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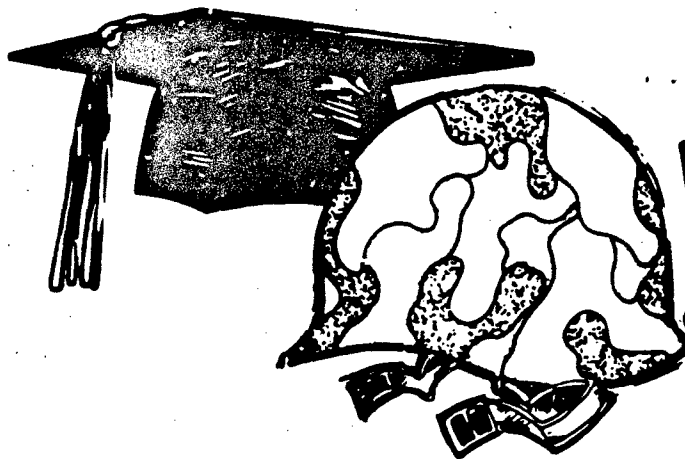


HEADQUARTERS DEPARTMENT OF THE ARMY
WASHINGTON, D.C.

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A Review of Education and Training for Officers

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VOLUME 3 OF 5 THE DATA BASE

- ANNEX G -- OTHER SERVICES
- ANNEX H -- OTHER ARMIES
- ANNEX I -- INDUSTRY
- ANNEX J -- UNIVERSITIES
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- ANNEX L -- OFFICER SURVEY

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REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

(RETO).

VOLUME 3, THE DATA BASE.

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Prepared by
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REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

ANNEX G

EDUCATION AND TRAINING OF OFFICERS IN THE U.S. ARMED FORCES

1. PURPOSE. This annex examines the officer education and training programs of the United States Air Force, Navy and Marine Corps, and makes limited comparisons with related Army programs. No recommendations are made in this Annex.

2. DISCUSSION. While there is an inherent danger in making direct comparisons between the Army and the sister services because of their very different missions, methods, and means, this seems to be the common approach for those that critique the Army and thus, we too, should understand this perspective. The services draw from the same pool of young men and women, operate in the same political, social, and ethical environment, provide, in sum, a common defense, and, in the process, have developed similar educational institutions. Individual papers on the Air Force, Navy and Marine Corps are in Appendixes 1, 2 and 3. Some general comments concerning sister service programs are contained in the paragraphs below. Figure 1 to this Annex portrays a brief comparison of U.S. Army and sister service resident school programs for officers.

a. Accessions in all three services come mainly from Reserve Officer Training Corps, the Academies, and Officer Candidate type programs. Officer Candidate programs are the most responsive sources and output has varied greatly over the years. For the Marine Corps such a program, in the form of the Platoon Leader Class, continues to be the principle source of accessions. A smaller but noteworthy source is Navy Enlisted Officer Scientific Education Program which provides a college education to outstanding enlisted men and women. It has provided commissions for a significant number of officers in both the Navy and Marine Corps.

b. Each of the services has a different approach to officer specialization learning necessary for the first duty assignment. The Air Force pilots and navigators spend nearly all their first duty year in schools; somewhat less time is needed for the missileman. Up to 20 (TDY) weeks are spent training technical and administrative specialists. The Navy requires all new officers to attend schools to begin qualification-learning as a surface warfare officer, an aviator, or a submariner. Although some courses are as short as 15 weeks, aviator training may consume 50 weeks, and nuclear submariners

may be in training for nearly a year and a half. The Marine Corps sends all newly commissioned officers through the 6 weeks Infantry Officer Course at the Basic School at Quantico. For a significant number of Marines (including some who will be advanced to the field grades) this will be their only extended formal resident schooling.

c. One way to compensate for the junior officer's lack of formal school training is to provide the time, the learning materials, and the command supervision that will permit him to raise his competency in the knowledge and skills while he is at work in his specialty. All the services have programs of correspondence courses; however, course completions are not extensive among junior officers. The Navy's program of Personnel Qualification Standards (PQS) for officers is one of the few examples of the systematic development of officer on-the-job learning. PQS provides the essential elements of effective, structured on-the-job learning. Booklets are prepared for the major specialties, which state briefly a wide range of skills and knowledge requirements for the junior officer. The commander or supervisor is responsible both to organize work and training in such a way that officers gain the skills required, and to "sign off" when the officer demonstrates satisfactory performance. Much of the learning is focussed on technical subjects; but it also encompasses such subjects as military law, administrative policy and procedure, and tactics. PQS is designed to supplement but not replace attendance at the more than 500 short training courses offered throughout the Navy resident school system. The PQS program is followed by a command certification process between the 6th and 12th years of service.

d. All of the services currently send officers to an intermediate level school -- usually in the grade of captain (navy lieutenant) -- and, except for the Marine Corps, the vast majority of the eligible officers attend. The Navy requires all surface warfare officers to attend a 28-week course to prepare them for duties as department heads on shipboard. This course is being revised as a result of the Navy's PQS program (see paragraph 2c); officers are coming to the school better prepared. The Air Force has opted for an 11-week Squadron Officers School; its purpose is to overlay the varieties of specialist thinking with professional knowledge and values through education in leadership and management. Though a Marine Corps study just a few years ago recommended increasing the percentage of officers attending the Amphibious Warfare School (or other "advanced course" level classes) the trend has been just the opposite. Currently only about 30 percent attend this level of schooling. Approximately another 10 percent will enroll in such schooling by correspondence.

e. While the Army has made a concerted effort to develop each officer in two (or more) specialties, the other services have undertaken a much more limited amount of dual tracking. On the average,

the sister services have dual tracked about one-third of their officers. They have found that it is not possible to prepare every officer in two unrelated skill areas. The Navy, however, has been innovative in tagging, for management purposes, the level of qualification reached in the subspecialties assigned. The level of qualification (education, skill, experience) necessary to serve in a subspecialty is indicated in each coded subspecialty designator. This coding system is used to identify both billets and officers. Officers are assigned a subspecialty only after obtaining an appropriate level of education or training, or significant experience. The levels of education or skill required (or attained) are indicated by a suffix. The Navy identifies officers who have proven their qualification by superior performance in recent, relevant tours by changing the education/skill suffix. Jobs requiring proven qualification are identified in the same way. The education/skill level suffixes used are as follows:

<u>EDUCATION/SKILL LEVEL</u>	<u>SUFFIX (education)</u>	<u>SUFFIX (proven)</u>
PHD	D	C
Baccalaureate	E	F
Baccalaureate plus either functional or graduate education, but less than masters level	G	
Engineer's degree (between masters and PHD)	N	M
Masters degree	P	Q
Significant experience (usually two tours with a superior rating)	S	R

The proven designations are awarded by individual subspecialty selection boards. The instructions convening a recent board directed it to "select those officers who have demonstrated excellent performance" in the subspecialty. Overall naval performance and background are important; however, "proven superior performance" in the subspecialty field is of "overriding importance." Officers previously identified are screened by each board and continue to maintain the "proven" designation only so long as they continue to meet the criteria.

f. While the Army increasingly focuses its staff college curriculum on the next assignment, the Marine Corps, the Navy and the Air Force are moving in somewhat the opposite direction. The 1977 Annual Report for the Naval War College (which includes the College of Naval Command and Staff) observed that "in developing the curriculum, a decision has been made to focus on concepts and principle rather than current events..., to emphasize that which can best prepare officers for the remainder of their active service rather than just for their

next assignment." The Air Force's Five Year Objective Plan (September 1977) for the Air Command and Staff College (ACSC) projects a similar orientation. "ACSC will produce graduates with a broad knowledge of an everexpanding profession" and the communicative, managerial and leadership skills essential to equip him "as a facilitator...who will develop the procedures and implement Air Force policy." Broadly stated, the Navy and Air Force look upon their formal schooling of field grade officers as an exercise in helping them to learn how to think through problems creatively and to research, write and communicate.

g. All of the services have to wrestle with the problem of obtaining a proper mix of education and training in their officer development programs. The Air Force has most fully developed the distinction between the facilities and methods used for military training as compared to those in Professional Military Education (PME). At all levels, the purpose of the Air Force PME is to advance the knowledge, skills and attitudes of performance which are common to all officers, and can thereby bind together an officer corps which is divided into specialty concentrations. The objective of PME is:

...to enhance the professional military competence of Air Force officers through a program of education designed to broaden perspective, increase knowledge, and prepare these officers to assume high levels of command and staff duties and responsibilities.

The Air Force PME system charges itself with certain tasks at all levels of officer education. Among these are:

- (1) Develop creative thinking.
- (2) Stimulate individual research.
- (3) Emphasize lucid oral and written work and the preparation of comprehensive military studies and plans.
- (4) Stimulate development of leadership abilities.
- (5) Impart knowledge which is significant to aerospace power.
- (6) Increase understanding of the nature of war, its causes, tactics, and strategies.
- (7) Explain how military forces...are developed, sustained, and employed in both peace and war.

3. RECOMMENDATIONS. None.

3 Appendixes

1. U.S. Air Force Officer Education and Training
2. Career and Education Patterns in the U.S. Navy
3. Officer Education and Training in the U.S. Marine Corps

FIGURE 1: PROGRESSION OF COURSES AND DURATION OF TRAINING FOR U.S. MILITARY SERVICES

YEARS OF SERVICE	US ARMY	WKS	US NAVY (SURFACE WARFARE OFFICERS)	WKS	US AIR FORCE	WKS	US MARINE CORPS	WKS
PRECOMMISSIONING	US ARMY ROTC Summer Camps 6 wks 390 hrs	16	US NAVY (SURFACE WARFARE OFFICERS) ROTC Summer Camps total 15 wks 480 hrs	25	US AIR FORCE ROTC Summer Camp 6 wks 360 hrs	15	US MARINE CORPS PLC 10-12 wks (ROTC Summer Camp 6-10 wks - total 20 wks)	12
0								
3	Basic Course 100%	11	Surface Warfare Off Basic (100%) 15 wks (Functional at Tng (50%) 8 wks)	15	Basic Course (non- rated) (rated 52 wks) 5-36 wks Approximately 100%	15	Basic School 100%	6
6	Advanced Course 100%	26	Department Head Course 28 wks 100% (Surface Warfare only)	28	Squadron Off Course leadership manage- ment and air power 65%	11	Amphibious Warfare Course (Advanced Comm Off Course, 42 wks) total 30%	39
12	Command and General Staff College 40%	40	Naval Command and Staff 12% Surface Warfare XO Course 60%	40*	Air Command and Staff College 20%	40	Marine Corps Command and Staff 35%	43
16	Battalion Cmd Refresher Crs	3	Surface Warfare CO Course, 50%	6	Sqd Command Course	1		
19	War College 16%	38	War College 11% (Naval Off seldom attend both Staff and War College)	38*	War College 8%	40	Senior Service Colleges of other services 17%	40

FIGURE 1: PROGRESSION OF COURSES AND DURATION
OF TRAINING FOR U.S. MILITARY SERVICES
(CONTINUED)

YEARS OF SERVICE	US ARMY	US NAVY (SURFACE WARFARE OFFICERS)	US AIR FORCE	US MARINE CORPS	WKS
22	Bdr Cdr Ref Crs	Sr Off Ship Material & Readiness Cr	Base/Wing Command Management Course		4
Max Wks in Instit Tng	138	137 **Navy Off do not attend both Staff and War College	126 (Rated Off 180)	151	
Min Wks in Instit Tng	54	68	30	18	

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 1

US AIR FORCE OFFICER EDUCATION AND TRAINING

TO ANNEX G

EDUCATION AND TRAINING OF OFFICERS IN THE U.S. ARMED FORCES

In carrying out its mission of bringing airpower to bear against an enemy threat to the United States, the Air Force organizes and trains its officers by airpower functions, such as in the Strategic Air Command, the Tactical Air Command, and the Military Airlift Command. These major commands (MAJCOMS) are, in turn, centered on types of aircraft and equipment which are designed to accomplish specialized functions. The Air Force officer's first responsibility is as a specialist, to man increasingly complex equipment. It is by this fact that the Air Force has lessons to offer to the Army, as ground warfare moves into a more highly technological era, and Army officers are increasingly "manning the equipment" as compared to "equipping the man."

This paper describes the Air Force programs for educating and training officers in terms of similarities and differences with related Army programs.

Air Force Officer Requirements. Carrying out the Air Force mission requires some 95,000 officers on active duty, and the additional strengths of those in National Guard and Reserve units. (See Figure 1) The active duty officer corps requires 43,000 rated pilots and navigators in some 125 subspecialties. Nonrated officers comprise over 300 more specialties, such as missile launch officer, electronic warfare officer, aircraft maintenance officer, and physicist.

Management Classification. Air Force officer personnel management is centered on each officer's Air Force Specialty Code (AFSC), which identifies his or her skills in a five-part designator. For example, the AFSC S1115F breaks down into:

- S -- Prefix (in this case, fighter weapons instructor)
- 11 -- Career Area (Operations)
- 1 -- Utilization Field (Pilot, Tactical Fighter)
- 5 -- Level of Proficiency
- F -- Suffix (in this case, F-4 aircraft)

FIGURE 1: Air Force Officer Strengths
(As of 28 Feb 78)

	RATED	NONRATED	TOTAL
2 LT	2,437	5,852	8,289
1 LT	4,388	6,171	10,559
CPT	18,720	21,735	40,455
MAJ	7,246	11,333	18,579
LTC	6,899	5,475	12,374
COL	3,391	1,859	5,250
GO	289	84	373
TOTAL	43,370	52,509	95,879

Qualification in one's specialty is indicated by the fourth part of the code, "level of proficiency." This number records the highest grade in which the officer should serve for the level of proficiency he has acquired. In this case, level 5 indicated that he has full proficiency and can serve in that specialty up to the level O-5, or lieutenant colonel.

Accessions. To maintain a 95,000 officer corps, the Air Force will commission annually more than 5,000 men and women in the coming years, a figure that is increasing in Fiscal Years 1979 and 1980. Approximately 900 will come from the Air Force Academy, 3,000-plus from the Air Force ROTC and 1,500 from the Officer Training School, whose output is being doubled in two years. Annual pilot production will increase from 1,000 in 1978 to 1,750 in 1980.

The Air Force ROTC, which provides nearly two-thirds of the annual officer accessions, has a 4-year program and a 2-year program in the American colleges. The system is authorized 6,500 scholarships, but funded for approximately 5,000. There are 4-year, 3-year and 2-year scholarships. These are awarded primarily for those majoring in scientific and engineering disciplines. An Air Force Officer Qualifying Test (AFQT) is required of each cadet enrolled in the program, to assess their potential for future service. A Flying Instruction Program introduces selected cadets to the elements of flying in their senior year of ROTC.

Career Patterns. Upon being commissioned the officer undertakes technical training in his entry specialty and is then assigned to a Major Command for initial duty in his specialty. Thereafter he will alternate schooling with sequential tours in either his specialty or

perhaps in a newly-acquired secondary specialty -- for rated officers referred to as a "rated supplement." The progression through a typical officer's career is pictured in Figure 2.

The Training System. The Air Force manages the specialty training of officers through the AF Military Personnel Center and the Air Training Command at Randolph AFB in Texas. Typical basic course lengths for rated officers are:

UPT - Undergraduate Pilot Training (6 locations).....49 wks
UHT - Helicopter (Ft. Rucker).....36 wks
UNT - Undergraduate Navigator Training (Mather AFB)...33 wks

Additional training for rated officers may include:

SAC Combat Crew Training, B-52.....19 wks
USAF Conversion Training to A-10..... 7 wks

For nonrated officers, initial technical training may range from 5 to 36 weeks, for an average of about 15 weeks. Typical courses and their lengths are outlined in Figure 3.

The Professional Military Education System. The Commander of the Air University at Maxwell AFB, Alabama directs the programs for professional education of Air Force officers at all levels, from the precommissioning general education of AFROTC cadets to the senior service college for the highest ranking officers. His responsibility includes the Squadron Officer School (SOS) for junior officers, the Air Command and Staff College (ACSC), the Air War College (AWC) -- all at Maxwell AFB -- and the Air Force Institute of Technology (AFIT) at Wright-Patterson AFB in Ohio. Air University provides the principal interface between the Air Force and the civilian universities and it maintains programs for the professional education of National Guard and Reserve Officers.

At all levels, the purpose of Professional Military Education (PME) is to advance the knowledge, skills, and attitudes essential for high standards of performance in the profession of arms in general, and in the employment of aerospace power in particular. Within the purview of PME is national security affairs, military history, leadership, management, professional ethics and standards of behavior, and the communications and analytical skills needed by the competent professional officer. The PME schools are charged with instilling the values and understandings which are common to all officers, and can thereby bind together an officer corps which is divided into specialty concentrations.

FIGURE 2

The Highlights of an Officer's Career Educational Opportunities

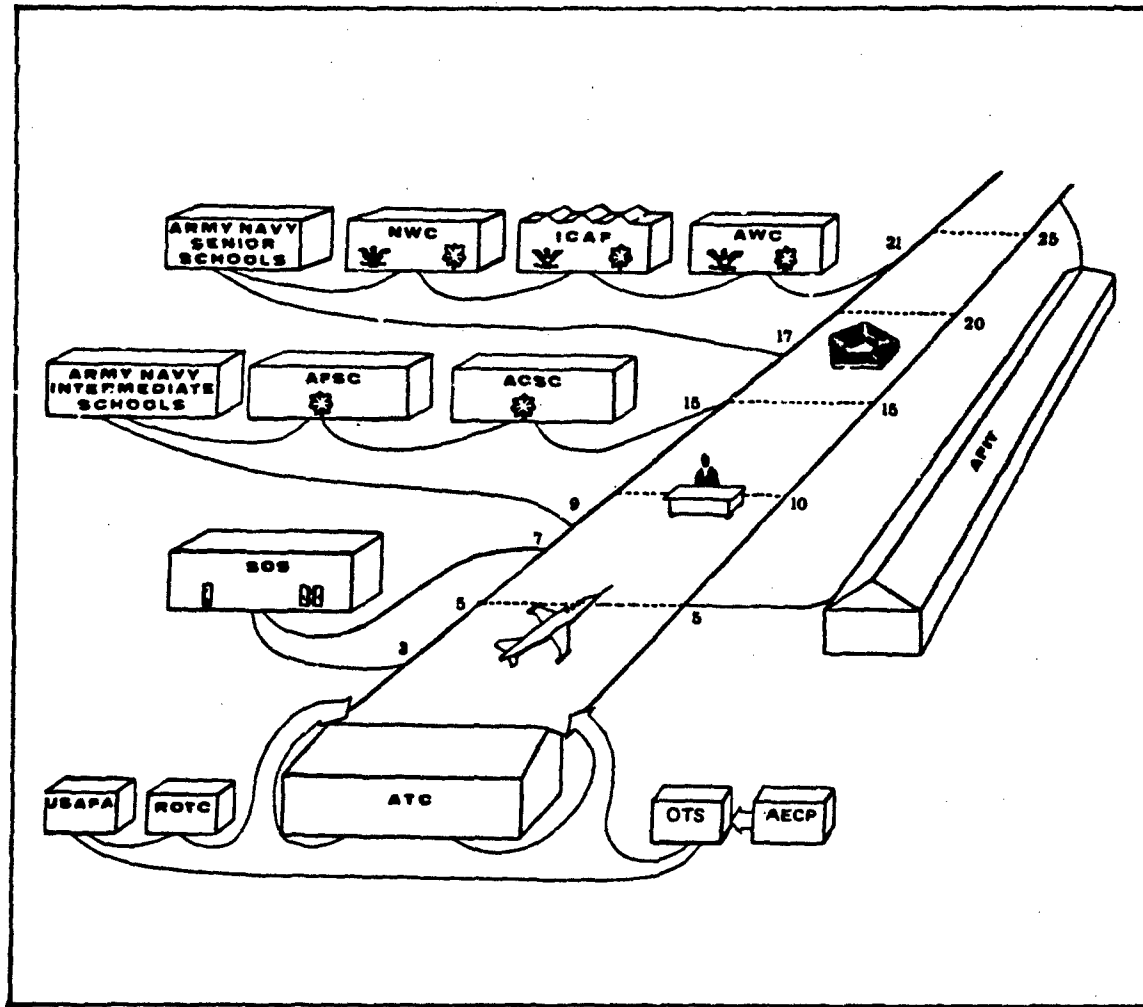


FIGURE 3

USAF OFFICER TRAINING PROGRAM

TECHNICAL TRAINING COURSES CONTROLLED BY AFMPC			
COURSE NUMBER	TITLE	LOCATION	DURATION
E30BP1741A	Weapons Controller (Manual)	Tyndall AFB, FL	7 Wk, 5 Da
J30BR1821F	Missile Launch Officer	Sheppard AFB, TX	12 Wk
182100F	Missile Combat Crew Initial Qualification Training	Vandenberg AFB, CA	7 Wk
182100G-1	Missile Combat Crew Initial Qualification Training	Vandenberg AFB, CA	12 Wk, 2 Da
182100K	Missile Combat Crew Initial Qualification Training	Vandenberg AFB, CA	15 Wk
182100L	Missile Combat Crew Initial Qualification Training	Vandenberg AFB, CA	16 Wk
E30BR3021	Communications Systems Officer	Keesler AFB, MS	30 Wk, 5 Da
E30BR3031	Communication Maintenance Officer	Keesler AFB, MS	32 Wk
E30BR3041	Electronics Systems Officer	Keesler AFB, MS	36 Wk, 4 Da
E30BR3051-1	Communications-Electronics Engineer	Keesler AFB, MS	25 Wk, 3 Da
C30BR3121G-4	Missile Maintenance Officer (WS-133)	Chanute AFB, IL	5 Wk
C30BR4021-2	Aircraft Maintenance Officer	Chanute AFB, IL	26 Wk
G30BR4051A	Munitions Officer	Lowry AFB, CO	17 Wk, 3 Da
J30ZR5135B	Computer Systems Analyst	Sheppard AFB, TX	9 Wk
E30BR5141-2	Computer Systems Programming Officer	Keesler AFB, MS	13 Wk
J30BR5151	Computer Systems Ops Officer	Sheppard AFB, TX	8 Wk
50BK2031	Signal Intelligence Officer	Goodfellow AFB, TX	20 Wk
L30BR6121	Security Police Officer	Lackland AFB, TX	4 Wk, 5 Da

The Squadron Officer School provides the first level of formal Professional Military Education to officers between their fourth and eighth years of service. In contrast with the Army Advanced Officer Course, the SOS is a short, 11-week TDY experience, and focuses on common command and staff capabilities rather than further specialty development. The course objectives are stated as preparing officers to be better able to:

- Speak and write
- Lead and follow
- Manage people, money, and material and,
- Assess the capability of U.S. military forces to perform their mission

Because it is "primarily a leadership school for company grade Air Force officers" much of the instruction is in small group exercises, calling for student-team resolution of practical problems. Athletic activity is emphasized. Three written examinations are required. A Code of Honor for academic matters states: "I will not lie, cheat, or steal, and I will not allow among my associates anyone who will violate these precepts."

The course is given 4 times annually, with a student load of more than 600 lieutenants and captains whose average age is 29 years. Major Commands nominate students, who return to them for further duty. At the end of the course the student receives a Training Report which is included in his permanent record, but does not state relative class standings unless he is an exceptional graduate.

The course is well received by officers (some 40 percent bring wives to Maxwell AFB at their own expense). The course is looked upon as highly successful in achieving its objectives, although it is expensive in terms of faculty and travel allowances.

The Air Command and Staff College provides the intermediate level of Professional Military Education to approximately 20 percent of Air Force officers who enter the rank of major, and offers an associate course by correspondence to others in the Active, Reserve, and National Guard forces. The resident course of 40 weeks accommodates 540 students, who are selected by a PME board from those who have been selected earlier by a temporary major selection board. The mission of ACSC is to prepare officers for their succeeding varied assignments and is stated as:

...to provide mid-career officers with the skills, knowledge, and understanding that will enhance their value to the Air Force for the balance of their careers in responsible command and staff positions;

to conduct student and faculty research of value to the Air Force/DOD; and to make available significant products of this research.

The 533 students who started the course in August 1977 consisted of 426 Active Air Force officers, 50 foreign officers from 31 countries, 36 Army officers, and 16 from Navy and civilian agencies. Fifty percent of the American students had Masters degrees from civilian universities. The typical American student is 35 years of age and in his twelfth year of service.

The learning goals of ACSC are stated in Figure 4. The core curriculum is portrayed in Figure 5, in the context of its transition from 1977 to 1978.

In the last three months of the course, the curriculum focuses on the Joint Planning Process; a 40-hour computer-supported planning exercise which culminates with a force deployment feasibility analysis leading into a conventional theater air warfare exercise; and a 50-hour manual wargame in which student seminar groups oppose each other in a simulated nuclear war. Foreign officers graduate in early March, before this instruction takes place.

For instructional purposes, the class is organized into 16-man seminars; the composition and leadership of the seminar is changed three times during the year. Each seminar has one Army officer, who is expected to be conversant with current Army organization, doctrine and policy. For these purposes the senior Army instructor conducts special seminars for Army officers before the course begins, and periodically during the year.

The general pattern of instruction at ACSC is to assign reading material, present one or more lectures with associated question periods, and then discuss in detail in seminar. The student attends instruction in lecture or seminar mode from 5 to 6 hours per day.

Because the experience and needs of students differ, several options are made available outside the core curriculum. Developmental tutorials are available in the fall semester wherein a student may spend twenty hours improving a skill such as writing, reading, and basic mathematics (students who do not do well on diagnostic tests take remedial instruction). Self-development options may also be elected in areas such as regional studies, computer programming, Army Division Tactical Operations, Naval Operations, or Writing for Publication. From mid-April to mid-May the student selects one of five Specialty Tracks, to obtain a broad overview related to his next assignment; the study may be in Command, Systems Acquisition, Logistics, or theater/strategic Plans and Operations.

Figure 4. Air Command and Staff College

COURSE GOALS

COMMON STAFF GOALS

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 in-depth instruction must

serve to increase an ACSC graduate's effectiveness within his area of specialization and reduce the transition time required in his next assignments.

BROADEN KNOWLEDGE OF THE AIR FORCE

6. To develop and emphasize knowledge consistent with action officer, mid-level supervisor, and unit command responsibilities.

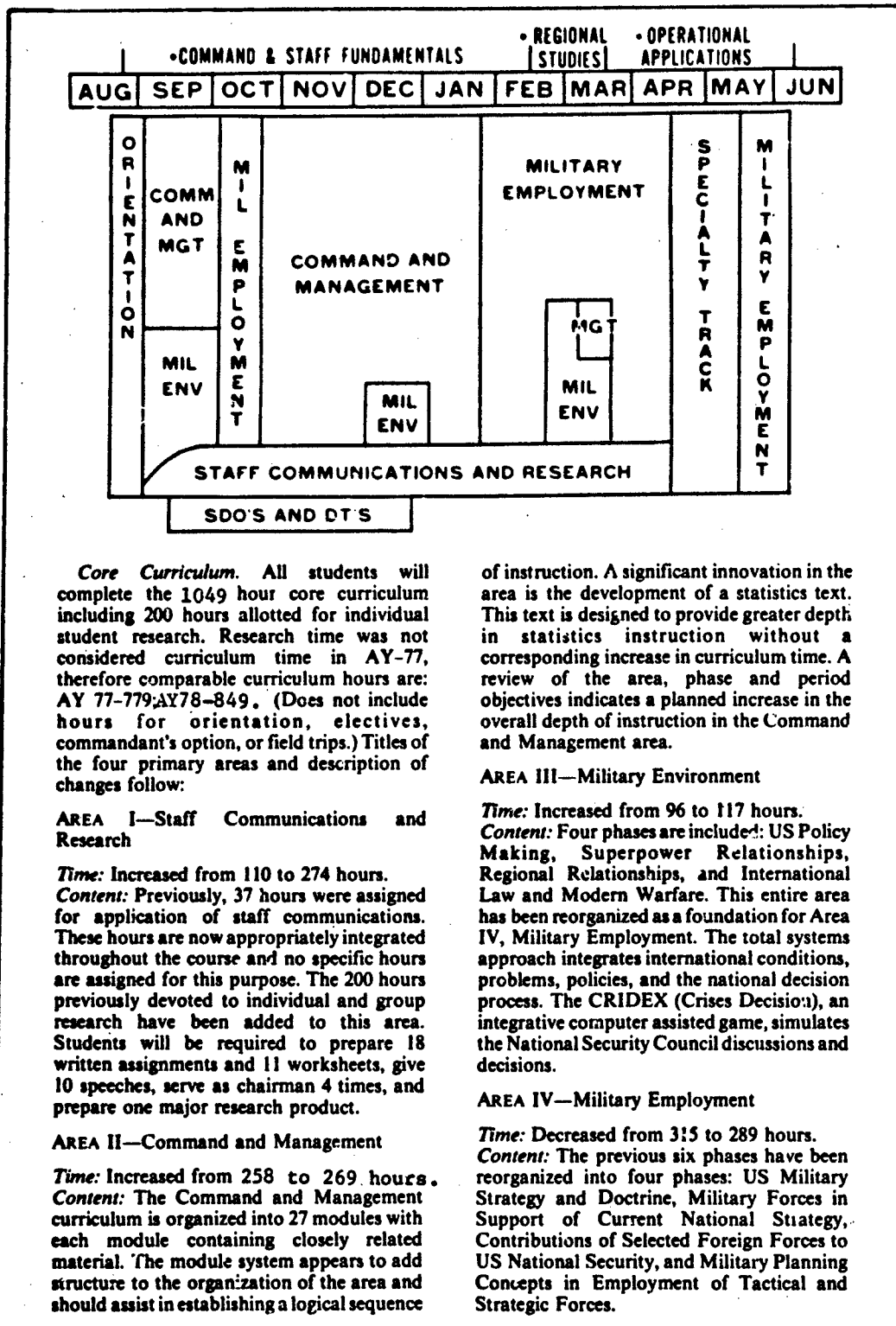
BROADEN VIEW BEYOND THE AIR FORCE

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 insights and recommendations to the DOD/Air Force on functional topics.

Figure 5. Air Command and Staff College Curriculum



Core Curriculum. All students will complete the 1049 hour core curriculum including 200 hours allotted for individual student research. Research time was not considered curriculum time in AY-77, therefore comparable curriculum hours are: AY 77-779:AY78-849. (Does not include hours for orientation, electives, commandant's option, or field trips.) Titles of the four primary areas and description of changes follow:

AREA I—Staff Communications and Research

Time: Increased from 110 to 274 hours.
Content: Previously, 37 hours were assigned for application of staff communications. These hours are now appropriately integrated throughout the course and no specific hours are assigned for this purpose. The 200 hours previously devoted to individual and group research have been added to this area. Students will be required to prepare 18 written assignments and 11 worksheets, give 10 speeches, serve as chairman 4 times, and prepare one major research product.

AREA II—Command and Management

Time: Increased from 258 to 269 hours.
Content: The Command and Management curriculum is organized into 27 modules with each module containing closely related material. The module system appears to add structure to the organization of the area and should assist in establishing a logical sequence

of instruction. A significant innovation in the area is the development of a statistics text. This text is designed to provide greater depth in statistics instruction without a corresponding increase in curriculum time. A review of the area, phase and period objectives indicates a planned increase in the overall depth of instruction in the Command and Management area.

AREA III—Military Environment

Time: Increased from 96 to 117 hours.
Content: Four phases are included: US Policy Making, Superpower Relationships, Regional Relationships, and International Law and Modern Warfare. This entire area has been reorganized as a foundation for Area IV, Military Employment. The total systems approach integrates international conditions, problems, policies, and the national decision process. The CRIDEX (Crises Decision), an integrative computer assisted game, simulates the National Security Council discussions and decisions.

AREA IV—Military Employment

Time: Decreased from 315 to 289 hours.
Content: The previous six phases have been reorganized into four phases: US Military Strategy and Doctrine, Military Forces in Support of Current National Strategy, Contributions of Selected Foreign Forces to US National Security, and Military Planning Concepts in Employment of Tactical and Strategic Forces.

Student evaluation is based on 3 seminar performance reports, 6 examinations, and the 200-hour research project. In addition, his work in electives and his leadership attributes are recorded. Approximately 20 percent of a class are recognized as distinguished graduates.

The program is continually evaluated through a system of student questionnaires, faculty assessments, graduate surveys, and interviews of supervisors of graduates. In the spring of 1978 ACSC will publish a new 5-year plan, a programming document which will include college goals, specific objectives, and milestone charts for achieving each objective. Among areas of particular interest are faculty upgrading, improving the institutional evaluation process, providing additional utilization of computers, and improving nonresidential instruction.

Some 13,500 USAF majors and senior captains are enrolled in the correspondence version of the ACSC regular course; over 17,500 officers have completed that nonresident instruction in the past. Recognizing the limitations of a program which does not include group discussion, guidance and supervision in learning communication skills, or exposure to collective problem-solving in staff exercises and battle simulations, the ACSC began in 1970 the associate seminar method of nonresident instruction. Seminars of 9 to 18 officers are formed at their duty stations; they meet weekly, studying the nonresident ACSC course in 40 lessons, taking about 1 year to complete. Faculty members from Maxwell visit regularly and evaluate progress. In the summer of 1977 nearly 2,000 students were enrolled in 128 seminars on 98 Air Force bases.

The Air War College provides the senior level of Professional Military Education to approximately 8 percent of officers who have been selected for promotion to temporary lieutenant colonel, and also provides a nonresident course for other active and reserve force officers. The resident course is 40 weeks in length and follows a simply stated mission: "to prepare selected officers for key command and staff." The size of the student body has been pared from a high of 310 in 1974 to 264 in 1978, and is expected to reduce further towards 200 in coming years. In 1978, 25 percent of the student body was other than regular Air Force officers; among them were 22 Army officers. Eighty-one percent of the USAF officers were rated; they averaged 18 years of service and 41 years of age; a third had not attended the intermediate staff college course; about half had Masters degrees and 19 held PhD degrees.

USAF officers are selected to attend AWC by a PME board which nominates them from the list of new selectees for lieutenant colonel and colonel. This published nomination list for lieutenant colonels opens up a 4-year window during which the nominee will attend a senior service school; annual selection boards designate the actual time of attendance based on the officer's assignment availability. Selections for promotion and War College attendance are Air Force-wide, and not by specialty.

Major elements of the resident program in 1977-78 are portrayed in Figure 6. The core curriculum is further explained in Figure 7. In addition, each student is required to take 3 elective courses, write one major research paper in the Military Studies Program, and participate in one field trip.

The AWC curriculum is in transition. Before 1976 emphasis was placed on the study of the formulation of national security policy. Since then the emphasis has been shifted to the employment of airpower, accomplished primarily by devoting more of the core curriculum to airpower strategy and employment. In addition, electives have been increasingly mission-related and the research program has been redirected towards practical aspects of airpower employment.

Of equal significance is a concomitant shifting of instructional method and faculty expertise at AWC. In a movement away from lecture/discussion towards small group learning, the AWC student body will be organized next year into 18 to 20 seminars of 12 officers. Half of the faculty of 40 will be specialty trained in national/international affairs and in management; the other half will be generalists in military affairs, for the teaching of airpower employment. The curriculum will be reconstituted so that seminars meet with the appropriate faculty members, who will concentrate on their area of expertise. In the process, the student will undertake more individual reading, researching, writing, and reporting, more in keeping with civilian graduate school methods and with the method at the Naval War College. The ratio of student "time in class" to "time in individual learning," which was perhaps 60/40 in the past will move to 45/55 in the future. The student's 40-hour week may find him in formal classes no more than 3 to 4 hours per day except for days containing exercises, case studies, special activities, etc. This shift in method will also call for the reinstatement of a significant testing and evaluation system. The necessary faculty upgrading will include changes in hiring practices, in-house faculty workshops, development of skills for guiding research, and new emphasis in designing and administering tests and evaluations.

Figure 6. Air War College

Resident Program

Curriculum: The Air War College curriculum stresses the application of aerospace power. A major portion of the academic year is devoted to a thorough and critical analysis of current strategy with a view toward the development of optimum alternative future strategies. The course provides for an in-depth evaluation of US and allied capabilities as they may be applied across the broad spectrum of conflict. It also includes instruction in the use of modern analytical techniques used by DOD to evaluate competing strategies and weapon systems. The curriculum allows for a wide range of individual differences in experience among students and provides ample opportunity for student-faculty research on current problems facing the Air Force.

**AIR WAR COLLEGE CURRICULUM
1977-1978**

JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY

REGISTRATION (2 Aug)

ORIENTATION (3-4 Aug)

AREA I LEADERSHIP & MANAGEMENT (5 Aug-3 Oct)

AREA II NATIONAL SECURITY AFFAIRS (4 Oct-9 Dec)

AREA III MILITARY STRATEGY & CAPABILITIES (12 Dec-1 Mar)

AREA IV MILITARY CAPABILITIES & EMPLOYMENT (2 Mar-19 May)

MEDIA-MILITARY SYMPOSIUM (28-29 Nov)

AIRPOWER SYMPOSIUM (13-15 Feb)

NATIONAL SECURITY FORUM (14-19 May)

MILITARY STUDIES PROGRAM (Aug-Apr)

ELECTIVES PROGRAM (Aug-Oct) (Jan-Feb) (Mar-May)

GRADUATION (23 May 1978)



Figure 7: Air War College Core Curriculum

AREA I — *Leadership and Management* includes management of defense resources both human and material. The student is exposed to the senior officer's problems of leadership and command in the current environment and to the recent developments in management science applicable to the defense establishment including decision analysis, budget formulation, logistics issues, the acquisition process, the Planning, Programming and Budgeting System (PPBS), and other defense resource management issues.

AREA II — *National Security Affairs* continues the curriculum theme of senior officer professional development by combining two topical perspectives: (1) The US and World Affairs, and (2) National Security Policy Formulation. The first perspective addresses the national and international environment and how it affects US national security. The second perspective provides a detailed examination of the role and influences of various agencies and groups on the formulation of national security policy. The role of the news media is highlighted by a two-day media-military symposium wherein an exchange of ideas between the students and prominent members of the media is encouraged.

AREA III — *Military Strategy and Capabilities* addresses the changing nature of strategy and doctrine in the employment of airpower; assesses the capabilities and vulnerabilities of the United States, its Allies, and Communist powers; and examines employment and structure of the strategic offensive and defensive forces of the United States. Reserve forces senior officers assigned strategic missions join the resident class to study future concepts and force applications of strategic power. Classic writings are examined to highlight the relationship of airpower and national interests. Issues of air doctrine and strategic warfare are subject to critical written analysis, case study, and seminar discussion.

AREA IV — *Military Capabilities and Employment* addresses the organization, readiness, capabilities of US general purpose forces to deter or, if deterrence fails, to fight a theater-level war. The role of each service is examined and the Air Force's role is studied in depth. Student research groups present the results of their studies on conventional theater warfare, which began early in the year. Students conduct research on allied military capabilities and brief their seminars on their findings. The National Security Study permits the students to determine national objectives and policies, assess the threat, develop military strategy and force posture, and program forces within budgetary constraints. During the theater war exercise the students consider the full range of employment options available to a theater air commander and critically assess such issues as basing, resupply, readiness, mobility, command and control, allocation of air resources, and survivability. The final week of the academic year is dedicated to the National Security Forum. During this week distinguished civilians join the students in discussing issues and alternative policies for national security.

The AWC Associate Program, aimed primarily at active duty lieutenant colonels but available to Reserve Component officers, officers of other services, and federal civilian employees, is offered in a correspondence format and a seminar format at selected Air Force installations. The Seminar Program enrolls over 2,000 officers annually, organizes them into groups of 10 to 20 students, and employs guided self-study and weekly discussions in a year-long program. AWC faculty members visit and conduct instruction on a regular basis. The 1,600 correspondence program students achieve their objectives through individual or group study.

In response to an Air Force need to prepare officers to conduct and manage tactical air combat operations in a joint and combined atmosphere, AWC is teaching a 5-week Combined Air Warfare Course for officers enroute to certain assignments. Emphasis on Europe and Far Eastern theaters, allied forces capabilities, and a computer-assisted simulation exercise on the employment of air assets. The course is offered 7 times a year to classes of 40 students.

The Air Force Institute of Technology meets the need for officers' specialized professional education in sciences, technology, medicine, management, and other fields. AFIT provides for advanced degree programs (mostly to the Masters' level), and for continuing education to update officers already specially educated in professional fields. Eighty percent of the officers requiring graduate degrees are placed in civilian institutions by AFIT. The remainder are taught in AFIT's degree-awarding programs in engineering, systems and logistics and management. For this, AFIT maintains a faculty of approximately 190 officers and civilians.

AFIT does not establish requirements for graduate schooling of officers (to be discussed later in this paper). It assists the Air Force Military Personnel Center in selecting officers for schooling by making judgments on the academic credentials of applicants, in the selection of appropriate schools, in monitoring the student's program, and forecasting utilization assignments.

The Air Force enrolls about 500-600 officers each year in graduate programs. AFIT conducts some short courses which do not award degrees; experience indicates that it is difficult to get officers to apply for schooling that does not provide a degree at the end of the schooling.

AFIT operates a variety of programs for the Air University: Education-with-Industry (125/year); Minuteman Education Program (200/year graduate); Airman's Education and Commissioning Program (200 students/year, in approximately a 27-month program leading to degrees in a technological field); advanced research; an Executive Overview of Current Technology (selected senior officers for one week); and a

Strategic and Tactical Science Program (selected officers for a graduate program in strategic and tactical planning).

Air Force Management of Education and Training Programs. The USAF Air Staff determines policy for officer career development and turns to the Air Force Military Personnel Center at Randolph AFB for overall management of the system. The Air Training Command and the Air University are in the process of determining requirements for education and training, designing programs which prepare officers to fulfill the requirements, and obtaining feedback for evaluation and program redesign.

The Occupational Measurement Center at Lackland AFB analyze officer duties and tasks, asking supervisors of a specialty what tasks are performed, asking officers if they actually perform these tasks, analyzing the data, and then recommending the kind of training needed and whether schools or using commands should provide that training. They determine the percentage of officers in a specialty who perform the task, the relative time spent by them in doing the task, the amount of time needed to learn the task, and a priority for the task, i.e., the criticality of Air Force need.

This survey data becomes a base for the Air Staff and ATC to develop classification manuals and to establish standards for schools or using commands to follow in setting up courses, publishing training documents, and mandating evaluation procedures.

The Occupational Measurement Center also conducts surveys of the effectiveness of training, asking graduates of courses and their supervisors about the practical utility of the training undertaken. This information is provided to agencies who conduct programs for their use in evaluating and redesigning courses.

Graduate education programs sponsored by AFIT have their roots in the requirements for specific skills within the using commands. Supervisors review positions and recommend reduction or upgrading of graduate degree requirements to the Air Staff for validation by the AF Educational Requirements Board. At present USAF has approximately 9,000 validated billets, as compared with about 5,000 each for the Army and Navy. Many of the advanced degrees held by Air Force officers are in less-needed nontechnical areas, while there is a continuing need to educate more officers in the technical fields.

Observations. The Air Force officer education and training system places 8 to 9 percent of the officer corps in schools at any given time, plus those in programs operated within the Major Commands.

The programs are changing, partly because of rapidly changing times, but also in response to a well-organized management system which is conscious of accurately stating requirements, designing courses to meet these requirements, and evaluating whether the requirements have indeed been fulfilled. In recent years, the organizational structure has emphasized the differences between training and education, allowing the best development of the needs of both; the structure allows for vertical sequencing of schooling and on-the-job learning throughout an officers career. Responsibility for the formulation of Air Force doctrine is left outside the purview of education and training systems.

Like the Navy, the Air Force conducts its own graduate college which awards Masters and PhD degrees in technical areas and management, although eighty percent of USAF degrees are obtained in civilian universities. There is a significant movement in the Air War College towards adopting the instructional methods and faculty that are commonly associated with graduate school methodology.

For the same reasons as the Army, the Air Force can be expected to have difficulty commissioning enough lieutenants in the coming years, especially with their requirement that 85-90 percent of ROTC scholarship recipients will study in technical areas. This will come at a time of intensive recruiting of training pilots by civilian industry which faces massive retirements of senior pilots. Shortages and high turnover usually forecast increased training and education requirements.

In the coming years, the Army and the Air Force will face many of the same problems which will be generated by changing technology and shifts in American societal values. Both services will respond through innovation in their programs for training and educating their officer corps. Their training programs must keep abreast of new weapons, equipment, tactics, and procedures so that they can respond to known and immediate challenges. Their education programs must prepare officers to cope with the unknown and more distant problems by dwelling on the thought processes, the communications skills, the historical backdrop, and the insights and values that will allow them to create new responses to new challenges. The common effort calls for continuing cooperation between the ground and air services.

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 2

CAREER AND EDUCATION PATTERNS IN THE US NAVY

TO ANNEX G

EDUCATION AND TRAINING OF OFFICERS IN THE U.S. ARMED FORCES

General. Because of the Navy's unique employment requirements - dictating recurring, lengthy sea duty tours - Navy careers take several divergent paths. These requirements have prompted the Navy to organize its roughly 52,000 officer personnel into three major divisions; unrestricted line, restricted line, and staff corps.

- **Unrestricted Line (URL).** With approximately 34,000 officers the unrestricted line is the largest group of naval officers, essentially the warfare specialists. This paper will concentrate on that group.

- **Restricted Line (RL).** A relatively small group of officers - nearly 3,000 - whose duties (and educational requirements) are so specialized that by law or convention they are restricted to a single field. An example of such duty would be the uniformed ship building engineers. These officers have no warfare specialties and seldom serve at sea.

- **Staff Corps.** This element, nearly 16,000 officers, includes Civil Engineers, Supply Corps, Judge Advocate, Chaplains, and Medics.

This examination focuses on the Unrestricted Line - specifically on one of its major subelements, Surface Warfare Specialty. (Other URL warfare specialties include; aviation, nuclear subs, strategic weapons and diesel subs, and special warfare.) With occasional side-ward glances to note interesting or instructive differences, we will proceed to examine the career and educational patterns of the Surface Warfare Officer.

The Surface Warfare Community is composed of officers who are qualified in the surface warfare specialty, who man the surface ships of the Navy, and whose goal is to command those ships. The Surface Warfare Officer, through a progression of assignments, learns the fundamentals of engineering, weapons systems, and operational tactics and an understanding of cruiser, destroyer frigate, amphibious, mine warfare and mobile logistic support force operations.

Within the Surface Warfare Officer community there are approximately 12,000 officers. Of these there are about 8,000 fully qualified to perform the duties normally expected of their grade and thereby authorized to wear the Surface Warfare Officer Insignia. The remaining 4,000 officers are still in training for a warfare specialty.

Against these numbers, the surface warfare community is responsible for manning approximately 7,600 billets that: (1) require the skill of a fully qualified Surface Warfare Officer, or (2) afloat billets which lead to qualification as a Surface Warfare Officer. At any given point in time, approximately, 4,400 qualified Surface Warfare Officers are available to meet requirements outside their specific warfare specialty, permitting assignment of selected officers who have attained their warfare specialty qualification to billets that could broaden their professional potential including student billets at Post Graduate School, instructor duty at various Navy schools or NROTC units, and an array of other positions ashore.

Figure 1 depicts an average Surface Warfare Officer's professional development path. It is included only to illustrate the general progression of assignments and promotions. No two officers will follow the same identical career patterns; however, on the average, the successful Surface Warfare Officer will accomplish most of the milestones shown in about the same sequence indicated.

The Navy's Chief of Naval Education and Training (CNET) in Pensacola has purview over most of the Navy's training programs. Under the CNET the Director for Naval Education and Training (DNET) in Washington is the staff proponent for officer development. The Navy's principle education institutions, such as the Naval Academy, the Naval Postgraduate School at Monterey, and the Naval War College report directly to the Chief of Naval Operations.

Precommissioning. The Navy currently acquires unrestricted line officers through several sources; the most important being the Naval Academy, the Naval ROTC scholarship program, and Officer Candidate Schools (see Table 1).

The preliminary findings of one current study of the Navy's accession program (OPRA - Officer Procurement, Retention, and Achievement Study) suggests that most of their sources are efficient in the production of officers (even the Naval Academy and high cost programs such as ROTC scholarship) when life-cycle or total career costs, and not just precommissioning costs, are considered. Those that failed to measure up -- the NROTC, college program, (nonscholarship), the Reserve Officer Candidate Program and the Aviation Reserve Officer Candidate Program -- showed up poorly because of poor retention of their officers on active duty.

SURFACE WARFARE OFFICER PROFESSIONAL DEVELOPMENT PATH

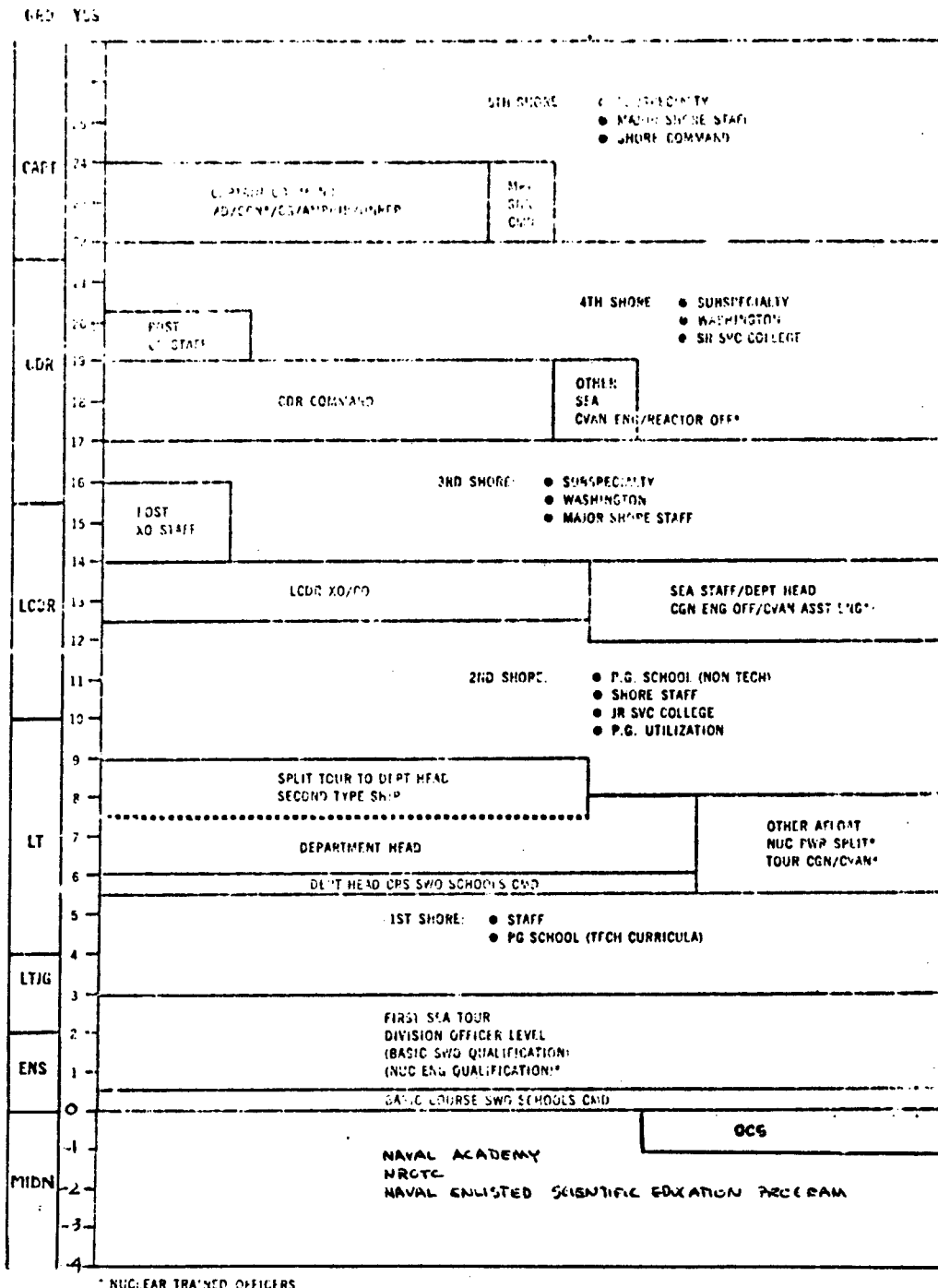


Figure 1. Surface Warfare Officer Professional Development Path

NAVAL OFFICER ACCESSIONS
(FY 77)

SOURCE	NUMBER	PERCENT
**Naval Academy	966	23.3
**NROTC (full) Scholarship	1,139	27.4
NROTC, College (no scholarship)	161	3.9
*Reserve Officer Candidate Program	4	0.1
Officer Candidate School	948	22.8
Aviation Officer Candidate School (pilots)	294	7.1
Naval Flight Officer Candidate School (navigators)	223	5.4
**Naval Enlisted Scientific Education Program	259	6.2
Aviation Reserve Officer Candidate School	159	3.8

*Discontinued in FY 77

**Regular Officers Commissioned from these sources

TABLE 1

All accession programs are designed to provide active duty officers; a minimum of 3 years active duty is required of all naval officers. NROTC scholarship students must agree to pursue academic majors of interest to the Navy. All NROTC students (with scholarship and without) are constrained by the limited number Navy commissions given to those with degrees in other than the hard sciences. Recently, the Navy has increased from 60 percent to 80 percent the proportion of NROTC graduates who must have degrees in areas such as math, physics, chemistry or engineering, bringing the NROTC program into line with current policy at the Naval Academy.

The overall program at the Naval Academy is structured to produce military professionals with the leadership ability to meet the demands and challenges imposed on junior officers in today's naval service. The professional program integrates formal academics, at-sea indoctrination, extensive training in naval science, and moral and physical conditioning to enable each graduate to effectively perform his duties. It is designed to develop a junior officer who is professionally competent, who possesses a deep sense of personal integrity and who has the physical and mental stamina to get the job done. The total course of instruction is based on fleet requirements and fosters the development of a specific competence in any of the four warfare specialties. The core professional program includes instruction in the principles of: (1) seamanship/tactics, (2) navigation, (3) naval weapons, (4) naval engineering, and (5) leadership and law.

Recently the Naval Academy has introduced a set of specific Professional Competency Objectives designed both as a guide for the midshipmen as they progress through their 4 years of professional education and training and as a standard by which professional development can be evaluated. Competency categories include leadership, administration, engineering, watchstanding, seamanship, ship control and combat systems. Each midshipman is required to pass a rigid examination in these areas before graduation. Though extension of this program to NROTC is seen as desirable, it is not considered feasible at present.

Initial Training. Officers entering the surface warfare community are sent to a 15-week intensive course of training at one of the Surface Warfare Officers Schools (SWOS). The school curriculum places primary emphasis on officer performance, training, and testing in all necessary watch and management skill areas necessary for subsequent qualification as a Surface Warfare Officer. The course is designed to equip him with the fundamental tools he will need for a successful first sea assignment. The essential mission of the SWOS is to develop and integrate qualification standards and functional training in support of Surface Warfare Officer professional development programs.

After SWOS and prior to reporting to his first ship, roughly half will receive additional, functional training related to the specific billet in which the commanding officer intends to place him. Examples include: (1) damage control assistant (DCS) -- 8 weeks, (2) main propulsion assistant (MPA) -- 10 weeks, (3) anti-submarine warfare (ASW) -- 8 weeks, (4) communications -- 8 weeks. Officers who have been selected for the surface nuclear power program will undergo an additional year of intensive instruction at the Nuclear Power School and at operational reactor plants. During this training, the officer student qualifies as Engineering Officer of the Watch on a long-based prototype of a surface ship's nuclear propulsion plan.

Initial Sea Tour. Upon completion of SWOS (and Nuclear Power School or special functional training, if applicable), the new surface warfare trainee reports to his first ship for a 3 to 3 1/2 year tour of duty. There are currently some 3,400 ensign and lieutenant junior grade billets aboard 400 surface ships. The initial sea duty will usually be an assignment as a division officer within either the Engineering, Weapons, or Operations Department, where he will be responsible for shipboard communications, gunnery, main propulsion, damage control or any one of a number of other duties below the department head level.

It is in this tour that he will be expected to qualify as a Surface Warfare Officer. Normally, the maximum time allowed for this qualification is 24 months. As a guide to obtaining the SWO designation, a series of Personnel Qualification Standards (PQS) have been developed. These standards are designed to assist prospective Surface Warfare Officers in completing the fundamental qualifications which are required Division Officer, Officer of the Deck in Port (OODI), Combat Information Center Watch Officer (CICWO) or Surface Watch Officer, Officer of the Deck Underway (OODU), and Junior Engineering Officer of the Watch.

Because qualification as a Surface Warfare Officer requires professional knowledge across a whole continuum of subjects an officer's first sea assignment will normally be served in the same ship. Although there are exceptions to this general policy both the stability provided to the ship, and advantage of an officer feeling "at home" as he progresses through the various stages of his SWO qualification, are best served by such a general policy.

Personnel Qualification Standards. The Personnel Qualification Standards (PQS) program was instituted in 1969 to serve as a standardized vehicle to define training/qualification requirements for various watch and duty stations and to provide for the orderly progressive training and qualification of each individual. PQS is essentially a subject outline of the various items an individual must accomplish to attain a specific qualification. The PQS for the Surface Warfare Officer is something of a latecomer and was fully initiated only two years ago. This program is divided into 5 subject elements:

- (1) Division Officer Qualification Standard
- (2) Engineering Qualification Standard
- (3) Officer of the Deck (in port) Qualification Standard
- (4) Officer of the Deck (underway)/Combat Information Center Watch Officer Qualification Standard
- (5) Warfare Qualification Standard

For ease of use each of these elements is published separately in booklet form. Two important parts of each are:

- The Standards Booklet contains questions and performance items which an officer needs to be able to answer or accomplish in order to qualify on a watch-station. The standard was written by naval personnel asking the question of themselves, "What do I need to know to do the job properly?"

● The Qualification Card is a checkoff list of what has been accomplished. As an officer completes an item in the requirements section of the standards booklet his supervisor signs off in the qualification card.

PQS consists of: fundamentals (knowledge necessary to do the job), systems (the equipment or man/equipment complex under studies usually broken down into functional groupings), and watch stations (the procedures needed to properly execute the duty). After all required qualifications have been signed off the officer appears before the ship's captain to be examined. When the captain is satisfied that the officer is proficient, he certifies him "qualified." The captain is ultimately responsible for the qualification program aboard his ship and must notify the Bureau of Naval Personnel why an officer fails to become qualified in the 2 years normally allotted. The program, which recently reached the end of the first full 2-year cycle, has experienced a high rate of satisfactory completions, though there is some suggestion that the Navy is not reassigning young officers until they finish the program. Though it may be too early to be certain, there are those at the Surface Warfare Officers School who are convinced that the program is dramatically improving the quality of young officers. Evidence of that conviction lies in projected shifts in the curriculum of the Department Head Courses which include elimination of material these new officers have already mastered.

Qualification as a Surface Warfare Officer is a significant first milestone in an officer's career. It must be accomplished prior to "consideration for selection" to the next major career milestone, the Surface Warfare Officer Department Head Course. This selection normally occurs at about the 2 1/2 to 3 1/2 year point in an officer's career - at approximately the same time he is first scheduled for assignment ashore. The selection rate is near 100 percent of those qualified. Failure for a SWO to be selected is a sure sign that he should seek a career elsewhere.

The First Shore Tour. Upon completion of his basic "at sea" qualifications, an officer can expect to be ordered ashore for a tour of approximately 2 to 2 1/2 years duration. With only about 400 junior officer billets ashore which require the expertise of a qualified Surface Warfare Officer (including billets as USNA/NROTC instructor, Fleet and Type Command Staffs) many will be assigned to a nonwarfare related shore billet (headquarters activities in Washington, for example). Another possibility on this or the second shore tour is the assignment to postgraduate school for the development of subspecialty.

The Officer Subspecialty System. The officer subspecialty system is a professional development system in which requirements for specific

professional qualifications (in addition to basic specialty qualification) are identified, and in which officers with these qualifications are identified or developed and assigned.

- **Billets.** The subspecialty system classifies and controls billets requiring officers who have specialized experience, training, or postgraduate education. Validation of these requirements by the Subspecialty Requirements Board is similar to that done by the Army Education Review Board except that the Navy board looks at experiential requirements in addition to those of education and training.

- **Officers.** Similarly, the system identifies and controls officers who have been selected (largely volunteers) as subspecialists because of their experience, training or education in fields of interest to the Navy. Restricted Line and Staff Corps Officers subspecialize within their basic specialties. Unrestricted Line Officers may subspecialize more broadly into secondary fields.

- **Subspecialty Codes.** In general, a Naval Officers (Warfare) Specialty and subspecialty (if any) are indicated by a 4-digit code (two digits for each element). In addition, level of preparation/proficiency in the subspecialty is indicated by a alphabetic suffix. Billed codes employ similar suffixes to indicate the level of preparation/proficiency required in the job (see Figure 2).

Postgraduate Education Policy. In a recent (April 1976) memorandum on postgraduate education policy, Admiral J. L. Holloway III, Chief of Naval Operations, included this philosophy. "The leaders of the Navy today, and increasingly in the future, must thoroughly understand the capabilities and limitations of the ships, weapons, systems and resources which they manage, further, they must have developed the capacity for original thought and problem solving technique which, in turn, will enhance perspective and scope of decisionmaking. Graduate education represents an essential means to this end and, as such, requires a sizable investment of resources by the Navy."

Unlike the other services, the Navy uses a selection board to pick a pool of officers qualified to attend graduate school. Assignment officers pick from this pool based on the officers personal interests (graduate school is voluntary), billet requirements, and availability. The selection boards use two screens to establish the pool; first, demonstrated performance of duty -- fitness reports, etc.; second, academic potential. (To assist in an analysis of the latter measure an Academic Profile Code has been created which considers both previous academic performance and demonstrated aptitude for technical studies. The code relates the performance of different individuals, though it may have occurred at different times, in different institutions, and in different fields of study.) The selection rate for URL officers

SUBSPECIALTY CODE SUFFIXES

Suffix**	Level of Preparation/Proficiency
C*	Proven subspecialist with PH D
D	PH D Level Education
E	Baccalaureate Level Education in Applicable Field
F*	Proven Subspecialist with Graduate Education at Less Than Master Level
G	Graduate Education at Less Than Master Level
M*	Proven Subspecialist with Engineers Degree (Between MS & PH D)
N	Engineers Degree Level of Education
P	Masters Level of Education
Q*	Proven Subspecialist with Masters Level Education
S	Significant Experience

* Designation as a "proven" subspecialist is made by board action for superior performance in previous assignments within the subspecialty. Lesser subsequent performance or failure to keep current by periodic assignments within the field will lead to board withdrawal of the "proven" designation.

**Certain additional codes for billets are available to indicate jobs in which a masters degree is desirable (H), or jobs which are second in priority to receive officers with masters degrees (B).

Figure 2

across the board in FY 7T/77 was approximately 13 percent. The rate for Surface Warfare Officers alone was somewhat better than the average at 22 percent.

Naval Postgraduate School. The Naval Postgraduate School in Monterey, California is now in its 70th year of providing advanced education for Naval officers. The Secretary of the Navy has defined the mission of the Naval Postgraduate School as follows:

"To conduct and direct the Advanced Education of commissioned officers, and to provide such other technical and professional instruction as may be prescribed to meet the needs of the Naval Service; and in support of the foregoing, to foster and encourage a program of research in order to sustain academic excellence."

Currently the school offers graduate level instruction (to PhD) in the following curriculum program areas:

- Administrative Science
- Aeronautical Engineering
- Computer Technology
- Electronics and Communications
- Environmental Sciences
- Naval Engineering
- Naval Intelligence/National Security Affairs
- Operations Research/Systems Analysis
- Weapons Engineering/ASW

In addition to its own program the school also coordinates the Navy's graduate education at civilian institutions. In both areas the school works closely with the Navy element sponsoring the students to insure that instruction provided tracks closely with that needed on the job. The school also conducts an extensive Continuing Education Program. Established in 1974 this program has extended the school's education services to the Navy at large through correspondence and off-campus programs. One purpose of the extension program was to offer basic preparatory courses required for later graduate studies at the school - thereby shortening the resident phase of the program. Up to now - though some officers have taken advantage of the program - the time saved has usually been spent on additional course work rather than earlier graduation.

The Second Sea Tour. Upon completion of his first shore assignment, ordinarily after 5 1/2 to 6 years of commissioned service, a Naval officer will be assigned again to sea duty for a 2 to 3 year

period. Having attended the Surface Warfare Officer Department Head Course (usually just before the second sea tour) he will be prepared for an assignment as either the Chief Engineer, the Weapons Officer, the Operations Officer or any one of the principal department head billets. This is particularly important period in a Naval Officer's career. As a department head his responsibilities are far broader than they were at the division officer level. But, in addition to what normally is a heavy daily work load, he must now commence his preparation for the command qualification examination and attempt to gain award of the designation "Qualified for Command of a Surface Ship." If he defers the preparation until later he may find that the demands on his time as an executive officer will limit his preparation.

For a very few officers completing their department head tours (about 1 percent) an "early command," is a possibility. There are approximately 27 command billets to which lieutenants are assigned. Most Surface Warfare Officers, however, will not receive their first command until they reach the grade of Commander.

Second Shore Assignment. The second shore tour commences at approximately the ninth year of commissioned service and contains further opportunities for professional development including the opportunity to attend postgraduate school or assignment to a command and staff college. The philosophy behind such assignments is reflected in a discussion of recent curriculum changes in the 1977 President's report for the Naval War College (which includes their Staff College). There it was reported that a decision had been made "to focus on concepts and principle rather than current events.., to emphasize that which can best prepare officers for the remainder of their active service rather than just for their next assignment." Despite that, the Navy places little emphasis on attendance at a staff or war college - just over 10 percent of the eligible naval officers attend at each of these levels. Command, not formal education is a pathway to stars. A more likely second shore tour assignment would be utilization in a subspecialty (if previously acquired), or staff duty with a Surface Force Type Command, the Deputy Chief of Naval Operations (Surface Warfare), the Joint Staff, a Fleet Staff, or a Training Command.

Naval War College. The Naval War College is divided into two levels - the College of Naval Command and Staff (staff college level) and the College of Naval Warfare (war college level). The curriculum organization and content is essentially the same for both courses. Naval officers do not attend both. Courses are divided into three areas:

Strategy and Policy (S/P)
Defense Economics and Decisionmaking (DEDM)
Employment of Naval Forces (NAVOPS)

Strategy and Policy at the Naval War College acquaints the officer-student with the fundamentals of military strategy, especially in its maritime applications, foreign policy, and the interrelationships between them. This study is presented through a series of historical case studies examining specific examples of strategic-political interaction in the modern era.

The Defense Economics and Decisionmaking course addresses the problems associated with allocating limited national resources to defense programs in a manner consistent with national goals and strategy. The purpose of the course is to develop understanding of the objectives and missions of the Navy in the context of national strategy and an appreciation for the process of rational choice among alternative ways of accomplishing them. The Employment of Naval Forces course is designed to expand the student's understanding of how naval forces are employed to execute the naval missions. The course is structured to highlight the four mission categories prescribed for today's Navy by the Chief of Naval Operations:

Strategic Deterrence
Naval Presence
Sea Control
Projection of Power Overseas

A typical academic calendar for the two courses is at Figure 3.

The Lieutenant Commander Sea Tour. Toward the end of the fiscal year in which he is selected for promotion to the grade of lieutenant commander, a naval officer receives the first of several screenings for assignment to executive officer and commanding officer billets at sea. Opportunity for a tour as executive officer is fair; the selection rate generally runs between 55 and 65 percent. In addition, about 5 percent of eligible LCDRs will have an opportunity to command. LCDRs also fill major department head billets in the larger surface ships. Obviously, the executive officer tour is the key lieutenant commander assignment and is the final milestone to command at the next grade. Performance as an XO is particularly critical because not every lieutenant commander serving as an executive officer (or as a major department head) will be selected for commander command though that selection rate is currently averaging about 60 percent and expected to remain at about the same level for the foreseeable future.

U.S. NAVAL WAR COLLEGE ACADEMIC CALENDAR 1977-78

COURSES

COLLEGE OF NAVAL WARFARE

CNW


COLLEGE OF NAVAL COMMAND & STAFF

CNC & S


- 15 Aug Convocation & Orientation
- 24-25 Nov Thanksgiving Recess
- 22 Dec-2 Jan Christmas Recess
- 27-29 Mar Professional Studies Conference
- 27 June Graduation

STUDIES

- S/p = STRATEGY & POLICY
- DEDM = DEFENSE ECONOMICS & DECISION MAKING
- NAVOPS = NAVAL OPERATIONS

A word needs to be said here concerning those officers who are qualified in their warfare specialty but who, for one reason or another, are not selected for either an executive officer or commanding officer assignment. Recall that "command" is the single most important career goal urged on every Surface Warfare Officer. The Naval Officers Career Development Handbook gives this advice. "Too frequently individuals who find themselves in this category erroneously view their careers as ended, and their promotion potential as nonexistent. This is simply not true! By the time an officer reaches the grade of lieutenant commander, the professional expertise which he has to offer is virtually irreplaceable. There is a need both at sea and ashore for such officers in the grade of lieutenant commander and commander; and there is a promotion path to captain from such a career pattern. The key, as always, is performance; and, for the officer able to develop a strong subspecialty within the OTMS framework, there will always be viable opportunity."

Enroute to an XO or CO assignment an officer is ordered to the Surface Warfare Officers School to attend the XO or CO Course, 5 to 7-week schools to prepare him for these specific jobs. Normally, an executive officer's tour will be programmed for 18 months. The tour is purposely shorter than the 24-month command tour to permit a greater flow of officers through these valuable operational billets, and to permit greater selectivity for command screen in the grade of commander.

Third and Subsequent Tour. During the third and subsequent shore tours an officer will normally be assigned to billets in one or more of 5 general categories: (1) Operational billets - assignments requiring the expertise of a qualified SWO are available in the same general areas as those noted in the explanation of the second shore tour; (2) Billets in the area of subspecialty - by this point many officers have developed a subspecialty either by means of postgraduate education, or by repetitive shore tours/experience in a particular subspecialty area; (3) General unrestricted line billets appropriate to his grade - examples include: CO/XO ashore, executive assistant to a senior flag officer, Professor of Naval Science, recruiting officer, and training command officer; (4) Senior service college assignment - at the Naval War College or the Industrial College of the Armed Forces (the Navy places much less emphasis on attendance at a Staff College or Senior Service College than do most of the other services. It is unlikely that an officer would attend both within the Naval War College); (5) Washington duty - including duty with the Secretary of Defense, Secretary of the Navy, OPNAV, JCS, BUPERS, the Navy Material Command, and other federal agencies.

Commander Sea Assignments. The majority of the SWO Commander sea assignments are as C.O.s of surface ships. For this reason, formal command selection boards will begin screening records at about the thirteenth year of commissioned service. Screening begins at this relatively early point to identify exceptional officers for early command opportunities while they are still serving in the grade of lieutenant commander (current policy provides for up to 10 percent of commander level commands being filled by outstanding lieutenant commanders). As stated above, commander opportunity for command is presently set at 60 percent and, as with executive officers, prospective commanding officers will be ordered to command via the 7-week Surface Warfare School Command Course.

Because selection for command at sea is highly competitive, a number of officers may not be selected. The Career Handbook again has advice. "While it is true that most of a Surface Warfare Officer's career is oriented toward eventual command at sea, it is also true that the much larger proportion of assignments as commander or captain may expect will be ashore. An officer who does not screen for command should never view his effort as a lost cause - there is simply too great a demand for his expertise in meaningful and rewarding assignments. Though perhaps personally disappointing, nonselection for command does not signal the end of a career. For the subspecialist, or the officer still capable and willing to make a contribution, there is a viable opportunity for further progression within the surface warfare community."

Senior Officer Training. Though the Navy has no formal program of continuing education for most senior officers, it has developed some very sophisticated informal approaches, including one developed in 1975 for the CINCLANTFLT - the Atlantic Fleet Tactical Command Readiness Program. The objective of that program was to upgrade the readiness of selected senior officers - O6 and flag ranking.

The program involves seminar gaming (concept development based upon contingency situations), self-paced programmed instruction (culminates in a 1 hour written examination administered by CINCLANTFLT), interactive wargaming (computer-supported wargame conducted in dedicated facility at Naval War College), and aims at a population of 35 Flag/General Officers in the Atlantic Fleet and 115 O6's in major operational command positions.

A second, more structured course offered to a limited number of flag rank officers and senior captains, is a 17-week course on ships maintenance and material management taught at the Nuclear Power Training Unit, Idaho Falls, Idaho. The intensity of this course can be seen in its initial 2-plus weeks of refresher training in math, chemistry and physics.

Summary. The Navy provides its officers with a largely functional education and training program. The Basic Course, supplemented by the PQS, insures that Surface Warfare Officers obtain the fundamental skills essential to their warfare specialty. Similarly the Department Head Course and the XO/CO Courses further prepare officers for sea duty assignments. Officer functional training currently occupies approximately 8 to 9 percent of the officer corps. Though some officers will have the opportunity to attend postgraduate school or a staff or war college (annually an additional 2 to 3 percent of the officer corps), the focus of the education and training program remains on the performance of duty at sea, aiming always toward command.

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 3

OFFICER EDUCATION AND TRAINING IN THE U.S. MARINE CORPS

TO ANNEX G

EDUCATION AND TRAINING OF OFFICERS IN THE U.S. ARMED FORCES

The Marine Corps. The United States Marine Corps is primarily organized, trained, and equipped to provide fleet Marine forces of combined arms and supporting air for service with the fleet in the seizure or defense of advanced naval bases and for the conduct of land operations essential to the prosecution of a naval campaign. The Corps' personnel policies and education and training programs operate in support of that mission. The Marine Corps' small size (currently about 17,300 commissioned officers) has dictated that it must depend on others for many educational facilities; it has, however, developed an educational philosophy altogether independent of its sister services. This paper briefly traces Marine officer career patterns, education and training programs, and their philosophy of professional education.

Accession and Precommissioning Training. The Marine Corps Reserve Officer Candidate Programs (the Platoon Leaders Class (PLC) Program in particular) are the largest source of officer accessions. Other important sources include the U.S. Naval Academy, Naval Reserve Officer Training Corps (NROTC), and enlisted education programs leading to a commission.

COMMISSIONED OFFICER ACCESSIONS BY SOURCE, FY 77

Platoon Leaders Course	855
Officer Candidate Course	353
Naval Reserve Officer Training Corps	224
Naval Academy	122
Naval Enlisted Scientific Education Program	59
Marine Corps Enlisted Commissioning Education Program	79
Woman Officers Candidate Class	42
Miscellaneous	48
TOTAL	1782

FIGURE 1

The Platoon Leaders Class (PLC) Program is for male college students attending accredited colleges or universities. Students enrolled as freshmen or sophomores attend a 6-week "junior course" summer camp the first summer after enrollment, and the "senior course" encampment (also 6 weeks) during the summer immediately preceding receipt of a degree. Students enrolled as juniors attend a single 10-week summer camp immediately prior to receiving their degrees. Upon successful completion of at least one summer training period, undergraduate PLC (and Woman Officer Candidate Program members) can request financial assistance -- a stipend of \$100 per month (maximum of \$900 per year), subject to yearly renewal, for the remainder of their undergraduate studies. The grant of a stipend increases the minimum 36 month obligated tour of active duty by 6 months for each academic year it is paid, to a maximum of a 54-month obligation. The PLC program produces officers for ground assignments, aviation, and law.

The Officer Candidate Class Program is open to male applicants who are seniors at, or graduates of, an accredited college, university, or law school. Selected applicants attend the Officer Candidate School at Quantico, VA. Exceptionally well qualified candidates can be granted a guarantee of military occupational specialty in selected fields such as: Engineer, Supply, Data Processing, and Communication-Electronics.

Each year a quota from the current graduating class of the Naval Academy is allotted to the Regular Marine Corps. This quota is filled by the appointment upon graduation of members of the class whose applications for commissions in the Marine Corps are approved by the Superintendent of the Naval Academy and the Commandant of the Marine Corps.

Under the Naval Reserve Officer Training Corps (NROTC) Scholarship Program the Marine Corps is authorized to input up to 275 applicants into the entering classes each year. These "marine-option" students receive a 4-year subsidized college education at one of the colleges or universities participating in the NROTC program. Other qualified college students may contract to participate in the "marine-option" NROTC program. They agree to take Naval Science courses, drill, complete one summer training period, and accept, if offered, a commission in the Marine Corps Reserve.

Other commissioning programs include the Woman Officer Candidate Class (WOCC) and certain programs for enlisted Marines. The WOCC is an officer program for female college juniors, seniors, graduates or graduates or graduate law students. Members of the WOCC program are required to attend an 8-week training/evaluation course at the Officer Candidates School. Enlisted marines -- male and female -- can be commissioned after attendance at the Officer Candidates School, or

after completion of one of two fully-funded college degree programs: Navy Enlisted Scientific Education Program (degrees in science, engineering or mathematics), and Marine Corps Enlisted Commissioning Education Program (other than scientific degrees).

Career Patterns. Officer assignments are categorized generally as Fleet Marine Force (FMF) and other. The former include essentially all of the tactical forces of the Marine Corps and their staffs. The latter includes assignment to: sea duty with a ships' detachment, a Marine barracks at a naval installation, recruiting duty, an instructor detail, or high level or joint staff. A company grade officer can generally expect assignment to FMF type duties about 75 percent of the time. In the field grades the ratio reverses; 75 percent of the time officers find themselves in non-FMF assignments. Despite that an effort is made to return officers to the FMF in each grade. Typical career assignments are illustrated in Figure 2.

Career schooling is defined as that training and education conducted for officers beyond entry and basic level training requirements. Specifically, career schooling is provided by military and civilian institutions and includes:

Professional schooling at intermediate, high and top levels to progressively develop individual professional capacity and those management skills necessary for increases command and staff responsibilities. Officer Professional Schools utilized by the Marine Corps are shown in Figure 3.

Technical training and education to advance skills in specific occupational specialties by assignment to service schools and/or in certain academic disciplines by assignment to the U.S. Naval Post-graduate School or a degree-granting civilian institution. Marine Corps officers currently attend over 170 Officer Skill Courses (27 conducted by the Marine Corps) ranging from a 1-week Unit Mess Officers' Indoctrination Course to a 48-week Test Pilot Course.

General education programs through which officers may pursue studies in specified academic disciplines leading to baccalaureate and advanced degrees.

It is the goal of the Marine Corps to provide all officers with an intermediate and high level education at appropriate times in their careers, either through assignment to a resident school and/or through completion of an approved nonresident course of instruction. Officers normally receive intermediate level professional education while in the grade of captain or major, high level education in the grade of major or lieutenant colonel, and top level education in the grade of lieutenant colonel or colonel. For top level education the Marine Corps utilized other services Senior Service Colleges.

OF-O3 INFANTRY

DUTY TYPE	LIEUTENANT	CAPTAIN	MAJOR	LIEUTENANT COLONEL	COLONEL
<div style="display: flex; justify-content: center; align-items: center;"> <div style="margin-right: 10px;"> <p>FMF</p> <p>├── MOS</p> <p>└── NON-MOS</p> </div> </div>	<p>RIFLE PLAT CDR RIFLE CO XO INF BN S-3 LNO RECON BN PLAT CDR</p>	<p>RIFLE CO CDR INF BN ASST S-3 INF REGT ASST S-3 RECON BN CO CDR</p>	<p>INF BN S-3 INF REGT S-3 INF BN XO FORCE RECON CO CDR</p>	<p>INF BN CDR INF REGT XO DIV G-3 L/S O RECON BN CDR</p>	<p>INF REGT CDR DIV CHIEF OF STAFF DIV G-3 FORCE G-3</p>
	<p>INF BN STAFF INF REGT STAFF</p>	<p>DIV ASST COMBAT INTEL O BN STAFF REGT STAFF DIV STAFF</p>	<p>PLAT STAFF DIV STAFF FORCE STAFF</p>	<p>DIV ASST G-1 DIV STAFF FORCE STAFF</p>	<p>DIV STAFF FORCE STAFF</p>
<p>NON-FMF</p>	<p>SEA DUTY BARRACKS PCRD POST/STATION OSD/RECRUITING INSTRUCTOR</p>	<p>SEA DUTY BARRACKS PCRD POST/STATION OSD/RECRUITING INSTRUCTOR I&I ADVISOR HIGH LEVEL STAFF</p>	<p>MPOTC BARRACKS PCRD POST/STATION MC DISTRICT INSTRUCTOR I&I ADVISOR HIGH LEVEL STAFF JOINT STAFF ATTACHE</p>	<p>MPOTC BARRACKS PCRD POST/STATION MC DISTRICT INSTRUCTOR MC REP/PLN MAN/MISSION HIGH LEVEL STAFF JOINT STAFF ATTACHE</p>	<p>MPOTC BARRACKS PCRD POST/STATION MC DISTRICT MC REP/PLN MAN/MISSION ATTACHE HIGH LEVEL STAFF JOINT STAFF</p>
<p>STUDENT</p>	<p>← TRG →</p>	<p>← INTERMEDIATE LEVEL →</p>	<p>← HIGH LEVEL →</p>	<p>← TOP LEVEL →</p>	<p>← TOP LEVEL →</p>

FIGURE 2

OFFICER PROFESSIONAL SCHOOLS

<u>Level</u>	<u>School</u>	<u>Quota Control</u>	<u>Location</u>	<u>Grade Pre-requisite</u>
Basic	The Basic School	USMC	MCDEC, Quantico, Va.	2dLt
	Women Marine Officer Basic	USMC	MCDEC, Quantico, Va.	2dLt
	Warrant Officer Basic	USMC	MCDEC, Quantico, Va.	WO-1
Intermediate	Amphibious Warfare School	USMC	MCDEC, Quantico, Va.	Capt-Maj
	Communications Officer Course	USMC	MCDEC, Quantico, Va.	Lt-Capt
	Judge Advocats Officer Advanced	Army	University of Virginia Charlottesville, Va.	Capt
Advanced	Infantry Officer Advanced	Army	Fort Benning, Ga.	Capt
	Engineer Officer Advanced	Army	Fort Belvoir, Va.	Capt
	Artillery Officer Advanced	Army	Fort Sill, Oklahoma	Capt
	Armor Officer Advanced	Army	Fort Knox, Kentucky	Capt
	Signal Officer Advanced	Army	Fort Monmouth, N. J.	Capt
	Defense Intelligence Course	DIS	U. S. Naval Station Washington, D. C.	Capt-Maj
	MP Officer Advanced	Army	Fort Gordon, Ga.	Capt

FIGURE 3

OFFICER PROFESSIONAL SCHOOLS (Cont'd)

<u>Level</u>	<u>School</u>	<u>Quota Control</u>	<u>Location</u>	<u>Grade Pre-requisite</u>
High	Military Intelligence Officer Advanced	Army	Fort Gordon, Ga.	Capt
	Women's Army Corps Officer	Army	Fort McClellan, Ala.	Capt
	Training at Royal Marine Installations	U.K.	Various Royal Marine Installations, England	Capt-Maj
	Canadian Land Forces Command and Staff College	Canada	Fort Frontenac, Kirgston, Ontario	Maj
	Marine Corps Command and Staff College	USMC	MCDEC, Quanticc, Va.	Maj-LtCol
	Armed Forces Staff College	JCS	Norfolk, Va.	Maj-LtCol
	Army Command and General Staff College	Army	Fort Leavenworth, Ks.	Maj-LtCol
	Command and Staff Course, Naval War College	Navy	Newport, R. I.	Maj
	Air Command and Staff College	Air Force	Maxwell AFB, Ala.	Maj
	National Senior Intelligence College	DIS	U. S. Naval Station Washington, D. C.	LtCol-Col
	NATO Defense College	JCS	Rome, Italy	Maj-LtCol

FIGURE 3 (CONT'D)

OFFICER PROFESSIONAL SCHOOLS (Cont'd)

<u>Level</u>	<u>School</u>	<u>Quota Control</u>	<u>Location</u>	<u>Grade Pre-requisite</u>
*Top	Senior Seminar in Foreign Policy	FSI	Arlington, Va.	Col
	National War College	JCS	Fort McNair, Washington, D. C.	LtCol-Col
	Industrial College of the Armed Forces	JCS	Fort McNair, Washington, D. C.	LtCol-Col
	Naval Warfare Course, Naval War College	Navy	Newport, R. I.	LtCol-Col
	Army War College	Army	Carlisle Barracks, Pa.	LtCol-Col
	Air War College	Air Force	Maxwell AFB, Ala.	LtCol-Col
	Imperial Defence College	JCS	London, England,	LtCol-Col
	**Inter-American Defense College	JCS	Washington, D. C.	LtCol-Col
	National Defense College of Canada	JCS	Fort Frontenac, Kingston, Ontario	LtCol-Col

* All selections for Top Level Schools are by the Top Level School Board which meets each October.

** Requires complete fluency in Spanish or Portuguese.

FIGURE 3 (CONT'D)

Development and Education Command. The Marine Corps Development and Education Command at Quantico, Virginia is responsible for the conduct of Marine Corps Officer Professional schooling. Included under their jurisdiction are:

- Officer Candidate School
- The Basic School
- Amphibious Warfare School
- Communication Officers School
- Marine Corps Command and Staff College
- Extension School

The Officer Candidate School is charged to evaluate and screen officer candidates to insure that they possess the requisite leadership, moral, and physical qualities for commissioned grade. The school conducts the college graduate Officer Candidates Class, the Platoon Leaders Class, and Marine-option NROTC summer sessions. The school evaluates and screens some 3,500 candidates, under the three source programs, each year. About 1,700 are eventually commissioned. Virtually all Marine officers, except academy graduates, must complete OCS.

The Basic School, in keeping with the Marine motto of "Every man a Rifleman," offers all new officers a common course. Currently all officer male and female, aviation and ground, take this course. This course may be followed by functional schooling as required. The Amphibious Warfare Course (AWC) is the prime intermediate level professional school in the Marine Corps today. Recently, however, only about 15 percent of eligible officers attended the school, down significantly from earlier years reflecting a decision to lengthen the course from 24 weeks to 39 weeks. The decision was seemingly based on a desire to minimize family turbulence rather than any new education or career management philosophy. The AWC emphasizes Marine air-ground tank forces in amphibious operations in order to prepare Marine captains for the general duties of command and staff functions in battalion and regimental size forces of the Fleet Marine Force.

Communication Officers School is another intermediate level professional school. (Officers do not attend more than one professional school at any level. A total of about 30 percent of eligible Marine officers attend an immediate level course.) The school provides military education in communications, and command and staff duties to prepare officers for selected Fleet Marine Force (and non-FMF) assignments.

The Marine Corps Command and Staff College, with its emphasis on Marine air-ground tank forces in amphibious operations, prepares field grade officers for command and staff duties at regiment and higher, and with joint and combined forces. The Command and Staff

College now reaches, in residence, about 35 percent of the eligible Marine officers. This is up a bit from earlier years but the increase reflects a decline in the base population rather than a larger number in school.

The Extension School provides nonresident professional educational services paralleling those provided in the various officer schools. The officer courses offered by the Extension School are:

The Basic School Extension Course
Marine Corps Amphibious Warfare School Extension Course
Marine Corps Command and Staff College Extension Course

Neither facilities or officer availability allow the Corps to meet its professional education goals with resident schooling alone. The Extension School helps fill the gap. "Completion of Extension School courses," officers were recently told, "satisfies all requirements met by attendance at the resident schools -- assignment, promotion, qualification for attendance at a higher level school." Nevertheless recent figures indicate that only approximately 10 percent of the eligible captains enroll for the Amphibious Warfare Course, and an even smaller number pursue the Extension School's Command and Staff College course.

Philosophy of Education. The Marine Corps philosophy of professional education is well presented in the following piece that focuses on the Corps senior school -- the Marine Corps Command and Staff College. The purpose of the school is "to develop as fully as possible [in] field-grade officers:

a. Intellectual processes, including oral and written communication and the analysis, synthesis, and evaluation of problems;

b. Knowledge of amphibious operations, command and staff functions, management, conference-techniques, leadership, and communication methods.

In addition, the college provides an environment conducive to thoughtful study and discussion, within which officer-students can strive to attain a better understanding of themselves and their professions....

The Marine Corps Command and Staff College has an incoming student body with diverse backgrounds, both in terms of academic schools attended and experience. The billets to which graduates of the college are assigned are also diverse, although some broad groupings

are possible. To meet the needs of all the students the college must:

First, individualize as much of the curriculum as possible so that officer-students can acquire knowledge and abilities that they may lack or increase their knowledge of fields of special interest to them;

Second, continuously examine its curriculum to insure that it is useful to all students, whatever their MOS....

The main emphasis of the college is on intellectual [learning], the extension of knowledge. It differs from that of the purely technical or 'hard skill' school, which usually deals with the operation of particular types of equipment or processes. Since the college graduates go to a variety of high-level billets, they are concerned with the solutions to problems and reactions to all kinds of situations military economic, political, and social, rather than with specific skills.

Implications for RETO. The Marine Corps' ability to accession nearly 80 percent of their officers through programs that require little or no on-campus presence is suggestive. Such programs might allow the Army to become more effective in its recruiting at the large number of colleges and universities without ROTC units.

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

ANNEX H

A COMPARISON OF OFFICER EDUCATION AND
TRAINING IN THE U.S. AND SELECTED FOREIGN ARMIES

1. PURPOSE. This Annex compares the salient features of the officer education and training systems of six foreign armies with the current U.S. system.

2. DISCUSSION.

a. The Armies of Israel, United Kingdom, Canada, Federal Republic of Germany, German Democratic Republic and Soviet Union were analyzed.

b. Despite similarities in the organization and missions shared by these modern armies, each has some unique practices regarding the method of educating and training its officers. The objective of this comparative study is to identify practices in foreign armies which might be appropriate for inclusion in the Review of Education and Training for Officers Study Group's deliberations. These practices are listed in the conclusion section of the Appendix to this Annex.

3. RECOMMENDATIONS.

None.

1 Appendix

1. A Comparison of Officer Education and Training in the U.S. and Selected Foreign Armies

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 1

A COMPARISON OF OFFICER EDUCATION AND
TRAINING IN THE U.S. AND SELECTED FOREIGN ARMIES

TO ANNEX H

A COMPARISON OF OFFICER EDUCATION AND
TRAINING IN THE U.S. AND SELECTED FOREIGN ARMIES

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A COMPARISON OF OFFICER EDUCATION AND
TRAINING IN THE U.S. AND SELECTED FOREIGN ARMIES

1. Introduction. The purpose of this paper is to compare the salient features of officer education and training systems in six foreign armies with the system of the U.S. Army. Surveyed here are the armies of the following countries: Israel, United Kingdom (UK), Canada, Federal Republic of Germany (FRG), German Democratic Republic (GDR) and the Union of the Soviet Socialist Republics (USSR).

All modern armies share similar missions of deterring or winning wars. Each of the armies studied in this paper has developed a system aimed at the proper integration of classroom instruction, self-study, practical exercises, and on-the-job experience in order to develop and maintain the technical proficiency of its officers. In addition to accepting the need for varying degrees of specialization, the armies of these six countries have developed methods for identifying and cultivating a relatively small number of mid-level and senior officers to assume positions of a more general and managerial nature.

Similar missions and shared concerns of these six modern armies notwithstanding, considerable differences in the respective systems are apparent--both in emphasis and in kind. When evaluating these differences or assessing their applicability to U.S. Army officer education and training, consideration must be given to the nature of the respective society and to the role of the military within its society. The quality of officers produced in each army is, to a significant degree, a reflection of the social milieu from whence the officers come and of society's attitude toward its armed forces. This attitude is important for at least two reasons: (1) it influences the attitudes of a nation's youth, thus predetermining in part, who will aspire to a military career, and (2) it influences the allocation of national resources.

The following characterizations provide a brief overview of the role of each of the above armies in their respective societies:

Canada, UK. The social status of the armies of the UK and Canada is most similar, understandably, to that of the U.S. Army. Political and economic pressures necessitate unceasing efforts to consolidate forces or to otherwise review defense policies with stringent cost-effective guidelines.

Israel. The Israeli Army, like no other in this summary, is geared to the real possibility of having to fight at any moment. The Israeli Defense Forces (IDF) are seen as the real guardian of society and service in the IDF is a social "must."

FRG. The Army of the Federal Republic of Germany (FRG) is a young and modern army within a relatively new democracy. Added to its normal defense role is the need to stay 'in tune' with the democratic principles of society.

USSR and GDR. The armies of both the USSR and GDR enjoy a high status among their populations, as well as among policy makers and financial planners. Both armies are highly politicized and provide laboratories for heightening the loyalty of young people to the parties which dominate their societies.

2. Preinduction/Paramilitary Training. Preinduction or paramilitary training is one of the most visible indicators of the military's role in society. Such training provides military officials not only with a number of personnel with varying degrees of pretraining, but also allows for reasonably reliable screening and selection of potential officer candidates. In any event, evaluation of immediate precommissioning training should be made only with knowledge of the preinduction or paramilitary background of the officer aspirants. An outline of preinduction and paramilitary programs is provided below:

Canada, UK, FRG

There are no nationally sponsored preinduction or paramilitary programs in Canada, UK or the FRG. In Canada and the UK, a very small number of young people attend various private schools with a military orientation.

Israel

Comprehensive efforts by the Israeli Defense Forces (IDF) to provide military training for Israeli youth are motivated both by the need for socialization of immigrants and the desire to identify potential officers as early as possible. Dr. Tom Bowden, in a 1975 article, "The Education Programme of the Israeli Defense Forces," points out:

It is particularly important to note from the outset that the IDF is a comprehensive social force, facilitating not only the assimilation of new immigrants but also educating for citizenship, teaching Hebrew (especially during the campaign to end illiteracy, spearheaded by the IDF in the 1950's),

providing entertainment and recreation. All this in addition to the development of leadership skills and training the cadre of technologists necessary for service in a modern army and a developing state. The impact of the Army upon life in Israel is fundamental and reaches out into every corner of society. (British Army Review, No. 49, April 1975)

The Israeli Youth Corps (Gadna) under the auspices of the IDF is involved in the early education and training of Israeli youth, both male and female. Heavy emphasis is placed on education and training among culturally disadvantaged or even criminal elements of the youth population, although Youth Corps activities involve all Israeli young people between the ages of 14-18. The Youth Corps is organized into land, air and sea departments. Active participation in the Youth Corps enhances one's chances for a responsible position in the IDF. Service in the IDF is an important personal event. According to DR. Bowden in the article cited above, "to miss the massive impact of Army Service is to be deprived of a vital educational and life experience. Those who have not served feel stigmatized, and sometimes are." The Armored Corps and the Fighting Pioneer Youth (Nahal) actively engage in military and, in the latter case, specialized agricultural training among youth.

USSR

The Soviet military is one of the most dominant institutions in Soviet society. The prestige of the military is reinforced through the publicizing, by all media and means, of its heroic role in WWII. The military itse^t perpetuates this image by publishing each year over 15 million copies of pamphlets or books, many for popular consumption. For example, 40 military periodicals and newspapers are published in Moscow alone. The official army newspaper, RED STAR, has the fourth highest circulation of all newspapers in the Soviet Union.

The Soviet defense-education program begins in the early elementary school years and continues fully integrated with academics throughout secondary and higher education. During the early school years the emphasis is on civil defense. As the child progresses through the school system he is taught more active skills.

Reportedly, each year 16 million youngsters (ages 10 to 15) gather in summer camps for military games (called "Summer Lightning").

These games include the introduction of military discipline, guard duty, military regulations, civil defense and maneuvers in formation. Soviet cosmonaut, Major General Beregovoy, directs a more advanced military game (called "Eaglet") for the highest two high school grades. These games include training in sentry duty, repelling an attack, grenade throwing, infiltration, dealing with chemical/nuclear contamination, map and compass work, and firing small arms.

The "games" described above are voluntary and sponsored by DOSAAF (All-Union Voluntary Society for Assistance to the Army, Air Force and Navy), or by the Komsomol. A 1967 law on Universal Military Service, however, established an additional, compulsory 140-hour preinduction training program for young men aged 15-17. This program is spread over the last 1 1/2 - 2 years of most secondary schools. About 25 percent of this training time is devoted to military specialties such as electrical engineering, radio electronics, parachuting, and military topography. DOSAAF assists further in military specialty training by providing specialist schools and military clubs.

Finally, special preparation for an army officer career is provided selected young men during their last 1 or 2 years of high school in a network of some 25 "Suvorov" military prep schools. The training and prestige of these schools are such that Suvorov graduates are exempted from taking competitive exams for entry into commissioning military colleges. Moreover, Suvorov graduates are known to make up a high percentage of command and staff academy student populations. Presumably, Suvorov graduates are the most likely to reach the apex of the Soviet military hierarchy--attaining 4-star or marshal rank.

GDR

Preinduction training in the GDR is modelled after that in the USSR. The GDR Gesellschaft für Sport und Technik (GST) - (Society for Sport and Technology) - resembles the Soviet DOSAAF. More than 90 percent of the young male population participates in GST activities, which include mostly military related sports. The Freie Deutsche Jugend (FDJ) - (Free German Youth) - is the GDR equivalent of the Soviet Komsomol. Under the auspices of the FDJ, training in military specialties is provided. Beginning in September 1978, special military classes will be given in all ninth and tenth grades of GDR schools. Ninth graders will receive 96 hours of practical military exercises with weapons, as well as some field training. Girls will be oriented more toward civil defense.

United States

No national preinduction program exists in the U.S.A. Preinduction or paramilitary training in this country consists of limited participation in such organizations as Civil Air Patrol, Navy League Programs, marksmanship clubs and Boy Scouts. Junior Reserve Officers Training Courses in some high schools represent the closest thing to preinduction military training in the U.S.A. These courses are usually restricted, however, to drill and ceremony.

3. Selection and Precommission Training.

Israel

Virtually all newly commissioned officers in the IDF advance through the ranks, receiving their commissions upon completion of an officer candidate-type course lasting 3-5 months. By the time candidates have reached this course, they have been carefully screened through testing and performance evaluations.

The process of selection begins when at the age of 16-17 all young men and women are given the Defense Department Coordination and Capabilities Test. Upon being drafted at age 18, all are retested. Recruits are then categorized by test scores which include IQ, Hebrew language, physical capabilities and motivation. From the composite score (called the KABA), recruits are placed into four categories: (1) officer potential, (2) non-commissioned officer potential, (3) regular soldier potential, and (4) dismissed because of physical limitations. All potential officers and NCOs then enter the army as recruits and undergo 20 weeks of basic infantry and advanced individual training. After completion of advanced training, soldiers serve in operational units for about 3 months. During this period the operational unit commander continues to evaluate those who earlier had been selected, and to identify other soldiers for formal training at various NCO courses.

Throughout all training phases, records are kept by cadre and commanders on the individual soldier's performance and motivation. At the NCO training centers peer ratings occur also. An individual's total score includes the KABA (modified throughout initial training periods), as well as faculty and staff evaluations at the schools. Upon completion of the NCO phase which is branch specific, the young soldier continues on to the officer school.

At the Mizpe Ramon Officer School there are three officer courses. One is a basic officers' course, lasting 3 months, which deals primarily with infantry officer skills. From this course, candidates go to branch courses (averaging 4 months in duration) for armor, artillery, engineer, and combat support officer training. Candidates who are to be commissioned in infantry remain for the second course at Mizpe Ramon -- an additional 2 months of infantry training. The third course is designed for officers with limited physical aptitude. This course provides basic tactics and other military training for candidates who will be commissioned in technical support specialties.

Courses at the Mizpe Ramon officer school range from 3-5 months and are branch oriented. Basic military subjects include:

Methods of Battle
Navigation
Communications
Demolition
Instructor Training
PT
Case Studies in Leadership
Ethics
First Aid

Heavy emphasis is placed on night training. An interesting side-light to the instruction in leadership is that the officer candidates are admonished not to emulate decisions of successful leaders. They are continually pressured to devise new and original solutions to combat problems.

Training companies at the officer school are commanded by former battalion commanders (LTC). Each company has four platoons of 40 candidates, to which are assigned four lieutenants and four sergeants. The objective of the officer school is to graduate branch qualified platoon leaders.

A small, but growing, ROTC-type program (Academic Reserve Program) also exists in Israel. Each year approximately 200 selected young people are deferred from the draft in order to attend the universities. Military training is provided each summer and once during each week military subjects are taught. Some of the students even attain advanced degrees before reporting for military service. Once on active duty, they begin by attending branch qualification courses.

UK

Although there are many different routes to a commission in the British Army, all officers commissioned in the combat arms, combat support and technical services attend courses at the Royal Military Academy Sandhurst.

Selection for one of the officer programs is competitive, the final decision being made by the Regular Commissions Board. Located in Westbury, the board administers written tests and oral interviews, and assigns individual and group activities designed to measure a candidate's reactions under stress. The 3 1/2 days of tests at Westbury are combined with earlier written reports from headmasters, commanding officers and former employers to determine a young man's fitness for officer training.

There are four basic types of commission in the British Army:

- o Regular (service to age 55)
- o Special Regular (service up to 16 years)
- o Short Service (service up to 8 years--3 on active duty; 5 in the reserves)
- o Short Service Limited Commission (service for at least 4 but not more than 18 months.)

Depending on the type and route chosen to gain a commission, a cadet will take at least one of the following courses at Sandhurst.

Standard Military Course. The aim of this course is to develop the qualities of leadership and to provide the basic knowledge required by all young officers of any regiment or corps so that, after the necessary specialist training, they will be fit to be junior commanders. The course last 28 weeks. There are three courses each year. The curriculum covers the following subjects:

Introduction to the Arms and Services
Organization of the Rifle Company
and Platoon
Section and Platoon Battlecraft
Oral Orders
Combat Appreciation
Patrols
Leadership
Map Reading
Skill at Arms
Signal
Adventure Training
Drill
PT
Administration
Characteristics of Armor and
Artillery
Deliberate Attack by Day and Night
Defense and Withdrawal including
Demolition Guards
Advance
Counter-revolutionary Warfare
Combat Team Organization and Tactics

Regular Career Course. This course aims to lay the foundation for a professional military career. Whereas the Standard Military Course is mainly military training, the greater part of the Regular Career Course is devoted to professional studies, including:

International Affairs
Contemporary Britain
War Studies
Introduction to Military Technology
Communications and Comprehension
Skills
Lecture Program on the USSR

The professional studies are the beginning of a continuum of professional education which progresses throughout the career of an officer. They provide a firm foundation for future studies in junior officer education, including the Junior Command and Staff Course and the two levels of the Progressive Qualification Scheme which serves as promotion and staff college entrance examinations.

The Regular Career Course lasts 23 weeks and is run also 3 times a year, starting about a week after each Standard Military Course.

Graduate Entry Courses. These special courses combine the syllabi of the above two courses at a tempo suited to a college graduate's capacity for assimilating knowledge. The normal course lasts 20 weeks, but there is a shorter version of 17 weeks for those who have had prior military training. Enrollment in these courses is limited to university graduates or certified professionals without military training, or those who have earlier received Army Cadet scholarships and attend the Pre-University Cadetship Course.

Pre-University Cadetship Course. This course aims to give the newly joined university cadet some basic military training so that he can go to the university with some knowledge of the army he has just joined. The course lasts 3 weeks and is run annually in September. The cadet is expected to train with his university's officer training corps and to serve with his unit for 4-6 weeks during summer vacations.

Pre-University Studies. These studies are for selected Regular officers who hope to enter a university but require additional academic qualifications. The length and content of these courses vary and are directly related to the needs of the individual officer, but no period of duty exceeds three academic terms.

Officers with a Regular or Special Regular commission attend both the Standard Military and the Regular Career Course before going on to a university or to their units.

Two pre-Sandhurst programs are geared to providing education opportunities to young men who excel in high school academics. One program allows for approximately 60 automatic admissions to the academy, or an opportunity to compete for the Cadet Scholarship program. The other offers junior college education (at Welbeck College) in science and engineering to approximately 80 youths who go on to Sandhurst and then directly to the Royal Military College of Science in Shrivenham.

Canada

Approximately one-half the officers commissioned in the Canadian Armed Forces have completed one of three joint military colleges or a civilian university on a fully funded ROTC-type scholarship.

Selection into one of these programs is competitive and is based on a combination of high school academic records, medical examinations, written tests and interviews. If the candidate is

determined qualified for admission to a military college his file is forwarded to the Final Board of Selection. Candidates who successfully complete all these selection procedures are offered an appointment to a military college or a scholarship to a civilian university. Before actual enrollment, however, they must successfully complete an 8-week summer preacademic phase of the basic officer training course. The final 8 weeks of this basic officer course are taken in the summer between the freshman and sophomore academic years.

The remainder of officers are commissioned via an officer candidate program, or by direct appointment.

There are three milestones during the course of regular commissioned service in the Canadian Armed Forces. All Regular officers begin with a Short Service Engagement which takes them up to 9 years service. At that time they may leave the service or be placed on Intermediate Service Engagement, which takes them to 20 years service or 40 years of age. At the end of that commitment, they can be accepted for Indefinite Service, which permits retirement at the age of 55.

The Canadian Military College System is comprised of three college campuses:

The Royal Military College of Canada is located in Kingston, Ontario and awards bachelors and masters degrees in Arts, Science or Engineering.

College militaire royal de Saint-Jean is located in Saint-Jean, Quebec. Here a cadet can obtain a bachelors degree in Arts, Science or Business Administration.

Royal Roads Military College in Esquimalt, British Columbia offers only the first 2 years of the 4-year degree programs, with the exception of a Bachelor of Science Degree in Physics and Physical Oceanography. Cadets pursuing degrees other than these two transfer to one of the other military colleges.

During the school years at the military colleges, some theoretical military courses and drill are included in the otherwise strictly academic curricula. The bulk of the military training, however, takes place during sessions in the summers, including the summer after graduation and commissioning.

As stated above, the Basic Officer Training Course is split between the summer just prior to entering college and the summer following freshman year. The mission of the Basic Officer Training

is to "motivate, teach and develop in the trainee basic military leadership, military skills and knowledge ... and to evaluate his progress." The major subject areas are:

Theoretical and Practical Leadership
Training
Drill
General Military Knowledge
Maps
Military Writing
Effective Speaking
Internal Security Operations
First Aid
Weapons Handling
Survival Techniques
Nuclear, Biological and Chemical
Warfare
PT

The course is structured around a series of progressive leadership exercises which take place under arduous physical and mental conditions. During this second summer period, foreign language instruction in either French or English is given.

The third, fourth and fifth summer training periods are devoted to branch/specialty training. A summary of the infantry summer training is provided as an example:

3d Summer: Training is based on the dismounted infantry section. Section operations taught include: the advance to contact; quick, deliberate and night attacks; woods clearing, house clearing; the defense; relief in the line; the withdrawal; patrolling; field defenses; company organization; small arms training; map using; staff duties; communications procedures; target grid procedure; the use of surveillance equipment; hygiene and sanitation in the field. Drill and sports are also included. Leadership is stressed throughout this phase, particularly during field exercises.

4th Summer: Training is based on the dismounted infantry platoon. Platoon operations taught include: the

advance to contact; the quick, deliberate and night attacks; the defense; relief in the line; the withdrawal; fighting in built-up areas; woods clearing and river crossing; patrolling; target grid procedure; the organization of a battalion; the conduct of range practices and field firing exercises. Staff duties and techniques of unit instruction are also included.

5th Summer (after graduation and commissioning):

This training is divided into a combat arms package and a Young Officers' Tactics Course. The combat small arms portion provides junior officers with the expertise to plan, conduct and supervise range work and live-firing exercises for infantry company weapons. The tactics course includes lectures, training exercises with troops, sand table exercises and field training exercises based on the mechanized infantry platoon in defensive and offensive operations. Infantry/armor cooperation, internal security and air mobile operations are also taught.

The goal of precommission training in the Canadian Land Forces is, thus: to produce a college educated, branch qualified platoon leader.

Federal Republic of Germany

The selection process for officer training programs in the FRG normally begins with a 2 1/2-day series of tests at the Officer Testing Center in Cologne. Most young men who are selected for officer training will have completed the German high school college preparatory track (Gymnasium) before reporting to the testing center.

In Cologne, applicants are tested for physical condition and aptitude, as well as in mathematics and the German language. Psychological traits of the applicants are measured through

individual interviews and group situation experiments. For successful candidates, branch and academic discipline assignments are made at this time.

Newly selected officer candidates report for active duty on 1 July, at which time they begin 3 months of basic training together with enlisted men/conscripts. Following basic, advanced training is provided for 3 months in troop units.

The next phase is an officer course lasting 9 months at the appropriate branch school. The goal of this course is to provide branch qualified platoon leaders. The branch officer course culminates in the officer examination. Candidates who pass this exam, and complete a total of 36 months active duty, are commissioned as lieutenants. This commissioning milestone usually occurs while the candidate is studying at one of the military colleges of the FRG Armed Forces (Hochschulen der Bundeswehr).

Approximately 75 percent of newly commissioned officers in FRG Armed Forces attend one of the two Bundeswehr Colleges (in Hamburg and Munich) or technical colleges in Munich and Darmstadt. Courses at these colleges began in 1973, and last from 3-5 years. Although they are funded by the Ministry of Defense, they are responsible to civilian academic regulations. There is virtually no compulsory military training during the course of study; faculty is almost exclusively civilian. Degrees awarded by the Bundeswehr Colleges have the status of those from civilian colleges and universities.

Curricula at each of the Bundeswehr Colleges have been established according to the needs of the services and are approved by the Hamburg and Bavarian governments. Quotas are set for each Arm of the Armed Forces. In Hamburg the following degrees are awarded:

Pedagogy
Business and Economics
Mechanical Engineering
Electrical Engineering

In Munich the following disciplines are offered:

Pedagogy
Business and Economics
Operations Research
Aerospace Technology
Electrical Engineering
Construction/Survey Engineering

At the technical colleges officer candidates can study for one of the following degrees:

Electrical Engineering
Mechanical Engineering/Space
Technology
Business Management
Construction Engineering

Of the above disciplines, army quotas are heaviest in business and economics, mechanical engineering, pedagogy and electrical engineering. About 60 percent of the college vacancies go to combat arms branches. Graduation from Bundeswehr College is accompanied by a diploma, a promotion to 1LT and a service obligation of 12 years. Failure at one of the colleges is usually followed by return to one's unit and service as an officer or enlisted man for the remainder of the initial 6 year obligation.

The remaining 25 percent of newly commissioned officers come from the ranks or are trained as technical specialists (Fachdienstoffiziere) in various institutes. Those coming from the ranks attend a variety of specialist training courses, as well as the standard initial officer courses (see next section for descriptions of Army Officer School, Hannover). Although in the main, the Fachdienstoffiziere will be a "Limited Duty Officer" with promotion only to captain, outstanding performance may qualify one for regular line duty (Truppenoffizier). In this case, the officer would proceed through his career with no arbitrary limit placed on promotion potential.

German Democratic Republic

Since 1971, all newly commissioned officers in the GDR Army (Ground Forces) attend at one time or another the Ernst Thaelmann Ground Forces College. (There are separate military colleges also for naval, air and border-guard forces.) Most officer candidates attend for 3 years and receive, in addition to a commission, a college degree in economics or engineering.

Candidates who have received their college education at a civilian college or university undergo compulsory military training there, as well as attend Ernst Thaelmann for 4-10 months (depending on the specialty in which they are commissioned).

All male youth are eligible (up to age 23) to apply for officer training, provided they are members of the "Free German Youth:" and have earned the "Society for Sport and Technology" badges in swimming, sports and vehicle driving.

Application for officer training is usually made during the 9th year of secondary school (age 15-16 years). A medical exam and interview are administered locally. If successful, the young man joins a special "Free German Youth" group for military career applicants. Upon completion of the standard 10-year high school, most young men either continue in an extended high school for 2 years or take professional/vocational training in the civilian economy. Some enlist in the army, attend noncommissioned officer school and then take a year preparatory training course before entering Ernst Thaelmann. One year before entry into the college, all applicants must take competitive, comprehensive examinations. Thaelmann includes general courses in:

Social Sciences
Military Science
Mathematics
Natural Sciences
Foreign Languages

and specialized training, depending on military specialty. Specialties in the GDR Ground Forces for which officers are trained at Ernst Thaelmann are:

Motorized Rifle
Tank Troops
Ground Rocket Troops
Artillery
Combat Engineers
Chemical Defense
Air Defense Artillery
Signal
Radar Service
Rocket Support Service
Ordnance Service
Armored and Motor Vehicle Service
Supply Services

Upon graduation from Thaelmann, the young branch qualified officer returns to command a platoon in the unit with which he trained as a cadet.

Officers for the following specialties are trained at selected civilian institutions:

<u>Military Physical Training</u>	- German Physical Culture School, Leipzig
<u>Finance</u>	- Humboldt University, East Berlin
<u>Foreign Languages Sepcialists</u>	- Karl Marx University, Leipzig
<u>Military Construction</u>	- Engineering School, Cottbus
<u>Information/Data Systems</u>	- Technical University, Dresden
<u>Military Transport Service</u>	- Engineering Schools for Traffic Technology, Dresden and Gotha

All male college students are required to undergo ROTC training (including those with prior service). Young men desiring a commission in one of the branches listed in the above paragraph must make their preferences known at the outset of their study. If accepted into the commissioning programs, they receive special stipends, and upon graduation, receive special training at Ernst Thaelmann. Young men who have not been enrolled in commissioning programs may later apply for a reserve commission upon graduation from GDR colleges and universities.

Also available as a source of commission is a short OCS course for NCOs. The primary focus of this course is on:

Drill and Ceremony Combat Training Physical Training NBC Political and Social Sciences

Soviet Union

As in the GDR, Soviet military authorities recruit officer candidates from among a large pool of young men who have been active for several years in Party and military youth activities.

Approximately 85 percent of the newly commissioned Soviet officers have completed one of the many ground forces military colleges. Although there are some 3-year colleges, at least 68 are of 4 years duration. Each military college is branch/specialty specific. There is no "infantry" branch in the Soviet Army. Therefore, the "Combined Arms" colleges can be viewed as producing infantry (or motorized rifle) officers.

The number of 4-year military colleges associated with the particular branches/specialties of the ground forces are provided below:

<u>Branch/Specialty</u>	<u>No of Colleges</u>
Combined Arms, Command	9
Airborne, Command	1
Tank Command	9
Field Artillery	
Command	12
Engineer	3
Antiaircraft Artillery	
Command	4
Engineer	1
Air Defense*	
Radio Electronics, Command	3
Radio Electronics, Engineer	1
Rocket, Command	2
Rocket, Engineer	1
Railroad Troops, Command	1
Military Topography, Command	1
Military Construction, Engineer	1
Rear Services	1
Chemical Defense	
Command	1
Engineer	1
Auto Transport	
Command	1
Engineer	1
Signal	
Command	7
Engineer	2

*National Air Defense (PVO Strany) is a separate arm of the Soviet Armed Forces and is normally not included in Ground Forces Strengths.

Military Engineer
Command
Engineer

2
1
TOTAL 68

As can be seen from this list, a distinction is made between commanders and technical specialists (engineers) in almost all branches. Soviet writers often refer to their officers as "commanders, political workers, engineers and technicians," or as military "leaders and scholars/scientists." This is a reflection of the genuine specialization in the Soviet officer corps. Not only are officers trained from the outset in branch specific military colleges, but the question of their specialization within a particular branch is also decided by the military college which they attend. (Graduates of 3-year colleges are referred to as "technicians.") The distinction between commander and engineer is addressed in a Soviet handbook:

What to become: a commander or an engineer?

This is not an idle question. True, given the complex military equipment available to our Armed Forces today, the differences between a commander and a technical specialist are not so pronounced as before, since commanders can do their duties properly only if they understand their equipment... Despite this, there is a significant difference in the nature of the responsibilities of a commander and an engineer. A young man must make up his mind before entering a military college where his interests and talents lie--in a commander's role, or as an engineer. *

Political indoctrination is an integral part of every Soviet school and especially of all military colleges (over 90% of all Soviet officers are Party or Komsomol members). Nevertheless, there exist, in addition to the above military colleges, five ground forces' military-political colleges of which one each is oriented toward combined arms; tank and artillery; engineer and signal; construction; and air defense. These colleges prepare ground forces' political officers who have specialized in Party political work, but who on occasion also assume regular military duties. Military medical, finance, music and certain other professional specialists are trained at civilian colleges and institutes.

* I.A. Kamkov, V.M. Konoplyanik, Voennye akademii i uchilishcha (Military Academies and Colleges), MOD Publishing House, Moscow, 1974.

Many, possibly most, male college students are required to take a comprehensive ROTC program as part of their regular curriculum. Those completing summer camp after graduation, and passing the commissioned officer exam, may be given a reserve commission. A call to active duty for 2-3 years could come anytime before the age of 30, but usually occurs only after the graduate has first worked in the civilian sector for a couple of years. After his active duty obligation is completed, the ROTC officer usually returns to civilian life and to the Reserves. Individuals in this category make up about 15 percent of newly commissioned officers. By the 3d/4th year of service for a particular year-group, however, almost 100 percent of those remaining on active duty are military college graduates. College graduates who do not receive a commission may be drafted as privates. In such cases they may elect to take a 3-month OCS-type course at the end of their first 9 months of service. Commissioned as junior lieutenants, they are then released from active duty into the reserves.

Selection for one of the military colleges begins with an application submitted to local military commissariats (draft boards) or, for active duty personnel, through the chain of command. Each applicant designates the college for which he is applying. This is an important step in the application process, since, as pointed out above, acceptance into and graduation from a particular branch college is a commitment of at least 25 years active duty service in that field. There is little or no changing specialty tracks once in college.

After applications have been reviewed (including the very important Party evaluation reports), a certain number of young men are allowed to take the entrance exams. The numbers taking the exams are regulated so that a minimum of four civilians and two servicemen compete for each college vacancy.

Young men selected to take the exams are given special preparatory courses and privileges. Servicemen candidates, for example, cannot be reassigned, sent on long TDY trips, or given details on free days and holidays. A special leave is granted to young servicemen candidates in order for them to study for the entrance exams. Civilian youth living near military bases may attend the special courses set up in officer clubs. Otherwise, preparation of civilian candidates is the responsibility of local Party and commissariat officials.

Entrance exams are tailored to the particular military college for which the candidate is applying, but are based on the All-Union Exams for entry into civilian colleges and universities. The Soviet handbook on military colleges referred to above provides a 75-page outline of the exams, with examples of the subject matter for which the candidates are responsible. A short subject matter outline is provided below:

Russian Language and Literature

Phonetics
Morphology and Orthography
Syntax
Literature (Reading list of Russian and Soviet
Classics: 25 books for Russians; 14 for
graduates of non-Russian schools)

Mathematics

Arithmetic
Algebra
Elementary Functions
Geometry

Physics

Mechanics
Fluids/Gasses
Molecular Physics
Thermodynamics
Foundations of Electrodynamics
Oscillation and Waves
Optics
Structure of the Atom

Chemistry

Exothermal and Endothermal Reactions
Periodic Law of Mendeleev
Properties of Selected Elements
Characteristics of all Chemical Reactions

Biology

Botany
Zoology
Anatomy and Human Physiology
General Biology

History of the USSR

Ancient Russian History
Development and Decline of Feudalism
Development of Capitalism
Beginning of Proletarian Stage
Period of Imperialism
October Revolution and Building of Socialism
Full and Complete Victory of Socialism
USSR in the Period of Full-scale Building of Communism

Geography

World Geography
Soviet Geography

Foreign Languages

Written and Oral Tests in one of ...

English
French
German
Spanish

Entrance exams are taken at the individual military colleges; the final decision as to who will be admitted as cadets rests with the commandants of each college.

The military colleges curricula vary, once again, according to the branch/specialty. All military colleges, however, have basic core academic courses which include:

History of the Soviet Communist Party
Marxist-Leninist Philosophy
Political Economy
Military Pedagogy
Psychology
Advanced Mathematics, Physics and Chemistry
Mechanical Drawing
Theoretical Mechanics
Strengths of Metals
Electrical Engineering
Thermodynamics
Hydraulics
Foreign Languages

Core military subjects include:

Tactics
Communications
Military Topography
Military History
Military Organization and Regulations
Weapons and Military Equipment
Military Engineering
Drill and Ceremony
Physical Education

At the military colleges the academic year is divided into two semesters. There is a winter holiday of 2 weeks; summer leave is 1 month. The normal day includes 6 classroom hours plus 3-4 hours for study. Cadets attend classes six days a week. Before final exams (at the end of each semester), at least 3 days are set aside for preparation. Classes are conducted by lecture, seminar, group exercises, practical exercise, tactical training, command and staff exercises with maps (or in the field), laboratory periods, duty with troops, term papers and projects, tests, consultations with teachers and independent research. Lectures take up approximately 50 percent of the time. Summers are spent in troop units. Each military college, in addition to the normal study halls, classrooms, laboratories and sports facilities, has a field base connected with it. Field bases contain mock battlefields, equipment testing grounds, firing ranges and tank/motor vehicle ranges.

Graduation from a military college and passing a national officer exam bring to the young man a nationally recognized college diploma and a commission as a lieutenant (the second of three grades of lieutenants in the Soviet Army). From college the young officer is assigned to a unit and is expected to arrive as a branch qualified platoon leader. Honor graduates have their choice of assignment location.

United States

The overwhelming majority (67 percent) of newly commissioned officers in the U.S. Army come from ROTC programs at civilian universities -- some fully funded by the government. These programs combine regular academic courses in a wide variety of disciplines with on-campus military courses and drill. Approximately 60 percent of the academic studies are in the social sciences, physical sciences, engineering and business. ROTC cadets (men and women) who participate in the full 4-year program attend

a military training camp during the summer preceding the final academic year. The combined military curriculum for ROTC includes:

Military History
Organization of the Army
National Security
Command and Staff Functions
Military Law
Logistics
Map Reading
Small Unit Tactics
Operation and Use of Weapons
Leadership and Management

College students wishing to join an ROTC program during their 2d or 3d year of college may do so by first attending a basic training camp in the summer. There are only 280 ROTC detachments out of a total of 1,914 U.S. 4-year colleges. Students in 422 colleges near ROTC detachments may also participate in the program. Some colleges are heavily oriented toward the military (Citadel, Virginia Military Institute, Texas A&M, etc.).

Most graduates of ROTC programs, in addition to receiving a college diploma, are commissioned in the Reserves. Approximately 30 percent are called immediately to active duty for a period of 3-4 years. The remainder serve on active duty for 6 months.

Approximately 19 percent of all new officers on active duty are commissioned from the U.S. Military Academy at West Point. The 4-year curriculum at West Point provides for a college degree in engineering and extensive military training both in the summers and during the regular academic years. West Point officers are given Regular Army commissions. Attendance at West Point is fully subsidized by the Government and selection for the academy is highly competitive. Rigorous physical and academic entrance exams must be passed for all who have received appointments. Appointments can be obtained by men or women from Members of Congress, the President or through competitive examinations within the Armed Forces (both Active and Reserve).

Approximately 13 percent of new U.S. Army officers are graduates of OCS courses of 14 weeks duration. OCS is open to all enlisted personnel on a competitive basis and usually requires that the soldier have a college degree before being accepted.

The objective of U.S. Army commissioning programs is to provide college educated young men and women, well trained in basic military skills and ready to attend further branch/specialty courses.

Summary

A key element in the commissioning programs of all the armies studied, except that of Israel, is some form of military academy or military-sponsored college education leading to a baccalaureate degree. Excluding the case of West Point, the U.S. Army is the only one which does not control the academy/college curricula of its future officers. In all the foreign armies technical or "hard" science courses are predominant.

Although each of the armies, including the U.S. Army, actively recruits outstanding young soldiers for officer training, only the FRG and Israeli armies require their future officers to undergo basic enlisted and NCO training, together with enlisted men/conscripts, before being accepted for officer training. Added to this military experience for young Israeli officer candidates is the training received through various national level preinduction training programs.

Preinduction training starting at an early age, combined with an active role in Young Communist Party affairs throughout their elementary and secondary school years, is a prerequisite for acceptance into officer training programs in the GDR and USSR.

Prior enlisted experience or extensive preinduction training thus assists the FRG, Israeli, GDR and Soviet Armies in selecting young men who have (1) demonstrated their desire, ability and inclination toward a military career, and (2) are physically, psychologically, and in some cases, technically prepared to accept the rigors of precommission training.

Early determination of branch or specialty is accomplished in the Canadian, FRG, GDR and Soviet Armies. Officers in these armies are expected to be branch qualified upon commissioning. In the case of the Soviet Army, determination of whether a young man will pursue a command track or become a support/staff specialist occurs at the time he selects the military college he desires to attend.

Officers in the FRG, GDR and Soviet Armies must pass an officer examination before they receive a commission.

4. Officer Education and Training Systems.

This section will describe officer education and training systems in the above armies from the point of view of the programs and institutions available for junior, mid-level and senior officers.

Israel

Junior Officers. Various short courses (usually of 4 weeks) are provided IDF lieutenants and captains during their first few years of commissioned service. In artillery, for example, selected junior officers may attend a 4-week advanced technical training course, a 4-week advanced tactical training course and a 4-week artillery specialization course. In the latter course, artillery officers may specialize in survey, artillery reconnaissance, etc.

All regular army officers of a particular branch meet once again as captains in a 9-12 week company commanders' courses given at the various branch schools.

Mid-Level. A joint service command and staff college is conducted for selected mid-level officers in the IDF. The course lasts 11 months and is divided into four terms devoted to the following subject areas:

- | |
|----------------------------------------------------------|
| 1st Term - General Military Command and Staff Procedures |
| 2nd Term - Structure and Organization of IDF |
| 3rd Term - Tactics |
| 4th Term - Strategic Studies |

Seventy percent of the instruction is single service oriented. Air force officers attend for only 5 months, while navy officers attend for 3. While attending the command and staff college many Israeli officers have their first opportunity for advanced civilian education. College courses can be taken (after hours) at the University of Tel Aviv, and certain courses at the command and staff college are accomplished by first obtaining a recommendation and then passing a test consisting of professional military knowledge and tactical problems. Approximately 75 percent of all regular army officers attend the course.

Instructors at the command and staff college are former battalion and brigade commanders; high ranking military and civilian guest speakers also take part. Instruction takes place 6 days a week. Physical training is highly emphasized. The objective of this course is to provide officers qualified to occupy designated key command and staff positions in the IDF.

Officers of all branches who have been recommended for battalion command must attend a 9-week battalion commanders' course. Prior to attendance, officers are furnished instructional materials on which they are tested during the 1st week of the course. A general framework of the course is provided below:

1st week - General Instructions. Diagnostic test
2nd/3rd week - Instruction and Visits to Syrian Front
4th week - FTX
5th week - Instruction and Visits to Jordanian Front
6th week - FTX
7th week - Instruction and Visits to Egyptian Front
8th week - FTX
9th week - Summary and Final Exams

Senior Officers. For senior officers there is a brigade commanders' course. The highest level of formal military education, however, occurs at the National Defense College (NDC). Promotable colonels and brigadier generals, as well as some high-ranking civilians attend this 1-year course. The purpose of the NDC, within the framework of overall training and education for IDF military officers, is best stated in the "National Defense College Information Sheet:"

The educational and training system of the IDF commander, from officers' school through Command and Staff College, is "programmed" for war -- and rightfully so. The result of this training route, and the way of life in the IDF -- of multiplicity and complexity of problems, of pressures of time and of current security burdens -- is that a generation of officers growing up in field units and echelons are unacquainted with the security problems in their overall context and with the network

of considerations at the General Staff level. IDF generals will continue to grow up and be forged in the "university" of reality--in which they confront the daily problems of the battlefield, but the NDC will enable commanders to take a year's sabbatical from their work to devote thought and study to the compendium of security problems that extend beyond their narrow military experience.

The NDC course of study is composed of three major courses:

General Background and National
Security Studies
Study and Debate of Tangible Security
Problems
Individual Research in Selected
Security Subjects

There are nine permanent instructors on the faculty, all of whom have advanced degrees. The academic program is supervised by the University of Tel Aviv and cooperative degree programs with the university are available.

United Kingdom

Junior Officers. The education and training of young British officers begins with basic courses at the respective branch schools. This usually takes place immediately upon commissioning at the completion of Sandhurst courses. An example of such a basic course is the Platoon leaders' Battle Course (Infantry) conducted at Warminster and lasting 5 weeks. Course objectives are such that at the completion of this course, officers are to be able to:

Pass the weapon training tests.
Plan, organize and supervise small arms training in a platoon.
Supervise unit firing point coaches.
Conduct live firing on ranges.
Zero all personal weapons.
Conduct live firing of (infantry) hand held anti-tank weapon and the throwing of live grenades.
Make an ammunition danger area template and apply the principles of range safety to all aspects of battle shooting.

Plan conduct and supervise an individual battle shooting exercise.
Plan, conduct and supervise a team battle shooting exercise.
Use the demolition set to destroy dud rounds.

The education and training of British junior officers is regulated by their "Progressive Qualification Scheme (PQS)" the first introduction to which begins at the Regular Career Course at Sandhurst. The rationale for PQS is outlined thus:

Every officer should strive throughout his service to continue his military and general education. The majority of the military skills and expertise that an officer will need during the early years of his career will be acquired largely through day to day experience in his job and through specialist military courses. The knowledge and understanding required in his profession is not however confined solely to military matters. The officer must widen his interest in national and international affairs and in economic and sociological factors both in Great Britain and the World both as they affect his country and the Army. To assist in this study and to ensure that certain minimum standards are achieved during each stage of an officer's career, the Progressive Qualification Scheme has been introduced... The officer will leave the scheme when he has successfully qualified for selection for promotion to major or for staff training .

The PQS is divided into levels as follows:

PQS 1

- o Troop duty after completion of basic officer course.
- o Examinations (practical and written) for promotion to captain.

PQS 2

- o Troop duty for minimum 18 months.
- o Attendance at Junior Command and Staff Course.
- o Examinations (practical and written) for promotion to major and selection to Army Staff Course.

Under PQS 1, officers are given practical exams in tactics and written exams in the following subjects:

Soldier in Society (2 hours)
Leadership, Personnel Management
and Administration (1 1/2 hours)
International Relations and War
Studies (2 1/2 hours)

Upon successful completion of these exams, attendance at a short military law course, and a recommendation for promotion from his commanding officer, an officer can expect to be promoted to captain.

Central to qualification under PQS 2 is attendance for all officers between the ages of 26-29 at the 10-week Junior Command and Staff Course (JCSC) collocated with, and administered by, the School of Infantry, Warminster. The objectives of the JCSC are to:

- Train officers for senior captains' assignments to regiments and mid-level staffs.
- Instruct officers in the tactical employment of combined arms up to battalion/battle group level, and to familiarize them with some of the operations of a combined arms team.

The JCSC was established in 1969 in recognition of the need to give all officers command and staff training early in their career. Previously, the only officers to receive any formal training in staff procedures were those selected to attend the field grade Army Staff Course. Prerequisites for attending the JCSC include: knowledge of the organization of an armored division and armored regiment, and an infantry and mechanized battalion. Additionally, before the start of the course all officers must be well versed in radio procedures.

The JCSC is a pass/fail course. Those who pass are exempt from taking the practical phase of the exam for promotion to major/selection for the Army Staff Course.

The examination for promotion to major serves also as a qualifying exam for consideration for attendance at the Army Staff Course. In addition to the tactical exam given during a division level FTX, essays on the following subjects are required:

International Relations (3 hours)
War Studies (3 hours)
Military Law (3 hours)
(Officers selected for
special foreign language
training are exempt from the
military law exam)

Permission to take these exams, which constitute the final phase of PQS 2, is granted after an officer has been recommended by a special report from his commanding officer. Approximately 80 percent of captains are allowed to take the exams. From those passing the exams, a board selects captains to be promoted to major and the most outstanding among them for attendance at the Army Staff Course.

Mid-Level. The British Army Staff Course consists of two phases: one, lasting 2-12 months, at the Royal Military College of Science (RMCS), Shrivenham, and the other, lasting 1 year, at the Staff College, Camberley.

The length and curriculum of study at RMCS, Shrivenham depends on an officer's scientific background. Officers are classified into three divisions:

Division I: Officers with baccalaureate degrees in engineering or science. Time spent at RMCS: 10 months. From among these officers come those who are selected to pursue graduate degrees in scientific disciplines.

Division II: Officers without degrees, but with some scientific background. Time spent at Shrivenham: 10-12 months.

Division III: Officers having little or no scientific background. Time spent at Shrivenham: 2 months.

Division I and II officers cover basically the same subject matter, while division III officers are given instruction designed merely to acquaint them with the military applications of technology. The Shrivenham curriculum for Division I and II officers includes the following main subject areas:

Aids to Decision Making
Telecommunications
Firepower
NBC
Equipment Management
Fighting Vehicles and Mobility
Aerial Vehicles
Surveillance, Target Acquisition and Guided
Weapons

The instruction at Shrivenham is sequenced so that all officers finish at the same time and continue on to the staff college at Camberley.

Instruction at the staff college is directed towards providing to the students: a broad knowledge of national and world affairs, a thorough understanding of the principles and techniques of the employment of forces on the modern battlefield, a thorough understanding of the principles of command and staff work, the ability to collect and collate information and to examine a problem with balance and imagination, the impetus and opportunity to read and think on a broad and varied range of subjects, and practical experience of working on a team under as realistic conditions as possible.

The syllabus includes instruction in each of the following subject areas:

Tactical Principles and Doctrine
Operations
Staff Duties and Training
Intelligence
Geopolitics
Logistics
Command Studies
Joint Studies

British officers promoted to major but not selected for attendance at the Army Staff Course can qualify as "staff trained" by on-the-job experience in a series of staff positions. This form of training is considered, officially, equivalent to resident instruction at the staff college.

Senior Officers. The next level of formal instruction for a highly select group of British field grade officers is the National Defense College (NDC) in Latimer. The NDC provides 27 weeks instruction in:

UK Defense Policy, Structure
and Resources
Strategic Studies and Defense
in NATO
Political and Economic Back-
ground to Defense
Defense Management Techniques
and Writing Skills

The aim of this course is to prepare officers for key positions in joint, MOD and Allied headquarters.

Officers in the rank of colonel or higher are eligible to attend the Royal College of Defense Studies (RCDS) in London. This is the highest military educational institution in the British forces. It is attended by selected officers of all UK services, as well as by high ranking officers and civilians from certain foreign countries. Students in the 1977 RCDS class included representatives of Australia, Belgium, Canada, Denmark, Egypt, France, Federal Republic of Germany, Ghana, Greece, India, Iran, Israel, Italy, Japan, Malaysia, New Zealand, Pakistan, Portugal, Saudi Arabia, Turkey and the United States.

The aim of this 11-month course is to give selected senior officers and officials of the UK the opportunity to study, with the representatives of other nations, the problems of defense related to international relations and public policy with emphasis on the strategic aspects. Subjects in the course are:

Elements of Power

Super powers and other centers of power
Strategy
Economics
Management

Contemporary Environment

Britain and Contemporary Society
Subversion and Revolutionary Conflict
Science and Technology

Area Studies

Middle East
Africa
Canada, Latin America and Carriibbean
Asia and Australasia

European Security

In addition to the courses outlined above, occasional courses are provided to update commanders and staff officers at company, battalion, regiment and brigade. Such a course

was the "Commanders and Staff Officers All Arms (read: "Combined Arms") Tactical Updating Course" held for 2 weeks in 1976. Its objectives were to review and update officers in the following fields:

Combined Arms Organization
and Tactics
Army Employment and
Restructuring
Army Training
Threat to UK Interests
Mobilization and Reinforce-
ment

Three practical exercises were conducted. Students in this course were: 1 brigadier, 10 colonels, 25 lieutenant colonels, 7 majors and 1 civilian.

Canada

Junior Officers. Immediately upon being commissioned, Canadian officers proceed to their last summer training session. Here they complete their branch/specialty qualification and are then assigned to units (or, for some officers, more specialist training).

From this point until they reach the grade of major, they are governed by the "Officer Professional Development Programme (OPDP);" a program similar to the British PQS. The objective of the OPDP is to broaden and deepen the junior officer's knowledge of the military profession beyond the specific technical expertise of branch training.

The OPDP is a two-part program. Part I is a self-study phase in the following six subjects:

General Service Knowledge

Organization roles and functions of the Department
of National Defense
Internal Security Operations
Information Services of the Canadian Forces

Personnel Administration

Canadian Forces Classification System
Canadian Forces Trade Structure
Canadian Forces Training System

Career Policies and Procedures
Personnel Resource Management
Releases and Retirement Policies, Procedures
and Provisions
Civilian Employment Assistance Program

Military Law

Discipline in the Canadian Forces
Legal Administration
Finance Law
Security

Financial Administration and Supply

Financial Administration within Department of
National Defense
Financial Administration and National Police
Forces
Supply

National and International Studies

Canadian System of Government
International Organizations
National Policy
Arms Control
Current Events

War and the Military Profession

The Profession of Arms
The Nature and Cause of War
The Conduct of War
The Heritage of the Canadian Armed Forces

Each year an officer selects a minimum of two of the above subjects which he will study during the period October through March. He is provided the appropriate study materials and, on a single date chosen for all officers, he must write an examination on those subjects. Grades are "Distinguished Pass," "Pass," or "Fail." Part II of OPDP is a performance test now administered in some branches. Although these exams are not a prerequisite for promotion, they must be completed before the 7th year of service and before participation in the next level of education--the Canadian Forces Staff School Course.

The Canadian Forces Staff School Course is a 10-week course to prepare junior officers to perform staff functions of a general nature that are appropriate to their rank and to provide a basis for their subsequent professional development. Students are selected from all branches normally within their 3d to 7th year of commissioned service. Attendance is restricted to those junior officers who have clearly demonstrated potential for an intermediate service engagement (up to 20 years service) and require elementary staff training.

In addition to the courses listed above, junior officers may be sent back to branch schools for advanced branch training. Canadian regulations emphasize that "OPDP does not relieve a commander of his responsibilities for continuing professional development of his officers, or substitute in any way for existing career courses."

Approximately 85 percent of senior captains will be selected to attend the Canadian Land Forces Staff Course, held in Kingston and lasting 5 months. The course curriculum includes the following subjects:

Operations

Combat Arms
Combat Support
Combat Service Support
Operations/General
Offensive Operations
Defensive Operations
Other Operations
 Nuclear Warfare
 Mountain Warfare
 Northern Warfare
 Jungle Warfare
 Peacekeeping
 Airborne Operations
 Air Assault Operations
 Internal Security
 Leadership and Command
 Battle Procedure

Staff Duties

Administration
Air Warfare

Intelligence
Movement
Staff Systems
Operations Staff Procedures
Training

The objectives of this course are: (1) to prepare an officer to assume a staff position at brigade level, and (2) to develop command ability for when the officer becomes a major (companies are commanded by majors in both the Canadian and British forces). Completion of the land forces staff course is a prerequisite for selection to the field grade level Canadian Forces Command and Staff College.

Mid-Level. The Canadian Forces Command and Staff College in Toronto conducts a 10-month, joint command and staff course. Approximately 40 percent of land force officers attend the course, the objective of which is to prepare an officer to fill command and staff positions up to and including theatre/fleet/national level. Land forces command and staff training is further designed to develop command ability when the officer becomes a lieutenant colonel.

The curriculum has five sequential components as follows:

Command and Staff Duties I - 4 weeks
Service Phases - 18 weeks (for sea, land
and air forces independently, but
concurrently)
Joint Operations - 8 weeks
Command and Staff Duties II - 1 week
National Strategic Readiness - 12 weeks

An outline of the curriculum for land forces officers is as follows:

Command and Staff Duties Phase, Part 1

National Strategic Readiness Structure
Command and Staff Duties

Organization of Land and Tactical Air Forces

Organizations at Divisions, Corps and Theatre levels
Logistics and Service Support at Divisional, Corps
and Theatre levels
Communications at Divisional, Corps and Theatre levels

Land Force Air Defense
Psychological Operations
Rear Area Security
Civil Affairs and Military Government
Organization and Employment of Tactical Air Forces

Staff Duties

Staff Planning
Fire Planning
Orders
Intelligence and Staff Duties
Load Movement
Training

Land Warfare

The Nature of War
The Theater Campaign Plan
Conventional Operations
Special Operations
Nuclear and Chemical Warfare
Automatic Data Processing
Electronic Warfare
Allied Armies
Selected Foreign Armed Forces
Canadian Land Forces Doctrine and
Equipment Developments
United States Army Doctrine and
Equipment Developments

Land Operations

Selected Corps and Divisional Staff Exercises

Joint Operations Phase

Cross-Environmental Familiarization

Sea
Land
Air

Internal Security

Operational Concept
Legal Considerations

Peacekeeping

Canadian Government Policy
Peacekeeping Operations
Peace Observation and Truce Supervision

Amphibious Operations

Command and Control
Communications
Intelligence
Supporting Arms
Logistics
Air Operations
Amphibious Assault
Trends in Amphibious Warfare
Organization of the Beach

Joint Task Force Operations

Joint Operations Planning
Joint Planning for:
Psychological Warfare
Unconventional Warfare
Civil Affairs Operations

Command and Staff Duties Phase - Part 2

Leadership
Innovation
Bilingualism

National Strategic Readiness

The Environment of National Security
Geopolitical Areas of Concern for Canada
Canada's Capabilities
Executive Decisionmaking Techniques in
Defense Management
Defense Logistics
Canadian Forces General Defense Readiness
Field Study Exercises

Students will normally be majors, or in exceptional circumstances, lieutenant colonels from all branches. Canadian students will normally have at least one performance evaluation

report in the rank of major and have demonstrated a potential for colonel rank. Approximately 23 foreign officers of comparable rank and experience attend as guest students annually.

Senior Officers. Selected colonels and brigadier generals are eligible for attendance at the National Defense College (NDC), which offers a joint 47-week course designed to prepare senior officers for appointments to the highest strategic positions of the Canadian Armed Forces. The course includes, in addition to armed forces officers, high ranking civilian and foreign guests.

The course provides lectures, group discussions and individual research under the following topics:

Internal Canadian Scene
External Influences
Strategies of Nations
Final Review and Final Problem (which includes considerations of leadership, management, forecasting methods, computer concepts, planning, budgeting and systems analysis)

Parallel to the officer professional development system outlined above is a management training program. The more important courses in this program are:

General Officer Management Symposium.
(4 1/2 days)
Senior Officer Management Symposium.
(10 days)
Advanced Management Course
(14 days)
Middle Management Course
(15 days)

Federal Republic of Germany

Junior Officers. As pointed out in Section 3 above, most FRG officers receive their promotion to 2LT while attending one of the military colleges. Upon graduation from college, they are promoted to 1LT and are assigned to the Offizierschule des Heeres (OSH) - the Army Officer School in Hannover.

Here they attend a military leadership course lasting 4 1/2 months. Subjects in this course include:

Leadership
Political Awareness
Military/International Law
Command and Control
Personnel Management
Logistics
Military History
Physical Education Instruction
Foreign Language

General leadership skills are developed at OSH by placing the student officer in the role of the battalion commander to solve classroom leadership and tactical requirements. It is felt at OSH that the young officer must first understand the role of the battalion in order to understand the company.

Officers who successfully complete OSH go to a 4 1/2-month company commander course at their respective branch schools. In addition to being able to lead a company, graduates of the commander course at the armor mech school, for instance, are expected to be able to plan, conduct and evaluate unit gunnery training. During this course, the officer is placed alternatively in the role of company commander, platoon leader, first-sergeant and vehicle commander/crewman. Thus he is able to sharpen skills learned (and possibly forgotten) during his military training preceding college. Upon completion of their respective commanders' courses, officers join their units.

Beginning this year (1978), an army-wide "Tactical Professional Training Program" (TTP) for junior officers is being initiated. Its purpose is to insure a sufficiently high training status and uniform understanding of tactics by all regular and 15-year obligated junior officers, as well as special category officers (Fachdienstoffiziere) who have become troop officers. Participation in the TTP is mandatory for all officers in the 7th year of service.

Objectives of the TTP are:

Understanding the basic doctrinal rules with regard to command/control and decisionmaking.

Mastering the command/control system.

Gaining the capability to make proper estimates of the situation;

and complete mission requirements

Training is conducted in two major phases:

Phase I

Guided self-study program (regulations, directives and doctrine)
Tactical Defense Problem (solved independently by the officer and submitted to division)
Bn level CPX (held at division)

Phase II

(Same as Phase I, but with a problem in tactical offense.)

The TPTP is controlled by the division chief of staff who writes an evaluation on each participant.

During the 8th year of commissioned service, senior captains are assigned (by year-group) to the Fuehrungsakademie der Bundeswehr (Staff College of the FRG Armed Forces) for the Field Grade Officer Qualification and Selection Course (FQSC). This course is designed to give a basic knowledge of national security, management, and the social sciences, and to provide qualification tests for promotion to major and selection to attend the General Staff Officer Course.

The FQSC is 3 1/2 months long and heavily oriented toward academic work, with virtually no study of tactics. Tests and student presentations are very frequent.

Subjects covered during the FQSC are:

Military Strategy of the Nuclear Powers
Military Strategy of Alliances
Military Geographic Factors and NATO
Warsaw Pact Policies
Theory of Collective Security
Theory and Problems of Deterrence Strategy
Cooperative Armaments Control
All-European Cooperation
International Crisis Management
FRG Security Policy
National Military Defense
Civil Emergency Planning

Each student must participate actively in one of the following seminars:

Nature of War According to Clausewitz
Theory and Practice of Limited Scale War
Patterns of Armed Conflicts
East/West Contrast in Europe 1945-1965
Armed Forces of FRG and NATO
Significance of Deterrence and Detente
Military Theory, Doctrine and Strategy of USSR
Military Psychological Situation in the FRG
Terrorism and the Role of the UN
CSCE, MBFR, SALT

All students must pass the course in order to be promoted to major. From among those who pass, the top 50-60 will be considered for attendance at the General Staff Officer Course (GSOC). Selection to the GSOC is based on: (1) class standing at the FQSC; and (2) an officer's last three efficiency reports.

Mid-Level. Officers not selected for the GSOC are scheduled for attendance at one of the 3-month S-Staff courses conducted at (or monitored by) the Fuehrungsakademie. These courses prepare field grade officers as staff officers or as assistants to general staff officers of the principal staff branches. Students who graduate from these courses are scheduled for careers in the principal branch of the staff for which they are trained.

The S-Staff courses are as follows:

- S1: Administrative field (less Medical) - Public relations, recruiting, general management theory, industrial and organizational science and economic theories.
- S2: Intelligence and Security - This course is held at the FRG Armed Forces Intelligence School at Bad Ems, but it is monitored closely by the Staff College.
- S3: All operational aspects, less intelligence and security, and those aspects which come under S1 in the NATO system to include command and control, planning, organization, and training.
- S4: Logistic Support, which includes some computer techniques.

The S1 Course is joint, except that some exercises are single service activities. The S2, S3 and S4 courses each have a joint service period and a single service period as follows:

<u>Course</u>	<u>Tri-Service Weeks</u>	<u>Single Service Weeks</u>
S2	7	5
S3	4	8
S4	7	5

Half of each course consists of practical exercises, group work and seminars. There is considerable emphasis on student presentations during the course of instruction.

Upon receiving the required three outstanding performance evaluation reports and passing with a sufficiently high score the FQSC, the prospective officer student, who has usually served as company commander for 3 1/2 years, is notified about 1 year prior to attendance that he has been selected for the GSOC. He must expect to attend the Government Language School in Cologne-Huerth for about 12 weeks to improve his English knowledge. If his English is sufficiently good, he may choose another language, since he must study a foreign language.

The General Staff Officer Course (GSOC) lasts 21 months and is designed "To teach selected officers to perform satisfactorily, independently, and responsibly in general staff officer assignments, both within and outside their services, on national and on NATO staffs, at all levels of command. Because about 50 percent of all general staff officer positions are dedicated to joint, national and international headquarters, the training by necessity must be broad."

The following subject areas are included in the GSOC:

Strategic Theories	Medical Service Techniques
World Political Contacts	Military, Admin Agencies
Security Politics of NATO and WP	Languages
Security Politics of Germany	Personnel Management
Military Politics of Germany	Combat Intelligence
Management, Operations Research	Combat Operations
Social Science	Logistics
Military History	Overall Defense Combined Arms
International Law (Military Justics)	Decisionmaking
Ordnance, Armaments Development	Army Decisionmaking, Command and Control

Brigade and division operations serve as the vehicle for tactical instruction during the 1st academic year. During the 2d year, corps operations are studied.

Senior Officers. No senior service college yet exists in the FRG, although among the many short courses offered by the Fuehrungsakademie are several which are attended by senior officers. One such course -- a 6-week Overall Defense Course -- may serve as a base for a future war college level course.

Among the other short courses offered at the Fuehrungsakademie are courses for battalion and brigade (senior) commanders. For an overview of the Fuehrungsakademie offerings, see Figure 1.

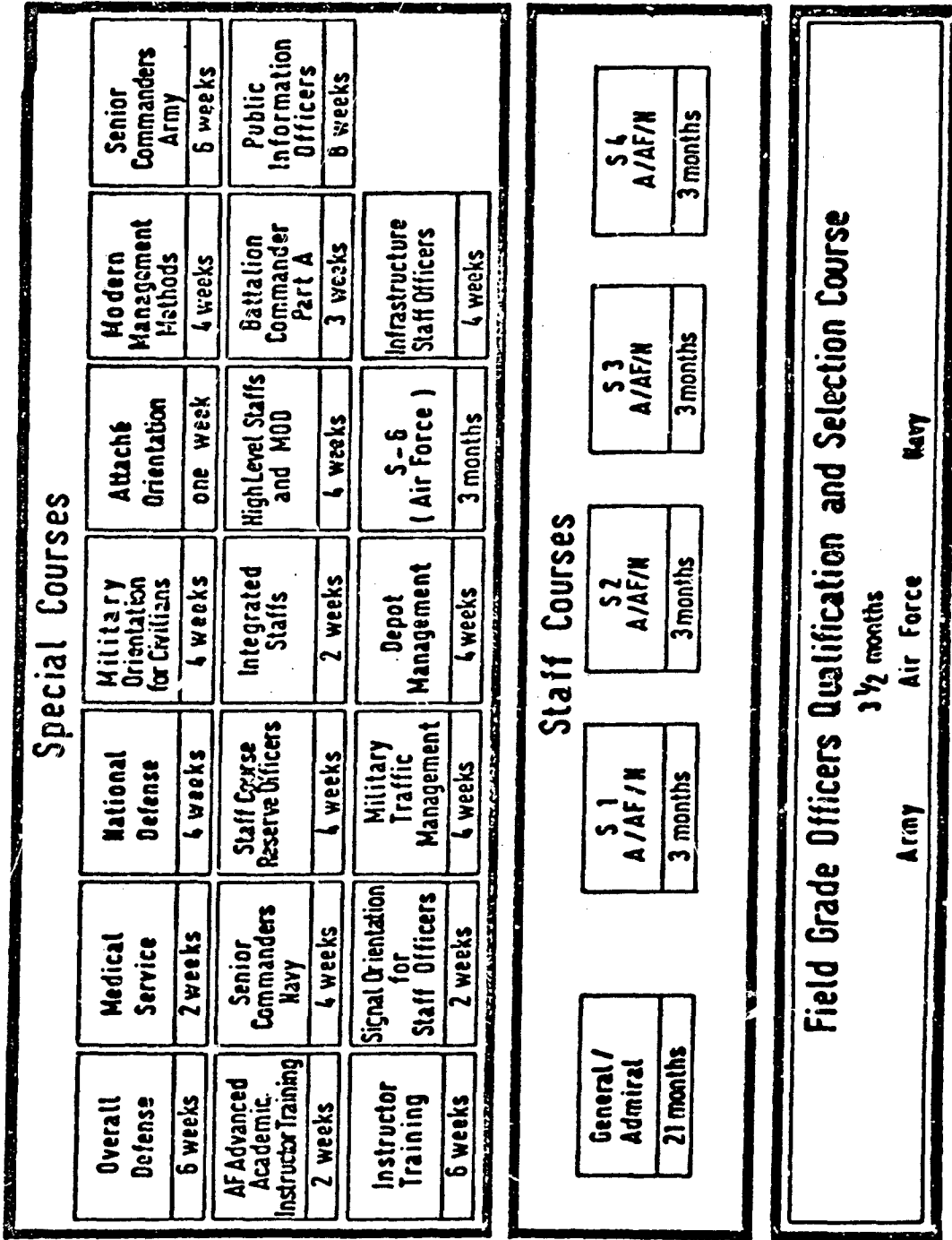


Figure 1. Courses offered by FRG Fuehrungsakademie

German Democratic Republic

Junior Officers. Officers in the GDR Army leave Thaelmann Ground Forces College prepared to assume duties as platoon leaders in their respective units. From that time until they are eligible for selection to Friedrich Engels Military Academy in Dresden, officer training takes place primarily in the troop units. Much emphasis is placed on self-study during off-duty-time. Some special short courses for commanders and chiefs of staff are reportedly, taught at Thaelmann.

Some battalion commands are held by senior captains in the GDR Army. It is also at this rank that officers are selected for the Staff Academy.

Mid-Level. The objectives of the Engels Academy are to prepare officers for assignments to staff and command positions at battalion, regiment and division level. Engels is the highest level of military professional training in the GDR. The course there is 3-5 years and is attended by officers from all services. At Engels, many officers are afforded the opportunity to acquire advance degrees. Training often consists of a period of internship with civilian industry.

Selection for this command and staff course is highly competitive. Prerequisites are changing (as more and more GDR officers attain higher education), but include at least recommendations from one's commander and Party organization. At times, battalion command has been a prerequisite and entrance exams have been administered. Whether or not these requirements are still in force is unknown.

A few officers who have outstanding records with their units, demonstrated academic excellence at Engels, and Party support, attend Soviet or other Warsaw Pact academies.

Senior Officers. Advanced training for selected senior officers (colonels and above) recently began at Engels Academy. Special courses in at least the following subject areas are now provided to senior officers who need updating or refresher training:

Leadership Procedures
Socialist Military Science
Cybernetics/Operations Research
National Defense
Automation of Command Procedures

Several CDR colonels and generals have attended the Voroshilov General Staff Academy in Moscow.

Soviet Union

Junior Officers. Newly commissioned Soviet officers arrive in their units direct from the military commissioning colleges. During the next 5-7 years they will serve as platoon leaders, company commanders and as members of battalion and regimental staffs. Some may be battalion chiefs-of-staff or battalion commanders before they are promoted to major.

During these years as a junior officer, the ambitious Soviet lieutenant or captain has one overriding goal: to pass the entrance exams for attendance at one of the Soviet staff academies.

Senior Captain-Major Level. There are sixteen 3-5 year Staff Academies for mid-level education of Soviet Armed Forces officers. Of these, the following support Soviet ground forces (including air defense):

- Frunze (Combined Arms)
- Malinovsky (Tank Troops)
- Kalinin (Artillery)
- Zhukov (Air Defense)
- Govorov (Air Defense)
- Budenny (Signal)
- Timoshenko (Chemical)
- Kuybyshev (Engineering)
- Academy of Rear Services and Transport

Selection for command and staff academies is fiercely competitive; candidates must take exams in the following subjects:

- Tactics
- Combat Equipment
- Employment of Combined Arms
- Military Topography
- Russian Language and Literature
- History of the USSR
- Geography
- Foreign Language

Candidates are initially screened at the military district level by examinations in mathematics and physics. Approximately three officers for each vacancy are allowed to take the entrance exams. Those who pass the exams with high enough marks to earn for themselves a position at one of the academies have spent from 2000 - 3000 hours of prior study.

Officers apply for acceptance to the staff academy appropriate to their branch. The selection rate is very small, no more than 10 percent of each year-group. Most students are senior captains but, as staff academy graduates, they are virtually assured of eventually reaching the rank of colonel; many will be promoted to general without further military schooling. Outstanding officers from Warsaw Pact countries also attend Soviet academies.

Information available on the Frunze Staff Academy (the oldest and most prestigious of the academies) indicates its mission is to prepare officers for battalion and regimental command, as well as staff duties at regiment to Army level. Probably 60 percent of the training time is spent on combined arms operations, although lectures are also given in:

Logic
Psychology
Literature
Art
Science

Between 1964-1968 Frunze faculty members headed up a study group which attempted to analyze the duties of commanders and staff officers after they graduated from the academy. As a result of the findings of the group, curriculum revisions were made at Frunze. This field evaluation effort appears to have been similar to current U.S. "front-end analysis" efforts.

Summer and winter field training for staff academy students occurs each year. Some of this time is taken up with CPXs lasting several days, or FTXs where academy students participate in various roles. Reportedly, students are performance-rated by a division commander (at the end of the first academic year) as either "qualified" or "not qualified" to command a battalion. Work at the staff academies includes course papers or projects. Graduation at Frunze and all staff academies is preceded by comprehensive MOD exams.

Some officers, who demonstrate the talent and inclination, are chosen to pursue in-depth studies in scientific and other

scholarly areas. They remain at the academy 5 years and finish with master's degrees in their field of endeavor. From among these officers will come the teachers and professors at military schools (all levels) and the high level strategists, referred to as 'defense intellectuals.' Promotion opportunities for the academic oriented officers are such that all probably will make colonel and some will become general officers within the defense academic/strategic community' (see Section 6 below for more information on Soviet faculty).

Probably all graduates of the staff academies go directly to command and staff positions earmarked specifically for academy graduates. By law, graduation from a staff academy guarantees certain "privileges" which non-graduates do not enjoy.

Officers not selected for one of the staff academies have other educational opportunities and obligations. Many of the commissioning colleges and staff academies have correspondence courses or provide refresher training, as needed, for officers of all grades. Junior officers, especially, are expected to enroll in correspondence courses. These studies are often supervised by the officer's commander or political officer.

Such off-duty study is no easy task for the young officer whose "free" time is often filled with other obligations. Nevertheless, a young officer is expected to organize his time so that 1100-1200 hours per year (100-120 hours per month) can be devoted to correspondence work.

Are these figures realistic? Yes, they are. Every officer is given three days off per month. If they are used properly, he can get a good 30 academic hours. During evenings when he is free from work he can study no less than 5 hours, which gives him more than 60 hours a month. The remaining time he can find in the evenings of other work days, on holidays and while on leave when, without giving up too much relaxation, he can study language and mathematics.

(Military Academies and Colleges, p 168)

Presumably, the time spent on these correspondence courses is counted as part of the 2000-3000 hours referred to above (preparation time for academy entrance exams). Correspondence courses are of many types but are usually centrally administered. Staff academy correspondence courses may be taken only by those officers who successfully pass the regular entrance exams.

At least two army-wide short courses for updating officers of all grades are offered at various military posts and schools. "Vystrel" courses are attended by lieutenants through colonels. At least 60 percent of the time is taken up with tactical instruction in the field. All Vystrel courses end with an examination. Artillery advanced or refresher training is provided at artillery schools under a program called the "Central Artillery Course."

Senior Officers. A very few highly successful officers (colonels and one star generals in their mid to late 30s) will attend the Voroshilov General Staff Academy in Moscow. The objectives of this 2-year, joint service course are to: (1) prepare senior officers to assume the highest and most responsible positions in the Soviet armed forces; and (2) to take the lead in theoretical efforts aimed at developing strategic and tactical doctrine. Students and faculty members work closely with the Soviet General Staff on current problems and during MOD sponsored CPXs and maneuvers. Classes at Voroshilov are small and graduation from the General Staff Academy is a virtual guarantee of promotion to general.

Selection procedures for attendance at Voroshilov are not known, except that recommendations from high level officers are believed to be the most important factor. It is one example of the significance attached to the Soviet military "patronage" system. Patronage begins when senior officers seek outstanding young field grade officers soon after graduation from branch academies. By all indications, this patronage system is based on actual performance and has no apparent relationship to family affiliation.

Voroshilov students are observed very closely by members of the Soviet General Staff. Whereas earlier military schooling was oriented toward branch tasks, the Voroshilov curriculum is oriented almost exclusively toward combined arms. Officers who have been in tank or artillery units all their careers may become, if they perform well enough at Voroshilov, combined arms commanders/Soviet general staff officers, and rise to

to the rank of Marshal of the Soviet Union. Other students will return to command branch specific units for the remainder of their careers, some rising to the rank of 3-4 star general or, possibly, to Marshal of Tank or Marshal of Artillery.

Voroshilov, as well as some lower staff academies offer "Higher Military Courses" for updating or retraining general officers. These courses usually last from 2-4 months. The present commander of Voroshilov, for example, graduated from the General Staff Academy in 1948, attended a 3-month course there in 1957 and a 2-month course in 1968.

United States

Junior Officers. Regardless of commission source, all U.S. Army Officers are sent immediately to an officer basic course at their respective branch/specialty schools. These courses vary considerably in content, but include several weeks of general military subjects and training in specialty specific skills. Basic officer training is designed to prepare officers to serve for 3-5 years as platoon leaders and staff specialists within their specialties.

U.S. Army captains (or occasionally senior 1LTs) are returned to their branch/specialty schools for advanced training during their 3d-8th year of service. The objectives of these courses are: (1) to refresh/update officers in specialty developments; and (2) to prepare them to command companies.

Mid-Level. Selected officers (about 40 percent) of the U.S. Army are sent for formal general staff training to the U.S. Army Command and General Staff College (USACGSC), Ft. Leavenworth, Armed Forces Staff College (AFSC), Norfolk or a staff college of another service. As the names imply, USACGSC trains officers to assume primary general staff duties in various Army headquarters, while AFSC trains officers for duty on joint staffs.

The mission of the USACGSC 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. The course is 42 weeks long. Selection (primarily at the grade of major) is made by a central Army board, and is based on the performance reports of an officer. USACGSC students include a few representatives from the U.S. Air Force, Navy and Marine

Corps, as well as approximately 100 foreign officers.

The USACGSC curriculum includes professional development courses, special study projects and independent student research. Career professional development courses include:

Soviet Tactics	Tactical Command & Control
Computer Terminal Operations	Nuclear, Biological & Chemical
Management & Force Development	Electronic Warfare
Combined Arms Fundamentals	Staff Officer Techniques
Offensive Operations	Logistics Readiness
Defensive Operations	Logistics Prospectives
Forward Deployed Force Operations	National Security Decisionmaking
Contingency Force Operations	Pacific Assessment
Fundamentals of Combat Service	American Assessment
Support	NATO Planning & Operations
Introduction to strategy	Theatre Operations - Coalition War
Strategic Environment	North American Air Defense Command
USSR & PRC	Personnel Management & Systems
US Policy, Posture & Issues	Organizational Effectiveness
Evolution of US Military Posture	Chain of Command
Low Intensity Conflict	Military History
Writing Skills	Military Ethics
Reserve Components	Background of American Soldier
Training Management	

Professional development electives are offered in the following subject areas:

Staff Operations
Management
Tactics
Combat Service Support
Military Strategy
Military History
Joint Operations & Low Intensity
Conflict
Sister Services
Profession of Army (Includes
writing)
Other (Research, Instructional
Technology & Language Training)

Cooperative degree programs are available to officers without advanced degrees. Additionally, a Master of Military Art and Science degree can be earned by U.S. officers who meet certain

Special courses are set up for commanders of companies, battalions and brigades in the IDF and FRG Army. Battalion commanders in the British Army and battalion and brigade commanders in the U.S. Army receive short orientations at combined arms and technical support centers immediately preceding assumption of command. Canadian, GDR, Soviet, and to some extent senior British commanders are expected to learn the art of command while attending their various command and staff colleges.

Examinations for promotion to captain and/or major, or for entrance into command and staff colleges, are required in all the foreign armies in this study. The prospect of examinations (combined with rather formal professional development systems in the Canadian and British Armies) places a heavy self-study burden on junior officers in these foreign armies. Only the U.S. Army does not test its officers, other than at the end of military courses.

A summary chart of officer education and training in all seven armies is provided as an inclosure.

5. Advanced Civilian Education.

The importance attached to a college education or advanced degree in each of the armies analyzed is, in part, a reflection of the respective society's view of such education.

Civilian degrees are most highly valued in the USSR, GDR, FRG and USA. The upgrading since the 1960's of military schools to degree producing institutions in the USSR and GDR was a direct result of this influence. The newly created Bundeswehr Colleges serve a similar role in the FRG, which is confronted with more university applicants than spaces. A baccalaureate degree is an almost absolute necessity for retention on active duty in the U.S. Army officer corps; most successful senior officers have advanced degrees.

A small number of officer specialists in the FRG, Canadian and British Armies are sent to civilian universities for advanced degrees. Additionally, British officers may attend the Royal Military College of Science, Shrivenham for advanced degrees in scientific subjects, while Canadian officers can obtain a masters degree at the Royal Military College of Canada in Kingston.

Common Overview
US And World Environment
Strategic Military Studies
Military Planning and Operations
Command and Management

The course ends with a 1-week 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 U.S. Army War College, together with invited civilian guests from across the country.

The curriculum at the National War College is oriented more toward joint operations, while the Industrial College of the Armed Forces emphasizes defense resource management.

In addition to the formal resident training, battalion and brigade commanders of combat arms units attend orientation sessions at branch, combined arms and technical support centers.

Summary

Branch qualification is the first order of business for newly commissioned officers in the Canadian, British and U.S. Armies. Officers in the FRG army, although branch qualified before attending a Bundeswehr college, undergo additional training in leadership and company commander courses before being assigned to their units. Officers of the Israeli, GDR and Soviet Armies begin commissioned service already branch qualified.

Formal staff training is provided all captains in the Canadian, British and FRG Armies. This is in addition to the later training at Command and Staff colleges for selected majors. Command and staff training is provided to only selected officers in the Israeli, GDR, Soviet, and U.S. Armies.

Senior officer extended resident education in national defense strategy is provided for a very few officers (LTC-BG) in all armies except that of the FRG. Only the U.S. Army maintains a service-specific War College, although Army officers do attend joint senior colleges and representatives of the other services attend the Army War College. Formal updating and retraining programs for general officers exist in the GDR and Soviet armies, and to a limited extent at the British Royal College of Defense Studies and the Canadian National Defense College.

Academic positions within Soviet higher military institutions are equated by law to operational billets in the field. For example, a staff academy commandant is equal to a military district commander; a department chairman--an army or corps commander; a senior instructor--a division commander or chief of staff; and an instructor--a regimental commander. "Appointment to a permanent faculty position at a staff academy...[is] viewed as a promotion."

It should not be too surprising, then, to note from a recent history of the Voroshilov General Staff Academy, that (as of 1976) the commandant is a 4-star general. His first deputy, a 3-star general, recently left to become the commandant of Frunze Military Staff Academy (and to receive his fourth star). Deputy Commandant for Scientific Research at Voroshilov is Professor LT-GEN (2 stars) Gaivoronsky; Deputy Commandant for Support is MAJ-GEN (1 star) of Quartermasters Gutsal. Chairman of the Department of Strategy is LT-GEN Karpov, who arrived at the academy from the post of Chief of Staff, Central Asian Military District. Senior instructor in the Strategy Department is Professor Doctor LT-GEN Kovalev. Also serving in this department are 13 additional generals, 1 admiral and 5 colonels, most of whom hold professorial or associate professorial rank, and have Doctorates or Masters' degrees. Finally, in the academy department from which study group mentors and textbook writers come, there are 32 generals. All this at an institution which runs 2 courses per year of perhaps no more than 100 students each!

7. Conclusion

The objective of comparing selected foreign armies' education and training systems has not been to pass judgment on who has the best system. Recent educational reforms in all the armies studied here suggest leaders in each army believe there is always room for improvement. The purpose of this comparative study has been to determine what practices found in modern armies, representing both East and West, might be applicable to the RETO effort. What education and training policies might, if proposed by RETO and adopted by the U.S. Army, provide reliable and effective means for insuring the officer of the 1980s-1990s is prepared to meet the challenges of an increasingly complex political and military environment?

It would be too easy to view foreign army systems from a purely quantitative point of view. The fact that most successful U.S. Army officers acquire about 138 weeks of formal military instruction--less than their counterparts in any of the six foreign armies studied--may

Soviet and GDR army officers may receive advanced degrees as part of their staff college work, or they may go directly from staff college to full-time studies at a civilian university. U.S. officers may acquire a Master of Military Art and Science degree at USACGSC or pursue advanced degrees on a cooperative basis from universities located near the staff and senior service colleges. Additionally, many U.S. officers attend civilian graduate schools on full government scholarships.

The first opportunity for many Israeli officers to study for a college degree occurs while they are at the IDF Command and Staff College or the National Defense College.

6. Faculty.

The quality of officer education and training is directly related to the quality of instruction. Each army studied here, including the U.S., appears to choose its faculties from among the best officers available (at least at the staff college and senior service college level). There are, nevertheless, some major differences between faculty selection in the foreign armies and in the U.S. Army.

In the Israeli, Canadian, British and FRG Armies, for example, most key instructors at the staff academies are former battalion commanders. (Very little is known about faculty selection at the GDR Engels Staff Academy.) At the USACGSC, subject matter specialists and former staff college students are employed as instructors. More than one-half, however, are majors. Among the lieutenant colonels and colonels who make up the remainder of the USACGSC staff and faculty, few have commanded battalions.

The most remarkable faculty, by all accounts, is that of the Soviet military education system. Soviet faculty members of commissioning colleges, staff academies and the Voroshilov General Staff Academy are primarily professional military teachers/scholars, or very senior officers with extensive military experience. Officers are selected for faculty development while in attendance at one of the staff academies. Teaching, combined with research and writing, then becomes a career specialty. From the ranks of these officers will come the strategists and writers of doctrine for the Soviet Army. These scholars write textbooks, manuals and articles for scholarly military journals and newspapers published by the MOD. Most Soviet military scholars will retire as colonels or 1-star generals, although some will achieve 3-or 4-star rank.

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or may not be significant. Even if that 138 weeks represents only one-third the amount of military instruction received by a successful Soviet officer, it should be kept in mind that the quality of training may compensate for the lack of 'quantity.'

It is with this--quality--in mind that the following practices which appear to be essential elements in the education and training systems of all or a majority of the six foreign armies studied--but lacking in the U.S. Army--are recommended for consideration by RETO:

- Early Branch/Specialty designation during precommission training.
- A structured, controlled self-study program for junior officers, supervised by unit commanders.
- Formal training in staff procedures for all captains.
- Testing on professional military subjects as a prerequisite for promotion or attendance at command and staff colleges.
- Commanders' courses for all echelons of command.
- Reevaluation of the manner of selecting and developing professional military faculty. Placement of senior or retired officers in administrative and academic leadership positions of Army schools.

Sources

The following list of publications represent primary sources from which descriptive data on foreign army education and training systems was gathered. Much of the material was collected and assembled by MG Benjamin Harrison and LTC Gunter Seibert during their travels to Canada, England, the Federal Republic of Germany and Israel, or proffered by the respective attaches here in Washington.

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(See Annex F).

2

SOVIET UNION	U.S.A.
FULLY SPONSORED PROGRAM. BEGIN RECEIVES IN ELEMENTARY OR EXTENSIVE MILITARY TRAINING IN ADOLESCENT AGE.	NO NATIONWIDE PROGRAM.
8 MILITARY COLLEGES FOR (FORCES. ALL COLLEGES (SPECIALIZED SPECIALIZATION BRANCH) AS COMMANDER (SUPPORT SPECIALIST OR BRANCH COLLEGE DIRECTOR).	U.S. MILITARY ACADEMY, WEST POINT.
BRANCH, MILITARY DISTRICT, COLLEGE COMMANDANTS.	CENTRAL BOARD AT WEST POINT.
ENOT ALL ARE 4 YEARS.	4 YEARS.
1 QUALIFICATION. ENGINEER OR COLLEGE DEGREE.	CENTRAL MILITARY EDUCATION. ENGINEER ORIENTED COLLEGE DEGREE.
OR ALL MALE UNIVERSITY STUD. MILITARY TRAINING 2ND YEAR.	280 ROTC DETACHMENTS. 1-4 YEAR SCHOLARSHIPS. MILITARY TRAINING DURING 1 SUMMER.
CENTRAL BOARD.	CENTRAL BOARD.
4-PLUS YEARS.	4 YEARS.
REAL MILITARY TRAINING. COLLEGE DEGREE.	GENERAL MILITARY TRAINING. COLLEGE DEGREE.
LEFTYD MEN WITH COLLEGE (WHO DID NOT RECEIVE DEGREE UPON GRADUATION).	FOR OUTSTANDING. RECRUITED MEN WITH RESERVE 2 YEARS COLLEGE.
ARMY'S RECOMMENDATION.	SERIES OF BOARDS.
3 MONTHS.	14 WEEKS.
ENCE QUALIFICATION AS ENCE OFFICER. 3	GENERAL MILITARY TRAINING.
ENCE QUALIFIED MEN ENCESSIONS.	BRANCH/SPECIALTY COURSES FOR ALL FULLY COMMISSIONED ZLT.
INTERNAL COURSES AS EXTENSIVE CORRESPONDENCE (4-YEAR).	ADVANCED BRANCH COURSE FOR ALL CAPTAINS.
(SEE MID-LEVEL TRAINING)	NONE.
NONE	NONE.
8 ACADEMIES FOR GROUND (INCLUDING AIR DEFENSE). BR. BRANCH SPECIFIC.	ARMY COMMAND AND GENERAL STAFF COLLEGE. 10 MONTHS. ARMED FORCES STAFF COLLEGE (AFSC). 3 MONTHS. JOINT. ⁶
ED AT BATTALION AND BRY. STAFF DUTIES UP TO 2ND ARMY LEVEL.	FIELD GRADE COMMAND AND PRIMARY STAFF DUTIES AT BRIGADE AND HIGHER ECHELONS. JOINT STAFF (AFSC).
ENR AND PARTS DEMONSTRATIONS. COMPETITIVE	CENTRAL BOARD.
ENRIOR CAPTAINS. ⁶	MAJOR.
ENRADNEY CORRESPONDENCE IN PT. THOSE WHO HAVE ENTRANCE EXAMS.	CORRESPONDENCE AND NON-RESIDENTY COURSES AVAILABLE TO ALL OFFICERS.
NONE.	ORIENTATION AT BRANCH. COMBINED ARMS AND TECHNICAL SUPPORT CENTERS FOR COMBAT ARMS COMMANDERS. OPTIONAL.
ENRSTAF GENERAL STAFF BR. 2 YEARS. JOINT.	ARMY WAR COLLEGE (AWC). NATIONAL WAR COLLEGE (NWC). INDUSTRIAL COLLEGE OF THE ARMED FORCES (ICAF). 10 MONTHS. NWC AND ICAF ARE JOINT.

AWC - ARMY OPERATIONS. STRATEGIC

SUMMARY CHART

A COMPARISON OF OFFICER EDUCATION AND TRAINING IN U.S. AND SELECTED FOREIGN ARMIES

		ISRAEL	UNITED KINGDOM	CANADA	FEDERAL REP. OF GERMANY	GERMAN DEMOCRATIC REP.
PRE-INDUCTION/PARAMILITARY TRAINING		NATIONALLY SPONSORED PROGRAM FOR BOYS AND GIRLS, AGE 12-18	NONE	NONE	NONE	NATIONALLY SPONSORED PROGRAMS STARTED IN ELEMENTARY SCHOOLS
PRECOMMISSION TRAINING						
MILITARY ACADEMY/ COLLEGE		NONE	ROYAL MILITARY COLLEGE SANDHURST	ROYAL MILITARY COLLEGE OF SANDHURST (RETIRED) OR SANDHURST MILITARY COLLEGE	TRAE NICKEL HOUSE	ERST TRAE NICKEL HOUSE MILITARY COLLEGE
	SELECTION	---	CENTRAL BOARD	CENTRAL BOARD	---	CENTRAL BOARD
	LENGTH	---	18-21 YEARS	6 YEARS	---	3 YEARS
	GOAL	---	GENERAL MILITARY EDUCATION	BRANCH TRAINING, DISCIPLINE, SPECIALIZATION	---	BRANCH QUALIFICATION COURSES (RETIRED) COLLEGE DEGREE
ROTC EQUIVALENT		4-MONTH ROTC PROGRAM MILITARY TRAINING DURING HIGH SCHOOL	UNIVERSITY CAMPSHIP PROGRAMS AND PROGRAMS BY VARIOUS AT UNIVERSITIES	4-YEAR UNIFORMED SERVICES UNIVERSITY OF HEALTH SCIENCES MILITARY TRAINING DURING HIGH SCHOOL	2-YEAR ROTC PROGRAMS (ARMY, NAVY, AIR FORCE) AND ROTC PROGRAMS (ALSO FEDERAL TECHNICAL SCHOOLS)	ALL MALE UNIVERSITY STUDENTS MILITARY TRAINING IN SUMMER, SOME SPECIAL STIPENDS
	SELECTION	CENTRAL BOARD	CENTRAL BOARD	CENTRAL BOARD	CENTRAL BOARD, PERFORMANCE REPORTS	CENTRAL BOARD
	LENGTH	4 PLUS YEARS	4 YEARS	4 YEARS	3-5 YEARS	4-PLUS YEARS
	GOAL	GENERAL MILITARY TRAINING, COLLEGE DEGREE	GENERAL MILITARY EDUCATION, COLLEGE DEGREE	BRANCH RELATED MILITARY TRAINING, COLLEGE DEGREE	DISCIPLINE, SPECIFIC COLLEGE DEGREE	GENERAL MILITARY TRAINING, COLLEGE DEGREE
OCS EQUIVALENT		4-YEAR ROTC PROGRAM (ARMY, NAVY, AIR FORCE) AND ROTC PROGRAMS (ALSO FEDERAL TECHNICAL SCHOOLS)	VARIOUS PROGRAMS FOR OFFICERS OF ALL ARMS, TRAINING OFFICERS MAY BE REQUIRED FOR ROTC PROGRAMS (ALSO ROTC PROGRAMS) (ALSO ROTC PROGRAMS) (ALSO ROTC PROGRAMS)	PUR SERVICE REG.	PUR SERVICE REG.	PUR SERVICE REG.
	SELECTION	CENTRAL BOARD, PERFORMANCE REPORTS	COMMANDER'S RECOMMENDATION AND CENTRAL BOARD	COMMANDER'S RECOMMENDATION AND CENTRAL BOARD	COMMANDER'S RECOMMENDATION AND CENTRAL BOARD	COMMANDER'S RECOMMENDATION
	LENGTH	APPROX. 18 MONTHS (INCLUDING ROTC PROGRAMS)	VARIABLE	3 MONTHS	4-12 MONTH LEADERSHIP COURSE AND OFFICER SERVICE IN BRANCH	SHORT COURSES AT TRAE NICKEL HOUSE
	GOAL	BRANCH QUALIFIED PLATOON LEADER	BRANCH QUALIFIED PLT.	LIMITED DUTY BRANCH SPECIALIST	LIMITED DUTY BRANCH SPECIALIST	LIMITED DUTY BRANCH SPECIALIST
JUNIOR OFFICER TRAINING						
BRANCH/SPECIALTY QUALIFICATION		BRANCH QUALIFIED WITH COMMISSION	BRANCH QUALIFICATION COURSES	SINGLE TRAINING AFTER COMMISSION COMPLETION, 6-MONTH COURSE (ARMY, NAVY, AIR FORCE) (ALSO ROTC PROGRAMS) (ALSO ROTC PROGRAMS)	BRANCH QUALIFICATION BEFORE ATTENDANCE AT BONDSWOMEN OFFICERS' SCHOOL (COMPLETION OF LEADERSHIP COURSE ATTEND BONDSWOMEN OFFICERS' SCHOOL)	BRANCH QUALIFIED WITH COMMISSION
BRANCH/SPECIALTY ADVANCED TRNG		SHORT FUNCTIONAL COURSES AS NEEDED FOR SENIOR OFFICERS	BRANCH RELATED OFFICER DEVELOPMENT PROGRAMS FOR ALL OFFICERS	BRANCH RELATED OFFICER DEVELOPMENT PROGRAM FOR ALL OFFICERS (ALSO ROTC PROGRAMS) (ALSO ROTC PROGRAMS)	BRANCH RELATED OFFICER DEVELOPMENT PROGRAM FOR ALL OFFICERS (ALSO ROTC PROGRAMS) (ALSO ROTC PROGRAMS)	SHORT FUNCTIONAL COURSES AS NEEDED, EXTENSIVE SELF-STUDY
STAFF TRAINING		NONE	10-WEEK JUNIOR COMMAND AND STAFF COURSE FOR ALL CAPTAINS	10-WEEK CANADIAN FORCES STAFF COURSE FOR SELECTED CAPTAINS (ALSO ROTC PROGRAMS) (ALSO ROTC PROGRAMS)	12-MONTH FIELD GRADE OFFICER LEADERSHIP COURSE (ALSO ROTC PROGRAMS) (ALSO ROTC PROGRAMS)	1-WK (SEE MID-LEVEL TRNG)
COMPANY COMMANDERS' COURSE		12-WEEK COURSE FOR ALL SENIOR OFFICERS AT BRANCH SCHOOLS	COURSES (COMMANDS BY MAJORS)	(COMMANDS ARE COMMANDED BY MAJORS)	6-12-MONTH COURSE AT BRANCH SCHOOLS FOR ALL 1LT WHO PASS LEADERSHIP COURSE, COMMANDER COURSE IMMEDIATELY AFTER LEADERSHIP COURSE	NONE
MID-LEVEL TRAINING						
COMMAND/STAFF COLLEGES		100 COMMAND AND STAFF COLLEGE, 11 MONTHS, JOINT	ARMY STAFF COLLEGE PHASE 1: ROYAL MILITARY COLLEGE OF SANDHURST (12 MONTHS), PHASE 2: STAFF COLLEGE, SANDHURST (12 MONTHS)	CANADIAN FORCES COMMAND AND STAFF COLLEGE, 10 MONTHS, JOINT	GENERAL STAFF OFFICER (GSO) COURSE, 21 MONTHS, 3-STAFF COURSES, 3 MONTHS, ALL COURSES JOINT AND HELD AT GENERAL STAFF COLLEGE	FREDERICH ENGEL ACADEMY, 3-5 YEARS, JOINT
	GOAL	PRIMARY STAFF DUTIES AT BRIGADE AND ABOVE	PRIMARY STAFF DUTIES AT BRIGADE AND HIGHER ARMY FORMATIONS	COMMAND AND STAFF DUTIES UP TO TROOP AND BATTALION LEVELS	GENERAL STAFF DUTIES AT DIVISION AND BATTALION LEVELS, BRIGADE AND BATTALION STAFF DUTIES, ASST TO GSO(S)-STAFF COURSES	COMMAND AT BATTALION AND REGIMENT, STAFF DUTIES TO HQ LEVEL (SOME OFFICERS GO ON TO SOVIET OR OTHER WARSAW PACT STAFF COLLEGES)
	SELECTION	COMMANDER'S RECOMMENDATION AND COMPETITIVE BOARD	COMPETITIVE BOARD IN BRANCH AND GENERAL MILITARY SUBJECTS	CENTRAL BOARD, PRE-REQUISITE COMPLETION OF LEADERSHIP COURSE	BASED ON LAST 3 PERFORMANCE REPORTS AND TEST GRADES AT POC	COMMANDER AND PARTY RECOMMENDATIONS, COMPETITIVE BOARD MAY STILL BE IN USE
	RANK	MAJOR	MAJOR	MAJOR	MAJOR	SENIOR CAPTAINS
	ALTERNATIVES	NONE	EQUIVALENT CREDIT CAN BE EARNED BY SERVICE IN SERIES OF KEY STAFF POSITIONS	NONE	GSO CREDIT CAN BE EARNED BY SERVICE IN GSO POSITION	UNKNOWN
BATTALION COMMANDERS' COURSE		9-WEEK COURSE PROVIDED BY SELF-STUDY COURSE	SHORT UPDATE COURSE FOR COMMANDERS AT ALL LEVELS	NONE	2-PHASE COURSE TAUGHT AT BRANCH SCHOOLS AND GENERAL STAFF COLLEGE	NONE
SENIOR OFFICER TRAINING						
SENIOR SERVICE COLLEGE(S)		NATIONAL DEFENSE COLLEGE (NDC), 1 YEAR, JOINT	NATIONAL DEFENSE COLLEGE (NDC), 2 YEARS, JOINT, ROYAL COLLEGE OF DEFENSE STUDIES (RCDS), 11 MONTHS, JOINT	NATIONAL DEFENSE COLLEGE (NDC), 1 YEAR, JOINT	NONE	NONE
			KEY STAFF POSITIONS IN JOINT	KEY STAFF POSITIONS IN		

FOUR COLONELS AND 1-STAR GENERALS.	LIEUTENANT COLONELS AND COLONELS.
NONE.	AMC CORRESPONDENCE COURSE FOR SELECTED OFFICERS.
NONE.	ORIENTATION AT BRANCH, COMBINED ARMS AND TECHNICAL SUPPORT CENTERS FOR COMBAT AND RESERVE COMMANDERS. OPTIONAL.
SHORT ADVANCED COURSES AT STAFF ACADEMIES AND AT VOROSHILOV.	OCCASIONAL MANAGEMENT COURSES AT CIVILIAN UNIVERSITIES. SHORT MILITARY ORIENTATION COURSES FOR SOME HIGH COMMANDERS.

4

COLLEGE(S)	STRATEGIC STUDIES	STRATEGIC STUDIES IN JOINT, ALLIED AND CANADIAN FORCES	STRATEGIC STUDIES IN CANADIAN FORCE		
GOAL	STRATEGIC STUDIES.	KEY S. VV POSITIONS IN JOINT, ALLIED AND CANADIAN FORCES (MOC). STRATEGIC STUDIES (MOC).	KEY STRATEGIC POSITIONS IN CANADIAN FORCE.	---	---
SELECTION	CENTRAL BOARD.	CENTRAL BOARD.	CENTRAL BOARD.	---	---
RANK	COLONELS AND BRIGADIER GENERALS.	SENIOR FIELD GRADE OFFICERS (MOC). COLONELS AND BRIGADIER GENERALS (MOC).	COLONELS AND BRIGADIER GENERALS.	---	---
ALTERNATIVES	NONE.	NONE.	NONE.	---	---
BRIGADE OR HIGHER COMMAND COURSE	COURSE OF UNKNOWN LENGTH.	SHORT UPDATE COURSES FOR COMMANDERS AT ALL ECHELONS.	NONE.	SENIOR COMMANDERS' COURSE AT GENERAL STAFF COLLEGE. 6 WEEKS.	NONE.
GENERAL OFFICER COURSES	(SEE MOC ABOVE)	(SEE MOC ABOVE)	(SEE MOC ABOVE)	NONE.	SHORT ADVANCED COURSE BRIGADES ACADEMY. SOME 6 SELECTED FOR ATTENDANCE WOODHOUSE GENERAL STAFF ACADEMY.

- NOTES:**
1. THE PROMOTION TRAINING FITS EITHER THE MILITARY ACADEMY FOR THE ROTC MODEL. IT IS COMBINATION OF ENLISTED TRAINING, OCS AND CIVILIAN COLLEGE EDUCATION.
 2. UNIVERSITY EDUCATION IS FLEX IN THE OCS AS WELL AS IN THE USMC AND PFC).
 3. FROM OCS, NEWLY COMMISSIONED JELTs ARE RELEASED INTO THE RESERVES.
 4. EXAMS MUST BE PASSED FOR PROMOTION TO CAPTAIN AND MAJOR IN THE BRITISH ARMY. ALTHOUGH MANDATORY FOR PROMOTION IN THE CANADIAN FORCES, EXAMS ARE AN INTEGRAL PART OF THE JUNIOR OFFY DEVELOPMENT.
 5. THESE EXAMS IN BRITISH AND PFC ARMIES SERVE TWO PURPOSES: PROMOTION TO MAJOR AND SELN TO THE STAFF COLLEGE.
 6. ALMOST ALL STAFF ACADEMY GRADUATES WILL BE MAJORS BEFORE THEY GRADUE.
 7. THERE ARE SEVERAL SHORT COURSES AT THE GENERAL STAFF COLLEGE AVAILABLE TO SENIOR OFFY.
 8. AT THIS POINT, OR SLIGHTLY EARLIER, OFFICERS ARE PROVIDED BASIC SPECIALTY TRAINING AT MILITARY SCHOOL OR CIVILIAN UNIVERSITY IS AN ALTERNATE SPECIALTY.

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REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

ANNEX I

AN ANALYSIS OF INDUSTRIAL MANAGEMENT DEVELOPMENT PROGRAMS

1. PURPOSE. This Annex presents a comparative analysis of industrial executive development programs, based on a listing of salient features that are common to all programs. Implications are drawn for Army management development positions in the future.

2. SCOPE. Appendix 1 presents the analysis in nine sections and seven inclosures.

1 Appendix

1. An Analysis of Industrial Management Development Programs

*This feature suggests that the Army develop a manpower system that links together US Army Material Development and Readiness Command activities (technology acquisitions), Training and Doctrine Command (training) activities, US Army Military Personnel Center (assignment) practices, Office, Deputy Chief of Staff for Personnel policies (promotion, retention), Reserve Officers Training Corps activities (accessions) and any other staff agencies engaged in organizational redesign actions (Organizational Effectiveness activities).

4. Top leadership levels committed to and involved in the development system.

*This item implies that in the Army it is essential that the Chief of Staff and the major commands have sincere, personal commitment to the total development system. This commitment needs to not only be verbalized through policy decisions but also to be systematically reinforced through actions. Such commitment further suggests that generals at these organizational levels regularly spend time on development related issues (e.g., inspecting plans, rewarding results, rejecting proposals which reflect inadequate manpower planning, etc.).

5. A threefold responsibility for development between the organization, the individual and the line manager.

*This feature identifies a need for the Army to adopt a deliberate and carefully planned strategy to result in the officer corps believing and accepting such threefold responsibility for development - shared equally between the Army, themselves and their commanders.

6. All commanders, leaders and managers responsible for subordinate development.

*This item suggests that within the Army commitment and involvement in the development system must extend to all leaders in the hierarchy. This feature recognizes that since leaders control the reward system in the organization, they concomitantly must be made cognizant of their responsibilities and accountability for subordinate development. Army leaders must be made aware of their obligations with respect to role modeling, coaching, delegating, encouraging and helping people to get promoted. It must be demonstrated that when line managers are faced with people decisions, development considerations carry visible weight.

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 1

AN ANALYSIS OF INDUSTRIAL MANAGEMENT DEVELOPMENT PROGRAMS

TO ANNEX I

AN ANALYSIS OF INDUSTRIAL MANAGEMENT DEVELOPMENT PROGRAMS

SECTION 1

EXECUTIVE SUMMARY

Frequently, in the design of education and training systems, one is encouraged to examine existing programs in other organizations for the purpose of capitalizing on their experience. Hopefully, the insights gained by such an examination will prove to be of value. This study represents a comparative analysis of industrial executive development programs. The following 13 items represent the salient features common to successful development programs. Highlighted below each feature is a potential extrapolation of that item to the Army. While these features are not prioritized in any order, together they define a total developmental system that encompasses many significant inter-relationships between the parts.

1. Presence of a master development plan or model that provides an overall blue print for all training and education efforts in the organization.

*This feature of successful industrial programs suggests that the Army develop a "big picture" describing the total developmental scheme as well as the overall plan to achieve training and educational objectives.

2. An organizational philosophy and climate that openly supports development efforts.

* This feature suggests that the Army articulate its formal philosophy regarding development, including applicable reward policies which should be congruent with the stated philosophy.

3. A manpower system that integrates the various subsystems that influence the development process.

*Features 8 and 9 together support an additional implication with respect to the Army. Industry, because of its peculiarity, is afforded the luxury of training only that small number of managers that have been selected for promotion to the next higher organizational level. The military, unfortunately, cannot function under such a philosophy. Since the Army does not know who will become top level leaders and additionally because of mobilization requirements, all eligible officers must be trained appropriately at each organizational level. Such a philosophical difference supports the existence of USACGSC, USAWC and additional senior level training within the Army.

10. A contingency approach to the selection of training tasks as well as training strategies.

*This feature suggests that the Army needs to recognize that application of the Instructional System Design approach is best suited for technical tasks ("hard skills"). Application of the system to the "soft skills" (managerial and leadership skills) requires that some variations in the process become acceptable. (Industrial development programs have recognized that some managerial tasks simply do not lend themselves to routine job analysis procedures, nonetheless they consider training in such areas (normally people oriented skills) as crucial.)

*This item further implies that detailed job task analysis efforts, when feasible, could reinforce the development and utilization of professional qualification standards and/or examinations. Since an inherent part of any job analysis effort is the identification of performance standards, these same standards could serve as a solid foundation for the development of qualification standards. Further, these same standards could likewise become useful in tailoring training to best meet student needs.

11. Presence of a long term detailed evaluation plan for training and development efforts.

*This feature of successful programs suggests that the Army recognize that in light of increasing budgetary constraints regarding all training efforts, the necessity for demonstrating effectiveness becomes absolutely essential. (Development of

7. Recognition that development is a long term proposition.

*This item suggests that within the Army, development must become a way of life. Its motivational value must be clearly recognized and accepted and it needs to be understood that results are a long term proposition. Further, this feature suggests that no matter how much budget pressure might be exerted by Office of Management and Budget and the Congress on the Army's development efforts, the central "core" of the development program must remain unaffected.

8. A changing overall emphasis in training and development from a specialty orientation at the lower levels to a generalist orientation at higher organizational levels.

*This feature requires that the Army recognize the fact that the job of higher-level leaders (as that of general managers) differs considerable from the job of lower-level leaders. This item further suggests that, (1) successful top level leadership demands conceptual skills which must provide an integrative function with a strategic direction as opposed to action and operation oriented skills, and (2) top level leaders must be generalists. These distinctions, in turn, support the necessity for, (1) a changing developmental emphasis at the mid-level - supporting the requirement for such training at USACGSC; (2) a requirement for a concerted generalist orientation at the senior service level.

9. Effective leadership and management skills comprised of nine separate dimensions of behavior which vary at each of five organizational levels.

*This item suggests that the Army seriously reexamine the specific skill emphasis at each of five organizational levels. An analysis of Army training programs conducted previously indicates that minimal change will be required at entry and lower levels. Proper emphasis already exists at these levels on technical (specialty) skills and basic leadership skills. At the mid-level, however, the existing school emphasis must show a significant change toward more management skills as well as battalion and brigade level tactical skills. At the senior levels, the emphasis must likewise swing much more heavily toward future oriented skills such as strategizing, decision analysis, forecasting, policymaking, etc. (specific details are in Inclosure 7).

SECTION II

INTRODUCTION

Organization theory suggests that there are certain basic principles which apply equally to all organizations. One might expect then, that any detailed examination of organizations would identify some commonality in basic needs and problems. Further, since it is the responsibility of the management group in an organization to cope with all aspects of organization functions, one might likewise expect certain similarities in existing management skills and techniques. In fact, it might be argued that the most important part of management's job is to appraise subordinates effectively and then to help develop their abilities. No matter how strong a company may be financially, trouble is inevitable if it does not have an adequate supply of trained, highly skilled and motivated managers available at all organizational levels. Since this applies to all organizations, one could thus reasonably expect some congruency in the extent and nature of management development efforts. Instead, such efforts in civilian corporations are noteworthy not for their similarities but rather for their variability.

Some companies have extremely sophisticated programs built upon exhaustive job analysis efforts and linked together with such diverse management programs as manpower planning, organizational development and wage and salary administration. Other companies merely engage in miscellaneous training, loosely tied to job requirements and heavily dependent upon the background of the individual trainer or consultant.

This effort is an attempt to describe existing management development programs with a view toward synthesizing those elements which appear to distinguish successful programs from unsuccessful ones and which appear to have unique applicability to the military. Since all development programs eventually succeed or fail because of the climate they operate in, this effort will begin with a discussion of organizational climate as it impacts on management development efforts. In the final analysis, it is the climate in an organization which ultimately provides substance to training and development programs. Next, the discussion will focus on the training content question. This will be followed by an analysis of appropriate training strategies presently employed. Then, the discussion will briefly touch upon details regarding the utilization of the trained resource. Finally, specific implications pertaining uniquely to the military will be discussed.

detailed evaluation plans would not only help justify training expenditures but equally important, would maximize the selection of efficient training techniques. Because of the nature of the Army school system (where the majority of officers receive training and education at regular intervals), it would be particularly useful to determine what skills are learned on-the-job in the interim period between formal training. Utilization of an assessment center process could uncover such skills.

12. Personnel policies that maximize utilization of trained resources.

*This item suggests that it is absolutely essential for Army policies to make maximum use of trained resources. Such policies would thus facilitate negotiations with OMB and the Congress regarding funds and would also maximize the motivational value of recently acquired training for trainees. (Development was shown previously to be a product of motivation and attitudes, skills and knowledge, and opportunity. Proper utilization of the trained resource is what constitutes the opportunity variable.)

13. Recognition of the increasing complexity of management tasks.

*This item suggests that the Army recognize that because of the increasing complexity of leadership situations, reliance on traditional techniques will frequently not be sufficient to accomplish the mission. Therefore, the Army must rely on maximum utilization of new developments in the whole spectrum of managing people.

SECTION III

ORGANIZATIONAL CLIMATE

The prevailing psychological climate within an organization both reflects as well as dictates that organization's philosophy toward training and development. To argue which is the cause and which the effect is perhaps academic, for no one would deny that the impact of climate on training and development is indeed pronounced.

There are many variables that combine to define an organization's culture or climate. Its relative success economically vis a vis competitors, its geographic location, the make up of its work force and numerous other variables, both external and internal. Of these, however, two appear to be particularly important with respect to management development efforts. First is the attitude within the organization that either favors or disfavors management development. Second, and by far the more critical, are the actual behavioral practices pertaining to development efforts. This latter variable is paramount simply because attitudes are not always specifically articulated within an organization and one must frequently infer existing attitudes from actual behavioral practices.

Industrial psychologists have long been interested in the conditions which make a worker effective in his job. Viteles (1953) identified the development of the "will to work" as industry's core problem in the utilization of its manpower. McGregor (1960) and Likert (1961) outlined theories of management based largely on assumptions about human motivation. Vroom (1967) proposed a theory of motivation in terms of the relative strength of the force on the individual to exert different levels of effort in performing a given task. Attempts on the same task have historically been based on two somewhat different assumptions. The first of these assumptions is that the performance of a person can best be understood in terms of his skills (abilities) to perform that task. This assumption led to efforts to measure abilities, either as a result of performance or standardized tests or through observation, and to use these measurements in the selection and placement of workers. It also led to efforts to increase performance by developing and increasing workers' skills (abilities) through training.

The second of these two assumptions is that performance is to be understood in terms of motives (needs or preferences) and the conditions for their satisfaction in the work situation. It can be stated more succinctly in the proposition that the level of performance of a worker on a task or job is a direct function of his motivation to perform effectively. This assumption has led to an attempt to identify the conditions which generate a high level of motivation and to establish them in work situations.

By no means is this analysis purported to be an exhaustive comparison of civilian executive development programs. Corporations whose inputs were solicited were chosen on the basis of their size, industry grouping or reputation for excellence in specific subject areas -- and some for all three. Many companies not surveyed would have been equally qualified to contribute but time precluded an exhaustive analysis. Sufficient breadth has been obtained, however, to strongly support the implication section. Interviews were conducted with high level executives. In keeping with industry requests, specific reference to individual corporations will be avoided. A list of contributing institutions appears at inclosure 1.

Mosel (1957) and Haire (1964) point out that although certain kinds of behavior may be reinforced by trainers or peers during the training period, such behavior has little chance of being translated back to the job situation if the trainer's boss does not reward the learning or allow it to be practiced. Haire points out that it is the superior who controls most of the rewards and determines the value system in the everyday work situation. The finding appears to be particularly appropo to the military environment.

Clement (1975) proposed a developmental model drawing together and relating the fundamental variables of motivation, skills and opportunity (Figure 1). It is important to note that management development occurs only upon completion of the entire process. While not denying that a significant portion of the development process is addressed within a formal training system, this model recognizes that there are organizational factors which ultimately impact on success of the entire developmental effort. For example, a highly motivated trainee, provided requisite skills and knowledge to perform a task and then denied an opportunity to actually perform that task, is likely to become extremely frustrated and ultimately cynical (feedback line 1). Similarly, an individual required to perform a task without having been adequately trained will also become frustrated no matter how well motivated he may be (feedback line 2). Positive feedback (line 3) affecting motivation and attitudes occurs only when the entire development sequence is completed.

Training, Education and Development

The Army has traditionally observed a marked delineation between training and education. Training is generally considered to encompass the imparting of skills and knowledge within a narrow range. Development on the other hand is generally thought to encompass a much broader perspective involved in developing the whole person - socially, intellectually and physically. A true development program is not reducible to a handful of training programs for management. Development is neither a program nor even a series of programs. It is a total system - a continual process carried on throughout the life of individual organizational members. Nonetheless, training is an important ingredient of a total development system. This distinction is important from more than an academic point of view for its presence or absence in an organization sheds great light on the actual training and education philosophy extant within that organization.

How can these two assumptions be reconciled? The most obvious solution is to suggest that both are only partially correct. A worker's level of performance on his job is dependent both on his ability and on his motivation. The evidence which exists suggests rather strongly that ability and motivation, as typically measured or manipulated, do not affect performance independently, but rather interact with one another. It has been shown that a given increment in motivation has greater positive effect on the performance of those high in ability than of those low in ability. (Wyatt, 1934). The general picture emerging from these and other relevant studies is that the effects of motivation on performance are dependent on the level of skill (ability) of the worker, and the relationship of skill to performance are not additive but interactive. Available data suggests, however, something more closely resembling the multiplicative relationship depicted in the following formula:

$$\text{Performance} = \text{Function} (\text{Skills} \times \text{Motivation})$$

Importance of Climate

The results of a study by Fleishman, Harris and Burtt (1955) suggested that the day-to-day climate in the work environment was crucial to performance irrespective of the quality of training. Foremen apparently learned different attitudes for different situations. The attitude that is "right" in the training situation may be very different from the one that "pays off" in the industrial environment. These results suggest that management training cannot be considered in isolation from the social environment in which the manager must actually function. In this sense, management training must be viewed as an attempt at social change which involves the reorganization of an individual's perceptual field. The implication seems to be that certain aspects of the manager's environment may have to be reorganized if training is to be effective in modifying individual behavior.

Campbell (1970) similarly notes the potential limiting effect of climate, or environment, on training efforts. His model specifies opportunity variables which refer to situational and organizational factors that influence the managerial process. They include such things as task characteristics, structural components, group influences, communication patterns and organizational climate.

It is extremely important that an organization's stated philosophy and attitude toward management development be consistent with its actual day to day practices. Support for development has to be operationalized through actual opportunities for development such as formal training, job rotation, job enrichment, coaching and the like. Wage and salary administration and other existing reward systems must reinforce the development effort.

SECTION IV

SALIENT FEATURES OF SUCCESSFUL DEVELOPMENT PROGRAMS

It is difficult to judge whether an organization's training and development efforts are successful or not. There simply is a lack of empirical evidence supporting such claims. Admittedly, there is a wealth of data and end of course evaluations reflecting participants perception of the worth of training efforts. Whether or not recently acquired skills are in fact transferred to the individuals actual work environment is an entirely different question, however. The data attesting to this contention is noticeable because of its absence. This is not to suggest that on a micro-level training is not valuable. With respect to specific technical skills within a narrow range of a specific job (for example, operating a piece of equipment) there is adequate evidence to support the value of training efforts. When one broadens his perspective through to the more complex tasks of managing and leading this conclusion is not so obvious.

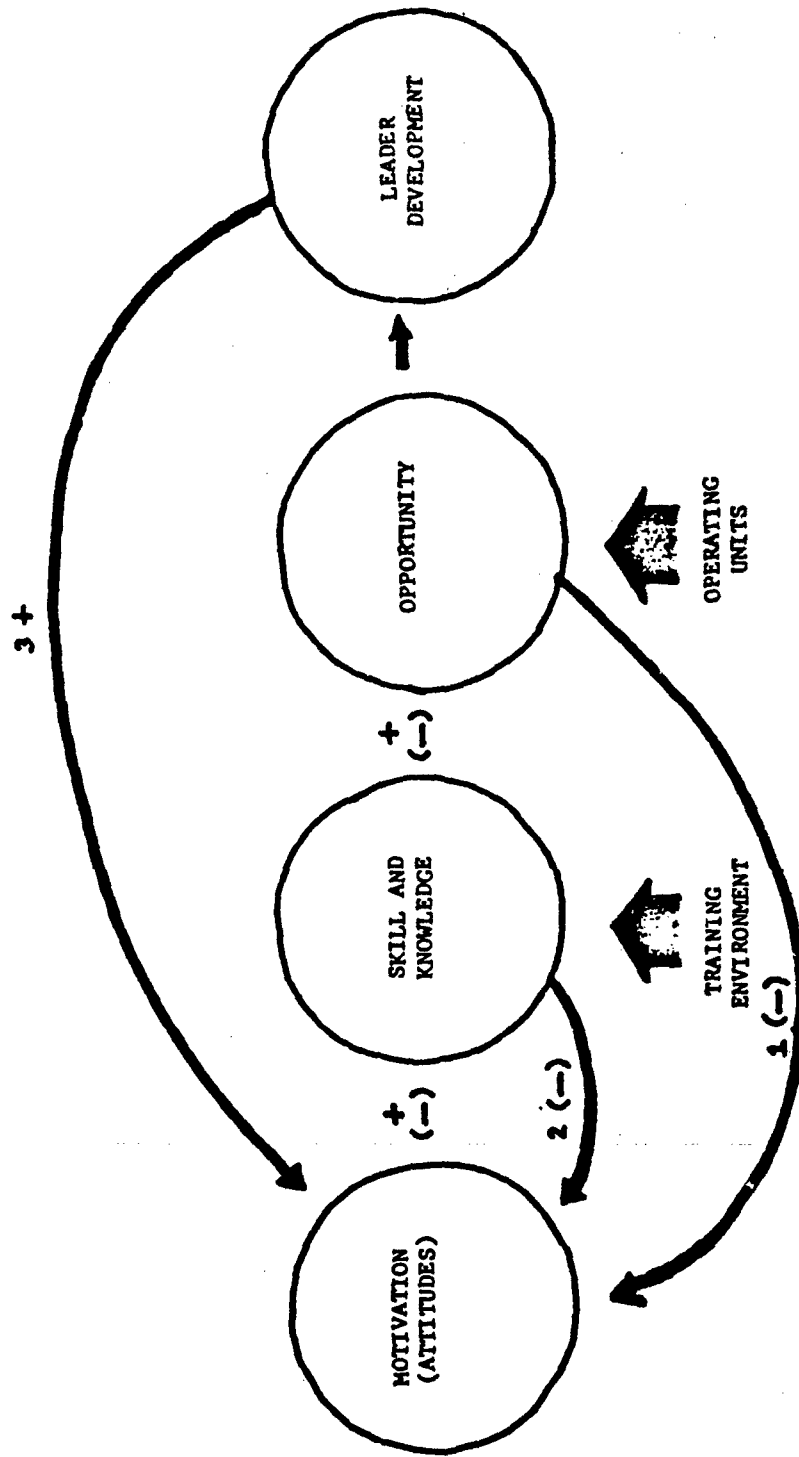
Fred Fiedler, a leading authority in the leadership area, goes so far as to contend that there is no long term effect in terms of actual behavioral change as a result of leadership training and experience. He cites a number of studies which in his view support this contention - the most noteworthy being the long term assessment program of management personnel conducted by Doug Bray and associates at AT&T.

Since it is not the purpose of this endeavor to accept or refute such a contention but rather to review existing management development programs, this issue will not be pursued further. It should be pointed out, however, that regardless of such contentions, many highly successful organizational management teams still strongly believe in the intrinsic value of management development efforts. Those organizations that appear to have the more successful training and development programs (based upon a comparative analysis) have the following characteristics.

Top Management Commitment

Commitment on the part of top level management is the most important requirement for executive development programs. Without top level commitment in deed as well as word, development efforts are likely to achieve only marginal success.

THE LEADERSHIP DEVELOPMENTAL MODEL



I-1-11

FIGURE 1

Reprinted from Leadership Monograph Series #7, "A Progressive Model for Leadership Development"

The job of general manager often presents a discontinuity in managerial effectiveness for some who have had a long track record of managerial success. The skills of a multifunction general manager differ considerably from previously learned skills. Topical expertise in a function (i.e., marketing, accounting) are action and operation oriented, not strategic oriented. Such expertise is characterized by an internal orientation, a differentiated focus rather than an integrated focus. Successful general managership demands just the opposite. It is totally dependent on conceptual skills which provide an integrative function, determine strategic direction and allocate resources, suggest policy and build multifunction teams. Training and development efforts generally support the generalist vs specialist strategy. Low level managers, when trained at all, are normally trained in a limited capacity for a specific technical job. Frequently, such training also includes an introductory block on management skills (the content of which will be discussed later). Training at all other levels is of the general management variety. The total extent of such efforts does not amount to much. Typically, a mid-level executive will be exposed to a general management training program of approximately 2 weeks duration. Most corporations rely upon individual development occurring on the job. Rather than viewing their education efforts as primarily training they see the corporate role as one of developing the total individual. They attempt to do this through careful movement of high potential executives through key management positions. Generally, the identification of these key positions is based upon the intuitive cumulative knowledge of previously successful managers. In companies with more sophisticated executive development programs (programs based upon detailed job analysis efforts - see next section for particulars) key positions are identified and clustered together into career paths. In these companies, executive movement is carefully orchestrated by executive development committees. These committees are staffed by highly qualified staff members.

Notwithstanding the fact that successful top level executives are normally developed within a generalist philosophy, substantial specialist programs exist also. Specialization is not kept under wraps in those corporations with successful management development programs. While it is true that not many specialists rise to the top of their particular specialty function and almost never go on to become top line managers, nonetheless, there are career tracks for specialists. To accommodate such employees, a system of successively more demanding assignments leading to top professional or technical responsibilities, accompanied by appropriate improvement in titles, salaries and other perquisites has been created. Training and development efforts, however, generally affect the specialist in a much narrower range.

It is top management who make policy decisions which either support or negate total development efforts. Such policies include much more than decisions to provide necessary training facilities. They include such related policy questions as selection and promotion, manpower planning, wage and salary administration and perhaps most important allocation of their most precious commodity - time. In one corporation, executive development responsibilities require as much as 50 percent of management's time. At the corporate level, the chief executive officer is chairman of the company's executive development committee. He meets weekly with other board members to review the management development plans and activities of the corporation's main operating organizations.

In other corporations, the chief executive officer regularly spends time on the various tasks of planning for top-level executive succession, and this fact is well known throughout the organization. Concomitant with such high level interest is the related requirement for all levels of management to be actively involved in development efforts. Successful programs are characterized by line managers clearly recognizing their basic responsibilities for developing subordinates.

The needs of the organization include attaching visible weight to development considerations when people decisions are made. Recruiting efforts in companies with successful programs are carefully tied to the total manpower program. Management tries to rotate job assignments in a way that will develop and broaden employee skills as well as fill the company's replacement needs. Training programs per se generally apply to lower management levels.

Generalist vs Specialist

There is no question that top corporate managers are generalists. Successful executives are promoted because of their demonstrated ability to manage widely diversified activities and responsibilities. Clearly the path to the top is through a progression of positions calling for a broad range of management abilities. Regardless of how a corporation might be organized, those executives who progress to top management levels do so because of their abilities to manage a variety of line and staff responsibilities. At one point in their career they might have been responsible for the performance of a manufacturing operation, later they might have been in charge of a major marketing function and still later a substantial geographic region or major organizational subunit. As a general manager, all of these relationships are different, and probably for the first time. It is fairly typical to see competitive middle managers moved through a succession of positions within a given function as well as across functions to total task responsibilities.

Other climate examples include an organizational value system that stresses individual choice. So long as the path to the top rung of the organizational ladder is clear, no penalty is applied to those individuals who choose to follow a different career path. They are not ostracized from the organization for having made that choice. In no way does this suggest, however, that successful executive development programs are devoid of incentives or that persuasive tactics are non-existent. Rather, it is intended to point out that once a decision has been made, the organization still views the individual involved as a worthwhile contributing member. It is important to point out that in more and more situations such a choice is being made by the individual rather than the institution. The concept here is to put the individual (not management) into the position of being held accountable for options selected, alternative paths unpursued and for successes and failures throughout and at the end of his career. This point will be elaborated on in the summary and conclusions section.

Finally, in many cases, specific rewards have been offered upon successful completion of development efforts. In one corporation promotion almost invariably follows successful completion of a major development hurdle. In still other organizations, positions of increasing responsibility which in turn have the potential to lead to promotion are the tangible pay offs. All of these outcomes give substance to an organizational value system which favors development.

Total Manpower System

Most companies who are concerned with executive development, tend to think of and label their activities in this regard as a "system." Utilization of the concept "system" is important in two respects. First, since most development programs rely primarily on promotions from within, they are thus dependent on the internal input of lower level managers. Thus, leading companies tend to view their management development systems and sub-systems as a type of pipeline, with accession personnel entering the system at one end and highly trained managers emerging from the other end.

"Systems" thinking has been of considerable importance in still another sense. In organizations with successful development programs the activities performed by management in implementing the total manpower system are interdependent and often sequential. The product of one sub-system often serves as input into additional sub-systems (e.g., organization redesign is an important ingredient in management development). Additionally, there frequently exists feedback loops between all sub-elements of the total system. Graphically, the system might appear as follows:

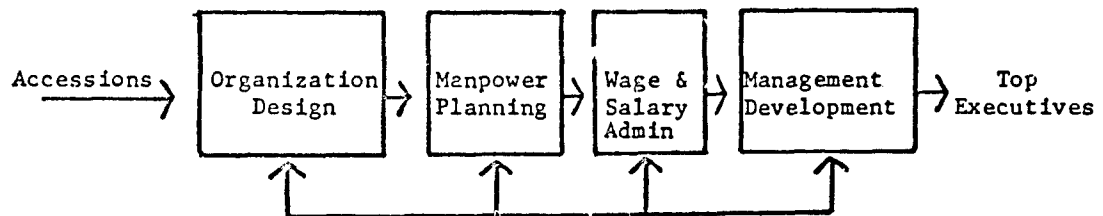


FIGURE 2

Organization Value System

Reference was made previously to the criticality of an organization's reward system reinforcing its development effort. The significance of this point should not be underestimated. Corporations that successfully stress the individuals role in development do so in a climate that openly fosters growth.

Growth and development as manifested in successful performance is closely followed with increasing responsibilities. Fencing off or hiding of management talent is not an acceptable practice in organizations with successful executive development programs. In one company, official company policy encouraged subordinates to actively seek more challenging jobs for which they feel qualified despite the temporary disruption that this policy encouraged. In all fairness, however, it should be pointed out that this policy applied chiefly to lower level employees.

Such a brief description of this methodology in no way does justice to the true complexity of the process. Suffice it to say, however, that such a detailed undertaking requires not only considerable resources but also entails a rather lengthy period of time. The principle advantage of such an analysis, however, is that once completed, a company is then able to tailor its total training program to meet its unique management needs in a way that maximizes the potential transfer of skills to the actual managerial job.

Training needs identified from one corporation's detailed task analysis are shown in inclosure 2. Specific tasks/behaviours in this company were grouped into the following general clusters:

- Management's Contribution
- Management's Social and Legal Responsibility
- Business Economics
- Management Science
- Individual and Group Behavior
- Leader Behavior
- Communications
- Optimizing Job Performance
- Support Systems
- Labor Relations
- Inter-company and inter-industry relations

This listing of training needs does not apply equally to all levels of management. Inclosure 2 highlights the differences for each of two organizational levels.

Other corporate job analysis efforts, while not as thorough as this, methodologically, nonetheless employed rather extensive use of the interview. In one company large numbers of job incumbents as well as their immediate supervisors were subjected to indepth interviews for the purpose of identifying critical management tasks. The interviews were content analyzed and final listings of critical skills were developed. The primary difference between the two approaches discussed thusfar was in the procedural steps that led to the identification of skill categories. The detailed task analysis effort first identified tasks which were subsequently clustered to form general skill categories. The interview method tended to identify skills directly. Both methods identified some similar skill categories, however, the detailed process facilitated the development of performance standards

SECTION V

CONTENT OF TRAINING PROGRAMS

While all corporations contend that their management development programs are based upon job analysis efforts, the detail and rigor with which they apply the variety of available job analysis techniques causes one to view this contention as highly suspect. Since it is not the purpose of this endeavor to describe the job analysis process per se, the following discussion will instead focus on two points (1) a brief description of the methodology employed in determining training needs and (2) a summary of the detailed content.

Detailed content of the executive development programs analyzed in this investigation can perhaps best be described as outgrowth of one of three major organizational approaches:

1. Job analysis efforts.
2. Management intuition.
3. Crisis response.

Job Analysis

Those programs that are based upon sophisticated job analysis efforts rely heavily upon data gathered by one of two general methods - questionnaires and/or interviews. The quality of such endeavors is proportionate to the degree that they reflect technical knowledge and skills (which lends itself more easily to job analysis efforts) or general management knowledge and skills. In nearly all cases, organizations are able to quite effectively analyze the technical requirements of the job. This is particularly true with respect to lower organizational levels. Where they begin to encounter difficulties, however, is in the identification of management needs.

The most sophisticated management development program examined and the one best able to overcome the above mentioned difficulty was based upon an exhaustive and thorough job analysis effort. Individual tasks were identified through field interviews of job incumbents and their supervisors. Highly similar tasks were grouped together to form a job analysis questionnaire. This questionnaire was then field tested in a major operating unit of the parent organization. After refinement, the questionnaire was distributed to the field. Responses were subjected to various statistical analysis including factor analysis, to determine significance. Significant tasks were then clustered together into related skill categories. The final process related these skill categories to individual organizational levels.

TRAINING DEVELOPMENT GUIDE

Item Content: Be able to apply effective techniques in planning and coordination (Gantt charts, arrow diagrams, PERT, etc.)
 TIME: 4.0 Hours

<u>Performance/Behavior Desired</u>	<u>Learning Method(s)</u>	<u>Measurement/Evaluation Methods, Condition(s)</u>	<u>Criterion (Criteria)</u>	<u>Resources</u>	
1. Administrative Instructions	Pre Test	Test	Test	90% of 20 items***	Williams: The Complex Strategist; Ewing, Human Side of Planning; Andrews: Concept of Corporate Strategy; Maynard: Top Management Handbook; Maynard: Long Range Planning
2. Development of Planning since the turn of the century; relate methodologies to problem solving process (e.g., step-wise procedures, rigor, etc.)	On a team basis, be able to correlate application of Planning Methodologies to team member role(s) as professionals or supervisors (foremen); be able to develop implications; team reports with instructor consolidation and critique.	Team exercise with background article(s) and worksheet. File/videotape possible alternative for background article(s)	Articles (file/videotape alternative); worksheet	80% agreement of application of specified methods/activities to role(s) with instructor judgment that consensus exists as to implications.	Management Planning for Management; AMA Management Handbook; Maynard: Handbook of Business Administration (Section 17) Newport: Tools of Managing
		Group discussion of instructor vignette/slide presentation.	Discussion	70% participation in discussion; 90% correct response to instructor questions; instructor judgment that consensus exists in support of performance objective(s)	Argenti: Corporate Planning; Gillis: Managerial Economics, Spencer & Siegelman: Managerial Economic; Film: Long Range Planning (Merritt case)
3. Utilization of various planning methods which currently are popular:	On a team basis, be able to distinguish arrow diagramming critical path, and PERT after matching each team with its correct definition from a list of ten definitions. Explain how/when these are used and ways to optimize use. Team reports with instructor consolidation and critique. On a team basis, be able to compile a plan covering a projection such as conversion of an automobile fleet to a new type automobile using PERT-time methodology.	Team matching exercise with worksheet	Matching list, worksheet.	100% agreement on correct matches; 80% agreement as to how/when activities are used; instructor judgment that consensus exists as to optimum usage.	WBR Reprint Series; See above plus - Planning; Benton: Use of the Computer in Planning; Coerden: Computers in Business Management; A. See above
A. Arrow Diagramming (1) Mechanics (2) Strengths (3) Weaknesses (4) Relation to other methods, ERP capabilities and other corporate resources					
B. Critical Path (CPM) (1) Mechanics (2) Strengths (3) Weaknesses (4) Relation to other methods, ERP capabilities and other corporate resources.		Team exercise with selected document and worksheet.	Worksheet; documents	100% agreement on results of research project	B. See above plus; Marketing (D & E) CPM Course; Roundtable Film: "Critical Path in Use" U.S. Government File Sources.

FIGURE 3

because it was task based. This is significant in that it greatly simplifies the evaluation problem. Figures 3 and 4 highlight the contrast between these two types of training development efforts.

An example of a complete training program developed primarily through interviewing and skill identification is described in inclosure 3.

Management Intuition

A second major approach to determining training and development needs relied principally on the intuition of experienced managers and trainers. Essentially these were manifested by one of the following general approaches:

- a. Historical evolution
- b. Personal recommendation of a key management individual
- c. Recommendations of external consultants
- d. Program in existence at key business competitors

While none of the above approaches are nearly as rigorous as those discussed in the previous section, by no means should one completely disregard the data generated by these approaches. Certainly one cannot afford to treat lightly those skills identified by highly successful managers as critical to their management success.

a. Those corporations whose training programs are developed as a result of historical evolution generally emphasize traditional management topics. Frequently, they do not focus on skills or competences but rather stress knowledge and understanding of the management process. An example of such a program is included in inclosure 4.

b. A second type of training program is one that develops gradually over time as a result of strong personal interest by key management personnel. Programs of this nature are often perceived to be disjointed efforts suffering from a lack of cohesiveness because of the absence of an overall organizational training model. Nonetheless, the content of these programs is not necessarily valueless for the insights and recommendations offered by successful key management personnel can indeed be worthwhile. Inclosure 5 describes topics/ subjects which fall into this category.

c. Another technique that corporations occasionally employ in developing their training programs is to rely upon the advice of outside consultants. The type of program that emerges is to a great extent dependent upon the background of the individual consultant. If he is associated with a university, then typically his program tends to be heavily oriented on knowledge and understanding. Skills that are generally recommended by many such consultants tend to fall into the general management category.

Consultant developed programs are frequently directed at middle managers or executives. Inclosure 6 contains two examples describing representative programs. The first represents a very modest effort whereas the second example highlights a much more sophisticated program.

People Management Skills

COURSE OBJECTIVES	SUBJECT MATTER
To improve the effectiveness of middle managers by providing them with new information, skills, techniques and practice in:	Examination of the middle manager's role
Planning their work	Methods for clarifying job objectives
Implementing their plans effectively	Problem-solving and decision making
Working with and through people in both planning and implementing work	Cost/benefit analysis
	Planning
	Contingency planning
	Managing change
	Influencing and negotiating
	Setting performance objectives
	Analyzing performance problems
	Counseling
	Affirmative Action

FIGURE 4

Turnover.

Ethics and values.

Other critical managerial performance shortfalls sometimes generate training in the following areas:

Leadership styles.

Motivation.

Discipline.

Unior labor contract.

Decision analysis.

Problem solving.

Budgeting.

In some situations intervention on the part of an external regulatory agency precipitated the development of a training thrust. Topics stressed as a result of this include:

Federal tax laws.

Fair employment practices.

Government contractual policies.

Fair trade laws.

Summary of Detailed Training Content

By adopting a broad systems perspective with respect to the detailed content of the training programs examined in this section, one is able to synthesize the findings into nine general categories. These categories are illustrated in Figure 5. A more detailed explication of these categories is contained at Inclosure 7.

In addition to suggesting that leadership/management can be dissected into nine elements, the overview described above also points out that the applicability of these dimensions also varies by organizational level. Even when activities apply across the organizational spectrum, the focus of the activity may shift. Inclosure 7 highlights the varying emphasis of the nine dimensions at each of five organizational levels. In scanning the matrix, the reader will note a significant distinction between the profile of skills required of lower-level leaders and the profile needed by leaders at the top levels.

d. A final influence in the determination of some management development programs is the presence of a particular emphasis in a key competitor's development program. Corporations that are heavily influenced by their principle competitors typically are not the leaders in their industry group. The training function is not held in very high esteem and management commitment toward the development process is more one of toleration than active support. The content of most such programs represents nothing more than a conglomeration of a variety of management techniques. Typically stressed are such topics as:

Motivation Theory.

Management Grid.

Management Styles.

Problem Solving.

Management Information Systems.

Awareness Training.

Effective Listening.

Change.

Crises Response Programs

A third major approach which determines the focus of management development efforts is in response to some form of crisis facing a corporation. The role of the training department in such corporations is as problem-solvers. Their task is to determine what is causing performance deficiencies and then design a training program to correct the problem. While this is certainly beneficial in the short run, what happens all too often is that the training program tends to remain long after the problem has disappeared. Unfortunately, in the face of limited training time and money, additional more relevant training is subsequently not developed. Following are examples of the content of programs that were designed to respond to a particular crisis:

Assembly line operations.

Company wide standards.

Managing overtime.

Customer relations.

Effective writing.

Resistance to stress.

The content of a dimension is not the only thing which changes according to level. The dimensions also change in orientation. At the lower levels, the skills implied in each dimension refer mainly to procedures and techniques; these skills can be acquired largely through training programs. But as an individual begins to move into mid-level positions -- and especially thereafter -- his focus shifts from procedures to processes. He is more concerned with integrating and synthesizing particular techniques into operations. This shift implies a conceptual ability which may not be called upon until the middle levels but which is crucial to successful functioning in a leadership role at higher organizational levels. The shift which begins occurring at the middle levels calls for very different abilities and different perspectives. For example, leaders at the lower levels maintain an internal system perspective. It is not until they move into the higher-level positions that leaders begin to adopt an external system perspective. Top-level executives, for the most part, are primarily involved in activities which require them to look outside the organization. Specifically, they concern themselves with questions of organizational reputation, the impact of laws and governmental regulations, issues related to the environment and society, and other economic, political and socio-cultural forces which affect their organizations. The shift in perspective which occurs has important implications for leadership training programs and developmental opportunities: from the middle levels on, those skills which leaders require are a product of developmental opportunities. Clearly, some dimensions are more amenable to skill training than are others.

In general, the emphasis by level can be summarized as follows:

- Low-levels - specialist orientation
- Mid-levels - managerial orientation
- Top-levels - generalist orientation

Each of the nine dimensions apply generally as follows:

ORGANIZATIONAL LEVELS

<u>SKILL/CATEGORIES</u>	<u>LOW</u>	<u>MIDDLE</u>	<u>TOP</u>
Specialty (Technical)	X		
Supervisory	X		
Counseling	X		
Human Relations	X		
Communication	X	X	X
Management Science		X	

DIMENSION

	FIRST	LOW	MIDDLE	TOP	EXECUTIVE
1. Communication					
2. Human Relations					
3. Counseling					
4. Supervision					
5. Technical					
6. Management Science					
7. Decision Making					
8. Planning					
9. Ethics					

Figure 5. Nine Dimensions of Leadership/Management Behaviors

SECTION VI

TRAINING DEVELOPMENT STRATEGIES

Corporations adopt a variety of training strategies to meet their training needs. Additionally, there exists a variety of specific training techniques that are employed. The importance of training strategies and specialized techniques should not be underestimated. If the same amount of care that is devoted to training needs analysis does not likewise go into the strategy and technique selection, the training success will be significantly lower. The first part of this discussion will focus on training strategies while the second part proposes a contingency approach to selecting training techniques.

Program Strategies

Essentially there are two overall program strategies that can be applied to training efforts. Programs can be conducted in a formal institutional setting or in the work environment. Institutional programs are advantageous in that they generally result in more uniform training for all participants. They permit the use of sophisticated training media and simulations which might be difficult to employ in a noninstitutional setting. They provide participants with training in a setting away from their normal work place. The quality and number of faculty can be tailored to best fit corporate training plans. Cost, however, becomes a major problem particularly when travel and lodging expenses are involved.

Institutional programs can be further classified into those conducted within the environment of a corporate training center or alternatively those conducted within an extra-organizational environment. The principle advantage of programs conducted at a formal corporate training center is in the amount of control one has over the curriculum and the learning situation.

Training provided in a field environment causes minimal personnel disruption. Realism can be enhanced when participants' actual supervisors conduct the training. Control over curriculum is more difficult with this strategy. Uniform background and experience of individual instructors is almost impossible to achieve in field programs, however. Costs are normally lower for training conducted in the field as opposed to institutional programs. Additionally, for cost reasons more students are likely to be exposed to field programs.

ORGANIZATIONAL LEVELS (CONT'D)

<u>SKILL/CATEGORIES</u>	<u>LOW</u>	<u>MIDDLE</u>	<u>TOP</u>
Decision Making		X	X
Planning		X	X
Ethics			X

The example cited in Figure 3 illustrates this methodology. Unfortunately, the number of companies that apply such rigor to their overall training development program and in particular, to the selection of a specific training technique are few in number. To attempt to describe completely the particulars of how these companies apply this process is beyond the scope of this endeavor. Nonetheless, the discussion in the next section, describing a contingency approach to selecting training techniques, would in fact represent a reasonable facsimile of sophisticated corporate approaches.

The second major methodology employed by companies in selecting an appropriate training technique is to simply let their instructors do so. This is by far the most widely adopted practice in industry. It suffers from many of the same methodological flaws, however, that were described in the previous section. This is not meant to suggest that instructors should never be allowed to select a training technique, for their experience represents a valuable input that needs to be tapped. Rather, selection of an appropriate technique should be done jointly by training development personnel, subject matter experts, resource managers and trainees. Without the combined input from all of these individuals, it is entirely possible that techniques will be dictated more by tradition or personal bias than by relevant criteria. As will be shown in the next section, there are strategies for avoiding these shortcomings.

A Contingency Approach to Training

Adoption of a contingency approach to selection of appropriate training techniques recognizes that training needs, resources and trainees vary from one situation to another. A contingency model begins by listing the key variables that underscore training needs analysis. It further specifies the variety of training techniques available for use in the learning situation. Together, these two groupings of variables permit consideration of the proper mix for a given situation. Following are some of the key variables that apply to the training environment. These variables are drawn from three basic sources:

1. Training Objectives.
2. Learning theory.
3. Constraints.

These sources in turn encompass the following additional sub-variables:

1. Training objectives
 - a. Motor skills
 - b. Attitudes
 - c. Cognitions/understanding

Programs taught on-site can either be centrally designed by a corporate training department or totally decentralized. Those centrally designed can be delivered through two training strategies. First, a relatively large training department can design as well as actually deliver the instruction. Alternatively, a smaller central training department could design institutional programs, export these programs to line managers who become the principle instructors, and then serve as consultants to these line managers. A variation of this strategy would be to formally train local instructors to present the learning material.

Of course there always exists the option of field training developed and controlled wholly by local training departments. This permits unique tailoring of instruction to meet local needs. Control and uniformity of training across organizational sub-elements is lacking under such a strategy, however.

Training Techniques

Training directors are continually bombarded by a plethora of literature stressing the merits of various training techniques. The training literature describes some 24 different methods which have been popular at various times. While numerous studies described the frequency of use of each method, unfortunately, the critical question of which method is the most effective in a given situation was never addressed. Many trainers purported to know the answers, all the while, however, they continued to utilize their favorite technique regardless of its true relevance.

Trainers and educators have often been locked into specific training techniques because of tradition. Such practices are manifested by the widespread use of the lecture method in the 1960s, the case method at certain universities and more recently experiential training in the military. Whenever training techniques are selected on the basis of illogical or irrelevant criteria, severe injustice results to trainees. There are many reasons why training developers might buy questionable methods. These include the cost of alternatives, the problems associated with revising the existing training programs, lack of knowledge of different methods and purely personal preferences. This discussion will first describe two general techniques employed by industry and it will then propose a new method that offers promise in adequately answering the question of what technique is most effective. Training techniques employed by industry are normally determined by one of two methods. The first method is to select a technique based upon training design considerations. This method is normally adopted by those corporations who have performed sophisticated job analysis efforts. In sophisticated efforts the job analysis process identifies standards and conditions implicit in performing required tasks. These standards and conditions in turn provide significant input into determining which training technique is most appropriate.

TRAINING TECHNIQUES

Lecture
Conference
Case Study
Role Playing
Coaching
Simulation
Self-Paced Instruction
Apprentice
Job Rotation
Laboratory Training
Films
Television

FIGURE 6.

2. Learning theory

- a. Participation (Active-Passive)
- b. Practice (Distributive-Massed)
- c. Reinforcement (Variable-Fixed)

3. Constraints

- a. Costs
- b. Time
- c. Facilities

Of the variety of available training techniques, 12 principle ones are specified in Figure 6. Together these two major groupings of variables can be combined to form a contingency matrix. Figure 7 illustrates how such a matrix might look. To maximize effectiveness this matrix should be filled out for each learning task identified in the job analysis process. An alternative but simpler methodology would be to fill out a matrix for each major cluster of tasks. Figure 8 illustrates how the completed process might look for a specific task. Figure 9 is illustrative of a major cluster.

There are many variations which can be applied to the contingency model just illustrated. The list of training techniques and constraints can be lengthened or shortened to meet an organizations unique needs. The important point is that this model represents simply a first approximation toward developing a framework for decisionmaking by training developers.

CONTINGENCY MODEL APPLIED TO JOB ANALYSIS TASK

TASK	LEARNING PRINCIPLES			CONSTRAINTS					
	MOTOR SKILL	ATTITUDE	UNDERSTANDING	PARTICIPATION	PRACTICE	REINFORCEMENT	COST	FACILITIES	TIME
LECTURE									
CONFERENCE									
CASE STUDY									
ROLE PLAYING									
COACHING									
SIMULATION			X(2)	ACTIVE	LOW	LOW	LOW	SIMPLE	SHORT
SELF-PACED			X(1)	ACTIVE	LOW	HIGH	LOW	SIMPLE	SHORT
APPRENTICE									
JOB-ROTATION									
LAB TRAINING									
FILM									
TELEVISION									

SKILL TASK

PLANNING SET WEEKLY

 PERFORMANCE GOALS

FIGURE 8.

A CONTINGENCY MODEL FOR SELECTING TRAINING TECHNIQUES

TRAINING OBJECTIVES (From Bloom's Taxonomy)			LEARNING PRINCIPLES (From Learning Theory)			CONSTRAINTS		
MOTOR SKILL	ATTITUDE	UNDERSTANDING	PARTICIPATION	PRACTICE	REINFORCEMENT	COST	FACILITIES	TIME

TRAINING TECHNIQUES

- LECTURE
- CONFERENCE
- CASE STUDY
- ROLE PLAYING
- COACHING
- SIMULATION
- SELF-PACED
- APPRENTICE
- JOB ROTATION
- LAB TRAINING
- FILMS
- TELEVISION

FIGURE 7.

SECTION VII

COMPETENCY & EVALUATION

Reference was made previously to difficulties encountered in determining competency as a result of the training experience. In fact the whole area of evaluation is considered to be the weakest link in the total training "system." This discussion will in no way attempt to resolve the many problems associated with this question. It is intended to briefly describe the extent of evaluation efforts in industry with the expressed purpose of drawing any conclusions which might apply to the military.

Determination of training success is most often based upon one of three types of evaluation plans:

1. End of course evaluation
2. Evaluation of on-the-job behavioral change
3. Change in operations statistics (e.g., profits, turnover, etc.)

End of Course Evaluation

Determination of the success or failure of most management development efforts is normally based upon an end of course evaluation. In the simplest case, trainees are merely asked for their subjective opinion regarding the value of the training effort they have just completed. In more sophisticated cases, student responses at the conclusion of training to a variety of test items are compared with pre-course responses. In still another version, trainee's competencies in selected skill categories are compared through the use of pre and post skill assessment techniques. Generally speaking, evaluation based on student appraisal is considered soft data. This does not necessarily mean, however, that such evaluations are valueless for there exists a certain body of knowledge that can only be evaluated this way.

Evaluation of Actual Behavioral Change

A much more viable approach to the entire evaluation question would be to base it on actual observable behavioral change. The difficulty in accomplishing this goal unfortunately, is considerable. Recall the argument presented previously by such well-known leadership and management experts as Fiedler, Cambell, Dunnett and Lawler indicating that the worth of leadership training and experiences has not been born out by objective measure. This contention does not necessarily mean that it is impossible to evaluate the worth of such efforts. Rather, it points out the complexity of this type of evaluation program. In only one instance was a corporation pursuing the evaluation issue in a sophisticated research and development fashion and that effort was purely in the developmental phase.

CONTINGENCY MODEL APPLIED TO SKILL CLUSTER

TRAINING OBJECTIVES	LEARNING PRINCIPLES			CONSTRAINTS		
	PARTICIPATION	PRACTICE	REINFORCEMENT	COST	FACILITIES	TIME
MOTOR SKILL	PASSIVE	LITTLE	LOW	LOW	SIMPLE	SHORT
ATTITUDE	PASSIVE	LITTLE	LOW	LOW	SIMPLE	SHORT
UNDERSTANDING	ACTIVE	MUCH	HIGH	HIGH	COMPLEX	LONG
X(1)						
X(2)						
X(3)						
X(4)						

SKILL CLUSTER

MANAGEMENT SCIENCE

SKILL

MANAGE CONFLICT

- LECTURE
- CONFERENCE
- CASE STUDY
- ROLE PLAYING
- COACHING
- SIMULATION
- SELF-PACED
- APPRENTICE
- JOB ROTATION
- LAB TRAINING
- FILM
- TELEVISION

I-1-35

FIGURE 9.

SECTION VIII

UTILIZATION OF THE TRAINED RESOURCE

An analyses of training development efforts would not be complete without a brief discussion of utilization policies regarding trained resources. Reference was made previously to the criticality of providing the newly trained individual with an opportunity to put into practice recently acquired skills. One cannot over emphasize the importance of this facet of the development sequence. Failure to ensure proper utilization could well nullify any gains obtained as a result of training or development efforts.

Those corporations that seem to do the best overall job in the training area are also the ones that pay particular attention to utilizing the trained resource. Most corporations train their managers only after they have been selecte for a particular job. One company prefers to let newly promoted top managers spend 1 to 2 months in their new job before training them. Those corporations that devote considerable energy to the utilization question also require the active involvement of management in the training scheme. Operating managers are appraised of the content of the training program affecting subordinates in terms of increased skills and knowledge. Additionally, they are encouraged to permit these same subordinates an opportunity to put into practice newly acquired skills. In a few companies, follow-on interviews and questionnaires are employed to reinforce the training experience. In a limited number of cases, upon successful completion of training, trainees are immediately placed in a job requiring the explicit use of newly acquired skills.

The significance of all of this is that the importance of utilization cannot be underscored. It must receive proper emphasis in the total training system if that system is to remain viable. Sophisticated management techniques must be employed to ensure that training is not only presented at the correct time, but also that fully trained (or developed) individuals are managed in such a fashion that appropriate levels of utilization are obtained.

Normally, the most sophisticated determination of on-the-job behavioral change is based upon the subjective evaluation of the trainee's superiors or peers. This is accomplished through an analysis of questionnaire responses or as a result of personal interviews. The latter technique is the more promising since it permits follow-on questioning and clarification when required. Such techniques are expensive, however, and those few companies employing this methodology limit their efforts to randomly selected samples.

Change in Operating Statistics

This type of evaluation really represents the bottom line for industrial training programs. Once again, however, the difficulty is in isolating or relating significant change in any organizational statistic to specific training efforts. It is virtually impossible to tie profitability to training in a pure cause-effect relationship because of the presence of numerous moderating variables. Unfortunately, it is precisely this kind of evaluation that would be most beneficial to training developers. The challenges to training developers in the area are without doubt unparalleled.

One important implication emerges from a discussion of evaluation efforts. Quite simply, organizations must devote considerably more time and effort in determining the effectiveness of existing training programs. As training resources become scarcer this area becomes even more important. Unless organizations can clearly demonstrate changes in behavior on-the-job as a result of a training or development experience, this whole area remains in jeopardy. The value of a good evaluation program goes far beyond a specific training situation. Its existence supports ongoing efforts in determining qualification standards and competencies.

10. A contingency approach to the selection of training tasks as well as training strategies.

11. Presence of a long term detailed evaluation plan for training and development efforts.

12. Personnel policies that maximize utilization of trained resources.

13. Recognition of the increasing complexity of management tasks. Each of these characteristics in turn has important implications for the Army's training and education efforts. The application and specific details for each are contained in the executive summary.

The implications which have resulted from this analysis are not considered to be all inclusive of the wealth of data gathered from the industrial sector. What has been stated here represents simply the salient features of successful programs. Much of this suggests a tremendous change from what presently exists in our system. Nevertheless, the logic for such change is indeed compelling.

A final word of caution is offered at this point. While there exists many similarities between civilian executive development programs and the military's, the reader is cautioned not to overlook some very important distinctions. The civilian sector develops only a miniscule portion of its total accession for managerial performance and that small number becomes even smaller as one moves higher in the organizational hierarchy.

The very nature of the military requires that we develop managerial and leadership expertise in all of our officers at a given level, since we are not afforded the luxury of predicting when, where, and how many will be affected by an outbreak of hostilities. Mobilization concerns further necessitate additional development considerations.

It has been argued that the military trains far too much when compared to the civilian sector. Some figures commonly referred to are that the Army has some 13 percent of its officers in school at one time; whereas industry figures hover around 2-5 percent depending upon the organizational level one focuses on. Suffice it to say that reliable industrial figures are hard to come by, but more important, whatever difference exists reflects once again a fundamental distinction between industry and the military. The very purpose of the Army in peace time is to train for the next war. It is incumbent upon the Army to identify those critical skills (both technical as well as managerial) essential to success on the modern battlefield and to insure that its officer corps is fully trained and developed with respect to these skills. The country nor the Army can accept nothing less.

SECTION IX

SUMMARY AND CONCLUSIONS

Numerous important conclusions can be drawn from the preceding analysis. By carefully examining the content of leading executive development programs, one is able to identify the particular skill mix which appears critical to managerial success at each of several organizational levels. Having identified critical skills, one's attention can then turn toward selection of an appropriate training strategy or technique.

But all of the above will be seriously undermined if an organization's overall training and education philosophy does not support development. An analysis of successful programs in the civilian sector points out the criticality of an organization's overall climate to development efforts. Listed below are several important characteristics that should be considered by the Army as it reviews its training and education effort:

1. The presence of a master development plan or model that provides an overall blueprint for all training and education efforts in the organization.
2. An organizational philosophy and climate that openly supports development efforts.
3. A complete manpower system that integrates the various sub-systems that influence the development process.
4. The top leadership levels are committed to and involved in the development system.
5. A threefold responsibility for development between the institution, the individual and commanders/managers.
6. All commanders, leaders and managers are responsible for subordinate development.
7. A recognition that development is a long term proposition.
8. A changing overall emphasis in training and development from a specialty orientation at the lower levels to a generalist orientation at higher organizational levels.
9. Effective management and leadership skills are comprised of nine separate dimensions of behavior which varied at each of five organizational levels.

DETAILED JOB ANALYSIS - TASK IDENTIFICATION

TASK ANALYSIS

Low Level

Middle Level

MANAGEMENT'S CONTRIBUTION

Understand what management does (planning, organizing, controlling, coordinating, staffing, motivating, etc.)

Clarify today's view of management and the achievement of results from the standpoint of both behavioral and management science

Understand management's authority - responsibility - accountability

Facilitate further reading and study; provide an outline of key authorities and issues

Distinguish between the nature of the contribution of the supervisor/manager and the staff specialist; clarify the importance of both to our overall effectiveness

Clarify on-the-job responsibilities and authorities of attendees

Clarify expected on-the-job contribution of attendees

Understand the Company's approach to management development.

MANAGEMENT'S SOCIAL AND LEGAL RESPONSIBILITIES

Become familiar with the important considerations relative to equal employment opportunity, environmental conservation, occupational safety and health, etc.

Clarify the contribution and relative power of government interest groups and other segments of society outside the company

Inclosure 2

I-1-II-1

LIST OF CONTRIBUTING CORPORATIONS

American Telephone and Telegraph Corporation

Chase Manhattan Bank

Chrysler Corporation

First National City Bank (Citicorp)

Eastern Airlines

Exxon Corporation

General Electric Corporation

Motorola Corporation

Pennacoil Corporation

TRW Incorporated

Xerox Corporation

Inclosure 1

I-1-I-1

Low Level

Be able to apply the fundamental techniques involved in designing work, establishing standards, and picking out critical job components to be monitored

Understand the local approaches for coordinated planning and controlling of manpower (time sheets, skill balance, etc.)

Middle Level

Be able to apply effective techniques in planning and coordination (charts, arrow diagrams, PERT, etc.)

Understand the needs to harmonize competing alternatives (short vs. long run, manpower vs. investment, etc.)

Understand the importance of manpower trends and the need for constant checking of manpower levels

INDIVIDUAL AND GROUP BEHAVIOR

Understand the meaning of personality and the various forms which behavior takes (to include the impact of such things as culture, difference in age, sex, etc.)

Be able to undertake study and experimentation following an outline of key authorities and their approaches in this area

Understand the importance of human needs in motivating job performance

Be able to improve attitudes and behavior or handle major organizational changes using several change strategies (education, legislation, adaptation, unstabilization)

Know the reasons for the formation of informal groups or cliques and understand their impact on attitudes and productivity

Understand the concepts of cooperation and conflict and be able to develop the first and manage the second using strategies designed to pull different viewpoints together

Low Level

Become familiar with supervisor/manager's situation with respect to the law (his position as the Company's agent, implications of contracting obligating, etc.)

Understand important Company policies and practices (release of information, conflict of interest, etc.)

Middle Level

Understand the Company's basis for a positive response to governments and organizations to include such concepts as enlightened self-interest

BUSINESS ECONOMICS

Understand the basic functioning of profit making firm in a free enterprise economy

Understand the basic economic issues facing the Company

Understand the fundamental concepts of financial accounting and reporting

Understand the fundamental concepts of cost accounting and control

Be able to interpret and create forecasts and budgets

Know the fundamental issues involved in cash flow management, return on investment, and alternative uses of capital

Know the several methods of generating capital, their relative costs, and their availability

Understand basic impact of federal and state taxes on profits

Be able to discuss significance of depletion allowances, utilization, import controls, etc.

Be familiar with the general economic outlook for the industry

MANAGEMENT SCIENCE

Be able to apply effective techniques for problem solving/decisionmaking.

Be aware of the best ways to use new aids to management such as electronic data processing, information systems, etc.

COMMUNICATION

Lower Level

Understand the significance of communications process

Understand the filtering process in communication (perception, screening, withholding)

Be able to obtain information feedback from others and achieve effective two-way communication flows

Be able to listen effectively and be alert to all messages being transmitted, including those not at a verbal level

Understand the operation of non-organization channels (such as the "grapevine" or union communications) be able to detect and counter undesirable themes and messages

Develop the ability to speak and write clearly and concisely

Develop the ability to read quickly and accurately

Middle Level

Be able to conduct an effective discussion (in problem solving, on sensitive subjects such as performance or career development or in an emotional atmosphere)

Understand the effective utilization of formal communication channels, media, and messages to achieve management objectives

OPTIMIZING JOB PERFORMANCE

Understand the fundamental concepts of job description and effective methods for communicating performance expectations

Understand ways to assign work that have good acceptance and understanding (involvement, clear-instructions, feedback, etc.)

Know how to recognize waste and poor practices and how to eliminate them with employee involvement and support

Know how to keep an organization moving forward with changes in personnel, technology, and society

Understand basic methods for organization and coaching

Low Level

Middle Level

Be able to diagnose when group methods for problem solving or information sharing are appropriate; be able to use effective methods (to include meeting leading)

Be able to build teamwork in and across organizations using communication and problem-solving strategies

Know how to accurately measure where individuals (including self) and groups stand with respect to attitudes toward work and practices experienced at work

LEADER BEHAVIOR

Be familiar with the several approaches to describing leader assumptions and behavior together with their implications for work productivity

Be able to undertake study and experimentation following an outline of key authorities and their approaches in this area

Be able to effectively apply the most productive leadership approaches developed to date (enrichment, objective setting, problemsolving involvement, communications, reinforcement, measurement selection)

Understand the importance of high standards and clear productivity targets and their interaction with effective leadership of employees

Be able to assess one's own leader behavior (preferably through accurate measurement) and judge its probable impact on productivity

Lower Level

Know the supervisor's role in dealing with union members

Know how to handle grievances and understand the arbitration process

Be able to apply techniques for reducing conflict with union and avoiding either initial organization or change in representation

Understand the political nature of unions and the needs and problems of elected officials

Know why and how unions are successful in representation elections and the constraints on actions related to the election

Be able to interpret typical provisions in a union contract or important sections of the local contract if appropriate

Middle Level

Be able to apply basic concepts of negotiating

Understand the outlook for the future on major issues/trends

INTERCOMPANY AND INTERINDUSTRY RELATIONS

Understand the relationship between operating functions and between operations and coordination and service managements

Understand the role of the Management Committee (and its subsidiary committee), and its relationship to the parent Company

Be knowledgeable about Marketing strategies and concerns

Be knowledgeable about Production and Exploration methods and concerns

Be knowledgeable about Refining and Marine operations and concerns

Understand and be able to discuss Company and industry concerns on key issues not previously covered (e.g., reserve situation)

Low Level

Know how to inventory individual skills and identify training needs

Be able to diagnose individual performance problems and deal with errors, mistakes, lack of skill, carelessness, etc.

Middle Level

SUPPORT SYSTEMS

Understand the Company philosophy on appraisal, compensation, and development systems

Be knowledgeable on current methods of appraisal and salary administration

Be able to appraise performance and estimate potential

Understand effective ways to motivate performance and reduce turnover through utilization of comprehensive personnel development methods (goal setting, performance discussions, career discussions, feedback)

Be able to apply personnel policies and interpret basic benefit plan concepts

Understand and be able to administer special purpose programs (safety, absenteeism, chemical abuse, etc.)

Be able to administer salaries

Know how to effectively participate in next higher level reviews of appraisal and salary administration

Understand the Company's recommended comprehensive personnel development program and be able to administer it effectively

LABOR RELATIONS

Understand the history and role of unions, to include the Company's involvement and philosophy

Understand one's obligation to bargain and its limitations

Understand the concept of management rights and its limitations

Understand the role of government, to include legislative and administrative bodies (Congress, courts, NLRB, etc.)

4. People Management Skills

- a. Setting performance standards
- b. Performance appraisal
- c. Coaching
- d. Delegating
- e. Motivation
- f. Affirmative action
- g. Discipline
- h. Situational management
- i. Complex people problems

MIDDLE LEVELS

Training for middle managers attempts to increase skills in three general categories:

1. Analytical Skills

- a. Planning
- b. Contingency planning
- c. Problem solving
- d. Decisionmaking
- e. Cost/benefit analysis

2. Interpersonal Skills

- a. Influencing other (negotiating)
- b. Managing change
- c. Clarifying objectives

JOB ANALYSIS - SKILL IDENTIFICATION

LOW LEVELS

Low Levels training addresses four broad categories of management needs:

1. Personal Skills
 - a. Goal setting
 - b. Implementing and monitoring
 - c. Conducting meetings
 - d. Making presentations
 - e. Communication skills
 - f. Problem solving skills
 - g. Giving and solution feedback
 - h. Time management
2. Technical Skills
 - a. Budgeting
 - b. Marketing management
 - c. Customer relations Product Specific
 - d. Use of control mechanisms
 - e. Compensation programs
3. Inter-Functional Understanding
 - a. Corporate organization structure
Company supply system Company Specific
 - b. Service administration
 - c. Customer inquiry

Inclosure 3

I-1-III-1

a. Business Policy Considerations

- Marketing
- Financial and accounting
- Organizational design
- Domestic and international economics

b. Strategic Planning

- Planning in multi national firms
- Planning in the international environment
- Technology and strategic planning
- Social problems and strategic planning

c. Human and Organizational Problems

- Organizational design
- The general manager role
- Competition
- Executive stress

3. People-Management Skills

- a. Affirmative action
- b. Performance problem analysis
- c. Counseling

The decision making skill is considered by the corporation to be of sufficient importance that it warrants further emphasis as a separate learning module. The purpose of this module is to develop within the mid-level manager skill in the use of modern quantitative analysis techniques and measurement in decision situations. Detailed subject matter includes:

- a. Decision analysis
- b. Forecasting
- c. Simulation
- d. Linear programming
- e. Game theory
- f. Decision trees
- g. Regression analysis
- h. Probabilities

EXECUTIVE LEVELS

Executive level programs focus on long range planning and strategy. The emphasis in these programs is to provide a general management perspective rather than specific skills or techniques. Such programs fall much closer to the educational end of the development spectrum than they do to the training end. Specific subject matter includes:

EXECUTIVE LEVELS

University Advanced Management Programs
(Harvard, Stanford, UCLA, etc.)

I-1-IV-2

TRAINING PROGRAM BASED ON HISTORICAL EVOLUTION

LOW LEVELS

Basic principles of management
Management style
Leadership and motivation
Staff organization
Goal setting
Decisionmaking
Accounting principles
Marketing function/effectiveness
Individual testing and assessment
Introduction to organization development

MID-LEVELS

Proposal management
Organizing and managing
Cost control
Cost estimate and pricing
Project management

Inclosure 4

I-1-IV-1

MID-LEVELS

Motivation theory
Management strategies
Teamwork
Conflict resolution
Reactions to stress
Interpersonal communication
Management by objectives

TOP-LEVELS

Organization principles
Systems overview
Administrative systems
Product systems
Computer systems
Operations research
Manpower system
Labor relations
Employee benefits
Fair employment practices
Salary administration
Employee communication

RECOMMENDATIONS OF KEY MANAGEMENT INDIVIDUALS

LOW LEVELS

Communication skills

Listening

Rumor control

Transactional analysis

Motivation

The nature of man

Human needs

Theory X - Theory Y

Management Principles

Problem solving

Decisionmaking

Salary administration

Leadership and discipline

Safety

Management Controls

Budgeting

Time management

Work load analysis

Inclosure 5

I-1-V-1

Attorney's Office

Patents

Public operation

International Operations

I-1-V-4

Product Development

Planning

Corporate marketing

Marketing research

Marketing strategies

Sales programming

Measuring sales performance

Advertising

Customer relations

Corporate Operations Staff Function

Long range planning

Manufacturing facilities

Purchasing

Machinery & equipment

Quality control

Executive responsibility

Staff Organization

Comptroller Function

Inventory

Accounting

Capital expenditure

Tax Department

Auditor

Credit

Agreement Analysis
Planning the Future of a Business
Capitol Investment
Managing Current Assets
Social Changes
International Trade

TOP-LEVEL

Balance Sheet Analysis
Resource Management
Strategic Response to a Changing Environment
Management Control System
Analysis of Strategy
Organization and Human Resources
Organization Team Building
The Business Team
Organizational Staffing
Business and Government Relations
Business and Social Responsibility
Coping with a Changing Environment
Ethics in Business Decisions

CONSULTANT PROGRAMS

MID-LEVEL

Motivation Theory

Theory X - Theory Y

Hertzberg's Hygiene Factors

Maslow's Hierarchy of needs

Components of the Management Process

Managerial Effectiveness

Problem Solving

Goal Setting

Planning

Controlling

Directing

Organizing

Business Simulation

Individual Group Behavior

Leadership Styles

Nondirective Interviewing

Fiscal Policy

Introduction to Finance

Fund Flow

Selecting Priorities for Managerial Productivity

Inclosure 6

I-1-VI-1

LEADERSHIP MONOGRAPH SERIES#8 - A MATRIK OF ORGANIZATIONAL LEADERSHIP DIMENSIONS

ORGANIZATIONAL LEVEL

	LIEUTENANTS (FIRST LINE)	CAPTAINS (LOW)	MAJOR/LIEUTENANT COLONEL (MIDDLE)	COLONELS (TOP)	
LEADERSHIP DIMENSIONS	1. COMMUNICATION A. Interpersonal B. Organizational	Applies interpersonal skills Provides inter-organizational and performance feedback Develops persuasion skills Listens empathetically Employs horizontal communication channels Disseminates information Reads technical reports Provides daily production information	Applies writing skills Employs organizational feedback techniques Develops persuasion skills Listens for consequences Flows information Develops inter-organizational communication channels Synthesizes information Writes reports Reads technical reports Briefs superiors	Communicates verbally and in writing Provides and receives feedback about production goals Establishes information networks Facilitates organizational communication Filters reports and data to executive level Attends meetings	
	2. HUMAN RELATIONS A. Inter-group Relations B. Intra-group Relations	Formulates relations within a small work group Keeps subordinates informed Applies reward & equity Gives credit where due Responds to personal needs and problems Evaluates immediate personal needs	Plans work group inter-relationships Comprehends the general principles of human behavior Emphasizes and copes with others' emotional reactions Shows interest in subordinates' welfare Is sensitive to stress releases Appreciates how subordinates are likely to act and how subordinates are motivated	Plans relations between and among groups Works to create a supportive work atmosphere Applies factitive skills Integrates individual needs with organizational ones Respects the dignity of subordinates	Formulates inter-group and extra-group relations Creates a supportive environment within the organization
	3. COUNSELING A. Personal Counseling B. Performance Counseling	Identifies employees with personal problems Refers subordinates to appropriate personnel or agency Employs open ended questioning Evaluates work performance against job criteria	Refers problems as appropriate Assists individuals to develop and implement action plans for resolution of manageable problems areas Selects interviewing techniques (eye contact, body position) Synthesizes feedback content Identifies performance criteria Provides performance feedback Suggests plans for performance feedback	Conducts exit interviews Focuses interviews for dismissal or separation Establishes guidelines to evaluate individual and group performance Provides and receives unit performance feedback Identifies performance feedback Develops and initiates performance improvement plans	Identifies colleagues who have personal problems which might adversely affect professional and organizational well-being Verifies and evaluates exit interview information Evaluates performance appraisal systems Reviews performance goals
	4. SUPERVISION A. Procedures B. Techniques	Enforces organizational rules Treats subordinates fairly & consistently Coordinates with peers Organizes use of equipment Develops work force cohesion Assigns persons to tasks Administers on the spot corrective action Maintains personal contact with subordinates Performs safety inspections Orients new people	Differentiates hour to hour results Administers reward and punishment appropriately Formulates efficient procedures Initiates work group activities in those of other groups Defines supervisory responsibilities Corrects undesirable behavior Orients and trains new people Advises about production data	Performs quality control tasks Focuses on efficiency of operations Performs linking pin function Circulates positive directions Evaluates procedural checks Selects qualified people Reviews production results	Evaluates programs and objectives Reinforces the motivational climate Coordinates sub-unit objectives Utilizes consultants Determines promotability Establishes organizational structure
	5. TECHNICAL A. Specific Current Area B. Procedures Techniques Principles C. Focus on Motor Skills	Performs solitary occupational specialty Selects procedures, techniques & methods related to specific task or subject area Utilizes equipment Applies motor skills	Performs occupational specialty Selects procedures and methods related to work unit activities Interprets the professional technical role	Comprehends advanced technology (e.g. data processing, management information systems) Synthesizes procedures & processes subordinated in management science dimension Consults technical experts	Relies on technical experts
	6. MANAGEMENT SCIENCE A. Procedures B. Processes C. Evaluation Organizing Counseling Problem Solving Setting Objectives Development (Staffing)	Differentiates hour to hour results Evaluates immediate needs	Resolves urgent and pending problems immediately	Measures results against the plan Interprets and utilizes management information systems Formulates wage and salary administration plans Establishes a reporting system Resolves conflict Identifies problems Develops performance standards and appraises performance Negotiates within work groups Maintains proper inventories Focuses on a budget and plans cost reductions Checks statements to verify facts Organizes work group activity Selects, awards, trains and develops subordinates Sets goals and establishes priorities Develops management techniques (e.g. MBO)	Evaluates problems Evaluates new ideas Identifies potential problem areas Resolves conflict Reviews budget proposals Manages time Develops performance appraisal systems Determines promotability Formulates wage & salary administration plans Sets long term objectives Develops management techniques
	7. DECISION MAKING A. Climate Variable B. Conceptual Ability C. Processes & Procedures	Carries out decisions Formulates decisions which pertain to specific unit, unit functioning Assigns workers to specific jobs	Deals with structured content Plans within short term time perspective Follows standardized procedures Applies decision making process Has knowledge of decision making techniques Seeks advice from superiors regarding decisions	Makes decision in operational procedures Reviews long term impact of decisions Selects the appropriate decision making process Determines whether or not to share decision making authority Identifies qualified person(s) to make decision Leads group discussions	Establishes Synthesizes Analyzes & have been Plans decisions & states views of
	8. PLANNING A. Procedures B. Processes C. Evaluation Organizing Counseling Problem Solving Setting Objectives Development (Staffing)	Schedules work and maintenance Sets daily production goals Organizes for the immediate present Operates within short term time frame Complies with administrative procedures Adapts to change	Schedules work Sets short term production goals Analyzes within immediate time frame Establishes procedures Operates within stated resource limitations Adapts to change	Participates in some planning activities Establishes intermediate general objectives Organizes short term programs Analyzes within long term perspective Implements policy Diagnoses internal system operations (internal system perspective) Makes recommendations Adapts to internal & external change	Strategizes Reassesses organizational goals Analyzes within long term time frame Interprets policy Adapts to external system perspective Allocates human resources Budgets Diagnoses poorly planned organizational change Identifies or finds problems Forecasts Evaluates and obsolesces dysfunctional plans & programs that are ineffective

EXECUTIVE LEVEL

Motivation Workshop

Making Human Resources Productive

Corporate Financial Reporting

Role of the General Manager

Role of the Multibusiness Vice President

Financial Statement Analysis

Foreign Markets

Leadership

Executive Stress

Ethics and Values

Challenge In a Changing Society

<p>Planning Programming Scheduling</p> <p>B. Process Conceptualizing Forecasting Strategizing</p>	<p>Schedules work and maintenance Sets daily production goals Organizes for the immediate present Operates within short term plans Complies with administrative procedures Adapts to change</p>	<p>Schedules work Sets short term production goals Analyzes within immediate time frame Establishes procedures Operates within stated resource limitations Adapts to change</p>	<p>Organizes short term programs Analyzes with long-term perspective Implements policy Devises internal system operations Internal system projected Manages resources Adapts to internal & external change</p>	<p>Attaches human resources Budgets Devises to poorly planned organizational change Identifies or finds problems Forecast Evaluates and estimates dysfunction and plans & programs that are corrective</p>
<p>B. ETHICS</p> <p>A. Individual Ethics & Values</p> <p>B. Professionalism</p> <p>C. Organizational Responsibilities</p>	<p>Recognizes the need to be ethical, discrete, fair and honest in dealing with people Follows good personal hygiene Recognizes the impact of role modeling</p>	<p>Initiates, initiates, to orient and reinforcing Comprehends the fact that the leader has to operate under behavior of constraints Recognizes the value of maintaining moral distance and trying to establish a "safe" from modeling with subordinates inside the work environment</p>	<p>Does not tolerate ethical behavior Displays integrity Manages the quality of work Focuses on good management, correct quality Realizes that he serves as organizational spokesman Speaks and acts as representative of the group Maintains moral distance from subordinates Checks with about compliance Displays commitment to hard work</p>	<p>Demonstrates ethical behavior Resolves ethical behavior Expresses ethical behavior Initiates conflict resolution and goals Formulates plans regarding conduct of personal is responsible for e.g. actions, conduct, service is concerned with public relations Plans realistic ethics policy Provides data for ethical policy decisions Displays professional dedication Has working knowledge of business ethics</p>

Stephen D. Clement, Ph. D. Model for commercial education
Dorine B. Ayres without permission of the authors

MATRIX OF ORGANIZATIONAL LEADERSHIP BEHAVIORS

I-1-VII-1

3

Inclosure 7

1
2
**GENERAL OFFICERS
(EXECUTIVE)**

activity
organizational structure
interorganizational
groups, pressure groups, etc.)
to
organization's response to the

organization's relation with those
organizations

relation with colleagues who have

of organizational perspective
relative motivational climate
employee
employee development programs

total output

approves executive development programs

approve
state that
are
can

can relations
influence of present actions
policy
on
on a productive basis
to change pressure
to a business problem

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

ANNEX J

REVIEW OF MANAGEMENT AND EXECUTIVE DEVELOPMENT PROGRAMS IN UNIVERSITIES

1. PURPOSE: This Annex presents a review of management and executive development programs in universities.
2. DISCUSSION: This review was undertaken with the following objectives:
 - a. Review the intent, structure, and content of advanced management and executive development programs at selected universities.
 - b. Identify elements of university programs that support officer professional development.
 - c. Draw conclusions and provide suggestions for improving management and executive development training for officers.
 - d. Identify benefits derived from officer attendance at universities beyond formal education.
 - e. Outline a cohesive strategy for executive development in the Army.
3. RECOMMENDATIONS:
 - a. Increase the number who attend executive training programs from 25 to 42 officers annually.
 - b. Examine the possibility of the increasing attendance in the Army Management Engineering Training Agency (AMETA), Naval Post-Graduate School (NPGS) and Air Force Institute of Technology (AFIT) specific issue management seminars; attendance of one officer at each AMETA Advanced Management course, and Management Development seminar; a total of 15 officers per year.
 - c. A Management Education and Training Programs Guide be prepared either as a separate document or as a supplement to Department of the Army, (DA) Pamphlet 600-3.

d. Develop a methodology for determining program costs and for assessing the value of the various programs to the Army. Insure the programs used are the most cost-effective.

e. Insure that personnel managers, officers and major commands understand the full spectrum of programs available throughout the DOD and from civilian institutions.

f. Provide for the development of programs to meet a new generation of concerns that executive will have to deal with.

g. That the Stanford and Harvard University programs be used as part of the Army's executive development program beginning in FY 79.

1 Appendix

1. Review of Management and Executive Development Programs in Universities.

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 1

REVIEW OF MANAGEMENT AND EXECUTIVE
DEVELOPMENT PROGRAMS IN UNIVERSITIES

TO ANNEX J

REVIEW OF MANAGEMENT AND EXECUTIVE
DEVELOPMENT PROGRAMS IN UNIVERSITIES

CHAPTER I. Purpose, Approach and Methodology

A. Purpose of the Review: In recent years, there has been increased emphasis on management and executive development within the U.S. Army. Increasing size, complexity, and cost of operations, have caused the Army to devote more attention to managerial systems, techniques and controls. Growth in attention has been accelerated by technological changes in management information systems, organizational developments, and congressional pressures for more efficient management of resources. Demand for Army officers qualified to develop and apply complex management systems has risen steadily. New management information systems have created new management concepts changing organizational and operational trends of long standing. Early identification and development of officers with potential managerial competence is necessary.

This review was undertaken with these objectives:

1. Review the intent, structure, and content of advanced management and executive development programs at selected universities.
2. Identify elements of university programs that support officer professional development.
3. Draw conclusions and provide suggestions for improving management and executive development training for officers.
4. Analyze benefits derived from officer attendance at universities beyond formal education.
5. Outline a strategy for executive development in the Army.

B. Approach:

A review of management and executive developments programs of five universities was undertaken. Interviews were held with program directors and key faculty members, representatives of the Office of the Secretary of Defense, Deputy Chief of Staff for Personnel DA and the U.S. Army Military Personnel Center to assess the current and future environment, requirements and practices.

These universities were visited:

Carnegie-Mellon University - Pittsburgh, PA
Harvard University - Cambridge, MA
University of Pittsburgh - Pittsburgh, PA
University of Michigan - Ann Arbor, MI
Stanford University - Stanford, CA

Data drawn from the universities visited and literature reviewed is representative of leading practices. A list of university officials interviewed is at Inclosure 1.

C. Data Collection:

Interviews were conducted with high level, expert personnel. The candor and objectivity of those interviewed matched their obvious knowledge of the subject areas. The subject of this review does not value scientific or hard measurements. Numerical data are often less important than ideas or perceptions. It explores concepts, theories and practices with emphasis on the future.

Statistical sophistication was not a major concern in the collection or analysis of data as the objectives did not include making inferences about the total population of universities. Selection of universities was based on:

1. Reputation as a top producer of management talent, as evidenced by demand for graduates by other organizations.
2. Possession of a reputation for excellence in management development.
3. Particular knowledge of governmental policy, status and emphasis regarding management development.

Based on the approach described, an interview guide was developed to yield information in these categories.

1. Development philosophy and objectives.

2. Types of program and a description of the approach followed.
3. Unique features of the program.
4. A detailed description of the specifics of the program.
5. Methods of evaluating program effectiveness.
6. Future plans and contemplated changes.
7. General comments concerning the program, background, lessons learned, etc.

CHAPTER II. Review of Professional Literature.

A. General Findings.

Before the data collection phase of this review, pertinent management development literature was surveyed with these general findings:

1. Development involves the acquisition of fundamental knowledge, skills, and operational proficiency in technical, human and conceptual areas. Successful application of these skills results in improved job performance.

2. The critical factor in development is on-the-job experience, but this can be greatly aided by the proper use of education programs.

3. Management development is generic term for methods of developing the competence and performance of individual managers including both on-the-job and off-the-job training.

4. Executive development systems are designed to produce the continuing flow of competent executives required by the Army.

5. Officers in the grade of O6-O7 are considered mid-level managers and O8-O10 senior executives.

Management and executive development is a complex process involving several types of skills. It is part of a total process to determine the need for managers by the organization, selection and identification, assessment of individual development needs, specific developmental needs, and performance evaluation.

B. Definitions:

Manager- one who organizes work and directs its completion through the services of others.

Executive- The occupant of a position charged with policy formulation and adaptation, including setting of mission related goals and coordination of multiple functions.

Middle Manager- Responsible for interpreting top-level philosophy and policy to lower levels of management, including management of broad or specific functions, manager and supervisor development and evaluating progress toward goals.

Management Development- A generic term for methods of developing the competence and performance of individual managers, including both on-the-job and off-the-job training.

Executive Development- Improving the competence and performance of executive level managers and candidates for executive level positions.

Organization Development- A planned organization-wide effort managed from the top, to increase organizational effectiveness and health through planned interventions in the organizations processes.

Assessment- Determining or making judgements about the degree to which individuals possess the knowledge and ability requirements identified for particular managerial positions.

C. A Conceptual Management Skills Model

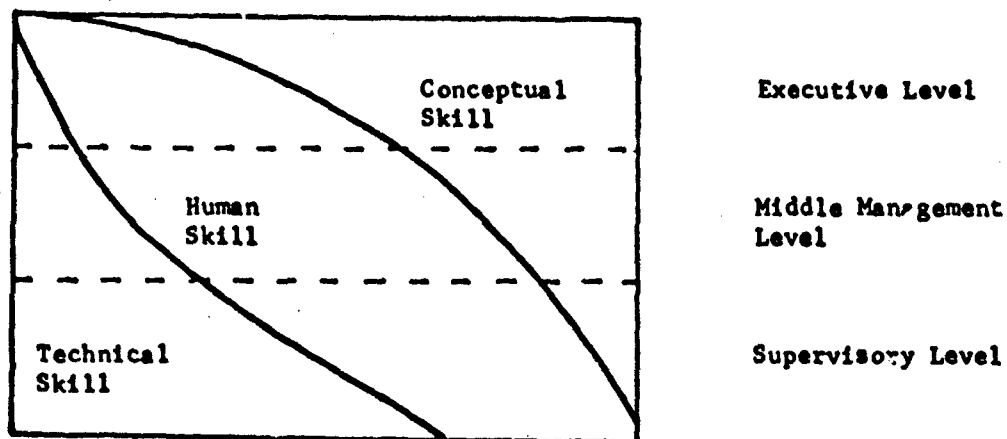
Executive development systems are designed to produce a continuing flow of competent executives in the quantity and quality needed by the Army. A key component is the identification, growth and selection of people.

Figure 1 suggests a model depicting the skills required from supervision through execution levels, described by Robert Katz.¹ Katz

¹Katz, R.L., "Skills of our Effective Administrator," Harvard Business Review Jan 1 Feb 1955.

defines a skill as an "ability which can be developed, not necessarily inborn, and which is manifested in performance, not merely in potential . . . an ability to translate knowledge into action."

FIGURE 1
MANAGEMENT SKILLS MODEL



Katz sees three basic managerial skills:

1. **Technical Skills** - An understanding of and proficiency in a specific kind of activity, particularly one involving methods, processes, procedures, or techniques. Technical skill involves specialized knowledge analytical ability within that specialty, and facility in the use of the tools and techniques of the specific discipline.

2. **Human Skills** - The ability to work effectively as a group member and to build cooperative effort within the team one leads. This skill is demonstrated in the way the individual perceives his supervisors, peers, and subordinates, and in the way he behaves subsequently.

3. **Conceptual Skills** - The ability to see the enterprise as a whole and to be able to use the knowledge in a way which coordinates and integrates the activities and interests of the organization toward a common objective.

Katz states that at lower levels of administrative responsibility, the major need is for technical and human skills; at higher levels, effectiveness depends largely on human and conceptual skills. At the top conceptual skills become the most important for successful

performance.

This identification of the skills most needed at various levels of responsibility is important in the selection, training and promotion of managers.

D. Summary:

From the professional literature it was learned that management development is a complex process, involving several distinct types of skills. The level and type of knowledge, skill and ability required can vary with the level of management in question and with other factors. Management development is part of the total process of determining the need for managers by the organization, selection and identification assessment of development needs of the individual, specific developmental means, and performance evaluation. Managerial development involves personal growth requiring both individual capacity and organizational opportunity. Executive level programs are largely individualized, oriented toward conceptual skills, strategy and environmental understanding.

CHAPTER III

Current Curricula and Management Development Programs of Universities

A. INTRODUCTION: This chapter outlines the results of personal interviews conducted with Directors of Management Development Programs and other officials at selected universities. The purpose of the interviews was not to gather statistical information about the university programs, but to gain an in-depth understanding and appreciation of their approach to and role in the development of managers and executives.

One of the major hurdles that executives face is that of becoming a general manager. The first half of a career is typically spent in functional work. Suddenly, the career-to-date depth of specialized knowledge is almost a liability and the new premium is on knowledge of all the functions and on how to trade-off between them. This is a difficult transition to make. Graduate schools of business or management offer courses designed to help functional managers over the hurdle to "generalist."

A second cross-road which some higher level executives face is that of moving from a general manager to institutional executive. That is, the executive achieves a position high in the line hierarchy or in the staff requiring a broader, external focus and perspective.

The executive's concerns shift to establishing policies, from parochial to global matters; from relatively short range to 5- and 10-year horizons. Again, this transition is a difficult one to make.

There was general agreement among university educators on many issues relating to executive education. A few are:

1. Off-the-job executive educational experiences should be spaced throughout a career. The effectiveness of technical education is 5-7 years.
2. The best time for such education is after the executives have had short exposure to a new position, rather than before they attain it. For instance, an advanced management program for a new rather than aspiring general manager is preferable.
3. The conceptual skills required at the executive level are best developed in an academic environment.
4. A long-range view is necessary as actions taken now in executive development may take 5-15 years for fruition.
5. A company should offer very brief (1-2 days) survey courses to its top executives in the subject matter which lower-level executives are exposed to in university courses. This helps to set a supportive environment for the executives returning from courses - a climate in which they are more likely to try out new ideas and approaches.
6. The prime value of off-the-job educational experiences is learning how to apply in the future that which has already been learned. This adapting of past experiences to new situations requires constant reintegration by the executive, and it is the process which executive programs, in part, provide and teach.
7. Executives find it difficult to move from specific problem solving to the theoretical underpinning for doing so. Courses help the executive learn the general case and approach.
8. Executives must not be sent to courses. They must be supplied the motivation to attend. The organization should set a climate which encourages participation.

In recent years, business leaders have become more concerned with the quality of their products and with the nature of their own values, their relationships to the community and their responsibilities as executives from an ethical standpoint. There is now a strong aversion to corruption. Organizations are becoming more open and democratic.

Managers have a new outlook, broader than simple organizational responsibilities. The movement of women into managerial roles has altered the sterotypical manager.

B. Sources of Information. The universities visited and persons interveiwed are listed in Inclosure 1. The conclusions drawn in this chapter are based on the interviews with university officials. Long-term programs such as degree programs were not included in the analysis, nor were specific - topic short courses of less than two weeks.

C. Philosophies and Objectives: The educational philosophy is to prepare the student for a series of jobs spanning 6-10 years with emphasis on developing top-level managers with competence in accounting, finanace, marketing, organizational behavior and quantitative methods of decision analysis. Harvard University in particular has a general management philosophy. The focus of their executive programs is to develop generalists by providing the general management skills to manage technology.

A review of the objectives of university advanced management programs surfaced two common goals:

1. To make generalist out of specialists.
2. To develop conceptual skills and increase executive effectiveness through exposure to current decisionmaking, communication, and behavioral science findings.

The universities base their programs on several assumptions regarding the business executive:

1. The executive rarely uses time to reflect on his work life and his performance as a manager.
2. The executive is a specialist in a functional area.
3. The executive has little or no time on the job to acquire competence in or an appreciation for other functional areas of the company.
4. The more responsibility an executive acquires within the firm, the more cognizant he must become of the organization's external environment.

The predominant objective is to make generalists out of specialists. Because university programs are based upon these assumptions, they

concentrate on broadening the participant's perspective. It is the degree and manner in which the particular university attempts to enlarge executives viewpoint that differentiates it from other university programs.

Two characteristics of university advanced management programs are:

1. Participants are drawn from a broad cross-section of businesses as well as from the public sector, foreign countries, and nonprofit agencies.

2. There is a new balance between analytical methods and general management instruction. More efficient teaching of analytical tools has resulted in a deemphasis of analytical tools and a concomitant increase in quality and quantity of management subjects. Future shifts are anticipated in increased depth of coverage of core courses and methodological sophistication.

D. Program Types and Approaches.

Program lengths ranged from 4 to 36 weeks. The median is 8 weeks. Attitude change requires time and reinforcement, and will not necessarily, be reinforced in the executive's work setting. Human, interpersonal, and analytical skills developed in lower and middle levels of management tend not to require as long a germination and reinforcement period, and can be internalized through practice in one's work environment.

University programs tend to focus on the executive as opposed to the middle manager. It is not cost-effective for organizations to offer in-house programs for higher levels of management unless the activity is sufficiently large; thus, many agencies go out-of-house for executive level training. The objective of most university programs is to broaden the individual and develop his conceptual skills, using a variety of instructional techniques. The typical program focuses on the executive and his personal skills and on the internal and external environments of the organization. The schools visited plan no revolutionary changes over the next 5-to-7 years. The typical program content changes about 15 percent each year. The vast majority of programs are intense, all day, live-in programs with room and board furnished. Costs, including room and board average \$600 per week. Most programs are offered once or twice a year, typically during summer months or on vacations or breaks, when classrooms and residence facilities are not utilized by regular students.

E. Methodological Approaches:

The purpose of the various programs is to develop analytical and problem solving skills and to sharpen thinking in the areas of political and economic analysis, organizational development, decision-making and implementation and control.

There does not appear to be one best way to develop executive skills by universities. The pedagogical approach varies from heavy reliance on the descriptive case approach to a balance of cases and lecture-conference. The methodologies used mix theory and application to develop analytical and problem solving skills and to sharpen thinking. The process was described by one program administrator as "intellectual slum clearance".

Descriptive cases provide the opportunity to address substantive issues in a structured framework. They are excellent vehicles for simulating interdisciplinary situations. Major strengths are the development of tactical and strategic thinking and establishing a frame of reference for decisionmaking. Case studies are weak in the interpersonal area. Cases inculcate the habit of being analytical by integrating diverse issues, applying tools mastered in core courses. The skills developed using the integrative case approach are:

1. Synthesis to include prioritization.
2. Planning and programing - thinking ahead to penetrate the "fog of the future." This includes identification of obstacles and control aspects.
3. Ability to assess risk and deal with uncertainty.
4. Ability to manage processes and to make decisions.
5. Ability to manage change and technology.

With notable exceptions, reliance on the case method diminishes in programs geared to top-management. However, in the longer programs, full case discussions are generally used more frequently than in the shorter programs where the principles to be learned must be presented more rapidly and directly.

The value of the comprehensive Harvard-type has been called to question, particularly at executive levels. The rationale is that officers at this level already know how to make decisions and solve problems; what is needed is a broadened viewpoint and conceptual skill.

The trend at lower levels is toward situational cases which attempt to illustrate the proper action required in situations not allowing much time for thought and analysis. Overall, the trend appears to be away from reliance upon any one form of instruction to a mixed-mode (lecture, discussion, cases, simulations, etc.).

F. Program Descriptions.

There is more similarity of program outlines than there is in program substance, because of differing approaches, philosophies, emphasis, and instructional techniques. Although the universities do not label their core area of study or their specific topics in the same fashion, the general categories of: (1) the executive, (2) the business organization and, (3) and the external environment, are common to most programs.

The schools visited have no plans to increase the size or number of programs offered. The main interests appear to be reputation through program quality and selectivity in accepting applicants, providing faculty an opportunity to interact with practicing managers, and facility utilization and revenue considerations. It is suspected that these priorities would change markedly as one departs from the prestige schools - quality and reputation goals may be subordinated to revenue production through quantity of enrollees.

G. Relevance of the Curricula/Evaluation/Feedback

Since the university programs are attempting to provide a service to clients and the schools place great importance on the reputation of their programs, the universities visited are diligent in securing evaluations of their programs to insure the relevance of curricula.

A variety of mechanisms are used to obtain knowledgeable and substantive feedback in order to evaluate the relevance of their curricular. The most common methods are:

1. Through professional associations whose membership consists of a mix of academicians and practitioners.
2. Regular visits by education program administrators to corporate managers to review the progress of graduates and to assess the contribution of the graduate to his organization.
3. An active consulting role by faculty members.
4. Interaction with chief executive officers in school-sponsored seminars and college advisory boards.

5. Feedback from the career counseling, placement and employment process.

6. Post-graduate interviews with participants.

7. Real world projects and cases and through internships.

8. Faculty curriculum review committees.

H. Future Plans.

An evolutionary change planned by one university decreases the amount of time spent on analytical methods because of higher entry-level knowledge possessed by the students. Students needing skill development in this area can take modules in specific topics.

I. Emerging Considerations.

The following issues emerge as the next generation of concerns with which the executive will have to deal:

1. The evolving executive: The entrance into the workforce and the imminent rise in the hierarchy of executives with untraditional attitudes, values and life styles, has caused most companies to reexamine and modify some of their long-standing policies and practices. There is a new mix of managerial and analytical skills at the more senior levels based partly on the entry level knowledge of students.

2. Increasing Complexity: The executive must operate in an environment of increased technical complexity. Radical mechanical, social and political changes all impact on the executive. Updated information is generally needed in areas of:

- a. International trade.
- b. Material shortages.
- c. Productivity loss through rapidly rising labor costs.
- d. Government agency and department challenges.
- e. Occupational safety and health.
- f. Environmental protection.
- g. Equal employment pressures.
- h. Time compression. The accelerated pace and increased sophistication of communications, data availability and technology crowd the executive tremendously.
- i. Changes within the work force (women, minorities).
- j. Changes within the formal organization.
- k. Public pressure and opinion.

The point is that cumulatively the pressures make the task of the executive extremely complex. His degrees of freedom - directions he can move to cope with an issue - have shrunk. The most promising strategies for coping with this complexity are centered around redesigning the organization and increasing executive capabilities.

3. Redesigning the organization: This involves rearranging assignments and restructuring toward more functional positions higher in the organization, so that the number who have to deal with the total complexity would be reduced. This would allow an organization to deploy its limited executives to the more complex tasks.

4. Increasing executive capabilities: Perhaps the most controversial issue emerging for executive manpower systems is that of transferring more accountability for career decisions from personnel managers to the individual. Accountability means "answering for" and the individual cannot be accountable unless he has an appropriate voice in the career decisions which affect him. There is also expanded agency responsibility for career planning, upward mobility, and counseling.

5. Computer technology. The future will bring greater efficiency and broader application of computer technology with more efficient software packages. Application of computer technology to the management of organizations, technological innovation and information systems is an area of emphasis.

6. Organizational Development: Business, government and academia are on the frontier of organizational change. Universities are departing from the traditional behavioral/psychological approaches to a process approach. The issues are the management of organizational change and the assessment of organizational effectiveness. Developing organizational alternatives and assessing the effectiveness of change is a difficult problem. The university programs develop change agents and provide the tools to manage, institutionalize and diffuse change. Changes in executive programs in this area include:

a. An update on research on future problems, ideas and opportunities for change are identified. Factors that will not change, e.g., stress, conflict and frustration are separated from new issues.

b. Students spend time in group problem solving and in observing group interactions and feedback mechanisms.

The clear message is that organizations should be designed to match individual needs and systems. Managers must not attempt to fit systems into existing organizations. New systems and technology

force change. Change agents generate new theories; negotiation takes place; there is movement toward or creation of a solution and reinforcements and the organization refreezes.

The impression gained is that technological opportunity is far ahead of potential applications.

7. Negotiation and intervention skills. The ability to negotiate and achieve compromise, in terms of objectives and resource requirements, is a critical managerial skill. There is increased emphasis on developing negotiating skills to include international negotiation and resource concessions. Senior officers must be equipped to deal with regulatory agencies and other large firms.

8. Geo-politics. There is increased emphasis on political and economic issues both foreign and domestic. The international mix of students permits a focus on current political situations and geo-political trends toward the 1980's.

9. Environment. The rapid changes in technology, recruitment of forces, domestic defense spending patterns and civil-military relations are all issues that are dealt with in executive development programs. Senior managers must be able to anticipate and cope with external events. Changes deal with natural and environmental forces as they impact on growth organizations based on increased dependence on resources; ethical problems, and values; and on an emerging ideology of management. There is increased emphasis on the interface of internal and external environments. University programs have tightened packages on government - business interface.

10. Systems orientation. There is an absolute requirement for strategic thinking about the future.

11. Alignment of Public/Private Objectives: There is a convergence of corporate and public sector goals with less difference among managers in public and private sectors. There is a trend toward increased attention to non-financial management understanding of people and organizations, and management control systems. Managers are increasingly bureaucratic and less entrepreneurial in their approach. Managers are less risk averse with increased loyalty to corporate goals and objectives. Managers tend to state corporate goals and objectives in terms of behavioral skills/outcomes.

J. Summary of University Findings.

1. Common Features. Most programs focus upon the upper middle and top manager, attempting to broaden him and develop his conceptual skills.

The typical program divides its time between the topics of the executive, the organization, and the external environment. All of the programs observed are live-in with housing furnished, often with programs designed for the student's spouse, and involve hard work. I.e., no gentlemen's courses.

2. Noteworthy or Unique Features. Unique is the degree of Harvard's commitment to the case-method of instruction and its related discovery method of learning. Harvard is using the case study method less than in the past, substituting role playing, individual study, and studies of real world problems in small groups.

3. A detailed description of each program is at Inclosure 2.

CHAPTER IV

Current Management Development Practices of the Department of the Army

A. Philosophy and Objectives.

The objective of advanced management training for senior officers is to develop their understanding of fundamental factors and strengthen higher order skills. The requirements of the Army are the key to the officer professional development process. At the executive level both job demands and educational programs are general in content. The Army is attempting to develop the leadership and managerial capacity to mobilize in the event of national emergency. Many uncertainties attendant to this eventuality and their requisite skills require senior officers with general managerial skills. It is difficult to transition to a generalist mode.

The need for technical skills at mid-level and general management skills emphasizing leadership and broad managerial responsibilities at higher levels is supported by the generalist philosophy of the universities visited. Educational and technical obsolescence have imposed a requirement for our professional military educational system to institutionalize the process of continuing education. It has placed a premium on development of conceptual thinking, critical judgement, and innovations rather than imparting factual knowledge and technical skills which quickly become obsolete.

Advanced management programs offered by civilian institutions are designed to:

- (1) Increase executive management capabilities.

- (2) Expand analytical and planning techniques.
- (3) Extend abilities to appraise economic, social, political and technological changes and the resultant effects upon organizations.
- (4) Provide for mutual exchange of expertise between top corporate executives from different areas and industries and senior Army Officers. This exchange strengthens executive competence by refining knowledge and understanding of environments outside of the military.

This section describes Army policies for developing candidates for senior executive positions and for managing senior executives. Officers in the grade O6 to O7 are considered mid-level managers and O8 to O10 senior executives. This review is concerned with the management of field grade and general officers with emphasis on the policies to develop, select, and manage senior executives.

B. Management and Executive Development Requirements

The military environment is changing at an accelerating rate confronting senior executives with new challenges and complexities. Personnel systems and the people in them, however, tend to adapt more slowly. The core problem is one of meeting challenges and new dimensions, which force changes in executive tasks.

A particular problem of any personnel system is how to develop the talents it needs in its executive force. This is especially important in a system that promotes entirely from within because the safety valve of recruiting executives from the outside is lacking should the policies fail to produce quality candidates for the top jobs. The OPMS must recognize and support requirements for officers who are professionally qualified to assume assignment of high command and heavy managerial responsibility as well as officers who are professionally qualified to assume assignments requiring in-depth expertise in narrow specialty areas.

A wide variation exists between skills required at the beginning of careers and those needed in executives. In early years, the Army needs specialists proficient in weapons, unit command and tactics. In the career progression a rigorous process is applied to find and develop officers who have strategic, cross-specialty and service-wide capabilities.

The executive programs which tend to develop generalist skills are not fully compatible with the Army's OPMS. The OPMS may be denying selected officers continued advancement, promotion and assignment. The Army does not need state-of-the art competence in each specialty. It needs officers who can keep technology in alignment with the Army mission.

Problems to be resolved:

- (1) How to develop adequate expertise given the high rates of job rotation.
- (2) How to define the characteristics desired in senior officers; and,
- (3) How to remold senior level training programs to produce the right balance between military subject matter and general executive broadening.

The Army has an obligation to assure the continued development of career executives. Individual desires and needs assessment must be incorporated into Army development plans. This includes increased reliance upon the individual in shaping his development plan.

C. Identification and Selection.

No amount of training or development can compensate for having selected the wrong person for development or promotion to management. The identification and selection process must employ valid and reliable methods for assessing management capability and potential. High potential individuals should be identified as early in their careers as possible. For these reasons, it is suggested that managers and executives be trained in techniques of assessment. Those who are to assume positions of leadership must, throughout their careers, receive the best preparation possible. Failure to nurture talent will cause an organization to lose adaptability to new developments. Expenditures for executive development programs at the present time are a necessary and justifiable investment in our nation's future.

Although the Department of the Army has made great progress in management, there is not an institutionalized or integrated program of management development. The emphasis on formal training slightes such important areas as selection and identification, managerial career planning, on-the-job development, and assessment of future potential. Department of the Army personnel managers place major emphasis on current problems and, therefore, devote insufficient time to development activities geared to future needs. Personnel managers are more concerned with technical and functional training to insure work accomplishment than with the development of the management and supervisory skills of officers. There is a need for an integrated management, manpower development program.

The issue of identifying individuals with potential for top management was discussed at each university. There is no model or formula for predicting future success of managers. They haven't been statistically profiled. Potentially successful managers seem to have no

behavioral, physical, educational, age or sex specifications. There is, however, a high correlation between salary, education and assignment. Research findings indicate that motivation and job interest are also critical to success.

The identification and selection of managers is not carried out on a consistent basis within organizations with valid and reliable assessment methods. Officers selected for management training must have a high probability of continued service and continued advancement.

There is reluctance on the part of supervisors to develop subordinates beyond the requirements of their current job. The manager who develops his subordinates faces the possibility of losing his competent people. Managerial development is not perceived as an actual responsibility based on his ability to develop subordinates.

Self-development is both encouraged and supported by the Army; however, there is no consistent reward or recognition for the individual who participates in these activities. A problem to be met by development programs involves scheduling the required training. Many Army executives occupy one-of-a-kind positions which require constant coverage and to be absent for any period means someone must handle routine duties, which can be substantial.

The most important intangible, issue facing the OPMS is whether it will produce executives who are responsive to changes in the Army's needs. That is, not only officers of high general quality but also a set of officers with the necessary mix of specific attributes.

D. Management Development Practices.

The Professional Development Division of MILPERCEN is the DA proponent for advanced management training for senior officers. There are several ancillary programs in which a few senior officers participate:

1. White House Fellows
2. Congressional Fellowships
3. Department of State Senior Seminar on Foreign Policy
4. Brookings Seminar; Federal Executive Fellows Program
5. Council on Foreign Relations
6. Harvard University Center for International Affairs

Nominees for the above programs are submitted by MILPERCEN to DCSOPS and then the CSA who selects participants.

For other advanced management programs 140 key positions have been identified; career managers nominate qualified officers for these positions; those officers selected to attend an advanced management program are centrally managed at MILPERCEN. Approximately 25 colonels are selected annually to participate in these programs. In addition to these courses, a significant number of unprogramed short courses for general officers are funded each year. A list of institutions to be used in FY 78 is at Inclosure 3. Management programs of several weeks duration minimize the time the officer is off the job. Two months provides depth and validity of subject matter and the opportunity for individualized remedial work for the slow student and challenge to the outstanding individual. The average course length in these programs is 5 weeks.

The present Army executive development program is largely "ad hoc". Future plans should include a formal program extending the executive level individual development planning approach down to the mid-manager level, making the program at that level more closely geared to the individual's needs.

The Department of the Army has recognized that managerial development involves personal growth requiring both individual ability and organization opportunity. The Army provides specific assignments to use newly developed skills after executive development training.

Single-issue seminars and other short training programs are at the option of the individual with MACOM/MILPERCEN approval. MILPERCEN in cooperation with participating universities has limited attendance to one officer per program class. The annual program cost is approximately \$100,000 split between per diem and tuition. The Army is not taking advantage of Army Management Engineering Training Agency (AMETA) and American Management Association (AMA) courses.

At mid-level there appears to be no formal program. Several options are used; e.g., The Army Educational Requirements Board (AERB) process, Training with Industry (30 positions in FY 78) and the cooperative degree programs at USACGSC/USAWC.

E. Institutionalization of Current Management Development Philosophy

1. There is a need for an integrated, progressive program for manager training and development to equip the manager to manage — to train and develop his people.

2. There are certain steps which must be taken to implement the philosophy. First, managers jobs must be identified. Then, it must

be decided what a person needs to know in order to do that job. Next, the potential candidate for that job must be evaluated to determine what, if anything, he lacks in order to do the job; and lastly, those selected must be provided an opportunity to correct any deficiencies. The objectives of this process are to improve the effectiveness of the present work force and to prepare those who will follow.

3. The type model envisioned is a set of attributes it takes to be successful in a given class of executive positions. These criteria include the abilities, knowledge, characteristics, experience, etc., believed to be crucial to success in a given class of executive positions. These criteria include the abilities, knowledge, characteristics, experience, etc., believed to be crucial to success in the given set of positions. The purposes include having a model or profile against which to:

- a. Identify and screen potential executives.
- b. Build development plans with individual aspirants.
- c. Counsel potential executives on the strength, realism and direction of their aspirations.
- d. Build the specific executive development courses.
- e. Assess the quality and quantity of flow in the executive pipeline.

4. These criteria do not represent a model against which to make selections to specific executive posts. In a sense the criteria are the given which all executive candidates should possess, and thus would present little discriminatory value in a given selection situation. Selection decisions should be made against a different framework.

5. The importance of having mobility and success models is obvious. It takes time to develop executives and thus the system must be future-focused, however imperfectly or simplistically and however crude the tools.

6. Actions to institutionalize:

- a. High level organization commitment and support through formal policy and an overall plan.
- b. Development plans for each mid-manager of high potential.
- c. More effective training resource utilization.
- d. Improved development program evaluation.
- e. Publish a Management Education and Training Programs Guide.

The purpose of the programs guide would be to provide a source of current information on management education and training programs which aid officer professional development. The information can be used by:

a. The managers of potential participants working on career planning and development; specifically, in selecting appropriate training or education opportunities.

b. Middle to top managers who are identifying training or education opportunities.

8. Goals of the system:

1. Identify, as early as possible, individuals with interest and potential for high-level managerial and executive positions and encourage such persons to develop that potential.

2. Ensure best-qualified managers in required numbers and with required knowledge and skills to meet present and anticipated needs are available.

3. Prepare newly assigned managers to become fully competent as soon as possible after assignment. Because of the nature of the university program, the ideal time to attend is when a person is about to move into a new assignment where general management perspective and policy-making are required. Also, if an individual is moving into a higher level functional assignment where greater interaction with other functions is required.

4. Continue the training and development of experienced managers to improve their present performance and to sustain high-level performance throughout their careers.

5. Provide specialized education and training which will assure skillful professional performance for personnel engaged in management functions.

1. Summary

The Army must develop managers and executives on a more integrated, systematic basis. To function effectively, the Army needs to adopt and institutionalize an integrated system of management positions planning, identification and selection through valid assessment of future potential, meaningful and representative individual development planning, complementary on-the-job and formal management development training and feedback of performance to act as input to future planning.

Because of its important bearing on the conclusions and recommendations that follow, some of the findings of the review are summarized here:

1. Private companies have given much more thought and emphasis to systematic executive development than the military or other government agencies.
2. There is wide variation in skills required between early years of the military career and the executive level. In early years, the Army wants specialists proficient in their weapons and competent unit commanders and tacticians. From this talent pool, there is a highly competitive process of selection of executives with strategic cross-service capabilities.
3. The process is highly competitive. Only about 6 percent of the total officer corps attains executive levels so defined. Selectivity is a key ingredient for maintaining executive quality.
4. Training is a high component of a military career, averaging 3-7 years across a 25-year career. Officers selected for advanced management training will have between 15 and 24 years promotion list service prior to completion of the course.
5. Advanced management courses, although oriented primarily toward civilian industry, are beneficial. The courses not only enhance the general management competence of senior Army officers, but also develop relationships between the military and civilian participants which contribute to a fuller understanding of each other's problems.
6. The Army can anticipate increases in training requirements in the following areas during the next decade:
 - Communications and electronics related primarily to the increasing sophistication of command, control and information systems.
 - Automatic data processing caused by the continued proliferation of computers and associated equipment.
 - Vast growth in the use of computers requires systems analysis skills in planning the uses of computers.
 - New organization concepts.
 - Short courses to qualify selected officers for key managerial positions.

CHAPTER V. Conclusions and Recommendations

A. General.

1. Knowledge obsolescence, rapidly changing social patterns and an increasingly sophisticated work environment demand that careful attention be devoted to the professional development of the officer of the future. In order to carry out its mission, the Department of the Army needs a career force of officers who are capable of overcoming the multiplicity of complex problems which arise in providing for the national defense. It requires a diverse group of officers who collectively have expertise in a wide spectrum of fields and from whose ranks specialists will emerge who are also capable of developing the breadth of vision and the executive skills needed to lead people and manage programs.

2. From the RETO perspective it is difficult to relate management development programs to other educational programs and in turn to overall patterns of career development. Part of the problem lies in the lack of a vocabulary to describe an officer's professional growth. Credit hours, graduate degrees, completion of various service schools, and performance ratings at certain job levels are among the ways this is currently done. Personnel managers need to be able to match these notations in an officer's personnel record to the requirements of positions to which an officer is assigned, and the officer needs to be able to interpret what these accomplishments mean vis-a-vis probabilities for future assignments and promotions. Obviously, some job and educational experiences are the equivalent of other job or educational experiences. Unfortunately, these equivalencies are exceedingly difficult to determine and many officers are reassigned more often than they should be. This is expensive, both in human and monetary terms.

B. Conclusions:

1. The need for continuous development of management skills is clear. The present rate of knowledge obsolescence and the continuing need for professional development supports the concept of continuing education. The response of corporate directors of executive development has been the establishment of systematic and continuing educational programs.

2. Senior officers and personnel managers must be personally committed to and involved in officer professional development and specifically executive development.

3. Producing an internal upward flow of competent executives is a long-term proposition.

4. Executives develop primarily on-the-job, thus jobs are used developmentally.

5. The Army is not taking full advantage of the educational programs available in civilian institutions, in-house, or of programs developed by other services.

6. The costs and benefits of various programs are not formally addressed. It is axiomatic that managers should be able to report accurately the total costs of a program and to assess in a reasonable fashion the achievements of a program. Measures of effectiveness for assessing program values should probably include such factors as percentages of participants assigned to roles requiring particular skills, promotion experiences and retention of participants.

7. Benefits of university programs are:

- a. Sharpened analytical skills.
- b. Opportunity for interaction with civilian counterparts and faculty in informal settings.
- c. Reestablishment of the career officers ties to the civilian community.
- d. Time away from the military environment to allow the officer to engage in reflection as he moves from one high-pressure job to another.
- e. Offers a period of mental flexing and intellectual stimulation.
- f. Enhances the prestige of the profession.
- g. Contributes to more efficient command/management.
- h. Relative short length of course does not keep officer out of the force structure.
- i. Exposure to differing values and problems and interaction with other senior managers on close personal terms.
- j. Establishment of a valuable set of professional relationships. The socialization that takes place, the confidence and respect that is built and the interchange of professional knowledge have a significant social and economic value.
- k. Provides a retention incentive for high-quality officers.
 - l. Increases the Army's intellectual and technological capability.
 - m. Keeps the Army abreast of attitudes and developments in academia.

8. Principal disadvantages include:

- a. Cost in dollars and manpower.
- b. Fragmentation of professional interest.

9. The Navy and Air Force have fully accredited graduate schools- the Naval Post Graduate School (NPGS) and the Air Force Institute of Technology (AFIT)- which they use in addition to civilian institutions. These schools are valuable resources. They can tailor programs which are directly relevant to military users; they can focus faculty and student research on defense problems; they can use classified and proprietary materials in their courses and in their research; and they can respond quickly to new educational requirements. The U.S. Army Management Engineering Training Agency also offers advanced management courses. RETO has concluded that the Department of the Army is not making optimal use of their capabilities.

10. To date there has not been a uniformed representative from the Army participating in the Stanford-Sloan Program, although five DA civilians and several Air Force officers have participated. Additionally, the Harvard University programs have not been used in several years.

11. Perhaps the most controversial issue emerging for executive manpower systems is that of transferring more accountability for career decisions from personnel managers to the individual.

12. A problem of any personnel system is how to develop the talents it needs in its executive force. This is especially important in a system that promotes entirely from within because the safety valve of recruiting executives from the outside is lacking should the policies fail to produce enough high quality candidates for the top jobs.

13. Problems to be resolved in officer professional development:

- a. How to develop adequate expertise in spite of the high rates of job rotation.
- b. How to define more clearly the characteristics desired in senior officers.
- c. How to remold senior level training programs to produce a better balance between military subject matter and general executive broadening.
- d. The large number of middle managers competing for a limited number of top jobs and the continuing problem of appropriate career incentives for both generalists and specialists

14. There was little confidence among university administrators that models can be constructed to predict the qualities executives of the future must possess to be successful.

15. The Army must develop managers and executives on a more integrated, systematic basis. To function effectively, the Army needs to adopt and institutionalize an integrated system of management position planning, identification and selection through valid assessment of future, potential, meaningful and representative individual development planning, complementary on-the-job and formal management development training and feedback of performance to act as input to future planning.

C. Recommendations.

1. Increase the number who attend executive training programs from 25 to 42 officers annually.

2. Examine the possibility of increasing attendance in AMETA, NPGS and AFIT specific issue management seminars; attendance of one officer at each AMETA Advanced Management Course and Management Development Seminar; a total of 15 officers per year.

3. A Management Education and Training Programs Guide be prepared either as a separate document or as a supplement to DA Pam 600-3.

4. Develop a methodology for determining program costs and for assessing the value of the various programs to the Army. Insure the programs used are the most cost-effective.

5. Insure that personnel managers, officers and MACOM understand the full spectrum of programs available throughout the DOD and from civilian institutions.

6. Provide for the development of programs to meet new or changing requirements as identified in chapter III, paragraph 1.

7. That the Stanford and Harvard University programs be used as part of the Army's executive development program beginning in FY 79.

3 Inclosures

1. List of Universities Visited and Individuals Interviewed.
2. Detailed Description of University Programs.
3. Institutions Used in FY 78.

UNIVERSITIES VISITED AND INDIVIDUALS INTERVIEWED

Carnegie-Mellon University, Pittsburgh, Pennsylvania

Dr. Arnold Weber, University Provost
Dean Daniel Berg, Mellon Institute of Science
Dean Otto Davis, School of Urban and Public Affairs (SUPA)
Professor Jerry Swedlow, Associate Dean of the Carnegie
Institute of Technology (CIT)
Professor Bernard P. Goldsmith; Associate Dean,
Graduate School of Industrial Administration (GSIA)
Mr. Frank Nowak, Director, Educational Projects Management
Center, Carnegie-Mellon Institute of Research
Professor Thomas Kerr, Head Administration and Management
Science Department
Professor Scott Richard, Member MS Program Committee
Professor Paul Goodman, Member PHD Program Committee
Professor Norman Johnson, Associate Dean and Director
of MS Program (SUPA)
Mr. August Walker, Director of Post-College Professional
Education in CIT
Professor Charles Kriebel, GSIA and Co-Director of
Entrepreneurship Program
Mr. Douglas Mintmier, Placement and Public Relations
Coordinator for GSIA

Harvard University

Dr. Lawrence E. Fouraker, Dean Graduate School of
Business Administration
Dr. Warren McFarlan, Chairman, Executive Education Programs
Dr. Stephen Hitchner, Director, Case Program JFK School of
Government.
Dr. Larry Lynn, Professor of Public Policy, JFK School of
Government
Mr. Pete Zimmerman, Assistant Dean and Director of Executive
Training and Program Development, JFK School of Government
Mr. William Presley, Administrative Director of Short Edu-
cation Programs
Mr. Tim Armour, Administrative Director, Program for Manage-
ment Development
Major Lindsey Parris, USAF Doctoral Candidate

UNIVERSITIES VISITED AND INDIVIDUALS INTERVIEWED

University of Michigan, Ann Arbor, Michigan

Dean Alfred S. Sussman, Dean of Graduate School
Dr. Alfred W. Swinyard, Associate Dean of Business Administration
Dr. Ralph W. Banfield, Director and Coordinator of ROTC Programs;
Director Office of Community College Services
Dr. Marvin W. Peterson, Director, Center for Higher Education
Dr. Robert B. Kozma, Center for Research on Learning and Teaching
CAPT Douglas V. Murray, Chairman, Navy Officer Education Program
(Navy ROTC)
COL Donald C. Peterson, Chairman, Air Force Officer Education
Program (AIR FORCE ROTC)
LTC Richard G. Parker, Chairman, Army Officer Education Program
(ARMY ROTC)
MAJ Charles P. Ahnell, Jr., Assistant Professor of Military Science.

University of Pittsburgh, Pittsburgh, Pennsylvania

COL Joe Hickey, Ret, Director, University of Pittsburgh
Executive Development Program

Stanford University, Stanford, California

Dr. George G.C. Parker, Director, Stanford-Sloan Program
Dr. James Howell, Director, Stanford Executive Program
Dr. Richard Snow, School of Education
Ms. Nancy Collins, Assistant Director, Stanford-Sloan Program
Mr. W. David Rozkuszka, Hoover Institute

CARNEGIE-MELLON UNIVERSITY
The Executive Program

Inaugurated 1954

SPONSOR Graduate School of Industrial Administration

PROGRAM LOCATION: Pittsburgh, Pennsylvania

DURATION: 9 weeks

1978 SESSION: February 12 --April 14

TUITION: \$4200 including all meals, plus
\$800 to \$1300 additional for room

PARTICIPANTS:

Number:	About 50
Age:	31-53 Average 43
Position:	Upper middle and top management
Industry:	Broad
Geography:	Broad--one quarter foreign

FACULTY: Carnegie-Mellon Graduate School of Industrial
Administration

OFFICIAL CONTACT: Prof. Bernard P. Coldsmith
Associate Dean
Graduate School of Industrial Administration
Carnegie-Mellon University
Pittsburg, Pennsylvania 15213
Telephone 412-683-4933 or 412-621-2600 ext. 556

Inclosure 2

J-1-II-1

Carnegie Mellon

SUBJECT MATTER

The program for Executives is concerned with providing a concise briefing on modern management techniques bearing directly on the planning and implementing of corporate strategy. The subjects covered specifically are:

- Corporate Policy and Organization
- Character and Style of Leadership
- Human Behavior in Organizations
- Financial and Quantitative Control
- The Economic and Political Environment
- Production and Operations
- Management Science
- Marketing
- Management of Research and Technological Change

METHODS OF INSTRUCTION

Instruction is primarily by lecture and guided discussion. There is some role playing and hands-on experience with a time sharing computer. Cases are used by instructors on occasion as illustrations of their subject matter.

Classes meet for three 90 minute sessions between 8:30a.m. and 3:00p.m., six days a week (only two sessions on Saturday), and additional sessions in the late afternoon twice a week.

To encourage exploration of special interests, the class is divided into groups of 7 or 8 who are left to develop their own programs with individual faculty members. Group makeup is usually changed every three weeks.

Each participant is expected to prepare at least one report on a salient problem of his/her company or industry to which he/she can relate his/her class-work.

The reading and study load is heavy and requires considerable time in the evenings. Each participant receives a substantial set of reading material well in advance of the program's start.

FACULTY

Instructors are senior members of the Faculty of the Graduate School of Industrial Administration. These are supplemented by off-the-record afternoon-thru-dinner meetings with business executives, government officials, and union leaders to highlight specific issues. Six of the more than twenty instructors teach in parallel throughout most of the program.

PARTICIPANTS

Participants are from upper middle and top management in a variety of large companies from all parts of the U.S. and of the world. Twenty-five percent are from abroad.

Industries represented include chemicals, steel, petroleum, transportation, machinery, utilities, aircraft, electronics, insurance, and financial institutions.

Functions represented include general management, administration, marketing, accounting, purchasing, engineering, manufacturing, planning, and personnel.

SPECIAL FEATURES

Continuing Education

A one-day Spring Conference is held every year, in which alumni of the program are encouraged to participate as part of maintaining an on-going interest in topics of broad business relevance.

A journal and reprint service is also maintained.

Wives' Program

Wives are invited to participate in the last two days of the program. Special classes for wives are scheduled on topics such as:

Human Behavior in Organization
The Individual in Society.

FACILITIES

Accommodations are very comfortable in the Webster Hall Hotel, a half mile from the campus, where a block of bedrooms, meeting rooms, and computer terminal facilities are set aside to assure essentially complete privacy. Participants have single rooms with bath.

Classes are held at the Graduate School's own building.

Meals are served at the Faculty Dining Room on campus.

Gymnasium, handball, swimming, tennis and golf are available.

RECOMMENDATION

This program is suitable for line or staff executives in the upper levels of management who are or will be concerned with the implementation and formulation of major policy. The considerable number of high level foreign executives makes the program of particular interest to those involved in international relationships.

HARVARD UNIVERSITY
Advanced Management Program

Inaugurated 1943

SPONSOR: Graduate School of Business Administration

PROGRAM LOCATION: Cambridge, Massachusetts

DURATION: 13 weeks

1978 SESSIONS: February 5 - May 4
MID-September - MID-December

A split summer session is held beginning every even year. The next session will be:

June 11 - July 21, 1978 and
June 10 - July 26, 1979

TUITION: \$7800 including room and meals except for Saturday and Sunday dinners

PARTICIPANTS: Number: 160 - divided into 2 sections
Age: Late 30's to early 50's Average 46
Position: Senior and top management
Industry: Broad
Geography: Broad - one-third foreign

FACULTY: Harvard Business School

OFFICIAL CONTACT: Mr. Robert L. Crane
Administrative Director
Advanced Management Program
Harvard Business School
Boston, Massachusetts 02163
Telephone 617-495-6161

J-1-II-4

SUBJECT MATTER

This is the oldest of the executive development programs. It is aimed specifically at the concerns and responsibilities of top management. It studies the environmental factors that affect business, and assesses managers as agents of economic change, examining their responsibilities within the institutional structure of society.

An integrated curriculum focuses on

- Business Policy
- Marketing Management
- Financial Management
- Management Control
- Quantitative Analysis for Decisions
- Human Behavior in Organizations
- Business and the World Society
- Business and Ideology

Elective courses are offered during the later weeks of the program. Some electives go more deeply into subjects of the curriculum, while others cover specialized topics not included in the regular curriculum, which are taught by members of the Business School and University faculties who would not ordinarily be available.

METHODS OF INSTRUCTION

Instruction relies primarily on the case method, based on class participation in the discussion of typical business situations. The case method, as practiced at Harvard, leaves largely to the individual participant the deduction of management principles represented by the cases discussed. Preparation of cases for class discussion is emphasized through regularly scheduled small group discussions from 8:00 to 8:50 every morning.

Classes meet in two sections for three 70 minute sessions six days a week between 9:00 a.m. and 2:40 p.m. (noon on Saturdays). Afternoons and evenings are well occupied with heavy reading and case study assignments.

Makeup of the two main sections and of the small study groups is rotated periodically, in order that each participant can work closely with a majority of his classmates.

FACULTY

Instructors are a group of professors specially chosen from the regular faculty of the Business School who devote their entire teaching effort to the Advanced Management Program for several years.

Harvard - AMP

PARTICIPANTS

Participants in this program are mature executives, male and female, with considerable management experience. They are at senior policy-making levels or about to assume such positions. They come from all parts of the U.S. and from every continent of the world.

A well-balanced cross section of industry, functional responsibility, and geographical distribution is assured through careful selection of candidates. Ordinarily not more than one candidate from any one company is accepted.

SPECIAL FEATURES

Graduation Week

A four-day program for spouses and their guests is scheduled the last week of the program, during which there are special class sessions for spouses, as well as final lectures for the participants.

FACILITIES

Accommodations are very comfortable in George Pierce Baker Hall, the new all-inclusive AMP facility. Each participant has his own bedroom-study, and shares a two-basin bathroom. Each group of eight rooms has its own lounge.

Breakfast and dinner are served in the Faculty Club, adjacent to Baker Hall. Lunches are provided in the main lounge.

Athletic facilities of the University are available to the participants. These include calisthenics, swimming, tennis, squash, rowing, and paddle tennis.

RECOMMENDATION

This program is suitable for senior and top echelon executives who show real promise of progressing further in the managerial ranks of their companies.

HARVARD UNIVERSITY
Program for Management Development

Inaugurated 1960

SPONSOR: Graduate School of Business Administration

PROGRAM LOCATION: Cambridge, Massachusetts

DURATION: 14 weeks

1978 SESSIONS: February 5 -- May 10
Early-September - MID-December

TUITION: \$7000 including room and meals except for
Saturday and Sunday dinners

PARTICIPANTS:

Number:	126 - divided into 2 sections
Age:	Under 30 to mid-40's Average 36
Position:	Middle and upper middle management
Industry:	Broad
Geography:	Broad - one-third foreign

FACULTY: Harvard Business School exclusively

OFFICIAL CONTACT: Mr. Tim Armour
Administrative Director
Program for Management Development
Glass Hall
Harvard Business School
Boston, Massachusetts 02163
Telephone 617-495-6487

Harvard - PMD

SUBJECT MATTER

The curriculum covers nine core areas:

Financial Management

Marketing Management

Operations Management

Information Control Systems

Organizational Behavior

Quantitative Analysis for Decisions

Issues in Labor Relations

Business and the World Society

Business Policy

In addition to the nine core areas, the curriculum includes other integrative exercises and a few electives during the last week of the program.

METHODS OF INSTRUCTION

The faculty employs a variety of teaching techniques to which the subjects lend themselves, but relies to a great extent on the case method, based on class participation in the discussion of typical business situations. The case method as practiced at Harvard leaves largely to the individual participant the deduction of management principles represented by the cases discussed. Preparation of cases for class discussion is emphasized through regularly scheduled small group discussions from 8:00 to 9:15 every morning.

Classes meet in two sections for three 75 minute sessions six days a week between 9:15 a.m. and 2:45 p.m. Afternoons and evenings are well occupied with heavy reading and case study assignments.

A sophisticated business game is played continuously for about a week with only one class a day on a subject directly related to a decision area of the game. The game starts with companies in various financial conditions, but with equal opportunity to succeed. Other simulation exercises using computer terminals are also presented.

FACULTY

Instructors are drawn from the regular faculty of the Business School and assigned full time to the Program for Management Development for two or three years.

J-1-II-8

PARTICIPANTS

Participants are executives in a wide variety of industries from all parts of the U.S. and all continents of the world.

A well balanced cross section of industry, functional responsibility, and geographical distribution is assured through careful selection of candidates. Ordinarily not more than one candidate from any one company will be accepted.

SPECIAL FEATURES

Spouses' Program

Spouses are invited during the last week of the program. Special classes for spouses only are held during the first two or three days.

FACILITIES

Accommodations in Mellon Hall (dormitory) have been completely renovated. Participants have individual sleeping rooms and share a lounge with eight other participants. Two or three persons share common bathroom facilities.

Meals are served at the Faculty Club.

Athletic facilities of the University are available to the participants. These include calisthenics, swimming, tennis, squash, and rowing.

RECOMMENDATION

This program is suitable for young executives in middle management with demonstrated growth potential for higher management responsibilities.

UNIVERSITY OF MICHIGAN
Executive Development Program

Inaugurated 1954

SPONSOR: Graduate School of Business Administration

PROGRAM LOCATION: Ann Arbor, Michigan

DURATION: 4 weeks

1978 SESSION: May 14 -- June 9

TUITION: \$2800 including room and meals except Saturday dinner and Sunday meals

PARTICIPANTS:

- Number:** Not over 45
- Age:** 30-51 Average 41
- Position:** Middle and upper middle management
- Industry:** Broad
- Geography:** Broad -- 10-15% foreign

FACULTY: University of Michigan and special lecturers

OFFICIAL CONTACT: Mr. William J. Carey, Director
Executive Development Program
Graduate School of Business Administration
The University of Michigan
Ann Arbor, Michigan 48104
Telephone 313-763-3154 or 764-2308

J-1-II-10

Michigan

SUBJECT MATTER

The theme of the program is Effective Resource Management.

The curriculum covers the following areas:

- Business Conditions
- Economics and Government
- Data Processing and Information Services
- Marketing Management
- Union-Management Relations
- Accounting and Control
- Anatomy of Social Pressure
- Business Planning
- Financial Management
- International Finance
- Manpower Management

In addition there are special lectures by distinguished public officials, business leaders, and educators.

METHODS OF INSTRUCTION

Instruction is principally by lecture-discussion, with cases and role playing as appropriate. Cases are used primarily in marketing, which deals about equally with consumer goods and industrial goods.

Classes meet for three 90 minute sessions between 8:30 a.m. and 2:30 p.m., five days a week, and for two sessions on Saturday. At least two nights a week are devoted to small group preparation of work on the next day's assignments.

Reading load is fairly heavy.

FACULTY

The instruction staff consists of eleven senior members of the Graduate School of Business faculty, most of whom teach in parallel throughout the program.

PARTICIPANTS

Participants are generally from middle and upper middle management of large companies, and top management of smaller companies, in a broad range of industries including chemicals, motors, petroleum, pharmaceuticals, metals, aerospace, computers, transportation and banking. Ten to fifteen percent are from abroad.

Michigan

Functions represented include administration, manufacturing, marketing, engineering, accounting, finance, personnel, and others.

FACILITIES

Accommodations in the Oxford Apartments are comfortable. Each participant has single occupancy of a housekeeping suite.

Meals are served in a private dining room.

Participants have access to the University's tennis courts, swimming pool, golf course, and athletic facilities.

RECOMMENDATION

This program is suitable for men and women in middle and upper middle management who are moving from relatively narrow functional areas into positions of broader responsibility.

J-J-II-12

UNIVERSITY OF PITTSBURGH
Management Program for Executives

Inaugurated 1949

SPONSOR: Graduate School of Business

PROGRAM LOCATION: Pittsburgh, Pennsylvania

DURATION: 8 weeks

1978 SESSION: February 26 - April 21

TUITION: \$4200 including five breakfasts and four dinners weekly, plus \$1000 for room

PARTICIPANTS:

Number:	Not over 36
Age:	35-55 Average 42
Position:	Middle to upper management
Industry:	Mixed
Geography:	Scattered - 15% military - 15% foreign

FACULTY: University of Pittsburgh plus several from other universities, industry and consulting firms.

OFFICIAL CONTACT: Mr. P. Joseph Hickey, Director
Management Program for Executives
Graduate School of Business
University of Pittsburgh
Pittsburgh, Pennsylvania 15260
Telephone 412-624-6424

Pittsburgh

SUBJECT MATTER

The first three days are devoted to a "learning community workshop" in group dynamics.

The curriculum for the ensuing seven and one half weeks embraces the following course modules:

- Financial Policy and Managerial Control Systems
- Corporate Environmental Influences
- Management Science Concepts and Planning Strategy
- Integrated Decision Problems
- Marketing Analysis and Planning
- Application of Behavioral Science
- International Business
- Special Areas for Management Awareness
- Individual Research

In addition there are a number of after dinner lectures by members of the business and academic worlds, as well as visits to institutions and industrial plants in the vicinity.

METHODS OF INSTRUCTION

Instruction is largely by lecture-discussion, except where cases and workshops are indicated.

Small study groups are assigned occasionally to prepare cases for class discussion.

Subjects are taught in a combination of block and parallel teaching throughout the program. Greatest emphasis is on policy, finance, accounting, and quantitative techniques for control.

Classes are scheduled in four 90-minute sessions between 8:30 a.m. and 4:00 p.m., five days a week.

Reading and study assignments are heavy.

FACULTY

Instructors are mostly from the regular faculty of the Pittsburgh Graduate School of Business and from other specialized departments of the University.

There are also a number of guest lecturers from other universities, industry, and consulting firms.

Pittsburgh

PARTICIPANTS

Participants are generally from middle and upper middle management of large companies in heavy industry, chemicals, utilities, banking and insurance, coming from various parts of the U.S. There are usually several members of the Armed Services, and about 15% of the participants are from abroad.

Functions represented include engineering, accounting, marketing, manufacturing, and administration.

SPECIAL FEATURES

Group Dynamics

The first three days of the program are devoted to a "Learning Community Workshop" which emphasizes temporary groups, the development of team building, use of temporary groups, and use of the resources of both faculty and participants.

Wives' Program

Wives are invited for the final three days of the program so that they may be informed as to what the program has been about, and to experience for themselves some of the discussion. Some activities are designed especially for their participation.

FACILITIES

Accommodations in the Webster Hall Hotel are very comfortable. A block of bedrooms and meeting rooms is set aside for the participants of this program. Each has a single room with bath.

Breakfast is served in the Webster Hall Hotel. Lunch is available in the Faculty Club of the University and other nearby dining establishments. Dinner is served Monday to Thursday in the Faculty Club, with several special International Nights scheduled at local restaurants.

Classes are held in the University of Pittsburgh's Tower of Learning, just a short walk from Webster Hall.

RECOMMENDATION

This program is suitable for middle and upper middle management executives, with apparent broader capabilities, whose past experience has been of a limited functional nature, and for those younger executives in senior positions who feel the need for a broadening experience.

STANFORD UNIVERSITY
Stanford Executive Program

Inaugurated 1952

SPONSOR: Graduate School of Business

PROGRAM LOCATION: Stanford, California

DURATION: 8 weeks

1978 SESSION: MID-June - MID-August

TUITION: \$6250 including room and meals

PARTICIPANTS:

- Number:** Not over 180 - divided into 3 sections
- Age:** 35-50 Average 42
- Position:** Upper middle and top management
- Industry:** Broad
- Geography:** Broad - one third foreign

FACULTY: Stanford Graduate School of Business

OFFICIAL CONTACT: Mrs. Fran Rinaldi
Assistant Director for Administration
The Stanford Executive Program
Graduate School of Business
Stanford University
Stanford, California 94305
Telephone 415-497-2300 ext. 2921

J-1-II-16

Stanford - Executive

SUBJECT MATTER

The courses are presented in integrated "streams" of related areas. The following streams flow in parallel throughout the program:

Computers and Management Science
Economics, Public Policy, and Business
Financial Management and Control
Management of Human Resources
Management of Marketing Strategy
Management of the Total Enterprise

METHODS OF INSTRUCTION

The program utilizes a variety of methods, including in-depth case studies, lectures, and discussions based on topics rather than cases. Presentations are coordinated to maximize effectiveness.

Classes meet in three sections for three 70 minute sessions from 8:00 a.m. to 12:10 p.m. five days a week. There is a four day break from Thursday noon to Monday evening at the end of the fourth week. Composition of the sections is changed every two weeks.

Afternoons are reserved for individual study and preparation of the next day's assignments. From 7:30 to 10:00 every evening assigned small groups meet to discuss cases and problems for the next morning's classes. Composition of the small groups is changed each week.

A computer terminal is located in each wing of the dormitories to allow participants to work out problems and experiment with the use of the computer. An assistant to the Director of the program is available for instruction in computer usage during informal afternoon and evening sessions.

Six Wednesday evening discussions are scheduled at which distinguished guests from business and government speak on timely topics of general interest, followed by an informal discussion period.

FACULTY

There are ten senior members of the Stanford faculty, each of whom teaches seven to twelve sessions over a period of two to six weeks.

PARTICIPANTS

All are upper middle and top management executives representing every functional area in a very broad range of industries. Titles range from Plant Manager to President.

Stanford - Executive

Most participants come from large companies in all parts of the U.S., and more than one third are from countries around the world, mostly Europe.

SPECIAL FEATURES

Spouses' Week

Participants are invited to bring their spouses to Palo Alto the last week of the program. (No campus dormitories are available for spouses.)

There are special classes for spouses for two days, and for the last day of regular program classes spouses may join the participants in sessions on Business-Government Relations and Management Style.

FACILITIES

Accommodations in Moore Hall are comfortable but strictly functional. Each participant has a private room and shares a hall bath. There are lounges available for informal discussions.

Meals are served in a private dining room of the dormitory complex in which the participants live.

RECOMMENDATION

This program is thoroughly suitable for upper middle and top divisional management of large companies, and top management of smaller companies.

STANFORD UNIVERSITY
Stanford-Sloan Program

Inaugurated 1958

SPONSOR

Graduate School of Business

PROGRAM LOCATION:

Stanford, California

DURATION:

9 Months

1978 SESSION:

September 5, 1978 - June 17, 1979

TUTION:

\$10,050 plus \$1400 for books, study materials and field trips; but not living costs

PARTICIPANTS:

Number: Not over 42

Age: 30-45 Average 37

Position: Young men and women in key management positions

Industry: Mixed

**Geography: Broad - 35% foreign
25% U.S. Government**

FACULTY:

Stanford University

OFFICIAL CONTACT:

**Miss Nancy W. Collins, Assistant Director
The Stanford-Sloan Program
Graduate School of Business
Stanford University
Stanford, California 94305
Telephone 415-321-2300 ext. 2270**

Stanford - Sloan

SUBJECT MATTER

The major portion of the Program is devoted to classroom seminars on general and specialized aspects of management, viz:

- Decision Science
- Accounting
- Marketing Management
- Organizational Behavior
- Economic Analysis and Policy
- Applications of Behavioral Science
- Business Finance
- Business and the Changing Environment
- Legal Aspects of Business
- Management of International Business
- Top Management - Director and Control
- Organizational Control

Monthly throughout the program there are Top Management Seminars in which the Fellows meet with outstanding business leaders in off-the-record classroom discussions.

Approximately once a month there is a Local Field Trip to a major operating facility in California, which includes an extensive tour of the facility and discussions with operating executives.

Between the winter and spring quarters there is an eastern field trip to New York City and Washington, at which the Fellows meet with some of the most outstanding government and business leaders in the U.S.

Live Case Studies are conducted by small groups who work out of the chief executive's office in a number of specially selected companies and government agencies, to identify problems and opportunities, and develop a plan of implementation for the top executive.

Fellows are encouraged to take elective courses at schools and departments throughout the University which will best serve their career goals.

Each Sloan Fellow undertakes an individual research project, involving in-depth study of a particular area - often investigation of current problems in his own company.

METHODS OF INSTRUCTION

Instruction is varied, using case method, lectures, seminar discussions, role playing, simulation, etc.

FACULTY

Regular faculty are well qualified professors from the Graduate School of Business.

J-1-II-20

Sanford - Sloan

Humanities seminars are conducted by professors from other departments of Stanford University.

Top Management Seminars are conducted by leading businessmen.

PARTICIPANTS

Participants, designated Sloan Fellows, are all outstanding young executives, preferably between the ages of 30 and 45, and with ten years' business experience, who have shown evidence of managerial ability plus demonstrated potential for senior management.

They usually come from large, technically oriented companies, including a third or more from overseas. Another 25% come from U.S. Government agencies.

SPECIAL FEATURES

Master of Science Degree

Since 1977, Fellows in this program are awarded the degree of Master of Science - degree in Management.

Wives' Program

Seminars for wives are scheduled every other Tuesday, drawing upon members of the Sloan faculty for leadership.

Wives may also obtain a "permit to audit" which enables them to attend selected University classes. In addition, athletic events, social functions, childrens' activities, and tours are planned.

FACILITIES

Participants normally move their families to the Stanford area for the duration of the program, and make their own housing arrangements. (There are accommodations for ten families on campus.)

RECOMMENDATION

This program is suitable for young executives of marked management potential whom the company or institution is prepared to utilize appropriately on their return from the nine month program.

AMP Institutions for FY 78

University of California (Berkeley)
Emory University
Carnegie-Mellon University
University of Texas (Austin)
University of Pittsburgh
University of Houston
University of Michigan
University of Virginia
Columbia University
Cornell University
Pennsylvania State University
Northwestern University
University of Southern California

Inclosure 3

J-1-III-1

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

ANNEX K

DATA COLLECTION AND ANALYSIS

1. PURPOSE. This Annex provides a broad overview of Review of Education and Training for Officers (RETO) actions taken to collect data from Department of the Army (DA), and the training and education proponents, the U.S. Army Military Personnel Center (MILPERCEN) monitors to determine duty position requirements, and to process, synthesize and analyze the data for each Officer Personnel Management System (OPMS) specialty.

2. DISCUSSION.

a. The Pilot Test. Prior to embarking on a massive data collection effort, the RETO study group developed methodology for determining qualitative and quantitative specialty requirements, and tested the methodology on a select group of five OPMS Specialty Codes (SC): Armor (SC-12), Law Enforcement (SC-31), Finance (SC-44), Comptroller (SC-45) and Maintenance Management (SC-91). A tasking message (Appendix 1) was sent to the three proponents for each of the selected specialties together with Inclosures 1 through 8 that contained forms, instructions for completion of the forms, and an Army officer duty module list. Subsequently, members of the RETO study group met with test specialty proponent representatives to obtain data, critique forms and data requirements, and resolve differences on questions and opinion requirements.

b. Lessons Learned. Pilot test results not only reinforced the basic validity of RETO methodology and data collection system, but also uncovered problem areas that required resolution prior to embarking on the major data collection effort. Appendix 2 summarizes pilot test problems into a general category applicable to all specialties, problems related to procedural changes, and issues and problems pertaining to RETO methodology changes. Overall, the lessons learned revealed weaknesses in DA proponenty and MILPERCEN monitorship of specialties, i.e., one officer in the Office of the DA Deputy Chief of Staff for Logistics (ODCSLOG) acting as proponent for 17 logistics specialties and one officer in MILPERCEN monitoring 10 logistics specialties. Some DA and MILPERCEN monitors did not possess the specialty that they monitored; consequently, they did not necessarily have the required expertise

to make meaningful contributions to specialty requirements. Further, the pilot test confirmed the major difficulties in management by Specialty Skill Identifier (SSI) as being (1) that current total assets were not readily available by SSI, (2) that SSI requirements were not known, and (3) that position title identification procedures lacked uniformity. RETO learned quickly that "determination of requirements" also implies a need to improve officer management and military occupation development. Thus, data collection effort was directed toward ready identification of SSI, command, and position requirements to meet RETO needs and to become an effective source of data for later use by MILPERCEN.

c. Data Collection. A significant portion of the RETO effort involved collecting and analyzing large amounts of data provided by proponents for each career specialty. Detailed data and information to ascertain training and education requirements was requested from all proponents by DA message (Appendix 3). Inclosures to the message furnished guidance on specific requirements, and extracts from The Army Authorization Documentation System (TAADS) and Army Research Institute (ARI) duty modules to standardize collection effort. RETO analysts determined that ARI duty module lists were incomplete and authorized proponents to develop new duty modules to better describe duty positions. To establish further common ground, RETO defined qualification and job categories, and developed codes for training/education types and alternatives. Specifically, RETO wanted the data to provide answers to questions on what jobs officers perform, the skills and knowledge they need to fill those jobs, the best method to impart those skills and what constituted qualification within a specialty. Additionally, MILPERCEN was tasked to provide automatic data processing (ADP) support to expedite keypunch, computer program, and data output operations to deal with the mass of information.

d. Specialty Data Receipt. Appendix 4 contains instructions to RETO analysts for in-processing proponent data packages. Inclosures 1 through 5 to Appendix 4 provide administrative information and checklists for controlling proponent packages; Part I of the Analysis Plan for manual analysis includes tasks not amenable to ADP, a specialty matrix for analyzing MILPERCEN data, qualification analysis procedures, and ADP instructions for keypunch data and error correction.

e. Specialty Requirements Determination and Analysis. This paper (Appendix 5) specifies common terminology for dealing with

requirements data and establishes the concept of "signatures." The concept is based on the premise that each duty position is unique if it possesses a group of duty modules that differ from other duty modules; hence, the position has a "unique signature." Conversely, a "common signature" for a duty position is indicated when a group of duty modules representing that position is shared with another duty module group representing other duty positions. Calculations of signatures, methods of comparing them, and data processing requirements are also contained in Appendix 5. Inclosures 1 and 2 to the Appendix depict formats developed by RETO to display requirements data and to compare signatures. Inclosure 3 is a priority listing of some specific comparisons and single signature analyses that establish the desired ADP output. Priority I comparisons were designated for tables that supported individual specialty analysis and education/training requirements. Lower priority comparisons were not produced; they were designated for future analysis of specialty groups, military education levels and the Army as a whole.

f. Analysis Plan, Part II. Whereas the preceding Appendix established data output requirements and instructions to MILPERCEN computer programmers, Appendix 6 describes each printout table to the analyst. More importantly, Part II of the Analysis Plan contains basic instructions and checklists for the RETO analyst to develop specialty recommendations and to determine a description of each duty position in terms of duty modules, best training methods, and requirements. Two groups of tables were produced. The first group (tables 1 through 34) provides an overview and summation of each specialty by grade, a detailed look at each SSI, command position requirements and dual specialty requirements in a multitude of conceivable displays to facilitate RETO analysis. The second group (tables 35-64) contains factual data about a single duty position signature or shows the results of computer comparison between signatures. Some of the more important tables in the signature group provided direct display of the recommended training method for each essential duty module in a given specialty; patterns of skills required as grade increases or for command; and determination of commonality or uniqueness between OPMS specialties. Duty modules entered into the RETO data base include both ARI and proponent developed duty modules. In some instances, the lack of a job task list for new duty modules precluded direct comparisons with ARI duty modules; however, manual comparison of duty modules could be and was made to supplement direct comparison from tables. In balance, the data base and computer output tables were adequate to evaluate each OPMS and non-OPMS specialty and to support RETO study recommendations.

2. Data Collection and Analysis Observations.

a. The decision to task MILPERCEN with providing ADP support for RETO was based on the compatability of software and computer programming capability with RETO data. However, the RETO requirement represented an unprogrammed requirement on MILPERCEN that strained their ability to respond as quickly as many analysts would have liked. In retrospect, commercial data processing support might have been a better choice when one considers the rapid response required for RETO analysis.

b. ADP programming support for study effort was accommodated primarily by ad hoc augmentation from MILPERCEN. This type arrangement did not prove totally satisfactory because excessive time was necessary to orient, or to update programmers on RETO requirements and overall study group effort. A more efficient arrangement would have been to assign a programmer to the study group from its very inception.

c. Processed data and information received by RETO was more than adequate for specialty analysis and for comparison of duty modules, training methods and specialty signatures. A detailed task analysis and training development remain as necessary ingredients to assist in implementing the proposed RETO professional development system. Continuing effort of this kind, under the purview of the U.S. Army Training and Doctrine Command (TRADOC), can be expedited by utilizing the data base and tables produced for RETO by MILPERCEN.

4. Recommendations:

a. That TRADOC become the repository of the RETO data base and tables, and that they be used for job task analyses and training development.

b. That MILPERCEN utilize RETO output to initiate officer assignment by SSI and to support military occupation development.

c. That the Army Research Institute and the training and education proponents refine the new RETO developed duty module list and associated task lists.

d. That future study groups such as RETO utilize the services of a commercial data processing contractor rather than adding an unprogrammed work load on an Army agency.

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FM DA WASH DC//DACS-OTRG//
TO RUEADWD/HQ DA WASH DC//DACA-ZX/DALO-RDP/DAPE-HRE/MPO//
KUEAHOF/CDR MILPERCEN ALEX VA//DAPC-OPP-S//
RUCLATA/CDR TRADOC FT MONROE VA//ATTNG-OES//
INFO RUCIBAA/USAARMS FT KNOX KY//ATSB-TD//
RUCLBWA/USAMPS TNG CENT FT MCCLELLAN AL//ATZN-TD//
RUCNAAA/USAADMINDEN FT HARRISON IN//ATSG-RM//
RULNAPG/USAOCCS ABERDEEN PROVING GROUND MD//ATSL-TD-TA//
BT

UNCLAS

SUBJECT: REVIEW OF TRAINING AND EDUCATION REQUIREMENTS FOR OFFICERS
ATTN: DACA-ZX(LTC AGOSTINI), ATSB-TD(LTC CASEY)

1. THE CHIEF OF STAFF ARMY, RECENTLY ESTABLISHED A GROUP TO REVIEW EDUCATION AND TRAINING FOR OFFICERS (RETO) WITH THE BROAD MISSION OF RECOMMENDING POLICIES AND PROGRAMS THAT WILL BETTER PREPARE ARMY OFFICERS TO MEET REQUIREMENTS OF THE 1980'S. THIS GROUP MUST FIRST DETERMINE OFFICER EDUCATION AND TRAINING REQUIREMENTS BASED ON ARMY MISSIONS AND INDIVIDUAL CAREER DEVELOPMENT NEEDS. METHODOLOGY FOR DETERMINING THE QUANTITATIVE AND QUALITATIVE REQUIREMENTS OF EACH SPECIALTY HAS BEEN DEVELOPED. A PILOT TEST TO REVIEW THE FOLLOWING FIVE SPECIALTIES WILL BE CONDUCTED 6-20 OCTOBER, WING 11, TEMPO A, FT. MCNAIR, WASH DC.

SPECIALTY	DATE OF REVIEW	DA PROP	ED/TNG PROP
FINANCE/COMPTROLLER SC 44/45	6 OCT(0730-1600)	OCA	ADMINDEN
ARMOR SC 12	18 OCT(0730-1600)	DCSPER	USAARMS
LAW ENFORCEMENT SC 31	19 OCT(0730-1600)	DCSPER	USAMPS
MAINTENANCE/MANAGEMENT SC91	20 OCT(0730-1600)	DCSLOG	USAOCS

THE DA, MILPERCEN, AND EDUCATION AND TRAINING PROPONENTS FOR THE ABOVE SPECIALTIES WILL PROVIDE REPRESENTATIVES AT THE REVIEWS, PREPARED TO PROVIDE DATA AND ADDRESS THE QUESTIONS BELOW. THE PILOT TEST WILL VALIDATE METHODOLOGY AND WILL CONSIDER PROPONENT INPUT AS TENTATIVE. THE PILOT TEST WILL BE INCLUDED IN THE REVIEW OF ALL OPMS SPECIALTIES TO BE CONDUCTED IN NOVEMBER.

2. THE REMAINDER OF THE MESSAGE IS IN FOUR PARTS.
A. PART I FOR DA PROPONENTS: YOU HAVE OVERALL RESPONSIBILITY FOR GATHERING DATA, DETERMINING REQUIREMENTS, OVERWATCH OF THE DEVELOP-

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MENT OF EDUCATION AND TRAINING REQUIREMENTS, IDENTIFICATION OF CAREER PATTERNS AND ASSOCIATED SPECIALTIES, AND THE RESOLUTION OF ISSUES.

(1) REQUEST ANSWERS TO THE FOLLOWING QUESTION BE PROVIDED RETO DURING THE SCHEDULED MEETINGS: WHAT ARE THE BEST AVAILABEL COST DATA FOR COMPARISON PURPOSES, I.E., COST PER STUDENT, ETC? FORMATS FOR REPORTING DATA ISSUED TO MILPERCEN AND TRADOC WILL BE PROVIDED ON 30 SEP.

B. PART II FOR MILPERCEN: IN COORDINATION WITH DA PROPONENT, REQUEST ANSWERW TO THE FOLLOWING QUESTIONS BE PROVIDED TO RETO DURING THE SCHEDULED MEETINGS.

(1) WHAT ARE THE CURRENT UTILIZATION RATES IN EACH SPECIALTY FOR EACH GRADE?

(2) WHAT WERE THE SELECTION RATES FOR EACH SPECIALTY FOR THE LAST TWO CPT, MAJ, LTC, CCL, AUS PROMOTION BOARDS? LTC/COL COMMAND SELECTION BOARDS?

(3) WHAT ARE THE CURRENT OFFICER ASSETS BY SSI, BY GRADE, WHO HAVE THE S,ECIALTY AS THEIR PRIMARY SPECIALTY? WHAT ARE THE CURRENT OFFICER ASSETS BY SSI, BY GRADE, WHO HAVE THE SPECIALTY AS THEIR ALTERNATE?

(4) FOR THE CURRENT OFFICER ASSETS WHO HAVE THE SPECIALTY DESIGNATED AS THEIR PRIMARY, WHAT ARE THEIR ALTERNATE SPECIALTIES LISTED BY S,ECIALTY CODE/TITLE, NUMBER DESIGNATED, AND PERCENTAGE DESIGNATED?

(5) FOR THE CURRENT OFFICER ASSETS WHO HAVE THE SPECIALTY DESIGNATED AS THEIR ALTERNATE, WHAT ARE THEIR PRIMARY SPECIALTIES LISTED BY SPECIALTY CODE/TITLE, NUMBER DESIGNATED, AND PERCENTAGE DESIGNATED?

A FORMAT FOR LISTING REQUIREMENTS FOR FY 78 AND FY 90 AND DUTY POSITIONS WILL BE HANDCARRIED TO MILPERCEN SPECIALTY MONITOR 30 SEP. C. ,ART III FOR TRADOC PROPONENT: IN COORDINATION WITH DA PROPONENT AND MILPERCEN REQUEST ANSWERS TO THE FOLLOWING QUESTION BE PROVIDED RETO DURING THE SCHEDULED MEETINGS.

(1) WHICH SKILLS/JOB KNOWLEDGE AT WHICH GRADE LEVEL WITHIN THE SPECIALTY ARE HIGHLY PERISHABLE? WHAT IS REQUIRED TO COMPENSATE FOR THE LOSS OF KNOWLEDGE? EX,ERIENCE, ADDITIONAL ASSIGNMENTS, REFRESH-ER TRAINING, OR OTHER?

(2) WHAT COURSES OF INSTRUCTION (RESIDENT AND NON-RESIDENT) ARE CURRENTLY AVAILABLE TO SUPPORT THE SPECIALTY AT EACH OFFICER GRADE-LEVEL (EXCLUDING CGSC/SSC LEVEL INSTRUCTION)? PROVIDE AS A MINIMUM THE FOLLOWING DATA/INFORMATION:

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- (A) COURSE TITLE
- (B) PREREQUISITES FOR ATTENDANCE
- (C) STUDENT SELECTION PROCEDURES (HOW,WHO,WHEN)
- (D) COURSE LENGTH (PFACETIME/MOBILIZATION)
- (E) FREQUENCY (NUMBER OF COURSES NORMALLY GIVEN PER YEAR)
- (F) CLASS SIZE (NORMAL AND MAXIMUM CAPABILITY)
- (G) ENROLLMENT DATA FOR FY'S 74,75,76,77,78,79 OUTYEARS IF AVAILABLE, TO INCLUDE INPUT/ATTRITION/OUTPUT.
- (H) SKILLS IMPARTED-QUALIFICATIONS/SPECIALTIES/MOS'S AWARDED
- (I) MAJOR PROGRAMMED CHANGES
- (J) ONE COPY OF CURRENT COI

A FORMAT AND INSTRUCTIONS FOR SUBMITTING DATA ON DUTY POSITIONS BY GRADE WILL BE PROVIDED VIA TELECOPIER ON 30 SEP.

D. PART IV FOR ALL THE FOLLOWING QUESTIONS PERTAIN TO ALL ADDRESSEES. PROPONENT REPRESENTATIVES SHOULD BE PREPARED TO DISCUSS THESE ISSUES WITH SUPPORTING RATIONALE WITH MEMBERS OF RETO AT SCHEDULED REVIEWS.

(1) WHAT ARE THE PROBLEMS ASSOCIATED WITH THE MANAGEMENT OF EACH SPECIALTY FROM THE DA, MILPERCEN, AND TRADOC PROPCENTS STANDPOINT SUCH AS ASSIGNMENT DIFFICULTIES, GRADE OVERSTRENGTH/UNDERSTRENGTH, LIMITED REQUIREMENTS AT THE FIELD GRADE LEVELS,ETC?

(2) WHAT ARE THE PROBLEMS ASSOCIATED WITH CODING THE SPECIALTY DUTY POSITION REQUIREMENTS?

(3) WHAT OTHER SPECIALTIES COMPLEMENT THIS SPECIALTY? HOW AND WHO? WHAT SPECILATIES ARE COMPLEMENTED BY THIS SPECIALTY? HOW AND WHY?

(4) IS THIS SPECIALTY CLOSELY RELATED TO OTHER SPECIALTIES? IF YES, WHICH S,ECIALTIES? SHOULD THE SPECIALTY BE ELIMAINATED OR COMBINED WITH OTHERS?

(5) ARE THERE PARTICULAR PROBLEMS WITH THE SPECIALTY WITH RESPECT TO SSI/ASI UTILIZATION, IDENTIFICATION, TRAINING, ETC?

(6) IS THERE A NEED FOR JOINT/UNIFIED/COMBINED LEVEL TRAINING IN THE SPECIALTY/ AT WHAT GRADL LEVEL AND WHAT SKILLS ARE NEEDED?

3. REQUEST NAMES OF POC BE PROVIDED TO RETO ACTION OFFICER: LTC WILLIAM K. GOOD, JR., AV 223-0043/0044, ON RECEIPT OF THIS MESSAGE.

BT

ACTION ADDRESSEES

003 DACA
006 DALD
003 DAPE

INFORMATION ADDRESSEES

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FORM A

OPMS REQUIREMENTS DATA

1 SPECIALTY TITLE: _____

2 SPECIALTY CODE: _____

3 SSI		4 PERSACS REQUIREMENTS-FY 78					5 PERSACS REQUIREMENTS - FY 90						
TITLE	CODE	LT	CPT	MAJ	LTC	COL	TOTAL	LT	CPT	MAJ	LTC	COL	TOTAL
6 ASSUMPTIONS:													
TOTAL													

7 SPECIALTY QUALIFICATION(S):

Inclosure 1

K-1-I-1

FORM A OPMS REQUIREMENTS DATA

Instructions

1. Specialty title: Designate title of specialty.
2. Specialty code: Designate the specialty code.
3. SSI: Designate the Specialty Skill Identifiers (SSI) by title and code.
4. PERSACS Requirements FY 78: From PERSACS determine the total personnel requirements by grade, by SSI for FY 78.
5. PERSACS Requirements FY 90: From PERSACS project the total personnel requirements by grade, by SSI for FY 90.
6. Assumptions: Designate the assumptions used to compute projected requirements for FY 90.
7. Specialty qualifications: Designate what constitutes qualification in the specialty by SSI at each grade level. How and when does the officer achieve qualification at each level? Is command at all levels essential for qualification?

Inclosure 2

K-1-II-1

FORM B TRAINING/EDUCATION REQUIREMENTS

¹ SPECIALTY: TITLE: CODE:	² DUTY POSITION:						³ GRADE:			
	⁴ TOTAL REQ FY78:						⁵ DUTY PSN #			
⁶ Number of positions- FY 78 ⁷ % expected to serve in duty position	SSI:		SSI:		SSI:		SSI:		SSI:	
	TOE	TDA	TOE	TDA	TOE	TDA	TOE	TDA	TOE	TDA
Duty Modules										
	⁸ RECOMMENDED TRAINING METHODS									

⁹SPECIAL REQUIREMENTS:

Inclosure 3

K-1-III-1

FORM B TRAINING/EDUCATION REQUIREMENTS

Instructions

Form B will be utilized to identify the essential duty positions required for qualification in the specialty. Complete the form for each duty position identified. Analyze the identified essential duty position and determine the duty modules required to perform in the position, indicating the recommended training method for imparting the skills required to perform each duty module.

1. Specialty: Designate the specialty by title and code.

2. Duty position:

a. Designate a duty position from PERSACS that is essential to achieve qualification in this specialty at this grade. To be an essential duty position the training and experience gained in the position must contribute directly to qualification at this grade, i.e., such training and experience is essential to achieving specialty qualification.

b. Some duty positions require clarification. Example: PERSACS duty position may be entitled CHIEF, but with the paragraph title added the duty position is clarified, such as CHIEF, SUPPORT ACTIVITY.

c. Duty position titles can be clustered on one Form B if all positions contribute equally to qualification at this grade, the duty modules required to perform the duty are the same, and the recommended training method to impart the skills are the same. Example: Platoon Leader, Armored Cavalry Platoon and Platoon Leader, Tank Platoon can be clustered into one duty position Platoon Leader. A duty module is a cluster of related job tasks that tend to go together organizationally and occupationally in meaningful ways.

Inclosure 4

K-1-IV-1

d. On a separate Form B list all other duty positions at this grade that are not considered essential to qualification, and indicate the number of required positions for FY 78 in the appropriate column(s). Enter in section two the words "Other Duty Positions."

3. Grade: Designate grade authorized in duty position.

4. Total requirements FY 78: Total required duty positions in FY 78 from PERSACS. This must be a total of all requirements for the positions clustered on this sheet. This figure must equal the total of the entries in Item 6.

5. Duty position number: Number sequentially the essential duty positions from Lieutenant to Colonel.

6. Number of positions - FY 78: From PERSACS identify the total duty position requirements for this grade by SSI, and by TOE or TDA position.

7. Percent expected to serve in duty position: What percentage of the officers in this grade can be expected to serve in this duty position? How was this percentage computed?

8. Recommended Training Methods: For each duty position list in the left column those duty modules (Incl 3) required to perform in the duty position. In the applicable SSI column(s) indicate the recommended training method to impart those skills required (Incl 4). Example:

Duty Module	SSI: A	
	TOE	TDA
A-8	1M	1M
M-1	1C	1C

When civilian education is indicated as the recommended training method, footnote and indicate in section 9 what discipline is required and how

much training is required, e.g., Graduate degree, 6 credit hours, etc.

NOTE: The duty module list at inclosure 3 is not intended to be all inclusive. If additional duty modules are developed they must be titled, coded, and added to the duty module list (Incl 3).

9. Special requirements: In this section provide whatever additional requirements/information necessary to fully identify the training/ education requirements of this specialty duty position at this grade.

This section may include:

- a. Advanced degree requirements that apply to all SSI's.
- b. Special duty position coding requirements. If some or all of the requirements indicated in part 6 require a specific alternate specialty, footnote and indicate here the alternate specialty and the number required, e.g., "50 positions require alternate specialty 45."
- c. Civilian education requirements.
- d. The specific number of positions requiring the recommended education, if different than the total shown in item 6.
- e. Other information as required.

List of Army Officer Duty Modules
(by Area)

A. COMMAND MANAGEMENT, GENERAL MANAGEMENT, AND ADMINISTRATION

- A-2 Performs general administration
- A-3 Exercises military command authority
- A-5 Supervises a staff section, detachment, or office
- A-6 Performs headquarters management staff functions
- A-7 Performs special staff administrative and adjutant type functions
- A-8 Directs, coordinates, and supervises a staff
- A-9 Performs executive staff secretariat functions
- A-10 Counsels and evaluates subordinates as troop leader and takes action on personal problems
- A-11 Supervises troop appearance and care and maintenance of materiel and facilities in unit
- A-12 Performs overall programming evaluation and review staff work
- A-13 Performs management analysis staff functions

B. PERSONNEL

- B-1 Performs manpower management staff functions
- B-2 Performs personnel management staff functions
- B-3 Performs staff functions pertaining to personnel services
- B-4 Performs officer personnel management functions at departmental level
- B-5 Directs or coordinates postal services for an installation or command

C. INTELLIGENCE

- C-1 Performs combat intelligence staff functions
- C-2 Performs counterintelligence and security staff functions in a general staff or coordinating staff
- C-3 Performs foreign area strategic intelligence staff functions
- C-5 Performs aerial surveillance staff functions in a general staff or other coordinating staff
- C-6 Performs intelligence staff functions concerning ground reconnaissance and surveillance
- C-7 Directs and conducts operations of counterintelligence unit
- C-8 Conducts military intelligence collection operations in the field

Inclosure 5

K-1-V-1

D. OPERATIONS AND PLANS (STAFF)

- D-1 Performs operations staff functions in a General Staff or other coordinating staff
- D-2 Performs operations planning staff functions in a General Staff or other coordinating staff
- D-3 Performs air support staff functions in a General Staff or coordinating staff
- D-4 Coordinates fire support for unit tactical operations
- D-6 Directs school troop unit operations at a service school center

E. ORGANIZATION, TRAINING

- E-1 Trains troops and/or civilian employees in units and activities
- E-2 Performs training staff functions
- E-3 Performs force development functions in general staff or other coordinating staff

F. LOGISTICS (STAFF, CONSUMER UNITS, AND COMPOSITE COMBAT SUPPORT COMMAND)

- F-1 Performs supply operations at consumer unit level
- F-2 Performs supply staff functions
- F-3 Performs equipment maintenance and readiness staff functions in a general staff or other coordinating staff
- F-4 Performs transportation staff functions in a general staff or other coordinating staff
- F-5 Performs logistical services staff functions in a general staff or other coordinating staff
- F-6 Performs staff functions pertaining to motor vehicle maintenance and operations
- F-7 Performs general logistics staff functions
- F-8 Performs staff functions concerning procurement of materiel
- F-10 Reviews, processes, and coordinates military construction budgetary planning and programming at Major command or departmental level
- F-11 Plans, staffs, and coordinates military base and facility engineering requirements
- F-12 Directs and controls operations of a combat support command or comparable composite combat service support organization

G. COMMUNICATIONS AND ELECTRONICS

- G-1 Serves as Battalion or Brigade Communications Officer
- G-2 Performs communications-electronics (CE) staff functions
- G-3 Directs and controls operations of mobile communications support unit
- G-5 Establishes and controls mobile area signal center
- G-6 Manages communications-electronics facilities and services at major command post or operations center
- G-7 Directs and controls fixed telecommunications center
- G-8 Establishes and controls communications-electronic services for military posts and comparable fixed installations

H. CIVIL-MILITARY AFFAIRS

- H-1 Performs civil-military staff functions
- H-2 Plans and controls civil affairs operations
- H-3 Plans and coordinates psychological warfare operations
- H-4 Performs attache type intelligence functions

I. COMPTROLLERSHIP AND PROGRAM/PROJECT/PRODUCT MANAGEMENT

- I-1 Performs program and budget staff functions
- I-3 Conducts cost studies and analyses of financial management
- I-6 Develops and designs budgetary methods and procedures for financial management systems

J. ARMY AVIATION

- J-1 Performs Army aviation staff functions
- J-2 Pilots rotary wing aircraft
- J-3 Pilots fixed wing aircraft
- J-4 Directs and controls Army aircraft maintenance
- J-5 Performs Army aviation safety duties

K. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION

- K-1 Performs staff functions pertaining to research, development, tests, and evaluation of new equipment and materiel
- K-2 Conducts service or operational test and evaluation of new equipment and materiel
- K-3 Coordinates test and evaluation of new equipment and materiel
- K-6 Coordinates or conducts research, development, and engineering for developmental materiel or system
- K-7 Performs or assists in overall life-cycle management of special materiel project or product

L. OPERATIONS RESEARCH AND SYSTEMS ANALYSIS

- L-1 Performs operations research analysis

M. ADP MANAGEMENT AND PROGRAMMING

- M-1 Performs ADP staff functions

N. EDUCATION, INSTRUCTION

- N-1 Prepares and conducts formal instruction in a school
- N-2 Conducts ROTC activities at civilian education institution
- N-3 Prepares doctrinal or formal instructional publications

O. INFORMATION ACTIVITIES

- O-1 Performs public information staff functions
- O-2 Assembles and prepares materials for command information or troop information activities
- O-4 Manages television or radio station of the Armed Forces Radio and Television Service

P. AUDIO-VISUAL ACTIVITIES

- P-1 Manages various audio-visual services for a major installation or activity
- P-2 Produces taped television or motion picture films for instructional or information purposes

U. TACTICAL DIRECTION OF COMBAT UNITS

- U-1 Directs and controls employment of Infantry and Armor maneuver unit
- U-2 Directs and controls mortars
- U-3 Directs and controls tactical employment of reconnaissance and scout unit
- U-4 Directs and controls heat seeking type air defense weapons (Redeye)
- U-5 Directs and controls antitank elements
- U-6 Participates individually and directly in ground combat

W. MISCELLANEOUS

- W-1 Provides personal assistance to general officer
- W-2 Directs and leads honor guard unit and performs staff functions pertaining to ceremonies
- W-4 Performs unit liaison activities
- W-5 Performs Inspector General staff functions
- W-6 Performs military history staff functions
- W-7 Provides advice and assistance for Army reserve components
- W-9 Represents US forces in military standardization activities with other countries

X. INDIVIDUAL FUNCTIONS AND SPECIAL QUALIFICATIONS

- X-2 Participates in airborne operations as a parachutist (MOS SQI prefix 7)
- X-3 Performs specialized nuclear weapons effects analysis (MOS SQI prefix 5)

AA. AIR DEFENSE ARTILLERY

- AA-1 Directs and controls employment of light air defense artillery weapons
- AA-2 Directs and controls HAWK type air defense launchers and missiles

BB. FIELD ARTILLERY

- BB-1 Directs and controls employment of field artillery cannon firing battery
- BB-4 Performs field artillery reconnaissance and survey
- BB-5 Performs field artillery target acquisition

CC. MILITARY POLICE, LAW ENFORCEMENT, CRIMINAL INVESTIGATIONS

- CC-1 Serves as Provost Marshal
- CC-2 Controls and participates in military police operations
- CC-4 Directs and operates a military confinement facility
- CC-5 Directs, controls, and participates in operation of criminal investigation unit
- CC-6 Directs and operates criminal information center or system

EE. ENGINEERING

- EE-1 Directs and controls combat engineer unit
- EE-2 Directs and controls portable bridging
- EE-3 Directs and controls mobile water supply point unit operations
- EE-4 Directs and employs atomic demolitions (ADM)
- EE-5 Serves as engineer staff officer
- EE-7 Directs and controls engineer construction or heavy equipment unit
- EE-8 Designs, plans, and monitors construction projects for military engineer units
- EE-9 Directs and controls facilities engineering services for an installation
- EE-10 Prepares terrain study material
- EE-11 Conducts engineering surveys
- EE-12 Manages field production or revision of topographic and photographic military maps
- EE-13 Performs on-site supervision of engineer contract construction projects, and related contract administration
- EE-14 Coordinates military construction activities in an engineer district
- EE-15 Provides resident engineer district representation and services at a military installation
- EE-16 Conducts engineer oriented strategic studies and analyses
- EE-17 Plans, constructs, and maintains military pipeline system

FF. LOGISTICAL SERVICE OPERATIONS (SPECIALIZED)

- FF-1 Manages installation commissary
- FF-3 Manages officers' open mess
- FF-4 Performs food service and advisor staff functions
- FF-5 Directs and controls operation of mobile field laundry and bath units
- FF-6 Directs and controls support service unit or activity
- FF-7 Performs purchasing and contracting functions under the Armed Services Procurement Regulations
- FF-8 Directs and controls field mortuary and cemetery activities
- FF-9 Manages materiel supply control for one or more commodities within an organization or activity
- FF-10 Performs staff and operating functions concerning property disposal
- FF-11 Performs contract administration functions under the Armed Services Procurement Regulations
- FF-12 Coordinates materiel production and procurement activities for a major project or program
- FF-13 Oversees contractor-operated munitions plant
- FF-14 Directs a unit engaged in explosive ordnance disposal operations
- FF-15 Performs explosive ordnance disposal staff functions

FF-16 Directs and controls chemical combat support
FF-17 Performs chemical staff functions in a combat or combined arms organization.

GG. TRANSPORTATION (OPERATIONS AND SPECIALIZED FUNCTIONS)

GG-1 Coordinates military passenger traffic and movement operations
GG-2 Performs staff management and coordination of military cargo shipments to and from overseas
GG-3 Coordinates cargo handling operations at military ocean terminal
GG-4 Directs or coordinates operations of deployable water terminal operating unit
GG-5 Directs and controls operations of amphibious truck unit
GG-6 Directs and controls operations of transportation truck unit
GG-7 Performs highway traffic engineering staff functions

HH. SUPPLY AND MAINTENANCE SUPPORT OPERATIONS

HH-1 Directs parachute maintenance and aerial delivery equipment support
HH-2 Directs and controls petroleum supply unit
HH-3 Directs and controls supply unit or activity
HH-6 Supervises division heavy drop support
HH-8 Directs and controls repair of non-missile equipment
HH-9 Supervises storage and warehouse operations
HH-10 Directs and controls support maintenance for artillery missile systems
HH-11 Directs and controls machine shop and metal-working
HH-12 Directs and controls special ammunition combat service support operations
HH-13 Exercises staff supervision and technical control over maintenance support operations
HH-14 Performs technical parts supply staff function
HH-15 Manages parts supply activities or units
HH-17 Directs and controls conventional ammunition supply and storage operations
HH-20 Coordinates large-scale bulk POL movement and storage operations

II. FINANCE

II-1 Performs finance and accounting functions
II-2 Performs financial services staff functions for a deployable command

KK. CRYPTOLOGY, SPECIALIZED SIGNAL INTELLIGENCE AND SECURITY OPERATIONS, AND ELECTRONIC WARFARE

KK-1 Directs and conducts ground signal surveillance, intercept, intelligence, and related electronic warfare operations
KK-2 Directs and conducts airborne signal intelligence operations
KK-3 Directs, conducts, and/or performs specialized cryptologic functions
KK-4 Performs functions concerning Electronic Warfare (EW) in a general staff

TRAINING/EDUCATION REQUIREMENTS

Indicators

TYPE TRAINING

1. Initial Task Training: First introduced to subject matter of the duty module.
2. Sustainment: Maintain proficiency at same or higher level.
3. Additional: Training, education, experience required to meet new requirements.

TRAINING/EDUCATION ALTERNATIVES

- P. Precommission Training.
- M. Military Resident Training.
- C. Civilian Education.
- S. Self Study.
- O. OJT, Supervised.
- E. OJE (On the job experience)
- X. Extension Training: Nonresident, TEC.
- U. Unit/installation schools. Formal training.
- T. Training with industry.

Inclosure 6

K-1-VI-1

SPREADSHEET:
CAREER PROFILE SUMMARY

SPECIALTY TITLE: _____

ESSENTIAL DUTY POSITIONS	LIEUTENANT									CAPTAIN									MAJOR								
	P	M	C	S	O	E	X	U	T	P	M	C	S	O	E	X	U	T	P	M	C	S	O	E	X	U	T
DUTY MODULE REQUIREMENTS																											

Inclosure 7

K-1-VII-1

TRAINING/EXPERIENCE ALTERNATIVES

INITIAL (RED)

SUSTAIN

SPECIALTY CODE: _____

LIEUTENANT COLONEL						COLONEL						ESSENTIAL DUTY POSITIONS			
C	S	O	E	X	U	T	P	M	C	S	O		E	X	U

BLUE) ADDITIONAL (GREEN)

2

CAREER PROFILE SUMMARY

Instructions

1. From the data compiled on Form B, Training/Education Requirements, prepare a summary spreadsheet of the specialty career profile in the format provided.
2. List in the top section of the spreadsheet those duty positions by grade found to be essential for specialty qualification and career development.
3. Enter in the lower section of the spreadsheet the duty module codes (A-2, C-3, etc) identified during the analysis of the duty positions (Form B) under the appropriate "Training/Experience Alternatives" for each grade. Color code the duty module code entry to indicate the appropriate "type training" as follows:

Initial Task Training:	Red
Sustainment:	Blue
Additional:	Green

Inclosure 8

K-1-VIII-1

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 2

LESSONS LEARNED
SPECIALTY REQUIREMENTS PILOT STUDY

TO ANNEX K

DATA COLLECTION AND ANALYSIS

LESSONS LEARNED

SPECIALTY REQUIREMENTS PILOT STUDY

The following is a compilation of lessons learned from a review of Armor (SC 12), Law Enforcement (SC 31), Finance (SC 44), Comptroller (SC 45), and Maintenance Management (SC 91) specialties during the period 6-20 October, 1977.

A. Lessons Learned Applicable to Specialties in General.

1. Management by SSI:

a. Under OPMS, officer assets are not currently managed by SSI, even in an overall, large-scale way.

b. Current total officer assets are not readily available by SSI.

c. MILPERCEN assignments personnel do, however, screen individual records to determine if an officer is qualified to fill a position requiring a particular SSI. Training is provided where needed, when possible, enroute to the assignment if the officer does not have the background in the particular SSI.

d. MILPERCEN does not want to manage assets by SSI other than on an individual basis (1c), but rather desires officers to be prepared to fill any position within the specialty.

e. The point still remains that if total assets can't be determined by SSI, how can requirements by SSI be met without the possibility of training too many or too few?

2. RETO/Proponents Meeting.

a. An early meeting between the RETO action officer and the specialty proponents (DA, training, MILPERCEN) is extremely important to fully explain the RETO requirements.

b. Since in many instances the DA proponent and the MILPERCEN monitor have several specialties, coordination of the meeting time and place may be difficult.

3. Position Coding/Identification Problems.

a. The pilot study confirmed the previously briefed coding difficulties.

b. The review also confirmed the lack of any uniformity in position title identification procedures. This may point to a requirement for establishing a listing of authorized position titles.

c. In reviewing the TAADS position documents, some positions were found to be coded for LT requirements even though the specialty is an advanced entry specialty and therefore no LT slots would normally be required.

d. However, because of grade reductions from manpower surveys, budget restrictions, personnel shortages, staffing criteria, etc., some positions have been downgraded to LT in some advanced entry specialties, i.e., the "Required" column calls for a CPT, but the "Authorized" column is for a LT.

e. It was found that certain positions lacked coding uniformity due to lack of guidance or understanding of the system. An example is the problem of coding Bn S1 or S4 positions. If coded 41/91 or 92 primary and combat arms alternate, then the Bn Cmdr may receive a non-combat-arms staff officer to fill the position. This then reduces his flexibility in assigning the officer to other combat jobs in the Bn or in assigning company officers to the battalion staff. This issue is on-going and is still unresolved.

f. The data gathered by the RETO effort may be of assistance in future revisions to AR 611-101, which commanders use to write up their requirements.

4. Quality of Officer Skills Requirements Data.

a. The pilot study proponents generally had fairly good data for company grade officers.

b. However, the data for field grade officers may be "softer" since the schools do not provide training to these grades for the most part.

5. Specialty Structure Changes.

a. In some specialties there are extensive SSI structural changes underway. The data we want must be based on the specialty as it is now.

b. The proponents are, however, asked to indicate all changes that are planned, approved, or in various stages of implementation.

c. The RETO action officer will have to determine the impact of these changes on the requirements data collection efforts as they are approved.

6. FY 90 "Number" Requirements Data.

a. This data is not presently available.

b. The reliability of any projected PERSACS data must be appraised and analyzed further when the SSI study is completed.

c. This data will be requested from DCSPER/DCSOPS.

7. Assessment of Magnitude of RETO Requirements Data Collection Effort.

a. The pilot study proponents felt that considerable effort will be required to provide the requested data.

b. This effort, of course, is unprogrammed and not in the TRADOC/school contract.

c. The SC 44/45 data collection effort (uncoordinated) took approximately 290 man hours.

d. The SC 31 proponent estimated approximately 12 man months to complete the requirement if starting from the beginning.

e. All proponents felt that the data could be provided, but had reservations on the quality if it is required in too short a period of time.

f. Some of the same personnel will be involved in the BG Brown study effort as will be tasked to meet the RETO requirement.

8. Difference in PERSACS Data.

a. Different runs of PERSACS result in differences in requirements due to continuous updating (moving train).

b. There is some question as to whether or not the TAADS documents consider reimbursable positions.

c. There are differences between PERSACS and TAADS data due to the THS account, factoring, etc.

d. Because of the above it may not be possible to reconcile differences in total figures.

e. RETO must become thoroughly familiar with limitations and any assumptions made in the PERSACS program. Perhaps a briefing on PERSACS for RETO would be appropriate.

9. "Qualification" Issue.

a. There are many different ideas and approaches to just what officer qualification is and how it is best achieved. However, assignment personnel and others throughout the Army are already using informal definitions or guidelines as to what qualification is or what an officer should do to become better qualified in a specialty.

b. The RETO effort must properly focus the diffused definitional difficulties. More standardized qualification guidelines will enhance career planning and counselling, better prepare the individual to do his job, and maximize his preparation for higher level jobs.

c. The pilot study group has developed an explanation of specialty qualification for use in determining the officer training and education requirements. This explanation is included in the data requirements package.

10. "Essential Duty Position" Concept.

a. The concept of requiring the proponents to determine and analyze the essential duty positions which were important for specialty qualification met with considerable misunderstanding. There was a general reluctance to identify a group of positions as essential for qualification at each grade.

b. Because of this, the pilot study team (with help from LTC Rick Garrity) has developed job categories which will be used in the requirements determination. Four categories of jobs were established:

- (1) Core jobs - heart or "guts" of the specialty jobs.
- (2) Related jobs - draw on specialty skills.
- (3) Special staff jobs - generally not directly related to specialty.
- (4) Army-wide support jobs - fair share of the cab for running the Army.

c. These categories are defined in the data requirements package.

11. Restrictions on late accession assignments.

a. Apparently there are informal restrictions now placed on assigning late accessions into certain specialty positions.

b. The policy on these restrictions should be made explicit.

12. Time for designating alternate specialties.

a. The policy of designating alternate specialties at the 8 year point was originally established because that was the point at which an officer became eligible for CGSC. CGSC eligibility is presently around the 10th year.

b. Should the alternate specialty designation policy now be revised since the driving reason for the 8th year point no longer applies?

13. Duty position analysis problems.

a. The proponent for SC 91 surfaced the problem that they do not possess the expertise to completely analyze all the SC 91 positions since many are signal, aviation, etc., maintenance positions. This may apply to other specialty proponents as well and will complicate their analysis effort.

b. The training proponents may have to coordinate with other agencies to receive assistance to complete the analysis in the short period available.

c. It may be worthwhile to circulate our POC list among all the proponents.

14. Late accession training requirements.

a. There are different training/education requirements in many instances for officers entering a specialty later than others. This late accession may be either through alternate specialty designation or changing primary specialties. Furthermore, the problem is especially acute for officers entering the specialty from a totally unrelated field.

b. The proponents are being asked to indicate the different training requirements/alternatives for these officers.

c. It is apparent that the training proponents need some form of diagnostic means of determining the specific training needs for these groups of officers.

15. Inadequate staffing at DA and MILPERCEN in some areas.

a. One man in DCSLOG is presently the proponent for 17 logistics specialties.

b. One man in MILPERCEN presently monitors 10 specialties.

c. Many of the DA and MILPERCEN action officers are not members of the specialty they monitor.

d. Training functions are presently centralized on the DA staff. PCSPER is proponent for all individual training but, for example, has no logistics personnel in the shop. DCSOPS is proponent for all unit training. DCSLOG has no logistics training responsibility beyond providing technical advice and assistance with no training tasking authority.

e. The above may hinder the RETO effort and has been brought to the attention of the OFMS Steering Committee, among others.

16. "Short Fuze" tasking problems.

a. The DA staff has difficulty in tasking outside agencies on a short notice due to lengthy coordination requirements.

b. RETO may have to do some of the tasking for the DA proponents to expedite the effort during the data collection phase.

c. If required, the DA proponent could draft messages in conjunction with the RETO POC for RETO approval and dispatch under RETO authority.

B. Procedural Changes/Issues Identified.

1. Clarification of terms and definitions was necessary during the pilot study. The following terms have been defined/discussed in the data collection packet instructions.

a. Qualification - technical competence/professional growth, etc.

b. Job categories - replaced essential duty positions.

c. Duty module concepts - additions, deletions.

d. Complementary/related specialties - good pairs/many of same skills.

e. Training types and alternatives - initial/SOJT, etc.

f. PERSACS/TAADS positions data are the "authorized" positions.

g. "As of date" on the duty position computer printout is 28 Oct 77. All other data should be compiled "as of" that same date.

h. Like duty positions are to be "clustered" on Form B.

i. On Form B, duty modules found to be "common" to each grade are to be listed on the first Form B for each grade.

j. A separate Form B is used to list appropriate duty modules required for late accessions at the appropriate grade (03 and/or 04).

k. On Form C, the duty positions providing comparable levels of experience may be clustered to provide a better career pattern profile.

l. To assist in the analysis of the requirements data, an ADP Form B has been developed.

2. The following actions were taken/incorporated into the data collection procedures to assist the proponents in their effort.

a. The PERSACS/TAADS position printout was redesigned to list positions by grade by SSI, with TOE and TDA positions on separate printouts. These were provided with the data requirements packet to all proponents.

b. The data packet includes (for the school proponents only) a portion of the ARI duty module study report. The "Catalogue of Army Officer Duty Modules", "Task List", and "Task Index" volumes are provided, along with an extract explaining the duty module concept and an explanation of how to construct new duty modules. The other proponents received a list of the current duty modules and the explanatory material.

c. RETO is interested in determining the best way of imparting the required skills and knowledge.

(1) In analyzing the positions, the proponents are asked to determine the best means of imparting the skills and knowledge, which may not necessarily be the way it is being done now.

(2) Because of this, the pilot study indicated that several alternatives (such as self study, SOJT, and unit schools) would not be selected frequently. However, these alternatives may be selected more frequently when the TRADOC task analysis is conducted.

(3) This approach remains valid, since RETO is interested in the best means of training officers in order to make comparisons with the present system and alternative systems.

d. Information copies of the final tasking message were provided to the TRADOC integrating centers to allow for their input as appropriate.

e. During the pilot study, developing a list of "common officering" duty modules was discussed. However, it was determined that this would best be an output of the analysis of all the specialties.

f. A request for cost data was not included in the data requirements. The pilot study group felt that a more detailed analysis of what RETO needs should be made prior to any formal tasking. TRADOC can provide cost data through FY76, and FY77 data is programed to be available in Dec 77.

g. The pilot study also determined that specific selection board results by specialty were not readily available, and since OPMS had not been fully implemented for the officers considered by these boards, the data would not provide any useful information. Therefore DCSPER/MILPERCEN are tasked to provide any written policies and instructions given to recent officer selection boards for RETO's use.

h. MILPERCEN is also tasked to provide the numbers of "command" positions available within each specialty by grade for RETO analysis.

C. Methodology/General Approach Lessons Learned.

1. With the changes and clarifications mentioned above and incorporated into the tasking documents, the pilot study generally confirmed the validity of the methodology and overall approach for determining the RETO requirements.

2. At the pilot reviews, with the exception of the SC 31 proponents, there was some initial resistance by the proponents. However, once the requirements were fully explained, the proponents responded more favorably and were more cooperative. This supports the need to fully acquaint the proponents with the RETO effort to impress them with how important this effort is to them as well as us, and to provide a detailed discussion of the data requirements.

3. The RETO requirements can be of great benefit to the proponents. The mechanics of going through the analysis will force them to look at some difficult questions and problems and will result in closer coordination among the various proponents for each specialty.

4. The addition of the ADP procedures should greatly assist the RETO effort in analyzing the collected requirements data. (There is hope for Christmas yet!) However, automating this function will, itself, require a great deal of effort.

5. Much of the success of the requirements determination effort will rest on the RETO action officer.

a. The RETO action officers must thoroughly understand the requirements, definitions, procedures, etc., to ensure that they are able to field questions and extract as much information as possible from the proponents' efforts.

b. RETO will have to monitor closely how the proponents complete the data requirements forms. During the pilot effort, understandably, many details were not completed by the proponents. Inaccurate or incomplete information will cause delays in data analysis if not provided accurately by 1 Dec.

c. The RETO action officer will have to gather data during his visits not only on the major formal proponent schooling, but on the smaller courses, shadow schools, unit/MACOM schools, etc., that provide training in the specialty as well.

d. The RETO action officer should provide to their POC's a copy of all specialty proponent POC's in case questions arise between specialties.

6. Time remaining to complete the RETO requirements data collection effort.

a. The short time frame available to the proponents when compared with their resource constraints may impact on the quality of the data.

b. However, the pilot study confirmed that meaningful data can be obtained. Some input will be better than others. The RETO action officer will have to monitor this closely and request additional data to fill any gaps or correct obvious errors.

c. During their follow-on complete job/task analysis, TRADOC may want to allow the proponents to clean-up and revise their duty module analysis without the time constraints under which RETO must work.

7. There are still several questions surfaced by the pilot study effort that RETO must address.

a. If some of the proponents just cannot meet the 1 Dec suspense, what is the absolute latest date the RETO can still meaningfully use the data?

b. There are certain reserve component unique positions that will not be analyzed through the requirements data determination effort. How can RETO obtain this data, if needed, and how does the present training system prepare the active duty officer to serve in these positions in wartime?

c. How will RETO actually make use of the data gathered? The specific analysis procedures and report formats must be devised and taught to the RETO members.

8. In the administrative support area, the pilot study group strongly recommends that RETO acquire a late generation word processing capability for more efficient/expeditious typing/editing. The administration section support to the pilot study has been outstanding especially when considering the lack of the top quality equipment.

30 October 1977

REQUIREMENTS DETERMINATION MILESTONES

21 Sep: 1st draft pilot study tasking document completed.

23 Sep: RETO study chairman briefed on initial pilot plan.

29 Sep: Final pilot plan tasking document approved.

30 Sep: Proponents tasked for pilot study requirements data.

6 Oct: Specialty 44/45 review meeting held.

11-14 Oct: Action Planning Conference held.

18 Oct: Specialty 12 review meeting held.

19 Oct: Specialty 31 review meeting - data received.

20 Oct: Specialty 91 review meeting held.

21 Oct: Specialty 44/45 pilot study data received.

25-30 Oct: Pilot study procedures analyzed, data reviewed, requirements determination data collection procedures developed, tasking document/packet drafted.

31 Oct: Brief RETO study chairman to obtain approval of tasking plan/documents.

31 Oct: Transmit tasking document.

31 Oct: Brief RETO personnel on data collection plan.

1 Nov: Mail data requirements packet (1 day delivery).

1 Nov-1 Dec: RETO PCC's assist proponents with data development.

7 Nov: Train RETO personnel on detailed data determination and collection procedures.

1 Dec: Receive final input from proponents.

15 Dec: Complete specialty requirements analysis, develop tentative career profile.

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 3

DATA COLLECTION

TO ANNEX K

DATA COLLECTION AND ANALYSIS

4 Inclosures

1. Data Requirements General Instructions
2. Form C, Career Profile Summary (Specific Instructions)
TADDS Documents are not included in this package
3. Form C, Career Profile Summary
Duty Module packet was provided to your Headquarters under
separate cover
4. Information Requirements

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NO

HQDA WASH DC/DACS-OTRG//

HQDA WASH DC/DAPE-MPO-C/DAPE-HRE/DAPE-HRO/DALO-

PLP/DAMO-RQD/DAMO-TCE-P/DAMO-SSA/DAMO-2D/

DAMO-SSN/DAMO-ODR/DAMO-SSC/DAEN-PEM/DAMI-TSI/

DAAG-PLP/DACA-ZN/SAPA-ZXP/DACS-DIR/DAMA-PPM-

M/DAMA-AOZ-A//

CDRTRADOC FT MONROE VA/ATTNG-OES//

CDRMILPERCEN ALEX VA/DAPC-OPP-S/DAPC-PS//

CDRDARCOM ALEX VA/DRCPT-MP//

INFO: CDR FORSCOM FT MCPHERSON GA/AFPR//

CDR ADMINCEN FT BENJ HARRISON IN/ATZI-TD//

CDRUSALC FT LEE VA/ATCL-T//

CDR DARCOM ALEX VA/DRCPP-S//

COMDT USACGSC FT LEAVENWORTH KS/ATSW-AD//

CDRUSALMC FT LEE VA/DRXMC-ACM/DRXMC-LS//

CDRUSAGC FT LEE VA/ATSM-TD//

DIR, TNG DEV INSTITUTE FT EUSTIS VA/ATTNG-TDI-

SFD//

CDR USACAC FT LEAVENWORTH KS/ATCL-TDA-AD//

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COMDT USASIG SCH FT GORDON GA/ATSN-TD/ATSN-TD-PH
CDRUSAMMCS REDSTONE ARSENAL AL/ATSK-TD-PD//
CDRUSATC FT EUSTIS VA/ATSF-TD//
CDRUSAAVNCS FT RUCKER AL/ATZQ-TD//
CDRUSAMPS/ING CEN FT MCCLELLAN AL/ATZN-TD//
CDRUSAOCS APG MD/ATSL-CLD/ATSL-TD-TA//
COMDT USAIMA FT BRAGG NC/USAIMS-SIS//
CDRUSAEC FT BELVOIR VA/ATSE-DT//
CDRUSAICS FT HUACHUCA AZ/ATSI-TD-CD//
COMDT DINFOS FT BENJ HARRISON IN//
CDRUSAIA FT BENJ HARRISON IN/ATSG-RM-C/ATSG-AS-CM
COMDUSAWC CARLISLE BKS PA/AWCA//
CDRUSAARMC FT KNOX KY/ATSB-DT//
CDRUSAFAC FT SILL OK/ATSF-CT//
CDRUSAADC FT BLISS TX/ATSA-TD//
CDRUSAIS FT BENNING GA/ATSH-EV//
CDRUSAISD FT DEVENS MA/ATSIE-TD-TS-LIT//
CDRTRADOC FT MONROE VA/ATTNG-TDD-OR//

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SUBJECT: TRAINING AND EDUCATION REQUIREMENTS FOR OFFICERS S: 1 DEC77

1. A DA STUDY GROUP HAS BEEN FORMED TO CONDUCT A REVIEW OF EDUCATION AND TRAINING FOR OFFICERS (RETO). IT HAS THE BROAD MISSION OF RECOMMENDING POLICIES AND PROGRAMS FOR INCLUSION IN THE FY 80-84 POM. AS A FIRST STEP IN THE STUDY EFFORT, RETO MUST DETERMINE THE TRAINING AND EDUCATION REQUIREMENTS FOR EACH OFFICER CAREER SPECIALTY TO MEET THE MISSION NEEDS OF THE ARMY AND THE PROFESSIONAL DEVELOPMENT NEEDS OF THE INDIVIDUAL. TO SUPPORT THIS EFFORT, SPECIFIC DETAILED DATA AND INFORMATION WILL BE REQUIRED FROM THE VARIOUS PROPONENTS FOR EACH SPECIALTY.

2. THE REMAINDER OF THIS MESSAGE IS IN FOUR PARTS.

A. PART I FOR DA PROPONENTS: {1} YOU HAVE OVERALL RESPONSIBILITY FOR THIS ACTION, I.E., GATHERING DATA, DETERMINING QUANTITATIVE AND QUALITATIVE TRAINING AND EDUCATION REQUIREMENTS, AND THE RESOLUTION OF ISSUES AMONG PROPONENTS. {2} A PILOT TEST OF THE METHODOLOGY TO BE USED IN THIS ACTION HAS SHOWN THAT AN EARLY COORDINATION/WORKING MEETING OF PROPONENTS IS ABSOLUTELY ESSENTIAL. SUGGEST YOU COORDINATE WITH THE MILPERCEN AND TRADOC/DARCOM PROPONENTS AND THE APPROPRIATE RETO ACTION OFFICER (SEE INCL 1) TO ARRANGE SUCH A MEET-

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ING ASAP. (3) IN COORDINATION WITH THE OTHER PROPONENTS, OBTAIN AND PROVIDE ANSWERS TO THE FOLLOWING QUESTIONS:

(A) WHAT ARE THE PROBLEMS ASSOCIATED WITH THE MANAGEMENT OF EACH SPECIALTY FROM THE DA, MILPERCEN, AND TRADOC/DARCOM PROPONENTS' STANDPOINT SUCH AS ASSIGNMENT DIFFICULTIES, GRADE OVERSTRENGTH/ UNDERSTRENGTH, LIMITED REQUIREMENTS AT THE FIELD GRADE LEVELS, ETC?

(B) WHAT ARE THE PROBLEMS ASSOCIATED WITH CODING THE SPECIALTY DUTY POSITION REQUIREMENTS?

(C) WHAT OTHER SPECIALTIES COMPLEMENT THIS SPECIALTY? HOW AND WHY? WHAT SPECIALTIES ARE COMPLEMENTED BY THIS SPECIALTY? HOW AND WHY? (SEE INCL 1 FOR DEFINITION OF "COMPLEMENTARY").

(D) IS THIS SPECIALTY CLOSELY RELATED TO OTHER SPECIALTIES? IF YES, WHICH SPECIALTIES? SHOULD THE SPECIALTY BE CONSIDERED FOR ELIMINATION OR COMBINATION WITH OTHERS? (SEE INCL 1 FOR DEFINITION OF "RELATED").

(E) ARE THERE PARTICULAR PROBLEMS WITH THE SPECIALTY WITH RESPECT TO SSI/ASI UTILIZATION, IDENTIFICATION, TRAINING, ETC?

(F) IS THERE A NEED FOR JOINT/UNIFIED/COMBINED LEVEL TRAINING IN THE SPECIALTY? AT WHAT GRADE LEVEL AND IN WHAT NUMBERS?

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B. PART II FOR MILPERCEN:

{1} PROVIDE ALL NECESSARY AUTOMATIC DATA PROCESSING (ADP) SUPPORT TO RETO TO PROCESS AND ANALYZE THE DATA GENERATED BY THIS ACTION.

{2} IN COORDINATION WITH THE PROPONENT TRAINING SCHOOL/AGENCY, PROVIDE THE SPECIFIED PORTION OF THE DATA REQUESTED IN INCLOSURE 1.

{3} IN COORDINATION WITH DA PROPONENT, PROVIDE THE FOLLOWING INFORMATION/DATA:

{A} THE CURRENT UTILIZATION RATES IN EACH SPECIALTY FOR EACH GRADE.

{B} THE CURRENT OFFICER ASSETS, BY GRADE, WHO HAVE THE SPECIALTY AS THEIR PRIMARY SPECIALTY. THE CURRENT OFFICER ASSETS, BY GRADE, WHO HAVE THE SPECIALTY AS THEIR ALTERNATE.

{C} THE ALTERNATE SPECIALTIES (LISTED BY SPECIALTY CODE/TITLE ,NUMBER DESIGNATED, AND PERCENTAGE DESIGNATED) FOR THE CURRENT OFFICER ASSETS WHO HAVE THE SPECIALTY DESIGNATED AS THEIR PRIMARY.

{D} THE PRIMARY SPECIALTIES (LISTED AS ABOVE) FOR THE CURRENT OFFICER ASSETS WHO HAVE THE SPECIALTY DESIGNATED AS THEIR ALTERNATE.

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{E} COPIES OF THE INSTRUCTIONS TO THE LAST TWO DA PROMOTION BOARDS FOR EACH GRADE, THE MOST RECENT LTC/COL COMMAND SELECTION BOARDS, AND THE MOST RECENT SELECTION BOARDS FOR CGSC AND SENIOR SERVICE COLLEGES. INCLUDE ANY DA POLICY OR ANY GUIDANCE GIVEN THESE BOARDS, NOT INCLUDED IN THE FORMAL INSTRUCTIONS, GOVERNING THE ALLOCATION OF SELECTIONS AMONG THE VARIOUS CAREER SPECIALTIES.

{F} THE TOTAL NUMBER OF COMMAND POSITIONS IN THE SPECIALTY FOR EACH APPROPRIATE GRADE.

C. PART III FOR TRADOC, DARCOM, OR DA TRAINING PROPONENT:

{1} IN COORDINATION WITH MILPERCEN AND DA PROPONENT, PROVIDE THE DATA REQUESTED IN INCLOSURE 1.

{2} THE DATA REQUESTED IN INCL 1 PERTAINS TO COMMISSIONED OFFICERS. HOWEVER, WHEN DETERMINING OFFICER REQUIREMENTS, DUE CONSIDERATION SHOULD BE GIVEN TO THE AVAILABILITY OF WARRANT OFFICER SKILLS AND POSITIONS TO PRECLUDE DUPLICATION OF TRAINING.

{3} A PORTION OF THE DATA IN INCL 1 MUST BE TRANSCRIBED FROM THE WORKSHEETS PROVIDED TO AN AUTOMATIC DATA PROCESSING FORM. THE NECESSARY INSTRUCTIONS AND FORMS FOR ACCOMPLISHING THIS WILL BE FURNISHED SEPARATELY.

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{4} PROVIDE INFORMATION ON ALL COURSES OF INSTRUCTION {RESIDENT AND NON-RESIDENT} CURRENTLY AVAILABLE TO SUPPORT THE SPECIALTY AT EACH OFFICER GRADE LEVEL {EXCLUDING CGSC/SSC LEVEL INSTRUCTION}. PROVIDE SIMILAR DATA FOR ALL WARRANT OFFICER COURSES. AS A MINIMUM, THE FOLLOWING DATA/INFORMATION IS REQUIRED:

- {A} COURSE TITLE
- {B} PREREQUISITES FOR ATTENDANCE
- {C} STUDENT SELECTION PROCEDURES {HOW,WHO,WHEN}
- {D} COURSE LENGTH {PEACETIME/MOBILIZATION}
- {E} FREQUENCY {NUMBER OF COURSES NORMALLY GIVEN PER YEAR}
- {F} CLASS SIZE {NORMAL AND MAXIMUM CAPACITY}
- {G} ENROLLMENT DATA FOR FY'S 74,75,76,77,78,79, AND OUT YEARS IF AVAILABLE, TO INCLUDE INPUT /ATTRITION/OUTPUT.
- {H} SKILLS IMPARTED-QUALIFICATIONS/SPECIALTIES/MOS'S AWARDED
- {I} MAJOR PROGRAMMED CHANGES
- {J} ONE COPY OF CURRENT COI

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NO

D. PART IV FOR ALL:

{1} SUSPENSE DATE FOR COMPLETION OF THIS ACTION AND SUBMISSION TO RETO IS 1 DECEMBER 1977.

{2} FOR UNIFORMITY, ALL DATA REQUIREMENTS SHOULD BE COMPILED "AS OF" 28 OCTOBER 1977.

{3} THE INFORMATION REQUESTED IN INCLOSURE 4 IS TO BE PROVIDED BY EACH PROPONENT SEPARATELY--A COORDINATED SPECIALTY "POSITION" IS NOT DESIRED. FURTHERMORE, IT IS NOT INTENDED THAT A STAFF STUDY BE DONE ON EACH QUESTION IN INCL 4: BUT THE ANSWERS SHOULD REPRESENT THE BEST CONSIDERED JUDGEMENT OF EACH PROPONENT.

{4} THERE ARE FOUR INCLOSURES TO THIS MESSAGE:

INCL 1- DATA REQUIREMENTS

INCL 2- MAPS DOCUMENTS

INCL 3- ART DUTY MODULES

INCL 4- INFORMATION REQUIREMENTS

THESE INCLOSURES WILL BE HAND-CARRIED OR DELIVERED BY EXPRESS MAIL OR ARMY POUCH WITHIN THE NEXT 24 TO 36 HOURS. NOT EVERY ADDRESSEE WILL RECEIVE ALL FOUR INCLOSURES.

3. ON RECEIPT OF THE INCLOSURES TO THIS MESSAGE, REQUEST EACH

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NO

PROPONENT PROVIDE NAME OF POC TO THE APPROPRIATE RETO ACTION OFFICER
LISTED BY SPECIALTY IN INCL 1. IF INCLOSURES ARE NOT RECEIVED BY
COB 2 NOV CONTACT RETO AUTOVON 223-0043/0044.

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K-3-10

DATA REQUIREMENTS GENERAL INSTRUCTIONS

1. Purpose. The objectives of the Review of Education and Training for Officers (RETO) are to:

- a. Determine officer training and education requirements based on Army missions and individual career development needs.
- b. Develop training and education policies and programs which combine self-development, unit training and experience, and institutional training and education in a phased schedule from precommissioning through career completion.
- c. Develop a plan for implementing the recommended programs within a constrained resource environment.
- d. Coordinate the integration of approved programs into the FY 80-84 program.

2. Requirements. This portion of the data requirements package provides general guidance on the data required, a sequence of collection and analysis of that data, and definitions of key terms. More specific instructions concerning data requirements are included with each of the data collection forms. Data required includes numbers of officer requirements in each specialty, duty assignments available within the specialty, skills and knowledge required to perform the duties of the specialty, the training and education required to impart these skills to the officer, and what constitutes qualification in the specialty. Document the specialty as it is today. Modifications of the data will be made if specialties are changed during the RETO analysis. From a detailed analysis of the data provided, a specialty career profile will be developed. The specialty career profile will be compared to existing training and educational programs, officer aspirations, and resource limitation alternatives. The end product will be meaningful training and education programs and policies that meet Army requirements and individual needs.

3. Qualification. Before a detailed analysis of the specialty training and education requirements can be conducted, the analyst must understand the definition of qualification - the end result of an officer's training, education and experience.

a. Officer qualification is generally considered to be a function of the officer's training/education, experience, and manner of performance. Manner of performance, however, is determined through the officer evaluation system, and it must be left largely to selection boards to judge the "whole" officer in determining who is "best" qualified. In determining specialty qualification requirements, an acceptable manner of performance must be assumed.

Inclosure 1

K-3-I-1

b. To a certain extent, qualification is dependent upon answering the question "Qualified for what?" Qualified for promotion? school? assignment? etc. It is recognized that qualification is then somewhat event oriented. However, a goal of this study is to determine the overall qualification in each specialty for each grade level so that professional development objectives can be formulated. These qualification objectives will then provide to the officer and the personnel managers the necessary tools to maximize the officer's preparation for current and future service.

c. Therefore, an officer is qualified at a particular grade when:

1) He possesses the combination of skills, knowledge, and experience necessary to be technically competent to perform in the most responsible and demanding jobs in the specialty at that grade and,

2) He is prepared for continuing personal and professional growth.

4. Quantitative Requirement. Form A (OPMS REQUIREMENTS DATA) provides a format for recording total number of officers required in each specialty by grade and by Specialty Skill Identifier (SSI). This data is required for FY 78 and FY 90. Requirements for FY 78 are those requirements as of 28 October 1977. Form A will be completed by the MILPERCEN proponent.

5. Training/Education Requirements. Form B Work Sheet (Training/Education Requirements) provides a format for analyzing duty positions to determine skills and knowledge required, and identifying the best method to impart those skills to the officer.

a. Using the TAADS printout (Incl 3) consider all of the duty positions in the specialty and place each of them into one of the following job categories:

1) 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 his 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.

2) 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.

3) 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, protocol officer, Race Relations Officer, special study groups and projects, etc.

4) 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. These are the jobs at each grade that enable 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 RCTC PMS, some training center jobs, some installation staff jobs, recruiting duty, etc.

b. Proponents must complete a Form B worksheet for each of the core and related duty positions. If, in your judgement, some selected special staff duty positions and Army-wide support positions are particularly useful or important to officer qualification in the specialty, they to can be analyzed on Form B worksheets. All special staff duty positions and Army-wide support positions not analyzed on Form B worksheets will be listed separately.

c. The skills and knowledge required to perform in each analyzed duty position will be expressed in terms of Officer Duty Modules. Inclosure 3 (ARI Duty Modules) is provided for your information and assistance. One set of the duty module catalog, task list, and task index are provided to the training and education proponents. The duty modules serve only as a shorthand indicator of broad skills and knowledge required to perform in the duty position. Current duty modules do not adequately address all specialties or duties; therefore, proponents may be required to develop new duty modules so as to better depict the skills and knowledge required for the duty position. Instructions for developing new duty modules are included in inclosure 3.

d. Once the duty position skills have been defined, the proponents must then indicate how the skills and knowledge of each separate duty module can best be imparted to the officer. There is no one definition of "best" in this analysis. Proponents should consider: if only one method were available, which would be used?; which alternative has the most advantages and least disadvantages?; what is the first choice if

the alternatives were listed in priority? For each duty module selected in the duty position analysis, a determination must be made as to what type of training/education is required and which training/education alternative can best be used to impart the broad skills and knowledge required by that duty module. These types and alternatives are listed and defined below.

1) TRAINING/EDUCATION (T/E) TYPES.

<u>T/E TYPE CODE</u>	<u>T/E TYPE TITLE</u>
1	Initial
2	Sustainment
3	Additional

2) TRAINING/EDUCATION (T/E) ALTERNATIVES

<u>T/E ALTERNATIVE CODE</u>	<u>T/E ALTERNATIVE TITLE</u>
P	Precommission Training
M	Resident Military Training
C	Civilian Education
S	Self Study
O	Supervised on-the-job Training(SOJT)
E	On-the-job experience (OJE)
X	Extension Training
U	Unit/Installation Schools
T	Training with Industry

3) DEFINITION OF TRAINING/EDUCATION TYPES.

a). Initial (Code 1): Initial training/education is the first training the officer receives in the skills and knowledge of the duty module. The object is to train the officer to an acceptable level of proficiency in the duty.

b). Sustainment (Code 2): Sustainment training/education is the type training the officer receives in order to maintain the degree of proficiency attained during previous training. This includes refresher training.

c). Additional (Code 3): Additional training/education is the training required by the officer to perform a duty at a more complex level and/or to a greater degree of proficiency than that attained during previous training.

4) DEFINITION OF TRAINING/EDUCATION ALTERNATIVES.

a). Precommission Training (Code P): Training/education received prior to commissioning.

b). Resident Military Training (Code M): Training/education received through resident military schooling in either a PCS or TDY status.

c). Civilian Education (Code C): Any training/education received through a civilian school or educational institution. Attainment of a degree need not be the goal of such training.

d). Self Study (Code S): Any unstructured, individual study program. This may include studying doctrinal and/or informational publications, service journals, newsletters, etc., to remain current in a specialty. It may also include informal study of service school training material.

e). Supervised On-the-job Training (SOJT) (Code O): SOJT is training received while performing the duty on-the-job under the direction of the officer's trainer/supervisor as a part of a structured training program.

f). On-the-job Experience (OJE) (Code E): In the OJE alternative the officer acquires through experience the skills and knowledge needed to perform the duty by actually performing on-the-job.

g). Extension Training (Code X): Extension training includes any formal, non-resident, individual training program. This includes enrollment in any correspondence courses.

h). Unit/Installation Schools (Code U): Unit/Installation schools are training programs/courses formally established by commanders at all levels to supplement other formal schooling programs. This type of training may include various division or installation schools.

i). Training with Industry (Code T): Training with industry imparts skills, knowledge, experience and different perspectives of management and operational techniques needed to perform a particular, appropriate duty by having the officer actually work in selected civilian industrial jobs. This training alternative might also include periods of internship with appropriate civilian agencies.

e. Other general requirements of Form B, Work Sheet.

1) Total number of duty positions by SSI. This can be determined from the TAADS document.

2) Based on total number of positions, officer assets, time in grade, and stabilization policies, MILPERCEN must compute the percent of officers that can be expected to serve in the analyzed duty position.

3) Proponents must also address the skills and training required for the officer who enters the specialty as a late accession.

4) Identify special requirements, assignment restrictions, and alternate specialty requirements.

5) Provide additional information deemed necessary to insure that the RETO analyst has a complete picture of the specialty, duty position, skills and training requirements.

f. Once the entire specialty analysis is completed the data on the Form B Work Sheets must be transferred by the proponents to Form B (Training/Education Requirements) which is an ADP keypunch sheet. This form with its detailed instructions for completion will be forwarded under separate cover.

6. Career Profile. Form C (Career Profile Summary) provides a format for listing all analyzed duty positions and required duty modules, at all grades. It is not expected that this small sheet be used to depict the entire specialty career profile. Rather, it serves as a format only and the actual spreadsheet profile may have to be made much larger. All analyzed duty positions and all required duty modules must be included on one piece of paper. The best method of training and education is also depicted for each duty module. An analysis of this spreadsheet will indicate many important details, for example: where military schooling is required, where civilian education is required, what duty modules are common for all grades, and what duty modules are unique at what grades.

7. Specialty Qualification.

a. After completing the analysis of duty positions, skills and knowledge required, and career profile, the proponents, on a separate sheet, must indicate how the officer achieves qualification at each grade level. That is, they must determine the qualification objective for each grade and lay out the road map for getting there. One way to approach this requirement would be to outline a combination of training/education opportunities and categories of duty assignments at each grade level to provide the skills, knowledge, and experiences necessary for qualification. However, no set format is prescribed; it will be up to the proponents to consider the unique requirements of each specialty in deciding the specific means by which the officer achieves qualification.

b. A final qualification requirement that must be addressed by the proponents is to answer the question: How do you qualify an officer and keep him qualified at each grade level when he alternates between primary and alternate specialty assignments? An officer does not work continuously in any given specialty. He may be given a variety of specialty immaterial assignments and, under OPMS, must attain proficiency in both his primary and alternate specialties. Since long periods of time may elapse between assignments in a given specialty, gaining and maintaining technical competence at each grade level will be extremely challenging. The requirement here, then, is for proponents to explain their solution to the problem of specialty qualification in this environment.

8. Information requirements. At inclosure 4 is a list of information questions that must be addressed by the DA and TRADOC/DARCOM proponents and the MILPERCEN specialty monitor. A large-scale study effort is not intended to determine the answers to these questions. However, the considered, collective judgement of each proponent agency is desired. A joint DA, TRADOC/DARCOM, MILPERCEN answer is not required. Different opinions will be appreciated.

9. Other Definitions. The basic tasking message included several data requirement questions. Two terms need to be further defined:

a. 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.

b. 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.

10. Submission of Data. Upon completion of the analysis the following items will be submitted to RETO NLT 1 December 1977:

- a. Answers to data requirements in the tasking message.
- b. Completed Form A
- c. Form B Work Sheets
- d. Completed Form B's (ADP keypunch sheets). These forms need not be typed.
- e. Completed Form C. Spreadsheet of career profile.
- f. List of additional duty modules, eliminated duty modules, and revised duty modules.
- g. Discussion of specialty qualification.
- h. Answer to informational questions at inclosure 4.

11. RETO Point of Contact. Listed below are the RETO points of contact for the specialties. They are available to answer questions and provide assistance as required. They should be involved in meetings of the proponents to provide guidance, answer questions, and assist in the analysis of the specialty.

- a. Commercial telephone prefix: (202) 693-.
- b. Autovon prefix: 223-.
- c. Mailing address: Headquarters, Department of the Army
ATTN: DACS-OTRG
Washington, D.C. 20310

<u>SPECIALTY</u>	<u>RETO POC</u>	<u>TELEPHONE</u>
11	COL PORTER	1636
12	LTC GOOD	0049
13	LTC PARTLOW	1636
14	COL DIRMEYER	1151
15	LTC MARSHALL	1546
21	MAJ CARTER	1636
25	LTC HEWLETT	1546
26	"	"
27	"	"
28	"	"
31	LTC MARSHALL	1546
35	MAJ HOLBROOK	0088
36	"	"
37	"	"
41	COL WILLIAMS	0088
42	"	"
43	LTC GOOD	0049
44	COL WILLIAMS	0088
45	LTC PARTLOW	1636
46	COL NYE	1151
47	LTC GOOD	0049
48	MAJ CARTER	1636
49	"	"
51	LTC STOFFT	0044
52	"	"
53	COL WILLIAMS	0088
54	LTC STOFFT	0044
70	MAJ CRACKEL	0088
71	LTC FOWLER	1616
72	MAJ CRACKEL	0088
73	LTC MANDERVILLE	0049
74	"	"
75	"	"
76	"	"
77	"	"

<u>SPECIALTY</u>	<u>RETO POC</u>	<u>TELEPHONE</u>
81	LTC WEBSTER	1616
82	"	"
83	"	"
86	LTC FOWLER	1616
87	"	"
88	"	"
91	LTC MANDERVILLE	0049
92	LTC WEBSTER	1616
93	"	"
95	LTC FOWLER	1616
97	MAJ CRACKEL	0088

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FORM A

OPMS REQUIREMENTS DATA

Specific Instructions

1. This form will be completed by MILPERCEN.
2. Item 1. Enter specialty title.
3. Item 2. Enter specialty code.
4. Item 3. In the SSI TITLE column list the Specialty Skill Identifier (SSI) titles. In the CODE column list the SSI code directly across from the SSI Title. Double space between SSI titles, and insure that requirements in items 4 and 5 line up with title and code.
5. Item 4. In the appropriate rank columns enter the total requirements from PERSACS as of 28 October 1977.
6. Item 5. Project by the best means possible the total requirements in FY 90. This figure can be updated at a later date when on-going force structure studies are completed.
7. Item 6. List the assumptions used to project the FY 90 requirements in item 5. This information can be updated at a later date.

FORM A

OPMS REQUIREMENTS DATA

1 SPECIALTY TITLE:

2 SPECIALTY CODE:

3 SPECIALTY SKILL IDENTIFIER(SSII)

4 PERSACS REQUIREMENTS-FY 78

5 PERSACS REQUIREMENTS-FY 90

SSI TITLE	CODE	PERSACS REQUIREMENTS-FY 78					PERSACS REQUIREMENTS-FY 90					
		LT	CPT	MAJ	LTC	COL	TOTAL	LT	CPT	MAJ	LTC	COL
TOTAL												

6 ASSUMPTIONS USED TO DETERMINE FY-90 PERSACS REQUIREMENTS:

K-3-1-11

FORM B WORK SHEET

TRAINING/EDUCATION REQUIREMENTS

Specific Instructions

1. Purpose. This worksheet is a format for analyzing core and related jobs and selected special staff and Army-wide support jobs. A separate Form B work sheet will be filled out for each job analyzed. Data required to complete the form include: total position requirements by SSI, the percent of officers at the given grade level that can expect to serve in the analyzed duty position, the skills and knowledge required to perform in the duty position, the best way to impart the skills and knowledge to the officer, and additional notes to clarify the requirements of the duty position. The other uses of the work sheet are explained below.
2. Job Categories. Using the TAADS document categorize all duty positions as CORE JOBS, RELATED JOBS, SPECIAL STAFF JOBS, or ARMY-WIDE SUPPORT JOBS. Definitions are contained in paragraph 5 of the Data Requirements General Instructions. All core jobs and all related jobs will be analyzed using Form B work sheets. Those duty positions categorized as special staff jobs or Army-wide support jobs that the proponent feels are especially useful and important to officer qualification in the specialty can be analyzed on Form B work sheets as desired. See paragraph 3n for instructions on non-analyzed positions.
3. Instructions for all Specialties. The following instructions apply to all basic entry specialties and advanced entry specialties. Additional instructions concerning advanced entry specialties and late accessions are found in paragraph 4 and 5 below.
 - a. Clustering of Duty Positions. If it is determined that various similar duty positions have essentially the same duty modules and recommended training methods, with only minor variations, the duty positions can be clustered on one work sheet and analyzed together. Different duty position titles, TOE and TDA positions, and different SSI's with the same duty position titles can be clustered IF the skills/knowledge required by the job and the training methods for imparting those skills are virtually the same for both positions. (e.g. Platoon Leader, Armored Cavalry Platoon, and Platoon Leader, Tank Platoon might be clustered). However, two positions might have the same general title on the TAADS document, yet be entirely dissimilar jobs, and should not be clustered. Clustering will only be done within job categories (e.g. Core Jobs, Related Jobs, Special Staff Jobs, Army-Wide Support Jobs). One duty position title will be entered in item 2, and the other duty position titles of the cluster will be listed in item 10. Items 4 and 5 will include total requirements of the clustered duty positions.

- b. Item 1. Enter specialty title and code.
- c. Item 2. Enter in parentheses the job category code letter. (G-Core Job, R-Related Job, S-Special Staff Job, A-Army-wide Support Job). Enter duty position title. (e.g. (C) Platoon Leader). Some duty position titles may not, in themselves, be self-explanatory. (e.g. CHIEF). In this event, combine the duty position title and the TAADS paragraph title. (e.g. (C) CHIEF, MAIT TEAM).
- d. Item 3. Enter authorized grade of duty position being analyzed. (e.g. 02, 05, etc). No TAADS duty positions are coded for an 01, therefore for the Lieutenant, use the grade 02.
- e. Item 4. Enter the total requirements for this duty position (or positions clustered on this work sheet) from the TAADS document. This figure must equal the total of requirements in item 6.
- f. Item 5. Fill in the appropriate SSI's for the specialty: (e.g. SSI: A SSI:B SSI:X) that apply to this duty position or clustered duty positions.
- g. Item 6. Indicate the total requirements for this duty position by SSI, by TOE and TDA, in the appropriate columns.
- h. Item 7. When the work sheet is completed, MILPERCEN must compute the percent of officers in this grade that can be expected to serve in this duty position. This percent will be computed for all SSI's, by TOE and TDA.
- i. Item 8. List the duty modules that indicate the skills and knowledge required to perform in this duty position. See paragraph 5, Data Requirements General Instructions and Inclosure 3. If additional duty modules are required, see Inclosure 3 for a discussion of how this is accomplished. See paragraph 3j below for a discussion of common duty modules. In selecting duty modules, keep in mind that it is not necessary for every element of the module to apply to the job at the given grade in order to use it. However, if the job requires only a small part of the skills and knowledge of the duty module, that module should probably not be selected unless it is an extremely important element of the job or essential to qualification at that grade.
- j. Common Duty Modules. The following procedure will be used to avoid repetitious listing of common duty modules. On the first Form B work sheet for each grade list the duty modules that are common to all officers at that grade. These will include modules that are common to all Army officers and those specialty specific modules common to that grade. Complete item 1; use the term "COMMON MODULES" in item 2; complete item 3; leave items 4, 5, 6 and 7 blank; list the common duty modules in item 8; indicate training method to impart skills in item 9 (Paragraph 3k); and use item 10 for other information (Paragraph 31). The sheet number in item 11 will be 000. On the remaining Form B work sheets for that grade indicate on the first line of item 8: "COMMON MODULES." Subsequent lines of item 8 will then be used to indicate unique duty modules for that duty position.

k. Item 9. In the appropriate columns, indicate for each SSI/TOE and each SSI/TDA the best training/education method to impart the skills and knowledge required to perform in the duty position (e.g. 1M, 2C, etc.). See paragraph 5, Data Requirements General Instructions for the definitions of training/education types and training/education alternatives. The types and alternatives are included below for reference. On the "COMMON MODULES" work sheet for each grade, all common duty modules listed will be analyzed for the best training method. On each subsequent duty position work sheet for that grade, only the training methods for the duty modules unique to that position need to be included in the appropriate columns.

<u>Training/Education Types</u>	<u>Training/Education Alternatives</u>
1 Initial	P Pre-commission Training
2 Sustainment	M Resident Military Training
3 Additional	C Civilian Education
	S Self study
	O Supervised on-the-job Training (SOJT)
	E On-the-job Experience (OJE)
	X Extension Training
	U Unit/Installation Schools
	T Training with Industry

1. Item 10. In this item provide whatever additional information concerning required skills and recommended training methods is needed to clarify the duty position analysis. As a minimum the following information will be included:

(1) When civilian education is indicated as the recommended training method, include in this section a note concerning required discipline, required course, required degree if appropriate. Also indicate, if possible, how much training is required (e.g. "MS, Accounting, 30 credit hours," etc).

(2) Special duty position coding requirements. If some or all of the requirements indicated in item 5 require a specific alternate specialty it must be noted. (e.g. "Of the 50 SSI/TDA positions, 40 require an alternate specialty of 45-Comptroller."). It is very important that these requirements be accounted for.

(3) Indicate the specific number of positions requiring the recommended training/education, if different from the total requirements in item 5.

(4) List other duty position titles clustered on this work sheet.

(5) If the position is improperly coded, indicate how the position could be better coded and provide rationale.

(6) Identify the skills/knowledge that are highly perishable. What is required to compensate for the loss of knowledge? Experience, additional assignments, refresher training, or other?

m. Item 11. Number sequentially the duty positions analyzed from the first duty position at grade 02 to the last position at grade 06. If more than one work sheet is required to analyze a duty position, all work sheets for that duty position will be numbered the same. Those work sheets indicating "COMMON MODULES" in item 2 at each grade level will be numbered 000. Such numbering will assist in the transfer of data to Form B-ADP key-punch sheet. See paragraph 5 below for additional numbering instructions for late accessions.

n. Non-analyzed duty positions. Those duty positions categorized as special staff jobs or Army-wide support jobs and not analyzed will be listed together on a separate Form B work sheet for each grade. Complete item 1; use the term "Non-Analyzed Positions" in item 2; complete item 3; leave items 4, 6 and 7 blank; enter all applicable SSI's in item 5; list the non-analyzed duty positions in item 8, including the job category code (S or A) of each position in parentheses ahead of the title; in item 9, indicate in the appropriate column (TDE or TDA) for the applicable SSI the total number of required positions from the TAADS document for each position title listed. To facilitate transfer of data to Form B-ADP keypunch sheet, each duty position in the specialty must have a sheet number assigned to it even if it is not analyzed. Therefore, number the position titles listed in item 8 by using the same continuing sequence of sheet numbers used to identify the Form B work sheets of the analyzed positions. Each non-analyzed duty position title will be given a separate sheet number, just as if it had been analyzed on a Form B work sheet. Place these numbers to the left of the position titles in item 8. In item 11, place the number 998.

4. Special Instructions - Advanced Entry Specialties. In addition to the instructions above, the following instructions apply to the analysis of the advanced entry specialties.

a. The analysis of the duty positions will commence at the grade level at which the officer normally enters the specialty and carry on through the grade of 0-6. At the initial entry grade level, assume a worst case situation for the previous skills/knowledge and experience attained in the other specialty, i.e., assume the officer's previous experience was in a totally unrelated field. This assumption will place the largest possible training and education requirements on the advanced entry training proponent. In actual practice, consideration might be given to reducing the training requirements somewhat for an officer entering the specialty from a related field.

b. Proponents may, if appropriate, analyze any of the duty positions coded on the TAADS document at grades below the normal initial entry grade. In any case, such positions should be handled like any other: place them in job categories; choose those to be analyzed; construct a common modules list; analyze the selected positions; and separately list the positions that were not analyzed (see paragraph 3n above). In addition, footnote the duty positions that you believe to be improperly coded and give rationale and recommended proper coding in item 10.

5. Special Instructions - Late Accessions. In addition to the instructions above, the following instructions concerning the late accession officer apply to both basic and advanced entry specialties. Late accessions, because of branch transfer or normal entry into an alternate specialty, create significant training/education requirements to provide the officer with the required skills and knowledge to perform in the specialty and achieve qualification. As in the advanced entry specialties, the analysis of the late accession must also be based on a worst case assumption concerning his previous experience so as to determine the most severe training/education requirements. For the officer who enters the specialty from a related specialty, many of the same skills/knowledge and experience have already been acquired; therefore, the training/education requirements might be reduced. Some diagnostic mechanism may be needed by the various training proponents to reduce duplication of training for the late accession.

a. Basic Entry Specialties. Conduct an analysis of the late accession at the grade of 0-3. Conduct a separate analysis of the late accession at the grade of 0-4.

b. Advanced Entry Specialties. Conduct an analysis of the late accession at the next grade above the initial entry grade. In most cases, the analysis will be conducted at the grade of 0-4.

c. Special instructions for the use of the Form B work sheet to conduct the analysis of the late accession:

(1) Item 1. Enter specialty title and code.

(2) Item 2. Enter "LATE ACCESSION".

(3) Item 3. Enter appropriate grade.

(4) Item 4. Leave blank.

(5) Item 5. Enter SSI codes in appropriate spaces.

(6) Items 6 and 7. Leave blank.

(7) Item 8. Examine all Form B work sheets completed for this grade in the basic analysis. Assume the officer has virtually no knowledge or experience in the specialty. Extract the duty modules which are particularly pertinent and unique to the specialty and which you consider especially

important to train the late accession officer on. List these in item 8 of the Late Accession Form B work sheet.

(8) Item 9. In the TOE columns of each SSI indicate the best method of imparting the skills and knowledge of the specialty at this grade for each duty module. These training methods may vary considerably from those recommended for the normal accession officer.

(9) Item 10. Include any explanatory notes. List in this item all duty positions at this grade which the late accession officer would not, or should not, be assigned to.

(10) Item 11. Number the "LATE ACCESSION" Form B work sheets with Sheet #999. This will assist in the transfer of information to Form B - ADP keypunch sheet.

6. Summary.

a. At the completion of this phase of the analysis, the proponent will have filled out a number of different types of Form B work sheets. The following is a summation of the requirements. For each grade there should be:

- A "Common Modules" list (paragraph 3j).
- A completed work sheet for every core and related job and one for each selected special staff job and Army-wide support job (paragraph 2, 3, and 4).
- A "Non-Analyzed Positions" list (paragraph 3n).
- A "Late Accession" work sheet for the grades of 0-3 and 0-4 (basic entry specialties) or the grade of 0-4 (normally)(advanced entry specialties) (paragraph 5).

b. The next step will be to transfer this data to Form C for further analysis and to Form B's for use in automatic data processing.

FORM B WORK SHEET		TRAINING/EDUCATION REQUIREMENTS									
1 SPECIALTY TITLE: SPECIALTY CODE:		2 DUTY POSITION TITLE:					3 GRADE:				
4 TOTAL REQUIREMENTS (FY78):	5 REQUIREMENTS BY SSI										
	SSI:		SSI:		SSI:		SSI:		SSI:		
		TOE	TDA	TOE	TDA	TOE	TDA	TOE	TDA	TOE	TDA
6 NUMBER OF POSITIONS (FY78)											
7 % EXPECTED TO SERVE IN DUTY POSITION											
8 DUTY MODULES		9 RECOMMENDED TRAINING METHODS									
10 SPECIAL REQUIREMENTS:											
		11 SHEET #									

FORM B (KEYPUNCH SHEET)

TRAINING / EDUCATION REQUIREMENTS

Specific Instructions

1. GENERAL. The Form B is designed to facilitate keypunching the data from the Form B Worksheets so that automatic data processing (ADP) can be used in handling and analyzing the information generated by 46 officer career specialties. All data from all Form B Worksheets will be transferred to Form B's and both sets of completed forms will be submitted to RETO.

2. Each field of column(s) on Form B has been numbered to reference the appropriate instructions given below. In addition, some instructions have numbers within squares, cross-referencing items from the Form B Worksheet, for ease of transfer of information and further instruction clarification.

a. Definitions

Field - Each item on Form B indicated with a circled number.

Alpha Field - A field containing only letters.

Numeric Field - A field containing only numbers.

Right Justify - Enter information in a field starting with the rightmost column within the field. (e.g., if the sheet number is 24, it would be entered as

0	2	4
---	---	---

). All numeric fields should be right justified.

Left Justify - Enter information in a field starting with the leftmost column within the field, i.e., duty position title would start on the left side even if it will not use all the columns designated within DUTY POSITION TITLE. The remaining columns would be left blank. All alpha fields should be left justified.

Zero Fill - If a numeric data item does not completely fill a field then fill in the rest of the unused columns with zeros to completely fill a numeric field (e.g., 86 in the TOTAL REQ (FY-78) would be entered as

0	0	8	6
---	---	---	---

).

b. Special letters and numbers for clarity.

Zero = 0

O (letter) = 0

One = 1

i (letter) = I

3. Instructions. Transfer all data from the Form B Worksheets for all analyzed duty positions. (See paragraphs 4, 5, and 6 below for instructions on special use worksheets.) A separate Form B must be completed for each duty position (or cluster of positions). The numbers in boxes below refer to corresponding items on the Form B Worksheet.

Item 1. Specialty Code - Enter specialty code. [1]

Item 2. Sheet Number - Zero filled. A sequentially assigned number for each duty position within the specialty. This number will uniquely identify the duty position on this sheet and should be the same sheet number as on the Form B Worksheet. If more than one sheet is required per duty title, use the same sheet number on each sheet. [11]

Item 3. Not used, leave blank.

Item 4. Job Category - Enter the job category code for the position (C, R, S, or A). [2]

Item 5. Duty Position Title - Enter the Position Title, Block [2] from the Form B Worksheet. It should be left justified and not exceed 30 characters in length. Unused columns will be left blank.

Item 6. Grade - The authorized grade for the duty position (e.g., 02, 03, 04, etc). [3]

Item 7. Total Requirements (FY 78) - Zero filled - Total requirements for this duty position (or cluster of positions). This should equal the sum of all entries in Item 13. [4]

Item 8. Specialty Code - Same as Item 1 above.

Item 9. Sheet Number - same as Item 2 above.

Item 10. SSI - Enter appropriate SSI. [5]

Item 11. TOE or TDA - Code an "E" for a TOE requirement or an "A" for a TDA requirement. [5]

Item 12. Footnote Count - Enter the total number of footnotes contained in Remarks (Item 20). If none, enter "0". If greater than 9, consolidate some of the footnotes.

Item 13. Number of Positions (FY 78) - The number of duty positions for this SSI by TOE or TDA. The sum of all entries in Item 13 should equal the number in Item 7. [6]

Item 14. % Expected to Serve in Duty Position - This percentage must be obtained from the MILPERCEN Specialty Monitor. % is recorded as the whole number (integer), zero filled on the left, and tenths of a % on the right. Do not enter the decimal point (i.e., 1000=100.0%, 0975=97.5%). [7]

Item 15. Duty Module. One or two alpha code - The one or two letters for the duty module as coded in the list of Army officer duty modules or as added by you to this list. Ignore the O (for officer) that precedes all codes in the list of duty modules. Left justify if only one letter and leave second position blank. [8]

Item 16. Duty Module. One to three digit number - The one to three digit number as coded in the list of Army officer duty modules or as added by you to the list. If less than three digits, zero fill this number (e.g., A-21 would be

A		0	2	1
---	--	---	---	---

). [8]

Item 17. Type Tng - The type of training as coded on the Form B Worksheet. 1, 2, or 3 are the only entries allowed. [9]

Item 18. Tng Alt - Training/education alternative as coded on the Form B Worksheet. P, M, C, S, O, E, X, U, or T are the only entries allowed. [9]

NOTE: You can record up to 9 duty modules and related information on each line. If you have more, move to the next line; repeat the specialty code, sheet number, SSI, TOE/TDA code, and continue to record duty modules and related information. After entering all data for the SSI/TOE combination, begin a new line and enter data for the same SSI/TDA combination if applicable. If there is more than one SSI on the Form B Worksheet, begin a new line, or lines, for each SSI/TOE or SSI/TDA combination. Every line completed on the Form B must have data entered in Items 8, 9, 10, and 11.

Item 19. Not used - leave blank.

Item 20. Remarks - Written comments keyed back to the above columns. Record here all entries in Item [10], Special Requirements, from the Form B Worksheet. Number each entry and enter total in Item 12 above. [10]

4. Special instructions for COMMON DUTY MODULES.

a. These instructions apply only for transferring data from the "Common Modules" worksheets (see paragraph 3j of the Form B Worksheet instructions) to the Form B. A separate Form B must be completed for each Common Modules Worksheet (normally one per grade/rank).

b. No data will be entered in Items 1 through 7; leave them blank.

Item 8. Enter specialty code. [1]

Item 9. Sheet Number - Always enter 000 regardless of the number of Common Modules Worksheets or the grade involved. [11]

NOTE: Items 10 and 11 will be used to enter the grade/rank to which the Common Modules apply, rather than SSI/TOE/TDA.

Item 10. Enter the letter "O"

Item 11. Enter the numerical grade (i.e., 2 for 02, 3 for 03, etc). [3]

Item 12. Use as normal Form B.

Item 13. Leave blank.

Item 14. Leave blank.

Item 15. Use as normal Form B. Enter the Duty Module code. [8]

Item 16. Use as normal Form B. Enter the Duty Module code. [8]

Item 17. Use as normal Form B. Enter the recommended training method. [9]

Item 18. Use as normal Form B. Enter the recommended training method. [9]

NOTE: If there are more than 9 common duty modules, begin another line(s) by completing Items 8, 9, 10, and 11 with the same entries as above; then continue entering duty modules and training methods.

Item 19. Leave blank.

Item 20. Use as normal Form B. [10]

5. Special instructions for NON-ANALYZED DUTY POSITIONS.

a. These instructions apply only for transferring data from the "non-analyzed positions" worksheets (see paragraph 3n of the Form B Worksheet instructions) to the Form B. separate Form B must be completed for each non-analyzed duty position.

b. The following are the specific instructions for each item on the Form B keypunch sheet.

Item 1. Enter the specialty code. [1]

Item 2. Enter the sheet number assigned to each duty position listed in Item 8 of the Form B Worksheet. (See Worksheet instructions.) Do not use the sheet number in item [11] of the worksheet. [8]

Item 3. Leave blank.

Item 4. Enter the job category (S or A) for the duty position. This code letter precedes each duty position title listed in Item [8] of the worksheet. [8]

Item 5. Enter the duty position title from Item [8] of the Form B Worksheet. [8]

Item 6. Enter the authorized grade for the duty position. **3**

Item 7. Enter the Total Requirements for this duty position. This number should be the total of the entries in the columns to the right of the position title as listed on the worksheet (see Worksheet instructions). **9**

Item 8. Same as Item 1 above.

Item 9. Same as Item 2 above.

Item 10. Use the same as normal Form B. **5**

Item 11. Use the same as normal Form B. **5**

Item 12. Use the same as normal Form B.

Item 13. Enter the number of duty positions for this SSI by TOE or TDA. The sum of all entries in Item 13 should equal the number in Item 7. **9**

Item 14. Leave blank.

Item 15. Leave blank.

Item 16. Leave blank.

Item 17. Leave blank.

Item 18. Leave blank.

Item 19. Leave blank.

Item 20. Use the same as normal Form B. **10**

6. Special instructions for LATE ACCESSIONS.

a. These instructions apply only for transferring data from the "Late Accessions" worksheets (see paragraph 5 of the Form B Worksheet instructions) to the Form B. A separate Form B must be completed for each grade analyzed (0-3 and/or 0-4).

b. No data will be entered in Items 1 through 7: leave them blank.

Item 8. Enter specialty code. **1**

Item 9. Sheet Number - Always enter 999 regardless of the number of worksheets or grades. **11**

NOTE: Items 10 and 11 will be used to enter the grade (0-3 or 0-4) being analyzed.

Item 10. Enter the letter "O".

Item 11. Enter the numerical grade (i.e., 3 for 03 or 4 for 04). 3

Item 12. Use as normal Form B.

Item 13. Leave blank.

Item 14. Leave blank.

Item 15. Use as normal Form B. 8

Item 16. Use as normal Form B. 8

Item 17. Use as normal Form B. 9

Item 18. Use as normal Form B. 9

NOTE: If it is necessary to use more than one line to enter all Duty Modules and training methods, begin additional lines by completing Items 8, 9, 10, and 11 with the same entries as above.

Item 19. Leave blank.

Item 20. Use as normal Form B. 10

7. When all data has been transferred from the Form B Worksheets to the Form B's, assemble the Form B's in the following order for each grade:

- Common Duty Modules.
- Analyzed Positions
- Non-Analyzed Positions.
- Late Accessions.

Change 1 to Instructions for FORM B (Keypunch Sheet)

The following is a change to Paragraph 6 of the Specific Instructions for Form B (Keypunch Sheet). Replace Paragraph 6 in its entirety with the paragraph below. The asterisks in the margin indicate the portions of the paragraph affected by this change.

6. Special Instructions for LATE ACCESSIONS.

a. These instructions apply only for transferring data from the "Late Accessions" worksheets (see paragraph 5 of the Form B Worksheet instructions) to the Form B. A separate Form B must be completed for each grade analyzed (0-3 and/or 0-4).

b. No data will be entered in Items 1 through 7: Leave them blank.

Item 8. Enter specialty code.

Item 9. Sheet Number - Always enter 999 regardless of the number of worksheets or grades.

* Item 10. Use as normal Form B. Enter applicable SSI.

* NOTE: Item 11 will be used to enter the grade (0-3 or 0-4) being analyzed.

Item 11. Enter the numerical grade (i.e., 3 for 03 or 4 for 04).

Item 12. Use as normal Form B.

Item 13. Leave blank.

Item 14. Leave blank.

Item 15. Use as normal Form B.

Item 16. Use as normal Form B.

Item 17. Use as normal Form B.

Item 18. Use as normal Form B.

* NOTE: If it is necessary to use more than one line to enter all Duty Modules and training methods, or if there is more than one SSI analyzed on the Form B Worksheet, begin additional lines by completing Items 8, 9, and 11 with the same entries as above and Item 10 with the appropriate SSI in each case.

Item 19. Leave blank.

Item 20. Use as normal Form B.

①	②	③	④	⑤											⑥	⑦		
SPECIALTY	SERIAL NUMBER	BLANK	JOB CATEGORY	DUTY POSITION TITLE: (E.G. PLAT LDR, ASST S-2, DIO)										GRADE 02, 03, 04	TOTAL RQMTS (FY78)			
⑧	⑨	⑩	⑪	⑫	⑬	⑭	DUTY MODULE		⑰	⑱	DUTY MODULE		⑲	⑳	DUTY MODULE		㉑	㉒
SPECIALTY	SERIAL NUMBER	SIS	TIME	FOOTNOTES	NUMBER OF POSITIONS (FY78)	% SERVE IN DUTY	⑮	⑯	TYPE	⑰	⑱	TYPE	⑲	⑳	TYPE	㉑	㉒	
						WHOLE #			TARGET			TARGET			TARGET			
⑳ REMARKS:																		

TAADS DOCUMENTS ARE NOT INCLUDED IN THIS PACKAGE

Inclosure 2

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FORM C

CAREER PROFILE SUMMARY

Specific Instructions

1. Purpose. Form C is a format used to synthesize the analyses conducted on the Form B work sheets. When completed it will, for all grades, combine the core duty positions, related duty positions, skills and knowledge required, and training/education methods. Among other things, it will reveal discrepancies in the data, e.g., initial training in a duty module occurring more than once. All duty positions analyzed on the Form B work sheets, all duty modules used to depict required skills, and all training methods must be entered on one form C. Therefore, a larger career profile summary spreadsheet may have to be constructed in the Form C format.

2. Requirements. The following data must be entered on the spreadsheet.

a. Item 1. Enter the specialty title.

b. Item 2. Enter the specialty code.

c. Item 3. At each grade level list each of the duty position titles from item 2 of the Form B worksheets. Precede each duty position title with the job category code (C, R, S, or A) in parentheses just as it is entered on the Form B worksheet. Behind each position title, indicate the SSI of the duty position (or SSI's if applicable because of clustering). Position titles may be grouped within each grade in any way you consider meaningful to help depict the career profile or to assist you in discussing specialty qualification (see paragraph 7, Data Requirements General Instructions).

EXAMPLE

LIEUTENANT

(C) Platoon Leader - 11A
(C) Executive Officer - 11B
etc.

(R) XO, Training Co. - 11A
(R) Spt Plt Ldr. - 11A
etc.

CAPTAIN

(C) Company Commander - 11A
(C) Asst Bn S-3 - 11B
etc.

(R) Bn S-1 - 11A
(R) Bn Motor Officer - 11B
etc.

(S) Aide-de-camp - 11X (if analyzed)
etc.

(A) Recruiter - 11X (if analyzed)
etc.

d. Item 4. List all duty modules used on the Form B worksheets on the left and right sides of the spreadsheet. List first the duty modules from all the "Common Modules" Worksheets. Then enter the position - unique modules from the remaining worksheets for all grades. (See example in paragraph 2e).

e. Item 5. For each duty module listed in item 4 indicate in the appropriate training/education alternative column the type training/education that best imparts the skills and knowledge. Duty modules, training education types, and training/education alternatives must be the same as those on the Form B work sheets. Example:

DUTY MODULE	P	M	C	S	O	E	X	U	T		DUTY MODULE
COMMON											COMMON
A-8		1									A-8
C-14		1									C-14
KK-2						2					KK-2
CC-1		1									CC-1
CC-2			1								CC-2
CC-3			3								CC-3
UNIQUE											UNIQUE
CC-12			1								CC-12
CC-14				3							CC-14

DUTY MODULE PACKET WAS PROVIDED TO YOUR HEADQUARTERS UNDER

SEPARATE COVER

Inclosure 3

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FORM C		CAREER PROFILE SUMMARY										1	SPECIALTY TITLE:																		
		LIEUTENANT					CAPTAIN					MAJOR																			
3		DUTY POSITIONS																													
4		DUTY MODULE	P	M	C	S	O	E	X	U	T	P	M	C	S	O	E	X	U	T	P	M	C	S	O	E	X	U	T		
DUTY MODULE REQUIREMENTS																															
5		TRAINING/EDUCATION ALTERNATIVES (INDICATE TYPE TRAINING: 1 - INITIA																													

ARMY OFFICER DUTY MODULE

A. BACKGROUND INFORMATION. To provide a general understanding of the Army Officer Duty Module Concept the following information has been extracted from the Army Officer Duty Module Manual, American Institute for Research in the Behavioral Sciences, dated October 1975.

1. The U.S. Army has developed an experimental system to improve communication among personnel resource planners, personnel assignment officers and manning table designers, and to facilitate the development of a common data bank of information on officer jobs. This new system has modular work activity descriptions that are based upon clusters of tasks. These task clusters have been given the name "Duty Modules". While the concept is adaptable to other large organizations and to jobs held by civilian and enlisted personnel as well as officers, development of the system to date has been directed toward support of the Army's officer corps generally, and particularly, the Officer Personnel Management System (OPMS).

2. A Duty Module, as the term is used herein, is a codifiable cluster of related tasks that tend to go together, occupationally and organizationally, in meaningful ways. In terms of relative size, a Duty Module is thought of as being smaller than an MOS and larger than a single task statement. To be useful in personnel management, each task cluster, or Duty Module, must be a coherent, distinctive and relatively self-contained segment of a significant work activity. By and large, each Duty Module should be applicable to a number of different duty positions and a wide variety of personnel. Properly composed and standardized Duty Modules become usable as "plug-in" units, like building blocks, for describing job requirements of manning table positions and qualifications and capabilities of personnel in a common language. To a far greater degree than either officer MOS or single task statements, Duty Modules also show the full interrelationship among jobs, including both the similarities and the differences.

3. The Duty Modules developed to date have been built up primarily from detailed field job analysis of representative positions filled by Infantry, Armor, Quartermaster, Engineer, and Ordnance officers. The positions analyzed were in Grades O-1 through O-6 and in a wide variety of field and DA units.

4. When fully developed, a complete set of officer Duty Modules offers almost unlimited possibilities for improving the efficiency and efficacy of the Officer Personnel Management System. If job requirements and personnel qualifications were stated in terms of interrelated Duty Modules, that is, if manning table positions were coded in terms of Duty Modules and officer personnel skills, knowledges, abilities, and job experience were coded in like terms, almost all personnel programs could be significantly improved. Programs such as selection for school, assignment of personnel to duty, design of officer training courses, performance appraisal, determining promotion potential, classification of positions, and officer career management could be improved. For example, requisitions currently tend to be annotated with requirements that are so specific that they do not allow for the flexibility needed in carrying on the officer assignment project, while officer qualifications are often stated in such general terms that they do not fully allow for meaningful selection of officers. The use of Duty Modules on manning tables would tend to improve the statement of realistic job requirements, while the use of the same Duty Modules to earmark the officer would tend to make an individual officer's skills more usable and more valuable. Likewise, the existence of a common language, in the form of Duty Modules, could improve and make most personnel actions fairer to the individual and more efficient for the Army.

5. These improvements, however, await the completion of the balance of Duty Modules necessary to cover the whole Army officer corps, and the jobs that these officers fill.

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B. APPLICABILITY OF DUTY MODULES TO REVIEW OF OFFICER REQUIREMENTS

1. For the review of officer requirements it is not intended that specialty proponents conduct a full job analysis or a detailed task analysis. The duty module is used to avoid such an effort and provide necessary officer training and education requirements data. The duty modules are only used as a shorthand indicator of the broad skills and knowledge that the officer must have to perform in the duty position being analyzed. Duty Modules that best describe the skills and knowledge required in a duty position will be entered on Form B.

2. If additional duty modules need to be developed to better depict the skills and knowledge required to perform in a duty position(s) the following guidelines are provided.

a. A duty module title is a sentence that best describes the grouping of skills and knowledge required by that segment of the job.

b. Each duty module must be meaningful to the personnel who will be using it - the training developers.

c. A duty module should be as independent as possible of other duty modules. It should not require additional explanatory material to differentiate it from other modules or to explain its meaning.

d. Additional duties which many junior officers perform and which are not necessarily associated with a particular position (i.e., Savings Bond Officer, Voting Officer, etc.) need not be included in the duty modules.

e. The key to the significant skills involved in a duty module is in the selection of a specific action verb for the overall module. Vague, generalized language such as "is responsible for" should be avoided.

f. Generally, duty modules should not cross over major Army functions such as combat, supply, administration, and intelligence. Modules which have a combination of dissimilar functions lose their modularity, or "plug-in" value for use with a variety of positions. Most positions will need more than one module to adequately describe the duties performed and skills required.

g. Do not use technical job language and standard abbreviations unless they are understood and accepted by informed military personnel who are not necessarily experts in narrow job areas.

3. When adding duty modules to any area (A, C, BB, etc) the proponents will use the block of numbers allocated for each specialty shown below.

<u>SC</u>	<u>NUMBERS</u>	<u>SC</u>	<u>NUMBERS</u>	<u>SC</u>	<u>NUMBERS</u>
11	21-40	43	341-360	74	641-660
12	41-60	44	361-380	75	661-680
13	61-80	45	381-400	76	681-700

<u>SC</u>	<u>NUMBERS</u>	<u>SC</u>	<u>NUMBERS</u>	<u>SC</u>	<u>NUMBERS</u>
14	81-100	46	401-420	77	701-720
15	101-120	47	421-440	81	721-740
21	121-140	48	441-460	82	741-760
25	141-160	49	461-480	83	761-780
26	161-180	51	481-500	86	781-800
27	181-200	52	501-520	87	801-820
28	201-220	53	521-540	88	821-840
31	221-240	54	541-560	91	841-860
35	241-260	70	561-580	92	861-880
36	261-280	71	581-600	93	881-900
37	281-300	72	601-620	95	901-920
41	301-320	73	621-640	97	921-940
42	321-340				

Example: If the proponent for specialty 31 determines the need for three additional duty modules in area CC and two in area A, the new duty modules would be coded CC 221, CC 222, CC 223, A 221, and A 222. If the proponent determines that a particular duty module is not appropriate or needs to be replaced by several others, delete the selected duty module(s) and add the additional module(s) using the numbering system described above.

4. If it is determined that a new duty module area is needed to group several newly identified duty modules which do not fit any of the established areas, the below listed codes and areas should be used.

<u>DUTY MODULE</u> <u>AREA TITLE:</u>	<u>IF APPROPRIATE, USE DUTY</u> <u>MODULE AREA CODE:</u>	<u>IF CODE AREA U OR X IS</u> <u>NOT APPROPRIATE USE NEW</u> <u>AREA CODE:</u>
Infantry	U	LL
Armor	U	MM
Atomic Energy	X	NN

Example: If the proponent for specialty 11 determines that a newly identified duty module is uniquely infantry and does not fit in area U - TACTICAL DIRECTION OF COMBAT UNITS, or any other duty module area, then the new duty module would be coded LL 21.

5. The duty module areas are broad enough that in most all cases new duty modules can be added to already established duty module areas. To avoid duplication, if new duty module areas are identified in addition to those above, it is imperative that proponents contact the RETO point of contact for the specialty before using additional area codes.

6. All new duty modules and duty module areas developed by proponents must be listed and titled on a separate sheet. Include on this list all duty modules eliminated. This revised list of additions, deletions, and revisions must be submitted with the Form B's.

7. Upon completion of this review the new list of duty modules will be given to the U.S. Army Research Institute (ARI) to assist in their efforts to develop duty modules to cover the entire spectrum of officer specialties and jobs.

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INFORMATION REQUIREMENTS

A. Training/Education Requirements.

1. Is there a need to be able to develop officer expertise in areas not now covered by recognized specialties? If so, how should this be done?
2. How do peacetime requirements in this specialty relate to wartime needs?
3. Is the current specialty "proponency" system adequate?
4. What is the best way to train officers to deal with uncertainty and complex, uncharted situations?
5. What requirements are generated in order to have the ability to rapidly expand the force or sustain heavy attrition over a prolonged period?
6. Is the specialty properly structured? If not, what restructuring is needed/planned/underway?
7. How would implementation of the Division Restructuring Study affect the specialty requirements by 1990?
8. How will the introduction of new equipment presently programmed affect the specialty requirements by 1990?
9. What other studies or developments are underway or planned that may impact on specialty requirements, and what effect on the 1990 requirements can be anticipated?

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10. Should there be more duty positions coded "specialty immaterial?" Do the positions in the Army-wide support category fall in the "specialty immaterial" area? Which positions?

11. What are the foreign language requirements of this specialty? In what way and at what level would an officer be required to perform in a foreign language?

12. What effects will the increase of women officers have on this specialty as they advance and branch out in career progression?

13. Should ROPA education and training requirements be changed? Example: CGSC completion requirements for promotion to LTC and COL.

B. Training/Education Concepts/Strategies.

1. Should there be a single overall Army proponent for training/education? Who? Should there be a "Tsar" for each specialty? Who?

2. Should training/education programs focus on the next job, on all possible jobs during the next career segment, or should there be a combination of programs? What should be the balance between training in hard skills and education in principles and concepts at each level of schooling?

3. Are level 1 (pre-commissioning) programs adequate to meet Army needs? What are advantages and disadvantages of adding specialty preparation to pre-commissioning training?

4. Should General Officers receive more training? What should be the subject matter? What are other considerations?

5. What important positions should be considered for preparatory training.

- Bn Command?
- Bde Command?
- Div Command?
- Corps Command?
- Project manager?
- Installation Command?
- High level Joint/Combined staff?
- Others?

6. What roles can professional examinations play in the training/education of officers? Can they shift more responsibility for preparation to the officer corps? Should there be qualifying examinations for certain promotions, assignments, or schools? Who should control content of examinations? Are there coherent bodies of knowledge which can be used as the basis for testing, e.g., FM 100-5 and derivative manuals? In non-combat specialties? Core subjects?

7. What special considerations are necessary for adapting Active Army training/education programs to reserve components use?

8. Is command essential to specialty qualification? If so, how is this reconciled with the fact that opportunities for command are limited?

9. What changes should be made to the Academic Efficiency Report system to make it more useful or meaningful?

10. To reduce personnel and facility costs, should there be a significant increase in training at civilian institutions and industry and/or greater use made of non-resident instruction/self-study?

11. Should every career officer attend some advanced course? Certain specialties may require unique military training or civilian education; should the "broadening" usually characteristic of the advanced course be provided by a limited non-resident course or possibly be bypassed altogether?

12. Must training at OPMS levels 4, 5, and 6 be the same for all officers or should it, for example, be significantly different for Armor and Infantry officers than for the other combat arms? Should those who are potential candidates for level 5 be selected out for special treatment?

13. About 50 percent of the field grade officers currently receive staff college training of generally the same scope; should all field grade officers receive a 2-4 month common core and then additional training according to their specialties? (The additional would be at Ft. Leavenworth for some and other places such as civilian and specialty schools and industry for others).

14. Should officers selected for the Armed Forces Staff College and Sister Service Colleges first attend a "core" course at CGSC? (Currently, about 250 officers going to staff colleges other than CGSC are missing training considered to be vital).

15. Should CGSC-level training be conducted under a "Staff University" concept, i.e., different schools and courses for different groupments of specialties? (Many located other than at Ft. Leavenworth).

16. What need exists to support Army student participation in staff and senior colleges of the other military departments and at foreign military schools?

17. Should "command" be designated as a specialty field? Rationale?

C. Managing the Trained Resource.

1. How does the "up or out" policy affect the specialties? Can some "mandatory 20 year retirees" be kept on active duty in certain specialty fields as "Limited Duty" officers within grade limitations? Can some potential eliminees be retained as "Limited Duty" officers in order to serve in their given specialties subject to the needs of the service and periodic reviews by a board?

2. What is the proper use of warrant officers? Can some officer specialist jobs be filled by warrant officers? Can warrants be offered to more "up or out" casualties in shortage MOS's?

3. Is it possible to maintain an appropriate level of opportunities for "on-the-job" learning in two specialties as an officer progresses in rank?

4. Should selection for advancement be linked to the needs of the specialty or to that of the Army as a whole? Should boards be given quotas by specialty?

5. What feedback mechanisms exist or should be instituted to update officer education/training requirements?

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 4

SPECIALTY DATA RECEIPT

TO ANNEX K

DATA COLLECTION AND ANALYSIS

5 Inclosures

1. Administrative Instructions
2. Manual Analysis of Specialties
3. Instructions - Specialty Matrix
4. Analyzing Qualification Standards
5. ADP Instructions

INSTRUCTION PACKET
INDIVIDUAL SPECIALTY ANALYSIS

This packet contains a set of instructions to be followed upon receipt of specialty data from proponents. In broad terms, there are three parts to your initial efforts:

(1) A careful check to insure that the data package is complete and that proponents have followed instructions.

(2) An off-line (manual) analysis of the data package, with particular emphasis being placed upon those portions which are not amenable to ADP.

(3) An analysis of computer printouts.

Only the first two of these three parts are addressed in this instruction packet. The third--analysis of printouts (including correction of rejected cards) -- will be addressed by separate set of instructions once programming effort is sufficiently far along to define outputs with some precision.

To a very great extent, the care you take in checking and analyzing proponent data packages should pay dividends later, for you should be able to reduce many errors which, if left undetected, would be compounded.

These inclosures form a part of this packet:

I ADMINISTRATIVE INSTRUCTIONS

II MANUAL ANALYSIS OF SPECIALTIES

III SPECIALTY MATRIX

IV ANALYZING QUALIFICATION STANDARDS

So there you have it. May the force be with you!

Charles A. Debelius
for CHARLES A DEBELIUS
COL, CE
Team M

ADMINISTRATIVE INSTRUCTIONS

1. STEP 1. The admin office is responsible to log the receipt of the proponent package (if received by RETO POC, inform Admin of specialty; Date/Time received; who received it; how many pages of OCSA Form 288 (Form B, ADP).
2. STEP 2. Burn three copies of new Duty Module list. Give two copies to LTC Good. Retain one copy for submission with OCSA 288 (Form B Key punch sheets).
3. STEP 3. Use separate Data Package Checklist to insure that you have a complete package, that the data is correct, and that proponents have followed instructions.
4. STEP 4. When all OCSA 288's and DA Form 3167's are completed, number consecutively each sheet in lower right hand corner in red, then determine the number of entries on data tape (how many lines filled out, including heading) and enter the number in the lower left hand corner of each OCSA 288 and DA Form 3167 in black. DA Form 3167's will precede OCSA Form 288's in sequence.
5. STEP 5. RETO POC delivers OCSA 288, DA Form 3167 and one copy of added DM list to admin office. RETO POC then goes to analysis instructions (INCL 2 -5) to conduct analysis.
6. STEP 6. Admin prepares batch to go to contractors consisting of the batch number, the number of 288/3167 pages and the number of entries on the data tape.
7. STEP 7. Admin office prepares DD Form 200 in 4 copies listing what is in each batch and attaches it to the batch.
8. STEP 8. Admin handcarries the batch to Data Tel, 3700 Mt. Vernon Ave, Alexandria, Virginia. Obtains signature of receipt transmitted.
9. STEP 9. Admin picks up previous days tape and OCSA 288's. Check and record the number of keypunch cards contained on the tape. Hand-carries tape and DM list to Mr. Leshner, Room 1S67, Hoffman II. Obtains signature of receipt transmitted. Brings forms, error listing and cards to RETO.

Inclosure 1

K-4-I-1

10. STEP 10. Admin office logs the error listing and error cards. Delivers to RETO POC.

11. STEP 11. RETO POC corrects error cards and returns to admin office. (Error card correction procedure to be provided later).

12. STEP 12. Admin office returns error cards to Hoffman II with next day's run. Logs in error log.

13. STEP 13. LTC Good submits new Duty Module List and duty module change list to admin. Admin will handcarry duty module changes to MILPERCEN. Admin will distribute new duty module list to each RETO POC, each MILPERCEN specialty monitor, each DA proponent, and each training and education proponent.

INCOMING SPECIALTY CONTROL SHEET

SPECIALTY	DATE/TIME REC	POC	# PAGES OF 298 (LOWER RIGHT HAND CORNER IN RE
11			
12			
13			
14			
15			
21			
25			
26			
27			
28			
31			
35			
36			
37			
41			
42			
43			
44			

INCOMING SPECIALTY CONTROL SHEET

SPECIALTY	DATE/TIME REC	FOC	# PAGES OF 228 (LOWER RIGHT HAND CORNER IN RED)
45			
46			
47			
48			
49			
51			
52			
53			
54			
60			
61			
63			
64			
65			
66			
67			
68			
7C			

INCOMING SPECIALTY CONTROL SHEET

SPECIALTY	DATE/TIME REC	POC	# PAGES OF 285 (LOWER RIGHT HAND CORNER IN RED)
71			
72			
73			
74			
75			
76			
77			
81			
82			
83			
86			
87			
88			
91			
92			
93			
95			
97		K-4r-I-5	

BATCH CONTROL

BATCH NUMBER (Batch #/ # of 288/3167 # Entries)	SPECIALTY CONTENTS OF BATCH	NEW DM LIST INCLUDED	DATE BATCH TO CONTRACTOR	DATE TAPE AND DM LIST TO MILPERCEN (# OF CARDS)	DATE/and # OF 288's to POC
-------------------------------------------------------	-----------------------------------	----------------------------	-----------------------------	-------------------------------------------------------	-------------------------------

K-4-I-6

SPECIALTY ERROR CARD CONTROL

SPECIALTY	DATE & NUMBER OF CARDS FROM MILPERCEN	DATE, CARDS & ERROR LISTING POC (by name)	DATE & NUMBER OF CORRECTED CARDS BACK TO MILPERCEN

K-4-1-7

DATA PACKAGE CHECKLIST

The following checks must be made before the OCSA 288's (Form B Keypunch sheets) can be turned in to admin. This is a checklist for a fast look at the data package to insure that the Form B Keypunch sheets are correct, thereby reducing the number of error cards. Major errors must be corrected by the RETO member after consulting with proponents. Minor flaws and/or misunderstandings/disagreements that do not affect ADP, can be discussed with proponent after the OCSA 288's are turned in to admin.

OK	DISCREPANCY

1. Form A
 - a. Specialty title and code properly entered.
 - b. SSI title and code(s) properly listed in item 3.
 - c. FY 78 assets entered and properly totalled on right side and bottom.
 - d. FY 90 assets entered and properly totalled.
 - e. Check assumptions indicated in item 6. Are they reasonable?
 - f. Are FY78 and FY90 assets the same? MILPERCENT should straight line project FY90 assets from FY84 assets.
2. Form B General
 - a. For each grade, the following must be present.
 - (1) Common Modules, numbered 000.
 - (2) Duty position analysis sheets, numbered sequentially.
 - (3) Non-analyzed duty positions numbered 998. Each duty position is numbered sequentially.

30 November 1977

MANUAL ANALYSIS OF SPECIALTIES

1. After completing the administrative requirements, each specialty must be analyzed using the attached format for preparation of the final analysis.
2. Each of the format paragraph headings will be used. Each question will be addressed in a separate sub-paragraph, if applicable. Where information is available, either from the data package forms, MILPERCEN data, answers to informational requirements, survey responses, etc., the source is identified at the end of each question.
3. Although a large amount of data is available for the analysis, the final written analysis must be short, and to the point.

Inclosure 2

K-4-II-1

ANALYSIS PLAN

PART I: MANUAL

ANALYSIS OF SPECIALTY _____ (TITLE) _____ (SC)

1. Analysis of duty positions.

a. Do those jobs selected as "core" duty positions really represent the heart or "guts" of the specialty? Do these jobs require the officer to perform specialty tasks on a day-to-day basis? Are there too many or too few core jobs? Do these jobs build technical competence? Should some be deleted, added? (Forms C and B)

b. Do those jobs selected as "related" duty positions require the performance of tasks that draw on specialty knowledge, skills and experiences? Are there too many, too few? Should there be additions/deletions? (Forms C and B)

c. Is there a pattern to the variety of types of jobs available in the specialty? Example: Only a few different types of jobs for company grade with an increasingly wider variety of jobs for field grade officers in the specialty.

d. Do the positions analyzed represent the majority of specialty positions? What %? (Forms B) (Total number of analyzed positions/total number of positions at each grade level).

e. Are the non-analyzed positions properly categorized? (Form B Sheets #998).

f. Are all positions from the TAADS documents accounted for? (Total from Forms B vs TAADS totals by grade).

g. Are the duty positions properly clustered, that is, do the jobs clustered under each duty position in fact require the same skills and knowledge? (Forms B) Has there been too much clustering/not enough clustering? Should there be changes? (Discuss with T&E proponent).

2. Analysis of skills/knowledge (duty modules) and training/education requirements.

a. Are the duty modules selected as common to all duty positions analyzed for each grade appropriate? Are they in fact "common?" Are there additions/deletions that could be made? (Form B Sheets #000)

b. Are there duty modules common to all grades/several grades in the specialty (Form C)? What areas of duty modules, i.e., main, specialty peculiar, etc.?

c. Of the unique duty modules, which apply to a significant number of duty positions 50-60% or more? (Forms B)

d. What are the trends of the training/education types for best imparting the skills/knowledges? (Form C)

e. Is there a pattern of required training/education alternatives for each grade level? Is the training concentrated in a few alternatives? Which ones? (Forms B and C)

f. Are there skills that, when clustered, clearly dictate the core for a military school for each grade/combination of grades? Are these skills appropriate for military schooling? Is the training alternative the "best" means of imparting the skills? (Form C)

g. Do the skills gained through experience fill the more formal training/education gaps? (Form C)

h. What are the significant special training/education requirements for the specialty? (Form B remarks)

i. What are the civilian education requirements? (Form C, B)
Identify any of the skills and knowledge indicated or obtainable through other means that could best be imparted by specific civilian instruction. (Discuss with proponents as appropriate).

j. Are there any obvious/significant differences in the number of personnel presently being fed through the schools and the needs of the specialty? Are too many being trained in particular skills (Example: All Lt receiving training required for only a few positions)? Are too few being trained in particular skills? Which skills (duty modules) - if obvious at this point in the analysis process? (School data, COI's).

3. Analysis of Information Requirements.

a. Briefly summarize the proponents' answers to the information requirements questions (Incl 4 of the data packet). The summary for each question should consolidate the different responses/positions as concisely as possible.

b. Use the same question numbering system, but do not repeat the question. Include enough of the question information in the summary for the paragraph to stand alone.

c. Indicate by an asterisk (*5, *8, etc.) those responses that are of particular interest, provide a new approach, should be pursued further, etc.

4. Analysis of specialty assets/requirements.

- a. Complete the specialty assets/requirements matrix analysis (Incl 3).
- b. On Form A compute the % of each grade for each SSI requirement.
- c. Compare the FY78 and FY90 SSI requirements (Form A).

Are there significant differences? Are there trends of increasing or decreasing SSI requirements? Do the SSI requirements by grade generally track with the total specialty requirements by grade for FY78? FY90? Are the assumptions valid for the FY90 requirements? Are there any known limitations on the FY90 data? Are the requirements concentrated in one/a few SSI's or are certain SSI's requirements very small? Are these requirements significant (possible eliminations/consolidations)?

5. Analysis of the specialty qualification "road map". Complete the qualification matrix analysis to include any appropriate comments/remarks (Incl 4).

6. Tentative Conclusions. Characterize the proponents analysis of the specialty. Will the proponents analysis allow RETO to complete its analysis? Does it reflect an in depth or superficial treatment? Is the data coherent and useful as presented? Are there grave discrepancies that must be resolved with the proponent?

7. Tentative Recommendations. After completing this manual analysis (including the specialty matrix and qualification standards), what are the short range recommendations for additional/further study/analysis by the proponents or RETO MEL teams?

INSTRUCTIONS

SPECIALTY MATRIX

1. This matrix is designed to address primarily the analysis of the data provided by MILPERCEN. Six complete sets of data are available. Two will be provided to each numbered team.
2. Instructions for performing each step are provided in the matrix itself. Some steps will require mathematical computations.
3. It will be useful if the RETO Analyst performs the Analysis of Information Requirements (Inclosure 4 to the Data Package) before proceeding with the matrix.
4. It is important that the comments be limited to only the most succinct statements of truly significant items.

Inclosure 3

K-4-III-1

SPECIALTY MATRIX

SC: _____

TITLE: _____

ITEM	DATA TITLE/SOURCE	DATA/COMMENT		
1.	ASSETS (Primary & Secondary) (p.46, C2) ^{1/} COL (p.60, C2) LTC (p.74, C2) MAJ (p.88, C2) CPT (p.102, C2) LT (add COL-LT) TOTAL	NUMBER	PERCENT	(Compute)
		<input type="text"/>	<input type="text"/>	
		<input type="text"/>	<input type="text"/>	
		<input type="text"/>	<input type="text"/>	
		<input type="text"/>	<input type="text"/>	
		<input type="text"/>	<input type="text"/>	
		<input type="text"/>	100	
2.	MILPERCEN REQUIREMENTS (p.33, C2) COL (p.33, C3) LTC (p.33, C4) MAJ (p.33, C5) CPT (p.33, C6) LT TOTAL	NUMBER	PERCENT	(Compute)
		<input type="text"/>	<input type="text"/>	
		<input type="text"/>	<input type="text"/>	
		<input type="text"/>	<input type="text"/>	
		<input type="text"/>	<input type="text"/>	
		<input type="text"/>	<input type="text"/>	
		<input type="text"/>	100	
3.	CAREER PROGRESSION Compare percents of Items 1 and 2 above. Comment on significant discrepancies. NO SIGNIFICANT DISCREPANCIES	COMMENT: CHECK <input type="checkbox"/>		

^{1/} Source is MILPERCEN data unless otherwise noted.
 Read (p.46,C2) as page 46, column 2 from left to right.

K-4-III-2

SPECIALTY MATRIX

SC: _____

TITLE: _____

ITEM	DATA TITLE/SOURCE	DATA/COMMENT																																														
4.	<p>Comment if there is no progression from LT to COL in Items 1 or 2.</p> <p style="text-align: center;">CHECK</p> <p>NOT APPLICABLE <input type="checkbox"/></p>	<p>LATE ACCESSION AT <input type="checkbox"/> RANK</p> <p>- FOR ASSETS <input type="checkbox"/> (CHECK)</p> <p>- FOR REQUIREMENTS <input type="checkbox"/> (CHECK)</p> <p>DEAD END BEYOND <input type="checkbox"/> RANK</p> <p>- FOR ASSETS <input type="checkbox"/> (CHECK)</p> <p>- FOR REQUIREMENTS <input type="checkbox"/> (CHECK)</p> <p>COMMENT:</p>																																														
5.	<p>MTO, TDA REQUIREMENTS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>(1) (M) TOE</th> <th>(2) TDA TO (M) TOE</th> <th>(3) (M) TOE SUBTOTAL</th> <th>(4) TDA</th> <th>(5) TDA/MTOE RATIO</th> <th>(6) TOTAL</th> </tr> </thead> <tbody> <tr> <td>COL</td> <td><input type="text"/> (pE,C2)</td> <td><input type="text"/> (pE,C3)</td> <td><input type="text"/> 2/</td> <td><input type="text"/> (pE,C4)</td> <td><input type="text"/> 3/</td> <td><input type="text"/> (pE,C5)</td> </tr> <tr> <td>LTC</td> <td><input type="text"/> (pD,C2)</td> <td><input type="text"/> (pD,C3)</td> <td><input type="text"/> 2/</td> <td><input type="text"/> (pD,C4)</td> <td><input type="text"/> 3/</td> <td><input type="text"/> (pD,C5)</td> </tr> <tr> <td>MAJ</td> <td><input type="text"/> (pC,C2)</td> <td><input type="text"/> (pC,C3)</td> <td><input type="text"/> 2/</td> <td><input type="text"/> (pC,C4)</td> <td><input type="text"/> 3/</td> <td><input type="text"/> (pC,C5)</td> </tr> <tr> <td>CPT</td> <td><input type="text"/> (pB,C2)</td> <td><input type="text"/> (pB,C3)</td> <td><input type="text"/> 2/</td> <td><input type="text"/> (pB,C4)</td> <td><input type="text"/> 3/</td> <td><input type="text"/> (pB,C5)</td> </tr> <tr> <td>LT</td> <td><input type="text"/> (pA,C2)</td> <td><input type="text"/> (pA,C3)</td> <td><input type="text"/> 2/</td> <td><input type="text"/> (pA,C4)</td> <td><input type="text"/> 3/</td> <td><input type="text"/> (pA,C5)</td> </tr> </tbody> </table>							(1) (M) TOE	(2) TDA TO (M) TOE	(3) (M) TOE SUBTOTAL	(4) TDA	(5) TDA/MTOE RATIO	(6) TOTAL	COL	<input type="text"/> (pE,C2)	<input type="text"/> (pE,C3)	<input type="text"/> 2/	<input type="text"/> (pE,C4)	<input type="text"/> 3/	<input type="text"/> (pE,C5)	LTC	<input type="text"/> (pD,C2)	<input type="text"/> (pD,C3)	<input type="text"/> 2/	<input type="text"/> (pD,C4)	<input type="text"/> 3/	<input type="text"/> (pD,C5)	MAJ	<input type="text"/> (pC,C2)	<input type="text"/> (pC,C3)	<input type="text"/> 2/	<input type="text"/> (pC,C4)	<input type="text"/> 3/	<input type="text"/> (pC,C5)	CPT	<input type="text"/> (pB,C2)	<input type="text"/> (pB,C3)	<input type="text"/> 2/	<input type="text"/> (pB,C4)	<input type="text"/> 3/	<input type="text"/> (pB,C5)	LT	<input type="text"/> (pA,C2)	<input type="text"/> (pA,C3)	<input type="text"/> 2/	<input type="text"/> (pA,C4)	<input type="text"/> 3/	<input type="text"/> (pA,C5)
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LT	<input type="text"/> (pA,C2)	<input type="text"/> (pA,C3)	<input type="text"/> 2/	<input type="text"/> (pA,C4)	<input type="text"/> 3/	<input type="text"/> (pA,C5)																																										

2/ Add (1) + (2)

3/ Divide (4)/(3)

SPECIALTY MATRIX

SC: _____

TITLE: _____

ITEM	DATA TITLE/SOURCE	DATA/COMMENT																																																										
6.	<p>MTOE, TDA REQUIREMENTS: FOR FIELD GRADES</p> <table border="1"> <thead> <tr> <th></th> <th>(1) (M)TOE</th> <th>(2) TDA TO (M)TOE</th> <th>(3) MTOE SUBTOTAL</th> <th>(4) TDA</th> <th>(5) TDA/MTOE RATIO</th> <th>(6) TOTAL</th> </tr> </thead> <tbody> <tr> <td>MAJ & LTC</td> <td><input type="text" value="4/"/></td> <td><input type="text" value="4/"/></td> <td><input type="text" value="4/"/></td> <td><input type="text" value="4/"/></td> <td><input type="text" value="3/"/></td> <td><input type="text" value="4/"/></td> </tr> <tr> <td>MAJ, LTC & COL</td> <td><input type="text" value="4/"/></td> <td><input type="text" value="4/"/></td> <td><input type="text" value="4/"/></td> <td><input type="text" value="2/"/></td> <td><input type="text" value="3/"/></td> <td><input type="text" value="4/"/></td> </tr> </tbody> </table> <p>FOR COMPANY GRADES</p> <table border="1"> <tbody> <tr> <td>CPT & LT</td> <td><input type="text" value="4/"/></td> <td><input type="text" value="4/"/></td> <td><input type="text" value="4/"/></td> <td><input type="text" value="4/"/></td> <td><input type="text" value="4/"/></td> <td><input type="text" value="4/"/></td> </tr> </tbody> </table>		(1) (M)TOE	(2) TDA TO (M)TOE	(3) MTOE SUBTOTAL	(4) TDA	(5) TDA/MTOE RATIO	(6) TOTAL	MAJ & LTC	<input type="text" value="4/"/>	<input type="text" value="4/"/>	<input type="text" value="4/"/>	<input type="text" value="4/"/>	<input type="text" value="3/"/>	<input type="text" value="4/"/>	MAJ, LTC & COL	<input type="text" value="4/"/>	<input type="text" value="4/"/>	<input type="text" value="4/"/>	<input type="text" value="2/"/>	<input type="text" value="3/"/>	<input type="text" value="4/"/>	CPT & LT	<input type="text" value="4/"/>	<input type="text" value="4/"/>	<input type="text" value="4/"/>	<input type="text" value="4/"/>	<input type="text" value="4/"/>	<input type="text" value="4/"/>																															
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7.	<p>REQUIREMENTS (FORM A)</p> <table border="1"> <tbody> <tr> <td>COL</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>LTC</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>MAJ</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>CPT</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>LT</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>TOTAL</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> </tbody> </table>	COL	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	LTC	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	MAJ	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	CPT	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	LT	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	TOTAL	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<table border="1"> <thead> <tr> <th>FY78 FORM A</th> <th>PERCENT (Compute)</th> <th>FY90 FORM A</th> <th>PERCENT (Compute)</th> </tr> </thead> <tbody> <tr> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> </tbody> </table>	FY78 FORM A	PERCENT (Compute)	FY90 FORM A	PERCENT (Compute)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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8.	<p>TRENDS. Compare FY78 with FY90 in Item 7, and with SSI Study trends. Comment as necessary.</p>	<p>COMMENT:</p>																																																										

4/ Add from Item 5.

SC: _____

TITLE: _____

ITEM	DATA TITLE/SOURCE	DATA/COMMENT		
9.	<p>REQUIREMENTS COMPARISON Compare requirements in Item 2, column (6) of Item 5, and Item 7. Resolve significant discrepancies with proponents. Comment as appropriate.</p> <p style="text-align: right;">CHECK NO SIGNIFICANT DISCREPANCIES <input type="checkbox"/></p>	COMMENT:		
10.	<p>COMMAND POSITIONS</p> <p style="text-align: right;">COL</p> <p style="text-align: right;">LTC</p> <p style="text-align: right;">COL</p> <p style="text-align: right;">LTC</p> <p>Compare above. Resolve significant discrepancies with proponents. Comment as appropriate.</p>	<p style="text-align: center;">CMD RQMT (pG)</p> <input type="text"/>	<p style="text-align: center;">GRADE TOTAL RQMT (Item 2)</p> <input type="text"/>	<p style="text-align: center;">PERCENT CMD RQMT (Compute)</p> <input type="text"/>
		<p style="text-align: center;">CMD RQMT (Form B)</p> <input type="text"/>		
		<input type="text"/>		
		<input type="text"/>		
		COMMENT:		

SC: _____

TITLE: _____

ITEM	DATA TITLE/SOURCE	DATA/COMMENT		
11.	<p>SHORTAGE. Enter Unfilled Positions, Number and Rate (percent)</p> <p>(p45, C9,10) COL</p> <p>(p59, C9,10) LTC</p> <p>(p73, C9,10) MAJ</p> <p>(p87, C9,10) CPT</p> <p>(p101, C9,10) LT</p> <p>(Review also the instructions to the 1977 COL's promotion board which identifies shortages - at APP 1 to Incl 2).</p>	<p>NUMBER</p> <p><input type="text"/></p> <p><input type="text"/></p> <p><input type="text"/></p> <p><input type="text"/></p> <p><input type="text"/></p>	<p>PERCENT</p> <p><input type="text"/></p> <p><input type="text"/></p> <p><input type="text"/></p> <p><input type="text"/></p> <p><input type="text"/></p>	<p>CHECK 5/</p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p>5/ If zero, leave boxes blank and check for appropriate rank</p>
12.	<p>OVERFILL. Enter "overfill" Number and Rate (unused assets as a percent of requirements)</p> <p>(p45, C11,12) COL</p> <p>(p59, C11,12) LTC</p> <p>(p73, C11,12) MAJ</p> <p>(p87, C11,12) CPT</p> <p>(p101, C11,12) LT</p>	<p>NUMBER</p> <p><input type="text"/></p> <p><input type="text"/></p> <p><input type="text"/></p> <p><input type="text"/></p> <p><input type="text"/></p>	<p>PERCENT</p> <p><input type="text"/></p> <p><input type="text"/></p> <p><input type="text"/></p> <p><input type="text"/></p> <p><input type="text"/></p>	<p>CHECK 5/</p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p>5/ If zero, leave boxes blank and check for appropriate rank.</p>

SPECIALTY MATRIX

SC: _____

TITLE: _____

ITEM	DATA TITLE/SOURCE	DATA/COMMENT	
13.	<p>AVERAGE UTILIZATION. Enter "Utilization Index Average"</p>	<p>AVERAGE UTILIZATION</p>	
	(p46, C9) COL	<input type="checkbox"/>	
	(p60, C9) LTC	<input type="checkbox"/>	
	(p74, C9) MAJ	<input type="checkbox"/>	
	(p88, C9) CPT	<input type="checkbox"/>	
	(p102, C9) LT	<input type="checkbox"/>	
14.	<p>REQUIREMENTS TO ASSETS RATIO Enter "Requirements/Assets" if under 0.33, or if over 0.66. Otherwise, check box.</p>	<p>RQMT TO ASSET CHECK</p>	
	(p46, C8) COL	<input type="checkbox"/>	<input type="checkbox"/>
	(p60, C8) LTC	<input type="checkbox"/>	<input type="checkbox"/>
	(p74, C9) MAJ	<input type="checkbox"/>	<input type="checkbox"/>
	(p88, C9) CPT	<input type="checkbox"/>	<input type="checkbox"/>
	(p102, C9) LT	<input type="checkbox"/>	<input type="checkbox"/>

SC: _____

TITLE: _____

ITEM	DATA TITLE/SOURCE	DATA/COMMENT																																				
15.	<p>COMMON PAIRINGS. Review specialty pairing tables (see explanation in p.12a) and enter the largest pairings (up to six) for each rank with your specialty as primary or secondary.</p> <p>EXAMPLE: <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td colspan="2">Pair Number</td> </tr> <tr> <td>35 36</td> <td>130</td> </tr> </table></p> <p>and <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td>36 35</td> <td>113</td> </tr> </table></p>	Pair Number		35 36	130	36 35	113	<p>COL (p13, 14)</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 33%; height: 20px;"> </td> <td style="width: 33%; height: 20px;"> </td> <td style="width: 33%; height: 20px;"> </td> </tr> <tr> <td style="width: 33%; height: 20px;"> </td> <td style="width: 33%; height: 20px;"> </td> <td style="width: 33%; height: 20px;"> </td> </tr> </table> <p>LTC (p15, 16)</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 33%; height: 20px;"> </td> <td style="width: 33%; height: 20px;"> </td> <td style="width: 33%; height: 20px;"> </td> </tr> <tr> <td style="width: 33%; height: 20px;"> </td> <td style="width: 33%; height: 20px;"> </td> <td style="width: 33%; height: 20px;"> </td> </tr> </table> <p>MAJ (p17, 18)</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 33%; height: 20px;"> </td> <td style="width: 33%; height: 20px;"> </td> <td style="width: 33%; height: 20px;"> </td> </tr> <tr> <td style="width: 33%; height: 20px;"> </td> <td style="width: 33%; height: 20px;"> </td> <td style="width: 33%; height: 20px;"> </td> </tr> </table> <p>CPT (p19, 20)</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 33%; height: 20px;"> </td> <td style="width: 33%; height: 20px;"> </td> <td style="width: 33%; height: 20px;"> </td> </tr> <tr> <td style="width: 33%; height: 20px;"> </td> <td style="width: 33%; height: 20px;"> </td> <td style="width: 33%; height: 20px;"> </td> </tr> </table> <p>LT (p21, 22)</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 33%; height: 20px;"> </td> <td style="width: 33%; height: 20px;"> </td> <td style="width: 33%; height: 20px;"> </td> </tr> <tr> <td style="width: 33%; height: 20px;"> </td> <td style="width: 33%; height: 20px;"> </td> <td style="width: 33%; height: 20px;"> </td> </tr> </table>																														
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SPECIALTY MATRIX

SC: _____

TITLE: _____

ITEM	DATA TITLE/SOURCE	DATA/COMMENT
16.	<p data-bbox="530 404 739 431">PAIRING COMMENT</p> <p data-bbox="530 445 930 610">Compare common pairings (Item 15) with pairings noted by proponents as being complementary or non-complementary. (Input to Tasking Message).</p> <p data-bbox="559 635 915 663">Comment only as necessary.</p> <p data-bbox="530 691 902 805">(Coordinate with RETO Analyst analyzing the other half of the pairs. Both comment.)</p> <p data-bbox="530 833 889 916">(Whether your specialty is primary or secondary is not important her)</p>	COMMENT:

K-4-III-9

SPECIALTY MATRIX

SC: _____

TITLE: _____

ITEM	DATA FILE/SOURCE	DATA/COMMENT																																																																		
17.	<p>PAIRING UTILIZATION CHECK</p> <p>Add "Requirements/Assets" value for both halves of each non-complementary pair and each complementary pair (Item 15, 16 and Input to Tasking Message).</p> <p>Record undesirable pairs when their added value exceeds the value noted for each rank below.</p> <p>COL if over .98 LTC if over .95 MAJ if over .89</p> <p>Record desirable pairs if added value is below given value.</p> <p>(Coordinate with RETO Analyst analyzing the other half of the pairs. Both record data).</p>	<table border="0"> <tr> <td></td> <td style="text-align: right;">Pair</td> <td style="text-align: right;">Value</td> </tr> <tr> <td colspan="3"><u>UNDESIRABLE PAIRS</u></td> </tr> <tr> <td></td> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> </tr> <tr> <td colspan="3">COL (p45, C8)</td> </tr> <tr> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> </tr> <tr> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> </tr> <tr> <td colspan="3">LTC (p60, C8)</td> </tr> <tr> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> </tr> <tr> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> </tr> <tr> <td colspan="3">MAJ (p74, C8)</td> </tr> <tr> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> </tr> <tr> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> </tr> <tr> <td colspan="3"><u>DESIRABLE PAIRS</u></td> </tr> <tr> <td colspan="3">COL (p46, C8)</td> </tr> <tr> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> </tr> <tr> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> </tr> <tr> <td colspan="3">LTC (p50, C8)</td> </tr> <tr> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> </tr> <tr> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> </tr> <tr> <td colspan="3">MAJ (p74, C8)</td> </tr> <tr> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> </tr> <tr> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> <td style="border: 1px dashed black; width: 40px;"></td> </tr> </table>		Pair	Value	<u>UNDESIRABLE PAIRS</u>						COL (p45, C8)									LTC (p60, C8)									MAJ (p74, C8)									<u>DESIRABLE PAIRS</u>			COL (p46, C8)									LTC (p50, C8)									MAJ (p74, C8)								
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SPECIALTY MATRIX

SC: _____

TITLE: _____

ITEM	DATA TITLE/SOURCE	DATA/COMMENT
18.	<p data-bbox="508 388 782 417">SPECIALTY HIGHLIGHTS</p> <p data-bbox="508 432 918 672">Review Items 1 through 17 and your Analysis of Information Requirements (Inclosure 4 of Data Package), and highlight any <u>significant</u> comment key in understanding your specialty's peculiarities with respect to the following items.</p> <ul data-bbox="538 701 854 1116" style="list-style-type: none"> - REQUIREMENTS - ASSETS - CAREER PROGRESSION - MANAGEMENT - UTILIZATION - SPECIALTY PAIRS - TRAINING & EDUCATION - OTHER 	<p data-bbox="944 388 1055 417">COMMENT:</p>

K-4-III-11

SPECIALTY MATRIX

SC: _____
TITLE: _____

ITEM	DATA TITLE/SOURCE	DATA/COMMENT
18.	SPECIALTY HIGHLIGHTS (CONT'D)	

ANALYZING QUALIFICATION STANDARDS

1. INTRODUCTION. One important early effort we must undertake in our analysis of inputs from each proponent is the definition of qualification standards at each rank within each specialty. If we can describe--and defend--such standards, we will have come a long way toward whittling important specialty yardsticks for later measurement of how well--or how poorly--identified training and education requirements are met by our current system. Three sources contribute to the yardstick development process:

- * The qualification description provided by proponents,
- * Officer opinions on qualification as determined from Mary Ruth's survey effort, and...
- * You, the RETO analyst, whose vital role cannot be over emphasized.

2. AN OVERVIEW OF THE QUALIFICATION ANALYSIS PROCESS.

In broad terms, you should expect to receive a fairly comprehensive, predictably voluminous, and possibly erudite statement of qualification standards from each proponent. Within less than two weeks thereafter you will also have access to a set of survey results. Your job is to analyze both inputs, coordinate where appropriate, and make some decisions about specialty qualification standards. A form (sample attached) should be filled out for each rank in each specialty.

3. WHY A FORM? The fixed format is imperative because, as the study evolves, individual specialty reports will change hands a number of times. Individual specialty considerations, groupments, looks across MEL's, and finally, a combined system look, will be accomplished. About the only reasonable way we can quickly handle voluminous data is to put it in a form which permits easy comparison and rapid assimilation of salient points.

4. FILLING OUT THE QUALIFICATION STANDARDS FORM. Four major columns are provided for your use as follows:

a. PROPONENT VIEWS. In this column, summarize proponent views beside the appropriate entry. You do not need to regurgitate detailed descriptions. For example, if the proponent goes into great detail about precise duty positions or combinations of duty positions necessary for qualification at a certain rank, you should make a succinct entry opposite the title, On The Job Experience.(Item 1f).

Inclosure 4

K-4-IV-1

A sample entry could be;

"Company Command for all plus... One of a variety of possible core positions generally demanding work as a staff officer."

The point to remember is that your summary will not supersede the proponent report. Proponent input will remain as a part of the specialty package as it passes from hand to hand and team to team.

Even before you receive the survey results, you should satisfy yourself that the proponent view is reasonable, logical, and possible. Where inconsistencies are obvious, coordinate and make changes when the proponent agrees.

b. OFFICER SURVEY RESULTS. This entire series of columns primarily involves transfer of data from one form to another. You should enter the PERCENTAGE of the respondents at that rank in that specialty who gave that answer to that question. For ease of entry, question numbers can be found on the form for each block in which an entry is required.

c. ANALYST'S COMMENTS. You should make an entry in this column if, after reviewing proponent views and those of the officer corps in general, you believe that:

- (1) Some change to the proponent input is needed to satisfy officer views, or...
- (2) Officer views diverge from proponent view but you believe proponent view should prevail, or...
- (3) You are convinced that qualification standards should be different for that entry from either officer opinion or proponent view, or...

When you feel a particular point deserves highlighting for further special consideration or long analysis at various MEL levels or in a combined mode.

Coordination with proponents is encouraged when survey results point up problem areas.

QUALIFICATION STANDARDS. This column should be used to reflect your decision as the analyst about what constitutes specialty qualification at that rank in that specialty. In most cases, you will probably agree with the proponent. If so, simply enter "P" indicating that the proponent's poignant points prevail permanently for that item. Spell out qualification where the proponent's data is insufficient or where you decide something different is needed.

5. PUTTING PACKAGE TOGETHER.

a. Make sure you have entered information in the upper left corner. Staple your entire package together with a blank cover sheet marked in bold magic marker:

QUALIFICATION STANDARDS

SPECIALTY _____ (number)
ANALYST _____ (your name)

b. All associated backup papers should be kept together so they are not lost. If they become too voluminous, we may need to get our Admin folks to provide a large box for filing each specialty set.

HUCK

CHARLES A. DEBELIUS
COL, CE

ADP INSTRUCTIONS

1. **GENERAL:** These instructions supplement - and in some cases supersede - the Administrative Instructions for in-processing the data requirements packages. They cover the detailed procedures for completing and handling the DA Forms 3167, additional information on checking out the Form B Key punch sheet, and preliminary instructions for correcting error cards and checking the "good card" listing for errors.

2. DA FORM 3167:

a. Many of the duty positions listed on the TAADS document call for a specific alternate specialty in addition to the primary, e.g., 11A54. The instructions for the Form B Worksheet directed the training proponent to indicate the number of requirements for such positions in Item 10 of the form. In order to capture this information and get it in the computer, it will be necessary for the RETO analyst to enter the data on a standard ADP sheet, DA Form 3167.

b. The first step is to total the requirements for each alternate specialty by looking at the remarks section of all the Form B Worksheets (or ADP Sheets) and adding up the numbers. For example, one 04 position may specify requirements for 50 11A54's and 20 11A45's. Another 04 position may require 30 11A54's and 10 11A41's. Aggregate these numbers by alternate specialty and grade:

MAJ: 10-41's, 20-45's, and 80-54's
LTC: 20-41's, 50-45's, and 60-49's
etc.

c. At the top of a DA 3167, write the specialty code you are analyzing, e.g., SC11. Enter data in the numbered card columns (CC) as follows:

CC 1-3 Enter "ASR" (Alternate Specialty Requirement)
CC 4 Grade. Enter 2 for 02, 3 for 03, etc.
CC 5-6 Primary specialty code (e.g., 11).
CC 7-8 Alternate specialty code (e.g., 54).
CC 9-12 Number of requirements for this alternate specialty as determined in b. above (e.g., 080).

d. In filling out the DA 3167, note the following:

(1) Enter only one grade and one alternate specialty on each line i.e., only the first 12 columns of each line are used. All 12 columns are filled out for each entry.

(2) The requirements field, CC 9-12, should be right justified and zero filled, e.g.,

0	0	9
---	---	---

= 9 requirements.

(3) Use the attached "Standard Character Representation for Coding" as a guide for printing each character.

(4) Neatness counts!

e. When you have all the data entered on DA 3167's, number the sheets in sequence in red in the lower right hand corner. Note: this is a separate sequence from the OCSA Forms 288. Enter the number of lines filled out on each sheet in the lower left hand corner in black. The DA 3167's will be kept separate from the OCSA 288's and will be turned in to the admin office when completed. The priority effort should be on turning in 288's; then fill out and turn in the 3167's. If the training proponent has not entered any alternate specialty data on the Form B's, contact him to determine if he overlooked this requirement. If, in fact, there are no alternate specialty requirements on the TAADS document, notify admin that you have no 3167's to turn in.

f. The admin office will keep a separate log on the 3167's. They will hold them until the RETO analysts have turned in 3167's on all CPMS specialties (or indicated they have none). At that time, a decision will be made as to whether the keypunching will be done by the contractor or by MILPERCEN.

3. Form B Keypunch Sheet

a. It is essential that the data on the Form B be correct and easily readable by the keypunch operator. If it is not, one or both of two things will happen: the computer edit routine will reject the card as being in error or incorrect information will be accepted and entered in the data base. If a lot of error cards come out of the machine, they will burden the RETO analyst who must correct them and will delay getting the data base established. If incorrect data is accepted by the computer, the RETO analysis will be based on faulty information. Therefore, the better the Form B's are, the easier and better our work will be.

b. There is an important item to check on the Form B which is not mentioned in the data package checklist. It concerns Item 12, Footnote Count and Item 13, Number of Positions. Because of the way each card is handled in the computer, there must always be numbers entered in Items 12 and 13. If not, the card will be rejected as being in error. (Therefore, each line on a Form B Keypunch Sheet must have data entered in Items 8, 9, 10, 11, 12 and 13). The situation sometimes arises that two or three lines or more are needed to enter all the duty modules that pertain to

a single SSI/TOE/TDA entry (one column on the Form B Worksheet). When this happens, the data in Items 8 to 13 of the first line should be repeated in all succeeding lines for that same entry. (Note that a change in SSI or TOE/TDA constitutes a new entry). Placing 0's in all columns of Items 12 and 13 on succeeding lines of an entry is also acceptable. You should check this carefully on all your Keypunch sheets and enter the appropriate numbers (or 0's) where necessary.

4. Error cards and good cards.

a. It will be necessary for the RETO analyst to correct the cards rejected by the computer as being in error. An error card will have a blank spot, or spots, on it at the point, or points, the computer detected an error. In addition, a computer printout will be produced showing the data on all error cards of a given batch. The RETO analyst should check the printout against the appropriate Form B Keypunch Sheets (which he will have gotten back from the contractor) to determine the correct data which should be entered in the blank spot, or spots, on each card (you might have to consult with the proponent). The card can be identified by matching the data typed on the top of the card with the data on the printout. Enter the correct data on the card as follows:

(1) If the error (blank spot) is on the left side of the card (first 40 columns), enter the correction on the right hand side of the card.

(2) If the error is on the right (last 40 columns), enter the correction on the left.

(3) Use a black felt tip pen.

(4) Print carefully, using the standard characters. Avoid the holes in the card.

(5) If there is more than one error on a card, enter each correction on the appropriate side of the card as above. If they are on the same side, enter the corrections in the same order the errors appear on the card, left to right (and top to bottom if necessary). If there is a possibility of confusion, draw arrows from the corrections to the corresponding blank spots at the top of the card.

b. The editing routine in the computer will not detect all errors. If the keypunch operator has entered a 6 instead of a 5 (because she couldn't tell the difference), that mistake might go undetected by the computer and, for example, 600 requirements might be entered instead of 500. In order to insure that the data base in the computer is at least as accurate as the figures submitted by the proponents, a "good card" check will be conducted. The computer will produce a printout of all the cards in each batch that were accepted by the editing routine. This printout will be given to the

RETO analyst, and he will check it entry by entry against the Form B Key punch Sheets. If there are no discrepancies, that will indicate that the computer has accepted nothing but correct data. If there are errors on the printout, it will show that the keypunching mistakes were not of the kind that the editing routine can detect. These errors must be corrected. At this time, we have not established the procedure for correcting bad data on the "good card" listing. Instructions will be provided later.

K-4-V-4

Please fill out the 1000 B (containing these characters) ...
 This will greatly assist our keypunch operators in
 character identification, speed and accuracy of data
 transfer. Thank you.

C-10
 13 Dec 74

STANDARD CHARACTER REPRESENTATION FOR CODING

A	B	C	D	E	F
G	H	I	J	K	L
M	N	O	P	Q	R
S	T	U	V	W	X
Y	Z	Ø	1	2	3
4	5	6	7	8	9
@	AT	=	EQUAL	,	COMMA
[LEFT BRACKET	>	GREATER THAN	\	REVERSE SLANT (SLASH)
]	RIGHT BRACKET	&	AMPERSAND	'	QUOTATION
#	NUMBER	\$	DOLLAR	;	SEMI-COLON
Δ	DELTA OR CARET	*	ASTERISK	/	FORWARD SLANT (SLASH)
(LEFT PARENTHESES	✓	SPACE	.	PERIOD
)	RIGHT PARENTHESES	%	PERCENT	□	LOZENGE
-	DASH	:	COLON	≠	NOT EQUAL TO
+	PLUS	?	QUESTION		
<	LESS THAN	!	EXCLAMATION		

Table 11-1
 11-3

K-4-V-5

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 5

SPECIALTY REQUIREMENTS DETERMINATION AND ANALYSIS

TO ANNEX K

DATA COLLECTION AND ANALYSIS

3 Inclosures

1. Formats, Tables 1-34
2. Formats, Tables 35-64
3. Required Signature Comparisons

K-5-1

SPECIALTY REQUIREMENTS DETERMINATION AND ANALYSIS

INTRODUCTION

An important first phase of the RETO effort involves determining the duty position requirements for every officer career specialty. This mass of data must then be placed in a computer, manipulated, compared, and printed out in a systematic way that will facilitate the RETO analysis. A portion of the output will simply document each specialty and various higher groupings, i.e., it simply records the important requirements data for future reference. The major portion of the computer function and output, however, will manipulate, group, and compare the data in ways that reveal important facts that would be impossible to determine manually.

This paper specifies a common terminology and notation for dealing with requirements data. Furthermore, it establishes the concept of "signatures", how they are calculated, the reason and method for comparing them, and the procedures for displaying the results.

A. REQUIREMENTS

1. General Requirements

Notation:

i = duty position	c = command
j = specialty	a = arm (C, CS, CSS, Other)
k = rank (grade)	O = OPMS specialties
l = SSI	N = Non-OPMS specialties
m = TOE/TDA	T = Grand Total Army

R_{ijklm} = Requirements of position i, in specialty j, at rank k, for SSI l and TOE or TDA m. (This represents one entry in one column of Item 6 on the Form B Worksheet or Item 13 of the Form B Keypunch sheet)

R_{ijkl} = Requirements of position i, in specialty j, at rank k, for SSI l. It is the sum of the TOE and TDA requirements of a given SSI of a specific duty position (or clustered positions).

$$R_{ijkl} = \sum_{m=TOE}^{TDA} R_{ijklm}$$

R_{ijk} = Total requirements of position i, in specialty j, at rank k.
 This is the total requirement for a specific duty position (or clustered positions). (This figure would be found in Item 4 of the Form B Worksheet or Item 7 of the Form B Keypunch sheet.)

$$R_{ijk} = \sum_{l=A}^Z R_{ijkl}$$

R_{jkl} = Total requirements of all positions in specialty j, at rank k, for SSI l.

$$R_{jkl} = \sum_{i=1}^n R_{ijkl}$$

R_{jk} = Total requirements for rank k in specialty j.

$$R_{jk} = \sum_{l=1}^n R_{ijkl}$$

or

$$R_{jk} = \sum_{l=A}^Z R_{jkl}$$

R_{j1} = Total requirements for SSI 1 in specialty j.

$$R_{j1} = \sum_{k=2}^6 R_{jkl}$$

R_j = Total requirements for specialty j.

$$R_j = \sum_{k=2}^6 R_{jk}$$

or

$$R_j = \sum_{l=A}^Z R_{jl}$$

R_{jo} = Requirements of an OPMS specialty

R_{jN} = Requirements of a Non-OPMS specialty

R_{ja} = Requirements of a specialty which is part of arm a.

R_k = Total requirements for rank k in a specified groupment of specialties, i.e.,

R_{ka} = requirements of rank k in arm a.

R_{kO} = requirements of rank k in all OPMS specialties

R_{kN} = requirements of rank k in all Non-OPMS specialties

R_{kT} = requirements of rank k in the entire Army.

$$R_k = \sum_{j=x}^y R_{jk}$$

R_o = Total requirements of all OPMS specialties

$$R_o = \sum_{j=x}^{no} R_{jo}$$

or

$$R_o = \sum_{k=2}^6 R_{ko}$$

R_N = Total requirements of all Non-OPMS specialties

$$R_N = \sum_{j=y}^{nN} R_{jN}$$

or

$$R_N = \sum_{k=2}^6 R_{kN}$$

R_a = Total requirements of an arm a (combat, combat support, or combat service support).

$$R_a = \sum_{j=z}^{na} R_{ja}$$

or

$$R_a = \sum_{k=2}^6 R_{ka}$$

R_T = Grand Total requirements of the entire Army (OPMS plus Non-OPMS).

$$R_T = R_O + R_N$$

or

$$R_T = \sum R_j$$

or

$$R_T = \sum_{k=2}^6 R_{kT}$$

2. Command Requirements

The addition of subscript c to any of the symbols defined above indicates that only command jobs are to be considered in the specified requirements. Command jobs are those duty positions which show duty module A-3 as one of the duty modules required for that position. For example:

R_{jkc} = Requirements of all command duty positions at rank k in specialty j.

3. Duty Module Requirements

A Duty Module Requirement, DR, is the total of the requirements for the individual sub-elements of the duty positions calling for a given duty module. The addition of subscript d to DR_{ijklm} indicates that each duty module listed for that specific position/specialty/rank/SSI/TOE/TDA entry should be assigned the requirements value of that particular entry. (Every duty module shown on a punchcard should be associated with the requirements shown in Item 13.) For any given duty module, these associated requirements can be summed within various categories. For example:

DR_{jkd} = The total requirements associated with duty module d, at rank k, in specialty j. Note that this is a summation of the requirements (within the grade and specialty) of all the individual position/SSI/TOE/TDA entries for which the given duty module has a training method indicated. Therefore, DR_{jkd} may or may not be equal to the corresponding R_{jk} for any particular duty module d.

Similarly, DR_{jld} = Total requirements associated with duty module d, for SSI 1, in specialty j. Again, this is a summation of individual requirements (entries in each column of Item 6 on the worksheet or Item 13 on the Key punch sheet) which are associated with the duty module d each time it is listed (with a training method) under SSI 1 for specialty j.

4. Additional Requirements

New Symbols:

- e = Type of job (C, R, S, or A)
- f = Training Type (1, 2, or 3)
- g = Training Alternative (P, M, C, S, G, E, X, U, or T)
- h = Analyzed/Non-Analyzed duty position (i.e., it does/doesn't have duty modules specified for it).

The addition of these subscripts to any of the basic symbols defined above indicates that the requirements should be aggregated by the category specified. For example:

- R_{jke} = Total requirements of all duty positions of type e, at rank k, in specialty j.
- R_{jkh} = Total requirements of all analyzed/non-analyzed duty positions in specialty j at rank k.
- DR_{jkdf} = Total requirements associated with duty module d, at rank k, in specialty j, for which training type f was specified.

DR_{jkdg} = Total requirements associated with duty module d, at rank k, in specialty j, for which training alternative g was specified.

DR_{jkdfg} = Total requirements associated with duty module d, at rank k, in specialty j, for each specified combination of training type f and training alternative g.

5. Other Requirements

Certain other requirements must be calculated for various other purposes. Examples of these (involving TOE/TDA requirements) are shown below. Consistent application of the standard notation should be followed.

R_{ijkm} = Requirements of position i, in specialty j, at rank k, for all SSI's, categorized as either TOE or TDA m.

$$R_{ijkm} = \sum_{l=A}^Z R_{ijklm}$$

R_{jkm} = Total requirements in specialty j, at rank k, categorized as TOE or TDA m.

$$R_{jkm} = \sum_{i=1}^n R_{ijkm}$$

R_{jm} = Total requirements of specialty j categorized as TOE or TDA m.

$$R_{jm} = \sum_{k=2}^6 R_{jkm}$$

R_{mo} = Total requirements of all OPMS specialties categorized as TOE or TDA m.

$$R_{mo} = \sum_{j=x}^{n_o} R_{jmo}$$

R_{mN} = Total requirements of all Non-OPMS specialties categorized as TOE or TDA m.

$$R_{mN} = \sum_{j=y}^{n_N} R_{jmN}$$

R_{mT} = Grand Total requirements of the entire Army categorized as TOE or TDA m.

$$R_{mT} = R_{mO} + R_{mN}$$

or

$$R_{mT} = \sum R_{jm}$$

R_{jklm} = Total requirements in specialty j, at rank k, for SSI , categorized as TOE or TDA m.

$$R_{jklm} = \sum_{i=1}^n R_{ijklm}$$

6. Outputs

Inclosure 1 shows the specific position requirements data that must be calculated and the formats for displaying the results (Tables 1 thru 34). Where percentages are required, they are indicated using the notation for Weighting Factors (see Section B) since such Factors are themselves ratios of requirements.

B. WEIGHTING FACTORS

1. Introduction

- A weighting factor is a ratio of the requirements of one sub-element of a group to the total requirements of the group as a whole. The weighting factor is, then, a percentage and is used in constructing "signatures" of various groups (see Section C).
- The requirements, R, used in weighting factors and signatures are those for assigned positions only, i.e., they are the requirements for those positions that have duty modules associated with them.
- The same notation is used for weighting factors as was used for requirements. However, one new notational procedure has been added: a bar over a subscript, e.g., \bar{m} , indicates that that factor is present in the numerator of a ratio but not in the denominator.

2. General Weighting Factors

$$W_{ijkl\bar{m}} = \frac{R_{ijklm}}{R_{ijkl}}$$
$$W_{ijkl\bar{l}} = \frac{R_{ijkl}}{R_{ijk}}$$
$$W_{ij\bar{k}l} = \frac{R_{ijkl}}{R_{jkl}}$$

$$W_{ijk}^- = \frac{R_{ijk}}{R_{jk}}$$

$$W_{jkl}^- = \frac{R_{jkl}}{R_{jk}}$$

$$W_{jk}^- = \frac{R_{jk}}{R_j}$$

$$W_{jkl}^- = \frac{R_{jkl}}{R_{j1}}$$

This formula states that the weighting factor for one rank of a specialty is equal to the requirements for that rank divided by the requirements for the entire specialty (all ranks).

$$W_{jk}^- = \frac{R_{jk}}{R_k}$$

This ratio shows the requirements of one rank in one specialty as a percentage of the total requirements for that rank in a group of specialties, e.g., $W_{jko}^- = \frac{R_{jko}}{R_{ko}}$

weighting factor of a rank in one OPMS specialty as a percent of the requirements for that rank in all OPMS specialties.

$$W_{j1}^- = \frac{R_{j1}}{R_j}$$

$$W_{jx}^- = \frac{R_{jx}}{R_x}$$

where $R_x = R_o$ or R_N or R_a or R_T or any groupment containing R_j .

$$W_{kx}^- = \frac{R_{kx}}{R_x} \quad \text{e.g.,} \quad \frac{R_{ko}}{R_o} \quad \text{or} \quad \frac{R_{ka}}{R_a} \quad \text{or} \quad \frac{R_{kN}}{R_N} \quad \text{or} \quad \frac{R_{kT}}{R_T}$$

$$W_o = \frac{R_o}{R_T}$$

$$W_N = \frac{R_N}{R_T}$$

$$W_a = \frac{R_a}{R_o}$$

3. Command Weighting Factors

These are formed from requirements of duty positions involving command (duty module A-3). For example.

$$W_{j\bar{k}c} = \frac{R_{jkc}}{R_{jc}}$$

$$W_{jk\bar{c}} = \frac{R_{jkc}}{R_{jk}}$$

$$W_{j\bar{c}} = \frac{R_{jc}}{R_j}$$

4. Additional Weighting Factors

These are formed in the same way as the basic factors. For example:

$$W_{j\bar{k}e} = \frac{R_{jke}}{R_{je}}$$

$$W_{jke\bar{c}} = \frac{R_{jke}}{R_{jk}}$$

$$W_{j\bar{h}} = \frac{R_{jh}}{R_j}$$

C. SIGNATURES

1. Introduction

In order to be able to compare the skills required by various groups of positions or specialties, a descriptor will be used for that group that will be called a "Signature". The signature for one column on the Form B Worksheet (or one line on the Form B Key punch sheet) is simply a column matrix of either 0's or 1's. A 1 appears for every duty module that applies to that particular position/specialty/grade/SSI/TOE/TDA entry, a 0 appears for every duty module that does not apply, when all possible duty modules are listed in a set order, e.g., numerically.

Hence:

$$S_{ijklm} = \begin{array}{|c} 1 \\ 0 \\ 0 \\ 1 \\ 1 \\ 1 \\ 0 \\ 1 \\ \text{etc} \end{array} \begin{array}{l} \text{Duty module 1 applies} \\ \text{Duty Module 2 does not apply} \\ \text{Etc} \end{array}$$

A signature for any position, rank, or other group can be built up from this basic signature by weighting each element of the group according to its size in relation to the whole. Since the "weighting factor" used

will be a scalar value between 0 and 1 and will be multiplied times a column matrix, the group signature will be a summation of matrices, and hence a column matrix or "vector" itself, composed of numbers between 0 and 1.

$$S_{ijkl} = \sum_{m=TOE}^{TDA} W_{ijklm} \cdot S_{ijklm}$$

$$S_{ijk} = \sum_{l=A}^Z W_{ijkl} \cdot S_{ijkl} \quad \text{This is the signature for one duty position (or clustered position).}$$

$$S_{jk} = \sum_{i=1}^n W_{ijk} \cdot S_{ijk} \quad \text{where } W_{ijk} = \frac{R_{ijk}}{R_{jk}}$$

Let us examine the latter expression. It shows the signature of one rank in a given specialty. It is formed by multiplying the signature (matrix) of each duty position in that grade by the "weighting factor" or ratio of the requirements of that position to the total requirements of all positions at that grade, and summing the results.

$$S_{jk} = \frac{R_{1ijk}}{R_{jk}} [S_{1ijk}] + \frac{R_{2ijk}}{R_{jk}} [S_{2ijk}] - \frac{R_{nijk}}{R_{jk}} [S_{nijk}]$$

where [] represents a column matrix or "vector"

The computations, for say captains jobs in specialty 11, might look like this:

$$S_{j11k3} = \frac{20}{1000} \begin{bmatrix} 0 \\ 1 \\ 1 \\ 0 \\ 1 \\ 0 \end{bmatrix} + \frac{200}{1000} \begin{bmatrix} 1 \\ 1 \\ 0 \\ 1 \\ 0 \\ 0 \end{bmatrix} + \frac{700}{1000} \begin{bmatrix} 0 \\ 1 \\ 0 \\ 1 \\ 0 \\ 0 \end{bmatrix} + \frac{80}{1000} \begin{bmatrix} 0 \\ 1 \\ 0 \\ 1 \\ 1 \\ 0 \end{bmatrix}$$

where for simplicity we only show four duty positions with a total of 1000 requirements and only six duty modules.

$$S_{j11k3} = \begin{bmatrix} 0 \\ 0.02 \\ 0.02 \\ 0 \\ 0.02 \\ 0 \end{bmatrix} + \begin{bmatrix} 0.2 \\ 0.2 \\ 0 \\ 0.2 \\ 0 \\ 0 \end{bmatrix} + \begin{bmatrix} 0 \\ 0.7 \\ 0 \\ 0.7 \\ 0 \\ 0 \end{bmatrix} + \begin{bmatrix} 0 \\ 0.08 \\ 0 \\ 0.08 \\ 0.08 \\ 0 \end{bmatrix} = \begin{bmatrix} 0.2 \\ 1 \\ 0.02 \\ 0.98 \\ 0.1 \\ 0 \end{bmatrix}$$

In analyzing this signature, we see that duty module number two has a value of 1. This is a common duty module at this grade (all positions require this duty module). The last duty module has a value of 0. None of the positions require this duty module. The other duty modules have values that reflect their relative importance in terms of the percent of analyzed duty positions that require them.

2. General Signatures

$S_{ijklm} = \begin{bmatrix} 1 \\ 0 \\ 1 \\ \text{etc} \end{bmatrix}$ = a vector composed entirely of 0's and 1's according to whether or not the duty module applies. It is a unique signature for one column entry on the worksheet or one line on the keypunch sheet.

$$S_{ijkl} = \sum_{m=TOE}^{TDA} W_{ijklm} \cdot S_{ijklm} = \text{The signature of one SSI of one duty position.}$$

$$S_{ijk} = \sum_{l=A}^z W_{ijk\bar{l}} \cdot S_{ijkl} = \text{The signature of one complete duty position.}$$

$$S_{jkl} = \sum_{i=1}^n W_{ijkl} \cdot S_{ijkl} = \text{The signature of one SSI at one grade of a specialty.}$$

$$S_{jk} = \sum_{i=1}^n W_{ijk} \cdot S_{ijkl} = \text{The signature of one rank of a specialty}$$

or

$$S_{jk} = \sum_{l=A}^z W_{jk\bar{l}} \cdot S_{jkl}$$

$$S_{j1} = \sum_{k=2}^6 W_{j\bar{k}1} \cdot S_{jkl} = \text{The signature of one SSI of a specialty.}$$

$$S_j = \sum_{k=2}^6 W_{jk} \cdot S_{jk} = \text{The signature of one specialty.}$$

or

$$S_j = \sum_{l=A}^z W_{j\bar{l}} \cdot S_{j1}$$

$$S_k = \sum_{j=x}^y W_{jk} \cdot S_{jk} = \text{The signature of one rank in a groupment of specialties.}$$

$$S_o = \sum_{j=x}^{n_o} W_{jo}^- \cdot S_{jo} = \text{The signature of OPMS specialties as a whole.}$$

or

$$S_o = \sum_{k=2}^6 W_{ko}^- \cdot S_{ko}$$

where $W_{jo}^- = \frac{R_{jo}}{R_o}$, S_{jo} = signature of one OPMS specialty

$$W_{ko}^- = \frac{R_{ko}}{R_o}, S_{ko} = \sum_{j=x}^{n_o} W_{jko}^- \cdot S_{jko} = \text{signature}$$

of one rank in the total of OPMS specialties.

$$S_N = \sum_{j=y}^{n_N} W_{jN}^- \cdot S_{jN} = \text{Signature of Non-OPMS specialties as a whole.}$$

or

$$S_N = \sum_{k=2}^6 W_{kN}^- \cdot S_{kN}$$

$$S_a = \sum_{j=z}^{n_a} W_{ja}^- \cdot S_{ja} = \text{Signature of an arm (C, CS, CSS) as a whole.}$$

or

$$S_a = \sum_{k=2}^6 W_{ka}^- \cdot S_{ka}$$

$$S_T = W_o \cdot S_o + W_N \cdot S_N = \text{Signature of the entire Army.}$$

8. Command Signatures

These are formed in the usual way except that the weighting factors and constants only use requirements and duty positions that involve

command. For example:

$$S_{ije} = \sum_{l=1}^{n_l} W_{ijle} \cdot S_{ijle}$$

This would represent the signature of the command jobs in one rank of a specialty. Only the signatures and requirements of command duty positions are used in calculating it.

9. Aggregated Signatures

Again, these are formed as above except that the signatures and requirements used are aggregated by the category specified. For example:

$$S_{jke} = \sum_{p=2}^6 W_{jke} \cdot S_{jke}$$

This would be the signature of one type of job (say all core jobs) in a specialty.

D. SIGNATURE CODING AND SPECIALTY GROUPING

1. Basic Signatures S_{ijklmcehao/N/T}

a. A signature using the standard notation can have as many as 10 subscripts. (It would be highly unusual if all 10 of them were used at once.) To designate a specific signature, it is only necessary to indicate those subscripts that apply:

S_{j13k5} = Specialty 13, grade 05.

S_{i015j121A} = Duty position #15 (sheet number), in SC12, SSI/A.

b. Some subscripts stand by themselves:

c = command, O = OPMS, N = Non-OPMS, T = Total Army

S_{mEO} = TOE jobs in the OPMS specialties

S_{ecN} = Core jobs in the Non-OPMS specialties. Note that the c follows an e and therefore refers to "core" jobs. A c standing alone, not preceded by e, refers to "command" jobs.

c. Two subscripts require explanation:

hA indicates analyzed positions

a1 indicates combat arms

a2 indicates combat support

a3 indicates combat service support

a4 indicates other

The specific specialties making up each arm are shown in paragraph 3 below.

d. If a subscript is used with no further designation of its elements, it is understood that all elements of the group are to be used in turn; therefore, more than one specific signature is indicated;

S_{j11k} indicates 5 signatures - one for each grade in specialty 11.

2. Special Signatures

a. Some comparisons require special groupings. For example, it might be desirable to examine "field grade officers", which is a group composed of 3 grades. Some situations require the signature of one element of a group to be compared with the signature of the rest of the group, e.g., SC11 versus (Combat Arms minus SC11). In most such cases the use of the standard notation is clear:

$S_{j11k456}$ Indicates the group included in the signature is composed of grades 04, 05, and 06 of specialty 11.

S_{a1-j11} Indicates combat arms minus specialty 11.

$S_{j1113k35c}$ Indicates command jobs at the grades of 03 and 05 in specialties 11 and 13. Note that this is one signature - not an indicator for multiple signatures.

b. If there is a possibility of confusion or misinterpretation of the precise signature desired, or if the subscripts become unwieldy, replace the subscript entry with an asterisk and place a notation beneath the signature to show the special grouping:

Si*j11 Indicates the grouping involves duty positions
*10101110 number 10 and 110 of specialty 11.

3. Arms and Specialty Grouping

a. The following shows the initial grouping of the specialties into arms for the purpose of this study. These groupings make use of Paragraphs 2-6 and 2-7 of DA Pam 600-3 and AR 10-6:

- 1 - Combat Arms: SC11, 12, 13, 14
- 2 - Combat Support: SC 15, 21, 25, 31, 35, 36, 37
- 3 - Combat Service Support: SC 26, 27, 41, 42, 44, 45, 54, 71,
72, 73, 74, 75, 76, 77, 81, 82,
83, 86, 87, 88, 91, 92, 93, 95, 97
- 4 - Other: SC 28, 43, 46, 47, 48, 49, 51, 52, 53, 70

b. The 46 OPMS specialties are shown above. In addition, there are 10 Non-OPMS specialties:

SC 55, 56, 60, 61, 63, 64, 65, 66, 67, and 68.

E. COMPARISON OF SIGNATURES

1. General

After signatures have been constructed for various groups of interest, it is possible to compare these signatures directly to determine various kinds of information. Such comparisons can show the skills (duty modules) which are common to two groups of positions, specialties, grades, etc. They can show what is unique about a certain group. They can be used to conduct a "curve fit" to see if two specialties are in fact equivalent; that is, they involve the same duty modules with about the same weight. Furthermore, once the common or unique duty modules are identified, it is possible to calculate the duty position requirements and training methods associated with each duty module. All of this information is central to the RETO study effort.

2. Comparisons

a. A comparison is the matching of duty module values, W_1 , in one signature against the corresponding values, W_2 , in another signature. The different types of comparisons, for different purposes, are shown below:

Types of Comparisons

1. Within one specialty
2. One specialty vs. another
3. One specialty vs. a group of specialties
4. Within a group as a whole
5. One group vs. another group

- a. Common - determine common duty modules.
 - b. Shared - determine shared/important duty modules.
 - c. Unique - determine unique and significant DM's.
 - d. Curve Fit - determine if the same duty modules are present in each signature with the same degree of importance.
 - e. Training - determine the best training method and associated requirements for specified duty modules.
- X. Only one signature is needed; no comparison is made between signatures.

b. Criteria or standards, must be established: to determine whether or not a particular duty module is significant within a given signature; to determine if a match-up of values for any one duty module between signatures is of interest; and to judge whether or not the comparison as a whole is significant.

Criteria:

(1) The significance of a duty module (DM) within any one given signature depends on its weighted value in that signature:

- | | |
|------------------|----------------|
| 1. W = 1.0 | Common DM |
| 2. W = .70 - .99 | Essential DM |
| 3. W = .40 - .69 | Important DM |
| 4. W = .20 - .39 | Significant DM |
| 5. W = .01 - .19 | Rare DM |

NOTE: If W = 0, the duty module is not present in the signature and carries no weight.

(2) In comparing signatures, the value of each duty module in one signature is matched against its value in the other signature using one or more of the following criteria:

- I. $W_1 \geq .4$ and $W_2 = 0$ - DM unique and significant to S_1
- II. $W_1 = 0$ and $W_2 \geq .4$ - DM unique and significant to S_2
- III. $W_1 \geq .5$ and $W_2 \geq .3$
or
- DM shared by and important to
- IV. $W_1 \geq .3$ and $W_2 \geq .5$
or
both S_1 and S_2
- V. $W_1 + W_2 \geq .8$ and $|W_1 - W_2| \leq .3$
- VI. $W_1 + W_2 \geq .3$ and $|W_1 - W_2| \leq .2$ - DM present and of approx.
equal value in both S_1
and S_2 .

(3) The degree of significance of a comparison of signatures depends on the percent of duty modules that meet the specified criteria. For example, if a large percent of the duty modules in signature S_1 meet criterion I above, the comparison is highly significant since it indicates that most of the skills required by S_1 are unique in comparison with S_2 . Conversely, a significant degree of commonality between S_1 and S_2 would be indicated if a high percentage of their duty modules met criteria III, IV, or V. Therefore, the degree of significance of a comparison will be measured by the percent of duty modules meeting the specified criteria and falling in the following range:

A. Extreme	60 - 100%
B. High	40 - 59%
C. Medium	20 - 39%
D. Low	10 - 19%
E. Doubtful	0 - 9%

These percentages are computed separately for S_1 and S_2 . In each case, as applicable, uniqueness is measured separately from commonality. It is important to note that only non-zero weight duty modules ($W>0$) are included in these calculations. For example, if signature S_1 is compared with signature S_2 , the following calculations might result:

	$\frac{S_1}{400}$	$\frac{S_2}{100}$
Non-Zero DM's ($W>0$)	20	20
Common DM's (Criteria III, IV, V)	200	10
Unique DM's (Criteria I, II)	$\frac{20}{400} = 5\%$	$\frac{20}{100} = 20\%$
Commonality Significance	$\frac{200}{400} = 50\%$	$\frac{10}{100} = 10\%$
Unique Significance		

The interpretation of these results would be that S_1 has a doubtful degree of commonality with S_2 and in fact is highly unique; whereas, S_2 has a medium degree of commonality with S_1 and a low degree of uniqueness. In other words, S_2 is somewhat of a subset of S_1 .

In the case of a "curve fit" comparison, which uses criterion VI, the percentages are calculated in the same way as above. Note that this is a variation of a commonality comparison.

3. Outputs

The computer should have the capability of computing and printing any specified signature or conducting any specified comparison. The printout will be as shown below.

a. Format. (Inclosure 2)

The attached table shows the format for printing out the results of a comparison between signatures. It can also be used for listing the common/important duty modules from one signature.

b. Criteria.

For each comparison, or single signature analysis, one or more of the criteria discussed above will be specified. The criteria used will be indicated on the printout.

c. Significance.

(1) A degree, or level of significance, as discussed above, will be specified for each comparison, e.g., Medium - 20%. A different degree of significance might be specified for commonality than for uniqueness. After making the comparison, the computer will indicate the degree of significance actually attained for S_1 and S_2 , common and/or unique as appropriate (i.e., up to 4 separate percentages). If the actual level attained, e.g., Low - 14%, is less than that specified, no printout of that element of the comparison is necessary. If the actual level meets or exceeds the specified level of significance, the appropriate portions of the table are printed out. In each case, however, the header information on criteria and significance will be printed out.

(2) In the case of a single signature, there is no comparison of duty modules, and hence no specified or attained significance level. Only those duty modules which meet or exceed the weight value designated in the criteria are printed out, along with associated information as specified. The appropriate columns under the heading S_1 on the attached table are used for this type of printout.

d. Training Method.

(1) The "best" training method for any duty module is the one associated with the largest subtotal DR (duty module requirement) of all DR's involving that duty module. For example, a given duty module might be involved in 1000 duty position requirements; therefore its total DR = 1000. Of these, 600 DR's are associated with training method 1M and 400 DR's are associated with training method 3E. In this case, the "best" training method is 1M. The computer would then print out 1M as the training method and 1000 (not 600) as the DR under "Requirements".

(2) If no subtotal DR represents a majority of the total DR, the training methods associated with the two largest DR subtotals are printed out as the best training method, in order of size. Again the entry under "Requirements" is the total DR.

e. Priority. (Inclosure 3)

Attached is a listing of some specific comparisons and single signature analyses that will be required. Also shown are the type of comparison involved, the signatures, the criteria, and the output desired. The entire listing represents a great deal of computer programming, calculation, and run time and obviously cannot all be undertaken at once.

The numbers in the far left hand margin indicate the priority of each of the comparisons. The number one priority comparisons are those needed to support the RETO analysis of each individual specialty. The lower priority comparisons will be needed for analyses of groupments of specialties, military education levels, and the Army as a whole.

INCLOSURE 1

FORMATS, TABLES 1-34

K-5-I-1

DICK MOORMAN 1535 DAPC-PSS-H ROOM 2N47

TABLE 6A

SPECIALTY CODES: 11

TOE/TDA REQUIREMENTS

INFANTRY

DATE 040578 PAGE 287

GRADE	COMMAND RQMTS	TOE				TDA				SUB TOTAL	OVERALL TOTAL	
		TYPE JOB C	TYPE JOB R	TYPE JOB S	TYPE JOB A	TYPE JOB C	TYPE JOB R	TYPE JOB S	TYPE JOB A			
LT	0	2275	7	2309	LT	0	194	84	68	5	351	2860
	08	863	08	878		08	78	38	38	08	138	448
CPT	659	887	3	920	CPT	328	476	150	70	113	809	1719
	368	528	08	538		198	288	98	48	68	478	288
MAJ	17	201	12	218	MAJ	34	234	87	47	87	455	791
	28	348	28	428		48	308	118	68	118	588	138
LTC	115	166	9	185	LTC	34	126	182	24	61	393	578
	208	298	18	328		68	228	318	48	118	688	98
COL	36	39	12	54	COL	80	50	165	38	43	296	352
	108	118	38	168		238	148	478	118	128	848	68
TOTAL	827	3448	38	3796	TOTAL	476	1080	668	247	309	2304	6100
	148	608	18	628		88	168	118	98	58	388	1008

K-5-I-2

INCLOSURE 2

FORMATS, TABLES 35-64

K-5-II-1

INCLOSURE 3

REQUIRED SIGNATURE COMPARISONS

K-5-III-1

COMPARISONS

<u>TABLE #</u>	<u>PRIORITY</u>	<u>PURPOSE</u>	<u>TYPE</u>	<u>SIGNA</u>
		1. Determine duty modules (skills) that are common/important to:		
60	3	a. All duty positions in the Army	4ab X	S _T
61	3	b. All positions in OPMS specialties	4ab X	S _O
62	3	c. All positions in each arm (C, CS, CSS, other)	4ab X	S _a
37	1	d. Each rank in the OPMS specialties	4abeX	S _{ko}
45	2	e. Each rank in each arm	4abeX	S _{ka}
35	1	f. Each specialty	lab X	S _j
36	1	g. Each rank in each specialty	labex	S _{jk}
46	2	h. TOE positions in each rank in the combat arms	4abeX	S _{kma}
38	1	i. Each SSI in each rank in each OPMS specialty	labex	S _{jklo}
63	3	j. Each SSI in each specialty	labex	S _{jl}
		2. Determine duty modules (skills) that are common/important or unique to:		
40	1	a. Each OPMS specialty	3ab,c	S _{jo} vs (S _c)
47	2	b. Each specialty in each arm	3ab,c	S _{ja} vs (S _a)
48	2	c. Each rank in the OPMS specialties	5ab,c e	S _{ko} vs (S _c)
49	2	d. Each rank in each arm	5ab,c e	S _{ka} vs (S _a)
50	2	e. Each SSI in each specialty	lab,c e	S _{jl} vs (S _j)
41	1	f. Each rank in each specialty in each arm	3ab,c e	S _{jka} vs (S _a)

URES

CRITERIA

OUTPUT

All references are to the
Signature Comparison Table

4 or above	S_1 Common Wt
4 or above	S_1 Common Wt
4 or above	S_1 Common Wt
4 or above	S_1 Common Wt, TM, Reqs
4 or above	S_1 Common Wt, TM, Reqs
3 or above	S_1 Common Wt, Reqs
3 or above	S_1 Common Wt, TM, Reqs
3 or above	S_1 Common Wt, TM, Reqs
3 or above	S_1 Common Wt, TM, Reqs
3 or above	S_1 Common Wt, TM, Reqs

	COMMON	UNIQUE		
		S_1	S_2	
- S_{jo})	III, IV, V	D	I C	S_1 Common/Unique Wt, S_2 Common Wt
- S_{ja})	III, IV, V	C	I C	S_1 Common/Unique Wt, S_2 Common Wt
- S_{ko})	III, IV, V	D	I C	S_1 All, S_2 Common Wt, TM, Reqs
- S_{ka})	III, IV, V	C	I C	S_1 All, S_2 Common Wt, TM, Reqs
- S_{jl})	III, IV, V	C	I C	S_1 All, S_2 Common Wt, TM, Reqs
ta- S_{jka})	III, IV, V	C	I C II C	ALL

<u>TABLE #</u>	<u>PRIORITY</u>	<u>PURPOSE</u>	<u>TYPE</u>	<u>SI</u>
		3. Determine skills required for command, i.e., determine duty modules that are common/important to command jobs in:		
51	2	a. Each rank in the OPMS specialties	4abeX	S _{koc}
52	2	b. Each rank in each arm	4abeX	S _{kac}
39	1	c. Each rank in each OPMS specialty	1abeX	S _{jkoc}
64	3	d. Each OPMS specialty	1ab X	S _{joc}
		4. Determine duty modules that are unique and significant to command jobs in:		
53	2	a. Each specialty	1c	S _{jc v}
42	1	b. Each rank in the OPMS specialties	5c e	S _{koc}
54	2	c. Each rank in each arm	5c e	S _{kac}
43	1	d. Each rank in each specialty in each arm	3ab,c e	S _{jkac}
		5. Determine skills that distinguish one grade level from another, i.e., determine the duty modules that are unique and significant to:		
55	2	a. Company grade officer positions as compared to field grade officer positions in each arm	5c e	S _{k23a}
56	2	b. 04 and 05 positions as compared to 06 positions in each arm	5c e	S _{k45a}
57	2	c. Each rank as compared to the next rank in each specialty	1c	S _{jk vs}
58	2	d. Each rank as compared to the next rank in the OPMS specialties	5c	S _{ko vs}

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2

FEATURES

CRITERIA

OUTPUT

4 or above	S_1 Common Wt, TM, Reqs
4 or above	S_1 Common Wt, TM, Reqs
3 or above	S_1 Common Wt, TM, Reqs
3 or above	S_1 Common Wt, Reqs

$(S_1 - S_{jc})$
 $(S_{ko} - S_{koc})$
 $(S_{ka} - S_{kac})$
 $(S_{kac} - S_{jkac})$

COMMON	UNIQUE		
	S_1	S_2	
	I	E	S_1 Unique Wt
	I	E	S_1 Unique Wt, TM, Reqs
	I	E	S_1 Unique Wt, TM, Reqs
III, IV, V, D	I	E	II E ALL

S_{k456a}

S_{k6a}

$j(k+1)$

$(k+1)_o$

UNIQUE				
S_1		S_2		
I	C	II	C	$S_1 \& S_2$ Unique, Wt, TM, Reqs
I	C	II	C	$S_1 \& S_2$ Unique, Wt, TM, Reqs
I	C	II	C	$S_1 \& S_2$ Unique, Wt, Reqs
I	C	II	C	$S_1 \& S_2$ Unique, Wt, Reqs

<u>TABLE #</u>	<u>PRIORITY</u>	<u>PURPOSE</u>	<u>TYPE</u>	
same as above	same as above	6.a. Determine the best training method for common and unique skills, i.e., determine the majority recommendation for training type and training alternative for the duty modules identified in Items 1 thru 5 above (as indicated below and cross referenced above):		
		1d, 1e, 1g, 1h, 1i, 1j 2c, 2d, 2e, 2f 3a, 3b, 3c 4b, 4c, 4d 5a, 5b	4e, 4e, 1e, 4e, 1e, 1e 5e, 5e, 1e, 3e 4e, 4e, 1e 5e, 5e, 3e 5e, 5e	Use DR: majorit
		b. Determine the position requirements associated with each such common or unique duty module		
44	1	7. Determine specialties that are equivalent, related, or dissimilar, i.e., compare each specialty with the other specialties in each arm	2d	S _{ja} vs
59	2	8. Determine validity of multiple SSIs in a specialty, i.e., compare each SSI with the other SSIs in each specialty	1d	S _{jl} vs :

NATURES

CRITERIA

OUTPUT

determine
recommendation

The "best" training method is the one associated with the majority of DRs. If no majority, the plurality determines priority method #1, the next largest DR group determines priority #2.

All DRs for each DM apply - not just the majority or plurality

VI A

Equivalent = B or above
Similar = C
Related = D
Dissimilar = E

VI A

Equivalent = B or above
Similar = C
Related = D
Dissimilar = E

see above

see above

Header Only

Header Only

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 6

ANALYSIS PLAN, PART II

TO ANNEX K

DATA COLLECTION AND ANALYSIS

K-6-1

ANALYSIS PLAN, PART II

(Individual Specialty Analysis Using Computer Printouts)

TABLE 1 SPECIALTY REQUIREMENTS

This table provides an overview and summation of each specialty. It shows how the specialty requirements are broken down into various categories or sub-elements. (Each of the sub-elements is examined in more detail in later tables.) Note that all percentages in this table (except the row and column totals) are grade percentages. That is, the requirements for any element are divided by the total requirements for that grade. The column and row totals show each category or grade as a percentage of the total specialty requirements.

a. Requirements Totals and Percents (Row and Column Totals)-

-- Note significant discrepancies between this data and TAADS, Form A, or the MILPERCEN printouts (they will not match exactly, although TAADS should be close).

-- Cross check these totals with the manual specialty matrix (the Polo analysis). Are any changes necessary in previous conclusions on grade progression, late accession/dead end, TOE/TDA requirements, command jobs, etc.?

-- Using Table 2 or 3 and Table 4, calculate the percent of all OPMS/ non-OPMS and Total Army requirements represented by this specialty.

b. Special Skill Identifiers -

-- Note how each SSI is broken down by grade and as a percent of the specialty as a whole.

-- Are the specialty requirements concentrated in certain SSIs or certain grades within a given SSI?

-- Are there gaps at any grades within an SSI? Is there grade progression in each SSI or is there an obvious concentration in fewer SSIs as grade increases or decreases?

-- Cross check the requirements and percentages at each grade for each SSI against the proponent's "recipe" for qualification at each grade. If the proponent prescribed experience in certain SSIs as a prerequisite for qualification, note whether or not there are enough positions in the SSI to qualify all officers at each grade.

-- See Table 5 for a detailed breakdown of each SSI.

c. TOE/TDA -

-- Note how the TOE and TDA jobs are broken down by grade and as a percent of the specialty as a whole.

-- Are the specialty requirements concentrated in either TOE or TDA jobs or certain grades within one of these categories?

-- Are both TOE and TDA jobs available at each grade? Is there an obvious concentration of jobs in one category or the other as grade increases or decreases? Is there, for example, a transition from mostly TOE jobs at the company grades to mostly TDA jobs at the field grades?

-- Cross check with proponent definition of qualification. Does it prescribe troop duty when most jobs are in TDAs at a given grade?

-- Check the corresponding portion of Table 2 or 3 and Table 4. How does this specialty compare with OPMS/non-OPMS specialties as a whole and with the total Army in the percent of jobs that are TOE vs TDA? Do this by grade and total. Note differences.

-- See Table 6 for a detailed breakdown of TOE/TDA requirements.

d. Command (Note: The numbers in this table will not match those in the Polo analysis because of differing definitions of command.)

-- Note how command jobs are distributed by grade and as a percent of all jobs in the specialty.

-- Are there command jobs shown at the grades of LT or MAJ? Check the Form B Worksheets to insure they are valid and that duty module A-3 has not been misused.

-- How does the percentage of command jobs vary from one grade to another? Does an officer have more opportunities to command (percentagewise) at some grades than at others? Are there virtually no command jobs at some or all grades?

-- Cross check with qualification definition. If the proponent prescribes command duty, is this reasonable?

-- Check Tables 2/3 and 4. How does this specialty compare with other specialties (OPMS/Non-OPMS) and the Army as a whole in opportunity to command? Do this by grade and total. Note differences.

-- See Table 7 for a detailed breakdown of command positions.

e. Type Job -

-- Note how each type of job is broken down by grade and as a percent of the specialty as a whole.

-- Are the specialty requirements concentrated in certain types of jobs or certain grades of a given type job?

-- Check the trends in the type of jobs available as grade increases. Do core jobs increase, decrease; are there gaps at some grades; is there an hourglass distribution? Is there an even distribution through all grades for core and related jobs taken as a group, or do these jobs peter out at the higher grades?

-- Does there appear to be an inordinate number of S and A type jobs in this specialty? Are there only a few A jobs - indicating that the specialty is not providing its fair share of requirements for running the Army?

-- Cross check with qualification definition. Are there enough C and R jobs for an officer to stay qualified at each grade?

-- Check Tables 2/3 and 4. How does this specialty compare in its breakout by type of job? Do this by grade and total. Note differences.

-- See Tables 17 to 21 for a detailed breakdown of duty positions by type job for each grade.

TABLE 2 TOTAL OPMS SPECIALTY REQUIREMENTS

This table sums up the data from Table 1 (except SSI) across all OPMS specialties.

TABLE 3 TOTAL NON-OPMS SPECIALTY REQUIREMENTS

Same as Table 2 for Non-OPMS specialties.

TABLE 4 TOTAL ARMY REQUIREMENTS

A summation of Tables 2 and 3.

TABLE 5 SSI REQUIREMENTS

This table provides a detailed look at each SSI in the specialty. A separate printout is provided for each SSI in the same format as was used in Table 1 to record the overall specialty requirements. This table can be used in conjunction with the analysis of Table 1, as well as providing the information indicated below.

a. TOE/TDA -

-- Note how the SSI requirements are distributed between TOE and TDA jobs by grade and as a percent of the SSI as a whole.

-- Are the SSI requirements concentrated in either TOE or TDA jobs or certain grades within one of these categories?

-- Are there gaps at some grades, in which there are either no TOE jobs or no TDA jobs or no jobs of either kind?

-- Is there an obvious trend toward one category as grade increases/decreases?

b. Command -

-- Note how the requirements for command jobs in this SSI are distributed by grade and as a percent of all jobs in the SSI.

-- Does this SSI have virtually no command positions at some or all grades?

-- Is this SSI particularly rich in command positions compared to the average specialty percentage at each grade? (See Table 1)

c. Type Job -

-- Note how each type job in this SSI is broken down by grade and as a percent of the SSI as a whole.

-- Are the SSI requirements concentrated in certain types of jobs or certain grades of a given type job?

-- Does there appear to be an adequate percentage of Core and Related jobs to support officer qualification in this SSI at all grades?

TABLE 6 TOE/TDA REQUIREMENTS

This table provides a detailed look at TOE and TDA position requirements in the specialty. Table 6a. shows the breakout of TOE/TDA positions by command and type jobs. Table 6b. shows the TOE/TDA breakout by SSI. This table can be used in conjunction with the analysis of Table 1, as well as providing the information indicated below.

a. Command -

-- Note how the TOE/TDA requirements for command jobs are distributed by grade and as a percent of all TOE/TDA jobs.

-- Are the command positions concentrated in the TOE or TDA category?

-- Are there virtually no TOE or TDA command positions at some or all grades?

b. Type Job -

-- Note the distribution of type jobs in the TOE/TDA categories by grade and as a percent of all TOE/TDA positions.

-- Are the TOE/TDA requirements concentrated in certain types of jobs or certain grades of a given type job?

-- Does the distribution of Core and Related jobs require service in both TOE and TDA positions to attain qualification, or are C and R jobs as a group concentrated almost exclusively in the TOE/TDA category?

c. SSI -

-- Note how the TOE/TDA requirements are distributed among the various SSIs, by grade and as a percent of all TOE/TDA positions.

-- Are the TOE/TDA requirements concentrated in certain SSIs or certain grades within a given SSI?

-- Does any one SSI represent the majority of the TOE or TDA jobs in total or at any one grade?

-- Does any SSI have requirements only in the TOE or TDA category?

TABLE 7 COMMAND REQUIREMENTS

This table provides a detailed look at command position requirements in the specialty. The table is in the same general format as Table 1 and can be used in conjunction with the analysis of that table, as well as providing the information indicated below.

a. SSI -

-- Note how command jobs are distributed among the various SSIs, by grade and as a percent of all command positions in the specialty.

-- Are the command requirements concentrated in certain SSIs in total or at a given grade?

-- Does any one SSI have the majority of the command positions?

-- Is the distribution and trend of requirements such that an officer's best opportunity to command at the lower grades is in one SSI or set of SSIs, while at higher grades his best opportunity is in a different SSI or set of SSIs?

b. TOE/TDA -

-- Note how command jobs are distributed between TOE and TDA by grade and as a percent of all command positions.

-- Are the command requirements concentrated in one category or the other? Does this vary by grade?

-- Check Tables 8 or 9 and 10. How does this specialty compare with all OPMS/Non-OPMS specialties and the Army as a whole in the percent of command jobs that are TOE vs TDA? Do this by grade and total. Note differences.

c. Type Job -

-- Are there any requirements for command jobs categorized other than Core jobs, i.e., are there any entries under R, S or A? If so, check Form B Worksheets to locate these positions and comment on the validity of the categorization. If there are valid requirements for command jobs of the R, S or A type, answer the next question.

-- Check Tables 8/9 and 10. How does this specialty compare in the breakout of command requirements by type of job. Do this by grade and total. Note differences.

TABLE 8 TOTAL OPMS COMMAND REQUIREMENTS

This table sums up the data from Table 7 (except SSI) across all OPMS specialties.

TABLE 9 TOTAL NON-OPMS COMMAND REQUIREMENTS

Same as Table 8 for Non-OPMS specialties.

TABLE 10 TOTAL ARMY COMMAND REQUIREMENTS

A summation of Tables 8 and 9.

TABLES 11-16 ALTERNATE SPECIALTY REQUIREMENTS

These tables show in matrix form, for OPMS and Non-OPMS specialties, the duty position requirements for specific alternate specialties. There is a matrix for each grade and a total matrix combining all grades. Each row shows the alternate specialty requirements for the primary specialty indicated on the left side of the matrix. Each column shows the primary specialty requirements for the alternate specialty indicated at the top of the matrix. Taken together, a row and column for any given SC shows the dual specialty requirements involving that SC as either primary or alternate.

a. Requirements Totals -

-- Record the totals of each row and each column headed by the specialty code (SC) you are analyzing. Do this by grade and total of all grades (Table 16).

-- Note that the column totals represent "hidden" requirements for this specialty. They are requirements generated by duty positions that call for this specialty as a specific alternate SC and to which officers in this specialty could be assigned. These requirements are not reflected in Table 1 since they appeared on the TAADS documents of the primary specialties with which they are associated. Compute the "adjusted" requirements for this specialty by adding the column total of Tables 11-16 to the respective grade and specialty totals in Table 1.

-- Determine how much use this specialty makes of dual specialty coding. Divide the row total of Tables 11-16 by the respective grade and specialty totals in Table 1. These figures show the percent of the duty positions that are dual specialty coded, for each grade and the specialty as a whole.

b. Dual Specialty Pairing -

-- Determine this specialty's largest requirements for specific alternate specialties. Going along the row headed by this SC, record the SCs and requirements of the three alternate specialties with the largest numbers in that row. Do this for each grade and total grades.

-- Determine the primary specialties with the largest requirements for this specialty as an alternate. Going down each column headed by this SC, record the SCs and requirements of the three primary specialties with the largest numbers in that column. Do this for each grade and total grades.

-- Determine the requirements for dual specialty positions involving this specialty as either primary or alternate. Add the numbers in the row headed by this SC to the corresponding numbers in the column headed by this SC, i.e., add the requirements for a 21/49 combination to those for a 49/21. Record the SCs and combined requirements of the three largest combinations involving this specialty. Do this for each grade and total grades.

-- Determine the total requirements for dual specialty positions involving this specialty. Add the total of the row headed by this SC to the total of the column headed by this SC. Do this for each grade and total grades.

c. Dual Specialty Comparisons -

-- Compare the dual specialty requirements determined above to the paired specialty assets recorded on page 7 of the Polo specialty matrix. Comment on any similarities or differences in the SCs that are paired in the assets compared to SCs paired in the requirements. If it were considered desirable, could the dual specialty requirements be filled by the available assets? Are there requirements but no corresponding assets, or vice versa?

-- Compare the dual specialty requirements with SC pairings designated by proponents as being complementary, related, or non-complementary. Comment as necessary.

TABLES 17-21 DUTY POSITIONS

These tables list, by grade, all the duty positions (or clustered positions) in the specialty and display the requirements for each position in various categories. Each table is broken into four parts: Part a. shows Analyzed positions; Part b. shows the SSI breakout for Analyzed positions; Part c. shows Non-analyzed positions; and Part d. shows the SSI breakout for Non-analyzed positions. Since there is a table for each grade and four parts to each table, there is a possible total of 20 separate displays of information for each specialty. This data can be used in conjunction with the analysis of other tables, as well as providing the information indicated below:

a. Analyzed Positions -

(1) Type Jobs

-- Note the duty positions categorized as Core Jobs and Related Jobs. Part I of this Analysis Plan called for comments on the proponent's selection of these positions. Make any additional remarks as necessary.

-- Were any Special Staff or Army-wide Support Jobs selected for analysis? If so, was this selection logical and necessary?

-- Look at the analyzed positions across all grades. Is a logical career pattern discernable? Is there enough of a variety of Core and Related jobs to provide multiple paths to qualification and advancement, or is there an element of "ticket punching" in the proponent's analysis?

(2) Requirements

-- The requirements are shown by numbers and 3 percentages. Note that there is a sub-total for each type Job (C, R, S and A). At the bottom of each table, total requirements are shown for Analyzed Positions, Non-Analyzed positions, and all positions for this grade. The first % shown for each position title indicates the percent of all jobs of this type at this grade represented by this one position, i.e., it is a percent of the sub-total for this type job (C, R, S or A). The second % indicates the percent of all analyzed/non-analyzed (as appropriate) positions at this grade represented by this one position, i.e., it is a percent of the first total at the bottom of the table. The third % indicates the percent of all positions at this grade represented by this one position, i.e., it is a percent of the grand total at the bottom of the table. A similar scheme is followed for the percents shown for each sub-total.

-- Note the requirements for Core and Related jobs. Are they concentrated in one, or perhaps a few, positions (indicating "ticket punching")? Is the percentage of Core jobs large or small compared to Related Jobs? - as a portion of all Analyzed positions? - as a portion of the grade total? Are the Related jobs a large or small portion of the grade total?

-- Note the requirements - if any - for S or A type jobs. Do these represent a significant portion of the Analyzed positions? If so, is this reasonable?

-- Do the Analyzed position requirements represent a majority of the requirements for this grade? If not, most of the positions at this grade are in S and A type jobs.

-- How does the proportion of Analyzed/Non-analyzed requirements change as grade increases? Are there, for example, proportionately fewer Analyzed positions at the higher grades?

(3) TOE/TDA and Command

-- Note that the Core and Related sub-totals have been displayed and basically analyzed in previous tables, but the individual position requirements have not. Therefore, attention should be focused on what is interesting about particular positions or groups of positions. For example, does one position with a lot of requirements overshadow all the other positions with few requirements? This could cause, say Core jobs, to appear to be concentrated in the TDA category when in fact only one large position is TDA and all other positions are TOE. Similarly, are command jobs mostly accounted for by one position title, or are there several different command jobs at this grade?

-- If there are Analyzed S or A jobs, are they mostly TOE or TDA? Are any of them categorized as Command jobs? Is this valid?

-- Note how the Total Analyzed Position requirements are broken down between TOE and TDA. Are they concentrated in one category or the other? How does this compare with the TOE/TDA breakdown of Non-Analyzed positions?

(4) Footnotes

-- This column indicates the number of footnotes on the Form B for each position. This serves as a reminder that there are special requirements or comments associated with this position that are not shown on any of the computer printouts. Any such remarks should have been analyzed in Part I of the Analysis Plan.

b. SSI -

-- Note the SSI breakout of the Analyzed positions and the Type Job subtotals.

-- Are Core and Related jobs spread over all SSIs, or are they concentrated in only one or a few of the available SSIs? Are Core jobs concentrated in one group of SSIs and Related jobs in another? What implications does this have for officer qualification at this grade?

-- Is any single Core job spread out over several SSIs? If so, check the Form B Worksheet to determine if the clustering of positions was appropriate.

-- Check the totals at the bottom of the table. Note the breakout of each SSI between Analyzed and Non-analyzed. Are there any SSIs which were mostly Non-analyzed? If so, why?

-- If there are any Analyzed S or A positions, are they concentrated in a particular SSI? Does this ameliorate or aggravate any SSI concentration in C and R jobs?

c. and d. Non-analyzed Positions and SSIs -

-- There should be only S and A type jobs listed. The same general format is used as for the Analyzed Positions. This data is mostly useful to document the specialty - very little analysis is required.

-- If possible, make a general characterization of the types of jobs listed, i.e., if most of the Non-analyzed requirements are for recruiting duty and DA Staff, say so. If the variety of jobs yields no apparent pattern, say so.

-- Are any command requirements shown? If so, is it reasonable or is it a mistake?

-- Does any position or small group of positions represent a large percentage of S or A jobs, Non-analyzed positions, any given SSI, or this grade as a whole?

-- If footnotes are indicated, were they analyzed and commented on in Part I of the Analysis? If necessary, make such remarks now.

TABLE 22 SPECIALTY DUTY MODULES

The previous tables and their analyses have been primarily concerned with duty positions and the requirements for those positions. Beginning with this table, and all succeeding ones, the emphasis shifts to duty modules and training methods.

This table lists all duty modules applicable to a given specialty. They are shown by title and code number, and they are listed in order of duty module (DM) weight in the specialty. The DM weight indicates the percentage of duty positions which call for that module: a weight of 1.0 (100%) shows that the DM is a Common duty module and applies to every analyzed position in the specialty. (It should be noted that the DM weight for a given module may be different for different groupings. For example, a DM common to the grade of Captain will have a weight of 1.0 in a listing for that grade, but will have a weight less than 1.0 in a listing for the specialty as whole if it is not common to all grades.) A DM with a weight of zero is not present in that grouping and will normally not be printed out. The other duty modules have values that reflect their relative importance in terms of the percentage of analyzed duty positions that require them.

The remainder of Part a. of the table shows the requirements of the duty positions which involve each duty module, broken down by grade and total. Note that the totals at the bottom of the table are the total requirements for each grade and the specialty as a whole - they are not sums of the numbers in the columns. Also note that the percents shown are grade percentages, i.e., they are percents of the totals at the bottom of each column. Part b. shows the duty module requirements broken out by SSI.

This table has two primary functions. The first is to provide a reference document which shows all the duty modules applicable to a given specialty. Table 22 is the only such complete listing, and it can be used in conjunction with various other tables. The second function is to indicate the duty modules which are important to this specialty as a whole. Some duty modules are important to a particular grade or SSI or other grouping, but this table shows the DMs which are key to the entire specialty.

a. Common/Important Duty Modules -

Duty modules are categorized according to their weight in a given signature (the weight column in Table 22 is a specialty signature). The categories are:

- | | |
|--------------------|------------------|
| 1. Common DM | Weight, W = 1.00 |
| 2. Essential DM | W = .70-.99 |
| 3. Important DM | W = .40-.69 |
| 4. Significant E.. | W = .20-.39 |
| 5. Rare DM | W = .01-.19 |

With a red marker, divide the duty module listing into the above five parts and print the category titles (or "significance levels") in the left margin.

-- Note the duty modules which are common to the entire specialty. Determine why they are common modules - that is, are they common because they are truly central to the functions of this specialty or because they are skills all officers should have or because the proponent has listed a routine task (such as "be able to salute") as a duty module? Make note of those which are central to the functions of the specialty.

-- Note the other highly weighted DMS - especially those rated "essential" or "important." Normally, the reason they have a high weight is because they are common to one or more grades (especially LT and CPT) but not to all grades. Observe that in the column for a given grade, a DM whose requirements are less than 100% of the requirements for that grade is obviously not a common duty module at that grade. Make note of the highly weighted DMs which you consider central or key to the functions of this specialty and indicate any exceptions, e.g., "DM is essential - common at company grades but 50% or less at field grades." If necessary, consult Tables 26-30 which show the duty modules and their weight for each grade.

-- Going down the column for each grade, note any deviations from the importance of each DM to the specialty as a whole. For example, a DM might have a fairly low weight in the overall specialty but be required in 90% of the positions at the grade of Colonel.

-- Check Tables 23 or 24 and 25. Are the DMs important to this specialty also highly weighted - or at least significant - to OPMS/Non-OPMS specialties or the Army as a whole?

b. SSI -

Part b. of the table lists the duty modules (by code number only) in the same order as is used in Part a.

-- Note that any DM which is common to the entire specialty should have requirements in every SSI in the specialty. If it does not, either there has been an error made, or that SSI (such as X) was not a part of any analyzed position. The validity of any such SSI (other than X) would have to be questioned if there are no Core or Related jobs in that SSI.

-- Note the distribution of requirements for other highly weighted DMs. Is there a pattern, such as almost all essential DMs being concentrated in a single SSI?

-- Cross check against the proponent's definition of qualification. If the proponent's "recipe" for service in specified SSIs is followed, will an officer be exposed to all the important duty modules in the specialty?

TABLE 23 OPMS DUTY MODULES

This table lists the duty modules applicable to all OPMS specialties. Note that the weight of any given DM will have changed from the weight it had in Table 22 unless it is common to all OPMS specialties.

TABLE 24 NON-OPMS DUTY MODULES

Same as Table 23 for Non-OPMS specialties.

TABLE 25 TOTAL ARMY DUTY MODULES

This table is a grand total listing of all duty modules applicable to all duty positions in the entire Army. Again, note that the weight of any given duty module is different from previous tables unless it is common to all positions in the Army.

TABLES 26-30 TRAINING METHODS

These tables (one for each grade) list the duty modules applicable to a given grade and specialty. The requirements of the duty positions involving each DM are broken down according to recommended training type and alternative. Again, these tables are useful as reference documents as well as for providing the information indicated below.

a. Common/Important Duty Modules -

As before, divide the listing into five significance levels (common, essential, etc.). The weight of a given duty module in this table depends on the percent of duty positions in this one grade which call for the DM.

-- Note the common and other highly weighted DMs which are clearly important to the functioning of this specialty. Are there any surprises - DMs which unexpectedly carry a higher or much lower weight than one would anticipate?

-- Do the common DMs make up a significant portion of the total list - indicating the proponent felt there were few positions calling for unique duty modules? If so, do you agree?

b. Training Types and Alternatives -

The requirements for each DM are broken down by Training Type (1, 2, 3) and total for each Training Alternative (P, M, C, etc.). Each Type is then summed in the right hand portion of the table. The total requirements for the DM are shown, along with its percentage of the total position requirements of the grade.

-- Are the recommended training methods concentrated in a few alternatives? Which ones? Are they mostly of one training type? Which one? Is it appropriate for each grade level?

-- Are there any differences in recommended training methods between highly weighted DMs and low weighted ones? Are there, for example, some "rare" DMs that are recommended for resident military schooling, M? Is this reasonable, or does it represent overkill?

-- Are there any important DMs with a training method you don't agree with - such as a common duty module recommended for self-study, S?

-- Would the DMs rated "significant" or higher and recommended for M represent a valid core course at a military school at this grade level? Indicate exceptions.

-- Are the DMs recommended for the other training alternatives appropriate? Do you agree, for example, with the ones recommended for P? C? E?

-- Is there follow-on training (type 2 or 3) at the higher grades for the important DMs acquired at the lower grades?

-- Check the proponent's definition of qualification. All the specified combination of assignments and training/schooling expose the officer to all the highly weighted duty modules shown in this table? Which DMs would not be acquired by following the proponent's recipe at each grade?

TABLES 31-34 EARLY/LATE ACCESSION

These tables list the duty modules and training methods applicable to an early or late accession into a specialty. Tables 31 and 32 are for late accessions at the grades of CPT and MAJ respectively. Tables 33 and 34 are for early accessions at the grades of LT and CPT respectively. Obviously, no specialty will have all of these situations, so no specialty will get all of these tables. Only the applicable tables will be provided each specialty analyst.

Note that these tables are basically in a "Form C" type format. The duty modules are listed by SSI and their weight within the SSI is shown. The training type and alternative recommended by the proponent are shown for each duty module in the same way used on Form C.

a. Duty Modules -

Since there are no requirements, per se, for late accessions, a DM weight has not been separately calculated for them. The DM weights shown are the same as for a normal accession. Again, these weights are taken from the signature for each SSI.

-- Note the duty modules chosen by the proponent as being important to the early/late accession. Do you agree? Are there too many or too few DMs, keeping in mind that the analysis was done on a "worst case" basis?

-- Note the weight of the duty modules. Has the proponent chosen DMs which carry a high weight in the SSI and specialty, or has he selected DMs that are relatively rare/unimportant? As a general rule, the early/late accession needs training in the most important DMs, i.e., those which are highly weighted.

-- Are all SSIs in the specialty represented? Is the training for the early/late accession concentrated in only a few SSIs? Is this justified?

-- Comment on any restrictions placed on the assignment and/or training of the early/late accession (as indicated in the Remarks section of the Form B).

b. Training Methods -

-- Are the training types and alternatives logical and appropriate for an early/late accession?

-- If there are low weight DMs listed, are they recommended for resident military training, M? Is this reasonable or is it overkill?

-- Is experiential training (O or E) recommended as a follow-on to resident schooling (M, C or T)? Is any use made of other alternatives (S, X or U) where appropriate?

-- In summary, if an early/late accession acquired the listed duty modules through the training methods recommended, would he be properly prepared to function in the specialty?

The remaining analyses are concerned with signatures. The tables will display the important facts about one signature or they will show the results of a comparison between signatures. In either case, the same tabular format is used with different parts of it being filled in depending on the use to be made of the table.

Attached is an extract from a paper which was written primarily to instruct the computer programmers on the terminology, mathematics, procedures and outputs of the RETO requirements determination effort. Among other things, this paper discusses the comparison of signatures, the criteria used, the significance level of a comparison, and the output format. Read this paper before proceeding to the analysis requirements presented below.

A great deal of computer programming, calculation and run time is involved in producing and comparing signatures. Therefore, the above 30 desired tables will not all be available at the same time. They have been placed in priority, with the top priority being those signatures and comparisons needed to support the analysis of each individual specialty. The lower priority comparisons will be needed for analysis of groupments of specialties, military education levels and the Army as a whole. This Part of the Analysis Plan, then, covers only those tables of interest to the specialty analyst. A great many more very interesting comparisons are possible and will be conducted in due course.

TABLE 35 SPECIALTY SIGNATURE

This is a single signature look at the important duty modules in a given specialty. The criterion used requires a DM to have a weight of .40 or above in order to be printed out. In essence, this list of duty modules is an abbreviated version of Table 22 and concentrates on the DMs rated "important" or above. The primary use of this table is as a reference document in conjunction with other signatures. No analysis is necessary.

TABLE 36 SPECIALTY/GRADE SIGNATURE

Same as Table 35 for each grade in each specialty. Note that this table also indicates the recommended Training Method for each DM. It is an abbreviated version of Tables 26-30. Again, no analysis is necessary.

TABLE 37 OPMS RANK SIGNATURE

This is a single signature look at each rank in the OPMS specialties as a whole. The criterion for printing out DMs is a weight of .20 or above, and recommended training methods are shown. Note that if there are no DMs at a given grade with a weight of at least .20, there will be no printout of the tabular data (other than the heading). This would indicate that there is very little commonality among OPMS specialties at that grade since no DM is involved in at least 20% of the duty positions.

This table will be used primarily for the MEL analysis. However, you should note the DMs which are important to each OPMS rank and determine if they are present in that rank in your specialty. If they are not, or if a different training method is recommended, comment on the desirability of adding them or changing the training method in your specialty.

TABLE 38 OPMS SPECIALTY/RANK/SSI SIGNATURE

This is a single signature look at each SSI in each rank in each OPMS specialty. The criterion for printout is a DM weight of .40 or above; hence, only the important, essential and common duty modules will be listed, along with a recommended training method. Note that a common module in this listing is common to all positions in that SSI, at that grade, in that specialty. A given DM, then, might be common only to the SSI or it might also be common to some higher grouping, like the entire grade.

Since this table looks at each grade separately, it gives a more detailed picture of the DMs applicable to each SSI than did TABLE 22, Part b. Furthermore, Table 22 did not include training methods. Together, these two tables should allow you to form a picture of the skills that are central to each SSI and the training necessary to impart those skills. Later signature comparisons will determine what is unique about each SSI, as well as what it has in common with the rest of the specialty, and will test the validity of multiple SSIs in the specialty.

Make any appropriate comments on SSI skills and training.

TABLE 39 COMMAND SIGNATURE

This is a single signature look at the duty modules which are important to command positions at each rank in each OPMS specialty. The weight criterion is .40 or above, and recommended training methods are shown. Again note that a common module on this listing might be common only to command positions or it might also be common to higher groupings that include the command positions. Later signature comparisons will show what is unique about command jobs.

-- Note the DMs applicable and important to command at each grade. Do you agree with the proponent's analysis? Are any DMs missing that you believe should be on the list or any DMs listed that you consider inappropriate?

-- Note the recommended training method for each DM. Is there a pattern at each grade, i.e., mostly M or E? Do you agree with the proponent?

-- Is there a pattern of skills required as grade increases? Are the same things important to the battalion commander as to the company commander? Do the training methods tend more toward alternative E at the higher grades?

-- Check the DMs on this table against the list in Table 22. Are the highly weighted skills necessary for command also highly weighted in the specialty as a whole? It is possible, for example, that a DM could carry a weight of .90 in Table 39, and thus be essential to command jobs, while its weight in Table 22 is only .10 - indication that it is a rare skill in the specialty as a whole. The important thing here is that some positions, such as command, make up only a small part of the specialty and their DMs may not carry much weight; but the skills involved in those positions may nevertheless be highly important. This fact must be considered in deciding whether or not it is "overkill" to train all officers on low weighted DMs.

TABLE 40 OPMS SPECIALTY COMPARISON

This table presents the results of a comparison between the signature of each OPMS specialty and the signature of all other OPMS specialties taken as a group. It shows the duty modules that these signatures have in common, and it shows what is unique about the specialty under consideration. The significance level for printout is 10% or higher for commonality and 20% or higher for uniqueness.

a. Commonality -

-- Did the actual significance level attained meet, exceed, or fall short of the specified level for commonality? What is the actual % of commonality which this specialty has with the rest of the OPMS specialties (S_1 %)? What % of commonality does the rest of the OPMS specialties have with this specialty (S_2 %)? Comment.

-- Note the DMs listed as common. What skills are important to this specialty and to all other OPMS specialties?

b. Uniqueness -

-- Was the specified significance level attained? What is the actual % of DMs in this specialty which are unique to it and meet the indicated criterion?

-- Note the DMs listed as unique. Characterize the skills which set this specialty apart from all other OPMS specialties.

-- Based on the attained levels of commonality and uniqueness, comment on the degree of specialization required for an officer to function in this specialty. Would it, for example, be a difficult specialty to master as an alternate specialty? Is a great deal of specialized training required? etc.

TABLE 41 SPECIALTY/RANK/ARM COMPARISON

This is a comparison of each rank in a specialty with the corresponding rank in the arm as a whole. For example, CPTS of Infantry will be compared with CPTS in the rest of the combat arms. Common and unique DMs will be determined for each signature and recommended training methods will be indicated. The specified level of significance in all cases is 20% or higher.

a. Commonality -

-- Was the specified level of significance attained? Note the actual % of commonality between the signatures. Comment.

-- Note the common DMs. What skills are required by this rank in this specialty which are also required by this rank in the rest of the arm?

-- Note the recommended training methods. Is this specialty out of step with the rest of the arm in the way it imparts the common skills? Is this reasonable?

b. Uniqueness -

-- Was the specified significance level attained? Note the actual % of unique DMs (which meet the indicated criterion) in this grade and specialty (S_1 %) and the rest of the arm (S_2 %).

-- What kinds of skills and training methods set this specialty apart from other OPMS specialties at this rank? What is unique about it?

-- What is unique about the rest of this arm - minus this specialty?

-- Judging from the various significance levels, common and unique, does it have a lot in common with the rest of the arm or is it so unique as to suggest it should be in some other arm? Is a lot of specialized training required for this grade and specialty that could not be included in a course for the officers in this arm as a whole at this grade level?

TABLE 42 OPMS COMMAND COMPARISON

This is a comparison of the signature for command jobs at each rank in the OPMS specialties as a whole against the signature for all other positions in that rank. The DMs unique to command at that rank will be determined, along with the recommended training method. The significance level is set at 0% or above so that any command-unique DMs will be printed out.

-- A minimum, duty module A-3 should be listed. Make note of any others at each rank, along with the training method and requirements.

-- From the attained significance level, would you conclude that the skills required for command at each grade are distinctly unique compared to other types of jobs?

-- Are the command skills generally imparted through schooling or experience at each grade?

TABLE 43 SPECIALTY/RANK/ARM COMMAND COMPARISON

This is a comparison of the signature for command jobs at each rank in each specialty against the signature for command jobs at the same rank in the rest of the arm as a whole. For example, command jobs of Infantry CPTs will be compared with command jobs of CPTs in all the rest of the combat arms taken as a group. Common and unique DMs for each signature will be determined, and recommended training methods will be indicated. The significance level is again set at 0% or above.

-- This table allows each specialty to see how its command jobs resemble or differ from corresponding command jobs in the other specialties in each arm and to compare the training methods recommended.

-- Since this table is the same as Table 41 - except that it is concerned only with command positions - it should be analyzed in the same way.

TABLE 44 EQUIVALENT SPECIALTIES COMPARISON

This is a "curve fit" type of comparison between each specialty and each of the other specialties in its arm. The comparison will show whether or not the two specialties involve the same duty modules with about the same degree of importance (weight). The only printout will be the Header information since the only fact of interest is the degree to which the specialties resemble each other. This can be determined from the attained level of significance, as follows:

-- If the comparison attains a "high" level of significance (40-59%) or above, the two specialties could be characterized as Equivalent.

A "medium" level (20-39%) indicates the specialties are Similar.

A "low" level (10-19%) indicates the specialties are Related.

A "doubtful" level (0-9%) indicates the specialties are Dissimilar.

-- Make note of the other specialties that fall in each of the above categories. Any of them rated as equivalent should be looked at closely as possible candidates for combining with this specialty.

TABLE 47 SPECIALTY/ARM COMPARISON

This is a comparison of each specialty in an arm against all the rest of the arm as a group. It shows the duty modules that the signatures have in common, and it shows what is unique about the given specialty. The specified significance level is 20% or higher.

-- This comparison is similar to that conducted for Table 40, except that each specialty is compared to its arm rather than OPMS specialties as a whole. The analysis for this table should answer the same sort of questions posed for Table 40.

TABLE 50 SPECIALTY/SSI COMPARISON

This is a comparison of each SSI in a specialty against all other duty positions in that specialty. It shows the duty modules that these signatures have in common, and it shows what is unique about the SSI under consideration. Training methods are indicated in each case. The specified significance level is 20%.

This table adds to the picture of each SSI provided by Tables 22 and 38. It looks at the SSI across all grades, determines the DMs the SSI shares with the rest of the specialty, and shows the skills that are unique to the SSI.

-- A high degree of commonality in this comparison might indicate that the SSIs in the specialty are really not very different from one another and that the division of the specialty into SSIs is rather artificial. This possibility will be explored further in Table 59. Comment on any indications of this.

-- Conversely, an SSI which is highly unique, with almost no commonality in this comparison, may not belong in this particular specialty. It may, in fact, be a candidate for creation of a new and separate specialty. Comment on any indications of this.

TABLE 57 RANK/NEXT RANK COMPARISON

This is a comparison of each rank with the next higher rank in each specialty. The duty modules unique to each signature are shown. The specified significance level is 20%.

This comparison shows the duty modules which make each rank different from adjacent ranks. It pinpoints the skills that must be imparted at a given rank because they have not been acquired at the previous rank in the specialty and/or will not be acquired at the next rank.

This table should be used in examining the content of training at each grade in the specialty and the proponent's definition of qualification at that grade.

TABLE 59 EQUIVALENT SSIs COMPARISON

This is a curve fit comparison between each SSI and each of the other SSIs in a specialty. The comparison will test the validity of having multiple SSIs in the specialty by identifying the SSIs that are equivalent to another. Only the header information will be printed out. The attained significance level will be used to categorize the SSIs as equivalent, similar, related, or dissimilar in the same way as was used on Table 44.

-- Make note of the categories which the SSIs fall into in this specialty. Use this information in conjunction with all previous tables to complete your analysis of SSIs.

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

ANNEX L

OFFICER EDUCATION AND TRAINING SURVEY

1. PURPOSE. To provide a report and limited analysis of the data collected employing the Officer Education and Training Survey.
2. MAJOR RETO DATA COLLECTION EFFORT. One of two complementary major RETO data collection efforts, the survey was designed to obtain views of representative Active Army officer populations relative to individual officer professional development needs.
 - a. SURVEYED POPULATIONS. The Officer Personnel Management System (OPMS) commissioned officer and the warrant officer versions were the first two survey versions developed. The Army Medical Department (AMEDD) and the Judge Advocate General (JAG) commissioned officer versions were added soon thereafter. Because of current Chaplain survey data already available, only a short survey for Chaplains was conducted at six Army installations.
 - b. SAMPLE SIZES. Responses were obtained from direct mailing of the survey packets to the officers concerned and were in sufficient quantities that responses represent 11.8 percent of Active Army commissioned (OPMS) officers and 11.7 percent of Active Army warrant officers serving at the time of the survey. Figures on the other survey versions are reported in the annexes relating specifically to those officer populations.
3. REPORT CONTENTS. This annex reports only on the commissioned (OPMS) and warrant officer versions of the survey, with reports on the other versions to be found in the annexes devoted to the Army Medical Department, the Judge Advocate General Corps, and the Chaplains Corps, respectively.

2 Appendixes

1. Officer Education and Training Survey, Final Report
2. Officer Education and Training Survey, "Houston Team" Input

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REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 1

OFFICER EDUCATION AND TRAINING SURVEY FINAL REPORT

TO ANNEX L

OFFICER EDUCATION AND TRAINING SURVEY

INTRODUCTION

The Review of Education and Training of Officers (RETO) was begun in August 1977 under the chairmanship of Major (then Brigadier) General Benjamin L. Harrison. RETO was assigned the following mission:

Determine officer training and education requirements based on Army missions and individual career development needs. Based on those requirements, develop training and education policies and programs which combine self-development, unit development, and institutional development in a phased schedule from pre-commissioning or pre-appointment training through career completion. Develop these programs with the prospect of implementation in a constrained resource environment; present the programs to the Chief of Staff, Army for approval and coordinate the integration of approved programs into the FY 80-84 Program.¹

Two major data collection efforts were undertaken to determine Army mission needs and individual officer professional development needs from the perspective of career specialty proponents and of individual officers. Insofar as possible, each effort reinforced and complemented the other.

The first data collection effort involved the analysis by career specialty and rank of every officer duty position in the Army; first, to determine inherent duty requirements by task clusters (duty modules) and, second, best training and education methods. The second data collection effort was the Officer Education and Training Survey, designed to obtain views of representative samples of individual Active Army officers relative to individual officer professional development needs. The Officer Education and Training Survey is the subject of the pages that follow.

Research Methodology

To assist the RETO team in survey design, implementation, and analysis, the services of three highly respected Doctors of Philosophy from the University of Houston (Texas)² were obtained. The University of Houston researchers met with members of the Army RETO team to develop ideas and hypotheses. The Army team then developed probable survey items, which were screened, revised for clarity and technical correctness, and sequenced by the Houston team. All survey items were of the multiple-choice, closed-end type.

Design and writing of the basic survey instrument was completed on 21 October 1977, permitting pretest of the instrument on a small sample of officers at each commissioned and warrant rank at Fort George G. Meade, Maryland on 26 and 27 October 1977. Officers participating in the pretest were asked to make comments on the survey instrument (wording of questions, expressions of clarity, etc.) directly on the questionnaire booklet. Further, these officers were interviewed as they completed the pretest to be sure that all of their comments had been received and understood by the pretest team. Subsequent to the pretest, changes in wording were made in some survey items and other survey items were deleted.

Two versions of the survey were developed initially: the Officer Personnel Management System (OPMS) commissioned officer and the warrant officer versions. The Army Medical Department (AMEDD) and the Judge Advocate General's Corps (JAGC) commissioned officer versions were added soon thereafter. In view of two surveys to obtain individual Chaplain professional development information conducted within the 18 months just prior to the RETO survey effort, no Chaplain commissioned officer version was developed. A short survey, however, was conducted later for Chaplains at six Army installations.

Only analysis of the initial two versions--the OPMS commissioned officer and the warrant officer versions--is described in this report.

Officers to be surveyed were chosen by random probability methods. In the case of the initial two survey versions, which involved the two largest of the four officer populations concerned, selections employed the last four digits of officer Social Security Numbers and were generated by computer. In recognition of the time constraints involved, survey booklets

were mailed directly to the officers selected for participation. Because direct mail surveys historically have had low response rates, large sample populations were selected, as Table 1 indicates.

Response rates were high, in comparison to previous direct mail survey efforts, and provided a sample of sufficient size to be reliable statistically for both the OPMS commissioned and warrant officer versions. Further description of the sample for each of these two versions can be found in the chapter of this report specifically addressing that survey version. A copy of each of the two survey version booklets has been included at the end of the appropriate chapter, as well. All questionnaires were completed anonymously, so that respondents could not be identified.

<u>TABLE 1*</u>					
<u>Sample Size and Return Rate</u>					
<u>Version</u>	<u>Forwarded</u>		<u>Returned</u>		
	<u>Opening Date</u>	<u>% of Universe</u>	<u>Closing Date</u>	<u>% of Forwarded</u>	<u>% of Universe</u>
OPMS Commis- sioned Officer	10 Nov 77	21.9%	1 Dec 77	53.5%	11.8%
Warrant Officer	10 Nov 77	24.5%	1 Dec 77	47.6%	11.7%

*Active Army Officers, O-1 through O-6 and W-1 through W-4.

Data were collected on mark-sense, standard Army answer sheets and read directly into the computer. Because only 15 working days could be allocated between the date survey packets were forwarded and the cutoff date for response data reduction, a significant number of survey responses were received after the cutoff date.

For the OPMS commissioned officer version, late responses accounted for 15.8 percent of those forwarded; for the warrant officer version, 12.2 percent. Were these late responses to have been included in the figures displayed in Table 1, "percent of

universe returned" would increase from 11.8 to 15.2 percent for OPMS commissioned officers; and from 11.7 to 14.7 percent for warrant officers. "Percent of forwarded" would increase from 53.5 to 69.3 percent for OPMS commissioned officers; and from 47.6 to 59.8 for warrant officers

Late responses for both versions have been analyzed since, and only one difference of any significance was revealed between those responses received before the cutoff date and those received after it. The difference relates to the geographical location of the respondents.

As would be expected, those commissioned officers who are part of the late sample are much more likely to be stationed outside the continental United States. Thus, in the first group of respondents, 12.3 percent were stationed in Europe at the time of the survey, as compared to 43.5 percent of the late group. Further, while 78.5 percent of the early sample were CONUS assigned, such was the case for only 46.8 percent of the late sample.

A similar pattern is found for warrant officers. In the early respondent group, 65.9 percent were assigned at the time of the survey within CONUS, as compared to 39.0 percent in the late group. While 21.3 percent of the early group reported Europe as their assigned location at the time of the survey, 45.7 percent of the late group reported a European location.

The chapters that follow in this report address only those commissioned and warrant officer responses received before the cutoff date of 1 December 1977. Analysis of cross tabulations or frequency distributions was the principal methods of analysis.

Bibliographical Notes

1. Chief of Staff Memorandum 77-5, 31 August 1977, subject: Officer Training and Education.
2. David Gottlieb, PhD, Dean, College of Arts and Sciences; Richard C. Stephens, PhD, Institute for Urban Studies; and David W. Brady, PhD, College of Arts and Sciences; University of Houston, Houston, Texas.

CHAPTER I. ANALYSIS OF

COMMISSIONED OFFICER (OPMS) SURVEY VERSION

The data discussed in this chapter are based upon responses to a paper and pencil questionnaire version of the Officer Education and Training Survey received from 7,787 Active Army commissioned officers managed under the Officer Personnel Management System (OPMS).

The Respondents

When compared with the current total number of Active Army commissioned officers managed under OPMS,¹ the survey sample represents 11.8 percent of the OPMS commissioned officer universe (7,787 of 66,147).

Table I-1, following, provides a comparison by rank of the sample with the universe and reveals that the sample was underrepresented at the rank of lieutenant by 7.9 percent; near perfect for captains; and somewhat overrepresented for the three highest ranks (4.2, 3.4, and 2.0 percent, respectively).

Table I-2, a comparison of the survey sample by component with the universe, shows that the sample was overrepresented by officers in the Regular Army, when compared to responding Army Reserve officers. A 7.3 percent overdraw of Regular Army officers, with a corresponding 7.3 percent underrepresentation of Army Reserve officers, is indicated.

At the time of participation in this survey, the majority of respondents (78.5%) were stationed in the continental United States; 12.3 percent, in the European area (including the Middle East); 4.7 percent, in Hawaii, Alaska, Puerto Rico, or Panama (Canal Zone); 4.3 percent in the Pacific area (including Korea); and the remainder (.2%) in other locations.

Table I-3 is a distribution of the respondents by grade and by primary specialty. Forty-five specialties are included in the table. The 46th, Specialty Code 70 (Logistics Management), is not included because it, alone, of all the specialties, has no assigned assets. An officer carries the specialty only while serving in designated positions. Two listed specialties, Atomic Energy (52) and Public Affairs (46) are not represented among the respondents.

TABLE I-1

Comparison by Rank, Sample with Universe

<u>Rank</u>	<u>Sample</u> %	<u>Universe</u> %	<u>Sample Less Universe</u> <u>Difference</u> %
Lieutenants	18.7	26.6	-7.9
Captains	33.8	33.7	+0.1
Majors	22.8	18.6	+4.2
Lieutenant Colonels	17.2	13.8	+3.4
Colonels	7.5	5.3	+2.0

TABLE I-2

Comparison by Component, Sample with Universe

<u>Component</u>	<u>Sample</u> %	<u>Universe</u> %	<u>Sample Less Universe</u> <u>Difference</u> %
Regular Army	65.8	58.5	+7.3
Army Reserve	33.6	40.9	-7.3
Army National Guard	.6	.6	-

Twenty-one specialties each are represented by less than 1 percent of the respondents. Ten specialties each are represented by more than 1 and less than 2 percent of the respondents.

Table I-4 provides a distribution of respondents by basic branch. All branches are represented among the respondents; four are represented by less than 5 percent.

Table I-5 gives a distribution of respondents by major command. Almost one-third were assigned to Forces Command when they participated in the survey; more than one-fourth, to Training and Doctrine Command; and more than one-tenth to U.S. Army, Europe.

TABLE I-3

Distribution of Respondents by Primary Specialty

<u>Specialty</u>		<u>Grade</u>						
<u>Title</u>	<u>#</u>	<u>01</u> <u>%</u>	<u>02</u> <u>%</u>	<u>03</u> <u>%</u>	<u>04</u> <u>%</u>	<u>05</u> <u>%</u>	<u>06</u> <u>%</u>	<u>ALL</u> <u>%</u>
Air Defense Artillery	14	4.9	2.6	5.0	5.2	5.6	5.4	4.9
Armament Materiel Management	76	.0	.2	.2	.2	.3	.2	.2
Armor	12	11.4	10.3	7.5	7.3	6.9	8.5	7.9
Atomic Energy	52	.0	.0	.0	.0	.1	.0	.0
Automatic Data Processing	53	.3	.2	.2	.6	.4	.4	.3
Aviation	15	.0	.8	6.7	7.8	6.9	5.1	5.5
Aviation Materiel Management	71	.7	1.3	2.3	1.9	2.3	1.6	1.9
Chemical	74	2.0	1.3	1.2	1.8	2.0	1.5	1.5
Club Management	43	.2	.1	.2	.1	.1	.2	.1
Combat Communications -Electronics	25	7.0	7.0	5.2	5.1	2.6	3.3	4.9
Communications-Electronics Engineering	27	.3	.2	.6	.9	.9	.7	.6
Communications-Electronics Materiel Management	72	1.0	.4	.5	.3	.2	.2	.4
Comptroller	45	.2	.0	.0	.1	.3	.5	.1
Counterintelligence/HUMINT	36	2.7	.7	2.3	2.6	1.4	1.5	2.0
Education	47	.2	.0	.0	.0	.0	.9	.1
Electronic Warfare/Cryptology	57	2.4	2.1	1.8	2.3	.9	.9	1.8
Engineer	21	8.5	9.2	6.5	5.8	6.6	7.3	6.9

TABLE I-3 (continued)								
Distribution of Respondents by Primary Specialty								
Specialty		Grade						
Title	#	$\frac{01}{\%}$	$\frac{02}{\%}$	$\frac{03}{\%}$	$\frac{04}{\%}$	$\frac{05}{\%}$	$\frac{06}{\%}$	ALL $\%$
Field Artillery	13	10.2	12.4	10.5	12.0	15.4	16.0	11.8
Finance	44	3.6	2.5	1.9	1.9	1.1	.7	1.9
Fixed Telecommunications Systems	26	.8	.8	1.5	1.0	.9	.9	1.1
Food Management	82	.2	.4	.2	.2	.2	.2	.2
Foreign Area Officer	48	.0	.0	.1	.1	.2	.4	.1
General Troop Support Materiel Management	83	1.0	.6	.2	.2	.5	.2	.4
Highway and Rail Operations	88	2.5	2.8	2.2	.7	.3	.2	1.5
Infantry	11	16.6	18.5	18.5	17.2	18.8	27.0	18.7
Instructional Technology and Management	28	1.0	.4	.1	.2	.2	.0	.2
Law Enforcement	31	4.6	3.6	4.4	2.7	3.0	1.6	3.5
Logistics Services Management	93	.0	.0	.1	.1	.5	.2	.2
Maintenance Management	91	.5	.0	1.1	2.0	2.9	1.8	1.5
Marine and Terminal Operations	87	.8	1.2	1.0	.7	.6	.0	.8
Missile Materiel Management	73	.5	1.2	.9	.6	1.2	.5	.9
Munitions Materiel Management	75	1.0	1.8	1.9	1.4	2.0	.9	1.7
Operations and Force Development	54	.0	.0	.0	.0	.3	.7	.1

TABLE I-3 (continued)								
Distribution of Respondents by Primary Specialty								
Specialty		Grade						
Title	#	O1 %	O2 %	O3 %	O4 %	O5 %	O6 %	ALL %
Operations Research/ Systems Analysis	49	.0	.0	.0	.1	.5	.2	.1
Personnel Administra- tion and Adminis- trative Management	42	5.1	4.7	3.7	2.6	1.6	.2	3.0
Personnel Management	41	1.4	2.8	3.1	3.0	2.6	2.4	2.8
Petroleum Management	81	.5	.5	.3	.3	.3	.2	.3
Procurement	97	.0	.2	.1	.3	.2	1.5	.3
Public Affairs	46	.0	.0	.0	.0	.0	.0	.0
Research and Develop- ment	51	.0	.4	.0	.1	.7	1.1	.3
Supply Management	92	1.4	2.7	3.0	4.3	4.0	2.5	3.3
Tactical/Strategic Intelligence	35	4.4	3.9	3.4	2.9	3.6	1.5	3.3
Tank/Ground Mobility Materiel Management	77	1.9	2.3	1.7	.9	.7	.5	1.3
Traffic Management	86	.2	.1	.3	.5	.5	.4	.4
Transportation Management	95	.0	.1	.3	2.3	2.0	2.7	1.2

The largest single group of respondents was assigned to combat units (20.6%); followed by training activities, including service school staff and faculty (18.5%); corps or higher level staff, including major commands, Headquarters, Department of the Army; etc. (15.9%); recruiting, ROTC, and Readiness Regions (8.8%); combat service support units (8.8%); combat support units (8.2%); garrison/ installation staff (7.7%); and other activities or units (11.5%).

TABLE I-4

Distribution of Respondents by Basic Branch

Basic Branch	Grade						
	O1 %	O2 %	O3 %	O4 %	O5 %	O6 %	ALL %
Infantry	16.6	18.5	20.9	20.6	22.7	29.3	21.2
Field Artillery	10.6	12.3	11.7	14.1	14.9	17.2	13.2
Armor	11.3	11.1	9.8	8.8	8.7	8.4	9.6
Signal Corps	10.4	9.1	8.0	7.6	4.9	6.3	7.6
Military Intelligence	9.1	6.5	7.6	7.8	5.8	3.9	7.0
Corps of Engineers	8.6	9.3	6.4	5.9	6.9	7.6	6.9
Adjutant Generals Corps	6.9	7.3	7.0	6.2	4.3	1.6	6.0
Ordnance Corps	3.9	6.0	6.0	5.3	7.9	4.9	5.9
Transportation Corps	4.0	5.6	6.0	6.3	6.1	6.9	5.9
Air Defense Artillery	4.9	2.7	5.4	5.6	6.1	5.8	5.2
Quartermaster Corps	3.2	4.2	3.8	5.1	5.3	4.0	4.3
Military Police Corps	4.7	3.7	4.3	2.7	3.0	1.6	3.5
Finance	3.9	2.4	1.9	2.1	1.2	.9	2.0
Chemical Corps	2.0	1.3	1.2	1.9	2.2	1.6	1.6

More than one-half (57.5%) of the respondents received their commission through the Reserve Officer Training Corps (ROTC); followed by 21.8 percent, Officer Candidate School (OCS); 14.2 percent, U.S. Military Academy (USMA); 5.8 percent, direct appointments; and .8 percent, other means.

The vast majority of respondents were men (96.7%); eight out of ten (83.0%) were married and 13.7 percent were single (including divorced, separated, widowed, or never married). More women than men, proportionately, were single (2.1% of 3.3% versus 13.7% of 96.7%).

TABLE I-5

Distribution of Respondents by Major Command

Forces Command	32.6%	U. S. Forces, Korea/ Eighth Army (Korea)	3.5%
Training and Doctrine Command	26.5%	Communications Command	1.4%
U. S. Army, Europe	10.9%	Support Command, Hawaii	1.0%
Military District, Washington	4.4%	U. S. Army, Japan; Health Services Command; other	19.8%

Nine out of ten respondents (91.7%) were White; 5.2 percent, Black; 1.3 percent, Mexican-Americans, Puerto Ricans, or of other Hispanic extraction; .9%, Asian-American; and the remainder (1.0%) identified themselves as of a racial or ethnic background other than the foregoing.

Highest levels of military education achieved by the respondents are shown by the following distribution figures: Basic Course--27.6 percent; Advanced Course--39.3 percent; U.S. Army Command and General Staff College (USACGSC) or equivalent (including nonresident and constructive credit)--27.2 percent; and senior service college (including nonresident and constructive credit)--6.0 percent.

A review of the formal civilian educational accomplishments of respondents reveals that 99.9 percent had accomplished some college work and that 96.2 percent held at least the baccalaureate degree at the time of the survey. Almost 1 percent (.9%) had earned the doctorate degree; 37.3 percent held a masters degree.

The Chemical Corps was represented by the highest percentage of members holding masters or doctorate degrees (47.2%); Armor, the lowest (31.0%). Air Defense Artillery (39.4%) and the Chemical Corps (39.1%) were represented by the highest proportions of respondents having completed the U.S. Army Command and General Staff College and senior service college, or their equivalents; Finance (14.9%) and the Adjutant General's Corps (20.9%) had the lowest representation.

Discussion of Response Data

Table I-6 provides a distribution of responses to the question, "Do you plan to make the Army a career? (That is, 20 or more years of service?)" Only 7.4 percent of the respondents reported that they do not plan to make the Army a career. Thirteen percent (13.1%)

had made no decision and 28.0 percent, while indicating that they do plan on making the Army a career, had not determined when they will retire. Almost one-fourth (23.6%) stated that they will, or will be required to, retire after completing 20 years of service. Twelve percent plan on retiring between the 20th and 26th year; and the remaining 16.0 percent plan to retire after 26 or more years of service. More than 1 in 10 (13.3%) of company grade respondents indicated that they do not plan an Army career; 24.9 percent of all field grade respondents stated that they plan to retire at 20 years. Twenty-eight percent of all respondents expressed an intention to remain in the Army beyond 20 years.

<u>TABLE I-6</u>							
<u>Plans for an Army Career</u>							
<u>RESPONSE</u>	<u>Rank</u>						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
Yes, but undecided when to retire	20.0	21.3	30.1	33.5	30.2	14.4	28.0
Yes, plan to retire at 20 years	7.2	8.6	30.2	37.9	18.3	.9	23.6
Yes, plan to retire after 26 years or more	7.2	7.7	8.4	9.9	22.4	76.2	16.0
Have made no career decision	40.3	38.9	15.9	1.1	.1	.4	13.1
Yes, plan to retire between 20 and 26 years	3.4	3.0	6.3	16.1	28.8	8.1	12.0
No, do not plan an Army career	21.8	20.5	9.0	1.6	.1	.0	7.4

Table I-7 provides a distribution of responses to the question, "Given normal career progression, what is the highest rank you expect to attain?" Fifteen percent (15.5%) of all respondents expect to achieve general officer status; 40.5 percent expect to be promoted to colonel; and 34.0 percent expect to achieve the

<u>TABLE I-7</u>							
<u>Highest Rank Expected</u>							
<u>Expected Rank</u>	<u>Current Rank</u>						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
Major	13.4	10.0	13.9	14.3	-	-	10.1
Lieutenant Colonel	24.5	28.0	39.2	41.5	36.1	-	34.0
Colonel	37.0	34.5	31.9	35.3	53.6	77.9	40.5
General Officer	25.0	27.5	15.1	8.9	10.2	22.0	15.5

rank of lieutenant colonel. Slightly under one-fourth (24.8%) of all lieutenants expect to be promoted eventually to general officer; one-third (33.3%), to the rank of colonel.

In response to a question relative to the number of times selected for promotion from the secondary zone, only .3 percent of all respondents had been selected three or more times; 1.7 percent, twice; and 7.3 percent, once.

Almost 64 percent (63.9%) had never been selected for secondary zone promotion; the remainder (26.9%) had never been considered for promotion by a centralized selection board.

Table I-8 provides a distribution of responses to the following question: "Regarding your personal career, which type of training or educational experience, successfully completed, do you believe 'carries the most weight' with promotion/selection boards?" The higher the rank, the greater the weight placed upon "resident military courses." Responses range from 34.6 percent for second lieutenants to 73.5 percent for colonels. An inverse pattern is seen for the second-ranked response, "on-the-job training or experience," where the range is from 37.0 percent for second lieutenants to 15.1 percent for colonels. For "civilian education," there is a high of 22.3 percent for second lieutenants and a low of 9.8 percent for colonels.

Table I-9 provides a distribution of responses to the question, "During your military career, what is the highest

TABLE I-8

Training of "Most Weight" with Selection Boards

<u>RESPONSE</u>	<u>Rank</u>						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
Resident military courses	34.6	43.0	45.8	61.7	70.8	73.5	54.7
On-the-job training or experience	37.0	32.6	25.5	16.6	15.4	15.1	22.6
Civilian education	22.3	18.8	25.9	18.9	11.6	9.8	19.6
Other	2.2	2.5	1.8	1.9	1.5	1.1	1.8
Nonresident military courses	3.4	2.1	.6	.7	.6	.4	1.0
Civilian industry or occupational training	.3	.9	.4	.2	.1	.2	.3

level at which you have commanded?" Slightly more than one-half (54.4%) of the officers responding had commanded at the company/battery/troop/equivalent level; 13.0 percent, the battalion/squadron/equivalent level; and 2.7 percent, the brigade/support command/equivalent level. Slightly more than one-fifth (21.6%) had never commanded.

Contrast is revealed when Table I-9 is compared with Table I-10. The latter shows responses to the question, "What is the highest level at which you expect to command during your active-duty career?" For example, Table I-9 indicates that 13.0 percent have commanded at the battalion or equivalent level; Table I-10 shows that 39.6 percent expect to command at the same level. Only 2.7 percent actually have commanded at the brigade or equivalent level (Table I-9), but 22.7 percent expect to command at that level (Table I-10). Command at the division level or above is expected by 8.3 percent. Six percent have no desire to command.

<u>TABLE I-9</u>							
<u>Highest Command Level Achieved</u>							
<u>Highest Command Level</u>	<u>Rank</u>						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
Company/battery/ troop/equivalent	5.9	17.6	68.4	87.8	49.3	4.2	54.4
Never commanded	73.3	64.7	21.9	3.7	3.3	.5	21.6
Battalion/squadron - /equivalent	-	-	.4	4.3	42.6	61.5	13.0
Detachment	20.7	17.5	9.3	4.1	4.2	.4	8.3
Brigade/support command/equivalent	-	-	-	-	.5	33.4	2.7

<u>TABLE I-10</u>							
<u>Highest Command Level Expected</u>							
<u>Expected Command Level</u>	<u>Rank</u>						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
Battalion	27.4	29.9	41.6	48.1	39.7	31.2	39.6
Brigade	20.0	19.8	18.7	17.3	26.9	55.7	22.7
Company	22.7	19.9	20.9	18.2	17.4	1.2	18.2
Division or above	14.8	17.1	8.4	4.4	4.2	8.3	8.3
No desire to command	8.8	7.9	5.9	6.7	5.3	.5	6.0
No opportunity to command	6.4	5.3	4.5	5.2	6.5	3.0	5.1

When asked about the timing of their company/battery/troop command, 37.6 percent of all respondents indicated that this command tour occurred prior to their attendance at the advanced course, as compared with 16.2 percent whose command occurred after their advanced course attendance. Almost 17 percent (16.9%) reported command both prior to and following attendance at the advanced course. Of all respondents, 29.2 percent reported that they had not commanded at the company/battery/troop level at the time the survey was taken.

Table I-11 shows a distribution of responses to the question, "What is the highest staff level at which you expect to serve during your career?" Almost one-half (48.2%) expect to serve on a Departmental staff: Department of the Army--30.2 percent; Department of Defense--18.0 percent. Another 21.8 percent expect to serve on the staff of a major command, making a total of 70.0 percent who expect staff duty at the major command level or higher.

In answer to the question, "When did you complete, or obtain credit for completion of, Command and General Staff College/Armed Forces Staff College or equivalent?", 67.1 percent reported that they had not completed or received credit for either of these courses at the time of the survey. Of those who had, however, 16.8 percent did so prior to assignment to brigade/corps/higher

TABLE I-11							
Highest Staff Level Expected							
<u>Expected Staff Level</u>	<u>Rank</u>						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
Department of the Army	12.8	20.1	29.0	32.9	35.8	46.7	30.2
Major command	15.7	18.7	20.6	26.6	27.3	10.4	21.8
Department of Defense	10.0	13.5	14.1	18.6	23.4	35.2	18.0
Division	22.3	18.8	15.5	7.0	2.2	.5	11.0
Installation	9.2	7.2	9.7	7.9	4.8	1.1	7.5
Brigade	13.5	9.2	5.8	2.4	.8	.0	4.7
Battalion	13.5	10.5	3.6	.7	.1	.0	3.6
Other	2.9	2.1	1.8	4.0	5.4	6.2	3.4

staff or to battalion command. Another 16.1 percent reported such schooling occurred subsequent to assignment to brigade/corps/higher staff or to battalion command.

Almost three-fourths of all respondents (71.9%) believed that the principal purpose of USACGSC-level training is to "broaden the outlook of the officer in preparation for positions of increased responsibility." Thirteen percent did "not know the purpose of USACGSC-level training," although 94.1 percent of this response was clustered in the three company grades. Over 9 percent (9.3%) identified the training's purpose as "to retain a competitive position for promotion/advancement." Other listed alternative responses accounted for less than 6 percent.

When asked for their reaction to a proposal to continue attendance at USACGSC for combat arms officers, and to provide equivalent military or civilian training to all others; responses ranged as follows: Over one-third (37.4%) opined that "resident training at this level is necessary;" almost one-fourth (24.4%) took the view that "either resident or nonresident training is necessary." Two groups of 13.2 percent each pronounced the current system "adequate," or were unsure whether "USACGSC-level training is either necessary or desirable." "The form of training (resident or nonresident) is not important," was the observation of 6.2 percent. A few (4.4%) replied that "most officers do not require training at the USACGSC level;" still fewer (1.2%) were "opposed to USACGSC-level training" for other reasons.

Another proposal, to select a small percentage of a given USACGSC-level class to remain for an additional year of study, prompted the following responses: Over one-third (36.4%) said, "It's worth a pilot test or 'trial run.'" On the other hand, 21.1 percent were less enthusiastic with, "The Army can't afford this luxury; we need more 'do-ers.'" Almost 18 percent (17.9%) feared the creation of an "elitist group" and termed the proposal a "bad idea." "It should be considered, but at another level," was the response of 12.7 percent, while 7.1 percent thought it should be implemented immediately. Only 4.7 percent replied, "I don't care one way or the other."

Table I-12 gives a distribution of responses to the following: "To be an effective officer, the minimum civilian educational level required at time of commissioning should be:" Over one-half (55.0%) of all respondents identified "college graduate" as the minimum required level; over one-fifth (21.1%), the "associate degree." Response percentages for all ranks held generally consistent for both responses. However, for the third ranking response, "Civilian

TABLE I-12

Civilian Education Required for Commissioning

<u>Response</u>	<u>Rank</u>						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
College graduate	56.2	58.6	52.6	51.9	58.4	60.5	55.0
Associate degree	22.1	20.3	20.4	21.9	21.2	21.4	21.1
Civilian education irrelevant to officer effectiveness	13.3	11.7	13.5	10.1	7.2	2.6	10.6
Some college, but no degree	5.0	6.5	8.7	7.9	7.2	9.3	7.8
High school graduate	3.4	2.9	4.8	8.3	6.0	6.2	5.6

education has nothing to do with being an effective officer," weight of response declined markedly as rank increased and ranged from a high of 13.3 percent for second lieutenants to a low of 2.6 percent for colonels.

The next two tables (Tables I-13 and I-14) address the question of proper "mix" of education and training for the effective Army officer. Table I-13 gives distribution of responses for the following question: "If education is defined as 'preparation for life (or the unknown),' while training is defined as 'preparation for a specific task (or the unknown),' what mix of education and training do you believe is required by an effective Army officer?" Table I-14 addresses the question, "At what rank do you believe education becomes more important to duty performance than specific training?"

Although in Table I-13 "about the same amount of each" ranked first among listed responses (39.1%), it was less than 8 percentage points ahead of "more training than education" (31.3%). Lieutenants were somewhat more inclined to select the former, when compared to other, more senior respondents; and somewhat less likely to select the latter. Almost twice as many officers replied "more training than education," than replied "more education than training" (31.3% versus 18.1%). The low response rates for the last two alternatives, "much more training" and "much more education" suggests that require-

<u>TABLE I-13</u>							
<u>Effective Education and Training Mix</u>							
<u>Response</u>	<u>Rank</u>						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
About same of each	43.5	44.0	39.3	37.7	36.7	36.7	39.1
More training than education	22.7	23.9	32.3	34.5	32.2	33.7	31.3
More education than training	23.7	20.1	17.1	16.9	18.0	17.9	18.1
Much more training than education	4.7	3.8	6.2	6.8	7.5	8.3	6.3
Much more education than training	5.4	8.2	5.1	4.1	5.6	3.3	5.2

<u>TABLE I-14</u>							
<u>Rank at which Education More Important than Training</u>							
<u>Response</u>	<u>Rank</u>						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
Major	28.1	34.0	31.4	41.4	42.4	40.1	36.2
Education never more important than training	13.6	15.2	16.5	17.2	16.6	15.1	16.2
Captain	19.6	16.8	18.2	14.2	9.1	8.5	14.9
Lieutenant colonel	6.5	9.1	14.5	10.7	15.8	21.8	13.2
Education always more important than training	13.9	11.3	5.8	6.3	7.5	6.9	7.5
Colonel	4.1	4.4	7.7	7.5	5.0	5.5	6.4
Second lieutenant	11.7	7.3	4.3	2.2	2.5	2.0	4.2
First lieutenant	2.6	2.0	1.7	.7	1.1	.2	1.3

ments for education and training, proportionately, are very close, in the view of Army officers.

Again in the next table (Table I-14), rank appears to be associated with response selection. The overall first choice, the rank of "major" was also the first choice of each sub-population of respondents when distribution by rank is considered. Percentage weight given to the response of "major" increases as respondents' rank increases. The same generally is true for the fourth-ranked response, "lieutenant colonel," but not for the third-ranked choice, "captain," or for the assertion, "Education always is more important than training," which ranked fifth.

TABLE I-15							
Primary Utility of Graduate Civilian Education							
Response	Rank						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
Broadening educational background for future assignments	56.9	49.9	43.0	39.9	43.5	46.4	44.5
Staying competitive for promotion	12.8	16.0	18.8	19.8	15.1	9.9	17.0
Preparing for utilization tour	7.4	7.7	13.9	17.3	19.8	21.9	15.1
Gaining alternate specialty knowledge	6.0	9.2	40.5	27.1	15.9	6.2	10.1
Gaining primary specialty knowledge	6.6	8.9	5.9	6.8	6.6	9.2	6.8
Preparing for civilian career	7.4	8.4	5.4	5.5	4.5	2.8	5.6
Not much of anything	1.0	.8	.9	.8	1.0	1.2	.9

Table I-15 gives a distribution of responses to the question, "For which of the following do you believe graduate-level civilian education is primarily useful?" Somewhat less than one-half

(44.5%) responded, "Generally broadening an educational background in preparation for future assignments;" 17.0 percent, "Staying competitive when considered by promotion/selection boards;" and 15.1 percent, "Preparing for a utilization tour requiring specific civilian education." "Gaining knowledge required in an alternate specialty" prompted a 10.1 percent response and "in a primary specialty," 6.8 percent.

When asked whether the Army should provide the opportunity to achieve a graduate degree in return for good performance, over three-fourths (77.0%) of all respondents replied "yes." Over one-half (54.3%) of those said "yes" because a graduate degree "will enhance my value to the Army;" or, 11.0 percent because "it is required for successful performance in my specialty;" or 11.7 percent for some other reason. Over one-fifth (21.3%) replied "no" because "my personal educational goals are my own responsibility" (10.0%) because "a graduate degree has no bearing on my effectiveness as an officer" (8.9%); or because of some other reason (24%). Only 1.6 percent had no opinion on this issue.

Table I-16 addresses the following question: "For maximum Army effectiveness, what proportion of the officer corps with your primary specialty do you believe should have graduate degrees?"

One-half of all respondents (50.1%) are split between two replies: "About one-fourth"--25.5 percent; "about one-half"--24.6 percent. In both replies, response levels consistently are over 20 percent for all ranks. For the response, "very few", percentages are highest at the senior ranks; while for the response, "almost all," percentages are somewhat higher at the more junior ranks.

Response	Rank						
	2LT %	1LT %	CPT %	MAJ %	LTC %	COL %	ALL %
About one-fourth	24.1	20.8	25.5	26.0	28.2	26.0	25.5
About one-half	25.8	28.5	25.3	24.5	21.4	22.8	24.6
Very few	8.8	8.8	18.1	23.5	23.9	22.8	18.9
Almost all	26.7	26.3	19.1	13.8	14.5	17.2	18.3
About three-fourths	10.2	11.8	7.2	6.3	5.8	3.7	7.3
None	4.4	4.0	4.7	5.9	6.1	7.4	5.3

TABLE I-17								
Proportion of Primary Specialty Requiring Graduate Degrees (by Unit Type)								
Response	Unit Type*							
	I %	II %	III %	IV %	V %	VI %	VII %	VIII %
About one-fourth	25.9	26.2	26.3	25.5	25.9	22.4	26.8	24.0
About one-half	26.6	23.5	24.7	24.2	23.7	25.9	23.8	23.6
Very few	16.0	17.4	15.7	18.8	20.1	20.2	21.5	22.7
Almost all	18.4	20.6	20.1	19.9	17.2	17.1	15.4	18.6
About three-fourths	8.8	8.5	9.6	6.6	6.0	6.8	6.7	5.7
None	4.3	3.8	3.6	5.0	7.0	7.6	5.8	5.5

Table I-17 addresses the same question as does Table I-16, but provides a distribution of the responses by type of unit to which assigned at time of survey participation. The table is of interest principally because it tends to reinforce the distribution by rank of Table I-16. Response percentages for "very few" and "almost all" are more consistent across unit types.

*KEY:

- I Combat units
- II Combat support units
- III Combat service support units
- IV Training activities (including service school staff and faculty)
- V Recruiting activities, ROTC units, and Readiness Regions
- VI Garrison/installation staff
- VII Corps or higher level staff (including major commands; Headquarters, Department of the Army; etc.)
- VIII Other activities or units

than across ranks; even so, the percentages remain significantly close for these two extreme responses. Percentages for "about one-fourth" and "about one-half" again are close in Table I-17, so that neither is the clear winner. Both tables show that about one-half of all respondents believe that between one-fourth and one-half of the officer corps should have graduate degrees. Almost another one-fourth (24.2%) opined that either very few or none of the officer corps need graduate degrees in the performance of their Army duties.

Table I-18 provides a distribution of responses to the question, "Which statement best describes your current assignment?" Over one-half (52.3%) of all respondents reported that their assignment at the time of the survey matched either their primary specialty training (37.3%) or their alternate specialty training (15.0%). Another 19.0 percent reported a match of their assignment with previous experience, rather than with specialty training. Slightly over one-fifth (20.6%) reported that their assignment matched neither previous training nor experience.

Responding to a similar question with respect to the assignment immediately preceding the one current at the time of the survey, 33.3 percent reported a match with their primary specialty training; 10.9 percent, a match with their alternate specialty training; 11.9 percent, a match with previous experience; and 14.4 percent, a match with neither previous training nor experience. Almost 30 percent (29.6%) reported assignment to the student-patient-in transit account.

<u>Response</u>	<u>Rank</u>						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
Matches primary specialty training	60.9	60.5	39.6	28.2	24.3	26.1	37.3
Matches neither experience nor training	23.4	22.4	21.3	20.1	19.9	15.4	20.6
Matches experience, not training	6.2	10.0	15.0	17.5	31.2	39.6	19.0
Matches alternate specialty training	3.0	4.1	12.7	23.3	20.8	15.4	15.0
Student, patient, in transit	6.4	3.0	11.3	11.0	3.9	3.3	8.0

When asked, "What do you believe is the most effective utilization of an officer?" 42.1 percent replied, "most assignments in the primary specialty; some in the alternate specialty." "Consistent rotation of assignments between primary and alternate specialties, with occasional assignments outside the two specialties," was endorsed by 36.2 percent; "even division of primary and alternate specialty assignments," by another 14.1 percent. "All assignments in one specialty, either primary or alternate;" received a 6.5 percent response. Slightly over 1 percent (1.1%) believed that most assignments should be in the alternate specialty, with some in the primary.

When asked to choose among several options to deal with assigning officers to nonspecialty-related duty positions requiring no specialty expertise, 43.8 percent preferred that such requirements be distributed to all specialties on a "fair-share" basis. Another 23.2 percent preferred that the closest possible specialty match arbitrarily be specified for the position. Establishment of a "specialty immaterial" or "duty" specialty was suggested by 14.9 percent; 11.6 percent suggested that such positions, unless specialty-specific, be deleted or civilianized; and 6.5 percent preferred some option other than those listed.

TABLE I-19							
Dissatisfaction with Primary Specialty							
Response	Rank						
	2LT %	1LT %	CPT %	MAJ %	LTC %	COL %	ALL %
Voluntarily chosen, but dissatisfied with it	12.6	10.7	7.3	5.2	5.3	2.1	6.9
Involuntarily assigned, and dissatisfied with it	11.6	9.9	7.4	5.1	4.6	3.2	6.7

Table I-19 gives a distribution of responses relative to dissatisfaction with primary specialty. Of those respondents who were dissatisfied (13.6%), the split is near even between those who chose their primary specialty and those who were assigned it. Among the "satisfied" respondents, however, almost five times as many (71.3%) chose their primary specialty than were assigned it (15.2%).

TABLE I-20							
Primary Specialty Match with Training, Experience, Desires							
Response	Rank						
	2LT %	1LT %	CPT %	MAJ %	LTC %	COL %	ALL %
Yes	62.9	64.6	79.9	89.6	91.8	94.0	82.2
No	28.8	27.2	15.1	6.9	5.5	5.1	13.2
Unsure	8.3	8.2	5.0	3.6	2.7	.9	4.6

Table I-20 addresses the question, "Does your primary specialty match your previous training, experience, or desires?" The 13.2 percent "no" response is consistent with the 13.6 percent who are shown in Table I-19 as "dissatisfied" with their primary specialty. Additionally, in Table I-20, the 4.6 percent who replied that they are not sure probably should be included in the negative category, as well. In both tables (I-19 and I-20), negative responses appear to correlate inversely with rank; that is, the percentages decrease as rank increases. Whatever the reason for greater senior satisfaction, a proportionately significant percentage of company grade respondents apparently are not entirely comfortable with their primary specialty.

Table I-21 provides distribution of responses to the question, "Which one of the following is the most useful training or education you have already received in support of your primary specialty?" The response selected by almost one-half of the respondents (44.2%) is "on-the-job experience (no structured training)." Its next competitor, "advanced course" (17.3%), was outdistanced by 26.9 percentage points. Other responses arranged themselves still farther down the scale.

In response to the question, "are adequate training opportunities available so that you can become competently trained in your primary specialty?" 71.1 percent responded, "yes;" 21.7 percent, "no;" and 7.1 percent did not know. Percentages for the "yes" response increase with rank, from a low for second lieutenant of 52.4 to a high for colonel of 82.7. Conversely, percentages for the "no" response decrease as rank increases, from a high of 33.3 for second lieutenant

to a low of 12.9 for colonel. "Unsure" responses, similarly, decrease in percentage points as rank increases.

TABLE I-21

Most Useful Primary Specialty Training or Education Received

<u>Response</u>	<u>Rank</u>						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
On-the-job experience (no structured training)	29.4	43.6	45.7	49.2	42.9	40.5	44.2
Advanced course	-	.7	21.4	20.4	20.7	22.6	17.3
Resident military specialty-related courses	5.6	11.8	15.7	13.4	14.0	11.1	13.3
Basic course	46.0	28.3	6.8	2.8	3.7	2.3	10.4
Civilian education/ civilian industry sources	5.4	5.1	4.8	6.3	9.6	12.6	6.7
Precommission train- ing	12.7	9.2	4.7	2.9	2.8	2.1	4.9
CGSC/AFSC	-	-	-	4.1	5.9	7.7	2.9
Military correspon- dence courses	.5	1.3	.9	.8	.4	1.1	.8

Responses to a related question generally are consistent with those indicated in the preceding paragraph. The question asks for a description of the training normally provided in support of the respondents' respective primary specialties. Over two-thirds (67.5%) described the training favorably: "Sufficiently thorough; prepares one well"--36.3 percent. "Broadly-based; provides required specialty knowledge"--31.2 percent. Another one-third (32.5%), on the other hand, described the training unfavorably: "Too broad, generalized; limited practical value"--20.8 percent. "Unrelated to actual duty requirements"--9.4 percent. "Nonexistent"--2.3 percent.

TABLE I-22

Usefulness of Primary Specialty Training or Education Modes

Response	Rank						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
<u>Most Important</u>							
Military resident instruction	47.3	51.9	59.0	60.0	59.8	59.3	57.7
On-the-job experience (no structured training)	38.0	36.8	31.6	28.9	27.2	26.3	30.9
Civilian graduate schooling	5.4	5.9	4.6	5.5	8.3	10.4	6.1
Specialized nondegree civilian training	2.9	2.0	2.0	3.1	2.0	1.1	2.2
Civilian undergraduate schooling	2.7	1.0	1.4	1.7	1.7	1.8	1.6
Military nonresident instruction	3.7	2.3	1.4	.8	1.0	1.2	1.5
<u>Least Important</u>							
Military nonresident instruction	27.1	28.1	31.2	30.8	27.4	24.4	29.3
Civilian graduate schooling	16.4	14.4	22.3	27.7	31.9	31.2	24.5
Specialized nondegree civilian training	26.0	28.0	24.2	23.5	21.1	27.4	24.3
Civilian undergraduate schooling	19.5	20.4	15.8	12.3	13.4	11.9	15.1
On-the-job experience (no structured training)	4.7	4.7	3.7	4.0	4.8	3.3	4.1
Military resident instruction	6.4	4.4	2.8	1.7	1.4	1.8	2.7

Table I-22 shows distribution of responses to the questions, "Which one of the following do you believe is the most important training or education which should be provided in support of your primary specialty?" and, "Which one of the following do you believe is the least useful training or education which could be provided in your primary specialty?" Over one-half of all respondents (57.7%) selected "military resident instruction," and 30.9 percent selected "on-the-job experience," as most important. These two responses account for 88.6 percent of all most important replies; with the next ranking response, "civilian graduate schooling," accounting for only slightly more than 6 percent (6.1%) of the most important replies. Except for one change in position ("civilian graduate" and "civilian undergraduate schooling" responses changed places), the bottom, least useful, half of the table is a reverse mirror image of the top half.

TABLE I-23							
Major Gap in Currently Available Primary Specialty Schooling							
Response	Rank						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
Unaware of any major gap	45.6	45.1	35.9	30.0	34.1	42.4	36.5
"Expert" knowledge level (LTC-COL)	8.5	9.8	21.4	32.5	41.9	38.1	26.5
Advanced knowledge level (CPT-MAJ)	9.2	12.7	19.6	17.3	8.6	5.1	14.5
Basic knowledge level (LT)	29.9	25.6	12.1	6.1	5.4	6.2	12.0
More than one of those listed	6.8	6.8	11.0	14.1	10.0	8.3	10.5

Table I-23 addresses the question, "At what level does the major gap in the currently-available schooling for your primary specialty occur?" Almost two-thirds of all respondents (63.5%) identified one of the listed knowledge levels as the point at which a "major gap" occurs, with the "expert" knowledge level being identified by over one-fourth (26.5%).

Table I-24 gives a distribution of responses to the following question: "Which of the following best describes the role of civilian education in your primary specialty?" Over one-third (36.5%) of all respondents reported available, important civilian education in support of their primary specialty. The remainder (63.5%) indicated either that available civilian education in support of their primary specialty is of limited importance; or that none is available.

<u>TABLE I-24</u>							
<u>Availability of Supporting Civilian Education</u>							
<u>for Primary Specialty</u>							
<u>Response</u>	<u>Rank</u>						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
Available; important	44.3	45.7	36.6	32.0	33.4	34.3	36.5
Available; limited importance	26.7	29.4	33.2	38.7	35.8	33.6	34.0
Unavailable	29.0	24.9	30.1	29.3	30.8	32.0	29.5

When asked if primary specialty training or education will be of value in a potential civilian career, one-third (33.6%) replied negatively because they expect to be working in an entirely different field. Another 30.5 percent gave a qualified "yes" because they are uncertain what they will be doing after active duty. In both answers, percentages held fairly constant across respondent ranks. Of those replying affirmatively, 13.4 percent expect to do similar work in civilian life; and 7.1 percent, the same type of work. Slightly over 13 percent (13.1%) were uncertain as to whether specialty training will be useful in civilian life; and 2.3 percent do not expect it to be useful, even though it is closely related to a probable civilian career.

Table I-25 addresses the following question: "Which one of the following most closely identifies your view of 'specialty qualification?'" Slightly over one-half (51.4%) opined that, "The ability to 'do the job' in the specialty, at the assigned

<u>TABLE I-25</u>							
<u>Specialty Qualification</u>							
<u>Response</u>	<u>Rank</u>						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
Ability to "do the job" in specialty	58.2	55.1	47.0	52.4	51.5	55.8	51.4
Designated training /assignments	22.3	23.6	28.1	23.7	25.5	24.6	25.4
Undefinable	12.7	11.8	13.6	13.5	10.8	9.5	12.5
Subjective administrative decision	2.9	4.9	5.9	5.8	6.9	5.8	5.7
Adherence to DA Pam 600-3	.3	2.1	2.8	2.3	3.3	3.0	2.5
Registration/certification	3.4	2.5	2.6	2.4	2.1	1.2	2.4

level, whether formally trained or not, as shown by OER evaluations or promotion/selection board results," constitutes specialty qualification. Another one-fourth (25.4%) believed that specialty qualification is, "Successful completion of designated training courses and developmental assignments." In both answers, percentages are relatively consistent across respondent ranks; although second lieutenants were somewhat more likely to select the former; captains, the latter. Only 12.5 percent of all respondents indicated a belief that specialty qualification is largely undefinable.

Table I-26 provides responses to the following survey item: "The primary responsibility for an officer becoming 'specialty-qualified' lies with:" Perhaps more significant than the 48.5 percent of the respondents who identified the officer himself as having primary responsibility for his own specialty qualification is the 51.5 percent who did not. Selected by the fewest respon-

dents (2.2%) was "the officer's rating officer," with even "the MILPERCEN specialty monitor" ahead of it by .8 of a percentage point. Almost one-fifth (19.0%) viewed the "officer education and training system" as primarily responsible; over one-fourth (27.3%), "the officer's MILPERCEN career manager/assignment officer."

TABLE I-26

Primary Responsibility for Specialty Qualification

Response	Rank						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
The officer	46.6	51.3	47.4	48.1	48.3	53.1	48.5
MILPERCEN career manager/assignment officer	23.9	24.4	31.4	28.1	25.2	18.6	27.3
Officer education and training system	23.1	17.0	16.4	18.1	22.4	24.8	19.0
MILPERCENT specialty monitor	2.4	2.3	2.6	4.5	3.1	2.3	3.0
Rating officer	4.1	5.0	2.3	1.1	1.0	1.2	2.2

TABLE I-27

Primary Specialty Assignments to Become Specialty-Qualified

Response	Rank						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
Three	35.3	32.7	35.7	32.7	34.3	33.5	34.2
More than four	22.5	22.6	22.6	26.9	27.4	33.3	25.2
Two	19.4	21.4	22.3	18.9	17.7	15.2	19.9
Four	11.8	13.8	13.1	15.6	14.8	13.8	14.0
One	11.0	9.6	6.4	6.0	5.8	4.2	6.7

Table I-27 provides respondent views for their respective primary specialties on the number of different assignments require to become specialty-qualified. Slightly over one-third of the respondents (34.2%) indicated that specialty qualification in their specific specialties requires about three different assignments. Another one-fourth (25.2%) said, in their specialties, more than four different assignments are required. Almost one-fifth (19.9%) identified two assignments as the required number; 14.0 percent, four assignments.

Table I-28 addresses the following question: "Which one of the following is the chief way you have (or expect to) become qualified in your primary specialty?" Whether respondents believed that it generally is all they can expect, as a practical matter; or, whether it is, in fact, their preference; almost three-fourths of them (71.2%) selected "on-the-job experience." "Resident military training accounts for almost an additional one-fourth (23.6%), relegating the three remaining alternatives statistically, to an insignificant status. Lieutenant colonels and colonels were somewhat less likely to select "on-the-job experience" and more likely to pick "resident military training" than were other ranks. Over one-half (56.3%) of all respondents did not respond to this survey item.

TABLE I-28

Chief Means of Primary Specialty Qualification

<u>Response</u>	<u>Rank</u>						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
On-the-job experience (no structured training)	71.7	69.5	72.1	75.1	67.3	66.8	71.2
Resident military training	20.2	22.1	23.6	21.1	28.2	27.4	23.6
Resident civilian education	3.0	3.1	2.4	2.3	3.3	4.0	2.8
Off-duty civilian study	2.4	3.1	1.1	.5	.5	.9	1.2
Nonresident military courses	2.7	2.3	.8	1.1	.7	.9	1.2

To complete the statement, "After completion of a training period, an officer with your primary specialty should work in a specialty-related assignment for a minimum period of," 35.9 percent and 34.5 percent of all respondents selected "2 years" and 3 years," respectively. Another 17.1 percent indicated for their specific specialties that "more than 3 years" would be the best minimum; 11.6 percent, "1 year." Less than 1 percent (.9%) selected "less than 1 year."

TABLE I-29

Establishment of Specialty Qualification Standards

<u>Response</u>	<u>Rank</u>						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>All</u> %
Yes, flexible standards	54.4	52.5	49.9	48.2	52.9	47.6	50.5
No, firm standards not possible	23.6	22.4	26.9	27.1	25.8	28.8	26.1
Not sure	7.4	9.6	9.6	11.3	10.0	12.3	10.1
Yes, absolute standards	10.0	11.3	9.5	8.7	7.5	7.4	9.1
No, for reason not listed	4.6	4.2	4.1	4.7	3.7	3.9	4.2

Table I-29 provides a distribution of responses to the question, "Should specialty qualification standards be established for each specialty at each grade?" Well over one-half of those officers responding (59.6%) viewed establishment of some sort of specialty qualification standards favorably, although only 9.1 percent believed that absolute standards should be established. Endorsement of absolute standards tends to decrease as rank increases, and ranges from a high of 11.3 percent for first lieutenants to a low of 7.4 percent for colonels. A similar relationship is apparent for "flexible standards," with a high of 54.4 percent for second lieutenants and a low of 47.6 percent for

colonels. The trend reverses for the "not sure" response, with a low of 7.4 percent for second lieutenants and a high of 12.3 percent for colonels.

TABLE I-30

Use of Specialty Qualification Standards Information

<u>Response</u>	<u>Rank</u>						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>All</u> %
As a diagnostic tool	40.6	43.9	50.4	53.3	53.4	49.4	50.0
Officially by promotion/selection boards, etc.	26.0	26.9	23.4	24.5	26.6	29.2	25.2
Unofficially to measure professional development	14.8	12.8	10.4	8.1	7.8	8.1	9.8
Unofficially for personal assessment	12.4	8.7	8.8	6.9	5.5	5.8	7.8
Not for any purpose	6.3	7.7	7.1	7.2	6.7	7.6	7.1

Table I-30 assumes the establishment of specialty qualification standards and provides a distribution of views on how information generated from the employment of these standards should be used. Over two-thirds (67.6%) of all respondents held the view that such information should be used only in diagnostic or unofficial ways, which would not have lasting or irreversible consequences for individual officer careers. One-fourth (25.2%), on the other hand, would have such information "used officially as a matter of record for consideration by promotion/selection boards or other activities." This latter view was held somewhat less strongly by captains and majors than by officers of other ranks, while colonels held this view most strongly of all those endorsing it.

Table I-31 responds to the following question: "Promotion to which of the following ranks should be dependent upon 'primary

specialty qualification'?" Percentages for the first three responses listed in the table are so close that none can be declared the clear winner. Major was the rank believed by respondents as the most likely candidate for dependency for promotion on primary specialty qualification. Of those selecting this rank, first lieutenants and captains held the view more strongly than did other respondents. Following the rank of major by 6.3 percentage points is the rank of captain, with the weight of endorsement tending to decrease as rank increases. Almost one-fourth (23.8%), however, replied that none of the ranks listed should be dependent for promotion on qualification in the primary specialty. Another 22.0 percent held the opposite view--that all listed ranks should be so dependent.

<u>TABLE I-31</u>							
<u>Ranks to be Dependent upon Primary Specialty</u>							
<u>Qualification</u>							
<u>Dependent</u>	<u>Current Rank</u>						
<u>Rank</u>	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
Major	23.5	28.6	29.3	21.8	22.4	17.2	25.0
No rank	18.4	18.5	22.2	27.0	27.0	26.7	23.8
Each rank	18.5	19.8	19.1	23.0	26.0	30.1	22.0
Captain	29.8	22.7	18.3	18.9	15.1	11.2	18.7
Lieutenant colonel	4.6	7.5	8.6	7.5	7.3	12.8	8.0
First lieutenant	5.3	2.9	2.4	1.8	2.3	1.9	2.5

Table I-32 shows a distribution of responses to a survey item which asks for an estimate of present level of professional development from the respondents in their respective primary specialties. Nine out of 10 respondents (90.9%) estimated that they are prepared in their respective primary specialties, but only 5 out of 10 (54.6%) estimated themselves to be well prepared. Not surprisingly, estimates of being well prepared increase as rank increases, although one-fourth of all respondents in the

TABLE I-32							
Level of Professional Development in Primary Specialty							
Response	Rank						
	2LT %	1LT %	CPT %	MAJ %	LTC %	COL %	ALL %
Well prepared	24.9	38.8	53.2	59.2	65.6	74.6	54.6
Somewhat prepared	54.6	45.8	37.9	34.4	28.2	20.9	36.3
Somewhat unprepared	14.7	10.5	6.2	5.2	5.0	3.7	6.7
Not prepared at all	5.8	5.0	2.8	1.2	1.2	.9	2.5

rank of colonel did not place themselves in the well-prepared category. Three-fourths of the second lieutenants responding did not consider themselves well prepared in their respective specialties; for first lieutenants, the percentage is 61.2; for captains, 46.8; for majors 40.8; and for lieutenant colonels, 34.4. Replies in the "unprepared" category ("somewhat unprepared" and "not prepared at all") range from 20.5 percent for second lieutenants to 4.6 percent for colonels.

When asked whether military resident or nonresident instruction is more effective in providing needed primary specialty skills, 82.8 percent of all respondents endorsed resident instruction. Weight of endorsement increases as rank increases and spans a range of 75.9 percent of second lieutenants to 90.9 percent for colonels. Close in percentages were the next two responses, with 8.1 percent for "neither are effective in their present form" and 7.9 percent for "they are both equally effective." Only 1.1 percent of all respondents believed that nonresident instruction is more effective than resident for their respective primary specialties.

In response to the question, "How many hours per week do you believe you could devote to independent career-related studies (both on and off duty time)?" 44.8 percent replied 2 to 4 hours; 26.9 percent, 5 to 7 hours; 11.5 percent, 1 hour; 9.5 percent, 10 hours or more; and 7.3 percent 8 to 9 hours.

Table I-33 shows how respondents viewed the prospect of instituting professional examinations for the officer corps. Five out of 10 respondents disagreed, with 26.4 percent in strong disagreement. Almost 1 out of 10 (9.5%) was neutral on the issue. More majors responding disagreed strongly than did respondents of other ranks, and slightly more first lieutenants agreed strongly.

TABLE I-33							
Institution of Professional Examinations							
Response	Rank						
	2LT %	1LT %	CPT %	MAJ %	LTC %	COL %	ALL %
Strongly disagree	17.8	20.6	27.1	30.1	26.8	28.6	26.4
Disagree	24.4	28.3	25.1	24.7	26.2	29.3	25.8
Agree	29.9	24.8	25.5	21.5	25.0	21.5	24.5
Strongly agree	14.2	15.4	14.2	14.3	12.3	11.6	13.9
Does not matter	13.7	11.0	8.1	9.3	9.7	9.0	9.5

When asked to assume the institution of professional examinations and then to identify the principal purpose for which they should be used, 61.3 percent would employ them only for unofficial purposes: "For individual diagnostic work only"--24.4 percent; "only to assist in determining education/training needs"--36.9 percent. Of those respondents who would employ such examinations for official purposes, 16.3 percent would place no restriction on their use; 14.6 percent would employ them as one of the criteria for promotion; and 7.8 percent, as one of the criteria qualifying for command and certain other positions.

Almost one-half of the respondents (44.1%) viewed the principal limitation of such examinations as the relative inability of paper and pencil tests to reflect job performance accurately. Another 40.6 percent said that the responsibilities of officers are too broad to be tested adequately. Almost 6 percent (5.5%) thought current procedures are adequate, rendering unnecessary another evaluative tool. Almost 10 percent (9.8%) thought there

is a significant limitation to such examinations, but one other than those listed.

Table I-34 addresses the following question: "Through what means do you believe professional development best can be achieved?" As can be seen, combination of a variety of developmental experiences is favored by the vast majority of respondents.

<u>Response</u>	<u>Rank</u>						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
Combination of the following	72.3	73.8	79.1	83.6	85.1	86.8	80.6
Experience	23.3	21.7	17.1	11.9	10.4	9.1	15.1
Resident instruction	1.2	2.2	2.9	3.7	3.7	3.5	3.0
Self-study and non-resident instruction combination	2.4	1.5	.8	.7	.4	.5	.9
Self-study within prescribed parameters	.8	.7	.2	.1	.4	.0	.3

One-half (50.8%) of the officers responding opined that their value to the Army would be increased "some," were they to graduate from the next higher military course of instruction. Another 29.6 percent believed that their value to the Army would be increased "greatly." Second lieutenants and colonels held this latter view more strongly than did respondents of other ranks. Percentages for the "some" response generally increased with rank. Almost 1 out of 10 (9.0%) held the view that "not much" increase in value would accrue from such an accomplishment; 2.6 percent said "none." Eight percent selected the "not sure" response.

When queried about an alternative to permit groups of officers to be managed as "commanders," with possible repetitive command tours at each level, 42.7 percent replied, "It's a good idea, but may cause some problems." Another 41.2 percent

replied, "I don't think this alternative should be implemented." Over 11 percent (11.5%) responded, "Implement immediately;" and 4.6 percent said, "I really don't care one way or the other." Asked to assume that "commander management" had been instituted, 34.3 percent indicated that officers should be identified for such a program upon individual application and file review; 33.6 percent, upon successful completion of their first command; 19.1 percent, upon selection for command by the DA Centralized Command Selection Board; and 13.1 percent, at some other time.

On the subject of whether or not promotion board results over the past 2 years have supported OPMS, almost one-half of all respondents (45.2%) reported that they are unfamiliar both with promotion board results and how these results relate to OPMS. Another 28.1 percent observed that "It is too early in the implementation of OPMS to identify board trends." Almost twice (17.3%) as many of the remaining respondents, however, believed OPMS has not been supported by promotion board results than believed OPMS has been supported (9.3%).

Asked to estimate the annual salary of a civilian whose duties and responsibilities correspond most nearly to those of the individual respondent in his present duty assignment, 36.3 percent estimated between \$20,000 and \$30,000. Another 26.2 percent estimated between \$30,000 and \$40,000; 8.6 percent, between 40,000 and \$50,000; 4.1 percent, more than \$50,000; and the remainder, \$20,000 or less.

Asked also to estimate the annual salary the individual respondent would earn in civilian life, given present level of training, education, and experience, and assuming unexpected termination of military service; 35.9 percent estimated between \$20,000 and \$30,000. Another 16.6 percent estimated between \$30,000 and \$40,000; 4.1 percent, between \$40,000 and \$50,000; 1.9 percent, more than \$50,000; and the remainder, \$20,000 or less.

A proposal was outlined to respondents in which the primary specialty could be redesignated for some officers at some point in their career as warranted by experience and training, retaining only the best qualified officers in the basic entry specialties. Over one-half (59.3%) agreed with the idea, 25.2 percent were unsure, and 15.5 percent disagreed.

Further to the same proposal, respondents were asked whether the Army or the individual officer would benefit from such a policy. Almost three-fourths (71.2%) replied that both the Army and the officer would benefit; 13.9 said it would be beneficial for the Army, but not for the officer; 10.9 believed neither the Army nor the officer would benefit; and 4.0 identified the officer, but not the Army, as the beneficiary.

Still relative to the same proposal, respondents were asked their views on alternating assignments between the "Army in the field" and combat development or training activities--or occasional staff assignments--of those officers selected for basic entry specialty continuation. Almost three-fourths (73.4%) agreed; 26.6 percent were unsure. Almost 10 percent (9.9%) did not respond to this survey item.

Data following are based upon responses to a series of "agree-disagree" survey items. "Strongly agree" and "agree" responses have been combined into one percentage figure to simplify analysis. An explanatory note is provided in those instances where rank of the officer contributes to significant variation in response to a particular question.

<u>Survey Item</u>	<u>"Strongly Agree"/"Agree"</u>
"Officers should be assigned to a utilization tour directly following formal specialty training."	96.0%
"Formal course training should be provided to learn the basics of a specialty."	93.3%
"Level 4 (USACGSC-level) training should not prepare officers for specific duty positions, but should provide broad preparation for a variety of duties during the following several years of service." [*Moderate increase in agreement with increased rank.]	91.0%
"The most valuable training in some specialties is on-the-job experience (no structured training)."	86.2%
"All commanders should receive a concentrated 'refresher' course prior to assuming command at any level."	85.2%
"The primary purpose of civilian education should be the acquisition of skills rather than the acquisition of academic credentials." [*Increase in agreement with increased rank.]	82.5%
"Officers who have received graduate-level civilian schooling are more competitive for promotion than those who have not." [*"Strongly agree" percentages increase as level of civilian education attained decreases; reverse is the case for "agree" percentages. High school graduate respondents are the exception to both of these comments.]	81.2%

Survey Item"Strongly Agree"/"Agree"

"Officers who have one of the basic entry specialties designated as an alternate at the eighth year of service are at a disadvantage when compared to those who have 'grown up' in the specialty."	72.6%
"For some highly technical specialties, training costs are so high that the 'up-or-out' promotion rule should be suspended." [*Disagreement increases as rank increases.]	63.4%
"Level 3 (advanced course) training should be oriented primarily toward training officers for their next duty position."	54.7%
"Selection boards use primary specialty qualification as a criterion for promotion." [*Disagreement increases with rank; 23.9 percent responded "I don't know."]	49.4%
"Quality" officers should be distributed equitably over all specialties, either voluntarily or involuntarily." [*Agreement increases as rank increases.]	49.0%
"It is more important to the Army that civilian education broaden the officer personally than provide him/her specific skills." [*Disagreement increases as rank increases.]	45.6%
"Promotion boards should not use a level of training completion as a criterion for selection."	42.8%
"OPMS-level 4 (USACGSC-level) training should be significantly different for the maneuver combat specialties (11--Infantry; 12--Armor) than for all other specialties." [*Disagreement increases as rank increases.]	42.5%
"USACGSC and AWC completion should be mandatory for all majors and lieutenant colonels, respectively, either by resident or nonresident programs." [*Disagreement increases as rank increases.]	41.9%
"Level 3 (advanced course) training would be more cost-effective if it was shorter, and if students attended on a TDY, rather than a PCS, basis." [*Disagreement increases as rank increases.]	35.3%

<u>Survey Item</u>	<u>"Strongly Agree"/"Agree"</u>
"Selection for attendance at USACGSEC/AWC is more important than actual attendance."	35.1%
"Only those specialties which can be related to a basic branch (e.g., 11--Infantry) have good promotion potential." [*Disagreement increases as rank increases.]	32.3%
"The academic report received upon completion of a course of military or civilian training is as important to one's advancement as an efficiency report." [*Disagreement increases as rank increases.]	30.2%
"Promotion boards should promote by specialty quotas."	27.5%
"Selection boards use alternate specialty qualification, if designated, as a criterion for promotion." [*Disagreement increases with rank; 30.4 percent responded "I don't know."]	25.2%
"The current specialty designation process allows 'quality' officers to be concentrated in certain specialties, with other specialties having few such officers." [*Agreement increases with rank; 27.6 percent responded "I don't know."]	25.1%
"Only the primary specialty has any real importance in career advancement."	21.3%
"Some specialties exist for which there are no Army requirements." [*53.5 percent responded "I don't know."]	14.0%
"There are adequate career progression opportunities in all OPMS specialties." [*34.4 percent responded "I don't know."]	12.7%
"Specialty 'qualification' is easily defined."	7.9%

Table I-35; survey question: "When did you have your alternate specialty designated?"

TABLE I-35*							
Timing of Alternate Specialty Designation							
Response	Rank						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
Other than following responses	59.1	58.3	28.0	65.0	93.1	94.4	63.8
8th year (AFCS)	11.4	3.1	65.2	29.9	1.9	.7	29.8
At a specific training event	29.5	38.5	6.8	5.1	5.0	4.9	6.4

*2403 respondents out of 7787, or 30.9 percent of all respondents, did not complete this survey item.

Table I-36; survey question: "Which statement best describes your alternate specialty designation?"

TABLE I-36*							
Dissatisfaction with Alternate Specialty							
Response	Rank						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
Involuntarily assigned, and dissatisfied with it	21.1	12.9	11.7	10.5	10.3	8.3	10.7
Voluntarily chosen, but dissatisfied with it	13.2	7.1	7.8	7.4	5.4	3.8	6.7

*2438 respondents out of 7787, or 31.3 percent of all respondents, did not complete this survey item.

Table I-37; survey question: "When did you receive your formal training in your alternate specialty?"

<u>TABLE I-37*</u>							
<u>Timing of Alternate Specialty Formal Training</u>							
<u>Response</u>	<u>Rank</u>						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
Never	35.7	34.9	57.0	49.8	48.1	49.6	51.1
Before first specialty assignment	33.3	50.0	33.4	36.6	32.8	29.1	34.1
After one specialty assignment	7.1	5.8	6.2	9.5	12.7	17.1	10.1
Concurrent with first specialty assignment	23.8	9.3	3.4	4.1	6.3	4.2	4.7

*2464 respondents out of 7787, or 31.6 percent of all respondents, did not complete this survey item.

Table I-38; survey question: "Which one of the following is the most useful training or education you have received which supports your alternate specialty?"

TABLE I-38*							
Most Useful Alternate Specialty Training or Education Received							
Response	Rank						
	2LT %	1LT %	CPT %	MAJ %	LTC %	COL %	ALL %
On-the-job experience (no structured training)	15.9	22.7	29.2	36.6	49.1	58.5	39.3
Civilian education/civilian industry sources	6.8	9.1	22.6	24.5	22.3	18.1	22.4
No alternate specialty training received	9.1	11.4	22.5	16.6	8.5	5.2	15.0
Resident military specialty-related courses	13.6	31.8	14.9	12.1	10.9	7.9	12.6
Advanced course	2.3	3.4	7.2	4.0	2.4	3.6	4.5
CGSC/AFSC	.0	.0	.1	3.6	4.8	5.6	3.0
Precommission training	18.2	3.4	1.3	.9	.8	.5	1.1
Basic course	31.8	18.2	.9	.5	.5	.0	1.1
Military correspondence courses	2.3	.0	1.3	1.1	.6	.5	1.0

*2417 respondents out of 7787, or 31.0 percent of all respondents, did not complete this survey item.

Table I-39; survey question: "To the best of your knowledge, are adequate or sufficient training opportunities available so that you can become competently trained in your alternate specialty?"

TABLE I-39*							
Availability of Alternate Specialty Training Opportunities							
Response	Rank						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
Yes	57.1	60.9	53.9	57.7	60.7	60.4	57.7
No	14.3	18.4	18.7	24.4	21.2	19.7	21.3
Unsure	28.6	20.7	27.3	17.9	18.1	19.9	21.1

*2428 respondents out of 7787, or 31.1 percent of all respondents, did not complete this survey item.

Table I-40; survey questions: "Which one of the following do you believe is the most useful training or education which should be provided in support of your alternate specialty?"
"Which one of the following do you believe is the least useful training or education which could be provided in support of your alternate specialty?"

TABLE I-40*

Usefulness of Alternate Specialty Training or Education Modes

Response	Rank						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
<u>Most Useful</u>							
Military resident instruction	37.2	51.2	45.4	44.6	39.8	38.6	43.1
Civilian graduate schooling	11.6	12.8	26.5	27.3	24.8	20.8	25.4
On-the-job experience (no structured training)	34.9	23.3	18.8	17.7	26.8	32.0	22.0
Specialized nondegree civilian tng	7.0	7.0	6.0	7.3	6.6	5.4	6.5
Military nonresident instruction	7.0	2.3	1.9	1.7	1.4	1.6	1.7
Civilian undergraduate schooling	2.3	3.5	1.4	1.4	.6	1.6	1.3
*2439 respondents out of 7787, or 31.3 percent of all respondents, did not complete this survey item.							
<u>Least Useful</u>							
Military nonresident instruction	23.3	44.9	47.6	48.6	42.0	40.4	45.6
Civilian graduate schooling	14.0	9.0	14.1	14.8	18.8	20.2	16.0
Civilian undergraduate schooling	25.6	14.6	14.5	13.7	15.4	16.6	14.8
Specialized nondegree civilian tng	11.6	16.9	11.6	11.9	12.7	15.5	12.5
On-the-job experience (no structured training)	16.3	4.5	7.5	7.4	6.4	4.7	6.9
Military resident instruction	9.3	10.1	4.7	3.5	4.7	2.7	4.3
*2448 respondents out of 7787, or 31.4 percent of all respondents, did not complete this survey item.							

Table I-41; survey question: "Do you believe your alternate specialty training or education will be of value to you in a potential civilian career?"

TABLE I-41*							
Alternate Specialty Training or Education Value in Civilian Career							
Response	Rank						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
Yes, but work unknown	27.9	33.0	36.5	36.8	39.7	42.6	37.9
Yes, similar work	18.6	20.5	20.2	18.4	17.6	11.3	18.0
Unsure	18.6	6.8	16.6	18.6	17.6	20.0	17.7
No, different work	11.6	18.2	12.2	14.0	16.2	19.2	14.6
Yes, same work	14.0	17.0	13.3	10.8	6.8	5.0	10.1
No, altho similar work	9.3	4.5	1.2	1.4	2.2	1.8	1.7

*2425 respondents out of 7787, or 31.1 percent of all respondents, did not complete this survey item.

Table I-42; survey question: "How many assignments have you had in your alternate specialty?"

TABLE I-42*							
Assignments Held in Alternate Specialty							
Response	Rank						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
None	47.6	38.4	51.3	33.4	18.1	10.4	32.7
One	40.5	51.2	29.9	34.2	29.5	22.3	30.8
Two	9.5	7.0	12.2	17.8	28.2	26.8	19.4
Three or more	2.4	3.5	6.7	14.7	24.2	40.6	17.1

*2433 respondents out of 7787, or 31.2 percent of all respondents, did not complete this survey item.

Table I-43; survey question: "What is the role of civilian education in your alternate specialty?"

TABLE I-43*							
Role of Civilian Education in Alternate Specialty							
Response	Rank						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
Available and important	31.6	37.5	54.6	53.0	48.8	39.8	50.7
Available, but limited importance	36.8	34.1	29.3	31.3	33.1	36.2	31.7
Unavailable	31.6	28.4	16.1	15.8	18.1	24.1	17.6

*2491 respondents out of 7787, or 31.9 percent of all respondents, did not complete this survey item.

Table I-44; survey question: "To provide maximum effectiveness to the Army, what percentage of the officer corps with your alternate specialty should have graduate degrees?"

TABLE I-44*							
Proportion of Alternate Specialty Requiring Graduate Degrees							
Response	Rank						
	<u>2LT</u> %	<u>1LT</u> %	<u>CPT</u> %	<u>MAJ</u> %	<u>LTC</u> %	<u>COL</u> %	<u>ALL</u> %
Almost all	22.0	25.3	32.2	29.4	27.9	23.1	29.1
About half	22.0	25.3	19.8	19.4	18.3	19.7	19.4
Very few	17.1	13.8	14.9	19.3	22.2	25.3	19.2
About a fourth	14.6	18.4	18.9	18.8	20.0	20.0	19.2
About three-fourths	12.2	11.5	9.4	9.2	8.2	6.0	8.7
None	12.2	5.7	4.9	3.9	3.4	5.8	4.4

*2497 respondents out of 7787, or 32.0 percent of all respondents, did not complete this survey item.

Bibliographical Notes

1. ODCSPER 46 Report, December 1977.



DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF STAFF
WASHINGTON, D.C. 20310

DACS-OTRG

1 November 1977

Dear Survey Participant:

At the direction of the Chief of Staff, Army, a potentially landmark review of officer education and training has been undertaken, the results of which are expected to be significant, both to the Army as a whole and to individual Army officers. A key effort in this important review is the attached Officer Education and Training Survey.

The survey has been designed to permit you and a large, representative sample of your fellow officers to tell us from your perspective what we need to know about certain specific areas under review. Also, the survey poses several courses of action and asks you and your fellow participants for your views on them. Since these courses of action are only a few of those under consideration, they should not be taken as indicative of review group conclusions.

Your responses will be held in strict confidence, so please do not identify yourself on any part of the survey booklet or answer sheet. When all responses have been received, they will be analyzed carefully, together with data relative to education and training requirements. Education and training policies addressing each phase of officer career development will be prepared and recommended for incorporation into the FY 80-84 program.

The attached survey is your best chance to put your experiences, expectations, and suggestions about officer education and training "on the record." We urge you not to miss this opportunity, but timing is important. To be included in this special review effort, your survey must be completed and put in the mail within five working days after its receipt. To protect the answer sheet, which will be machine-scored, we ask, too, that you tuck it completely inside the survey booklet and mail both in the return envelope provided.

Thank you for your participation, and good luck to you in your military career.

Sincerely,

E. L. HARRISON
Major General, USA
Chairman, Review of Education
and Training of Officers

RCS: CSOCS-(OT) 259

L-1-51

GENERAL INSTRUCTIONS FOR SURVEY PARTICIPANTS

1. Use only a No. 2 pencil when completing the answer sheet.
2. Do not place your name or social security number (SSN) anywhere on the answer sheet or survey booklet. This will help to assure that your responses remain truly anonymous.
3. Answer all questions as of 31 December 1977, even though you may be completing the survey before that date.
4. Be sure that the question number that you mark on the answer sheet is the same as the question number in the survey booklet.
5. You may make only one response for each question. Blacken the circle on the answer sheet that has the same letter or number as the response you selected in the survey booklet. Do not make any other marks, or write, on the answer sheet.
6. Fill in the circle completely with a heavy mark, but do not go outside the circle. Look at these examples:

RIGHT WAY	41	A B C D E F G H I	•	WRONG WAY	43	A B C D E F G H I
TO MARK		A B C D E F G H I		TO MARK	44	A B C D E F G H I
ANSWER SHEET	42	A B C D E F G H I		ANSWER SHEET	45	A B C D E F G H I
7. If you make a mistake, erase the mark completely before you enter a new one.
8. You are not required to answer any question which you find objectionable.
9. If the possible responses to a question do not fit your opinion exactly, please choose the response which most nearly approximates your view.

INSTRUCTIONS FOR COMPLETING THE FRONT OF THE ANSWER SHEET

The front of the answer sheet contains lettered columns. These columns are used to state demographic information. Please complete the lettered columns as follows:

COLUMN A: Blacken the circle corresponding to your pay grade.

COLUMN B: Select from the following table the geographic area in which you are taking this survey. Blacken the lettered circle corresponding to your location. (Ignore the two numbered columns.)

- A. Continental United States (CONUS)
- B. Hawaii, Alaska, Puerto Rico, Panama (Canal Zone)
- C. Pacific area (Other than Hawaii, includes Korea)
- D. European area (Includes Middle East)
- E. Other

COLUMN C: Select the letter which corresponds to your control branch and blacken the appropriate circle.

- A. Adjutant General
- B. Air Defense Artillery
- C. Armor
- D. Chemical
- E. Engineer
- F. Field Artillery
- G. Finance
- H. Infantry
- I. Military Intelligence
- J. Military Police
- K. Ordnance
- L. Quartermaster
- M. Signal
- N. Transportation
- O. Aviation

COLUMN D: Select the letter corresponding to the major command (MACOM) to which you are assigned and blacken the appropriate lettered circle in Column D:

- A. USAREUR
- B. FORSCOM
- C. TRADOC
- D. USFK/EIGHTH ARMY (KOREA)
- E. US ARMY, JAPAN
- F. SUPPORT COMMAND, HAWAII
- G. COMMUNICATIONS COMMAND
- H. HEALTH SERVICES COMMAND
- I. MILITARY DISTRICT OF WASHINGTON
- J. OTHER

COLUMN E: Indicate the type of unit to which you are assigned by selecting the appropriate code from the table below and blackening the proper circles in Column E. Blacken the circle corresponding to the first digit of the code in the first sub-column and the circle corresponding to the second digit in the second sub-column.

- 00. Combat
- 11. Combat Support
- 22. Combat Service Support
- 33. Training (includes service school staff and faculty)
- 44. Garrison/installation staff
- 55. Recruiting, ROTC, Readiness Regions
- 66. Corps or higher level staff (includes MACOM, DA, etc)
- 77. Other

The following are OPMS specialty codes. Use them in completing Column F and Column G.

Specialty Code	Title		
14	Air Defense Artillery	84	Highway and Air Operations
76	Armament Materiel Management	11	Infantry
12	Armor	28	Instructional Technology and Management
82	Atomic Energy	31	Law Enforcement
83	Automatic Data Process	70	Logistics Materiel Management
15	Aviation	93	Logistics Services Management
71	Aviation Materiel Management	91	Maintenance Management
74	Chemical	87	Marine and Terminal Operations
43	Club Management	73	Missile Materiel Management
25	Combat Communications-Electronics	75	Munitions Materiel Management
27	Communications-Electronics Engineering	54	Operations and Force Development
72	Communications-Electronics Materiel Management	49	Operations Research, Systems Analysis
45	Comptroller	42	Personnel Administration and Administrative Management
36	Counterintelligence/HUMINT	41	Personnel Management
17	Education	81	Petroleum Management
37	Electronic Warfare/Cryptology	97	Procurement
21	Engineer	46	Public Affairs
73	Field Artillery	81	Research and Development
44	Finance	92	Supply Management
26	Fixed Telecommunications Systems	35	Tactical/Strategic Intelligence
82	Food Management	77	Tank/Ground Mobility Materiel Management
48	Foreign Area Officer	86	Traffic Management
83	General Troop Support Materiel Management	95	Transportation Management

COLUMN F: Indicate your primary specialty by blackening the appropriate circles in Column F. Blacken the circle corresponding to the first digit in the first sub-column and the circle corresponding to the second digit in the second sub-column.

COLUMN G: Indicate your alternate specialty by blackening the appropriate circles in Column G. Blacken the circle corresponding to the first digit in the first sub-column and the circle corresponding to the second digit in the second sub-column. If you have not had an alternate specialty designated, use code 00.

COLUMN H: Enter the number of years of Active Federal Commissioned Service (AFCS) you will have completed as of 31 December 1977 by blackening the appropriate circles in Column H. Round partial years upward to the next higher whole year. If you have completed less than ten years AFCS, blacken 0 in the first sub-column, and the circle corresponding to the number of years (1-9) in the second sub-column. If you have completed ten or more years AFCS, blacken the circle corresponding to the first digit of the number in the first sub-column, and the circle corresponding to the second digit in the second sub-column.

COLUMN I: Select the code from the table below that corresponds to the highest level of military education you have completed. Blacken the appropriate circle in Column I.

- A. Basic Course
- B. Advanced Course
- C. Command and General Staff College or equivalent (includes non-resident and constructive credit)
- D. Senior Service College (includes non-resident and constructive credit)

COLUMN J: Select the code from the table below that corresponds to the highest level of civilian education you have completed. Blacken the appropriate circle in Column J.

- A. Doctoral degree
- B. Master's degree
- C. Bachelor's degree
- D. Some college
- E. High school graduate or less

COLUMN K: Indicate your marital status and sex by selecting the appropriate code from the following table and blackening the corresponding circle in Column K.

- A. Married male
- B. Married female
- C. Single male (divorced, separated, widowed, never married)
- D. Single female (divorced, separated, widowed, never married)

COLUMN L: Indicate your racial/ethnic background by selecting the appropriate code from the following table and blackening the corresponding circles in Column L.

- 00. White (Caucasian)
- 11. Black (Negro)
- 22. Mexican-American; Puerto Rican; Hispanic extraction
- 33. Asian-American
- 44. Other

The questions in this survey pertain to your primary and alternate specialty (if any), and the education and training you have received or expect to receive. Most of the questions are loosely grouped by functional area; that is, questions regarding your primary specialty will be found in one section, while questions concerning your alternate specialty will be found in another. Please answer each question from your individual perspective, rather than from an "Army" perspective.

1. Through which of the following did you receive your commission?
 - a. OCS
 - b. USMA
 - c. ROTC
 - d. Direct appointment
 - e. Other

2. What is your component?
 - a. Regular Army
 - b. US Army Reserve
 - c. National Guard

3. Do you plan to make the Army a career? (That is, 20 or more years of service?)
 - a. Yes, I plan (or will be required) to retire at 20 years of service
 - b. Yes, I plan to retire after more than 20, but less than 26 years.
 - c. Yes, I plan to retire after 26 years of service or more.
 - d. Yes, but I am undecided as to when I will retire.
 - e. I have made no decision as to whether or not I will make the Army a career.
 - f. No, I do not plan to make the Army a career.

4. Given normal career progression, what is the highest rank you expect to attain?
 - a. MAJ
 - b. LTC
 - c. COL
 - d. General Officer

5. During your military career, how many times have you been selected for promotion from the secondary zone (below the zone)?
 - a. I have never been considered for promotion by a centralized selection board.
 - b. Never
 - c. Once
 - d. Twice
 - e. Three or more times

6. Regarding your personal career, which type of training or educational experience, successfully completed, do you believe "carries the most weight" with promotion/selection boards?
 - a. Resident military courses
 - b. Non-resident military courses
 - c. On-the-job training or experience
 - d. Civilian Education
 - e. Civilian industry or occupational training
 - f. Other

7. During your military career, what is the highest level at which you have commanded?
- I have never commanded
 - Detachment (CPT or below)
 - Company/battery/troop or equivalent (CPT-MAJ)
 - Battalion/squadron or equivalent (LTC)
 - Brigade/support command or equivalent (COL)
8. What is the highest level at which you expect to command during your active-duty career?
- My specialties have no opportunities for command
 - I do not desire to command
 - Company level
 - Battalion level
 - Brigade level
 - Division level or above
9. I commanded at the company/battery/troop level:
- I have never commanded at this level
 - Prior to attending the officer advanced course
 - After attending the officer advanced course
 - Both before and after attending the officer advanced course
10. What is the highest staff level at which you expect to serve during your career?
- Battalion
 - Brigade
 - Division
 - Installation/garrison
 - Major Command (e.g., Forces Command; Training and Doctrine Command)
 - Department of the Army
 - Department of Defense
 - Other
11. When did you complete or obtain credit for completion of, Command and General Staff College/Armed Forces Staff College or equivalent?
- I have not completed CGSC/AFSC or equivalent
 - Prior to assignment to Bde/corps or higher staff, or battalion command
 - After being assigned to Bde/corps or higher staff, or battalion command

12. The principal purpose of level 4 (CGSC-Level) training is:
- I do not know the purpose of CGSC-Level training
 - To become proficient in depth in my primary specialty
 - To attain specialty qualification in my alternate specialty
 - To do a little of both
 - To prepare for command
 - To share professional experience with peers
 - To retain a competitive position for promotion/advancement
 - To broaden the outlook of the officer in preparation for positions of increased responsibility
 - Some other reason
13. About half of the officer corps will serve in field grade positions throughout the Army without benefit of Level 4 training (CGSC). Assume for this question expanded professional development opportunities should be opened. One alternative would be to continue attendance at CGSC for combat arms officers, and to provide equivalent level 4 training to other officers at appropriate military or civilian institutions. Which one of the following best expresses your view about this alternative?
- Resident training at this level is necessary
 - Either resident or non-resident training is necessary
 - The form of training (resident or non-resident) is not important
 - I'm not sure that CGSC-level training is either necessary or desirable
 - Most officers do not require training at the CGSC level
 - The current system is adequate
 - I am opposed to Level 4 (CGSC) training but for reasons not mentioned above
14. Several foreign armies provide extended Level 4 training for selected officers; for example, a small percentage of a given CGSC-level class is selected to remain for an additional year of professional development in military thought, philosophy, and application. If the Army could adopt the "Second year at CGSC" concept outlined above, what would be your view regarding this alternative?
- Implement immediately; the Army needs more "thinkers"
 - It's worth a pilot test or "trial run"
 - It should be considered, but at another level (i.e., advanced course level or senior service college level)
 - I don't care one way or the other
 - The Army can't afford this luxury; we need more "do-ers"
 - It's a bad idea; it would create an "elitist" group
15. To be an effective officer, the minimum civilian educational level required at time of commissioning should be:
- High school graduate
 - Some college but no degree
 - Associate degree (2 years of college)
 - College graduate
 - Civilian education has nothing to do with being an effective officer

16. If education is defined as "preparation for life (or the unknown)" while training is defined as "preparation for a specific task (or the known)", what mix of education and training do you believe is required by an effective Army officer?
- Much more education than training
 - More education than training
 - About the same amount of each
 - More training than education
 - Much more training than education
17. At what rank do you believe education becomes more important to duty performance than specific training?
- Education is never more important than training
 - Education is always more important than training
 - Second Lieutenant
 - First Lieutenant
 - Captain
 - Major
 - Lieutenant Colonel
 - Colonel
18. For which of the following do you believe graduate-level civilian education is primarily useful?
- Gaining knowledge required in a primary specialty
 - Gaining knowledge required in an alternate specialty
 - Generally broadening an educational background in preparation for future assignments
 - Staying competitive when considered by promotion/selection boards
 - Preparing for a utilization tour requiring specific civilian education
 - Preparing for a civilian career after leaving active duty
 - Not much of anything
19. Do you believe that if you perform well the Army, through either fully-funded or partially-funded programs, should provide you the opportunity to achieve a graduate degree during your term of active service?
- Yes; a graduate degree will enhance my value to the Army
 - Yes; graduate education is required for successful performance in my specialties
 - Yes, for some other reason
 - I have no opinion
 - No; my personal educational goals are my own responsibility
 - No; a graduate degree has no bearing on my effectiveness as an officer
 - No, for some other reason
20. For maximum Army effectiveness, what proportion of the officer corps with your primary specialty do you believe should have graduate degrees?
- None
 - Very few
 - About a fourth
 - About half
 - About three-fourths
 - Almost all

21. Which statement best describes your current assignment?
- I am a student, a patient, or in transit
 - Matches my primary specialty training
 - Matches my alternate specialty training
 - Matches my previous experience, rather than specialty training
 - Matches neither previous experience nor specialty training
22. Which statement best describes the assignment immediately preceding your current assignment?
- I was a student or a patient
 - Matched my primary specialty training
 - Matched my alternate specialty training
 - Matched my previous experience, rather than specialty training
 - Matched neither previous experience nor specialty training
23. What do you believe is the most effective utilization of an officer?
- Most assignments in the primary specialty; some in the alternate specialty
 - Most assignments in the alternate specialty; some in the primary specialty
 - An even division of primary and alternate specialty assignments
 - All assignments in one specialty; either primary or alternate
 - Consistent rotation of assignments between primary and alternate specialties with occasional assignments outside either specialty.
24. Many duty positions within the Army are non-specialty-related; for example, they require an officer, but no specific specialty expertise. Which one of the following options best deals with this situation?
- Establish a "specialty immaterial" or "duty" specialty
 - Distribute requirements to all specialties on a "fair-share" basis
 - Arbitrarily specify the closest possible specialty match for the position
 - Delete or civilianize the position unless it is specialty-specific
 - Other
25. Which of the following statements best describes your primary specialty designation?
- It was voluntarily chosen and I am satisfied with it
 - It was voluntarily chosen but I am dissatisfied with it
 - It was involuntarily assigned, I am satisfied with it
 - It was involuntarily assigned, I am dissatisfied with it
26. Does your primary specialty match your previous training, experience or desires?
- Yes
 - I am not sure
 - No

27. Which one of the following is the most useful training or education you have already received in support of your primary specialty:
- Pre-commission training
 - Basic course
 - Advanced course
 - Resident specialty-related courses (military)
 - Military correspondence courses
 - On-the-job experience (no structured training)
 - Civilian education/civilian industry sources
 - CGSC/AFSC
28. To the best of your knowledge, are adequate training opportunities available so that you can become competently trained in your primary specialty?
- Yes, adequate training opportunities are available
 - No, adequate training opportunities are not available
 - I don't know if adequate training opportunities are available
29. How would you best describe the training normally provided which supports your primary specialty?
- It is broadly-based, and provides the specialty knowledge required to perform effectively at successively higher levels.
 - Sufficiently thorough; prepares one well
 - Too broad and generalized to be of much practical value
 - Not related to actual duty position requirements
 - Non-existent
30. Which one of the following do you believe is the most important training or education which should be provided in support of your primary specialty?
- Military resident instruction
 - Military non-resident instruction
 - On-the-job experience (no structured training)
 - Civilian schooling (undergraduate)
 - Civilian schooling (graduate)
 - Specialized civilian training (non-degree)
31. Which one of the following do you believe is the least useful training or education which could be provided in your primary specialty?
- Military resident instruction
 - Military non-resident instruction
 - On-the-job experience (no structured training)
 - Civilian schooling (undergraduate)
 - Civilian schooling (graduate)
 - Specialized civilian training (non-degree)
32. At what level does the major gap in the currently-available schooling for your primary specialty occur?
- Basic knowledge level (LT)
 - Advanced knowledge level (CPT-MAJ)
 - "Expert" knowledge level (LTC-COL)
 - More than one of the above
 - I am not aware of any major gap in the currently available schooling

33. Which of the following best describes the role of civilian education in your primary specialty?
- It is both available and highly important for proper professional development
 - It is available, but of limited importance for professional development
 - Not available
34. Do you believe your primary specialty training or education will be of value to you in a potential civilian career?
- Yes, I expect it to be directly applicable; I plan to do the same type of work after I leave active duty.
 - Yes, I expect it to be of use; I plan to do similar or closely related work in civilian life
 - Yes, I expect it to be valuable, although I do not know what I will be doing after I leave active duty.
 - No, I do not expect it to be useful even though it is closely related to what I might be doing in civilian life
 - No, I do not expect it to be useful; I will be working in an entirely different field
 - I am not sure whether or not my specialty training will be useful in civilian life
35. Which one of the following most closely identifies your view of "specialty qualification?"
- Successful completion of designated training courses and developmental assignments
 - The ability to "do the job" in the specialty, at the assigned level whether formally trained or not, as shown by OER evaluations or promotion/selection board results
 - A subjective administrative decision on the part of career managers and promotion/selection boards
 - Close adherence to the career patterns shown in DA Pam 600-3 (Officer Professional Development and utilization)
 - Professional registration/certification
 - I believe "specialty qualification" is largely undefinable
36. The primary responsibility for an officer becoming "specialty-qualified" lies with:
- The officer
 - The officer's MILPERCEN career manager/assignment officer
 - The officer's rating officer
 - The MILPERCEN specialty monitor
 - The officer education and training system

37. In your primary specialty, how many different assignments would you estimate are required for an officer to become "specialty-qualified?"
- One
 - Two
 - Three
 - Four
 - More than four
38. Which one of the following is the chief way you have (or expect to) become qualified in your primary specialty?
- Resident training in military courses
 - Military correspondence courses
 - Resident civilian education
 - Off-duty civilian study
 - On-the-job experience (no structured training)
 - A combination of the above
39. After completion of a training period, an officer with your primary specialty should work in a specialty-related assignment for a minimum period of:
- Less than one year
 - One year
 - Two years
 - Three years
 - More than three years
40. Should specialty qualification standards be established for each specialty at each grade?
- Yes; absolute standards should be established
 - Yes; flexible standards, to be used as goals, should be established
 - No; specialty qualification is subjective, no firm standards can or should be established
 - No, but for reasons not specified above
 - I am not sure whether or not specialty qualification standards should be established
41. If firm specialty qualification standards were established, they would provide a benchmark for officer professional development; that is, an officer would either be "qualified" or "not qualified." What use should be made of this information?
- Used unofficially to measure professional development of the individual officer
 - Used officially as a matter of record for consideration by promotion/selection boards or other activities.
 - Used only by the officer for his personal assessment
 - Used as a diagnostic tool for determining assignment and/or educational opportunities for the officer involved
 - Not used for any purpose

42. Promotion to which of the following ranks should be dependent upon "primary specialty qualification?"
- 1LT
 - CPT
 - MAJ
 - LTC
 - None of the above
 - To each of the above
43. Estimate your present level of professional development in your primary specialty:
- Well prepared
 - Somewhat prepared
 - Somewhat unprepared
 - Not prepared at all
44. In many specialties, military training is available through both resident courses and non-resident (correspondence) instruction. In your view, which type is most effective in providing the skills required for your primary specialty qualification?
- Resident instruction is the most effective
 - Non-resident instruction is the most effective
 - They are both equally effective
 - Neither are effective in their present form
45. How many hours per week do you believe you could devote to independent career-related studies (both on and off-duty time).
- One hour or less
 - Two hours to four hours
 - Five to seven hours
 - Eight or nine hours
 - Ten hours or more
46. Professional examinations for the officer corps should be instituted.
- Strongly agree
 - Agree
 - It does not matter to me
 - Disagree
 - Strongly disagree
47. Let us assume that professional officer examinations were instituted. What do you think the principal purposes of this exam should be?
- For individual diagnostic work only
 - Only to assist in determining education/training needs; for example, validation of CGSC (Level 4) knowledge, or attendance of some phase of formal instruction at that level
 - As one of the criteria for promotion
 - As one of the criteria for qualifying for certain positions (i.e. Brigade Command)
 - For any purpose

48. What do you think would be the principal limitation of officer examinations?
- a. Paper and pencil test may not reflect job performance accurately
 - b. Officers responsibilities are too broad to be adequately tested.
 - c. Another evaluative tool is not necessary; current procedures are adequate.
 - d. Some limitation not listed above
49. Through what means do you believe professional development can best be achieved?
- a. Through experience
 - b. Through self-study within prescribed parameters
 - c. Through a combination of self-study and non-resident instruction
 - d. Through resident instruction
 - e. Through a combination of the above
50. If you were to graduate from the next higher military course of instruction (for example, CGSC if you are an advanced course graduate), do you believe that your value to the Army will have been increased?
- a. Yes, greatly
 - b. Yes, some
 - c. Not sure
 - d. Not much
 - e. Not at all
51. Current Army policy minimizes multiple opportunities for command at each level. An alternative would be to allow groups of officers to be managed as "commanders", to permit repetitive command tours at each level. What are your views regarding this alternative?
- a. Implement immediately
 - b. It's a good idea, but may cause some problems
 - c. I really don't care one way or the other
 - d. I don't think this alternative should be implemented

52. If "Commander management" were instituted, when should officers be so identified?
- Upon successful completion of their first command
 - When selected for command by the DA Centralized Command Selection Board
 - Upon individual application, after file review
 - At some other time than specified above
53. Promotion board results over the last two years have:
- Supported OPMS by selecting "specialist" officers for promotion in proportion to their specialty
 - Not supported OPMS, by selecting officers for promotion who have followed the traditional or "generalist" path
 - It is too early in the implementation of OPMS to identify board trends
 - I am not familiar with promotion board results, or how these results relate to OPMS
54. What is your estimate of the annual salary which would be earned by a civilian whose duties and responsibilities correspond most nearly to those you have in your present duty assignment (or most recent one if you are now a patient, student, or unassigned)?
- \$10000 or less
 - \$10001 to \$15000
 - \$15001 to \$20000
 - \$20001 to \$30000
 - \$30001 to \$40000
 - \$40001 to \$50000
 - More than \$50000
 - I have no idea what a corresponding civilian job would be worth, or there are no corresponding civilian jobs
55. Suppose that your military service was unexpectedly terminated. Given your present level of training, education, and experience, what is your estimate of the annual salary you could earn in civilian life?
- \$10000 or less
 - \$10001 to \$15000
 - \$15001 to \$20000
 - \$20001 to \$30000
 - \$30001 to \$40000
 - \$40001 to \$50000
 - More than \$50000
 - I have no idea what I could earn in civilian life
56. Most officers now retain their basic entry specialty (branch related) as their primary specialty throughout their career. An alternative would be to redesignate the primary specialty (based on experience and training) for some officers at a given point in their career, retaining only the best qualified officers in the basic entry specialties. What are your views regarding this alternative?
- I agree with this idea
 - I'm not sure
 - I disagree with this idea

57. The alternative described above would serve to identify those officers who could most productively perform their Army service in specialties other than their basic entry specialty. This identification would be:
- a. Beneficial for both the Army and the officer
 - b. Beneficial for the Army, but not for the officer
 - c. Beneficial for the officer, but not necessarily for the Army
 - d. Probably not beneficial for either the officer or the Army
58. Those officers selected for continuation in their basic entry specialty would receive alternating assignments between the "Army in the field" and combat-development or training activities, with occasional assignments to other (e.g. HQDA) staffs. This would be the most effective utilization for these officers.
- a. I agree
 - b. I'm not sure
 - c. I disagree

The following statements are neither proposals nor alternatives. They are simply intended to identify attitudes within the officer corps. Please indicate your agreement or disagreement with each of the statements by selecting the appropriate response from this list.

- a. Strongly agree
 - b. Agree
 - c. No opinion
 - d. Disagree
 - e. Strongly disagree
 - f. Don't know
59. All commanders should receive a concentrated "refresher" course prior to assuming command at any level.
60. Level 3 (advanced course) training would be more cost-effective if it was shorter, and if students attended on a TDY, rather than a PCS, basis.
61. Officers should be assigned to a utilization tour directly following formal specialty training.
62. The primary purpose of civilian education should be the acquisition of skills rather than the acquisition of academic credentials.
63. Level 3 (advanced course) training should be oriented primarily toward training officers for their next duty position.
64. There are adequate career progression opportunities in all OPMS specialties.

65. Some specialties exist for which there are no Army requirements.
66. Officers who have one of the basic entry specialties designated as an alternate at the eighth year of service are at a disadvantage when compared to those who have "grown up" in the specialty.
67. The academic report received upon completion of a course of military or civilian training is as important to one's advancement as an efficiency report.
68. Level 4 (CGSC-level) training should not prepare officers for specific duty positions, but should provide broad preparation for a variety of duties during the following several years of service.
69. It is more important to the Army that civilian education broaden the officer personally than provide him/her specific skills
70. CGSC and AWC completion should be mandatory for all majors and lieutenant colonels respectively, either by resident or non-resident programs.
71. Only the primary specialty has any real importance in career advancement.
72. Specialty "qualification" is easily defined.
73. Formal course training should be provided to learn the basics of a specialty.
74. Promotion boards should promote by specialty quotas.
75. "Quality" officers should be equitably distributed over all specialties, either voluntarily or involuntarily.
76. OPMS-Level 4 (CGSC-level) training should be significantly different for the maneuver combat specialties (11-Infantry; 12-Armor) than for all other specialties.
77. Selection boards use primary specialty qualification as a criterion for promotion.
78. Selection boards use alternate specialty qualification, if designated, as a criterion for promotion.
79. Only those specialties which can be related to a basic branch (e.g. 11-Infantry) have good promotion potential.
80. The current specialty designation process allows "quality" officers to be concentrated in certain specialties, with other specialties having few such officers.
81. Selection for attendance at CGSC/AWC is more important than actual attendance.
82. The most valuable training in some specialties is on-the-job experience (no structured training).

83. Officers who have received graduate-level civilian schooling are more competitive for promotion than those who have not.
84. For some highly technical specialties, training costs are so high that the "up-or-out" promotion rule should be suspended.
85. Promotion boards should not use a level of training completion as a criterion for selection.

The following questions concern your ALTERNATE specialty. If you have not had an alternate specialty designated, you have completed the marked response portion of the survey. Please turn to page 23.

If you have had an ALTERNATE specialty designated, please answer the following questions.

86. When did you have your alternate specialty designated?
- During the eighth year of active federal commissioned service
 - Upon the occurrence of a specific training event (for example, graduation from flight school)
 - At some point in your career other than those specified in (a) and (b) above
87. Which statement best describes your alternate specialty designation?
- It was voluntarily chosen and I am satisfied with it
 - It was voluntarily chosen, but I am dissatisfied with it
 - It was involuntarily assigned, but I am satisfied with it
 - It was involuntarily assigned, and I am dissatisfied with it
88. Which one of the following is the most useful training or education you have received which supports your alternate specialty?
- Pre-commission training
 - Basic course
 - Advanced course
 - CGSC/AFSC
 - Resident specialty courses (military)
 - Military correspondence courses
 - On-the-job experience (no structured training)
 - Civilian education/civilian industry sources
 - I have never received training in my alternate specialty

89. When did you receive your formal training in your alternate specialty?
- Prior to the first assignment in that specialty
 - After at least one assignment in that specialty
 - Concurrently with assignment in an alternate specialty
 - I have never received formal training in my alternate specialty
90. To the best of your knowledge, are adequate or sufficient training opportunities available so that you can become competently trained in your alternate specialty?
- Yes, adequate training opportunities are available
 - No, adequate training opportunities are not available
 - I don't know if adequate training opportunities are available
91. Which one of the following do you believe is the most useful training or education which should be provided in support of your alternate specialty?
- Military resident instruction
 - Military non-resident instruction
 - On-the-job experience (no structured training)
 - Civilian schooling (undergraduate)
 - Civilian schooling (graduate)
 - Specialized civilian training (non-degree)
92. Which one of the following do you believe is the least useful training or education which could be provided in support of your alternate specialty?
- Military resident instruction
 - Military non-resident instruction
 - On-the-job experience (no structured training)
 - Civilian schooling (undergraduate)
 - Civilian schooling (graduate)
 - Specialized civilian training (non-degree)
93. Do you believe your alternate specialty training or education will be of value to you in a potential civilian career?
- Yes, I expect it to be directly applicable; I plan to do the same type of work after I leave active duty.
 - Yes, I expect it to be of use; I plan to do similar or closely related work in civilian life
 - Yes, I expect it to be valuable, although I do not know what I will be doing after I leave active duty.
 - No, I do not expect it to be useful even though it is closely related to what I might be doing in civilian life
 - No, I do not expect it to be useful; I will be working in an entirely different field.
 - I am not sure whether or not my specialty training will be useful in civilian life; or I have not received any alternate specialty training or education.

94. How many assignments have you had in your alternate specialty?
- a. None
 - b. One
 - c. Two
 - d. Three or more
95. What is the role of continuing education in your alternate specialty?
- a. It is available and highly important for proper professional development
 - b. It is available, but of limited importance for professional development
 - c. It is not available
96. To provide maximum effectiveness to the Army, what percentage of the officer corps with your alternate specialty should have graduate degrees?
- a. None
 - b. Very few
 - c. About a fourth
 - d. About half
 - e. About three-fourths
 - f. Almost all

You have completed the marked response portion of the survey.
Please refer to the next page.

There may be some portion of the officer education and training system which you believe this survey has not adequately addressed. In addition, you may wish to expand upon or explain some of your answers, or to make other comments. Please use this sheet for that purpose.

L-1-72

CHAPTER II. ANALYSIS OF
WARRANT OFFICER SURVEY VERSION

The data discussed in this chapter are based upon responses to a paper and pencil questionnaire version of the Officer Education and Training Survey received from 1,543 Active Army warrant officers. A comparison of aviation and nonaviation warrant officer attitudes with respect to education and training experiences provides focus for the discussion. But first, a description of the respondents follows.

The Respondents

When compared with the current total number of Active Army warrant officers,¹ the survey sample represents 11.7 percent of the warrant officer universe (1,543 of 13,177). Table II-1, following, provides a comparison by rank of the sample with the universe and reveals that the sample was underrepresented by slightly over 8 percent at the most junior warrant officer rank; near perfect for chief warrant 2; and overrepresented by about 4 percent for the two senior warrant ranks.

<u>TABLE II-1</u>			
<u>Comparison by Rank, Sample with Universe</u>			
<u>Rank</u>	<u>Sample</u> <small>%</small>	<u>Universe</u> <small>%</small>	<u>Sample Less Universe</u> <u>Difference</u> <small>%</small>
WO 1	14.8	22.9	-8.1
CW 2	39.7	39.6	+.1
CW 3	31.2	27.4	+3.8
CW 4	14.4	10.1	+4.3

Table II-2, following, provides a comparison of the sample with the universe with respect to component.

<u>TABLE II-2</u>			
<u>Comparison by Component, Sample with Universe</u>			
<u>Component</u>	<u>Sample</u> <u>%</u>	<u>Universe</u> <u>%</u>	<u>Sample Less Universe</u> <u>Difference</u> <u>%</u>
Regular Army	30.6	21.4	+9.2
Army Reserve	69.1	78.2	-9.1
Army National Guard	.3	.3	-

At the time of participation in this survey, the majority of respondents (65.9%) were stationed in the continental United States; 21.3 percent in the European area, including the Middle East; 7.3 percent in Hawaii, Alaska, Puerto Rico, or Panama (Canal Zone); and the remainder (5.6%), in the Pacific area or some other region.

Of the total sample, 34.9 percent held military occupational specialties (MOS) associated with aviation. Distribution of responses by control branch follows:

<u>TABLE II-3</u>			
<u>Distribution of Respondents by Control Branch</u>			
Aviation	34.9%	Signal	5.9%
Ordnance	13.7%	Air Defense Artillery	3.7%
Quartermaster	10.7%	Engineer	3.2%
Military Intelligence	8.6%	Transportation	2.5%
Adjutant General	8.5%	Field Artillery	1.5%
Military Police	6.7%	Armor	.5%

Distribution of responses by major command follows:

Forces Command	41.7%	Health Services Command	1.8%
U. S. Army, Europe	18.5%	Support Command, Hawaii	1.2%
Training and Doctrine Command	13.7%	Military District, Washington	1.1%
U. S. Forces, Korea/ Eighth Army (Korea)	3.9%	U. S. Army, Japan	.5%
Communications Command	2.5%	Other	15.1%

Six out of every ten (60.7%) warrant officer respondents were assigned to a combat, or combat related, unit at the time of their survey participation: 22.2 percent--combat units; 21.0 percent--combat support units; and 17.5 percent--combat service support units. Slightly over 11 percent (11.3%) were assigned to training units; 6.9 percent, to garrison or installation staffs; 5.8 percent, to corps or higher level staffs; 9 percent, to recruiting duty, ROTC units, or Readiness Regions; and the remainder (14.4%), to other units.

Highest levels of military education achieved by the respondents are shown by the following distribution figures: Warrant Officer Advanced Course (or old Intermediate Course)--19.3 percent; Warrant Officer Senior Course (or old Advanced Course)--13.6 percent; Warrant Officer Senior Course Corresponding Studies student or graduate--3.2 percent; Warrant Officer Advanced Course Corresponding Studies student--2.7 percent; and other--61.3 percent.

Relative to highest levels of civilian education attained, 6.2 percent of the warrant officer respondents had earned only a high school diploma or the equivalent; 43.5 percent had some college credit short of an associate degree; 31.2 percent held an associate degree; and 16.6 percent had acquired the baccalaureate degree. Relatively few (2.5%) held advanced degrees.

The great majority of respondents were married men (90.6%). Almost 9 percent (8.9%) were single men, including those who had been married previously. Women comprised less than 1 percent of the warrant officer sample.

Nine out of 10 respondents (90.3%) were White; 5.6 percent, Black; 2.0 percent, Mexican-Americans, Puerto Ricans, or of other Hispanic extraction; .7 percent, Asian-American; and the remainder (1.3%) identified themselves as of a racial or ethnic background other than the foregoing.

Almost 6 out of 10 (59.7%) received their warrant through direct appointment; 36.0 percent, through officer candidate school; and 4.3 percent, through some other means.

Discussion of Response Data

Table II-5 provides a distribution of responses to the question, "Do you plan to make the Army a career? (That is, 20 or more years of service?)" Only slightly more than 1 percent (1.1%) of the respondents indicated that they do not plan an Army career; another 5.1 percent stated that they have made no career decision. Aviation warrants were slightly more inclined than other warrants to deny plans for a career (2.5% versus .4%) and even more inclined to have postponed the career decision (8.4% versus 3.4%). Over 19 percent of all respondents (19.3%) stated that they plan to retire at 20 years. Comparison of the aviation and nonaviation groups on 20-year retirement plans reveals again a somewhat higher percentage for aviation warrants than for other respondents (21.8% versus 18.1%). Of those respondents who indicated that they do intend an Army career, but are undecided as to when to retire (29.2%), warrant officers associated with aviation again replied in greater numbers (31.8%), when compared with other warrant officers (27.8%).

TABLE II-5								
Plans for an Army Career								
Response	Rank					Field		
	WO 1 %	CW 2 %	CW 3 %	CW 4 %	ALL %	NONAVIATION %	AVIATION %	ALL %
Yes, but undecided when to retire	41.7	32.5	22.9	20.8	29.2	27.8	31.8	29.2
Yes, plan to retire after 26 years or more	14.5	18.1	33.7	58.8	28.3	31.4	22.2	28.3
Yes, plan to retire at 20 years	11.0	25.2	22.5	5.0	19.3	18.1	21.8	19.4
Yes, plan to retire between 20 and 26 years	17.5	15.8	19.2	14.9	17.0	18.9	13.2	17.0
Have made no career decision	13.6	6.7	1.3	-	5.1	3.4	8.4	5.1
No, do not plan an Army career	1.8	1.6	.4	.5	1.1	.4	2.5	1.1

Table II-6 provides a distribution of responses to the question, "Given normal career progression, what is the highest rank you expect to attain prior to retirement?" Of all warrant officers responding, 72.4 percent expected to attain the rank of Chief Warrant Officer 4 (CW4). When the nonaviation and aviation groups are compared relative to expectations for CW4, more than 8 out of 10 (85.0%) aviation warrants expect to achieve the highest warrant officer rank. Such was the case for only two-thirds (65.9%) of the nonaviation warrants. Almost twice as many of the nonaviation group than of the aviation group (25.1% versus 13.2%) expected to achieve the CW3 level, as compared to 21 percent of all respondents.

When asked the primary benefit of warrant officer promotions, those respondents associated with aviation tended to place more emphasis upon "pay-raise" as the primary benefit than did nonaviation respondents (52.9% versus 45.5%). For members of both the aviation and nonaviation groups, "increase in responsibility"

TABLE II-6

Highest Rank Expected

<u>Expected Rank</u>	<u>Current Rank</u>					<u>Field</u>		
	<u>WO 1</u> %	<u>CW 2</u> %	<u>CW 3</u> %	<u>CW 4</u> %	<u>ALL</u> %	<u>NONAVIATION</u> %	<u>AVIATION</u> %	<u>ALL</u> %
CW 2	8.0	13.7	-	-	6.6	9.0	1.7	6.6
CW 3	25.8	25.8	21.9	-	21.0	25.1	13.2	21.1
CW 4	66.2	60.5	78.1	99.5	72.4	65.9	85.0	72.4

received the endorsement of over 20 percent of the respondents (20.7% and 22.9%, respectively). Nonaviation respondents were somewhat more inclined than aviation respondents to identify "increase in prestige" (20.0% versus 17.8%) and "other" (11.5% versus 8.7%) as the prime benefits of promotion.

When asked what should be the primary basis for selection for the next higher grade, both aviation and nonaviation warrants agreed that "competence in PMOS (principal duty)" and "competence in principal and additional duties" should be the primary factors. Differences exist, however, in the emphasis placed upon these factors. Aviation respondents endorsed "competence in principal and additional duties" more strongly than did nonaviation respondents (47.4% versus 32.6%), while nonaviation respondents endorsed "competence in PMOS (principal duty)" more strongly than did aviation respondents (49.1% versus 36.6%). Both groups viewed "potential for further service" and "longevity" similarly. For the aviation group, 11.6 percent selected the former; 2.5 percent, the latter. For the nonaviation respondents, 13.9% selected the former; 1.7%, the latter.

About half (53.3%) of those respondents considered for promotion from the secondary zone pointed out that they have never been selected from the secondary zone. Forty-one percent have never been considered for promotion by a centralized selection board. Slightly more than 5 percent (5.1%) have been selected from the secondary zone once and .7 percent, twice. Those in aviation show a higher rate of never being selected from the secondary zone (61.8% versus 48.9%) and a lower rate for never having been considered for centralized promotion selection (33.6% versus 44.8%), when compared with nonaviation respondents.

When asked to identify the "chief effect of secondard zone promotions for warrant officers," nonaviation, more so than aviation, respondents agreed that "secondary zone promotions recognize outstanding performance and potential" (57.8% versus 44.6%). Conversely, the aviation group was almost twice as likely to express the position that "secondary zone promotions have an adverse effect" (20.0% versus 10.9%).

Table II-7 displays responses to the question, "Which type of training, successfully completed, do you believe 'carries the most weight' with promotion/selection boards?" Whether the responses are sorted by rank or by career field (aviation and nonaviation), "civilian education" and "on-the-job training and experience" were viewed as the type of training carrying the most weight with promotion and selection boards. Each received endorsement by about one-third of the respondents, with "civilian education" being selected by slightly more warrant officers. More senior warrant officers tended to place greater importance on "resident military courses" than did their juniors, as did the nonaviation group when compared with those respondents associated with aviation. Nonresident military courses, clearly, were viewed as carrying the least "weight" by all categories.

TABLE II-7								
Training of "Most Weight" with Selection Boards								
Training	Rank					Field		
	NO 1 %	CW 2 %	CW 3 %	CW 4 %	ALL %	NONAVIATION %	AVIATION %	ALL %
Civilian Education	29.3	37.8	38.0	30.9	35.6	36.5	34.1	35.7
On-the-Job Training and Experience	41.8	36.2	30.3	26.4	33.7	32.2	37.0	33.9
Resident Military Courses	19.1	17.8	25.0	34.5	22.6	25.1	17.3	22.4
Other	5.3	6.1	5.9	6.4	6.0	4.4	9.1	6.0
Nonresident Military Courses	4.4	2.1	.8	1.8	2.0	1.8	2.5	2.0

When asked about their experience with DA Pamphlet 600-11 (Warrant Officer Professional Development), aviation warrants indicated that they are less knowledgeable about the pamphlet than warrants in other fields. Sixty-two percent (61.8%) of the nonaviation respondents stated that they have read the pamphlet and understand the system, as compared to 50.0 percent of the aviation respondents. Respondents in the aviation group were more likely than nonaviation warrants to report that, although they have read the pamphlet, they do not understand the system (17.8% versus 12.4%); or, that they have not read the pamphlet and do not understand the system (16.8% versus 10.5%).

Table II-8 depicts responses to the question, "DA Pam 600-11 outlines normal career progression from entry on active duty as a warrant officer until retirement. What do you think of the outlined career program?"

TABLE II-8								
Attitudes Toward Warrant Officer Career Program								
Attitude	Rank					Field		
	WO 1 %	CW 2 %	CW 3 %	CW 4 %	ALL %	NONAVIATION %	AVIATION %	ALL %
Career pattern for my MOS is adequate, with sufficient challenging and attainable goals	34.7	27.2	30.4	41.5	31.3	33.4	27.3	31.4
Goals have little basis in reality; few warrants will be able to attain them	12.2	19.3	26.4	22.6	20.9	22.9	17.2	20.9
Career pattern too limited; does not provide sufficient challenge	13.1	20.0	20.0	15.2	18.3	12.5	29.9	18.4
Unfamiliar with MOS career patterns in DA Pam 600-11	31.1	18.0	11.0	7.4	16.2	15.0	18.6	16.2
There is no career pattern for my MOS	9.0	15.5	12.2	13.4	13.2	16.3	7.0	13.1

It is significant that only slightly less than one-third of the respondents believed that the career pattern for their respective MOS is adequate, with sufficient challenging and attainable goals. When responses are viewed by rank, more senior warrant officers demonstrated this attitude; when viewed by comparing the non-aviation and aviation groups, those in fields other than aviation were more likely to record this attitude. One-fifth (20.9%) stated that goals have little basis in reality and that few warrants will be able to attain them. Here again, more senior warrant officers were somewhat more likely to hold this view, as were nonaviation warrants over those in aviation MOS. Members of the aviation group were more than twice as likely than non-aviation respondents to believe that their respective career patterns are too limited and without sufficient challenge (29.9% versus 12.5%). Nonaviation warrants felt more strongly than did those in aviation that there is no career pattern in their respective MOS (16.3% versus 7.0%).

Nonaviation respondents endorsed a higher educational level requirement for appointment to warrant than did those in aviation. Over one-half (57.8%) of the nonaviation group would require a minimum of some college, as compared with 47.4 percent of the aviation warrants. On the other hand, more than one-half (52.0%) of the aviation warrants set the high school diploma or equivalent as the minimum requirement, as compared with 41.8 percent of the nonaviation group. When all respondents were considered, 54.2 percent would require some college for appointment to warrant: 29.0 percent would require college work short of a degree; 23.6 percent would require an associate degree; and only 1.6 would require a baccalaureate degree. Forty-five (45.2) percent of all respondents would require a high school diploma or the equivalent, and less than 1 percent (.5%) would require high school courses short of the diploma level.

Aviation warrants were twice as likely as nonaviation warrants to report that they were only somewhat aware or not aware of expected duty requirements prior to appointment as warrant officer (43.3% versus 21.5%). Further, respondents in the aviation group, more so than their nonaviation colleagues, indicated a view that they only were somewhat prepared or not prepared to assume the duties required at the time of appointment (31.4% versus 18.4%), as compared with 22.8 percent for all respondents.

Table II-9 provides responses to the question, "Do you believe the military training you received as a new warrant officer was acceptable to successfully do the job expected?" Although no respondents from the aviation group adjudged their initial warrant officer training as insufficient, 29.9 percent of the nonaviation respondents made such a judgment. Almost one-half (47.5%) of all respondents did not reply to this survey question.

TABLE II-9								
Adequacy of Initial Training for Job Expected								
Response	Rank					Field		
	WO 1 %	OW 2 %	OW 3 %	OW 4 %	ALL %	NONAVIATION %	AVIATION %	ALL %
Yes, for principal duties only	11.9	43.3	32.8	11.9	61.0	41.5	74.5	61.1
Yes, for additional duties only	.0	1.7	3.5	2.2	2.1	4.3	.6	2.1
Yes, for both principal and additional duties	18.8	21.5	14.5	24.2	19.3	24.4	15.9	19.3
No, the training I received was not sufficient	22.8	17.7	18.8	8.8	17.7	29.9	.0	17.5

Table II-10 gives distribution of responses to the question, "Which statement best describes your current duty position?" Over one-third (35.7%) of all responding warrant officers reported that their current assignment matches previous experience and training, and another 30.4 percent stated that their current assignment matches primary MOS training. Only 7.2 percent believed that their current assignment matches neither previous experience nor MOS training.

TABLE II-10

Training Match with Current Assignment

Response	Rank					Field		
	WO 1 %	CW 2 %	CW 3 %	CW 4 %	ALL %	NONAVIATION %	AVIATION %	ALL %
Matches previous experience, and MOS training	33.5	33.3	34.2	47.7	35.7	39.1	29.3	35.7
Matches primary MOS training	41.4	34.2	27.3	15.3	30.4	27.8	35.2	30.3
Matches previous experience, not MOS training	10.6	7.9	10.4	9.0	9.2	11.2	5.4	9.2
Serving in commissioned officer position	3.5	6.9	9.4	12.2	7.9	7.3	9.2	8.0
Matches neither previous experience nor MOS training	5.3	7.1	8.1	7.2	7.2	8.4	4.8	7.2
Matches additional MOS training	2.2	6.6	7.3	5.4	6.0	2.6	12.6	6.0
Student, patient, in transit	3.5	4.1	3.1	3.2	3.6	3.7	3.4	3.6

When the duty position immediately preceding the current one is considered, respondents reported that the assignment matched previous experience and training in 31.1 percent of the cases involved and that it matched primary MOS training in another 25.4 percent of the cases. Slightly over 5 percent (5.1%) of the respondents indicated no fit between the immediately previous assignment and either training or experience.

When asked what is most effective utilization of a warrant officer, most (51.2%) opined that most assignments should be in the primary MOS, with some in additional MOS. When aviation and nonaviation groups are compared, similar percentages (52.0% and 50.9%, respectively) are revealed. One-fourth (25.8%) of all respondents believed that all assignments should be in one MOS

only, either primary or additional; with the percentages for aviation and nonaviation respondents on this alternative, 16.7 and 30.4, respectively. Fifteen percent of all respondents endorsed the current system (i.e., a variation of assignments between primary MOS and additional MOS, with occasional assignments outside MOS), with the aviation/nonaviation percentages on this alternative, 19.2 and 12.8, respectively.

Table II-11 provides an indication of warrant officer dissatisfaction with primary MOS. Of the small number who indicated dissatisfaction, the aviation group is less satisfied than the nonaviation group, with 18.5 percent of the former having expressed dissatisfaction regardless of how the primary MOS was assigned. Dissatisfaction with a chosen primary MOS is much more prominent among the first three ranks of warrants than it is among the most senior warrants, while the middle two ranks are more dissatisfied with their respective assigned primary MOS than the most junior and senior ranks.

When asked, "Does your primary MOS match your previous training, experience, or desire?" 91.4 percent of all respondents replied, "yes." Warrants in the aviation group were less likely (85.5%) to reply in the affirmative than were other warrants (94.4%). When the "not sure" and "no" replies are combined, and aviation and nonaviation warrants are compared, the percentages are 14.5 and 5.6, respectively. Further, aviation warrant officers were more inclined to report "no" (12.2%) than were those in other fields (4.1%).

TABLE II-11								
Dissatisfaction with Primary MOS								
Response	Rank					Field		
	WO 1 %	CW 2 %	CW 3 %	CW 4 %	ALL %	NONAVIATION %	AVIATION %	ALL &
Voluntarily chosen, but dissatisfied with it	8.0	9.9	6.3	2.7	7.4	6.7	8.7	7.4
Involuntarily assigned, and dissatisfied with it	1.3	5.1	4.6	3.6	4.2	1.3	9.8	4.2

Table II-12 addresses the following question: "Which one of the following is the most useful training or education you have received in support of your primary MOS?" Three training or education experiences were cited most often as having been most useful: On-the-job training and experience, 49.4 percent (for the aviation group, only 41.5 percent); pre-appointment training, 17.6 percent; and resident military functional training courses, 15.5 percent (for the aviation group, 25.0 percent). Less than 3 percent (2.5%) of all warrant officer respondents reported that none of the listed training or education alternatives was most useful.

Significant differences in views are revealed when aviation warrants are compared with other warrants relative to their responses to the following question: "What was the primary

TABLE II-12								
Most useful Primary MOS Training or Education Received								
Response	Rank					Field		
	WO 1 %	CW 2 %	CW 3 %	CW 4 %	ALL %	NONAVIATION %	AVIATION %	ALL %
On-the-job training and experience	42.2	49.9	49.8	54.3	49.4	53.3	41.5	49.3
Pre-appointment training	23.8	19.3	13.1	16.3	17.6	18.6	15.6	17.6
Resident functional training courses (military)	12.6	14.0	19.2	14.9	15.5	10.7	25.0	15.6
Initial entry-basic course	9.4	6.6	3.3	.9	5.2	2.6	10.2	5.2
Civilian education/civilian industry sources	4.5	3.8	5.2	7.7	4.9	6.2	2.5	4.9
Advanced course	.9	3.0	4.0	1.4	2.7	3.3	1.7	2.8
None	4.9	1.6	2.9	1.4	2.5	2.3	2.9	2.5
Military correspondence courses	1.8	1.8	1.7	2.7	1.9	2.6	.6	1.9
Senior course	.0	.0	.8	.5	.3	.5	.0	.3

benefit of attending Initial Entry/Basic Course?" Nonaviation and aviation respondents ranked the available replies thusly: "I did not attend an Initial Entry/Basic Course"--74.4 versus 19.1 percent. "It provided the technical basis only for performance of my PMOS, but did not prepare me sufficiently for other duties I have had to perform"--8.5 versus 47.1 percent. "It prepared me to meet general responsibilities required by my PMOS, including assigned additional duties"--6.6 versus 18.9 percent. "It prepared me sufficiently to assume all duties required by my PMOS"--3.5 versus 11.0 percent. "It did not prepare me to assume the duties required by my MOS"--7.1 versus 3.9 percent.

Table II-13 provides a distribution of responses to the following question: "To the best of your knowledge, are there adequate or sufficient training opportunities, of one form or another, available for each MOS so that a warrant officer can become competently trained?" Less than half (46.7%) opined that adequate or sufficient training opportunities for each MOS are available. When affirmative replies for nonaviation and aviation warrant officers are compared, the percentages are different by 10 points: 43.5 for nonaviation and 53.5 for aviation.

TABLE II-13								
Adequate Training Opportunities								
Response	Rank					Field		
	WO 1 %	CW 2 %	CW 3 %	CW 4 %	ALL %	NONAVIATION %	AVIATION %	ALL %
Yes	37.0	46.1	46.2	59.6	46.7	43.5	53.5	46.9
No	33.9	31.2	36.2	28.4	32.8	36.2	25.7	32.7
I'm not sure	29.1	22.7	17.6	11.9	20.5	20.3	20.8	20.5

Table II-14 shows responses to the questions, "Which one of the following do you believe is the most important training or education which should be provided in support of your primary MOS?" and "Which one of the following do you believe is the least important training or education which could be provided in support of your primary MOS?" To almost half of the respondents (46.9%), military resident instruction was the most important of the training or education modes listed. Some variation is revealed when nonaviation and aviation groups are compared: nonaviation--44.5 percent; aviation--51.4 percent. On-the-job training and experience was ranked next important by 31.0 percent, overall; by 29.1 percent of nonaviation warrants; and by 34.9 percent of those warrant officers association with aviation.

Civilian graduate schooling and military nonresident instruction almost tied for the designation, "least important training or education mode," with the former (32.6%) nudging out the latter (32.3%) by only .3 percent. Apparently, respondents were somewhat mixed in their views of specialized, nondegree civilian schooling. It placed third on both lists: most important--10.9 percent; least important--16.6 percent.

TABLE II-14

Importance of Training or Education Modes

<u>Response</u>	<u>Rank</u>					<u>Field</u>		
	<u>NO 1</u> <u>%</u>	<u>OW 2</u> <u>%</u>	<u>OW 3</u> <u>%</u>	<u>OW 4</u> <u>%</u>	<u>ALL</u> <u>%</u>	<u>NONAVIATION</u> <u>%</u>	<u>AVIATION</u> <u>%</u>	<u>ALL</u> <u>%</u>
<u>Most Important</u>								
Military resident instruction	45.1	46.4	49.5	44.5	46.9	44.5	51.4	46.8
On-the-job training and experience	25.7	31.0	30.3	38.1	31.0	29.1	34.9	31.1
Specialized civilian training (nondegree)	12.8	9.3	11.7	11.9	10.9	13.2	6.6	11.0
Civilian undergraduate schooling	6.6	5.8	4.8	4.1	5.4	6.6	3.1	5.4
Civilian graduate schooling	5.8	5.8	1.9	.9	3.9	4.4	2.7	3.8
Military nonresident instruction	4.0	1.8	1.9	.5	2.0	2.3	1.4	2.0
<u>Least Important</u>								
Civilian graduate schooling	29.6	30.8	34.2	37.3	32.6	30.7	36.4	32.6
Military nonresident instruction	34.5	33.4	30.4	30.9	32.3	35.0	26.8	32.2
Specialized civilian training (nondegree)	17.3	15.7	17.7	15.9	16.6	16.7	16.4	16.6
Civilian undergraduate schooling	13.7	13.5	13.3	13.2	13.4	12.2	16.0	13.5
Military resident instruction	3.5	3.5	2.3	1.8	2.9	3.3	2.2	2.9
On-the-job training and experience	1.3	3.0	2.1	.9	2.2	2.2	2.2	2.2

Table II-15 addresses the question, "At what level does the major gap in the currently available schooling for your primary MOS occur?"

TABLE II-15								
Major Gap in Currently Available Primary MOS Schooling								
Response	Rank					Field		
	WO 1 %	CW 2 %	CW 3 %	CW 4 %	ALL %	NONAVIATION %	AVIATION %	ALL %
Unaware of any major gap	46.9	33.3	34.5	36.5	36.1	33.7	40.9	36.2
More than one of those listed	10.7	19.7	20.4	20.5	18.7	22.9	10.8	18.8
Advanced knowledge level (4-9 years)	8.5	20.4	18.9	13.7	17.2	15.6	20.3	17.2
Basic knowledge level (0-3 years)	29.5	15.1	11.2	11.9	15.5	18.6	9.5	15.5
"Expert" knowledge level (9-23 years)	4.5	11.5	14.9	17.4	12.4	9.2	18.5	12.3

Almost 41 percent (40.9%) of aviation warrants, as compared to 33.7 percent of other warrants, responded that they are unaware of any major gap in currently available schooling for their primary MOS. On the other hand, 22.9 percent of non-aviation respondents believed that the gap occurred at more than one level, as compared with 10.8 percent of aviation respondents. Seventeen percent of all respondents placed the gap at the advanced level; almost 16 percent, at the basic level; and slightly more than 12 percent, at the "expert" level. At each of these levels, significant differences exist between the aviation and nonaviation groups in terms of the extent of the deficiency, as they viewed it. The majority of all respondents (63.9%), however, believed that there is at least one level in which currently available schooling does not provide adequate preparation for their primary MOS.

When queried about results of attendance at functional training courses in support of primary MOS, far more nonaviation than aviation warrants indicated that they have not attended such a course. Of those nonaviation respondents who have attended (less than half of the sample), 77.2 percent believed that the course increased technical expertise in their primary MOS. Among aviation respondents, 92.6 percent took a similar position. Remaining respondents in both groups reported no increase in technical expertise.

When asked if their MOS training will be of value in a potential civilian career, nonaviation warrants generally were more likely than those in the aviation group to see a beneficial connection. Almost one-fourth (22.5%) of the nonaviation group expected their MOS training to be applicable directly and planned to do the same type of work after leaving active duty, as compared with 12.7 percent of the aviation group. Similarly, 27.5 percent of the nonaviation group, as compared with 22.5 percent of those warrants associated with aviation, indicated that they expect it to be of use and plan to do similar or closely-related work in civilian life. Aviation warrants were more inclined than their nonaviation counterparts to say either, "Yes, I expect it to be valuable, although I do not know what I will be doing after I leave active duty" (40.6% versus 34.7%); or, "no, I do not expect it to be useful; there are no similar civilian jobs" (17.3% versus 8.4%).

The question, "Do you believe all warrant officer positions require the same level of experience and training?" prompted the majority (74%) to respond negatively. This view is held more strongly by aviation warrants than by their nonaviation colleagues (84.1% versus 68.8%). Conversely, nonaviation warrants, more so than those in the aviation group, felt either that all warrants should have "somewhat" similar training (15.5% versus 9.2%) or the same training (11.1% versus 5.7%).

Table II-16 provides distribution of responses to the question, "What is the most important training presently available in your primary MOS?" On-the-job training and experience was viewed as the most important by both nonaviation and aviation groups, although the former took this view more strongly than the latter (50.2% versus 46.6%). Further, the importance attached to on-the-job training and experience increased with rank, ranging from a low of 41 percent for WO1 to a high of 54.4 percent for CW4. Aviation warrants,

TABLE II-16

Most Important Training Available in Primary MOS

Response	Rank					Field		
	WO 1 %	CW 2 %	CW 3 %	CW 4 %	ALL %	NONAVIATION %	AVIATION %	ALL %
On-the-job training and experience	41.0	48.9	50.4	54.4	49.0	50.2	46.6	48.9
Resident Military courses	43.7	37.5	34.7	31.2	36.6	33.0	43.9	36.7
Civilian education/civilian industry training	11.7	11.4	11.4	10.7	11.3	13.8	6.6	11.3
Nonresident military courses	3.6	2.2	3.4	3.7	3.0	3.1	2.9	3.0

by over 10 percentage points, placed greater importance on resident military instruction than did their nonaviation colleagues (43.9% versus 33.0%). Conversely, nonaviation warrants viewed civilian education or training as more important than did aviation warrants (13.8% versus 6.6%). Both the nonaviation and aviation groups placed relatively little importance on nonresident military courses (3.1% and 2.9%, respectively).

Warrant officer respondents considered graduate level civilian education useful primarily for two purposes: First, "Staying competitive when considered by promotion/selection boards" (52.7%); and second, "Preparing for a civilian career after leaving active duty" (28.0%). "Gaining knowledge required in my primary MOS," was ranked third, with 12.7 percent; "Not much of anything," fourth with 4.9 percent; and "Gaining knowledge required in my additional MOS," last, with 1.7%. Aviation warrants, more so than members of the non-aviation group, selected the civilian career value option (33.2% versus 25.5%); while nonaviation warrants tended to show greater endorsement of the primary MOS knowledge benefit (15.5% versus 7.3%). These differences might be explained in part by the fact that more aviation respondents have participated in a civilian education program (since appointment as a warrant officer) than have nonaviation warrants (84.0% versus 73.3%).

When asked whether or not civilian education opportunities available to warrant officers are adequate, 52.3 percent of all respondents replied negatively. Responses were decreasingly negative with increases in rank, with a range of 58.0 percent for WO1 and 42.8 percent for CW4. When the nonaviation and aviation groups are compared, responses are similar, with 52.5 percent of the former responding in the negative and 51.5 percent of the latter, likewise, viewing opportunities as inadequate.

When asked, "Which of the following best describes the role of civilian education in your primary MOS?" 41.5 percent responded that, "It is both available and highly important for proper professional development." Almost 40 percent (39.7%) responded that "It is available, but of limited importance for professional development," and 18.8 percent that it is "not available." Emphasis on the "available/important" response decreases with rank, with a range of 49.3 percent for WO1 to 33.8 percent for CW4; while the reverse is true for the "available/unimportant" response, with a range of 34.7 percent for WO1 to 45.2 percent for CW4. More so than those in aviation, nonaviation respondents selected the "available/important" response (45.5% versus 33.8%); and, conversely, aviation warrants, more than their nonaviation colleagues, selected the "available/unimportant" response (48.2% versus 35.4%). Responses were close for the two groups in replying "not available": Nonaviation--19.1 percent; aviation--18.0 percent.

Table II-17 addresses the following question: "Which one of the following best expresses your views regarding your participation in civilian education programs?" Nonaviation warrants, more than aviation warrants, viewed civilian education as a duty performance enhancement (44.0% versus 32.8%), while aviation warrants, more than nonaviation warrants, viewed it as a promotion enhancement (37.4% versus 33.7%). Corresponding differences in emphasis between the two groups can be noted in selecting one or the other of the two "no correlation" responses. Over 14 percent (14.5%) did not respond to this survey question.

In answer to the question, "In your view, what constitutes MOS qualification?" the two following responses were selected most frequently: "The ability to 'do the job' in the MOS, whether formally trained or not"--67.5 percent; and "Successful completion of designated training courses and developmental assignments"--24.4 percent. Selection of the former by the nonaviation and aviation groups was 76.0 percent and 50.8 percent respectively.

TABLE II-17

Views Regarding Participation in Civilian Education Programs

<u>Response</u>	<u>Rank</u>					<u>Field</u>		
	<u>WO 1</u> %	<u>CW 2</u> %	<u>CW 3</u> %	<u>CW 4</u> %	<u>ALL</u> %	<u>NONAVIATION</u> %	<u>AVIATION</u> %	<u>ALL</u> %
Enhances ability to perform duties	40.8	38.2	40.6	42.6	40.0	44.0	32.8	39.9
Enhances promotion opportunity	37.9	38.8	33.7	24.6	35.0	33.7	37.4	35.0
No correlation between courses and duties	17.2	19.3	19.6	25.7	20.0	17.2	24.9	20.0
No correlation between courses and promotion opportunity	4.1	3.7	6.2	7.0	5.0	5.1	4.9	5.0

For the latter, the corresponding percentages are 15.2 and 42.3, respectively. The remaining three responses were selected by 5.0 percent or less of all respondents; the same generally is true when nonaviation and aviation respondents are compared.

Although the majority of all respondents placed the responsibility for becoming "MOS qualified" with the warrant officer concerned (72.4%), only 51.3 percent of aviation warrants, as compared with 83.3 percent of nonaviation warrants, held this view. "The officer's MILPERCEN career manager/assignment officer" was selected as the appropriate response by 37.4 percent of the aviation group and by 11.5 percent of the nonaviation group. Less than 1 percent of each group placed the responsibility on the rater; and 5.8 percent of the aviation group and 1.1 percent of other warrants saw the "unit/installation commander" having such a responsibility. Almost 4 percent (3.9%) of all respondents placed the responsibility elsewhere from the available responses.

When asked how many different assignments are estimated to be required for a warrant officer to become qualified fully in his MOS, most respondents (30.0%) responded "three." Ranked second was "more than four" (25.1%); third, "two"

(20.7%); fourth, "one" (15.3%); and, last, "four" (8.8%). Significant differences between the nonaviation and aviation groups can be noted as follows: "More than four," 28.3 and 18.9 percent, respectively; "two," 17.6 and 26.6 percent, respectively; "one," 12.4 and 20.9 percent, respectively; and "four," 10.9 and 4.7 percent, respectively.

Table II-18 provides a distribution of responses to the question, "Which one of the following is the chief way you have or expect to become qualified in your MOS?" Over half (58.5%) of all respondents, 65.2 percent of the nonaviation group, and 45.7 percent of the aviation group selected on-the-job experience. Second choice of all respondents (27.0%) was resident military training, with the nonaviation-aviation comparison for this response 17.7 and 44.9 percents, respectively.

Response	Rank					Field		
	WO 1 %	CW 2 %	CW 3 %	CW 4 %	ALL %	NONAVIATION %	AVIATION %	ALL %
On-the-job experience (no structured training)	55.9	54.4	64.3	59.9	58.5	65.2	45.7	58.6
Resident military training	20.7	30.4	25.1	27.9	27.0	17.7	44.9	27.0
Other	8.8	5.1	4.2	6.8	5.6	5.6	5.6	5.6
Nonresident mili- tary training	4.8	2.1	2.5	1.4	2.5	3.5	.8	2.5
Off-duty civilian study	4.0	3.6	1.3	.9	2.5	3.4	1.0	2.5
Resident civilian education	3.1	3.1	1.3	.9	2.2	2.5	1.5	2.2
Civilian occupa- tional sources	2.6	1.2	1.5	2.3	1.6	2.2	.6	1.6

Other listed responses were selected by fewer than six percent of those warrant officers responding to the survey.

When asked to complete the statement, "After completion of a training period, a warrant officer (if he/she is to become fully qualified) should work in an MOS-related assignment for a minimum period of:" 35.4 percent of all respondents selected, "more than three years." Differences between the nonaviation and aviation groups relative to this response were insignificant. Other listed responses were ranked in descending order of the time involved: "Three"--27.3 percent; "two"--20.5 percent; "one"--14.5 percent; and "less than one year"--2.3 percent. Only the "three year" response generated a difference of any significance between the nonaviation and aviation groups: Percentages are 25.9 and 30.2, respectively.

Table II-19 depicts respondent views on the following question: "Should MOS qualification standards be established for warrant officers?" Initially, it should be noted that 48.8 percent of the aviation respondents, as compared with 14.7

TABLE II-19								
Establishment of MOS Qualification Standards								
Response	Rank					Field		
	WO 1 %	CW 2 %	CW 3 %	CW 4 %	ALL %	NONAVIATION %	AVIATION %	ALL %
Yes, flexible standards	29.8	24.8	27.2	32.0	27.3	30.7	21.0	27.4
My MOS already has standards	18.4	33.1	24.5	19.8	26.3	14.7	48.8	26.3
Yes, absolute standards	12.7	13.8	18.0	18.9	15.7	16.2	14.6	15.6
No, for reason not listed	15.4	14.3	14.0	17.1	14.8	19.6	5.2	14.7
No. firm standards not possible	18.4	7.9	8.8	9.9	10.0	11.3	7.5	10.0
Not sure	5.3	6.2	7.5	2.3	5.9	7.5	2.9	5.9

percent of other respondents, indicated that their MOS already has MOS qualification standards. Nevertheless, aviation respondents lagged behind nonaviation respondents in both affirmative responses: "Flexible standards": nonaviation--30.7 percent; aviation--21.0 percent. "Absolute standards": nonaviation--16.2 percent; aviation--14.6 percent. Forty-three percent of all respondents selected one of the two affirmative replies; in comparison, 31.5 percent selected a reply other than in the affirmative. Ten percent opined that "MOS qualifications are subjective" and that "no firm standards can be established;" 5.9 percent were "not sure."

Table II-20 addresses the question, "If firm MOS qualification standards were established, they would provide a benchmark for warrant officer professional development; e.g., a warrant officer would either be 'qualified' or 'not qualified.'"

TABLE II-20								
Use of MOS Qualification Standards Information								
Response	Rank					Field		
	WO 1 %	OW 2 %	CW 3 %	CW 4 %	ALL %	NONAVIATION %	AVIATION %	ALL %
As a diagnostic tool	40.8	42.8	46.2	38.7	43.0	42.6	43.9	43.1
Officially by promotion/selection boards, etc.	30.7	36.3	35.6	36.0	35.2	34.9	35.6	35.1
Unofficially to measure professional development	11.0	10.3	7.3	15.8	10.3	9.7	11.2	10.2
Not for any purpose	9.2	5.3	6.5	4.5	6.2	7.0	4.6	6.2
Unofficially for personal assessment	8.3	5.2	4.4	5.0	5.4	5.8	4.6	5.4

What use should be made of this information?" Most warrant officers cited one of two purposes: "As a diagnostic tool for determining assignment and/or educational opportunities for the warrant officer involved"--43.0 percent; "Officially as a matter of record for consideration by promotion/selection boards or other activities"--35.2 percent. Little difference is found when nonaviation and aviation warrant responses are compared for these two purposes.

Table II-21 addresses the following survey item: "Estimate your present level of professional development in your primary MOS." While there is little difference between nonaviation and aviation warrants in their estimate of personal professional development, those in aviation are somewhat less likely to select the "somewhat prepared" response. One-fourth (24.7%) of all respondents selected a response other than "well prepared." Selection of such a response occurred more often among the very junior and more junior warrants and occurred less often as rank increased.

TABLE II-21								
Level of Professional Development in Primary MOS								
Response	Rank					Field		
	WO 1 %	CW 2 %	CW 3 %	CW 4 %	ALL %	NONAVIATION %	AVIATION %	ALL %
Well prepared	52.2	69.2	85.6	92.8	75.2	76.9	71.9	75.2
Somewhat prepared	41.1	28.6	12.3	5.9	22.1	20.8	24.6	22.1
Somewhat unprepared	5.8	1.5	1.0	.5	1.8	1.7	2.1	1.8
Not prepared at all	.9	.7	1.0	.9	.8	.6	1.3	.8

Table II-22 provides distribution of responses to the following question: "In many MOS, military training is available through both resident courses and nonresident (correspondence) instruction. In your view, which type would be most effective in providing the knowledge required for qualification in your primary MOS?" There is a high level of agreement among all respondents that resident instruction (75.4%) is more effective than nonresident instruction (2.3%). Only one percentage point separates the respondents who selected the "both are equally effective" response (11.7%) from those who selected the "neither is effective in their present form" (10.7%). Aviation respondents, compared to nonaviation

TABLE II-22								
Most Effective Way of MOS Qualification								
Response	Rank					Field		
	NO 1 %	CW 2 %	CW 3 %	CW 4 %	ALL %	NONAVIATION %	AVIATION %	ALL %
Resident instruction	67.7	78.7	73.0	79.2	75.4	72.4	81.0	75.3
Both equally effective	18.6	9.4	12.3	9.5	11.7	12.4	10.2	11.6
Neither effective in present form	11.5	9.7	12.8	8.1	10.7	12.6	7.1	10.7
Nonresident instruction	2.2	2.3	1.9	3.2	2.3	2.6	1.7	2.3

ones, were more likely to select "resident instruction" (81.0% versus 72.4%); and less likely to select "both are equally effective" response (10.2% versus 12.4%), "neither is effective in their present form" (7.1% versus 12.6%), and nonresident instruction" (1.7 versus 2.6%).

No significant differences are found in the number of hours per week the two groups (nonaviation and aviation) felt that they could devote to independent career-related studies (both on and off duty). Almost 45 percent (44.9%) felt that they could devote up to 4 hours per week; 28.5 percent, 5 to 7 hours per week; 10.2 percent, 8 or 9 hours; and 16.5 percent, 10 hours or more.

Table II-23 displays responses to the question, "What do you believe should be the chief way warrant officers become trained in newly acquired equipment and/or systems?" Although "formal military functional training courses" was selected by over half (54.3%) of all respondents, it was viewed somewhat differently by the nonaviation and aviation groups. Selection of this response by the nonaviation group is at 45.7 percent, as compared to 70.6 percent for the aviation group. There also is a difference in the emphasis given by the two groups to "on-site civilian contract training." Selection percentages are 38.5 for nonaviation and 18.8 for aviation. Endorsement of "OJT," although less than for the preceding two responses overall, decreased somewhat as rank increased. Less than 1 percent of any category of respondents selected "correspondence course."

TABLE II-23								
Chief Way of New Equipment/Systems Training								
Response	Rank					Field		
	WO 1 %	CW 2 %	CW 3 %	CW 4 %	ALL %	NONAVIATION %	AVIATION %	ALL %
Formal military functional training course	41.4	58.2	56.0	53.5	54.3	45.7	70.6	54.2
On-site training via civilian contract	42.3	25.9	32.9	34.3	31.7	38.5	18.8	31.8
OJT	15.9	15.5	10.3	11.7	13.4	14.9	10.6	13.4
Correspondence course	.5	.5	.9	.5	.6	.9	-	.6

Table II-24 provides distribution of responses to, "What method of retraining do you believe should be conducted in conjunction with mandatory reclassification?" While "formal military functional training course" was the clear winner in Table II-23, this response has been relegated to third position (7.1%) in the table below. Conversely, the second place response from Table II-23, "on-site civilian contract training," placed first in Table II-24, with 80.9 percent favored in Table II-24 by almost four-fifths (78.2%) of all respondents, civilian training was emphasized more strongly by aviation warrants (86.1%) than by other warrants (78.2%).

TABLE II-24								
Chief Way of Retraining for Mandatory Reclassification								
Response	Rank					Field		
	WO 1 %	CW 2 %	CW 3 %	CW 4 %	ALL %	NONAVIATION %	AVIATION %	ALL %
On-site training via civilian contract	75.4	80.8	83.0	81.0	80.9	78.2	86.1	80.8
CJT	10.7	9.9	9.4	8.1	9.6	11.0	7.0	9.6
Formal military functional training course	8.9	6.6	6.5	7.7	7.1	8.0	5.2	7.1
Other	3.1	2.5	.0	3.2	2.2	2.6	1.5	2.2
Correspondence course	.9	.0	.2	.0	.2	.2	.2	.2

Table II-25 depicts respondents' views relative to the following survey item: "Professional examinations for the warrant officer corps should be instituted." Warrant officer ambivalence on the professional examination issue is illustrated by the first, second, and third response: Only a percentage point or less separates them, and none of the three is the clear winner. Almost one-half (47.8%) of all respondents, however, selected either the "strongly disagree," or the "disagree" response, as compared with 38.1 percent who selected the "agree," or "strongly agree" response. When the

TABLE II-25								
Institution of Professional Examinations								
Response	Rank					Field		
	WO 1 %	CW 2 %	CW 3 %	CW 4 %	ALL %	NONAVIATION %	AVIATION %	ALL %
Strongly disagrees	24.2	21.4	25.9	29.7	24.4	29.0	15.6	24.5
Disagree	28.6	24.4	20.4	21.9	23.4	24.3	21.6	23.4
Agree	20.3	24.7	21.1	19.6	22.2	17.0	32.2	22.2
Strongly agree	14.5	16.4	16.4	14.6	15.9	15.0	17.6	15.8
It does not matter	12.3	13.1	16.2	14.2	14.1	14.8	12.9	14.1

nonaviation and aviation groups are compared, 53.3 percent of the nonaviation group disagreed (both "disagree" responses) with the institution of professional examinations, as compared with 37.2 percent of the aviation group similarly in disagreement. In agreement (both "agree" responses) were 32.0 percent of the nonaviation group and 49.8 percent of the aviation group. Fourteen percent (14.1%) of all respondents indicated, "it does not matter to me one way or the other."

Assuming that such professional examinations were instituted, Table II-26 provides the distribution of responses relative to, "What should be the principal use of the results of such warrant officer examinations?" Over one-half (52.3%) of all respondents would prefer that examination results be used "to determine education/training needs." The comparison on this response for the nonaviation and aviation groups is 50.3 percent and 56.0 percent, respectively. Over 17 percent (17.2%) selected "for any purpose;" 13.4 percent, "for individual diagnostic work only;" 10.5 percent, "to qualify for certain positions;" and 6.6 percent, "as a basis for promotion."

TABLE II-26								
Principal Use of Professional Examination Results								
Response	Bark					Field		
	NO 1 %	OW 2 %	OW 3 %	OW 4 %	ALL %	NONAVIATION %	AVIATION %	ALL %
To determine education /training needs	54.8	54.1	51.1	47.5	52.3	50.3	56.0	52.2
For any purpose	16.7	15.2	16.9	23.7	17.2	18.4	15.1	17.2
For individual diagnostic work only	14.5	12.3	13.3	15.5	13.4	14.2	11.9	13.4
To qualify for certain positions	7.9	10.8	12.1	9.1	10.5	11.2	9.2	10.5
As a basis for promotion	6.1	7.6	6.6	4.1	6.6	6.0	7.8	6.6

When asked what would be the principal limitation of professional examinations, 62.8 percent responded "paper and pencil tests may not reflect job performance accurately." Percentages for the other two listed responses were almost equally split (18.3% and 18.8%, respectively) between "another evaluation tool is not necessary" and "some limitation not stated above."

Relative to the question, "What do you believe is the major result of your attendance at a Warrant Officer Advanced Course?" most respondents (73.4%) had not participated in one. Of those who had participated, 50.9 percent replied "It enhanced my potential for promotion and/or career progression;" 28.7 percent, "I am better prepared to perform the duties required of my MOS;" and 20.4 percent, "I am neither better prepared to perform in my MOS, nor did it enhance my career progression."

Over one-half (52.3%) of all respondents indicated that they expect to obtain civilian employment after leaving active duty in an area relating to one of their MOS. Forty-three percent (43.0%) would expect to earn at least \$20,000 annually from civilian employment in today's job market; another 41.1 percent, between \$15,000 and \$20,000. Forty-four percent (44.3%) indicated that, were they released immediately from active duty, they would accept \$15,000 to \$20,000 in the present civilian job market for employment in an area related to their military training and experience; another 24.9 percent would accept \$20,000 to \$30,000.

Data following are based upon responses to a series of "agree-disagree" survey items. "Strongly agree" and "agree" responses have been combined into one percentage figure to simplify analysis. Significant differences of opinion between nonaviation and aviation respondents are noted.

<u>Survey Item</u>	<u>"Strongly Agree"/"Agree"</u>
"Warrant officers should be assigned to a utilization tour directly following formal MOS training."	93.5%
"The most valuable training in some MOS is on-the-job experience."	91.7%
"Warrant officers serving in commissioned officer positions should receive credit in some way for such non-MOS-related service."	90.3%
"All other things being equal, 'more' formal course training is always more career-enhancing than 'less.'"	90.0%

<u>Survey Item</u>	<u>"Strongly Agree"/"Agree"</u>
"All MOS are based upon a solid Army-requirement for that functional area."	70.4%
"Formal course training is necessary to learn the basics of an MOS."	67.2%
"For some highly-technical MOS, training costs are so high that the 'up-or-out' promotion rule should be suspended." [*Significantly greater agreement among aviation warrants (73.3% versus 59.3%)]	64.3%
"Warrant officers who have received college-level civilian schooling in support of their primary MOS are more competitive for promotion than those who have not." [*Tendency toward greater approval by nonaviation warrants (69.4% versus 61.1%)]	66.7%
"Promotion boards should promote by MOS quotas; i.e., each MOS should be assured of its 'fair share' of each new promotion list. (Fair share must be based on validated needs for officers in each MOS.)"	55.9%
"The academic report received upon completion of a course of military or civilian training should be as important to promotion potential as an efficiency report."	53.4%
"More general educational opportunities, rather than specific MOS-related training, should be provided for warrant officers."	52.3%
"On-the-job training should be more structured (firm requirements, time limits, an OJT monitor, and graduation/completion certificate)." [*Greater endorsement by aviation warrants (57.3% versus 48.0%)]	51.1%
"In my MOS, military training is superior to civilian 'contract' MOS training." [*Significantly greater agreement among aviation warrants (58.2% versus 39.6%)]	46.0%

<u>Survey Item</u>	<u>"Strongly Agree"/"Agree"</u>
'All educational or training opportunities for warrant officers should be directly related to a technical MOS skill.'	42.7%
"Military schools such as the Advanced Course or the Senior Course provide little specialty training support."	42.0%
"Selection boards should use MOS training completion as a criterion for promotion."	41.4%
"Warrant officers should have a training program similar to commissioned officers leading to appointment (e.g., ROTC, Military Academy, OCS)." [*Significantly greater agreement among aviation warrants (55.8% versus 30.4%)]	39.0%
"The knowledge gained through civilian college-level education is more important to the Army than any degree received by the warrant officer."	38.6%
"Only the primary MOS has any real importance in career advancement." [*Much stronger agreement from nonaviation warrants (46.8% versus 19.0%)]	37.3%
"'Quality' officers should be distributed equitably over MOS, either voluntarily or involuntarily."	32.5%
"MOS examination for warrant officers should be instituted." [*Significantly stronger agreement on the part of aviation warrants (42.4% versus 25.1%)]	30.9%
"Warrant officers should never be required to serve in commissioned officer positions."	27.2%
"Selection for attendance at AWOAC/WOSC is more important than actual attendance."	19.2%
"Warrant officer utilization policies and procedures are clearly defined and understood by most Army personnel."	14.7%

The following tables provide data relative to additional MOS held by warrant officers.

Table II-27; survey question: "Which statement best describes your additional MOS designation?"

TABLE II-27*								
Dissatisfaction with Additional MOS								
Response	Rank					Field		
	WO 1 %	CW 2 %	CW 3 %	CW 4 %	ALL %	NONAVIATION %	AVIATION %	ALL %
Voluntarily chosen, but dissatisfied with it	2.9	3.9	4.9	3.3	4.1	4.0	4.2	4.1
Involuntarily assigned, and dissatisfied with it	22.9	5.2	7.9	3.3	7.0	6.8	7.1	7.0

*982 respondents out of 1543, or 63.6 percent of all respondents, did not complete this survey item.

Table II-28; survey question: "Which one of the following is the most useful training or education you have received which supports your additional MOS?"

TABLE II-28*								
Most Useful Additional MOS Training or Education Received								
Response	Rank					Field		
	NO 1 %	GN 2 %	GN 3 %	GN 4 %	ALL %	NONAVIATION %	AVIATION %	ALL %
Resident military functional training courses	29.6	44.4	43.5	29.5	40.8	29.0	49.3	40.7
On-the-job experience (no structured training)	44.4	23.4	29.0	40.9	29.5	34.4	26.0	29.6
Preappointment training	3.7	16.8	8.3	10.2	11.9	19.9	6.0	11.9
Initial entry/basic course	18.5	6.1	8.3	5.7	7.5	4.5	9.7	7.5
Civilian education/civilian industry sources	3.7	5.1	6.7	9.1	6.3	7.2	5.7	6.3
Warrant Officer Advanced Course	.0	2.8	3.1	1.1	2.5	3.6	1.7	2.5
Military correspondence courses	.0	1.4	.5	1.1	1.0	1.4	.7	1.0
Warrant Officer Senior Course	.0	.0	.5	2.3	.6	-	1.0	.6

*1,021 respondents out of 1,543, or 66.1 percent of all respondents, did not complete this survey item.

Table II-29; survey questions: "Which one of the following do you believe is the most useful/least useful training or education which should/could be provided in support of your additional MOS?"

TABLE II-29*

Usefulness of Additional MOS Training or Education Modes

Response	Rank					Field		
	WC 1 %	CW 2 %	CW 3 %	CW 4 %	ALL %	NCNAVIATION %	AVIATION %	ALL %
<u>Most Useful</u>								
Military resident instruction	44.1	55.8	46.8	45.1	50.1	46.4	52.5	50.0
On-the-job experience (no structured tng)	41.2	29.9	32.3	37.4	32.7	33.2	32.4	32.7
Civilian specialized nondegree training	5.9	4.6	8.5	11.0	7.2	7.2	7.2	7.2
Military nonresident instruction	5.9	3.9	4.0	2.2	3.8	6.4	1.6	3.8
Civilian undergraduate schooling	2.9	2.2	5.5	1.1	3.2	4.0	2.6	3.2
Civilian graduate schooling	.0	3.5	3.0	3.3	3.1	2.8	3.3	3.1
*986 respondents out of 1,543, or 63.9 percent of all respondents, did not complete this survey item.								
<u>Least Useful</u>								
Civilian graduate schooling	20.6	33.6	37.8	38.5	35.1	32.0	37.4	35.0
Military nonresident instruction	35.3	30.1	24.5	33.0	28.9	32.0	26.5	29.0
Civilian undergraduate schooling	20.6	15.7	12.2	15.4	14.7	15.8	13.9	14.8
Civilian specialized nondegree training	11.8	8.7	13.3	4.4	9.8	9.7	9.9	9.8
On-the-job experience (no structured tng)	5.9	9.2	7.7	2.2	7.3	4.9	9.3	7.3
Military resident instruction	5.9	2.6	4.6	6.6	4.2	5.7	3.0	4.2
*993 respondents out of 1,543, or 64.3 percent of all respondents, did not complete this survey item.								

Table II-30; survey question: How many assignments have you had in your additional MOS?"

TABLE II-30*								
Assignments Held in Additional MOS								
Response	Rank					Field		
	WC 1 %	CW 2 %	CW 3 %	CW 4 %	ALL %	NONAVIATION %	AVIATION %	ALL %
One	36.4	39.3	23.6	19.8	30.2	28.1	32.0	30.5
Three or more	6.1	14.4	36.0	41.8	26.3	22.9	28.8	26.1
None	57.6	27.9	15.8	11.0	22.5	33.3	13.7	22.5
Two	.0	18.3	24.6	27.5	21.0	15.7	25.5	21.1

*987 respondents out of 1,543, or 63.9 percent of all respondents, did not complete this survey item.

Table II-31; survey question: "What is the role of civilian education in your additional MOS?"

TABLE II-31*								
Role of Civilian Education in Additional MOS								
Response	Rank					Field		
	WC 1 %	CW 2 %	CW 3 %	CW 4 %	ALL %	NONAVIATION %	AVIATION %	ALL %
Available, but limited importance	35.5	38.2	36.6	44.0	38.4	35.3	41.1	38.5
Unavailable	32.3	28.5	33.2	31.9	31.0	31.7	30.5	31.0
Available and important	32.3	33.3	30.2	24.2	30.6	32.9	28.5	30.5

*991 respondents out of 1,543, or 64.2 percent of all respondents, did not complete this survey item.

Table II-32; survey question: "What is the most important training presently available in your additional MOS?"

TABLE II-32*								
Most Important Presently Available Additional MOS Training								
Response	Rank					Field		
	WC 1 %	CW 2 %	CW 3 %	CW 4 %	ALL %	MCNAVIATION %	AVIATION %	ALL %
Resident military courses	41.9	47.1	42.4	36.0	43.2	43.3	43.0	43.1
On-the-job training and experience	51.6	38.9	41.4	46.1	41.7	39.6	43.6	41.8
Civilian education/civilian industry training	6.5	10.4	12.1	15.7	11.7	12.1	11.4	11.7
Nonresident military courses	.0	3.6	4.0	2.2	3.3	5.0	2.0	3.3

*1,004 respondents out of 1,543, or 65.0 percent of all respondents, did not complete this survey item.

Table II-33; survey question: "When did you receive formal training in your additional MOS?"

TABLE II-33*								
Timing of Additional MOS Formal Training								
Response	Rank					Field		
	WC 1 %	CW 2 %	CW 3 %	CW 4 %	ALL %	MCNAVIATION %	AVIATION %	ALL %
Prior to first assignment in MOS	28.1	61.0	55.4	49.4	55.2	39.8	67.4	55.1
Have not received formal tng in MOS	62.5	21.9	24.8	28.1	26.3	45.9	10.5	26.4
After one assignment in MOS	.0	6.3	11.9	11.2	9.6	7.3	11.5	9.6
Concurrent with assignment in MOS	9.4	8.8	7.9	11.2	8.9	6.9	10.5	8.9

*992 respondents out of 1,543, or 64.2 percent of all respondents, did not complete this survey item.

Table II-34; survey question: "What was the chief source of training you already have received in your additional MOS?"

<u>TABLE II-34*</u>								
<u>Chief Source of Additional MOS Training</u>								
<u>Response</u>	<u>Rank</u>					<u>Field</u>		
	<u>OW 1</u> %	<u>OW 2</u> %	<u>OW 3</u> %	<u>OW 4</u> %	<u>ALL</u> %	<u>NONAVIATION</u> %	<u>AVIATION</u> %	<u>ALL</u> %
Military resident courses	41.7	64.0	52.3	40.7	54.5	46.0	60.5	54.4
On-the-job experience or tng	54.2	33.0	38.3	48.8	38.8	46.0	33.7	38.8
Civilian schooling	.0	2.0	7.3	7.0	4.8	3.8	5.5	4.8
Military nonresident courses	4.2	1.0	2.1	3.5	2.0	4.3	.3	2.0

*1040 respondents out of 1543, or 67.4 percent of all respondents did not complete this survey item.

Bibliographical Notes

1. ODCSPER 46 Report, December 1977.



DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF STAFF
WASHINGTON, D.C. 20310

DACS-OTRG

1 November 1977

Dear Survey Participant:

At the direction of the Chief of Staff, Army, a potentially landmark review of officer education and training has been undertaken, the results of which are expected to be significant, both to the Army as a whole and to individual Army officers. A key effort in this important review is the attached Officer Education and Training Survey.

The survey has been designed to permit you and a large, representative sample of your fellow officers to tell us from your perspective what we need to know about certain specific areas under review. Also, the survey poses several courses of action and asks you and your fellow participants for your views on them. Since these courses of action are only a few of those under consideration, they should not be taken as indicative of review group conclusions.

Your responses will be held in strict confidence, so please do not identify yourself on any part of the survey booklet or answer sheet. When all responses have been received, they will be analyzed carefully, together with data relative to education and training requirements. Education and training policies addressing each phase of officer career development will be prepared and recommended for incorporation into the FY 80-84 program.

The attached survey is your best chance to put your experiences, expectations, and suggestions about officer education and training "on the record." We urge you not to miss this opportunity, but timing is important. To be included in this special review effort, your survey must be completed and put in the mail within five working days after its receipt. To protect the answer sheet, which will be machine-scored, we ask, too, that you tuck it completely inside the survey booklet and mail both in the return envelope provided.

Thank you for your participation, and good luck to you in your military career.

Sincerely,

B. L. HARRISON
Major General, USA
Chairman, Review of Education
and Training of Officers

RCS: CSOCS-(OT) 259

L-1-111

GENERAL INSTRUCTIONS FOR SURVEY PARTICIPANTS

1. Use only a No. 2 pencil when completing the answer sheet.
2. Do not place your name or social security number (SSN) anywhere on the answer sheet or survey booklet. This will help to assure that your responses remain truly anonymous.
3. Answer all questions as of 31 December 1977, even though you may be completing the survey before that date.
4. Be sure that the question number that you mark on the answer sheet is the same as the question number in the survey booklet.
5. You may make only one response for each question. Blacken the circle on the answer sheet that has the same letter or number as the response you selected in the survey booklet. Do not make any other marks, or write, on the answer sheet.
6. Fill in the circle completely with a heavy mark, but do not go outside the circle. Look at these examples:

<p>RIGHT WAY 41 <input checked="" type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E <input type="radio"/> F <input type="radio"/> G <input type="radio"/> H <input type="radio"/> I</p> <p>TO MARK</p> <p>ANSWER SHEET 42 <input type="radio"/> A <input checked="" type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E <input type="radio"/> F <input type="radio"/> G <input type="radio"/> H <input type="radio"/> I</p>	<p>WRONG WAY 43 <input type="radio"/> A <input checked="" type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E <input type="radio"/> F <input type="radio"/> G <input type="radio"/> H <input type="radio"/> I</p> <p>TO MARK</p> <p>ANSWER SHEET 44 <input type="radio"/> A <input checked="" type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E <input type="radio"/> F <input type="radio"/> G <input type="radio"/> H <input type="radio"/> I</p> <p>45 <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E <input type="radio"/> F <input type="radio"/> G <input type="radio"/> H <input type="radio"/> I</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
7. If you make a mistake, erase the mark completely before you enter a new one.
8. You are not required to answer any question which you find objectionable.
9. If the possible responses to a question do not fit your opinion exactly, please choose the response which most nearly approximates your view.

INSTRUCTIONS FOR COMPLETING THE FRONT OF THE ANSWER SHEET

The front of the answer sheet contains lettered columns. These columns are used to state demographic information. Please complete the lettered columns as follows:

COLUMN A: Blacken the circle corresponding to your pay grade.

COLUMN B: Select from the following table the geographic area in which you are taking this survey. Blacken the lettered circle corresponding to your location. (Ignore the two numbered columns.)

- A. Continental United States (CONUS)
- B. Hawaii, Alaska, Puerto Rico, Panama (Canal Zone)
- C. Pacific area (Other than Hawaii, includes Korea)
- D. European area (Includes Middle East)
- E. Other

COLUMN C: Select the letter which corresponds to your control branch and blacken the appropriate circle.

- A. Adjutant General
- B. Air Defense Artillery
- C. Armor
- D. Chemical
- E. Engineer
- F. Field Artillery
- G. Finance
- H. Infantry
- I. Military Intelligence
- J. Military Police
- K. Ordnance
- L. Quartermaster
- M. Signal
- N. Transportation
- O. Aviation

COLUMN D: Select the letter corresponding to the major command (MACOM) to which you are assigned and blacken the appropriate lettered circle in Column D:

- A. USAREUR
- B. FORSCOM
- C. TRADOC
- D. USFK/EIGHTH ARMY (KOREA)
- E. US ARMY, JAPAN
- F. SUPPORT COMMAND, HAWAII
- G. COMMUNICATIONS COMMAND
- H. HEALTH SERVICES COMMAND
- I. MILITARY DISTRICT OF WASHINGTON
- J. OTHER

COLUMN E: Indicate the type of unit to which you are assigned by selecting the appropriate code from the table below and blackening the proper circles in Column E. Blacken the circle corresponding to the first digit of the code in the first sub-column and the circle corresponding to the second digit in the second sub-column.

- 00. Combat
- 11. Combat Support
- 22. Combat Service Support
- 33. Training (includes service school staff and faculty)
- 44. Garrison/installation staff
- 55. Recruiting, ROTC, Readiness Regions
- 66. Corps or higher level staff (includes MACOM, DA, etc)
- 77. Other

COLUMN F: Indicate your primary MOS by blackening the appropriate circles in Column F. Blacken the circle corresponding to the first digit in the first sub-column and the circle corresponding to the second digit in the second sub-column. Ignore the third and fourth digits of your primary MOS.

COLUMN G: Indicate your additional MOS by blackening the appropriate circles in Column G. Blacken the circle corresponding to the first digit in the first sub-column and the circle corresponding to the second digit in the second sub-column. Do not enter the third and fourth digits of your additional MOS. If you have not had an additional MOS designated, use code 00.

COLUMN H: Enter the number of years of Active Federal Warrant Service (AFWS) you will have completed as of 31 December 1977 by blackening the appropriate circles in Column H. Round partial years upward to the next higher whole year. If you have completed less than ten years AFWS, blacken 0 in the first sub-column, and the circle corresponding to the number of years (1-9) in the second sub-column. If you have completed ten or more years AFWS, blacken the circle corresponding to the first digit of the number in the first sub-column, and the circle corresponding to the second digit in the second sub-column.

COLUMN I: Select the code from the table below that corresponds to the highest level of military education you have completed. Blacken the appropriate circle in Column I.

- A. Warrant Officer Senior Course (or old Advanced Course) graduate (includes selected and deferred or declined)
- B. WOSC Corresponding Studies student or graduate
- C. Warrant Officer Advanced Course (or old Intermediate Course)
- D. WOAC Corresponding Studies student
- E. Other

COLUMN J: Select the code from the table below that corresponds to the highest level of civilian education you have completed. Blacken the appropriate circle in Column J.

- A. Master's degree or higher
- B. Bachelor's degree
- C. Associate degree
- D. Some college
- E. High school graduate or less

COLUMN K: Indicate your marital status and sex by selecting the appropriate code from the following table and blackening the corresponding circle in Column K.

- A. Married male
- B. Married female
- C. Single male (divorced, separated, widowed, never married)
- D. Single female (divorced, separated, widowed, never married)

COLUMN L: Indicate your racial/ethnic background by selecting the appropriate code from the following table and blackening the corresponding circles in Column L.

- 00. White (Caucasian)
- 11. Black (Negro)
- 22. Mexican-American; Puerto Rican; Hispanic extraction
- 33. Asian-American
- 44. Other

1. Through which of the following did you receive your warrant?
 - a. Warrant Officer Candidate School
 - b. Direct appointment
 - c. Other
2. What is your component?
 - a. Regular Army
 - b. US Army Reserve
 - c. National Guard
3. Do you plan to make the Army a career? (That is, 20 or more years of service?)
 - a. Yes, I plan to retire at 20 years of service
 - b. Yes, I plan to retire after more than 20, but less than 26 years
 - c. Yes, I plan to retire after 26 years of service or more
 - d. Yes, but I am undecided as to when I will retire
 - e. I have made no decision as to whether or not I will make the Army a career
 - f. No, I do not plan to make the Army a career
4. Given normal career progression, what is the highest rank you expect to attain prior to retirement?
 - a. CW2
 - b. CW3
 - c. CW4
5. In your view, what is the primary benefit of warrant officer promotions?
 - a. Pay-raise
 - b. Increase in responsibility
 - c. Increase in prestige
 - d. Other
6. In your estimation, what should be the primary basis for selection to the next grade?
 - a. Competence in PMOS (principal duty)
 - b. Competence in principal and additional duties
 - c. Longevity
 - d. Potential for further service
 - e. Other
7. During your career as a warrant officer how many times have you been selected for promotion from the secondary zone ("below the zone")?
 - a. NA - I have never been considered for promotion by a centralized selection board
 - b. Never
 - c. Once
 - d. Twice
 - e. Three times

8. Which one of the following do you feel is the chief effect of secondary zone promotions for warrant officers?
 - a. Secondary zone promotions recognize outstanding performance and potential
 - b. Secondary zone promotions act as a motivator
 - c. Secondary zone promotions have an adverse effect
 - d. Secondary zone promotions have some effect not expressed in the choices above

9. Which type of training, successfully completed, do you believe "carries the most weight" with promotion/selection boards?
 - a. Resident military courses
 - b. Non-resident military courses
 - c. On-the-job training and experience
 - d. Civilian education
 - e. Other

10. DA Pamphlet 600-11, Warrant Officer Professional Development is the basis for WO career development. What has been your experience with this document?
 - a. I have read DA Pam 600-11, and understand the system
 - b. I have read DA Pam 600-11, but don't really understand it
 - c. I have not read DA Pam 600-11, and know little or nothing about WO professional development
 - d. I have not read DA Pam 600-11, but I understand the system

11. DA Pam 600-11 outlines normal career progression from entry on active duty as a warrant officer until retirement. What do you think of the outlined career program?
 - a. I am not familiar with the MOS career patterns shown in DA Pam 600-11
 - b. I believe the stated career pattern for my MOS is adequate and provides sufficient goals that are challenging as well as obtainable
 - c. I believe my career pattern is too limited and does not provide sufficient challenge in obtaining desired goals
 - d. I believe that they have little basis in reality, and that few warrants will be able to obtain stated goals
 - e. I believe there is no career pattern for my MOS

12. What should be the minimum education level at the time of appointment to warrant?
 - a. Some high school
 - b. High school diploma or its equivalent (for example G.E.D.)
 - c. Some college
 - d. An associate degree
 - e. A bachelor's degree

13. Were you aware of the expected duty requirements prior to your appointment as a warrant officer?
- a. Yes
 - b. Somewhat
 - c. No
14. Did you believe yourself fully prepared to assume the duties required of you at appointment?
- a. Yes
 - b. Somewhat
 - c. No
15. Do you believe the military training you received as a new warrant officer was acceptable to successfully do the job expected?
- a. I did not receive any initial entry training.
 - b. Yes, for principal duties only
 - c. Yes, for additional duties only
 - d. Yes, for both principal and additional duties
 - e. No, the training I received was not sufficient
16. Which statement best describes your current duty position?
- a. I am a student, a patient, in-transit, or unassigned
 - b. Matches my primary MOS training
 - c. Matches my additional MOS training
 - d. Matches my previous experience and MOS training
 - e. Matches my previous experience, rather than MOS training
 - f. Matches neither previous experience, nor MOS training
 - g. I am serving in a commissioned officer position
17. Which statement best describes the duty position immediately preceding your current duty position?
- a. I was a student, a patient, in-transit, or otherwise unassigned
 - b. Matched my primary MOS training
 - c. Matched my additional MOS training
 - d. Matched my previous experience and MOS training.
 - e. Matched my previous experience, rather than MOS training
 - f. Matched neither previous experience, nor MOS training
 - g. I am serving in a commissioned officer position
18. What do you believe is the most effective utilization of a warrant officer?
- a. Most assignments in the primary MOS; some in additional MOS's
 - b. Most assignments in the additional MOS's; some in the primary MOS
 - c. An even division of primary MOS and additional MOS assignments
 - d. All assignments in one MOS only; either primary or additional MOS
 - e. A variation of assignments between primary MOS and additional MOS's with occasional assignments outside the MOS

19. Which of the following statements best-describes your primary MOS designation?
- a. It was voluntarily chosen and I am satisfied with it
 - b. It was voluntarily chosen, but I am dissatisfied with it
 - c. It was involuntarily assigned, but I am satisfied with it
 - d. It was involuntarily assigned, and I am dissatisfied with it
20. Does your primary MOS match your previous training, experience, or desire?
- a. Yes
 - b. I am not sure
 - c. No
21. Which one of the following is the most useful training or education you have received in support of your primary MOS?
- a. Pre-appointment training
 - b. Initial entry-basic course
 - c. Advanced course
 - d. Resident functional training courses (military)
 - e. Military correspondence courses
 - f. On-the-job training and experience
 - g. Civilian education/civilian industry sources
 - h. Senior course
 - i. None
22. What was the primary benefit of attending Initial Entry/Basic Course?
- a. I did not attend an Initial Entry/Basic Course
 - b. It provided the technical basis only for performance of my PMOS, but did not sufficiently prepare me for other duties I have had to perform
 - c. It prepared me to meet general responsibilities required by my PMOS including assigned additional duties.
 - d. It prepared me sufficiently to assume all duties required by my PMOS
 - e. It did not prepare me to assume the duties required by my MOS
23. To the best of your knowledge, are there adequate or sufficient training opportunities, of one form or another, available for each MOS so that a warrant officer can become competently trained.
- a. Yes
 - b. No
 - c. I'm not sure

24. Which one of the following do you believe is the most important training or education which should be provided in support of your primary MOS?
- a. Military resident instruction
 - b. Military non-resident instruction
 - c. On-the-job training and experience
 - d. Civilian schooling (undergraduate)
 - e. Civilian schooling (graduate)
 - f. Specialized civilian training (non-degree)
25. Which one of the following do you believe is the least important training or education which could be provided in support of your primary MOS?
- a. Military resident instruction
 - b. Military non-resident instruction
 - c. On-the-job training and experience
 - d. Civilian schooling (undergraduate)
 - e. Civilian schooling (graduate)
 - f. Specialized civilian training (non-degree)
26. At what level does the major gap in the currently available schooling for your primary MOS occur?
- a. Basic knowledge level (0-3 years warrant service)
 - b. Advanced knowledge level (4-9 years warrant service)
 - c. "Expert" knowledge level (9-23 years warrant service)
 - d. More than one of the above
 - e. I am not aware of any major gap in the currently available schooling
27. If you have attended functional training courses in support of your primary MOS, what was the chief result of your attendance?
- a. I have not attended
 - b. It increased technical expertise in my MOS
 - c. It did not increase technical expertise in my MOS
 - d. There are no functional training courses available in my MOS
28. Do you believe your MOS training will be of value to you in a potential civilian career?
- a. Yes, I expect it to be directly applicable; I plan to do the same type of work after I leave active duty
 - b. Yes, I expect it to be of use; I plan to do similar or closely-related work in civilian life
 - c. Yes, I expect it to be valuable, although I do not know what I will be doing after I leave active duty
 - d. No, I do not expect it to be useful; there are no similar civilian jobs
 - e. I am not sure whether or not my MOS training will be useful in civilian life

29. Do you believe all warrant officer positions require the same level of experience and training?
- Yes
 - No
 - Somewhat
 - Don't know
30. What is the most important training presently available in your primary MOS?
- Resident military courses
 - Non-resident military courses
 - On-the-job training and experience
 - Civilian education/civilian industry training
 - Other
31. For which of the following is graduate-level civilian education primarily useful?
- Gaining knowledge required in my primary MOS
 - Gaining knowledge required in my additional MOS
 - Staying competitive when considered by promotion/selection boards
 - Preparing for a civilian career after leaving active duty
 - Not much of anything
32. Since your appointment as a warrant officer, have you participated in a civilian education program?
- Yes
 - No
33. What are your views regarding the civilian education opportunities available to warrant officers?
- They are adequate
 - They are inadequate
34. Which of the following best describes the role of civilian education in your primary MOS?
- It is both available and highly important for proper professional development
 - It is available, but of limited importance for professional development
 - Not available
35. Which one of the following best expresses your views regarding your participation in civilian education programs?
- I have not participated in a civilian education program
 - I believe that the courses I have taken have enhanced my ability to perform my duties as a warrant officer
 - I believe that having taken courses or obtained a degree have enhanced my promotion opportunity
 - There is no correlation between my duties and the courses I have taken
 - There is no correlation between the courses I have taken and my opportunities for promotion

36. In your view, what constitutes "MOS qualification?"
- Successful completion of designated training courses and developmental assignments
 - The ability to "do the job" in the MOS, whether formally trained or not
 - A subjective administrative decision on the part of career managers and promotion/selection boards
 - Close adherence to the career patterns shown in DA Pam 600-11
 - MOS qualification is largely undefinable
37. Do you believe the responsibility for a warrant officer becoming "MOS qualified" lies primarily with:
- The warrant officer himself/herself
 - The rating officer
 - The officer's MILPERCEN career manager/assignment officer
 - The unit/installation commander
 - Other
38. In your MOS how many different assignments would you estimate are required for a warrant officer to become fully qualified?
- One
 - Two
 - Three
 - Four
 - More than four
39. Which one of the following is the chief way you have or expect to become qualified in your MOS?
- Resident training in military courses
 - Military correspondence courses
 - Resident civilian education
 - Off-duty civilian study
 - On-the-job experience (no structured training)
 - Civilian occupational sources
 - Other
40. After completion of a training period, a warrant officer (if he/she is to become fully qualified) should work in an MOS-related assignment for a minimum period of:
- Less than one year
 - One year
 - Two years
 - Three years
 - More than three years
41. Should MOS qualification standards be established for warrant officers?
- My MOS already has MOS qualification standards.
 - Yes; absolute standards should be established for each MOS.
 - Yes; flexible standards, to be used as goals, should be established for each MOS.
 - No; MOS qualifications are subjective - no firm standards can be established
 - No; but for reasons not stated above.
 - I am not sure whether or not MOS qualification standards should be established.

42. If firm MOS qualification standards were established, they would provide a benchmark for warrant officer professional development, i.e., a warrant officer would either be "qualified" or "not qualified." What use should be made of this information?
- Used unofficially to measure professional development of the individual warrant officer
 - Used officially as a matter of record for consideration by promotion/selection boards or other activities
 - Used only by the warrant officer for his personal assessment
 - Used as a diagnostic tool for determining assignment and/or educational opportunities for the warrant officer involved
 - Not used for any purpose
43. Estimate your present level of professional development in your primary MOS.
- Well prepared
 - Somewhat prepared
 - Somewhat unprepared
 - Not prepared at all
44. In many MOS's, military training is available through both resident courses and non-resident (correspondence) instruction. In your view, which type would be most effective in providing the knowledge required for qualification in your primary MOS?
- Resident instruction is the most effective
 - Non-resident instruction is the most effective
 - They are both equally effective
 - Neither are effective in their present form
45. On the average, how many hours per week do you believe you could devote to independent career-related studies (both on and off duty)?
- One hour or less
 - Two to four hours
 - Five to seven hours
 - Eight or nine hours
 - Ten hours or more
46. What do you believe should be the chief way warrant officers become trained in newly acquired equipment and/or systems?
- OJT
 - Formal military functional training course
 - Correspondence course
 - On-site training through civilian contract
 - Other

47. What method of retraining do you believe should be conducted in conjunction with mandatory reclassification?
- a. OJT
 - b. Formal military functional training course
 - c. Correspondence course
 - d. On-site training through civilian contract
 - e. Other
48. Professional examinations for the warrant officer corps should be instituted.
- a. Strongly agree
 - b. Agree
 - c. It does not matter to me
 - d. Disagree
 - e. Strongly disagree
49. Let us assume that such examinations were instituted. What should be the principal use of the results of such warrant officer examinations?
- a. For individual diagnostic work only
 - b. To determine education/training needs
 - c. As a basis for promotion
 - d. To qualify for certain positions
 - e. For any purpose
50. In your view, what would be the principal limitation of warrant officer examinations?
- a. Paper and pencil tests may not reflect job performance accurately.
 - b. Another evaluation tool is not necessary; current procedures are adequate
 - c. Some limitation not stated above
51. What do you believe is the major result of your attendance at a Warrant Officer Advanced Course?
- a. I have not attended the Warrant Officer Advanced Course appropriate to my MOS
 - b. My MOS does not have an advanced course
 - c. I am better prepared to perform the duties required by my MOS
 - d. It enhanced my potential for promotion and/or career progression
 - e. I am neither better prepared to perform in my MOS, nor did it enhance my career progression
52. After you leave active duty, do you expect to obtain civilian employment in an area that relates to your military training, education, or experience?
- a. Yes, probably relating to my primary MOS
 - b. Yes, probably relating to my additional MOS
 - c. Undecided
 - d. No

53. Based on your age, education and experience, what annual income from wages would you expect to earn from civilian employment in today's job market?
- a. \$10,000 or less
 - b. \$10,001 - \$15,000
 - c. \$15,001 - \$20,000
 - d. \$20,001 - \$30,000
 - e. \$30,001 or more
54. What is the minimum level of income you would accept in the present civilian job market for employment in an area that related to your military training and experience if you were immediately released from active duty?
- a. \$10,000 or less
 - b. \$10,001 - \$15,000
 - c. \$15,001 - \$20,000
 - d. \$20,001 - \$30,000
 - e. \$30,001 or more

The following statements are neither proposals nor alternatives. They are intended simply to identify attitudes within the Warrant Officer Corps. Please indicate your agreement or disagreement with each of the statements by selecting the appropriate response from this list:

- a. Strongly agree
- b. Agree
- c. No opinion
- d. Disagree
- e. Strongly disagree
- f. Don't know

55. All MOS's are based upon a solid Army requirement for that functional area.
56. More general educational opportunities, rather than specific MOS-related training, should be provided for warrant officers.
57. The academic report received upon completion of a course of military or civilian training should be as important to promotion potential as an efficiency report.
58. Only the primary MOS has any real importance in career advancement.
59. Formal course training is necessary to learn the basics of an MOS.
60. Promotion boards should promote by MOS quotas; i.e., each MOS should be assured of its "fair share" of each new promotion list. (Fair share must be based on validated needs for officers in each MOS.)
61. All educational or training opportunities for warrant officers should be directly related to a technical MOS skill.

62. "Quality" officers should be equitably distributed over MOS's, either voluntarily or involuntarily.
63. Military schools such as the Advanced Course or the Senior Course provide little specialty training support.
64. Selection for attendance at AWOAC/WOSC is more important than actual attendance.
65. MOS examinations for Warrant Officers should be instituted.
66. Warrant Officer utilization policies and procedures are clearly defined and understood by most Army personnel.
67. In my MOS, military training is superior to civilian "contract" MOS training.
68. On-the-job training should be more structured (firm requirements, time limits, an OJT monitor, and graduation/completion certificate).
69. Warrant Officers should be assigned to a utilization tour directly following formal MOS training.
70. Warrant Officers should never be required to serve in commissioned officer positions.
71. The knowledge gained through civilian college-level education is more important to the Army than any degree received by the warrant officer.
72. Warrant Officers should have a training program similar to commissioned officers leading to appointment (e.g., ROTC, Military Academy, OCS).
73. The most valuable training in some MOS's is on-the-job experience.
74. Selection boards should use MOS training completion as a criterion for promotion.
75. Warrant Officers serving in commissioned officer positions should receive credit in some way for such non-MOS-related service.
76. Warrant officers who have received college-level civilian schooling in support of their primary MOS are more competitive for promotion than those who have not.
77. All other things being equal, "more" formal course training is always more career-enhancing than "less".
78. For some highly-technical MOS's, training costs are so high that the "up-or-out" promotion rule should be suspended.

The following questions concern your ADDITIONAL MOS. If you do not have an ADDITIONAL MOS, you have completed the marked response portion of the survey. Please turn to page 20. If you do have an ADDITIONAL MOS, please answer the following questions.

79. Which statement best describes your additional MOS designation?
- It was voluntarily chosen, and I am satisfied with it
 - It was voluntarily chosen, but I am dissatisfied with it
 - It was involuntarily assigned, but I am satisfied with it
 - It was involuntarily assigned, and I am dissatisfied with it
80. Which one of the following is the most useful training or education you have received which supports your additional MOS?
- Pre-appointment training
 - Initial entry/basic course
 - Warrant Officer Advanced Course
 - Resident functional training courses (military)
 - Military correspondence courses
 - On-the-job experience (no structured training)
 - Civilian education/civilian industry sources
 - Warrant Officer Senior Course
 - I have never received training in my additional MOS
81. Which one of the following do you believe is the most useful training or education which should be provided in support of your additional MOS?
- Military resident instruction
 - Military non-resident instruction
 - On-the-job experience (no structured training)
 - Civilian schooling (undergraduate)
 - Civilian schooling (graduate)
 - Specialized civilian training (non-degree)
82. Which one of the following do you believe is the least useful training or education which could be provided in support of your additional MOS?
- Military resident instruction
 - Military non-resident instruction
 - On-the-job experience (no structured training)
 - Civilian schooling (undergraduate)
 - Civilian schooling (graduate)
 - Specialized civilian training (non-degree)
83. How many assignments have you had in your additional MOS?
- None
 - One
 - Two
 - Three or more

84. What is the role of civilian education in your additional MOS?
- a. It is both available and highly important for proper professional development
 - b. It is available, but of limited importance for professional development
 - c. It is not available
85. What is the most important training presently available in your additional MOS?
- a. Resident military courses
 - b. Non-resident military courses
 - c. On-the-job training and experience
 - d. Civilian education/civilian industry training
 - e. Other
86. When did you receive formal training in your additional MOS?
- a. I have not received formal training in my additional MOS
 - b. Prior to my first assignment in that MOS
 - c. After at least one assignment in that MOS
 - d. Concurrently with my assignment in an additional MOS
87. What was the chief source of training you have already received in your additional MOS?
- a. Military resident courses
 - b. Military non-resident (correspondence) courses or OJT
 - c. On the job experience or training
 - d. Civilian schooling
 - e. I have never received training in my additional MOS

You have completed the marked response portion of the survey. Please refer to the next page.

There may be some portion of the warrant officer education and training system which you believe this survey has not adequately addressed. In addition, you may wish to expand upon or explain some of your answers, or to make other comments. Please use this sheet for that purpose.

PMOS: _____

L-1-129

CHAPTER III. ANALYSIS OF
SUBJECTIVE (UNCODED) RESPONSES

In addition of completing the questionnaire portion of the survey, respondents were afforded an additional opportunity to comment. Free, narrative comments were invited on any aspect of the education and training system which respondents felt had not been addressed adequately in the questionnaire portion or to expand answers to specific questionnaire questions. About 2,400 commissioned and 1,100 warrant officers provided such additional, subjective comments.

Analysis Procedure

The Army Research Institute (ARI) was asked to provide technical help through content analysis in interpreting the subjective comments. Subject categories were developed; tabulations made of frequency of comment in these categories; and interpretation of results reported as a supplement to the analyses contained in Chapters I and II, this Annex.

First, two research teams, each working independently, reviewed separate samples of comments for commissioned and for warrant officers. From this review, each team developed a set of content categories and response alternatives for each category. Separate team results then were discussed between teams, and an expanded and refined content classification scheme was developed.

Two random samples of 150 each were drawn from commissioned officer comments and of 100 each from warrant officer comments. Each team utilized one sample from each officer group, reviewed each comment, classified it against the content scheme, and recorded it in the appropriate category. Samples were exchanged between teams without discussion of results, and the procedure repeated, so that each comment in the samples was subject to two separate, independent analyses.

Independence between coding teams, and their consistency of interpretation, were of research concern. Thus, indices of inter-team agreement, and of intra-team agreement between first and second sample analyses, were computed to establish a degree of confidence in the manner of data interpretation and classification. While not so rigorously defined or computed as to meet the definition of "reliability coefficients," the indices revealed a high level of agreement.

Since the opportunity to comment was open-ended, relatively small frequency tabulations occurred on each dimension. It is not surprising, because there were so many possible alternatives, that most items were not mentioned with high frequency among the respondent total, even with a pool of 300 commissioned and 200 warrant officer comments to consider. Analysis of the open-ended responses was performed in two stages: descriptive analysis of item frequencies and contingency table analysis of selected items. Analyses were performed separately for commissioned and for warrant officers.

Analysis Results

The following descriptive analysis is organized into seven general categories: Satisfaction with and Commitment to the Army, Officer Personnel Management System (OPMS), Career Progression Inequities, Assignment/counseling, Training, Alternate Specialty, and Civilian Education. Within these categories, the results were:

Satisfaction with and Commitment to the Army

Within this category, 22 percent of the commissioned officer responses included a comment concerning commitment to the Army. Of this group, more than half (56%) were evaluated as "individual-oriented" rather than oriented to the Army. Among the warrant officers, only 12 percent included a comment relative to their commitment, and 70 percent of these were "individual-oriented."

Responses also were classified in terms of the level of frustration, as evidenced by the open-ended responses. Nineteen percent of the commissioned officers responded on this dimension, and 69 percent of those reflected either frustration and critical attitudes, or completely frustrated attitudes, toward the Army career system. Only 8 percent did not appear critical. Ten percent of the warrant officers were coded as frustrated.

The data were analyzed in terms of the respondent's view of the Army's organizational structure (the Army viewed as a corporation contrasted to a fraternal organization). Nineteen percent of the commissioned officers responded in this manner. Of this group, 81 percent commented on the corporate features of the Army that they disliked. Although fewer warrant officers

included such a comment (9%), the proportion expressing dislike of the corporate features was very similar. Very few commissioned officers (4.5%) commented about the quality of leadership and supervision that they had experienced, but those who did respond were overwhelming negative. Even fewer warrant officers commented on this point, and again the comments were mainly negative.

Officer Personnel Management System (OPMS)

Responses concerning OPMS were coded for comments about goals, implementation, objectives, system focus, and rewards. Seventeen percent of the commissioned officers made a comment concerning the relationship between OPMS goals and the system as it is implemented; 94 percent of them felt that the system does not support the goals. Ten percent of the commissioned officers commented about the focus of the OPMS system, and the responses are split as to whether the system is too generalized or too specialized. Sixty-two percent of the commissioned officers thought that the system is too generalized. Many respondents (15%) criticized the OPMS for rewarding "yes men" and "ticket punching."

Career Progression Inequities

Four types of career progression complaints surfaced in the responses to the open-ended question. These concerned promotions, selection for schools, OER, and the opportunity to attend graduate school. The response frequencies were:

	<u>Commissioned Officers</u>	<u>Warrant Officers</u>
Promotions	17.5%	12.1%
School Selection	11.2%	10.0%
OER	9.2%	4.7%
Graduate School Opportunity	6.5%	0.8%

Complaints in the promotion category produced significant objection to the "up or out" requirement; in the Army schools category, the opinion that selection was a "ticket punch" rather than a verified requirement; OER as inadequate vehicles for the administrative weight they attain; and graduate school as poorly correlated with defined Army needs, rather, as opportunity for post-Army career.

Assignment/Counseling

In general, both the commissioned and warrant officer comments showed a very small percentage that felt that progression opportunities were hurt because of specialties that hampered promotion. A very small percentage commented about administrative slippage in assignments. However, 19.5 percent of the commissioned and 20.5 percent of the warrant officers commented about assignment/counseling policies, and, in both groups, the comments were overwhelmingly negative. Of those who commented, 93 percent of the commissioned and 97 percent of the warrant officers said that the policies were poor.

In terms of the execution of the assignment/counseling system, 17 percent of the commissioned and 21 percent of the warrant officers were found to have comment. Again the trend is that most respondents--99 percent of the commissioned and 100 percent of the warrant officers--had a complaint about the execution of the system. Very few responses indicated a complaint about personnel in the assignment/counseling system. Six and two-tenths percent of the commissioned and 3.4 percent of the warrant officers indicated negative experience with counseling personnel. Even fewer responses indicated that poor information about their career has been received.

Training

The most obvious conclusion concerning training is that there is not enough of it. Ten and five-tenths percent of the commissioned and 21 percent of the warrant officers said that they needed more training. Some responses concerned the training that they had received in military schools. Eleven percent of the commissioned and 6 percent of the warrant officers made comments relative to the amount of specialization apparent in the training that they had undergone. Sixty-nine percent of the officers thought that the training should be more specialized, while the percentage for the warrant officers was even higher (91%).

Of those commissioned and warrant officers who commented about on-the-job training (8% of the commissioned and 7% of the warrant officers), most wanted more on-the-job training (OJT). Although relatively few responses included a comparison between Army training and OJT, those that made such comparisons felt that OJT was of more utility.

A number of responses indicated that they had not used their training in their job. Eight and seven-tenths percent of the commissioned and 7.4 percent of the warrant officers made this comment. Although most responses were not directed toward the timeliness of Army training, 7.0 percent of the commissioned and 6.6 percent of the warrant officers felt that training was offered to them either too early or too late in their career. A common suggestion from the warrant officers was for a specific orientation program at the time of appointment, and more frequent military school training.

Civilian Education

Eighteen percent of both commissioned and warrant officers commented on the value of civilian education. Nearly 64 percent of the commissioned and 83 percent of the warrant officers considered civilian education valuable. However, while accepting the value of the education, these respondents felt the emphasis placed on civilian education was overstressed for promotion purposes. Comments from 12 percent of commissioned and a similar percentage from warrant officers revealed a difference of opinion. For example, of the commissioned officers responding, 68 percent felt civilian education was overemphasized, while only 38 percent of the warrant officers thought civilian education was overemphasized. Many of the warrant officers who felt civilian education was underemphasized felt the Army should offer encouragement to complete a bachelor degree. Some commissioned officers specified that the issue was not whether there should be more education, but how to find time in their long and exhausting work schedule that could be spared for either resident or nonresident educational purposes. Several recommended strongly that a regular time be set aside, perhaps on a monthly basis, for professional growth. During this time, officers would have the opportunity to discuss their mutual problems with each other and to learn how to deal with them better.

Specific Warrant Officer Reactions

A number of comments specific to warrant officers were coded only for them. Nine percent mentioned that they thought that their assignment is inconsistent with their rank. Five percent felt that a secondary MOS assignment degrades their primary skill. Some (8.2%) complained that they are not always viewed as a "real" officer, and 6.8 percent said that there is too little distinction between the warrant officer ranks.

Contingency Table Analysis

In order to assess relationships between some of the comments, contingency tables were constructed to investigate whether some remarks were related to others. It was hypothesized that remarks in different specific areas were made by the same individuals. For instance, it was discovered that most (87.5%) of the "individual-oriented" officers also responded about the "bad-corporate" features of the Army. Although most of the complaints about promotions were made by the "individual-oriented", the percentage is not that high (62%), while school selection complaints showed a slightly lower percentage (61%). But in respect to complaints about the opportunity to attend graduate school, 83 percent of those complaints come from "individual-oriented," rather than from Army-oriented respondents.

The same type of analysis was done comparing those who thought the assignment/counseling system policies are good with those who thought they are bad. Looking at those who thought that OPMS objectives should be changed, contingency table analyses revealed that 98 percent of those who thought OPMS objectives should be changed also thought that the assignment/counseling policies were poor. Such a relationship is not presented as a "surprise" finding, but confirmatory of the criticism of OPMS. This same group also represented 93 percent of those who complained about the timeliness of Army school selection. Those who complained about the timeliness of Army schooling also tended to think that the corporate features of the Army are bad. And those who thought that Army schooling was not timely also said that they did not use their training in their job.

Contingency table analysis revealed that those who said that the assignment/counseling policies were poor also said that implementation of OPMS is not supportive of its goals.

Conclusions

Through the Officer Education and Training Survey, a representative sample of commissioned officers and warrant officers were given an opportunity to express their feelings and concerns about some key issues in their military career. Thirty-one percent of the officers commented about those topics

on which they felt strongly. The majority of the comments could be classified as critical of some aspect of the Army system of education and training, but less than twenty percent expressed overall dissatisfaction with the Army.

Interpretation of these data, together with the conclusions, should be tempered by the knowledge that what was analyzed was an open-ended question that solicited (1) an expansion or explanation of previous answers, or (2) comments about things not asked in the questionnaire. Many were one of a kind and, therefore, meaningless for tabulation purposes. Additionally, there is no way to know the feelings of the 59 percent who offered no comments on the questionnaire they returned or of the group (almost half) who did not return the questionnaire they received.

The questionnaire itself generated comments from 18 percent of the commissioned officers and nearly that percentage of the warrant officers. Although 26 percent of the officer respondents stipulated that the questionnaire was useful, it should not surprise anyone that most of the other comments were negative. This type of question, at the end of the questionnaire, probing a sensitive area of social experience, is bound to draw negative responses. Therefore, one generalization which may be made from this analysis is that most areas of responses--OPMS, training, education, etc.--were mentioned on about 40 percent of those who responded with comments and represented less 20 percent of the questionnaires returned.

Of the seven broad categories of career concerns, the areas that are mentioned most frequently are OPMS and the assignment/counseling system. Many warrant officers said that more training is desirable. Civilian education is thought to be valuable, but the commissioned officers felt that civilian education should not have quite as much emphasis placed on it, and the warrant officers felt they need more than the system allows. A very small proportion (3% commissioned, 1.6% warrant officers) mentioned that they planned to leave the military.

Response Highlights

To a great extent, comments of survey respondents were interested, constructive, and thoughtful. Most suggested a significant appreciation on the part of the contributor for the problems faced by the Army today. Some were hastily written; some were typed. The majority covered over half a page; many, an

entire page; some, more than one page. Many were signed.

A few suspected that their comments would never be read; but many wrote that they were grateful to be asked for their thoughts on a subject so important to them. Some suggested that similar surveys should be taken occasionally, so that individual officers could participate in addressing vital Army issues. Some concluded their comments with the words, "good luck."

What follows certainly is not reliable in the technical sense. Very likely, it is somewhat biased. Nevertheless, to the extent possible, highlights recorded in this section are an attempt to convey an impression of what respondents wrote on the last pages of their survey booklets.

Commissioned (OPMS) Officers

Senior Officers as Trainers of Young Officers

"The survey did not address the most important aspect of officer education and training: the responsibility of senior officers to train younger officers. I guess OJT encompasses this aspect, but feel this is one area we, the Army, fail to emphasize. An officer has no greater responsibility, or duty, than to train and educate his young officers."

"A major education factor not addressed separately is that training conducted by the commander. There is to me a singular lack of training of subordinates by superiors. The old 'train-your-subordinates-to-replace-you' has disappeared."

"The current system of highly mission oriented tasks leaves little room for individuals to either make or allow mistakes. OJT is most strongly reinforced when a point is learned through mistakes. Sr cdrs (O5 and above) must allow company grade officers the leeway to make mistakes and recover from them w/o the 'report card' hung over their heads."

Training and Experience for New Lieutenants

"I am not sure how the system can be changed, but I think it is a waste of money to send an officer to a course (i.e., Basic Course) and then send [him/her] to fill a branch immateria. slot or that of another branch. In my case, I came to a training officer slot from [the] Basic course. After 3-4 years on post, I will have forgotten most of what I learned."

That to me is a waste of money, though I don't know another way to fill this slot."

"Junior officer assignment in non-specialty fields should not be an option given to brigade commanders or lower. Involuntary assignment to SD positions without proper prior training, or to fill positions designated as civilian hire, can be disastrous for the officer, organization, and the Army...."

"I really enjoy the Artillery but my current assignment has taken me away from the part of the Army I like. I have serious doubts if I will stay in the Army if I spend so much time away from 'tubes' and in other assignments such as my current assignment."

"The basic course is a necessary introduction for most officers, but most initial experience in a specialty is gained through OJT...."

"Training for LT's should be more severe, challenging, and longer in duration. If necessary, force them to learn prior to releasing them to units."

"A 2LT should never be assigned outside of his primary specialty for his first assignment. I will become a Finance 1LT in June w/o ever having set foot in a Finance Office for work...."

What Some Said About OPMS

"[Junior] officers should be given more opportunity to influence their specialties [designation]...."

"...I don't believe that the majority of the officer corps with over 5 years of service believes the current OPMS system is working either for the Army or the individual."

"If OPMS will ever function, it should be adhered to in education, training, and assignments."

"OPMS is alive and well in the hearts and minds of DA planners, but is somewhat nonexistent in the field!"

"Give OPMS a chance and don't screw up the system by being impatient. No system will get us all to school or promoted...."

"My great fear of OPMS is becoming a number rather than a name...."

On the Subject of Specialties

"If the Army is truly committed to specialization of the officer corps, as I believe it should be, specialty qualification standards, professional examinations, and use of specialty qualification as criteria for promotion should be instituted. Consideration should also be given to the elimination of the branch management concept in light of OPMS."

"One of the largest problems that the Army faces with its training programs overall is that once the training is given, opportunity is rarely provided to implement that training. With greater emphasis on specialty training, greater emphasis should be placed on utilizing officers within their specialty."

"I somehow feel that the Army is operating under a system of crisis management with little or no time to 'adapt' to the current job. Stability in specialties is a problem. I am working in an austere TDA and putting in 10-12 hours a day and weekends and still learning. My time is spent reacting during the normal duty day with little or no time available for research...."

"The obvious emphasis on career specialties and subsequent qualification in those specialties is misplaced....Two tracks in the Army should be established, command and staff. They require different skills and personalities and we must realize that an officer probably won't be able to do both well...."

"The traditional branch orientation of the Army has a deleterious effect on officers who possess highly developed abilities and interests in non-traditional areas. Although some 'career-branch' is necessary, it need not be one of the traditional branches. Assuming political objections could be overcome the Army should revive two branches as 'carriers' for certain OPMS specialties (active Army):

"a. Army Air Corps for OPMS 15 and 71

"b. Army Staff Specialists Corps for OPMS 47, 48, 53, 28, and 49. (These specialties cut across, or are not related to, existing branches, although OPMS 48 may best be assigned to MI.)

"The advantage of such a revival/redistribution would be that the specialties indicated could be assigned as 'primary' without adversely affecting the advancement/development opportunities of officers who were truly qualified and wished to pursue such specialties."

"Main problem with the system appears to be in the lack of an adequate definition of the skills and knowledges required of a given specialty. Added to this, the personnel management system does not control assignments of the specialties. This is more the fault of local commanders who place people in the wrong billet. Job and position titles must be changed to reflect actual duties of incumbents and the skills and knowledges of the position tied directly to a given specialty."

"It is evident that the Army's promotion system does not recognize the importance of technical qualification in the more specialized fields, such as ADP, nor does it understand the importance of repetitive assignments in such fields as ADP, where it is difficult to impossible to keep up with state-of-the-art advancement if one is out of the field for two or three years. Consequently, those who have chosen to continue repetitive assignments in the field are at a distinct disadvantage at promotion time."

"If an officer has a highly technical specialty or one in which the state-of-the-art rapidly changes; i.e., ADP, then consideration should be given (with the officer's concurrence) to assigning him primarily in that specialty so he will not lose 'touch' with his field."

"Many are not aware of the opportunity to drop the entry specialty and pick up an alternate as primary. In particular, those O5's who are not selected for command in their branch don't have much (any?) of a chance for promotion so they might as well pick another specialty...."

"I believe it would be sound management to shift officer specialties after a certain point."

"Consideration should be given to dropping an alternate specialty. I am a professional military communicator. I do my job well and I love it. This is so because I served in troop units early in my career and did what I liked best."

"It may be important to assign an alternate specialty early in a career (4th year) rather than 8th year. If a person is aware of his alternate, he can more or less begin to prepare himself to perform in either specialty...."

Specialty Qualification

"Evaluation of officers for promotion, schooling and any other purpose will never be adequate until we adopt an officers' SQT approach."

"...if we could devise a good, thorough 'proficiency test' oriented in specialty related skills, the Army would benefit tremendously. The requirement could be for a qualifying exam every 2-4 years in primary/alt specialties much as a pilot is required to be tested periodically to maintain flying status."

"OERs should be eliminated in favor of an SQT specialty qualification testing [scheme]...."

"The concept of an SQT for officers is valid if the on-going training program necessary for such action is implemented in advance and closely monitored."

"An officer SQT would be objective. OER's by their nature are subjective. A combination of both would give a more accurate and fair view of the officers."

"If E & T [education and training] were tied more closely to advancement by some type of professional qualification scheme, its value could be more accurately determined. This would take some of the pressure off the OER as the primary career determinant."

"The concepts of officer skill level testing and completion of civil schooling or correspondence courses seem to neglect an important facet of today's Army. The officer assigned in combat specialty (i.e., 11) does not have the time to complete civilian courses or correspondence courses. Additionally, he does not have the time for study for comprehensive skill exam."

Command and Commanders

"Advance course should come before company command...."

"...I am concerned that career courses train former company commanders to be what they were--likewise CGSC has stepped backward in training former bn/bde staff officers to be what they were....[underline added]"

"I would like to see the Army move in the direction of having specific officers for commanders. Many officers do not want the responsibility of having a command and others just are not prepared to be [commanders]. Those of us that want to be [commanders] and can be effective leaders should be given the opportunity to serve in that capacity."

"Officers with the ability to lead troops can be identified early and should then be placed in command positions."

"I strongly agree with the idea of having certain officers designated and handled for command slots during their career. In the technically oriented branches, some highly educated officers simply do not have the personality required for command...."

"I have not been impressed by commanders selected by the current command selection process. I believe successful commanders should spend most of their careers commanding."

"Command designator should be attached after completion of successful 'company' level command, updated after 2d company cmd, or bn cmd."

"The 'mania' for command should be stopped immediately. A number of officers are not suited for, nor do they desire, command. To require these officers to command to progress is both a trial to the officer and a detriment to unit readiness. Having a group of officers with demonstrated command ability would increase the quality of commanders."

"Some folks are suited for command; let them be commanders repeatedly."

"Continuity would solve many of current Army ills. Problems in the units and staff organizations stem from lack of continuity. Put someone at a post for 5 years each assignment. Allow him to hold no more than 2 jobs while there. Exceptions cleared by DA. Establish command 'track' and staff 'track' for those so inclined and capable. Need close quality control over commander designees."

Mix of Education and Training

"There must be a proper blend of training and experience to develop an effective and productive officer. It has been my observation that some officers who have weighted their careers toward education and away from experience do poorly when confronted with an assignment with troops. The formative

years at company grade should be weighted toward experience. Expansion of the educational processes at major and LTC levels would accomplish more toward developing an officer who can think on a broad scale yet appreciate the intricacies of the military."

"An ill-trained officer with education is less effective than a well-trained, uneducated officer. The soldier is apt to suffer less from the latter."

Civilian Education

"I do not believe that the survey has adequately addressed the importance of civilian education, both at undergraduate and graduate levels, to the professional Army officer. The number of junior officers in my battalion who, though they hold bachelor degrees, are not able to communicate verbally or orally is startling. A more strict control of undergraduate courses taken by potential officers, both from ROTC and USMA, could be a solution as well as a comprehensive test for officer candidates already holding a degree prior to commissioning through OCS...."

"Advanced civilian education is needed in only a few Army specialties. On the other hand, the opportunity to attend graduate school keeps many quality officers in the service."

"Advanced civil schooling is too restrictive in some specialties. The Army will profit greatly regardless of whether or not an officer is educated for a skill or for general development. Restrict this schooling to the man who will remain on active duty to the 25th year mark. Have seen too many take it and run!!"

"I believe too much emphasis is being placed on graduate level education by OPMS and not enough on military training and on-the-job experience...."

Some Proposals

"With the elimination of DA [Form] 66, DA disregarded an extremely important gage of professional development and level of expertise; namely, a listing of an individual's journal level publication track record. I strongly urge DA to reinstitute the yard stick of formal publications as a direct measurement of one's academic qualifications. Journals accept articles for publication...on their academic merit solely."

"Every officer should speak, understand, read, and write a minimum of one foreign language--resident military instruction--and be frequently utilized in either his primary or alternate specialty in that country during his tours overseas. Teach him before overseas shipment, refresh before subsequent assignments...."

"[The survey] did not address language training; I feel that's very important. We almost always wait for a war to start, then we send officers to language school....language training should be a requirement...."

"As a company commander, I see much wealth in the USMA policy of sending prospective officers into the field for the experience necessary to deal with the problems they will encounter on their first assignments. Such knowledge prepares them to be receptive to the formalized training they will receive in IOBC. I recommend that such a policy be expanded to outstanding ROTC cadets, if feasible under monetary restraints."

"The officer Educational System in the past provided non-combat arms officers, Regular Army (i.e., MP) to serve a two-year tour of duty with the combat arms. This practice has since been discontinued. I would recommend a reevaluation of this program...."

Some Observations

"Over the past several years...I have observed in the officer corps an unhealthy trend to place personal goals--promotion, school, other lists--above institutional goals...."

"Are you people in DA blind? There are hundreds of junior officers totally dissatisfied with the Army...."

"Current promotion/assignment criteria encourage ticket punching and self-serving career manipulation at the expense of the service. The MISSION comes first--remember?...Re this survey: May your labors bear fruit! Too late for me, but not for many others."

"My contact with field grade officers has left me with the belief that they are only interested in their career progression and not their or anyone else's professional development."

"The current climate places far more demands on those officers assigned with troops in combat maneuver units than in any other place in the Army. Young officers I have known often leave the Army or transfer to CSS [combat service support] branches because to quote one: 'I want to live with my family like a human being'..."

"...I now have 35 years service and have been consistently dissatisfied with Army personnel actions and their communication gap for the entire period."

"I was a 30 year career officer until I realized within the past 18 months that I have no job security, no reliable health insurance (especially for dependents), no real discount in the commissary or PX, and no protection from ill-informed Congressional crusaders....I like the Army. I enjoy my work. I am satisfied with my specialty areas. In light of current losses suffered by the military, however, I feel compelled to remain alert to civilian employment opportunities....if I work this hard as a civilian, I know my children can see a doctor."

"You [the survey] have used 20 or more years to define a 'career'--this period represents less than half of the average workers' (blue or white collar) working life. Need to address the role of the Army as a temporary or 'stepping stone' career. It is not, and cannot be, w/personnel needs as they are, a life-time career. Impact of preparing for a 2d career is significant."

"I do highly appreciate the opportunity to complete this survey. If such a means were used to obtain comments prior to implementation of hard issues such as 'up or out,' perhaps we could stop the downward trend in the Army on morale, trust, confidence, and faith...."

"I feel all services waste manpower and money by having an up or out promotion system..."

"The Army must eliminate the up or out policy...."

"Publish the pertinent data from this survey in the Army Times or some other widely disseminated vehicle in order that the results can get out to the field."

"I trust your group will publish the results of the study in Soldiers Magazine or similar mass distribution periodicals."

Warrant Officers

Early Training

"I strongly believe that each newly appointed warrant should be required to attend the basic course regardless of their personal preferences."

"Every WO should be sent to a branch basic course as soon as possible after appointment."

"All warrants should go to 'charm school.' I had many unanswered questions and this could be a great help."

"This [521A] is one of the few MOS's with no structured training of enlisted counterpart 'feeder' MOS. I feel a general utilities training course should be set up so that an officer has a better understanding of the basics of plumbing, carpentry, masonry, electrical work, heating, ventilation, air conditioning, and fire fighting."

"Too often a young WO enters the 761 field via direct appointment, and [not] until near eligibility for retirement is school offered, when he needs it least! A resident course should be tailored for WO's at the 6-8 year mark for supply and services personnel...."

What They Need to do the Job

"In spite of regulations governing the use of warrant officers, many are assigned completely unrelated 'extra duties' which are time consuming and unrelated to their primary job. In addition they are expected to become managers and administrators in their primary MOS, a task for which most are not prepared...."

"Warrant officers in my PMOS [971A] generally lack managerial capabilities...."

"...I believe certain fields require training for such areas as staff responsibilities and relationships, effective writing, communications, procedures for completing staff studies, operations, and administrative orders, and SOP's, and the myriad other daily tasks inherent in a staff position [for warrants]."

"DA should establish in each service branch an additional MOS in which WO's can be assigned in order to serve on bn and higher staffs where they would function as a staff officer; thus, not only being able to provide to the staff and the commander the expertise in his MOS, he can improve the WO visibility within his unit and make valuable contributions to the service."

"Each MOS proponent should establish a warrant officer institute--MOS oriented--on the service schools home ground. Assignment managers would control input. Commanders would not be permitted to 'hold back' potentially good people under the guise of mission requirements."

"I would like to see an annual MOS related symposium held at a CONUS central location for supply and maintenance warrants to exchange ideas on various aspects of their fields. This is the singular area where the WOSC really paid off bigSupply and Main are suggested because they seem to be the focal point of readiness related problems."

College Courses and Degrees

"I consider on-the-job experience preceded by a formal military resident course the key to MOS proficiency. I am appalled by the fact that DA has chosen to impose upon the WO corps the same idiotic emphasis on civil schooling as the commissioned branches."

"I believe that regardless of DA educational standards and programs, the key to a qualified warrant officer corps lies with the individual warrant officer."

"It seems to me that more emphasis is placed on the college 'degree' earned than the courses taken and how they may contribute to the officer/WO's proficiency and professionalism."

"I agree with HQDA stated standard of civilian education level for warrant officers (Associate Degree); however, I get the impression that more emphasis is being placed upon the attainment of the degree than on the MOS-related knowledge/skills which is/are obtained during the schooling process."

"At a very minimum, I believe that WO education should be expanded to encourage the bachelor degree...."

"Education builds the foundations for awareness, insight, and the desire to understand and seek knowledge. This alone would contribute to the professional stature of the w/officer. To limit the w/officer to only his/her specific area of technical expertise is to deny him/her a greater understanding and awareness of how all things relate to life and his/her respective areas of expertise."

Utilization

"When you serve in a staff position as I am now, approximately 10% of your time may be devoted to your specialty while the rest may be in peripheral areas...."

"I feel that WO overall are being utilized as if they were commissioned officers; performing the same duties and filling the same positions as LT and CPT...consequently they are being forced to neglect their primary job in order to accomplish...additional duties...."

Military Occupational Specialties

"I have a good record and will continue to work where the Army orders me to do so. However, I wish that I could have been the one to choose my PMOS. Thank you."

"Additional 'skill identifiers' need to be developed for at least some WO MOS's. An example is the very broad field of 286A."

"WO's should not have an additional MOS."

Career Management

"Personnel management that is effective for warrant officers is nonexistent. The assignment officers in major commands and at DA level simply refuse to force senior warrant officers where they belong: in the company level, balanced with junior warrants."

"Because of assignment and tour limitations many WOs never have the opportunity to serve anywhere except company level. This severely limits their experience!"

"There is no career development or incentives to keep the P.A. [physician's assistant] on active duty. After 2 years of training, there is a 4 year obligation without further training...."

DA Pamphlet 600-11

"The first time I heard of DA Pam 600-11 was today while answering this survey."

"DA Pam 600-11 is an outstanding pamphlet; unfortunately, the only personnel who read it are warrants. Senior officers, majors and above, need to be made aware of its contents."

"DA Pam 600-11 is not being followed for my MOS [214E]. This is especially true concerning assignments for personnel who are graduates of the Advanced Course or the Senior Course. There have to be certain job positions designated for priority to these graduates."

"I had not heard about DA Pam 600-11 until now! Thanks."

Some Views from Aviators

"When I joined the Army, the Army was advertising warrant officer flight tng program for high school grads. Now that I've become a WO, I am expected to have an Associate Degree...."

"The aviation field is so widely diversified and, in many ways, the field is undefined. All forms of education are necessary, but, due to the diversification of requirements for not only the pilot, but the specific situation (e.g., mission, geographical location, etc.), by far most important in education is on-the-job training...."

"Aviation warrant officer's is a primary MOS in a totally different field, but he is expected to be qualified (in some cases in more than one additional MOS) but not adequately trained."

"Once an aviator is given an advanced aircraft rating, give him a chance to work with that particular aircraft for at least three years, but hopefully for the remainder of his career."

"Give the aviation warrant the money they deserve as opposed to their [commissioned] officer contemporaries."

Other Observations

"...WO slots should be indicated in the MTOE's. No junior WO should be in a position to evaluate the performance of a senior WO at a lower echelon."

"Promotions to next higher grade should be based on the numbers needed for the next higher grade. All warrants should not be dumped in a common pot and then chosen as compared to other warrants. The warrant should be evaluated in comparison to his peers; i.e., those in his MOS...."

"Recommend that junior company grade officers to include all lieutenants not be required to rate a WO. This individual is too inexperienced and immature to understand the importance of ratings and what they mean to the individual. In most cases they are not even qualified to write about the performance and potential of an experienced warrant officer."

"Most warrant officers' superiors (i.e., commissioned officers) do not understand a warrant's job and want to make a warrant a 3d lieutenant...."

"Warrant officers are by definition an elite group and as such should be judged as such, evaluated as such, and respected as such, rather than compared with commissioned officers...."

"At the grass roots level, I feel that the warrant officer has lost a great deal of prestige over the years...."

"If a warrant is in a commissioned officer job, give him credit for it."

"The "up or out" promotion rule should be suspended for all warrant officers. Warrant officer positions are for highly skilled technical positions too specialized for commissioned officers...."

"I would be interested in knowing the results of this survey including the total number of participants."

Appendix 2

Officer Education and Training Survey

"Houston Team" Input

As a complement to the final survey report provided in Appendix 1, Appendix 2 provides the contribution of the "Houston team" to the survey effort in its analysis phase. The "Houston team" was comprised of David Gottlieb, PhD, Dean, College of Arts and Sciences; Richard C. Stephens, PhD, Institute for Urban Studies; and David W. Brady, PhD, College of Arts and Sciences; University of Houston, Houston, Texas. The services of these men were obtained early in the survey effort to provide the RETO team technical assistance in survey design, implementation and analysis.

Part I of Appendix 2 addresses the commissioned officer (OPMS) version of the survey; Part II, the warrant officer version.

Although the following input from the "Houston team" was useful to the overall RETO group in the latter's early, preliminary study efforts, weaknesses of the Houston input should be highlighted for the reader as a caution against considering it as definitive in isolation from the final report (Appendix 1).

- First, due to the critically short deadline imposed on the "Houston team" for their input, the pages that follow contain statistical errors. These have been annotated where they occur.

- Second, the "Houston team's" input, not surprisingly, suffers somewhat from a lack of understanding of military terminology. For example, education, as a learning category, occasionally is considered synonymous with any instruction received from a civilian institution; while all military instruction is considered training.

● Third, there is some scientific dispute relative to the statistical reliability, as a matter both of technique and of outcome, of Part I, Chapter III, Factor Analysis.

With the preceding cautions, the pages that follow are provided as a part of the RETO historical "audit trail" in assessing officer attitudes on the subject of education and training.

PART I. COMMISSIONED OFFICERS (OPMS)

INTRODUCTION

The purposes of this study are to investigate how commissioned officers of the United States Army perceive and assess their education and training.

Further, this study seeks to determine those areas of education, training, and promotion which respondents feel are deserving of further review and perhaps modification.

The data being discussed here are based upon responses to a paper and pencil survey received from 7,787 commissioned officers.

The officer ranks of 2nd Lieutenant, 1st Lieutenant, Captain, Major, Lieutenant Colonel, and Colonel were included in this survey.

Chapter I of this study will represent a profile of the respondents.

Chapter II will be an overview of how respondents perceive and assess their education and training.

Chapter III will seek to ~~provide answers to three questions:~~ *TEST THREE HYPOTHESES:*

- EDUCATION AND TRAINING FOR LIEUTENANTS AND CAPTAINS IS ADEQUATE.*
- A: ~~Is the education and training of officers at the Lieutenant and Captain levels adequate?~~
- EDUCATION AND TRAINING FOR MAJORS IS ADEQUATE.*
- B: ~~Is the education and training of officers at the rank of Major adequate?~~
- EDUCATION AND TRAINING FOR LIEUTENANT COLONELS AND COLONELS IS ADEQUATE.*
- C: ~~Is the education and training of Lieutenant Colonels, and Colonels adequate?~~

The Appendix of this report will include a technical discussion outlining sampling and statistical methodologies utilized in this research.

Finally, the reader must recognize that the data being discussed in this report are based solely upon the recall, perceptions and experiences of respondents. *COLUMNS OF PERCENTAGES MAY NOT TOTAL 100 PERCENT BECAUSE OF ROUNDING.*

CHAPTER I: THE OFFICER RESPONDENTS

A total of 7,787 commissioned officers responded to this survey.

The officer rank of respondents is as follows:

2nd Lieutenant	7.8% 7.7
1st Lieutenant	11.1%
Captain	33.8%
Major	22.8%
Lt. Colonel	17.2%
Colonel	7.3%
Total	100.0%

When compared with the current total officer corps the sample represents ^{11.8}~~10.9~~ percent of the officer universe (7,787 of ^{66,147}~~84,991~~).

Comparisons by rank show the following differences:

<u>Rank</u>	<u>Sample</u>	<u>Universe</u>	<u>Sample less Universe</u> <u>Difference</u>
1st and 2nd Lieutenants	10.9 18.7	28.3 26.6	-9.5 -7.9
Captains	33.8	33.7	+0.1
Majors	22.8	18.6	+4.2
Lt. Colonels	17.2	13.8	+3.4
Colonels	7.3	5.6 5.3	+1.7 +2.0

The distribution noted above shows that our sample is under-represented at the rank of lieutenant; near perfect for Captains; somewhat over represented for the three highest ranks. In terms of representativeness of the sample a note of caution is in order. This sample of respondents is ~~significantly~~ over represented by officers in the Regular Army as opposed to the U.S. Army Reserve.

The actual distribution in the universe of commissioned officers is estimated to be:

Regular Army	53.5% 58.5%
U.S. Army Reserve	45.8% 40.9%
National Guard	.6%
Total	100.0%

For this sample the distribution is as follows:

Regular Army	65.8%
U.S. Army Reserve	33.6%
National Guard	.6%
Total	100.0%

The discrepancies represent a ~~12.3~~^{7.3} percent overdraw of Regular Army officers and a ~~12.7~~^{7.3} percent underrepresentation of U.S. Army Reserve officers.

At the time of participation in this survey the majority (78.5 percent) of the respondents were stationed in the Continental United States; 12.3 percent in the European Area including the Middle East; 4.7 percent were stationed in Hawaii, Alaska, Puerto Rico, or Panama (Canal Zone); 4.3 percent in the Pacific Area including Korea; and the remainder (0.2 percent) in other locations.

Basic branch distributions were as follows:

<u>Branch</u>	<u>Percent</u>
Infantry	21
Field Artillery	13
Armor	10
Signal	8
Military Intelligence	7
Engineer	7

<u>Branch</u>	<u>Percent</u>
Adjutant General	6
Ordinance	6
Transportation	6
Air Defense Artillery	5
Quartermaster	4
Military Police	4
Finance	2
Chemical	<u>+2</u>
Total	100

The major command (MACOM) assignment of respondents show almost a third (32.6 percent) with FORSCOM; more than a fourth (26.5 percent) with TRADOC; 11 percent with USAREVR; some ~~4.5~~^{4.4} percent with the Military District of Washington; 3.5 percent with USFK/Eighth Army (Korea); and the remainder (22 percent) in a mixture of assignments including U.S. Army, Japan, Support Command, Hawaii, Health Services Command and others.

The largest single group of respondents are assigned to combat units (21 percent); followed by Training (including service school staff and faculty) 19 percent; Corps of higher level staff (includes MACOM, DA, etc.) 16 percent; Recruiting, ROTC, Readiness Regions 9 percent; Combat Service Support 9 percent; Combat Support 8 percent; Garrison/Installation staff 8 percent; with some 12 percent assigned to other units than those specified. As to component, the majority of respondents (66 percent) are Regular Army with a third U.S. Army Reserve and the remainder (~~17~~¹ percent) National Guard. More than half (~~57~~⁵⁸ percent) received their commission through ROTC; followed 22 percent OCS; ~~15~~¹⁴ percent USMA; ~~and 6 percent~~ direct appointments; ~~AND 1 PERCENT BY OTHER MEANS.~~ As would be expected the vast majority of officers are males (~~96~~⁹⁷ percent) eight out of ten are married while ~~two out of ten~~^{14 PERCENT} are single (including divorced, separated, widowed, or never married). More females (2.1 percent) are single with 1.2 percent being married.

The racial/ethnic distribution of officer respondents is:

White	92%
Black	5%
Mexican-American, Puerto Rican, Hispanic	1%
Asian-American	1%
Other	1%

Two items of information provide data as to the educational background of the respondents.

The distribution of responses for highest level of military education achieved shows:

Basic Course	28%
Advanced Course	39%
CGSC	27%
Senior Service College	6%

The formal civilian educational accomplishments of respondents shows that less than four percent have failed to complete college. About one percent have earned the doctorate degree; 37 percent hold a masters degree, and 58 percent the baccalaureate degree.

As would be anticipated in both areas of education the higher the rank the higher the proportion of respondents with advanced degrees and advanced military education.

The greatest proportion of advanced degree holders (Ph.D. and M.A.) are found in the Chemical Branch with the Armor Branch showing the lowest proportion of officers with advanced degrees.

Branches with the highest proportion of officers having achieved Military Education Levels 3 and 4 (CGSC and/or SSC) are:

Air Defense Artillery	39.4%
Chemical	39.1%

Those with the lowest levels of Military Education Levels achievement are:

Finance	14.9%
Adjutant General	20.9%

Only 7 percent of the respondents report that they do not plan to make the Army a career. Thirteen percent have made no decision and 28 percent while indicating that they do plan on making the Army a career have not as yet determined when they will retire. Almost a fourth (24 percent) state that they will or will be required to retire after completing 20 years of service. Twelve percent plan on retiring between the 20th and 26th year; and the remainder 16 percent plan to retire after 26 years of service.

In response to the question: "Given normal career progression; what is the highest rank you expect to attain?" We find the following:

Major	10%
Lt. Colonel	34%
Colonel	40% 41%
General Officer	16%

Less than one percent (0.3 percent) of all respondents have been selected for promotion from the secondary zone on three or more occasions. Two percent have been selected twice, and 7 percent at least once. Sixty-four percent have never been selected, and the remainder (27 percent) have never been considered for promotion by a centralized selection board.

Slightly more than half (54 percent) of the officers have commanded at the Company/Battery/Troop or equivalent level. Thirteen percent at the Battalion/Squadron or equivalent level; and three percent at the Brigade/Support Command or equivalent level. Eight percent at the Detachment level and 22 percent have held no command responsibility. With regard to command level expectations we find that:

- 40% expect to command at the Battalion level.
- 23% at the Brigade level.
- 18% at the Company level.
- 8% at the Division or above level.
- 6% do not desire a command.
- 5% have specialties which have no command opportunities.

CHAPTER II: PERCEPTIONS OF THE MILITARY TRAINING AND EDUCATION
EXPERIENCE--SOME GENERAL OBSERVATIONS

While, as indicated earlier, the vast majority of respondents have achieved the baccalaureate degree only a little more than half (55 percent) believe that to be an effective officer, the minimum civilian educational level required at the time of commissioning should be the baccalaureate degree. Eleven percent feel that "civilian education has nothing to do with being an effective officer." The remainder take the position that anything between a high school diploma and two years of college would be appropriate.

Responses to the question noted above as well as others clearly suggests that officers are not of a common mind as to the value of formal education as opposed to training.

For example, in response to the question:

"If education is defined as 'preparation for life (or the unknown)' while training is defined as 'preparation for a specific task (or the known)' what mix of education and training do you believe is required by an effective Army officer?"

We obtain the following distribution of responses:

Much more education than training	5%
More education than training	18%
About the same amount of each	39%
More training than education	31%
Much more training than education	7% 6%

We see then that no single alternative generates a majority response. ~~Twenty-three percent~~ About a fourth place, the emphasis upon education and almost ~~40~~³⁷ percent select the training alternative.

Further information as to the education versus training dichotomy is provided by the following data which show variations in response by rank designations. In this case the question asked is:

"At what rank do you believe education becomes more important to duty performance than specific training?"

- 16% say that education is never more important than training.
- 8% believe education is always more important than training.
- 4% feel that education becomes more important at the 2nd Lieutenant rank.
- 1% at the 1st Lieutenant rank.
- 15% at the Captain rank.
- 36% at the Major rank.
- 13% at the Lieutenant Colonel rank.
- 6% ~~7%~~ at the Colonel rank.

No doubt a variety of factors including branch, specialty, and promotion status play some part in explaining the observed variations.

Certainly the rank of the respondent helps to account for some of the differences in response. ~~Major~~, more so than ~~1st Lieutenants~~, take the position that education is never more important than training. ~~Major~~ Conversely lieutenants are ^{ALMOST} twice as likely as other officers to take the position that education is always more important than training.

The lower the rank the greater the belief that education becomes more important to duty performances at the rank of Captain. For the rank of Major the flow is in the opposite direction with Majors and above selecting education while Captains and below endorsing training. A similar pattern is found when the specified rank is Lieutenant Colonel. Less than 7 percent of the 2nd Lieutenants believe that education becomes

more salient at the Lieutenant Colonel level as compared to ¹⁶~~22~~ percent of the Lieutenant Colonels. Little difference is found between the various officer ranks when the specified rank is that of Colonel.

In general it would appear that officers of the lower commissioned ranks are more likely to stress education over training (29 percent of the 2nd Lieutenants versus 21 percent of the Colonels) while those officers of the higher ranks emphasize training.

<u>Rank</u>	<u>Percent Agreeing More Training Than Education</u>
2nd Lieutenant	27%
1st Lieutenant	28%
Captain	38% 39%
Major	41%
Lt. Colonel	40%
Colonel	42%

It should also be noted that 1st and 2nd Lieutenants are more likely than other ranks to take the middle ground position, i.e. that there should be the same amount of each.

The analysis presented to this point should not be interpreted as suggesting that officers in some cavalier manner are writing of the importance of formal education. On the contrary, responses to other questions (less than one percent of all respondents believe that graduate level education is "not worth much of anything") as well as educational credentials earned would confirm a strong commitment to civilian formal education. Rather it is a question of "education for what"? A question not unique to the military but one that has and is continuously being debated in our society.

What is clear is that many officers see civilian education, particularly at the graduate level, as being important to the general broadening of one's background (45 percent); allowing one to be competitive when being considered by promotion and selection boards (17 percent); and for preparing for a utilization tour requiring specific civilian education (15 percent).

Formal civilian education is viewed as being less important for gaining knowledge required in a primary specialty (7 percent); gaining knowledge required in an alternate specialty (10 percent); or even in preparing for a civilian career after leaving active duty (6 percent).

A further indication of the overall perceived value of higher education can be noted by answers provided to this question:

"Do you believe that if you perform well the Army, through either fully funded or partially funded programs, should provide you the opportunity to achieve a graduate degree during your term of service?"

The majority (54 percent) respond in the affirmative noting that a graduate degree will enhance their value to the Army. Twenty-~~two~~^{THREE} percent answer "yes" pointing out the importance of such education to the successful performance of their specialty or for some other reason. Ten percent believe that personal educational goals are the responsibility of the individual and not the Army. ~~ten~~^{NINE} percent indicate "no" that a graduate degree will either have no bearing on their effectiveness as officers or for some other reason.

Further evidence of the importance attributed to graduate level education is found when in answers to a question dealing with primary

specialties and the desirability of advanced education. Only 5 percent of all respondents say that no graduate degree should be required of any officers holding their primary specialty. The question:

"For maximum Army effectiveness, what proportion of the officers corps with your primary specialty do you believe should have graduate degrees?"

None	5%
Very Few	19%
Fourth	26%
Half	25%
Three Fourths	7%
Almost All	18%

Whether the individual places the emphasis upon education or training it is quite clear that most officers do not believe that civilian education is the primary factor in the thinking of those who constitute promotion/selection boards.

Of ~~the variety~~^{THREE} of education/training modes Resident Military Instruction is seen as carrying the most weight with promotion/selection boards (55 percent); followed by "on-the-job training or experience" (23 percent); and last "civilian education" (20 percent).

Assuming that those at the higher officer ranks are most knowledgeable as to the criteria utilized by promotion/selection, the data would then suggest that those at the lower ranks may in fact be misreading the appropriate promotion signals.

We find that officer rank is very much associated with how respondents answer the question of what types of education/training "carries the most weight" with promotion/selection boards.

The higher the rank the greater the weight placed upon "Resident Military Courses" and the lower the weight placed upon "on-the-job training or experience" and "civilian education."

The distribution of responses, by rank, to the importance of "Resident Military" training is as follows:

2nd Lieutenant	35%
1st Lieutenant	43%
Captain	46%
Major	62%
Lt. Colonel	71%
Colonel	74%

For the factor of "O.J.T." the endorsement range was 37 percent for 2nd Lieutenants and 15 percent for Colonels.

For "civilian education" there was a high of 22 percent for 2nd Lieutenants and a low of 10 percent for Colonels.

Our findings would indicate that officers at the lower ranks not only place greater faith in the value of education as an important dimension to officer performance but are also inclined to see the combination of civilian education and O.J.T. as critical ingredients required for promotion.

Still other data add to the view of significant differences between commissioned officers of the junior as opposed to more senior rank. Generally, the impression which emerges is one of junior officers being less knowledgeable (the greatest proportion of no answer or no opinion responses comes from the 1st and 2nd Lieutenants); less involved (i.e. they are more likely to select a "I don't care one way or the other" alternative); more inclined toward acceptance of change; and, more likely to endorse the importance of non-military based education and training.

An illustrative example would be the variations in responses to a question dealing with educational/training innovation. The question:

"Several foreign armies provide extended level 4 training for selected officers; for example, a small percentage of a given CGSC level class is selected to remain for an additional year of professional development in military thought, philosophy, and application. If the Army could adopt the 'Second year at CGSC' concept outlined above, what would be your view regarding this alternative?"

Seven percent of all respondents are in favor of implementation of such a plan. The range of endorsement, however, extends from a high of 13 percent on the part of 2nd Lieutenants to a low of three percent among Colonels.

Thirty-six percent of the officers feel the concept might have some merit and should be given a "trial run." Again, rank plays a significant part in explaining variations as can be noted from the distribution of responses:

<u>Rank</u>	<u>Percent Agreeing with a Trial Run</u>
2nd Lieutenant	12%
1st Lieutenant	16%
Captain	40%
Major	33%
Lt. Colonel	30%
Colonel	25%

The "I don't care one way or the other" reply runs from a low of one percent among Colonels to a high of nine percent for lieutenants. Colonels are three times as likely (34 percent) as 2nd Lieutenants (11 percent) to believe that "the Army can't afford this luxury; we need more 'doers'."

A total of 18 percent of all officers reject the concept completely, taking the position that such a policy would create an "enlist" group in the Army. Those most likely to hold this latter view are Lieutenant Colonels and Colonels (23 percent) followed by Majors (22 percent); Captains (15 percent); and, finally, Lieutenants (9 percent).

Regardless of primary specialty or the manner in which primary specialty was assigned the majority of officers (82 percent) believe that their primary specialty does match previous training, experience, and desires. Thirteen percent take an opposite view and the remaining few percent are uncertain as to the fit between primary specialty and previous training, experience or performances.

Obviously the value placed upon the kinds of education/training which are considered to be beneficial for primary specialty preparation will vary by rank since rank is associated with opportunities to have experienced the various levels of military training. Hence, responses to the question:

"Which one of the following is the most useful training or education you have already received in support of your primary specialty?"

are not too surprising.

- 2nd Lieutenants emphasize Basic Courses (46%) and O.J.T. (29%)
- 1st Lieutenants emphasize O.J.T. (44%) and Basic (28%)
- Captains endorse O.J.T. (46%) and Advanced (21%)
- Majors select O.J.T. (49%) and Advanced (20%)
- Lt. Colonels choose O.J.T. (43%) and Advanced (21%)
- Colonels endorse O.J.T. (41%) and Advanced (23%)

Higher ranking officers will more so than officers at the lower ranks select CGSC and civilian education as having been most useful in support of the primary specialty.

Almost three fourths (71 percent) of the officer respondents do believe that current training opportunities are sufficiently adequate to allow an individual to be competently trained in the primary specialty. A little less than a fourth (22 percent) disagree; and seven percent indicate that they do not know if adequate training opportunities are available.

Once again officer rank does generate significant variations in response to the training adequacy question.

INACCURATE ~~These at the higher ranks (Captain and above) are most in agreement with those at the Lieutenant rank answering either "no" or "don't know."~~

The range of those responding in the negative is 33 percent for 2nd Lieutenants as compared to only 13 percent of the Colonels. Similarly "don't knows" go from a low of four percent among Colonels to a high of 14 percent for 2nd Lieutenants.

Generally assessment of primary specialty training are favorable, although there are those who are less than enthusiastic in their evaluations.

It is also clear that such training is not viewed as a monolith. Different people perceive primary specialty training in different ways. For example:

- ~~30%~~^{31%} feel that such training is "broadly-based, provides specialty knowledge required to perform effectively at successively high levels."
- 36% believe such training is "sufficiently thorough and prepares one well."
- 21% feel the specialty training is "too broad and generalized to be of much practical value."

9% see the training as "not related to actual duty position requirements."
 2% ~~3%~~ state that such training is "non-existent."

As in the case of other educational/training related issues officer rank is a critical variable. Briefly, the higher the rank the higher consensus around the view that current training is broadly based and provides knowledge required to perform effectively at successfully higher levels.

2nd Lieutenants	20%
1st Lieutenants	25%
Captains	30%
Majors	32%
Lt. Colonels	39% 37%
Colonels	42%

Conversely those at the lower ranks are more likely to consider available training as being too generalized to be much of practical value.

<u>Rank</u>	<u>Too General</u>
2nd Lieutenant	33%
1st Lieutenant	31%
Captain	22%
Major	18%
Lt. Colonel	14%
Colonel	10%

Despite the variations caused by differences in rank there is still general agreement with regard to the purpose, content, and benefits of military education and training programs.

ALMOST NINE (89%)
 More than eight out of ten respondents agree that military resident instruction and on-the-job experience are the most important ingredients of effective primary specialty training. Conversely, and as would be expected, there is also agreement as to which types of education/training

are least important for one's primary specialty (military non-resident, civilian schooling, and non-degree specialized civilian training).

Rank is also associated with perceived major gaps in currently available schooling for primary specialties. **ALTHOUGH 37 PERCENT OF ALL RESPONDENTS WERE UNAWARE OF ANY MAJOR GAP** Hence, Lieutenants see

the critical gap at the Basic level; Captains at the Advanced level; and Majors, Lieutenant Colonels and Colonels at the Expert level.

*DISMISSED BY
OVERGENERALIZATION*
~~There is also general agreement that specialty training/education can be of value in a potential civilian career for those who expect to pursue such careers in a field similar to that of the primary specialty.~~

With regard to specialty qualification more than half of the respondents (51 percent) believe the criteria should be "the ability to 'do the job' in the specialty, at the assigned level whether formally trained or not, as shown by OER evaluation or promotion/selection boards." A fourth held the position that "successful completion of designated training courses and developmental assignments" is what should constitute specialty qualification.

Differences in rank do not seem to be important in response to the question:

"The primary responsibility for an officer becoming 'specialty-qualified' is with."

The distribution of response to this question:

The officer	49%
The officer's MILPERCEN career manager/assignment officer	27%
The officer's education and training system	19%
The MILPERCEN specialty monitor	3%
The officer's rating officer	2%

Most officers have or expect to be qualified in their specialty through either one of two routes:

On-the-job experience (No structural training)	71%
Resident training in military courses	24%

The data indicated that there are a significant number of officers who are reluctant to see the establishment of firm specialty qualification standards.

Only nine percent believe that absolute standards should be established. Half are willing to go along with flexible standards as long as they are used as goals. Twenty-six percent respond in the negative pointing out that specialty qualification is subjective, and therefore it is not possible to establish firm standards. The remainder, 14 percent, are either opposed for other reasons or uncertain as to whether or not specialty qualification standards should be implemented.

Generally, officers at the lower ranks are more inclined than others to endorse the idea of absolute or flexible standards.

The following question pertaining to utilizations of specialty standards was asked of respondents:

"If firm specialty qualification standards were established, they would provide a bench mark for officer professional development; that is, an officer would either be 'qualified' or 'not qualified.' What use should be made of this information?"

- 50% used as a diagnostic tool for determining assignment and/or educational opportunities for the officer involved.

- 25% used officially as a matter of record for consideration by promotion/selection boards or other activities.
- 10% used unofficially to measure professional development of the individual officer.
- 8% used only by the officer for his personal assessment.

~~7% - 8%~~ not used for any purpose.

The responses do confirm an earlier observation, namely that officers are not eager to see the establishment of firm singular qualification standards nor are they enthusiastic over the proposition that such standards be part of an official selection/promotion process. ~~It is also worth noting that with few minor exceptions there is little difference between the officer ranks as to the appropriate utilization of qualification standards. Officers at the lower ranks are slightly more inclined than others to take the position that such information should be provided only to the individual officer and not be part of official records.~~

DISTRICTS BY OVER-STATEMENT

Little consensus is found as to whether or not primary specialty qualifications should be a critical factor in promotion considerations.

- 3% believe promotion to the rank of 1st Lieutenant should be dependent upon primary specialty qualification.
- 19% believe it should be a requirement of promotion to Captain.
- 25% of promotion to Major.
- 8% of promotion to Lt. Colonel.
- 24% answer "none of the above."
- 22% respond that promotion to all of the ranks noted above should be dependent upon primary specialty qualification.

At the same time the majority of officers do believe that at the present level of professional development in their primary specialty

they are either "well prepared" (55 percent) or "somewhat prepared" (36 percent). Less than nine percent consider themselves either ill prepared or not prepared at all.

Rank is of course highly correlated with primary specialty qualification self assessment. Those at the highest ranks are far more likely to view themselves as well prepared (75 percent of the Colonels) as compared to officers at the lower ranks (25 percent of the 2nd Lieutenants).

Still, it is interesting to point out that more than a few officers at each rank assess themselves as either somewhat or not at all well prepared. Such is the case for: 21 percent of the 2nd Lieutenants; 16 percent of 1st Lieutenants; 9 percent of Captains; ⁶7 percent of Majors; 6 percent of Lt. Colonels; and 5 percent of Colonels.

As noted in earlier discussions there is a high level of agreement among officers as to the types of military training which are considered to be most effective for primary specialty qualification.

- 83% believe that resident instruction is most effective.
- 1% of all respondents select non-resident instruction as being most effective.
- 8% • 7% believe both are equally effective.
- 8% consider neither, in their present form, as being effective.

~~Officers in the more advanced grades are the strongest supporters of resident instruction while those in the lower commissioned ranks express greater support for both resident and non-resident instruction. Lieutenants, more so than those of higher ranks, are more inclined to see both forms, as currently practiced, as being inadequate.~~

INACCURATE

DISTRICTS THROUGH
DIVERGENCE REALIZATION

As was the case with the establishment of firm specialty qualification standards, there are mixed feelings expressed with regard to the instituting of professional examinations for the officers corps.

- 14% strongly agree that professional examinations should be instituted.
- 25% would agree, but not strongly.
- 26% would disagree.
- 26% would strongly disagree.
- 10%* ~~9%~~ indicate that it does not matter to them whether such examinations are or are not instituted.

Disagreement with a policy of professional examinations increases with officer status. Again, as in the case of other suggested promotion/selection policies, acceptance is most apparent at the Lieutenant rank. In this case disagreement is expressed by ⁴²~~32~~ percent of the 2nd Lieutenants and 58 percent of the Colonels.

Assuming the implementation of professional officer examinations, *15 PERCENT* less than a third of all officers believe examination results should be used as one of the criteria for promotion; *16 PERCENT BELIEVE EXAMINATION RESULTS SHOULD BE USED FOR ANY PURPOSE.*

Similar to the finding pertaining to the utilization of primary specialty qualifying scores the majority (61 percent) believe such results should be limited to individual diagnostic work or to assist in determining education/training needs; for example validation of CGSC (level 4) knowledge, or attendance of some phase of formal instruction at that level.

The two major reasons given for a lack of endorsement for officer examinations are:

- 44% paper and pencil tests may not reflect job performance.

- 41% officer responsibilities are too broad to be adequately tested.

81

Eight out of ten officers (~~80~~ percent) believe that professional development of an officer can best be achieved through a combination of activities including:

- Experience
- Self study within prescribed parameters
- Self study and non-resident instruction
- Resident instruction

A similar proportion (80 percent) of respondents feel that their value to the Army would be increased were they to graduate from the next higher military course of instruction (for example, CGSC).

Mixed results are ~~also~~ obtained in response to the question:

"Current Army policy minimizes multiple opportunities for command at each level. An alternative would be to allow groups of officers to be managed as 'commanders' to permit repetitive command tours at each level. What are your views regarding this alternative?"

Implement immediately	11%
A good idea, but may cause some problems	43%
I don't think this alternative should be implemented	41%
I really don't care one way or the other	5%

By rank of officer no differences are found in the "do it now" response. ^{GENERALLY,} The lower the rank the higher the endorsement of the "good idea, but may cause some problems" answer. The higher the rank the greater the support for the response "I don't think this alternative should be implemented."

2nd Lieutenants	33%
1st Lieutenants	36%
Captains	36%
Majors	43%
Lt. Colonels	52%
Colonels	56%

When asked about promotion based results over the last two years the highest single response (45 percent) is: "I am not familiar with promotion board results, or how these results relate to OPMS."

The second highest response (28 percent) is: "It is too early in the implementation of OPMS to identify board trends."

Seventeen percent answer "Not supported OPMS, by selecting officers for promotion who have followed the traditional or 'generalist' path."

^{NINE}
~~Ten~~ percent select, "Support OPMS by selecting 'specialist' officers for promotion in proportion to their specialty.

As would be expected those of the lower officer ranks are most likely to select the not familiar alternative (⁷⁶~~75~~ percent of the Lieutenants as compared to only ²³~~24~~ percent of Lieutenant Colonels and Colonels). Advanced officers are far more likely than Lieutenants to believe it is too early to identify board trends (42 percent of the Colonels as compared to ¹¹~~12~~ percent of the Lieutenants). Colonels are more likely (17 percent) than other officers to agree that promotion board results supported OPMS by selecting "specialist" officers for promotion in proportion to their specialty. Lieutenant Colonels, more so than others (24 percent) thought results have not supported OPMS, by selecting officers for promotion who have followed the traditional or "generalist" path.

The concluding section of this chapter will present responses to a number of agree or disagree questions. In order to simplify this presentation strongly agree and agree responses have been combined into a single percentage. An explanatory note is provided in those cases where rank of the officer contributes to significant variation in response to a particular question.

<u>Question</u>	<u>Per cent Strongly Agree and Agree</u>
1. All commanders should receive a concentrated "refresher" course prior to assuming command at any level.	85%
2. Level 3 (advanced course) training would be more cost effective if it was shorter, and if students attended on a TDY rather than a PCS basis. (Disagreement increases with rank).	35%
3. Officers should be assigned to a utilization tour directly following formal specialty training.	96%
4. The primary purpose of civilian education should be the acquisition of skills rather than the acquisition of academic credentials. (Agreement increases with rank).	83%
5. Level 3 (advanced course) training should be oriented primarily toward training officers for their next duty position.	55%
6. There are adequate career progression opportunities in all OPMS specialties. (34% responded "I don't know.")	13%
7. Some specialties exist for which there are no Army requirements. (54% responded "I don't know.")	14%
8. Officers who have one of the basic entry specialties designated as an alternate at the eighth year of service are at a disadvantage when compared to those who have "grown up" in the specialty.	73%
9. The academic report received upon completion of a course of military or civilian training is as important to one's advancement as an efficiency report. (Disagreement increases with rank.)	30%
10. Level 4 (CGSC-level) training should not prepare officers for specific duty positions, but should provide broad preparation for a variety of duties during the following several years of service. (Moderate increases in agreement with rank.)	91%

Question

Per cent
St.ongly
Agree and
Agree

11. It is more important to the Army that civilian education broaden the officer personally than provide him/her specific skills. (Disagreement increases with rank.) 46%
12. CGSC and AWC completion should be mandatory for all majors and lieutenant colonels respectively, either by precedent or non-precedent programs. (Disagreement increases with rank.) ~~41%~~ 42%
13. Only the primary specialty has any real importance in career advancement. 21%
14. Specialty "qualification" is easily defined. 8%
15. Formal course training should be provided to learn the basis of a specialty. ~~94%~~ 93%
16. Promotion boards should promote by specialty quotas. ~~27%~~ 28%
17. "Quality" officers should be equitably distributed over all specialties, either voluntarily or involuntarily (Agreement increases by rank.) 49%
18. OPMS-level 4 (CGSC-level) training should be significantly different for the maneuver combat specialties (II-Infantry; 12 Armor) than for all other specialties. (Disagreement increases with rank.) 43%
19. Selection boards use primary specialty qualification as a criterion for promotion. (Disagreement increases with rank. 24% responded "I don't know.") ~~50%~~ 49%
20. Selection boards use alternate specialty qualification, if designated, as a criterion for selection. (Disagreement increases with rank. 30% responded "I don't know.") ~~50%~~ 25%
21. Only those specialties which can be related to a basic branch (e.g. II-Infantry) have good potential for promotion. (Disagreement increases with rank.) ~~33%~~ 32%
22. The current specialty designation process allows "quality" officers to be concentrated in certain specialties, with other specialties having few such officers. (Agreement increases with rank. 28% responded "I don't know.") 25%

<u>Question</u>	<u>Per cent Strongly Agree and Agree</u>
23. Selection for attendance at CGSC/AWC is more important than actual attendance.	35%
24. The most valuable training in some specialties is on-the-job experience (no structured training).	86%
25. Officers who have received graduate-level civilian schooling are more competitive for promotion than those who have not.	81%
26. For some highly technical specialties, training costs are so high that the "up-or-out" promotion rule should be suspended. (Disagreement increases with rank.)	63%
27. Promotion boards should not use a level of training completion as a criterion for selection.	43%

CHAPTER III. FACTOR ANALYSIS

~~CHAPTER~~

In this ~~section~~ ^{TO BE PROVED OR DISPROVED} we deal with the adequacy of training and education for commissioned officers. The specific hypotheses are as follows:

1. ~~Do officers at the Lieutenant and Captain ranks perceive Army training and education as adequate~~
EDUCATION AND TRAINING FOR LIEUTENANTS AND CAPTAINS IS ADEQUATE.
2. ~~Do Majors perceive Army training and education as adequate~~
EDUCATION AND TRAINING FOR MAJORS IS ADEQUATE.
3. ~~Do Lieutenant Colonels and Colonels perceive Army training and education as adequate~~
EDUCATION FOR LIEUTENANT COLONELS AND COLONELS IS ADEQUATE.

Answering these three questions requires that we first determine an analysis technique adequate to the task, and second run such an analysis on the entire set of respondents to determine the generalizability of the technique.

The major problem in analyzing the data to ascertain answers to the specific question is that there are over forty questions which might tap some aspect of the adequacy of training and education. In short, the problem is to determine the relevant dimensions of adequacy. In order to achieve this end we have chosen to use a factor analytic technique. In a situation where the analysts are searching for dimensions, factor analysis is an appropriate analytic technique. Essentially factor analysis separates the wheat from the chaff. That is, it is a multivariate technique which allows the researcher to determine what the respondents (officers) themselves perceive as the dimensions of adequacy of training and education. We therefore utilized a Varimax factor analysis assuming that all of variance in the matrix (the 42 questions with face validity) was common. In short, we used the standard search technique.

The result of the general factor analysis was a three factor principal component solution which was then rotated orthogonally using a varimax solution to produce clear factors. That is, the results of the rotated analysis should result in factors with variables which do not cross load on other factors. Table 1 shows the results of this analysis.

TABLE 1

A VARIMAX ORTHOGONAL FACTOR SOLUTION TO ADEQUACY OF ARMY TRAINING AND EDUCATION OF OFFICERS: GENERAL SAMPLE

Questions	FACTOR I (UTILITY)	FACTOR II (PRIMARY)	FACTOR III (TRAINING)
14	-.02	.44	-.04
19	-.25	.58	-.05
20	.23	-.62	.02
27	.18	-.12	.40
28	.09	.00	-.51
29	.10	.05	-.56
31	-.22	.41	.05
33	-.07	.43	-.04
69	.03	.44	.23
88	.52	-.05	-.00
91	.72	-.02	.08
92	-.65	.12	.00
95	.71	.07	-.07
96	.68	-.30	.08

The first factor was defined by questions 88, 91, 92, 95, and 96. We defined this as the utility of training and education for alternate specialty factor (hereafter Utility). Each of the questions tapped how commissioned officers perceived training and civilian education as a basis for alternate specialty adequacy. The facets of the Utility factor range from questions concerning the most useful training received to what type of training should be received and specifically what should be the role of civilian education.

In regard to what types of training and education had been received on the job, training and military residence courses accounted for over one-half of the response. As was expected, the higher the rank (thus years in service) the greater the amount of every kind of training and education received. Slightly over one-fifth of the sample had received some civilian education with Captains through Colonels having received more than Lieutenants. ~~In short, the mix of Army training to civilian education was slightly over 3 to 1.~~

*REFLECTIVE OF GENERAL MIS-
UNDERSTANDING OF WHAT EDU-
CATION AND TRAINING ARE IN ARMY TERMS.*

The type of training and education perceived as the most useful to officers was on the job and military resident ~~by slightly more than~~ *TRAINING INSTRUCTION; 88.6 PERCENT* ~~2 to 1 (66.8%).~~ *FOR PRIMARY SPECIALTIES AND 65.1 PERCENT FOR ALTERNATE SPECIALTIES.* However, fully 25.4 percent felt that civilian graduate

training had been most useful in support of alternate specialties.

When the respondents were asked which type of training was least useful *FOR ALTERNATE SPECIALTIES,* only 6.9 percent said on-the-job training while almost 31 percent felt that civilian education had been least useful. Thus, on-the-job training is perceived as most useful while civilian education is perceived as useful by some and as not too useful by others. Analyzing perceived

utility by rank reveals a polar pattern. Lieutenants, Lieutenant Colonels and Colonels preferred on-the-job training to civilian education by higher ratios than did Captains and Majors. For example, 34.9 percent of 1st Lieutenants thought on-the-job training should be provided compared to only 11.6 percent who felt civilian graduate education should be provided. In contrast, 17.7 percent of Majors preferred on-the-job training while 27.3 percent of Majors favored civilian graduate education. Lieutenant Colonels and Colonels broke more evenly on the question with on-the-job training being slightly preferred.

When the officers were asked specifically about the role of civilian education in alternate specialties, 50.7 percent felt it was important and should be available while 31.7 percent felt it should be available but that civilian education was of limited importance, and 17.6 percent felt that it was not available. Analyzing by rank reveals a jump in the perceived importance of civilian education at the Captain level which holds through the ~~Lieutenant Colonel~~ ^{MAJOR} level and declines at the ^{LIEUTENANT COLONEL AND} Colonel level. About 50 percent of Captains, Majors and Lieutenant Colonels felt civilian education was important for alternate specialties whereas slightly less than 40 percent of Colonels felt it was important.

In summary, analysis of the Utility Factor shows that on-the-job training and military residence courses are perceived to be more important than civilian education in support of alternate specialties. However, at the ranks of Captain to Lieutenant Colonel there is clearly an increase in the perceived importance of civilian education; while at

AND RESIDENT MILITARY INSTRUCTION ARE
the Colonel rank on-the-job training, ~~is~~ seen as most important. It is interesting to note that while on-the-job training is viewed as important and useful by almost everyone, military residence instruction is viewed in a polar fashion. That is, many officers see such courses as very useful while a similar proportion see such courses as least useful. In short, the value of various kinds of training and education varies by rank and career longevity, and the actual adequacy of the various programs cannot be answered without understanding how rank and time in service affect perceptions.

The second factor was primarily defined by questions 14, 19, 20, 31, 33, and 69. These questions deal with training and graduate education in regard to primary specialties. We have, therefore, named the second factor the Role of Education versus Training Primary Specialties factor (hereafter Primary). The specific questions on this factor range from the general--what is the role of graduate education--to the specific--should the Army adopt a "second year at CGSC program." Essentially there are two parts to the factor. The first is do the officers perceive that civilian graduate training should be available and would be useful. The second is the perception of what has been most useful in their primary specialty. In regard to the first part, the answer is clear. Over four-fifths of the respondents felt that graduate civilian training should be available and that it would enhance with their value to the Army and/or their performance in primary specialties. This response pattern holds across all ranks with some differences. The major difference is that field grade officers are more likely (than non-field grade officers) to feel that graduate

education can benefit performance. In spite of this overwhelming endorsement of graduate education when we turn to the question of what has been least useful in primary specialties, the results shift somewhat. Here, as was the case for alternate specialties, on-the-job training is perceived as useful--only 4.1 percent felt it was not useful--whereas fully one-quarter of the sample saw graduate training as least useful for primary specialties. Thus, there is a gap between what is desired and what has been experienced. It is important to point out that the gap is wider the higher the rank. That is, a small proportion of non-field grade officers felt civilian education was least useful but about 30 percent of all field grade officers feel that graduate education is not very useful in their specialty. Again, as was the case for alternate specialties, non-military residence courses were often seen as not very useful.

In summary, Army officers perceive that civilian education should be available in their primary specialties and that such education would increase their value to the Army. However, field grade officers often felt that civilian education was less useful than on-the-job and military training. Thus, there is slippage between what is desired and what is received. It is interesting to note that when the sample was asked whether a "2nd year at CGSC" program should be started the sample split, with 41 percent willing to try such a program and 39 percent opposed to as a luxury or elitist. This, of course, indicates that there are major differences of opinion in regard to how the Army should train and educate in primary specialties.

The third factor is essentially defined by two questions regarding the training normally received for primary specialties and the perceived adequacy of training opportunities in primary specialties. This factor differs from the Primary (2nd) factor in that factor three emphasizes Army training and availability of such training while the Primary factor dealt with the role of civilian education in primary specialties. We have chosen to call the third factor Training Experience and Availability in Primary Specialties (hereafter Training).

Analysis of this factor shows that commissioned officers evaluated the training normally provided favorably. Over two-thirds of the sample gave a positive response to questions dealing with training. Thirty-six percent felt that the training was thorough, 31 percent felt it was broadly based and provided the necessary knowledge. Slightly over 20 percent felt that the training was too general to be of much use in a primary specialty, whereas only 9 percent felt that training was not related to actual duty requirements. The respondents rank affects perception of such training. For example, in the case of those who thought training was broadly based, twice as many Colonels as Lieutenants responded that the training was broadly based. In general, the higher the rank the more favorable the evaluation of normal training.

In regard to the availability of training opportunities, 71 percent of the sample felt that adequate training opportunities were available, while 22 percent felt such opportunities were not available. As was the case with the training normally provided, rank affects

perception of the availability of training opportunities. The following table shows the progression by rank of positive evaluations of the availability of training.

TABLE 2
PERCENTAGE OF SAMPLE RESPONDING YES TO
AVAILABILITY OF TRAINING: BY RANK

2LT	1LT	CPT.	MAJ.	LTC.	COL.
52.4	62.7	71.6	72.9	76.4	82.7

The results show quite clearly that rank affects officers' evaluation of the availability of training opportunities for primary specialties. The higher the rank the greater the belief that such training is available.

In sum, the majority of the sample at all ranks evaluate both normal training and the availability of such training favorably. It is, however, important to point out the fact that rank affects the officers' evaluation of such training. The higher the rank and thus the more experience the officer has with the training and its availability the greater the likelihood that the evaluation will be favorable.

The general factor analysis shows three primary dimensions to officers' evaluations of the adequacy of Army training and education. In regard to primary specialties one factor is the relative role of graduate education versus training. A second factor deals with the evaluation and availability of training in primary specialties.

The third factor dealt with the utility of training and education for alternate specialties.

Regarding the role of civilian education for primary specialties the sample felt strongly that educational opportunities should be made available. Moreover, most of the sample saw such training as beneficial to the Army for a variety of reasons, with the model response being that such training increased an officer's value to the Army. However, when the sample was asked to identify the facet of training or education least useful in performing primary specialties, on-the-job training was viewed as more important than civilian education. The response pattern here was curiously polar with Lieutenants and Colonels most likely to view on-the-job training as more important while Captains and Majors tended to favor civilian education. Thus, rank affects perception of the adequacy of and role of civilian education in the Army.

The factor dealing with the type of training and the availability of such training for primary specialties was easier to evaluate. By a 2 to 1 ratio Army officers felt that normal training was adequate, and by a 3 to 1 ratio they felt training was available. Thus, training seems to be adequate. However, rank in the Army is the major determinant of the adequacy of training. The lower the rank the higher the proportion who felt that training in primary specialties was both inadequate and unavailable. Thus, those more familiar with the system (higher rank) were more pleased with it.

The factor concerned with the adequacy of training and education in alternate specialties revealed that the perceived mix of Army

training to civilian education was about [?]3 to 1. In regard to the utility of civilian education for alternate specialties, a polar response pattern was again noted--Lieutenants and Colonels more likely to perceive on-the-job training as most useful while Captains and Majors felt civilian education to be more useful. Thus, those beginning careers and those closest to ending their careers were most likely to value on-the-job training while mid-career officers (while valuing on-the-job training) were more disposed toward civilian education. The response pattern to what should be provided for alternate specialty training follows the pattern noted above for what is most useful. In short, as was the case with the primary specialty factors, rank affects perceptions not only of what is useful but what should be provided. Mid-career officers are most likely to perceive civilian education as important for their careers.

FACTOR ANALYSES FOR EACH RANK LEVEL

The final analysis which was conducted was to factor analyze subsets of the items of the questionnaire. This analysis tested the three hypotheses that education and training were adequate for Captains and below, Majors, and Lieutenant Colonels and above. The Army team picked the subset of items which they felt were potentially relevant survey items appropriate to the testing of the hypotheses for each rank level. The following items were selected for each rank:

1. Captains and below--Items 15, 17, 27, 28, 29, 30, 31, 32, 38, 44, 50, 59, 60, 63, 73
2. Majors--Items 12, 13, 14, 17, 18, 19, 20, 27, 32, 33, 47, 50, 59, 62, 68, 70, 76, 81, 69, 85, 88, 89, 91, 92, 95, 96
3. Lieutenant Colonels and above--Items 16, 17, 18, 32, 34, 50, 59, 70, 81, 88, 91, 92, 93.

Each of these subsets of items were then factor analyzed using a principal components extraction with a varimax rotation. In general, a cut-off point of .4 on the loading was used to interpret the factor structure.

Table 3 contains the structures for the two factors which were extracted for Captains and below. The first factor relates to training for primary specialty and is similar to the primary factor extracted in the factor analysis of all officers. Generally, it shows that Captains and below feel that basic training and on-the-job experience was the most useful primary specialty training. Further, they felt the most important primary specialty training which should be offered

TABLE 3

A VARIMAX ORTHOG'AL FACTOR SOLUTION TO ADEQUACY OF ARMY
TRAINING & EDUCATION OF OFFICERS: LT. TO CPT.

Questions	FACTOR I (PRIMARY)	FACTOR II (AVAILABILITY)
27	[.70]	-.09
28	-.01	[.74]
29	-.08	[.74]
30	[.72]	.06
32	.08	[.51]
38	[.74]	-.11

is residential military and on-the-job training and felt that the most important method of qualification for the primary specialty was on-the-job training. Thus, Factor I measures the underlying dimension of education for the primary specialty.

The second factor extracted for Captains and below is similar to the factor labeled "training" in the general factor analysis and measures the availability of training for primary specialties and the perceived adequacy of such training. Most officers felt that adequate training was available but sizeable minorities of first and second lieutenants did not feel this way. The lower ranked officers split on their opinions of primary specialty training--they either felt it was too general or they felt it was broadly based and thorough. They generally felt there was no gap in training but most of those

who did see a gap saw it as occurring in the basic training for primary specialty.

In short, the factor analysis of questionnaire items chosen for Captains and below reveals that these persons have concerns in the same general areas of the whole officer corps, as well as ones more specific to their level.

Table 4 contains the factor analysis for the Majors. The first factor is identical to the utility factor extracted for all officers, and concerns the utility of training and education for alternate specialties. In general, it shows that the Majors felt on-the-job experience and civilian education were the most useful education they did receive for their alternate specialty training. And they felt that military resident instruction and, to a lesser degree, civilian graduate education should be provided in support of their alternate specialty. ~~Finally, most Majors felt that at least one-fourth of the officer corps with their alternate specialty should have graduate degrees.~~ *TECHNICALLY CORRECT, BUT MIS-LEADING AS STATED.*

The second factor extracted was one which specifically measured the role of CGSC in a military officer's career. The vast majority of majors felt the role of CGSC was to broaden the officer's outlook in preparation for positions of increased responsibility. Most Majors also thought that some type of level 4 training, whether resident or not, was needed and they felt that such training would increase their value to the Army. Interestingly, most Majors were evenly split on whether selection for attendance at CGSC was more important than actual attendance.

TABLE 4

A VARIMAX ORTHOGNAL FACTOR SOLUTION TO ADEQUACY OF ARMY
TRAINING & EDUCATION OF MAJORS

Questions	FACTOR I (UTILITY)	FACTOR II (CGSC)	FACTOR III (PRIMARY)
12	.09	[-.42]	.16
13	-.06	[.56]	.03
19	-.34	.29	[-.48]
20	.27	-.21	[-.62]
50	-.06	[.73]	.04
62	-.01	.01	[-.57]
69	.11	.06	[.65]
81	.02	[-.50]	.17
88	[.55]	-.04	.02
89	[.41]	-.04	.00
91	[.76]	.02	.00
92	[-.67]	-.04	.09
95	[-.73]	-.02	.05
96	[.73]	-.01	-.29

The third factor, labeled "primary" in Table 4 is similar to the factor called primary in the factor analysis of all officers' responses. It taps the feelings of the Majors about civilian education. Over 70% of the Majors feel the Army should provide them with the opportunity for graduate education. They further feel this education should be directed toward acquiring specific skills rather than academic credentials. However, they are divided on whether the acquisition of such skills benefits the Army more than education which just broadens the officer.

In summary, the factor analyses show that the Majors have many of the same concerns as the officer corps in general as measured by the correspondence of two of the factors. The other factor, CGSC, is one more specific to the careers of field grade officers.

The theme of career concerns is carried through in the analysis of the responses of Lieutenant Colonels and above in Table 5. The "CGSC" factor shows that these officers feel that CGSC would greatly enhance their value to the Army although they are split on whether selection for attendance at CGSC is more important than actual attendance.

The utility of their primary specialty training to a potential civilian career seems to be of some concern to these officers, many of whom are nearing retirement. Most field grade officers feel that the training will be relevant to a civilian job although over a third do not see it as being applicable. Also associated with this factor is the question of where they feel a gap in primary specialty training

TABLE 5

A VARIMAX ORTHOGNAL FACTOR SOLUTION TO ADEQUACY OF ARMY
TRAINING & EDUCATION OF LIEUTENANT COLONELS & COLONELS

Questions	FACTOR I (UTILITY)	FACTOR II (CGSC)	FACTOR III (PRE-RETIREMENT)
32	-.05	-.14	[.50]
34	.14	.04	[.61]
50	.05	[.77]	.09
81	-.08	[-.66]	-.17
88	[-.68]	-.02	.14
91	[-.79]	.02	.13
92	[.71]	.04	.05
93	[.47]	.05	.34

occurs. Of those two-thirds who feel there is a gap, it is interesting to note that most feel it is at the expert knowledge level. This question, too, may be tapping some uneasiness about the state of their knowledge when they retire.

The final factor--actually the first extracted--is the "utility" factor which measures the utility of training and education for alternate specialties. Field grade officers felt on-the-job experience was the most useful alternate specialty training received and that residential military training, on-the-job experience and civilian graduate education should be the most useful training provided. The least useful training which could be provided they felt was non-residential

military training. Finally, most Lieutenant Colonels and Colonels felt that their alternate specialty training would be of use in a civilian career.

In summary, this analysis demonstrates two themes--communality of areas of concern in some areas as noted in the overlap between the factor analysis of all officers' responses and the analysis of the specific ranks. The second more predominant theme is one of specificity. The officers seem to have concerns in the areas most relevant to them--primary specialty training for the Captains and below, alternate specialty and CGSC concerns for the Majors and CGSC and pre-retirement concerns for the Lieutenant Colonels and above.

APPENDIX

STUDY METHODOLOGY

Sampling

The sample of commissioned officers was chosen by a pure random probability sampling procedure. A listing of the total universe of officers was obtained and computer generated random numbers were used to select the sample. Of the original sample size of 14,536 commissioned officers (approximately a 22 percent sample of the total officer corps), 7,787 returned the questionnaire for a completion rate of 54 percent. Further description of the sample can be found in Chapter 1 of the report.

Development of the Questionnaire

The University of Houston researchers met with the United States Army project team to develop ideas and hypotheses. The Army then developed the questions which were revised by the University of Houston team for clarity and technical correctness. A pre-test questionnaire was developed in this way. All items in the questionnaire were of the multiple-choice closed ended type.

The questionnaire was then pre-tested on small sample of officers at each rank level. The officers were told that we were interested in any comments they might have on the questionnaire (wording of questions, expressions of clarity, etc.) and that they should make such comments on the questionnaire. These officers were also interviewed as they completed the questionnaire to assure that all their comments were solicited and understood.

Subsequent to the pre-test, changes in wording was made on some questions and other questions were dropped. The final questionnaire consisted of 96 items.

Collection of the Data

The questions were printed and put into a booklet which was mailed to the sample of officers. Officers were given approximately 15 working days to complete and return the questionnaire. All questionnaires, of course, were completed anonymously so that all respondents could be assured that they would not be able to be identified.

Analysis of the Data

Data were collected on mark-sense sheets and directly read into the computer. Two general modes of analyzing these data were used in this report:

1. Analysis of marginals--Analysis of the responses made by officers at different rank levels. Questions which seemed particularly interesting or discriminating were analyzed and presented in Chapter II.
2. Factor analysis--Factor analysis was conducted on a series of items which the Army team felt would be most relevant to testing the three hypotheses. Then three separate analyses were conducted on the three subsets of these items for the three rank levels of Captain and below, Major, and Lieutenant Colonel and above. The results of these factor analyses are presented in Chapter III.

A few technical comments on the factor analyses is in order. Before any factor analysis was conducted, all relevant items were recorded so that they were in scalar form. For instance, a question might list a variety of educational opportunities which varied from purely civilian to purely military based. In such cases we recoded the responses so that the code numbers reflected such an underlying dimension. In this way, we were able to satisfy the scalar or interval scale requirement of the correlation coefficient which is the base statistic used in factor analysis.

The principal components extraction method was used whereby unity was inserted in the diagonal as an estimate of the communality. All rotations were Varimax and a cut-off point of .40 was used for the loadings to determine which items defined the three factors.

PART II. WARRANT OFFICERS

INTRODUCTION

This report deals with the education and training related experiences and attitudes of a sample of U.S. Army Warrant Officers.

The discussion presented here will focus upon differences and similarities between Warrant Officers in the Aviation as opposed to Non-Aviation MOS categories.

CHAPTER
~~Part~~^I of the report will deal with the characteristics of the sample population.

CHAPTER
~~Part~~^{II} will provide an analysis of both how Warrant Officers perceive and assess various components of their military career as well as contrasts between those in the Aviation and Non-Aviation fields.

The data to be discussed are based upon responses to a paper and pencil questionnaire distributed among a representative sample of Warrant Officers.

COLUMNS OF PERCENTAGES MAY NOT TOTAL 100 PERCENT BECAUSE OF ROUNDING.

CHAPTER ~~Part~~ 1: The Warrant Officer Sample

Fifteen hundred and forty three (1543) Warrant Officers represent the sample upon which this analysis is based.

The distribution of respondents based upon pay grades is as follows:

W.O. 1	15%
C.W. 2	40%
C.W. 3	31%
C.W. 4	14%
	<hr style="width: 100px; margin: 0 auto;"/> (100%)

At the time in which respondents participated in this survey the majority (66%) were stationed in the Continental United States (CONUS). Twenty one per cent (21%) were stationed in the European area including the Middle East. Seven per cent (7%) in Hawaii, Alaska, Puerto Rico or the Canal Zone; with the remainder (6%) in ~~some other area of the Pacific region~~ *OR IN SOME OTHER AREA.*

Of the total sample thirty five per cent (35%) hold an MOS identified as placing them in the Aviator category with sixty five per cent (65%) being in the Non-Aviator grouping.

With regard to Control Branch the following distribution is obtained:

Aviation	35%
Ordnance	14%
Quartermaster	10% 11%
Military Intelligence	9%
Adjutant General	8% 9%
Military Police	7%
Signal	5% 6%
Air Defense Artillery	3% 4%

Engineer	3%
Armor	2% 0.3%
Field Artillery	2%
Transportation	2%
	(100%)

The Major Command (MACOM) distribution is as follows:

FORSCOM	42%
USAREUR	18% 19%
TRADOC	14%
U.S.FK/8th Army, Korea	4%
Support Command, Hawaii	2% 1%
Communications Command	2% 3%
Health Services Command	2%
U.S. Army, Japan	1%
Military District, Washington	1%
All Other	14% 15%
	(100%)

Six out of every ten (61%) of the Warrant Officer respondents are assigned to a combat related unit:

22%	Combat
21%	Combat Support
18%	Combat Service Support

Eleven per cent (11%) are involved with training units; seven per cent (7%) Garrison/Installation Staff; six per cent (6%) are corps of higher level staff; with the remainder (15%) assigned to other units.

A little less than two thirds (61%) report a level of military education completed which falls below the ~~senior or advanced levels~~ **FOLLOWING LEVELS:**

- 19%: Warrant Officer Advanced Courses (or old ~~Immediate~~ ^{INTERMEDIATE} Course).
- 14%: Warrant Officer Senior Course (or old Advanced Course).
- 3%: WOSC Corresponding Studies student or graduate.
- 3%: WOAC Corresponding Studies student.

Few (6%) of all respondents have ~~not~~ ^{ONLY} earned a high school diploma or equivalent.

Forty-~~three~~ ^{FOUR} per cent (~~43%~~ ^{44%}) have earned some college credit although they might not have attained an associate or baccalaureate degree.

Thirty-~~two~~ ^{ONE} per cent (~~32%~~ ^{31%}) hold an Associate Degree while seventeen per cent (17%) have acquired the baccalaureate degree. Relatively few, ~~(2%)~~ ^{3%}, hold more advanced academic degrees.

The great majority of Warrant Officers are married males (91%). Almost nine per cent (9%) are single and once married males - with females representing less than one per cent of this Warrant Office sample.

Nine out of ten Warrant Officer respondents are white; six per cent (6%) are Black; two per cent Mexican-Americans, Puerto Rican or of other hispanic background; the remaining two per cent identify themselves as Asian-Americans or "other".

The majority of the respondents (~~67%~~ ^{69%}) are U.S. Army Reserves with a little less than a third (31%) in the regular army.

Six out of ten received their warrant through direct appointment; thirty six per cent (36%) through Warrant Officer Candidate School; the remaining four per cent (4%) through some other accrediting route.

In response to the question: "Do you plan to make the Army a career? (more than 20 years of service) we find the following:

- 29%: Yes, but undecided as to when retirement will occur.
- 28%: Yes, plan to retire after completing twenty six or more years of service.
- 19%: Yes, plan to retire at 20 years of service.
- 17%: Yes, plan to retire after more than 20, but less than 26 years of service.
- 5%: Have not as yet made a career decision.
- ~~1%~~ ~~2%~~ No, do not plan on making the Army a career.

~~CHAPTER~~ Part II: Aviation and Non-Aviation Warrant Officers

In terms of civilian educational background little difference is found between these ~~two groups of~~ ^{AVIATION AND NONAVIATION} Warrant Officers. The same proportion in both groups have earned the baccalaureate degree (19%) and about three fourths of both groups report either "some college" or having been awarded an Associate Degree.

The only significant difference in military educational level is found in completion of the Warrant Officer Advanced Course (or old Intermediate Course). While more than a fourth (27%) in the Aviation group report completion of this level such is the case for only fifteen per cent (15%) of the non-aviation group. The majority in both groups select the "other" category when responding to the question of highest military educational level achieved.

Little variation is found in terms of military component with the majority in both groups being in the U.S. Army Reserves (71% for non-aviation and 65% for aviation).

Those in the Aviation group are somewhat more likely to report that either they do not plan on making the Army a career or that they are uncertain of their future plans. Combining those who say that they do plan on making the Army a

career but are undecided as to when they will retire; those who have not made a decision; and those who do not plan on making the Army a career we obtain the following differences:

Aviation	43%
Non-Aviation	31% 32%

A major contrast between the two groups is found in an examination of rank expectations. More than eight out of ten (85%) of the Aviation group expect to achieve the CW4 rank. Such is the case for only two thirds (66%) of the Non-Aviation group. ^{ALMOST} Twice as many of the Non-Aviation group ^(25%) expect to achieve the CW3 level as compared to thirteen per cent (13%) of the Aviation group.

Warrant Officers in the aviation group tend to place more emphasis upon "pay-raise" as the primary benefit of Warrant Officers promotion than do Non-Aviation Warrant Officers. (53% vs. ^{46%}~~45%~~). For both groups "increase in responsibility" receives the endorsement of ^{OVER} twenty per cent (20%) of the respondents (*AVIATION: 21 PERCENT; NONAVIATION: 23 PERCENT*).

Non-Aviation respondents are somewhat more inclined to identify "increase in prestige" (20% vs. ^{18%}~~17%~~) and "other" (12% vs. 9%) as the prime benefits of promotion.

Both groups of Warrant Officers agree that "competence in FMOS (principal duty)" and "competence in principal and additional duties" should be the primary factors in promotion considerations.

Differences do exist in the emphasis placed upon each of these factors: Aviation respondents endorse the "competence in principal and additional duties" (47% to 33%) while Non-Aviation respondents select the "competence in FMOS" criteria (49% to 37%).

~~Some fifteen per cent (15%) in both groups view "potential" and "longevity" as the more salient promotion variables.~~ *DISTORTS BY TALLING A LARGE AND A VERY SMALL PERCENTAGE.*

About half (53%) of all respondents point out that they have never been selected for promotion from the secondary zone. Forty one per cent (41%) have never been considered for promotion by a centralized section board. Five per cent (5%) have been selected once and one per cent (1%) have been selected twice.

Those in aviation show a higher rate of never being selected, ^{FROM THE SECONDARY ZONE} (62% to 49%) and a lower rate for never having been considered for promotion, ^{WHEN COMPARED TO} (34% to 45%) ^{FOR} the Non-Aviation respondents. ^{FROM THE SECONDARY ZONE}

Non-Aviation respondents, more so than Aviation respondents (58% to 45%), agree that "secondary zone promotions recognize outstanding performance and potential". The aviation group is twice as likely to express the position that "secondary zone promotions have an adverse effect" ^{20%} (21% to 11%).

Two thirds of both groups believe that on the job training/experience and civilian education are the types of training which carry the most weight with promotion/selection boards. The Non-Aviation Warrant Officers place a somewhat greater importance upon resident military courses (25%) than do aviation respondents (17%).

Clearly the aviation group is less knowledgeable about DA Pamphlet 600-11 than is the case among Non-Aviation W.O.'s.

Sixty two per cent (62%) of the non-aviation respondents state that they have read the pamphlet and understand the system as compared to fifty per cent (50%) of the aviation respondents. Respondents in the Non-Aviation group are also more likely to report that although they have read DA Pamphlet 600-11 they do not understand the system (18% to 12%); and that they have not read the pamphlet and do not understand the system (17% to ^{11%} ~~10%~~).

In response to the question:

"DA Pamphlet 600-11 outlines normal career progression from entry on active duty as a Warrant Officer until retirement. What do you think of the outlined career program?" We obtain the following distribution of responses.

	<u>Aviation</u> (%)	<u>Non-Aviation</u> (%)	<u>All</u> (%)
I. I am not familiar with the MOS career patterns shown in DA PAM 600-11.	24 19	15	10
II. I believe the stated career pattern for my MOS is adequate and provides sufficient goals that are challenging as well as obtainable.	27	33	31
III. I believe my career pattern is too limited and does not provide sufficient challenge in obtaining desired goals.	31 30	12 13	18
IV. I believe they have little basis in reality, and that few Warrants will be able to obtain stated goals.	17	23	20 21
V. I believe there is no career pattern for my MOS.	5 7	17 16	15 13
	<u>(100%)</u>	<u>(100%)</u>	<u>(100%)</u>

The major difference between the two groups is in response III where members of the aviation group are more than twice as likely (^{30%}~~31%~~ to ^{13%}~~12%~~) as Non-Aviation respondents to believe that their "career pattern is too limited and does not provide sufficient challenge in obtaining desired goals."

The only other impressive difference is found in the fact that Non-Aviation

W.O.'s feel more strongly than Aviation W.O.'s that there is no career pattern for their MOS (^{16%} ~~17%~~ to ^{7%} ~~5%~~).

Non-Aviation respondents do set a ^{SOMEWHAT} higher educational level for appointment to Warrant than do Aviation W.O.'s. Over ^{ONE-HALF (58%)} ~~two-thirds~~ of the Non-Aviation group would require a minimum of some college, with the remainder (42%) stating that a high school diploma or equivalent would be sufficient. On the other hand more than half (^{52%} ~~53%~~) of the Aviation W.O.'s set a high school diploma as the minimum base - with the remainder (47%) ^{ENDORSE} ~~expressing~~ a formal educational background beyond the high school diploma.

While Aviation W.O.'s do, as noted earlier, hold higher rank expectations than Non-Aviation W.O.'s, there is some evidence that this group is less knowledgeable about the workings of the system and perhaps less certain as to their competency.

For example Aviation W.O.'s are twice as likely as Non-Aviation W.O.'s to take the position that they were either somewhat or not aware of expected duty requirements prior to appointment as a Warrant Officer (^{43%} ~~47%~~ to ^{22%} ~~21%~~).

Further, Aviation W.O.'s, more so than their Non-Aviation counterparts hold the view they they were either somewhat or not fully prepared to assume the duties required at the time of appointment (31% to 18%).

For the most part the, Non-Aviation W.O.'s hold a more positive view as to both awareness of expected duties and competency to perform such duties at the time of appointment to Warrant.

Two thirds of the W.O.'s believe that their current duty assignment matches either their primary MOS Training (30%) or their previous experience and MOS Training (36%). Only seven per cent believe that there is no fit between current assignment and previous experience on MOS Training.

Two differences of limited magnitude exist: First, Non-Aviation respondents,

more so than Aviation W.O.'s rate the fit between previous experience/MOS Training and current duty position as being appropriate (~~34%~~^{39%} to 29%). Conversely, Aviation W.O.'s, more so than Non-Aviation W.O.'s, see a positive relationship between additional MOS Training and current duty position (13% to 3%).

The majority of all W.O.'s believe that for the effective utilization of a Warrant Officer: "Most assignments should be in the primary MOS some in additional MOS's" (51%) or "All assignments in one MOS only; either primary or additional MOS" (~~24%~~^{26%}).

The only substantial difference between the two groups is that Non-Aviations W.O.'s are much more likely than Aviation W.O.'s to select the "All assignments in one MOS" either primary or additional MOS (~~31%~~^{30%} to 17%). Aviation respondents also tend to place more emphasis upon a variation of assignments between primary MOS and additional MOS's with occasional assignments outside the MOS (19% to 13%).

While the vast majority of all respondents express satisfaction with their primary MOS designation a small number do indicate dissatisfaction. The less satisfied are the Aviator group where ~~eighteen~~^{NINETEEN} per cent (~~18%~~^{19%}), compared to eight per cent (8%) of the Non-Aviation group, say that they are dissatisfied regardless of whether or not the primary MOS was voluntarily chosen or imposed.

Aviation W.O.'s are also more inclined to report that the primary MOS does not match previous training, experience, or desire (12% to 4%). Still, the majority of both groups (91%) do feel that there is an acceptable match between previous training/education/desire and primary MOS.

Three types of training/education processes are most often cited as having been most useful in support of the primary MOS.

On the Job Training and Experience	49%
Pre-Appointment Training	18%
Resident Functional Training Courses (Military)	16%

Only two per cent (^{3%}~~2%~~) of all W.O.'s respond that "NONE" of the training/education alternatives were of any value. There are three training/education modes which generate differences of opinion between the two groups of W.O.'s.

1. Resident Functional Training Courses
2. On the Job Training and Experience
3. ^{INITIAL}~~Limited~~ entry basic courses

The first endorsement is most prevalent among Aviation respondents (25% to 11%). In the second, the greater positive response comes from Non-Aviation W.O.'s (53% to ^{42%}~~41%~~). In the third, Aviation W.O.'s indicate the stronger support (10% to 3%).

A question dealing with the primary benefit of Initial Entry/Basic Courses produces significant differences between the two groups. Almost three fourths (74%) of all Non-Aviation W.O.'s indicate that they did not participate in such courses as compared to only nineteen per cent (^{19%}~~11%~~) of Aviation W.O.'s.

For those Non-Aviation respondents who did attend such courses no one particular benefit is apparent. For the Aviation respondents the response most frequently cited was:

"It provided the technical basis only for performance of my PMOS, but did not sufficiently prepare me for other duties I had to perform" (47%).

Nineteen per cent (19%) felt that the course did help in preparation for general responsibilities required by the PMOS including assigned additional duties. Eleven per cent (11%) believe that the course did prepare them sufficiently to assume all duties required by the MOS. There is ^{A CLOSE}~~almost a perfect~~ numerical split ^(47% VERSUS 53%) between those agreeing that adequate training opportunities are available for each MOS and those who either disagree or are uncertain.

Aviation W.O.'s are more likely to answer in the affirmative (^{54%}~~53%~~ to ^{44%}~~43%~~)

with Non-Aviation W.O.'s assuming a more negative posture (36% to 26%). The same proportion in each group ^(20% AND 21%) say they are uncertain. The ~~TWO~~ ^{THREE} forms of Training which are perceived to be most important in support of the primary MOS are:

Military Resident Instruction 47%

O.J.T. and Experience 31%

SPECIALIZED CIVILIAN TRAINING (NON DEGREE) 11%

Those considered least important are:

Civilian Schooling (Graduate) 33%

Military Non-Resident Instruction 32%

Specialized Civilian Training
(Non-degree) 17%

Civilian Schooling (undergraduate) 13%

Non-Aviation W.O.'s tend to be slightly more positive about civilian specialized training (13% to 7%) and Aviation W.O.'s more enthusiastic about O.J.T. (35% to 29%) and resident military instruction (51% to 45%).

Differences between the two groups tend to be more widespread in response to a question dealing with the level at which gaps occur in schooling for the primary MOS.

Non-Aviation W.O.'s are twice as likely as Aviation W.O.'s to believe that the gaps exist at more than one level (22% to 11%); and at the basic level (19% to 9%). Aviation W.O.'s on the other hand are inclined to see the gap at the "Expert" knowledge level (19% to 9%).

Forty one percent (41%) of the Aviation group as compared to thirty four per cent (34%) of the Non-Aviation group report that they are unaware of any gap in currently available schooling. The overall majority of all respondents (64%) do feel that there is at least one level in which current available schooling does not provide adequate preparation for the primary MOS.

Far more Non-Aviation than Aviation W.O.'s indicate that they have not attended a functional training course in support of the primary MOS. Of those Non-Aviation respondents who have attended (less than half of the sample) the great majority (77%) believe the course increased technical expertise in the primary MOS while the remainder (23%) take the opposite position

Among Aviation W.O.'s (about 30% did not participate in a functional course) almost all who did attend (93%) agree that the course did help to increase technical expertise. No matter the post military career plans of the respondents the majority (82%) do believe that MOS Training will be of value in a potential civilian career.

Generally Non-Aviation W.O.'s are more likely than Aviation W.O.'s to see a potential beneficial connection between primary MOS Training and a civilian career. Almost a fourth (23%) of the Non-Aviation group respond in the affirmative and indicate that they plan on doing the same type of work once they leave active duty. A similar response is made by only thirteen per cent (13%) of the Aviation W.O.'s.

More Aviation than Non-Aviation W.O.'s (28% to ~~22%~~^{23%}) respond that they plan on doing closely related work in civilian life. Aviation W.O.'s are more inclined than their Non-Aviation counterparts to say either "Yes, I expect it to be valuable, although I do not know what I will be doing" (41% to 35%) or "No, I do not expect it to be useful; there are no similar civilian jobs" (17% to 8%).

While many respondents agree that all Warrant Officer positions do not require the same level of training (74%) this view is most strongly held by Warrants in Aviation (84% to 69%). Non-Aviation Warrants, more so than Aviation Warrants feel either that all Warrants should have "somewhat" similar training (16% to 9%) or the same training (11% to 6%).

Moving from preferred training modes to assessments of currently available primary MOS oriented training we find that O.J.T./Experience (^{49%}~~47%~~) and Resident Military Courses (37%) are perceived as being most important. Civilian education/civilian industry training receives the endorsement of eleven per cent (11%) of all Warrants.

W.O.'s in Aviation see resident military courses as being more important than do Non-Aviation respondents (44% to 33%); while Non-Aviation W.O.'s view civilian education training as more important (14% to 7%).

Graduate level civilian education is considered to be of primary value for two purposes:

1. Staying competitive when considered by promotion/selection boards 53%
2. Preparing for a civilian career after leaving active duty 28%

Only thirteen per cent (13%) see such education as being of value in gaining knowledge required for the primary MOS, and five per cent (5%) see no value what so ever to such advanced academic work.

Aviation W.O.'s, more so than Non-Aviation Warrants, select the civilian career value option (33% to ^{26%}~~25%~~) and Non-Aviation tend to show greater endorsement of the primary MOS knowledge benefit (16% to 7%). The differences noted above might in part be explained by the fact that more Aviation W.O.'s have participated in a civilian education program (since appointment as a Warrant officer) than have Non-Aviation Warrants (84% to ^{73%}~~77%~~).

No differences are found between the two groups as to the availability of civilian educational opportunities. A little more than half (52%) feel that the opportunities are inadequate while the remainder (48%) hold an opposite view.

It does seem clear that there are differences between the two groups in both their perceptions of the availability of civilian education opportunities and the value of such courses for primary MOS Training. Non-Aviation W.O.'s feel more strongly that educational opportunities are available and important (46% to 34%), while Aviation Warrants believe that such courses, while being available, are of limited importance for professional development (48% to 35%).

Among those who have participated in civilian education programs:

- 40%: Believe that the courses have enhanced ability to perform Warrant officer duties.
- 35%: Believe such courses have enhanced promotion opportunities.
- 20%: See no correlation between duties and courses.
- 5%: See no correlation between courses and promotion opportunities.

The one major difference in the assessments of both groups is in the question of benefits to the performance of duties. Non-Aviation Warrants, more so than Aviation Warrants, view these courses as having enhanced performance of duties (44% to 33%).

The two responses most frequently selected as to what constitutes "MOS qualification" are:

- 1. The ability to "do the job" in the MOS, whether formally trained or not 68%
- 2. Successful completion of designated training courses and developmental assignments 24%

The question of what does constitute MOS qualification generates perhaps the most significant differences of opinion found in this study.

By almost a three to one margin Aviation Warrants select the "successful completion of designated training courses and developmental assignment (42% to 15%). Non-Aviation Warrants on the other hand show a much stronger commitment

to "ability to do the job in the MOS, whether formally trained or not (76% to 51%). Clearly, Aviation W.O.'s prefer a more formal and systematic training/experience check off system while Non-Aviation W.O.'s prefer job assessments and less in the way of formal course completion requirements. Further evidence of the qualification dichotomy between the two groups arises when a question is asked dealing with where major responsibility rests in matters of Warrant officer primary MOS qualification.

Although the majority in both groups believe the responsibility should be with the Warrant Officer, Non-Aviation W.O.'s are far more likely to take this view than are Aviation W.O.'s (83% to 51%). Conversely, Aviation Warrants feel much more strongly that responsibility should rest with the Warrants MILPERCEN career/management assignment officer (37% to ^{12%}~~44%~~).

~~Again, we see that while Aviation Warrants show a greater preference for a more externally based process, the Non-Aviation Warrants express a preference for a more internal and perhaps less formal process.~~ ?
VAGUE AND MISLEADING

The two groups differ also, but to a lesser degree, in estimates of how many different MOS assignments are required for a Warrant officer to become fully qualified.

<u>Number of Assignments</u>	<u>Aviation W.O.'s</u> (%)	<u>Non-Aviation W.O.'s</u> (%)
One	21	12
Two	27	18
Three	29	31
Four	5	11
Four or More	18 19	28
	(100%)	(100%)

Most Warrants have or expect to become qualified in their MOS by one of two

methods: On the job experience (no Structured Training) 59% or Resident Training in military courses (27%). Non-Aviation Warrants are much more likely to select the OJT alternative (65% to 46%) while Aviation Warrants are about three times more likely to choose the resident training in military courses alternative (45% to 18%).

No differences exist between the two groups as to the number of years after completion of training a Warrant should work in an MOS assignment in order to become fully qualified. Almost two thirds in both groups believe that three or more years are required (63%) with the remainder of both groups (37%) feeling that two or less years are sufficient.

Responses to a question dealing with the establishment of MOS qualification standards provides additional insight as to how the two groups view formalized as opposed to less formalized criteria for evaluation.

First, It should be noted that many more Aviation Warrants than Non-Aviation Warrants report that their MOS already has qualification standards (49% to 15%).

Secondly, Non-Aviation Warrants, more so than Aviation Warrants prefer flexible standards (31% to 21%).

Third, Twice as many Non-Aviation Warrants are opposed to the establishment of firm standards since they believe that MOS qualifications are subjective (^{11%} ~~14%~~ to ^{8%} 7%).

Fourth, Four times as many Non-Aviation Warrants say no to fixed qualification standards for some reason other than those identified in the question (20% to 5%).

Given the imposition of a system of firm MOS qualification standards most Warrants, be they Aviation or Non-Aviation, believe that information gathered should be used for either one of two purposes:

1. As a diagnostic tool for determining assignment and/or educational opportunities for Warrant Officers 43%
2. Used officially as a matter of record for consideration by promotion/selection boards or other activities 35%

Neither are differences apparent between the two groups when asked to assess their present level of professional development in the primary MOS.

- 75% Believe they are well prepared
- 22% Believe they are somewhat prepared
- 3% Believe they are either ~~UNPREPARED~~ somewhat or not prepared at all

There is also a high level of consensus among all W.O.'s that resident instruction is preferable to non-resident instruction in providing knowledge required for qualification in the primary MOS (75%). Only two per cent view non-resident instruction as most effective. Twelve per cent (12%) feel they are both effective and eleven per cent (11%) believe neither are effective in their present form.

No differences of any significant nature are found in the number of hours per week the two cohorts of W.O.'s feel they could devote to independent career-related studies (both on and off duty).

- 45%: Four ~~or~~ fewer hours per week
- ~~29%~~ ~~28%~~ 29%: Five to seven hours per week
- ~~17%~~ ~~27%~~ 17%: Ten hours or more per week

Although major variations do exist between the two groups of Warrants there is overall agreement that formal military functional training courses (54%) and on-site training through civilian contract (~~31%~~ ^{32%}) are the chief ways in which Warrant should become trained in newly acquired equipment and/or systems.

Non-Aviation W.O.'s show a greater preference for on-site training through civilian contract (39% to 19%) while Aviation W.O.'s indicate a stronger commitment to formal military functional training (71% to 46%).

For retraining in conjunction with mandatory reclassification both groups respond in a similar manner.

- 81%: On-site training through civilian contract.
- 10%: O.J.T.
- 7%: Formal military functional course
- 2%: Correspondence course or other

Similar to other questions dealing with examinations and fixed qualification standards we find that Aviation W.O.'s are also more likely to agree that professional examinations for the Warrant officer corps should be instituted.

The table which follows shows the distribution of agree and disagree responses for the two groups and the total sample.

	<u>Aviation W.O.'s</u> (%)	<u>Non-Aviation W.O.'s</u> (%)	<u>All</u> (%)
Strongly Agree	18 (50)	15 (32)	16 (38)
Agree	32	17	22
Does not matter to me	13	15	14
Disagree	22 (37) (38)	24 (53)	23 (48)
Strongly Disagree	16 45-	29	25

We see from the table above that agreement is most apparent among Aviation W.O.'s while disagreement is most prevalent among Non Aviation respondents.

Again, we also find that despite differences in feelings about fixed standards and examinations between the two groups little disagreement is found in how respondents feel about the proper utilization of such test results and other

information.

About half of both groups believe that results from Warrant Officers examinations should be used to determine education/training needs. Thirteen per cent (13%) take the position that test results should be used only for individual diagnostic purposes. Eleven per cent (11%) for qualification into certain positions. Seven per cent (7%) as a basis for promotion and the remainder (17%) believe such results should be used for any purpose.

In summary we find then that although Aviation W.O.'s express the greater preference for more standardized qualification criteria as well as professional examinations, they do not differ significantly from Non-Aviation W.O.'s as to attitudes with regard to the use of data obtained through tests and other formalized evaluative instruments.

The major limitation respondents feel to the use of Warrant Officer examinations is based upon a belief that paper and pencil tests may not accurately reflect job performance (63%). Another nineteen per cent (19%) see some other limitation; and the remainder (18%) believe another evaluation tool is not necessary since current procedures are adequate.

No significant variations are found between the two groups in the question of Warrant Officer examination limitations.

Most respondents have not participated in a Warrant Officer Advanced Course. Of those who have half (51%) believe the course enhanced their potential promotion and/or career progression; twenty nine per cent (29%) feel the course better prepared them in performance of duties required by assigned MOS; and the remainder (20%) feel that the course neither better prepared them to perform duties nor did it enhance career progression.

~~By a margin of~~ Sixteen per cent (16%) Non-Aviation W.O.'s selected the duty performance benefit and ~~by a margin of~~ ^{OF} fourteen per cent (14%) Aviation

W.O.'s selected the promotion enhancement benefit.

Both groups of Warrant Officers would expect similar levels of salaries were they employed in the current civilian labor market.

- 16%: Would expect annual salaries of \$15,000.00 or less
- 41%: Would expect annual salaries of between \$15,000.00 and \$20,000.00
- 38%: Would expect an annual salary range of \$20,000.00 to \$30,000.00
- 5%: Would expect annual salaries in excess of \$30,001.00

The data which follow are based upon responses to a series of agree-disagree questions. In order to simplify analysis and discussion "strongly agree" and "agree" responses will be combined into a simple percentage figure. Questions which produce significant differences of opinion between the two Warrant Officer groups will be noted.

- I. Warrant Officers should be assigned to a utilization tour directly following formal MOS Training ~~93%~~ 94%
- II. The most valuable training in some MOS's is on the job experience 92%
- III. All other things being equal "more" formal course training is always more career-enhancing than "less" 90%
- IV. Warrant Officers serving in commissioned officer positions should receive credit in some way for such Non-MOS related service 90%
- V. All MOS's are based upon a solid Army requirement for the functional area 70%
- VI. Formal course training is necessary to learn the basics of an MOS 67%

- VII. For some highly-technical MOS's, training costs are so high that the "up-or-out" promotion rule should be suspended. * Significantly greater agreement among Aviation W.O.'s (73% to 59%) 64%
- VIII. Warrant Officers who have received college-level civilian schooling in support of their primary MOS are more competitive for promotion than those who have not 67%
 * Tendency toward greater approval from ^{NON-}Aviation W.O.'s (~~61% to 53%~~). (69% to 61%).
- IX. Promotion boards should promote by MOS quotas; i.e., each MOS should be assured of its "fair share" of each new promotion list. (Fair share must be based on validated needs for officers in each MOS) 56%
- X. The academic report received upon completion of a course of military or civilian training should be as important to promotion potential as an efficiency report 53%
- XI. More general educational opportunities, rather than specific MOS - related training, should be provided for Warrant Officers 52%
- XII. On-the-job training should be more structured (firm requirements, time limits, an OJT monitor, and graduation.completion certificate) 51%
 * Greater endorsement by Aviation W.O.'s (58% to 48%).
- XIII. In my MOS, military training is superior to civilian "contract" MOS training 46%
 * Significantly greater agreement among Aviation W.O.'s (58% to 40%).
- XIV. All educational or training opportunities for Warrant Officers should be directly related to a technical MOS skill 43%

- XV. Military Schools such as the Advanced Course or the Senior Course provide little specialty training support 42%
- XVI. Only the primary MOS has any real importance in career advancement ^{47%} ~~41%~~ 37%
 * Much more likely (~~41%~~ to 19%) to be endorsed by Non-Aviation W.O.'s.
- XVII. Selection boards should use MOS training completion as a criterion for promotion 41%
- XVIII. The knowledge gained through civilian college-level education is more important to the Army than any degree received by the Warrant Officer 39%
- XIX. Warrant Officers should have a training program similar to commissioned officers leading to appointment (e.g., ROTC, Military Academy, OCS) 39%
 * Significantly greater agreement among Aviation W.O.'s (56% to 30%).
- XX. "Quality" officers should be equitably distributed over MOS's, either voluntarily or involuntarily 33%
- XXI. MOS examinations for Warrant Officers should be instituted ~~33%~~ 31%
 * Significantly greater agreement on the part of Aviation W.O.'s (42% to 25%).
- XXII. Warrant Officers should never be required to serve in commissioned officers positions 27%
- XXIII. Selection for attendance at AWOC/WOSC is more important than actual attendance 19%
- XXIV. Warrant Officers utilization policies and procedures are clearly defined and understood by most Army personnel 15%

As was the case with selection and satisfaction with Primary MOS the majority of all W.O.'s state that the additional MOS was voluntarily chosen and there is satisfaction with that choice ^{72%} (76%).

No matter method of assignment only eleven per cent (11%) of all W.O.'s indicate that they are dissatisfied with their additional MOS. No differences are found between the two groups of respondents.

Similarly, as was the case with training received for the primary MOS the majority of W.O.'s select either "Resident Functional Training courses (military) (41%) and" on-the-job experience (no structured training) (30%) as the two training modes most useful to support of the additional MOS. "Pre-appointment training" is identified as having been most useful by twelve per cent (12%) of the respondents with "initial entry/basic course" being endorsed by seven per cent ^{8%} (7%).

Non-Aviation W.O.'s show greater support for pre-appointment training (20% to 6%) and O.J.T. (34% to 26%). Aviation W.O.'s are far more likely to identify Resident Functional Training courses than are Non-Aviation W.O.'s (49% to ^{29%} 24%).

There is of course a positive correlation between responses to the previous question and a question dealing with the types of training which should be provided in support of the additional MOS. Hence, again the two modes most frequently cited are:

Military Resident Instruction	^{50%} 51%
O.J.T./Experience	53%

~~Comparisons between the two groups as to preferred or desired training modes would more than suggest that Non Aviation W.O.'s would like to see more in the way of Military resident instructions. In the previous question (dealing with the most useful training received in support of the additional MOS) twenty~~

→ MISLEADING; AVIATORS HAD HIGHER PERCENTAGES IN BOTH CASES.

~~nine per cent (29%) selected Resident Functional Training courses. In response to the question of preferred training mode forty six per cent (46%) chose military resident instruction.~~

OVERSIMPLIFICATION
(There has been more mobility) in additional MOS assignments among Aviation W.O.'s than is the case for Non-Aviation W.O.'s a third (33%) of all Non-Aviation W.O.'s say they have served no assignments in the additional MOS as compared to only fourteen per cent (14%) of Aviation respondents. More than half (54%) of Aviation Warrants have had two or more assignments in the additional MOS in contrast to ~~thirty five per cent (35%)~~ ^{49%} of Non-Aviation W.O.'s.

The two groups do not really differ in what they perceive as the role of civilian education in the additional MOS.

- 38%: Believe civilian educational opportunities are available but of limited importance for professional development
- 31%: Believe it is both available and highly important for proper professional development
- 31%: Believe such opportunities are not available

There is also general agreement among both groups that Resident military courses (43%) and ON-THE-JOB TRAINING AND EXPERIENCE ~~Civilian Education/Civilian Industry Training~~ (42%) are the most important training alternatives currently available in the additional MOS.

Non-Aviation W.O.'s much more so than Aviation W.O.'s report that they have not received training in the additional MOS (46% to ^{11%} 40%) and Aviation W.O.'s, by a significant margin, are more likely to report having received training prior to the first assignment in the additional MOS (67% to 40%).

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 (CATTSS) - 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 (PERSACS) - 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 (RETC) - 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.