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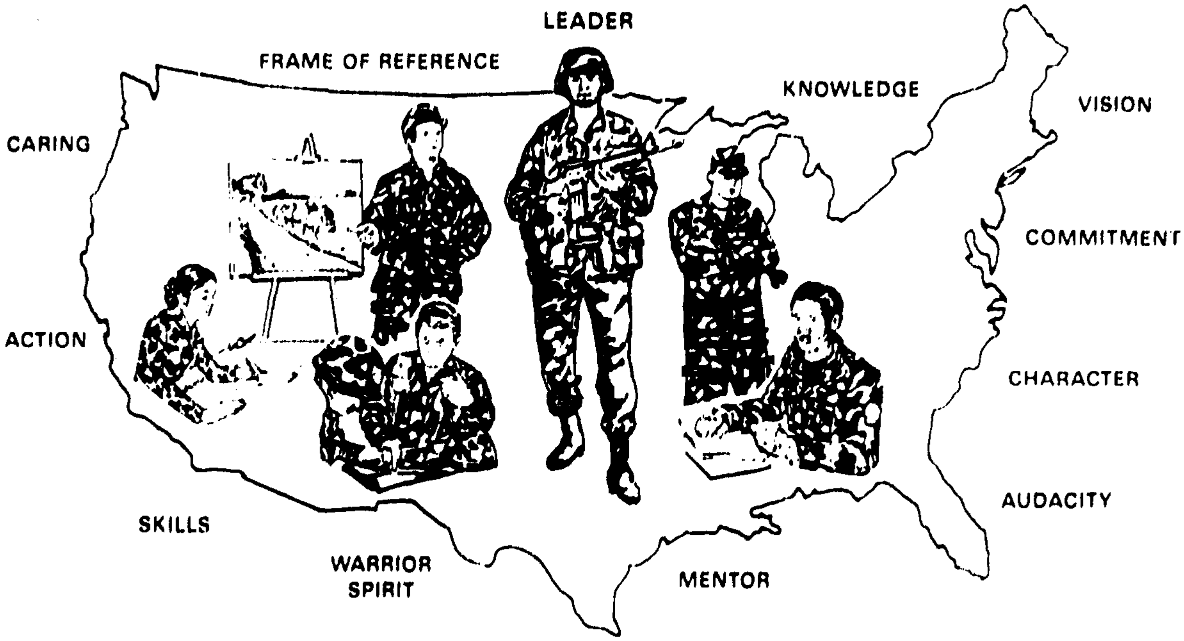
PROFESSIONAL DEVELOPMENT OF OFFICERS STUDY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VOLUME III—SYSTEMS-WIDE ISSUES

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DEPARTMENT OF THE ARMY
OFFICE CHIEF OF STAFF
WASHINGTON

STUDY DIRECTOR: LTG CHARLES W. BAGNAL

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The purpose of the study was to re-examine all aspects of the officer professional develoment system as it has evolved since the 1978 Review of Education and Training for Officers (RETO) Study. This report provides an analysis of every area of officer professional development (Active and Reserve), with particular concentration on education and training out to the year 2025. The recommendations made are designed to transition the Army to a training and education strategy which will more effectively meet tomorrow's challenges.

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The views, opinions, and/or findings contained in this report are those of the study group author(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation.

The words "he," "him," and "men," when used in this report represent both masculine and feminine genders unless specified otherwise.

Contents

Professional Development of Officers Study Group Report
Table of Contents
Volume III —System-Wide Issues

Page
Title Page i
Disclaimer iii
Table of Contents v
System-Wide Issue ....
Annex
Professional Development Concepts .... F
Decision Making And Cognitive Complexity .... G
Self-Development And Individual Assessment .... H
A Mentorship Strategy I
Warrior Spirit .... J
BE/KNOW/DO Concept .... K
Art And science Of War L
Expert-Integrator .... M
Common Shared Operational Language .... N
Common Core .... O
Education And Training Methods .... P
Functional Education And Training .... Q
Command .... R
Advanced Civil Schooling .... S
Impact On Officers And Their Families .... T
Implications For Women .... U
Macom Commander Comments V
Control And Coordination .... W
Balanced Cells Of Quality X
PDOS Teleconference Net .... Y
OPMS-OPDS Crosswalk (Education And Training) .... Z

Volume 1—Main Report

Page

Disclaimer i

Title Page ii

Transmittal Letter iii

Tasking Directive v

Report Documentation Page xiii

Volume I: Table of Contents xv

Volume I: List of Figures and Tables xix

Volumes II-V: Table of Contents xxi

Distribution List xxii

Executive Summary xxvii

Study Group Membership xxxi

Chapter I. Genesis and Organization of the Study

Background 1
Objective Of The Study 1
Composition, Direction And Control 2
Acknowledgments 2
Organization Of The Report 3

Chapter II. Methodology

Introduction 5
Overview Of Methodology 6
Fundamental Principles 7
Strategic Goals 9
Teleconference Net 10
Surveys 11
Alternative Futures And Policy Impact Analysis Methodology 12
Organization Of The Study Group To Implement The Methodology 14

Chapter III. Needs Analysis

Introduction 17
The Challenge 17
The Education And Training System 21
Other Studies 27
Other Armies 31
PDOS Assessments 31
Additional Strengths And Challenges Of The Current System 33

Conclusions 35

Chapter IV. **Theoretical Basis for Educating and Training Officers**

Origins Of The PDOS Desired System 37
Professional Values 37
Individual Motivation 40
The Adult Learning Cycle, Education And Training 43
Frame Of Reference, Decision Making And Cognitive Complexity 45
PDOS Professional Development Framework 51

Chapter V. **The Seven Officer Professional Development Periods**

Introduction 55
Development Period: Pre-Commissioning 55
Development Period: Lieutenant 58
Development Period: Captain 59
Development Period: Major And Lieutenant Colonel 62
Development Period: Colonel 65
Development Period: Brigadier And Major General 67
Development Period: Senior General Officers 70

Chapter VI. **System-Wide Issues**

Overview 73
Warrior Spirit 73
BE-KNOW-DO 74
Professional Values 75
Art and Science of War 75
Expert-Integrator 76
Decision Making 77
Common Shared Operational Language 78
Self-Development 78
Mentor 79
Common Core 80
Education And Training Methods 81

Chapter VII. **Special Interest Items**

Introduction 89
The Reserve Components 89
Functional Educational And Training 90
Impact On Special Branches 94
Pre-Command Course 94
Advanced Civil Schooling (ACS) 95
Impact On Individual And Families 96
Implication For Women Officers 96
Control And Coordination Of Officer Professional Development 97

Chapter VIII. **Chief of Staff, Army Decisions and Implementation Strategy**

Introduction 99
Summary of MACOM Commanders Comments 99

CSA Approved Base Policies 99
CSA Modified Base Policies 105
Implementation Plan 105
Managing Uncertainty 107
Summary And Conclusion 110

Annexes
A—System Spread Sheets A-1
B—Future Evironment/Policy Impact Analysis B-1
C—Glossary of Terms, Abbreviations and Acronyms C-1
D—Bibliography D-1

Volumes II-VI

Annex
Volume II Implementation Plan .... E

Volume III **System-Wide Issues**

Professional Development Concepts .... F
Decision Making and Cognitive Complexity .... G
Self-Development and Individual Assessment .... H
A Mentorship Strategy I
Warrior Spirit .... J
BE/KNOW/DO Concept .... K
Art and Science of War L
Expert-Integrator .... M
Common Shared Operational Language .... N
Common Core .... O
Education and Training Methods .... P
Functional Education and Training .... Q
Command .... R
Advanced Civil Schooling .... S
Impact on Officers and Their Families .... T
Implications for Women .... U
MACOM Commander Comments V
Control and Coordination .... W
Balanced Cells of Quality X
PDOS Teleconference Net .... Y
OPMS-OPDS Crosswalk (Education and Training) .... Z

Volume IV **Development Periods And Reserve Components** Annex
Development Period: Pre-Commissioning .... AA
Development Period: Lieutenant .... BB
Development Period: Captain CC
Development Period: Major/Lieutenant Colonel .... DD
Development Period: Colonel .... EE
Development Period: Brigadier and Major General .... FF
Development Period: Senior General Officers .... GG
Reserve Components .... HH

Volume V Policy Impact Analysis II

Author: LTC Witherspoon
Team Chief: COL Rowe

Annex F

Professional Development Concepts

1. PURPOSE. To introduce the development period framework used throughout the study and to serve as a preface to the annexes which describe the seven development periods in an officer's career. This annex also discusses learning theory and its relevance to PDOS and the 1978 RETO Study.

2. DISCUSSION.

a. Background.

(1) At the outset of its deliberations. PDOS determined it would be essential to orient on the design of an ideal or desired Officer Professional Development System. Simultaneous with an analysis of the strengths and weaknesses of the current system and definition of the fundamental principles and strategic goals which give purpose to the future system. the study group began to explore theoretical aspects of professional development.

(2) The search led to an examination of professional development models in other professions. However it readily became apparent that few share the unique aspects of the Army officer corps—a well defined hierarchy. central management of a large membership. the requisite of a unifying corporate ethic. command. and responsibility for vast public resources. Only other military services share these characteristics. several of which were reviewed. Each provided valuable insights that were incorporated in the study. However. no single theoretical foundation emerged as being adaptable to US Army officer professional development.

(3) Contacts with various individuals and agencies studying Army leadership proved more fruitful. The model described herein draws most heavily on the work by the Army Research Institute. It derives also from many discussions with other military and civilian researchers in this and related fields.

(4) PDOS has sought to develop a framework for officer professional development that is consistent with the actual experiences of the officer corps today and in the future. But professional development is more than a static description of how the officer corps is organized and prepared. It is also the province of the individual and how he acquires the skills. knowledge. and craft to perform with competence and excellence. A professional development framework. then. must recommend as well as describe a system which promotes learning and growth. These two criteria form the basis for evaluating the PDOS framework.

b. The PDOS framework for officer professional development.

(1) Three key concepts lie at the heart of the PDOS model of Officer Professional Development:

(a) Frame of Reference: The officer's breadth of perspective. a measure of his capacity to understand things and to assert control over them. The frame of reference is the sum total of an officer's understanding of himself. his role. his organization. his subordinates and cause and effect in the flow of events around him. all of which determine his capacity for proactive control of his environment. his ability to deal with uncertainty and complexity. and his perspective in terms of time.

(b) Development Period: A phase in an officer's career. bounded usually by promotion. during which he acquires a given set of cognitive skills. operates within specified bounds of authority. bears a certain level of responsibility and contends with some degree of complexity and uncertainty. The development period represents an envelope of assignments during which we can identify general and branch or functional area specific attributes. skills and performance standards for officers to attain based on the range of positions they are likely to hold.

(c) Transition Point: The time between development periods when an officer. having completed one phase of duties, prepares for the next in which his frame of reference must be broader if he is to perform successfully. Transition points imply the need to expand an officer's frame of reference through intensive education or training before he enters the new development period. FIGURE F-1 portrays these concepts.

(2) The study group devoted a considerable effort to eliciting from literature, other studies, researchers, and its own aggregate experience just what the key transition points are within the profession. Two "camps" evolved, those who identified transitions as opportunity gates (e.g., command and school selection) and those who identified the transitions as being between levels of duty performance. As the concept definitions above indicate, the latter view prevailed, largely because it more fully supported the study group's notion of the fundamental purpose of the officer corps: to meet the needs of the Army and Nation. The Army's systems for selecting talented officers for promotion, command and other key assignments are related to professional development but do not define its purpose.

(3) The PDOS framework for officer professional development conceives of seven sequential, increasingly complex frames of reference, which correspond to development periods for an officer's career:

Pre-commissioning
Lieutenant
Captain
Major and Lieutenant Colonel
Colonel
Brigadier and Major General
Senior General Officer

(a) As an officer advances in rank and responsibility, effective performance increasingly hinges on the progressive growth of conceptual and integrative skills as well as on the contextual understanding of the officer's role in the Army at each stage of his career. Each officer needs a time of training, education and reflective thought to synthesize past experiences and expand his conceptual and contextual perspective to make the transition in frames of reference from one development period to the next. Thus, transition points contain a key Army school experience targeted on the requirements the officer must meet in the forthcoming period of development. The school curricula of all development periods are coordinated so the officer receives progressive and sequential instruction in required subjects. Once through the transition point and into

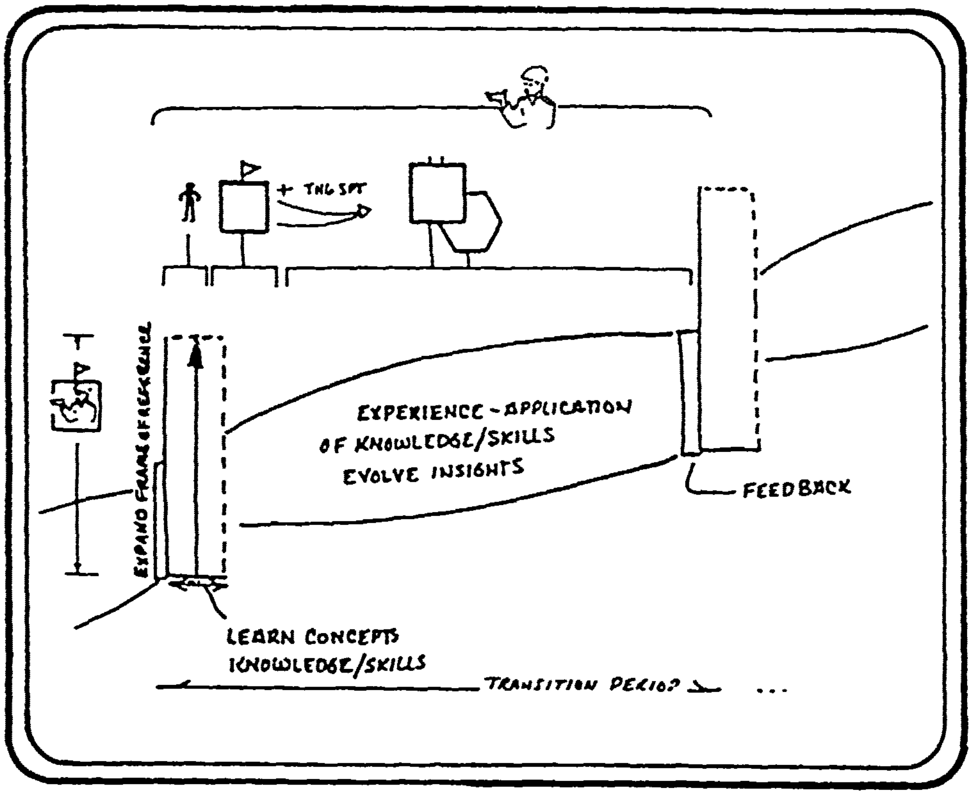

+ TNG SPT
EXPAND FRAME OF REFERENCE
EXPERIENCE - APPLICATION OF KNOWLEDGE/SKILLS EVOLVE INSIGHTS
FEEDBACK
LEARN CONCEPTS KNOWLEDGE/SKILLS
TRANSITION PERIOD
...

Figure F-1: Transition Points.

the development period itself, the officer continues to develop through a variety of means to include self-study, mentoring by senior officers, actual job experience, and assistance from Army schools via written material and computer programs. This process of phased, general development is a vital precursor and complement to functional training, education and experience.

(b) Promotion usually initiates the officer's transition into a new development period. (Often, however, individuals fill positions normally designated for more senior officers, and the Professional Development System must take this into account.) These transitions are sharp because the hierarchical nature of military organizations demands of the newly promoted officer the exercise of suddenly broader responsibilities and authority over more complex matters than he knew from his previous experience. FIGURE F-2 graphically portrays progressive growth through development periods.

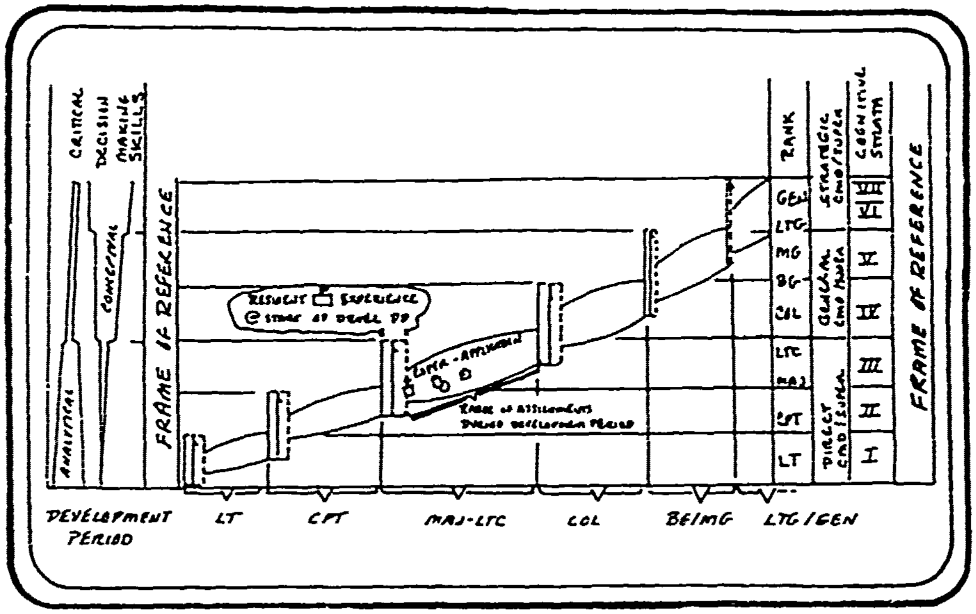
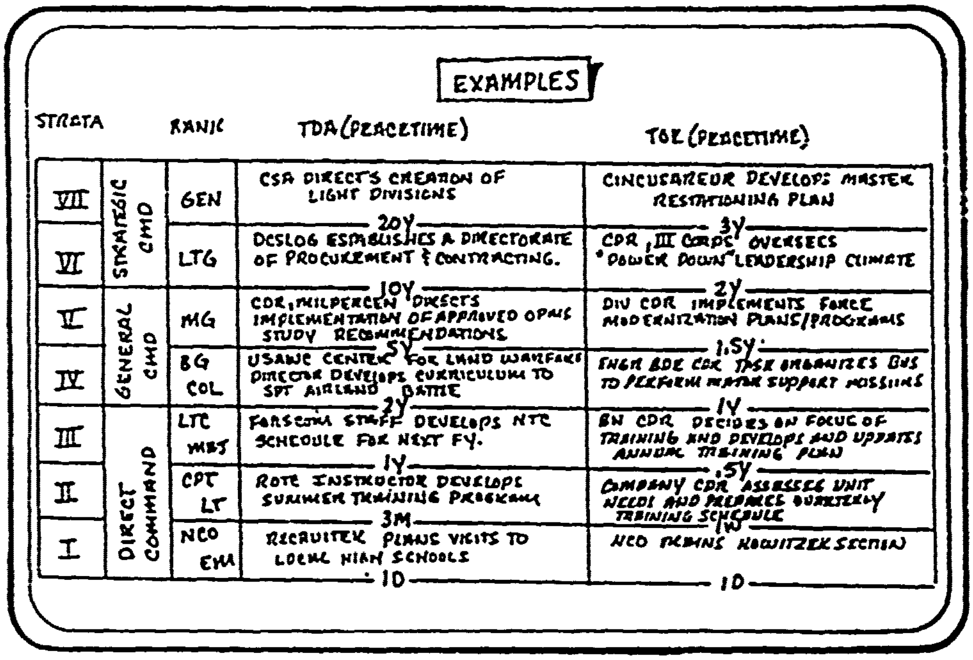

CRITICAL DECISION MAKING SKILLS
ANALYTICAL
CONCEPTUAL
FRAME OF REFERENCE
RESULT □ EXPERIENCE @ START OF DEVEL PD
CREA - ATTITUDE
RANGE OF ASSIGNMENTS DURING DEVELOPMENT PERIOD
RANK
STRATEGIC CMD/TOPLVL
GENERAL CMD/MGMT
DIRECT CMD/SUPV
COGNITIVE STRATA
GEN
LTG
MG
BG
COL
LTC
MAJ
CPT
LT
VII
VI
V
IV
III
II
I
FRAME OF REFERENCE
DEVELOPMENT PERIOD
LT
CPT
MAJ-LTC
COL
BG/MG
LTG/GEN

Figure F-2: Progressive Growth Through Development Periods.



EXAMPLES

STRATA		RANK	TDA (PEACETIME)	TOE (PEACETIME)
VII	STRATEGIC CMD	GEN	CSA DIRECTS CREATION OF LIGHT DIVISIONS — 20Y —	CINCUSAREUR DEVELOPS MASTER RESTATIONING PLAN — 3Y —
VI		LTG	DCSLOG ESTABLISHES A DIRECTORATE OF PROCUREMENT & CONTRACTING. — 10Y —	CDR, III CORPS OVERSEES "POWER DOWN" LEADERSHIP CLIMATE — 2Y —
V	GENERAL CMD	MG	CDR, MILPERCEN DIRECTS IMPLEMENTATION OF APPROVED OPMS STUDY RECOMMENDATIONS — 5Y —	DIV CDR IMPLEMENTS FORCE MODERNIZATION PLANS/PROGRAMS — 1.5Y —
IV		BG COL	USAWC CENTER FOR LAND WARFARE DIRECTOR DEVELOPS CURRICULUM TO SPT AIRLAND BATTLE — 2Y —	ENGR BDE CDR TASK ORGANIZES BNS TO PERFORM WATER SUPPORT MISSIONS — 1Y —
III	DIRECT COMMAND	LTC MAJ	FORSCOM STAFF DEVELOPS NTC SCHEDULE FOR NEXT FY. — 1Y —	BN CDR DECIDES ON FOCUS OF TRAINING AND DEVELOPS AND UPDATES ANNUAL TRAINING PLAN — .5Y —
II		CPT LT	ROTC INSTRUCTOR DEVELOPS SUMMER TRAINING PROGRAM — 3M —	COMPANY CDR ASSESSES UNIT NEEDS AND PREPARES QUARTERLY TRAINING SCHEDULE — 1W —
I		NCO EM	RECRUITER PLANS VISITS TO LOCAL HIGH SCHOOLS — 1D —	NCO TRAINS HOWITZER SECTION — 1D —

Figure F-3: Layering of Responsibilities Associated with Frames of Reference.

(c) Figure F-3 on previous page provides examples of the distinct layering of responsibilities associated with the varied frames of reference.

(4) PDOS identified what an officer must BE, KNOW and DO within each development period. These general performance standards (discussed in detail in Annex K) gear the mentors, trainers and educators as well as the individual officer to perform appropriate roles in the development process at each stage. Finally, the framework includes an analysis of methodologies to be employed by each actor, from the individual officer in his self-development role through the central Army school system (see Annex P).

(5) Diversity: Although the PDOS model offers a general framework for analyzing professional development, it does not advocate a "generalist" track for all officers; nor does it seek to mold all into one pattern. The Army's need for expertise in all branches and functional areas will grow in future years. It bears repeating that the PDOS framework is duty driven. Army requirements determine not only the generic qualities and capabilites an officer must have in each development period, they also place demands on Army and civil educators and trainers to breed technical and tactical experts in a wide spectrum of warfighting and supporting roles. The Army draws strength from the diversity of its officers. It will continue strong by nurturing that diversity.

c. Individual learning.

(l) During the 28 November 1984 IPR, the Vice Chief of Staff, Army challenged the study group to revalidate the development period framework. In his view, PDOS, by recommending that schools place emphasis on preparation of officers for a series of duty positions rather than just the next job, appeared to depart from the direction set by the RETO Study. The memorandum at Appendix 1 responds to this concern.

(2) PDOS considered that the development period framework for officer professional development would be valid only if its implications accorded well with accepted learning theory. Research into this area yielded a number of competing theories of how people learn and retain what they have learned. Appendix 1 contains, in summary form, a reasonably common interpretation. PDOS developed Figure F-4 to illustrate the study group's understanding of the adult learning cycle. Taken together the development period framework the learning cycle model and the emerging education/knowledge model (discussed in Annex P) constitute a coherent conceptual framework for a professional development system.

d. Implications for curricular structuring: The PDOS framework offers some insight into appropriate designs of service school curricula. The needs to prepare officers for a new development period involving a broader frame of refer-

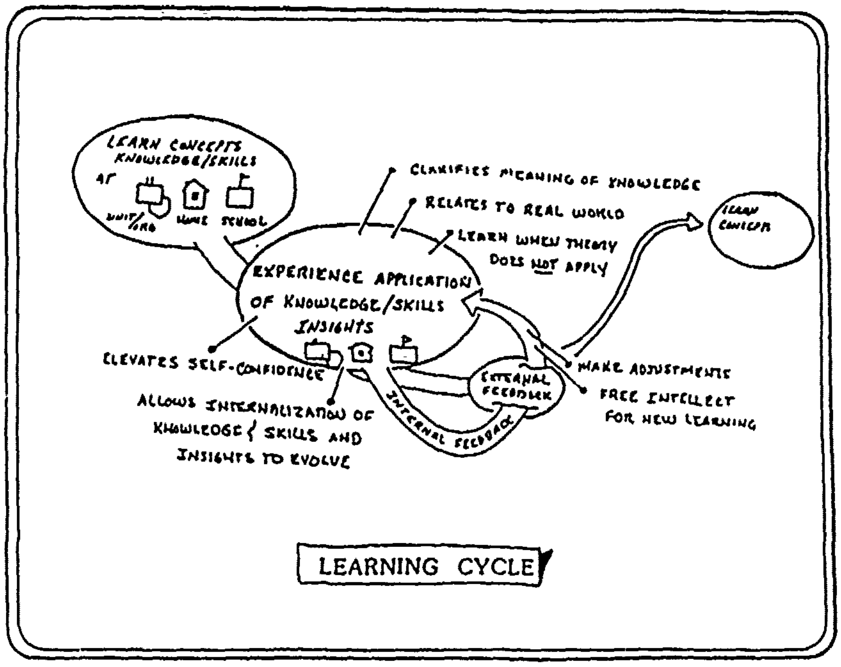

LEARN CONCEPTS KNOWLEDGE/SKILLS AT
UNIT/ORG
HOME
SCHOOL
CLARIFIES MEANING OF KNOWLEDGE
RELATES TO REAL WORLD
LEARN WHEN THEORY DOES NOT APPLY
LEARN CONCEPTS
EXPERIENCE APPLICATION OF KNOWLEDGE/SKILLS INSIGHTS
ELEVATES SELF-CONFIDENCE
ALLOWS INTERNALIZATION OF KNOWLEDGE & SKILLS AND INSIGHTS TO EVOLVE
EXTERNAL FEEDBACK
INTERNAL FEEDBACK
MAKE ADJUSTMENTS
FREE INTELLECT FOR NEW LEARNING
LEARNING CYCLE

Figure F-4: Adult Learning Cycle.

ence and to inculcate officers with a common core of skills, knowledge, and attributes (see ANNEX O) argue for a substantial mandatory base curriculum at each service school. This base curriculum also supports those who participate on a non-resident basis. On the other hand, Army schools must be the repository of technical and doctrinal expertise from which officers can best prepare for specific assignments. As computer knowledge bases maintained by service schools become available, it will eventually be possible for individual officers to access this repositing of technical and doctrinal expertise from remote locations. Furthermore, since the individual officer learns best by application of previously learned concepts, each school should devote a portion of its curriculum to the detailed preparation of officers for their upcoming assignments, and should assist individuals and units in the field with exportable training packages exploiting the most modern distributive technology. In sum, the most appropriate curricular models will be modular, will be exportable, will stress the common core and will provide individual assignment preparation.

3. RECOMMENDATIONS. None.

4. CSA REMARKS. None.

Appendices

1 PDOS Underpinnings
2 Bibliography
3 Action Plan
4 Phasing Plan

Appendix 1 to Annex F

PDOS Underpinnings

Memorandum for Director, Professional Development of Officers Study

Subject: Underpinnings of the PDOS Recommendations

1. **PURPOSE:** This paper addressess the Vice Chief of Staff's questions during the 28 November PDOS IPR concerning our philosophical underpinnings. Specifically, he asked for the rationale behind the PDOS main thrust that the officer professional development system should focus "schools on (a) series of jobs rather than just (the officer's) next job," and whether this was a departure from the direction set by the RETO study. He asked that we examine this issue from the theoretical perspective of how people learn.

2. **DISCUSSION:**

a. RETO:

(1) The RETO Study's recommendations responded to a shift in focus in the Army's educational philosophy from long-term general development toward short term technical preparation to meet identified Army requirements. Key among RETO objectives was to respond to the "continuing introduction of new technology" by increasing the tactical and technical competence of the officer corps, particularly at the junior officer level. (In actual fact, RETO identified the need for a balance between professional education and job-oriented training, as will be discussed later. The training initiatives, however, received more attention in implementation.)

(2) RETO oriented much of its analysis on duty modules—those skills required of an officer to perform specific assignments. Many of the RETO recommendations (increased functional training, a longer OBC, CAS3) logically followed from an analysis of what skills were required for the preponderance of officer jobs at various grades. The effort to link officer professional development to specific Army requirements represented a rationalization of the education system—a common sense view that an officer ought to learn about his job before he reports to perform it. This was deemed all the more true given the increasingly specialized technical demands of most officer positions.

b. Learning Theory:

(1) The psychological basis for preceding performance of tasks as closely as possible with training is well established in learning theory. The mind learns most things by first understanding a concept, then by repeatedly performing attendant tasks which reveal and refine the rules governing that concept's salient features.

(2) Motivation and methods chosen to teach play key roles in learning and, perhaps more important to the issue at hand, in retention. People differ, for instance, in their abilities to learn and retain what they have learned through audial as opposed to visual means. Likewise, the choice of the most effective teaching methods depends to some extent on the subject matter to be taught. In general, however, memory improves:

(a) when multiple senses are employed in learning,

(b) when manual skills are involved in task execution,

(c) when the learning conditions closely approximate performance conditions,

(d) when feedback on performance is clear, and

(e) when the new knowledge logically "fits" into the broader context of an individual's understanding.

(3) Learning, without practice, decays over time.

(a) This decay is exacerbated if various unrelated learning processes intervene before performance. For complex procedures or material the decay (forgetting) can be quite rapid. This is of particular concern to Army training and education because even junior officer duties have grown increasingly complex. Yet the fact that several months or years may intervene between learning and on-the-job performance of a complex series of tasks does not nullify the value of the initial learning process. The recovery of once learned material will be more rapid than learning from scratch.

(b) The decay is less rapid for concepts and the context of a job. Since the learning of detailed facts or procedures is much faster once one has learned the conceptual and contextual base, efficiencies can be obtained in future training and education needs (see discussion on Figures 1, 2 and 3) while providing a base to build upon in the unit should it be necessary to assign an officer to different duties than orginally intended.

c. PDOS Strategy:

(1) PDOS is in full agreement with RETO's authors regarding the need for increased technical and tactical proficiency and closer proximity of schooling with assignments that use it. Our recommendation for an earlier CAS3, for example, stems directly from the recognition that many captains serve in important brigade and division staff positions before their eighth year of service. Other recommendations, such as assessment programs, additional MQS levels and expanded field grade and general officer education opportunities, have as their objective improving officer preparation for impending assignments.

(2) In an ideal world each officer would learn all tasks and knowledge necessary for a given assignment immediately before assuming it. Two factors mitigate against such a learning strategy for the Army:

(a) First, there are important non-technical aspects of an officer's education—executive skills and officership—which require a process of continuing education to achieve sequential building and reinforcing. RETO explicitly recognized the requirement for such a "Professional Military Education." We have expanded upon RETO's concern for professionalism. The recommendations regarding warrior spirit, mentoring, self-development and professional values derive from the same emphasis RETO placed on the role professionalism plays in providing a common bond for an officer corps increasingly fragmented by the Army's demands for specialization.

(b) The second factor concerns how the learning process intersects with professional experience and is fundamental to our analytical framework. Drawing on the leadership research conducted at ARI, the PDOS model of officer professional development conceives of seven sequential, increasingly complex frames of reference, which define development periods for an officer's career. Within each development period the range of an officer's potential duties require him to demonstrate a given set of cognitive skills, operate within specified bounds of authority, bear a certain level of responsibility and contend with some degree of complexity and uncertainty. Transition points exist at those times (usually promotion) when an officer completes one development period and begins another in which his frame of reference (as defined by prospective duties) must be distinctly broader if he is to perform successfully. It is important to understand that these transitions tend to be more in the nature of quantum jumps than gradual changes. The expectations we have, for example, of field grade officers and the requirements of positions normally coded for field grade officers, are an order of magnitude greater than what we expect of cap-

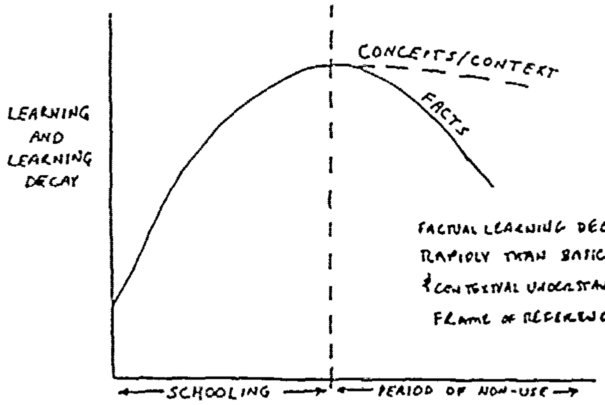


Figure 1: Non-use of information acquired through schooling.

tains. Yet, the new major only partly has assimilated a field grade perspective through his junior officer experiences and observations of superiors. The same is true for the other six transitions we have identified. At each one the officer must develop new technical proficiencies; acquire more mature leadership, managerial and communications skills; expand his planning horizon; and become competent within increasingly complex decision-making environments.

(c) The implications of learning theory for the PDOS development period model are illustrated in the enclosed figures:

Figure 1 depicts a schooling period followed by non-use of learned information and makes the point that factual learning decays more rapidly than basic conceptual and contextual understanding (i.e., frame of reference).

Figure 2 depicts the relative merits of two schoolhouse strategies in terms of total expertise brought to a subsequent assignment. For the same resource (time in school) the "Next Job Strategy" produces an officer initially better prepared for his assignment. Rather quickly, however, the officer schooled under a "Frame of Reference Strategy" would surpass his contemporary by virtue of his conceptual understanding and contextual perspective. The latter knows better how to employ technical skills and relate them to what others are doing. He has a basis for proactive rather than reactive contributions to the Army. He will find it easier to close the skill differential than his contemporary will to gain his perspective.

Figure 3 illustrates the situation later in a development period when an officer changes assignments. If in the past he acquired the conceptual and contextual understanding of a job (e.g., one that was not his next assignment),and an orientation on fundamental skills, he can much more rapidly become proficient by receiving a quick refresher of the concept and the detailed facts/procedures pertinent to the job. With new and emerging technology it should be possible to provide these without returning to the schoolhouse for the richer interaction useful in learning new concepts. (Least efficient would be going straight into the job with no schooling.)

Figure 4 is from the RETO Study and is included as a footnote to the preceding discussion. The PDOS model incorporates the notion of a changing mix of technical skill training and developmental education from one development period to the next. Lieutenants and Captains in particular will be intensively grounded in branch and combined arms skills as a first priority to ensure an Army ready to fight.

3. SUMMARY: The PDOS philosophy builds on rather than departs from the direction established by RETO. The PDOS goal is to prepare officers in generic skills, attributes and frames of reference for a series of likely assignments in each developmental period and to ensure that every officer is expert in branch or functional area skills essential to each assignment. We recommend increased roles for mentoring, self-development and computer communciatioins based instruction to complement the centralized school system's efforts to accomplish these aims. Further, we recommend more realistic simulations in school curricula, expansion of modular curricular structures and better school support to the field in the form of training packages. Fully implemented, PDOS will foster an officer corps more proficient in the art and science of war and better able to meet the complex challenges facing Army leadership in the coming decades.

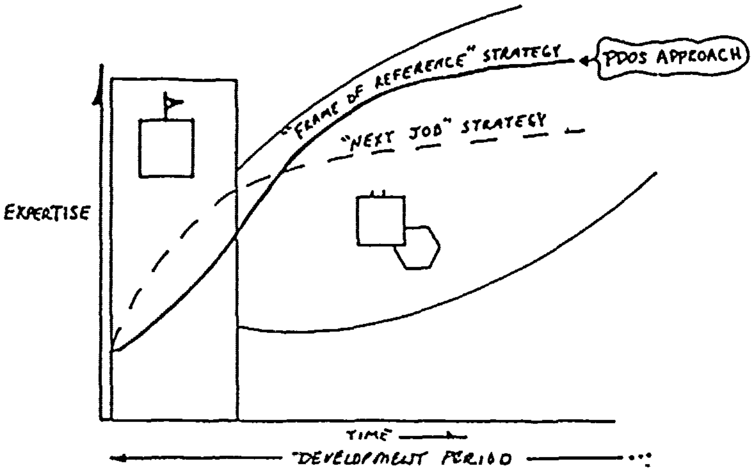


Figure 2: Schoolhouse strategies.

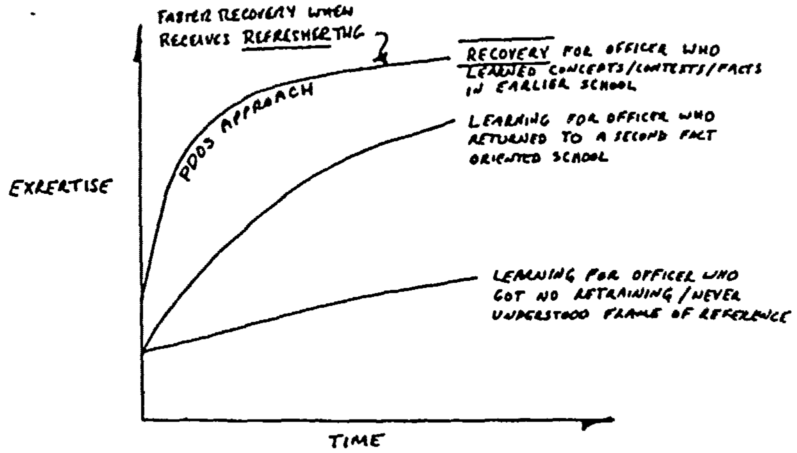


Figure 3: Assignment development period.

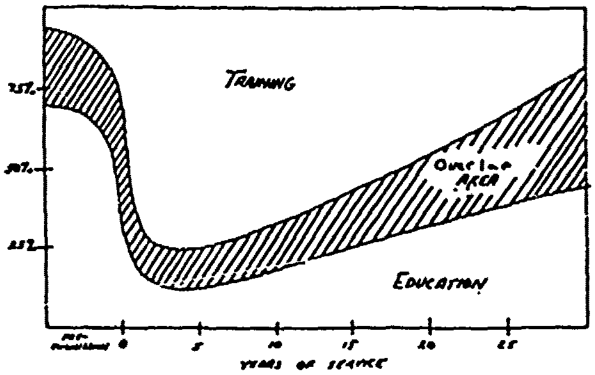


Figure 4: Mix of technical skill training and developmental education.

Author: LTC Witherspoon
Team Chief: COL Rowe

Appendix 2 to Annex F

Bibliography

Fiedler, Fred. (1984). "Effects of Intellectual Ability and Military Experience on Leadership Performance", remarks presented to the ARI Basic Research Contractors' Meeting, Georgetown University, September 18, 1984.

Hulse, Stewart H., James Deese and Howard Egeth. (1975). *The Psychology of Learning*, 4th ed., New York: McGraw-Hill.

Jaques, Elliott. (1982). "Implications of Discrete Levels of Human Capability for Military Organizations and Operations". Unpublished manuscript.

McAdams, Kenneth G. (1973). *Job Evaluation and Classification.* Paper presented at the Wisconsin Sect. Meeting, September 21, 1973.

Partlow, Frank A., Jr. (1984). "Keys to Develop and Preserve "The Fabric of Officership", *Army*, August 1984.

Steg, Doreen R. (1984). "Learning and Some Limitations of Equipment for Learning". Unpublished paper.

Streufert, Siegfried. (1983). "Styles of Executive Decision-Making", *The Conference Board*, Vol. XX, No. 9, October 1983.

U.S. Army. (1983). *Report on Implementing Human and Leadership Goals*, Fort Hood, Texas: Department of the Army.

U.S. Navy. OPNAV 13-P-1. *Unrestricted Line Officer Career Planning Guide*, Washington, D.C.: Department of the Navy.

Appendix 3 to ANNEX F
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
F11 TRADOC require periodic seminar updates for general officers on methods to assist subordinates in adopting Army values and applying them in their lives.	Develop seminar content into exportable packages that can be used in the field; update as necessary.	TRADOC (P) ARI CCL	1Q FY87	
	Train leaders to facilitate conduct on seminars.	MACOMS (P) TRADOC		
	Determine who attends, how often, etc.	OCSA (P) TRADOC		
	Use Commanders Call or similar publications to present new material on professional values and as a supplement to seminars.	OCPA (P) TRADOC		
F12 OCSA require senior officers to speak out frequently and forcefully on how value systems form the basis for soldier motivation and care.	CSA solicit commander interest and involvement from the top down.	OCSA (P) MACOMS	4Q FY86	
F13 TRADOC integrate into every major block of instruction discussions on professional values and ethical considerations associated with the application of that instruction in real-life situations; provide appropriate materials to commanders for use in integrating values in unit professional development activities.	Develop values/ethics dilemmas that officers can be expected to encounter when involved in activities addressed by the course content presented in the schoolhouse	TRADOC (P) OFC, CH of CHAP ODCSPER ODCSOPS	4Q FY88	
	Incorporate the above into every block of instruction as part of the course.	TRADOC		

NOTES:

Appendix 3 to ANNEX F
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
F14 OCSA require the OER support form be initiated and completed within the first 30 days of the officer's rating period as the beginning point of ensuring a shared professional value system within the organization.	Publish change to AR 623-105 requiring that DA Form 67-8-1 be completed and submitted to the senior rater within 30 days.	ODCSPER (P) MILPERCEN	3Q FY85	
NOTES:				

Appendix 3 to ANNEX F
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
COMMAND CLIMATE F20 Direct that ODCSPER allocate research funds to conduct a study of the potential and actual impact of PDOS policies on command climate.	Prepare study directive.	ODCSPER	4Q FY87	
	Initiate study within one year of PDOS major policy implementation date.	ODCSPER (P) ARI		

NOTES:

Appendix 4 to ANNEX F
Phasing Plan

PROFESSIONAL VALUES

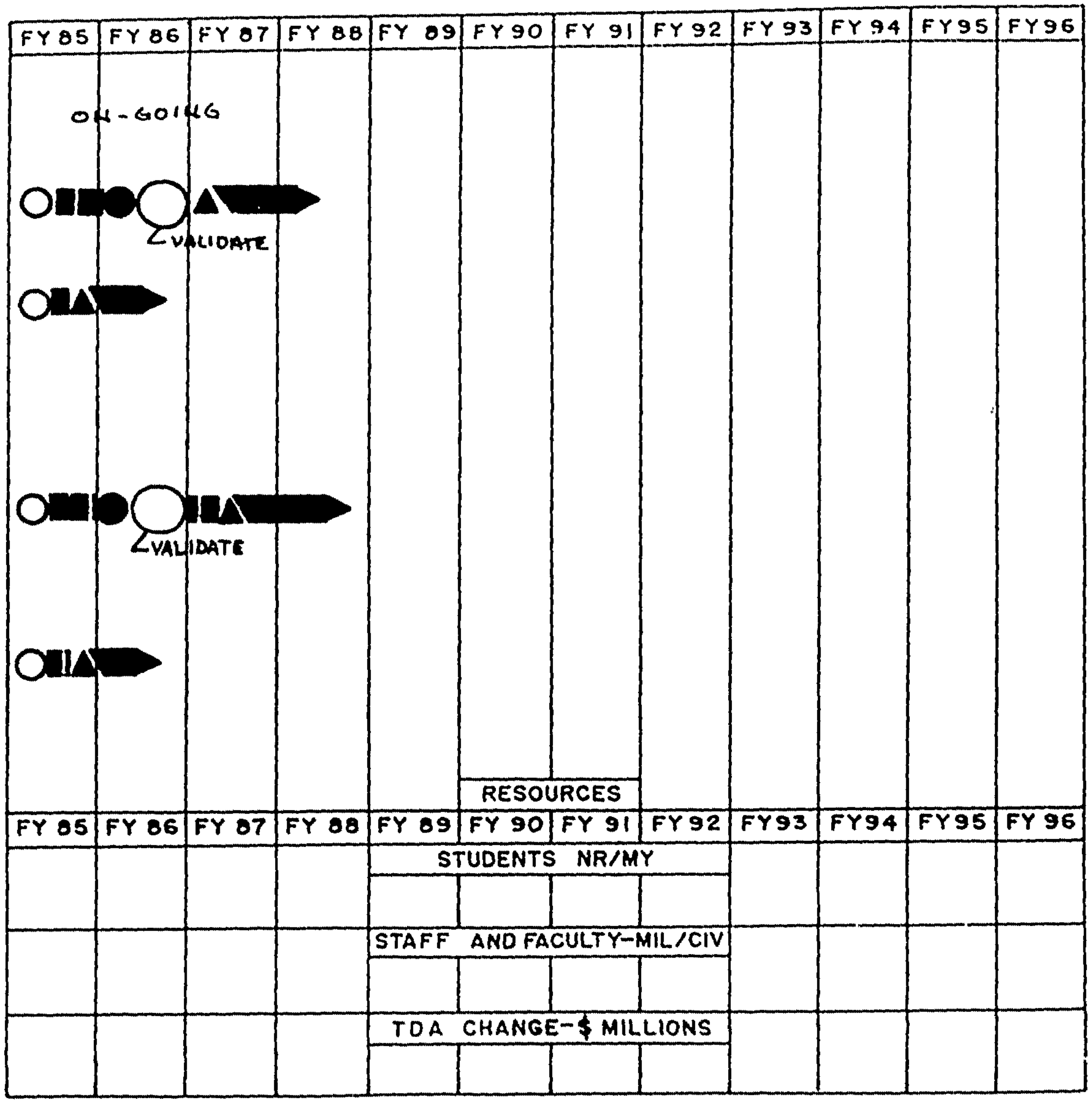
F10 ODCSPER PERIODICALLY ASSESS THE STATUS OF PROFESSIONAL VALUES/ETHICS OF THE OFFICER CORPS WITH FEEDBACK TO THE ARMY POLICY COUNCIL, ARMY CENTER FOR LEADERSHIP, AND MACOM COMMANDERS.

F11 TRADOC REQUIRE PERIODIC SEMINAR UPDATES FOR GENERAL OFFICERS ON METHODS TO ASSIST SUBORDINATES IN ADOPTING ARMY VALUES AND APPLYING THEM IN THEIR LIVES.

F12 OCSA REQUIRE SENIOR OFFICERS TO SPEAK OUT FREQUENTLY AND FORCEFULLY ON HOW VALUE SYSTEMS FORM THE BASIS FOR SOLDIER MOTIVATION AND CARE.

F13 TRADOC INTEGRATE, INTO EVERY MAJOR BLOCK OF INSTRUCTION IN ALL SERVICE SCHOOLS, DISCUSSIONS ON THE PROFESSIONAL VALUES AND ETHICAL CONSIDERATIONS ASSOCIATED WITH THE APPLICATION OF THAT INSTRUCTION IN REAL LIFE SITUATIONS; PROVIDE APPROPRIATE MATERIALS TO COMMANDERS FOR USE IN INTEGRATING VALUES IN UNIT PROFESSIONAL DEVELOPMENT ACTIVITIES.

F14 OCSA REQUIRE THE OER SUPPORT FORM BE INITIATED AND COMPLETED WITHIN THE FIRST 30 DAYS OF THE OFFICER RATING PERIOD AS THE BEGINNING POINT OF INSURING A SHARED PROFESSIONAL VALUE SYSTEM WITHIN THE ORGANIZATION.



Author: MAJ Meriwether
Team Chief: COL Dunn

Annex G

Decision Making And Cognitive Complexity

1. PURPOSE. To develop and reinforce critical decision-making and cognitive-conceptualizing skills in officers.

2. DISCUSSION.

a. Critical Need. The critical need to enhance decision skills in officers is evident by examining the environment—both current and future—within which the officer must make decisions. Not only is the need for critical decision-making skills increasing, but so too is the required tempo.

b. Future Environment.

(1) The future battlefield will be accompanied by both high stress on American forces and a demand for appropriate thinking skills and initiative at every level.

(2) Additionally, middle and top level decision making will be characterized by a lack of complete information, multiple and conflicting objectives, high levels of uncertainty, turbulent environments and decision outcomes that tend to be both costly and long-range in their implications.

(3) Senior leaders will continue to rely heavily on thinking skills as they must function as the organizational engineer, i.e., they must integrate the elements of the command, create conditions that make them work well together and develop subordinate leaders who are capable of the creative, innovative and risk-taking actions demanded by the future battlefield.

c. Current Environment.

(1) Today's active Army is characterized by: a steady-state (780,000 man) ceiling; heavy reliance on the Reserve and civilian components; almost half the Army in the TDA; an expanding force structure (i.e, the addition of two infantry divisions (light) to the active force structure by 1990); evolution of the COHORT and New Manning System initiatives; a significant proportion of the Army overseas and continued personnel turbulence through key leadership positions.

(2) This means the average captain will serve only one tour in a TOE unit, the average officer has two to three jobs per assignment, and junior officers are "force fed" into higher-level positions. The command climate associated with such a turbulent environment will also tend to focus more on immediate tasks and less on development. There will be consistent shortfalls in long-range and strategic planning. This in turn increases the burden on the schoolhouse to meet both functional skills and education needs (e.g., how to think) to make up for shortfalls in experience and the corresponding decrease in opportunity for a mentor to assist in the development process. As a consequence, the individual officer frequently finds himself assigned to a key position for which he may not be adequately prepared. To succeed and make the effective, timely decision, an understanding of the decision process is a must.

d. Decision Making. To determine how to enhance decision skills in officers, it is necessary to understand the nature of the decision process, the decision characteristics of the individual and critical decision tasks required by organization level (Gibson, Ivancevich, and Donnelly, 1979; Gannon, 1977; Schroder, Driver, and Streufert, 1967; Rice and Chemers, 1973; MacCrimmon and Taylor, 1976; Streufert, 1984):

(1) There are seven steps in the typical decision-making process: establish goals and objectives, identify problems, develop alternatives, evaluate alternatives, choose an alternative, implement the decision, control and evaluate.

(2) There are two basic types of decisions: programmed (i.e., repetitive, routine decisions with a definite procedure to handle them) and non-programmed (i.e., novel and unstructured decisions without an established procedure for

handling the problem, requiring intuition and creativity).

(3) The nature of decisions varies by organization level (see Appendix 1):

(a) Top Level managers/leaders should be most concerned with non-programmed decisions.

(b) Middle level managers/leaders should be most concerned with programmed decisions, but will participate in non-programmed decisions.

(c) First level managers/leaders should be most concerned with programmed decisions.

(4) Constraints on the decision-making process include:

(a) Level of organization (top, middle, lower).

(b) Uncertainty (which tends to increase with level of organization).

(c) Type of organization, to include type power and subordinate involvement in the process (decisions should be made in accordance with the nature of the organization).

(d) Time (Managers/Leaders at all levels work at an unrelenting pace with brief, varied and discontinuous activities; the amount of time spent on any particular decision varies by level; the higher the level, the more time is spent on problems that require decisions; at lower levels, most problems are handled in under two weeks; at higher levels, problems may require a year or more to resolve).

(e) The individual's personality (which is the most important factor influencing reaction to uncertainty).

(5) Optimal job complexity produces the greatest performance and satisfaction, while an overload of complexity in a situation decreases the performance of both high and low complexity leaders, with highly complex leaders tending to be able to absorb and differentiate more information for a longer period of time before performance decrement. The facilitating effect of cognitive complexity on task performance will increase the more the environment calls for complex forms of behavior—but only up to a point, after which all behavior is debilitated until it is completely made inadequate (usually at the point of complete environmental chaos).

(6) Research on decision styles indicates individuals may be type categorized according to degree of differentiation and integration (e.g., decisive, flexible, hierarchic, integrative) and various elements may be predicted: use of data, decision speed, use of contingencies, amount of creativity and level of organization, use of information, information search and screening, etc. (Appendix 2).

(7) Leader success is dependant upon a match between the level of the leaders cognitive complexity and the complexity characteristics inherent in the unit/organization task environment.

e. Developing Decision Skills to Handle Complexity. It is difficult at best to develop skills required to handle complexity.

(1) The peacetime environment does not teach well the decision skills required to survive in war.

(2) The peacetime mindset (obey the rules, learn/follow procedures, ask for exceptions to policy when needed) evolves from a simple environment, characterized by low-time pressures and unimpeded communication. This reduces problem-solving skills, reduces innovation, and produces a mechanical, slowmoving organization.

(3) Complex tasks are not done well because they deal with complex issues, integrating functions, and acting with incomplete information.

(4) Critical ingredients for developing decision skills are:

(a) Learning through experiencing (i.e., systematic, tough, realistic, and progressive training and education).

(b) Mentorship by a development-oriented leader (i.e., set the climate) whereby leaders at all levels become teachers so as to develop a shared frame of reference.

(c) Long-term schoolhouse strategy characterized by a mentoring faculty; maximum use of simulations and tough, realistic training; small group modalities; feedback through an assessement program; frequent use of "smart" computer technologies.

(d) A key factor—especially at senior levels—is a program for assessment and feedback (i.e., growth comes slowly, but logically, and is based on assessment of current capacity/needs by level, programmed learning/experience, practice and feedback, integration of lessons learned, and re-assessment).

(e) Other useful development tools include: coaching, wargaming, "what-if-ing," battle planning, simulations, TEWT's, etc.

f. Key Points To Be Stressed.

(1) The future battlefield will increase the need for leaders at all levels to make timely decisions in a highly-complex environment.

(2) Critical decision/cognition skills required varies by organization level; the need for non-programmed (i.e. creative, innovative, and conceptual) decisions increases with organizational level.

(3) Time frame of reference as well as time spent on decisions increases with organization level.

(4) The individual's personality is the more important single factor influencing individual cognitive conceptualizing skills.

(5) Development of decision making/cognitive conceptualizing skills is difficult, and may be accomplished only experientially through the involvement of a leader-mentor over time in an organization with a supportive and rational climate.

(6) Assessment/feedback is important.

(7) A comprehensive decision-skill model of officer development is at Appendix 3.

3. RECOMMENDATIONS.

a. That ODCSPER design a phased plan to assist in developing/using professional executive ability and decision skills in the Army. The plan will provide for:

(1) CGSC-assisted self-assessment for professional and decision-skill development. Provide the officer a profile of knowledge, skills, values, temperament, and decision style to assist in own professional growth.

(2) SSC—An in-depth assessment for professional development using assessment instruments and simulations to provide the officer an updated profile, a check on professional growth, and eventually assist in structuring a development program for future assignments.

(3) Upon selection to general officer—Evaluate and compile data to build and provide completed profiles (experiential, duty performance, professional strengths) of the individual for possible use in assignment and systematic transition training prior to assignment.

b. That TRADOC reinforce and develop officer decision skills at all levels of the schoolhouse and the unit/organization through frequent use of simulations, experiential exercises "smart" computer courseware and small group modalities.

4. CSA REMARKS. Approved in concept.

Appendices

1—The Nature of Decisions Varies by Level
2—Cognitively Complex Individuals
3—A Decision Skill Model of Officer Professional Development
4—Bibliography
5—Action Plan
6—Phasing Plan

Author: MAJ Meriwether
Team Chief: COL Dunn

Appendix 1 to Annex G

The Nature of Decisions Varies by Level

1. PURPOSE. To identify levels of reponsibility in an organization, provide examples of critical-decision tasks at each level, and match these decision tasks with required critical-cognitive states.

2. DISCUSSION.

a. Organization Level. Dr. Elliott Jacques (1984) has hypothesized there are seven distinct levels of responsibility in the TOE Army which may be characterized by the nature of the time span of the longest program/project at each level. These levels roughly correspond to: platoon, company, battalion, brigade, division, corps and Army.

b. Critical-decision tasks vary by level.

(1) Platoons-employ the weapons.

(2) Companies-fight the battle.

(3) Battalions-integrate weapons systems.

(4) Brigades-apply combat power to mission accomplishment.

(5) Divisions-integrate the components of combat power.

(6) Corps-develop organizations and shape the future.

c. Critical-cognitive states required vary by level.

(1) Platoons-Concrete shaping (one task at a time; leadership by demonstration).

(2) Companies-Reflective articulation (program a series of direct operating tasks, choose methods for those tasks, and change program/methods as required by the situation).

(3) Battalion-Linear extrapolation (mold operating tasks and methods into a functioning system of direct work; adjustments made to the system to cope with changes in the operational environment).

(4) Brigade-Alternative systems (operate paired alternative operating systems to include alternative modes of deploying/modifying them).

(5) Divisions-Complex system shaping (not only operate complex systems but can also modify them to cope with second and third order consequences).

(6) Corps-Reflective articulation of complex systems (develop/ modify/deploy a plurality of complex systems).

(7) Armies-Strategic design for development/deployment of complex systems (create strategies/context for the development or deployment of complex systems).

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Appendix 2 to Annex G

Cognitively Complex Individuals

1. PURPOSE. To identify the characteristics of the highly cognitively complex individual.

2. DISCUSSION.

a. The highly cognitively complex individual is more likely to:

(1) Stress flexibility, adaptability, and the possiblity of rule/system changes.

(2) Search for more different kinds of information.

(3) Reach higher levels of strategic planning and action.

(4) Communicate more effectively.

(5) Be resistant to persuasive attacks.

(6) Be susceptible to attitude change.

(7) Use information more effectively.

(8) Be information oriented.

(9) Be better at perception.

(10) Be open in their assessment of others.

(11) Display greater content knowledge, greater delivery skills and more assertiveness when placed into difficult situations.

(12) Score higher on ego identity.

(13) Be creative.

(14) Be reliant on their own integrative efforts and are not as externally information bound.

(15) Perform better under conditions of low structure.

(16) Be flexible across different situations.

b. The highly cognitively complex individual is less likely to:

(1) Stress authority and unquestioned obedience to stated rules.

(2) Be certain when they have made a decision.

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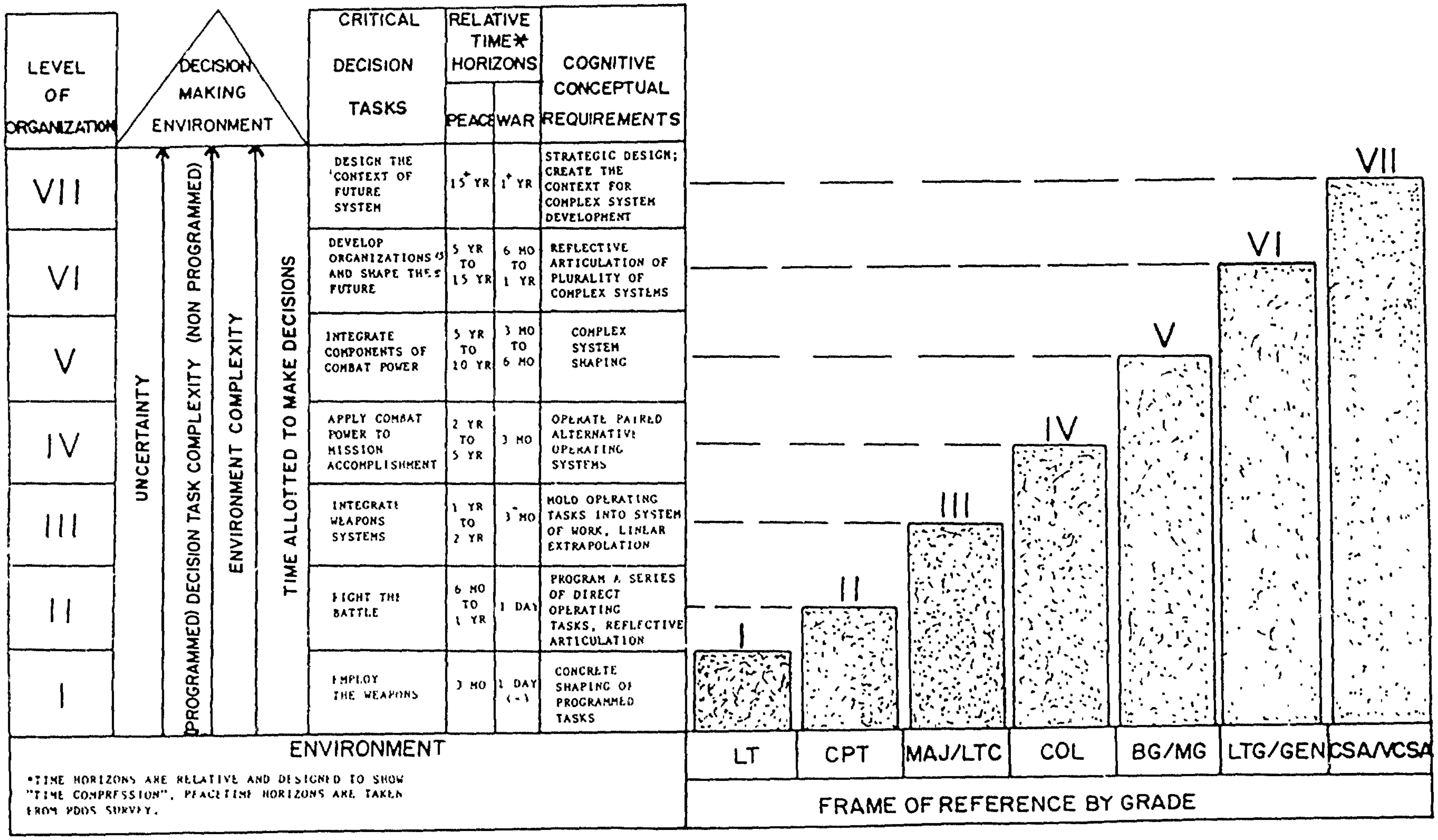
* Extracted from Streufert and Swezey (1982), Streufert (1984), and Wynne and Hunsaker (1975).

DECISION SKILL MODEL
OF
OFFICER PROFESSIONAL DEVELOPMENT


DECISION MAKING ENVIRONMENT
UNCERTAINTY
(PROGRAMMED) DECISION TASK COMPLEXITY (NON PROGRAMMED)
ENVIRONMENT COMPLEXITY
TIME ALLOTTED TO MAKE DECISIONS
ENVIRONMENT
I
II
III
IV
V
VI
VII
LT
CPT
MAJ/LTC
COL
BG/MG
LTG/GEN
CSA/VCSA
FRAME OF REFERENCE BY GRADE

LEVEL OF ORGANIZATION	CRITICAL DECISION TASKS	RELATIVE TIME* HORIZONS		COGNITIVE CONCEPTUAL REQUIREMENTS
		PEACE	WAR	
VII	DESIGN THE CONTEXT OF FUTURE SYSTEM	15+ YR	1+ YR	STRATEGIC DESIGN; CREATE THE CONTEXT FOR COMPLEX SYSTEM DEVELOPMENT
VI	DEVELOP ORGANIZATIONS AND SHAPE THE FUTURE	5 YR TO 15 YR	6 MO TO 1 YR	REFLECTIVE ARTICULATION OF PLURALITY OF COMPLEX SYSTEMS
V	INTEGRATE COMPONENTS OF COMBAT POWER	5 YR TO 10 YR	3 MO TO 6 MO	COMPLEX SYSTEM SHAPING
IV	APPLY COMBAT POWER TO MISSION ACCOMPLISHMENT	2 YR TO 5 YR	3 MO	OPERATE PAIRED ALTERNATIVE OPERATING SYSTEMS
III	INTEGRATE WEAPONS SYSTEMS	1 YR TO 2 YR	3- MO	HOLD OPERATING TASKS INTO SYSTEM OF WORK, LINEAR EXTRAPOLATION
II	FIGHT THE BATTLE	6 MO TO 1 YR	1 DAY	PROGRAM A SERIES OF DIRECT OPERATING TASKS, REFLECTIVE ARTICULATION
I	EMPLOY THE WEAPONS	3 MO	1 DAY (-)	CONCRETE SHAPING OF PROGRAMMED TASKS

*TIME HORIZONS ARE RELATIVE AND DESIGNED TO SHOW "TIME COMPRESSION". PEACETIME HORIZONS ARE TAKEN FROM PDOS SURVEY.

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Appendix 4 to Annex G

Bibliography

Foa, U.G., T.R. Mitchell, and F.F. Fiedler. "Differentiation Matching". *Behavioral Science*, 1971, 16: 130-42.

Gannon, Martin J., *Management: An Organizational Perspective*, Boston, Massachusetts: Little, Brown and Company, 1977.

Gibson, James L., Ivancevich, John M. and Donnelly, James H. Jr., *Organization: Behavior, Structure, Process*, Dallas, Texas: Business Publications Inc., 1979.

Jacques, Elliot, PhD, "Discrete Levels of Human Capacity". A presentation at the 17-18 September 1984 ARI Basic Research Contractors' Meeting (Ability Assessment).

Jacques, Elliot, PhD, "Principles of Organization Structure for the U.S. Army: Developing the Army Organization Structure to strengthen the foundations of Leadership and Combat Effectiveness". A document prepared as part of Grant No. DAJA 37-80-C-007 for the U.S. Army Research Institute for the Behavioral and Social Sciences, 1984.

MacCrimmon, Kenneth R., and Taylor, Ronald N., "Decision Making and Problem Solving". *Handbook of Industrial and Organizational Psychology*, Marvin D. Dunnette, ed., Chicago: Rand McNally College Publishing Company, 1976, pp. 1397-1453.

Mitchell, Terence R., *People in Organizations: Understanding Their Behavior*, New York: McGraw-Hill Book Company, 1978.

Rice, R.W., and Chemers, M.M., "Predicting the Emergence of Leaders Using Fiedler's Contingency Model". *Journal of Applied Psychology*, 1973, 57: 281-87.

Schroder, H.M., Driver, M.J., and Streufert, S., *Human Information Processing*, New York: Holt, Rinehart and Winston, 1967.

Streufert, Siegfried, "Assessing and Training for Cognitive Complexity". A presentation at the 17-18 September 1984 ARI Basic Research Contractors' Meeting (Ability Assessment).

Streufert, S., and Swezey, W., "Aspects of Cognitive Complexity Theory and Research as Applied to a Managerial Decision Making Simulation". ARI Contract MDA 903-79-C-0699.

U.S. Army Research Institute (ARI) for the Behavioral and Social Sciences, "Senior-Level Leadership" Working Paper, Alexandria, Virginia, Spring 1984.

Wynne, Bayard E., and Hunsaker, Phillip L., "A Human Information Processing Approach to the Process of Leadership". *Leadership Frontiers*, James G. Hunt and Leo L. Larson, ed., Kent, Ohio: The Kent State University Press, 1975, pp. 7-25.

Appendix 5 to ANNEX G
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
F96 ODCSPER design a phased plan to assist in developing/using professional executive ability and decision skills in the Army. The plan will provide for: a. CGSC--Assisted self assessment for professional development. Provide the officer a profile of knowledge, skills, values, temperment, and decision style to assist in own professional growth. b. AWC--An in-depth assessment for professional development using assessment instruments and simulations to provide the officer an updated profile, a check on professional growth, and eventually assist in structuring a development program for future assignments. c. Upon selection to GO--Evaluate and compile data to build and provide completed profiles (experiential, duty performance, professional strengths) of the individual for possible use in assignment and systematic transition training prior to assignment.	o ODCSPER design phased plan as described;	ODCSPER (P) ARI; TRADOC; AWC	4Q FY85	(1) (2) (3) (4)
	o Establish pilot program at CGSC for developmental purposes only. The program should be feasible and sustainable, with the following program elements: for targeted positions, with job analysis, identification of dimensions, assessment, and developmental guidance. oo Targeted positions--battalion command and brigade/division staff. oo Job analysis--interview to establish dimensions (e.g., initiative, problem analysis, judgement, decisiveness, planning and organization, delegation, supervision, sensitivity, adaptability, decision style). oo Developmental guidance should consist of formal courses, readings, counseling as necessary.	TRADOC (P) ARI	3Q FY86	

NOTES:
(1) CSA Remarks: Concept approved--ensure there are adequate provisions for pilot testing and build on programs that may already be in progress at CGSC and AWC.
(2) Conduct a systematic analysis of leadership dimensions and decision styles.
(3) Seminal work has been initiated by ODCSPER, ARI, and TRADOC: draft concept work by Dr Bill Burke.
(4) Pilot should be two phased, tied to dimensions using paper and pencil plus exercises with feedback only to the individual.

Appendix 5 to ANNEX G
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
	oo Pilot should be two phases: --Phase I: paper and pencil tests for all students, done outside of class to assess leadership and decision styles with an in-class tailored in-basket exercise that is dimension based; feedback and developmental guidance to be mailed to the student. --Phase II: Elective students involved in indepth exercises that are assessor observed and evaluated with one on one feedback, tailored to the individual.		Implement Phase I NLT school year 86-87; Phase II to be implemented NLT school year 87-88.	(5)
F92. ODCSPER continue to emphasize cohesion and stability through the NMS and COHORT initiatives.		ODCSPER (P)	on-going	(6)
F95. TRADOC reinforces and develop officer decision skills at all levels of the schoolhouse and the unit/organization through frequent use of simulations, experiential exercises and small group modalities.	a. Adjust POI/MOI to reinforce develop decision skills in the individual. (1) Retain/adjust current course content.	TRADOC/ARI Support	FY 87	(7)

NOTES:
(5) Efforts to implement a test program at AWC may begin simultaneously with CGSC contingent upon needs of AWC.
(6) NMS and COHORT provide for conditions that foster a mentoring style of leadership--a critical ingredient in developing a proper frame of reference and enhancing critical decision skills in an officer.
(7) Particular emphasis is required at the officer basic and advanced course levels; supporting actions and resource implications are included in approved Education and Training policies and in approved Mentoring policies.

Appendix 5 to ANNEX G
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)–PRIMARY RESP.	REQUIRED COMPLETION	NOTES
	(2) Increase emphasis on simulations, exercises, small group modalities.			
	b. Design instructor training packages to support new modality.	TRADOC	FY 87	
	c. Focus developmental emphasis as indicated: -Precommissioning-Broad General Education -OBC/OAC - Basic Analytical Skills -CAS^3/CGS - Cognitive Integration/Advanced Decision Techniques - AWC/GO Ed - Cognitive synthesis involving future scenarios.	TRADOC/ODCSOPS	FY 87	
	d. Transition to new MOI/LOI's completed.	TRADOC/ODCSOPS	FY 88	
	e. Continue to develop simulations and experiential exercises for export to units/organizations.	TRADOC	FY 90	
	f. Develop decision skills experientially through frequent use of simulations, terrain walks, TEWTs, experiential exercises, frequent discussions designed to convey the commander's intent, "think" sessions, footlocker counseling, etc.	Commanders at all levels	FY 85 ongoing	

NOTES:

Appendix 6 to ANNEX G

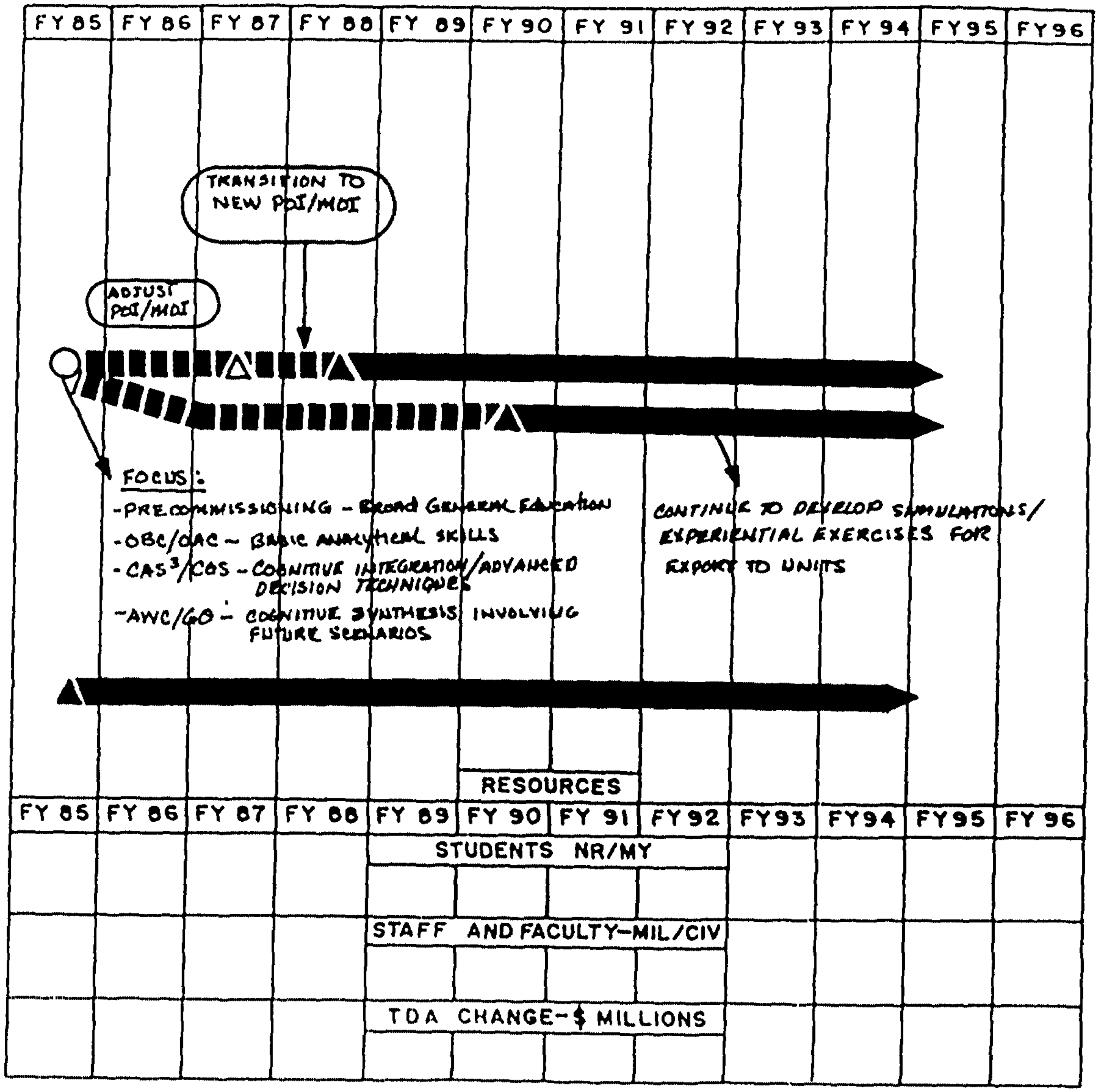
PHASING PLAN

F95

DECISION MAKING

TRADOC REINFORCES AND DEVELOP OFFICERS DECISION SKILLS AT ALL LEVELS OF THE SCHOOLHOUSE AND THE UNIT/ORGANIZATION THROUGH FREQUENT USE OF SIMULATIONS. EXPERIENTIAL EXERCISES AND SMALL GROUP MODALITIES.

COMMANDERS AT ALL LEVELS DEVELOP SUBORDINATE DECISION SKILLS EXPERIENTIALLY THROUGH FREQUENT USE OF SIMULATIONS. TERRAIN WALKS, TEWTS, EXPERIENTIAL EXERCISES, FREQUENT DISCUSSIONS DESIGNED TO CONVEY THE COMMANDER'S INTENT, "THINK" SESSIONS, FOOTLOCKER COUNSELING, ETC.



NOTE: COSTS INCLUDED IN POLICY 084

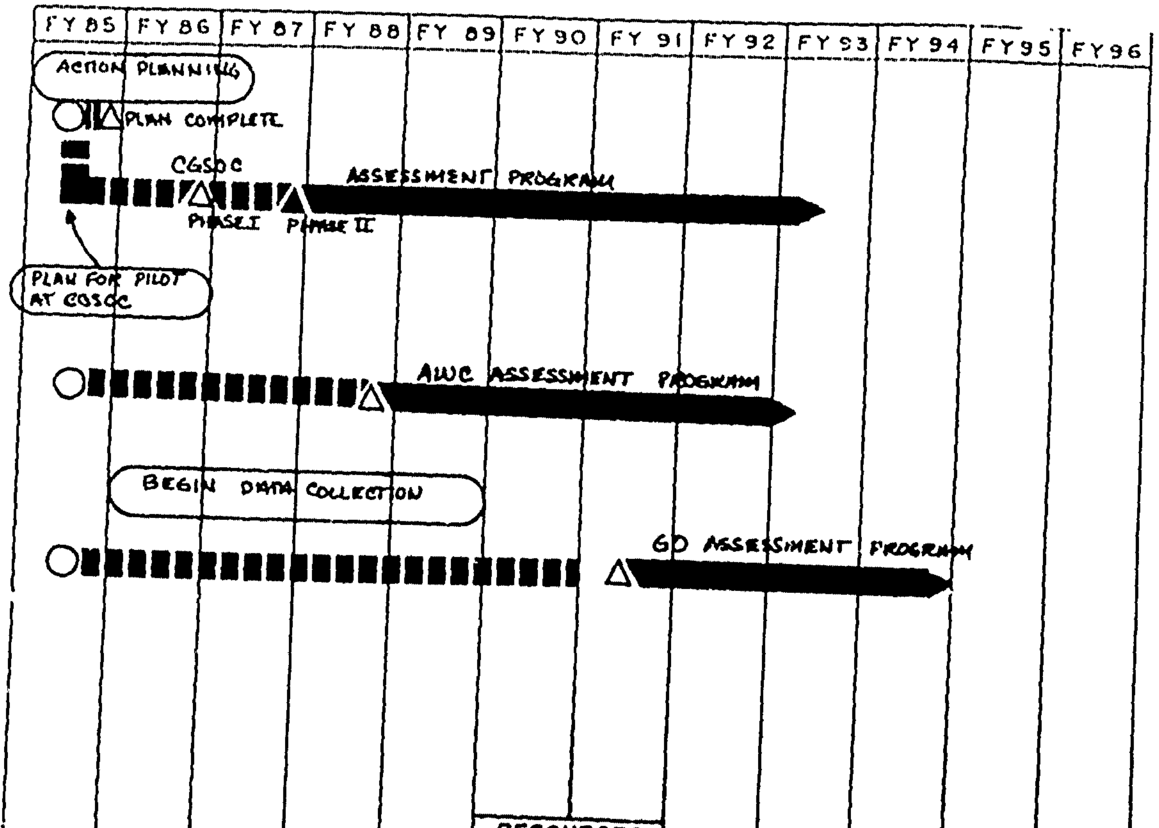
PHASING PLAN

F96 ODCSPER DESIGN A PHASED PLAN TO ASSIST IN DEVELOPING USING PROFESSIONAL EXECUTIVE ABILITY AND DECISION SKILLS IN THE ARMY. THE PLAN WILL PROVIDE FOR:

A. CGSC--ASSISTED SELF ASSESSMENT FOR PROFESSIONAL DEVELOPMENT. PROVIDE THE OFFICER A PROFILE OF KNOWLEDGE, SKILLS, VALUES, TEMPERAMENT, AND DECISION STYLE TO ASSIST IN OWN PROFESSIONAL GROWTH.

B. AWC--AN IN-DEPTH ASSESSMENT FOR PROFESSIONAL DEVELOPMENT USING ASSESSMENT INSTRUMENTS AND SIMULATIONS TO PROVIDE THE OFFICER AN UPDATED PROFILE, A CHECK ON PROFESSIONAL GROWTH, AND EVENTUALLY ASSIST IN STRUCTURING A DEVELOPMENT PROGRAM FOR FUTURE ASSIGNMENTS.

C. UPON SELECTION TO GO--EVALUATE AND COMPILE DATA TO BUILD AND PROVIDE COMPLETED PROFILES (EXPERIENTIAL, DUTY PERFORMANCE, PROFESSIONAL STRENGTHS) OF THE INDIVIDUAL FOR POSSIBLE USE IN ASSIGNMENT AND SYSTEMATIC TRANSITION TRAINING PRIOR TO ASSIGNMENT.



RESOURCES

FY 85	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY93	FY94	FY95	FY 96
				STUDENTS NR/MY							
				STAFF AND FACULTY-MIL/CIV							
		1/8	4/14	4/14	4/14	6/16	6/16	6/16	6/16	6/16	6/16
				TDA CHANGE-$ MILLIONS							
	.14	.29	.67	.67	.67	.77	.77	.77	.77	.77	.77

Author: MAJ Lumpkin
Team Chief: COL Johnson

Annex H

Self Development

1. PURPOSE. To assist all officers in meeting their responsibilities for professional self-development by:

a. Providing a professional development roadmap that gives direction.

b. Expanding, validating, and articulating standards to serve as guideposts.

c. Providing feedback through an individual assessment and evaluation program which monitors progress.

2. DISCUSSION.

a. The current role of the schoolhouse, that of preparing the officer only for his next assignment, is being expanded as a result of the PDOS findings. The courses will now be designed to not only teach the officer about his next assignment, but also include how to think, solve problems and develop his decision making skills. With the development of a "Common Core" of knowledge, skills and proficiencies for the officer corps (ANNEX O) and the limited time spent in a schoolhouse experience, there is an increased need for a program of individual self-development.

b. An effective Army officer may be described as one who is:

(1) trained in the skills needed to accomplish the mission competently;

(2) educated in the knowledge and insights necessary for successful mission accomplishment within the context of broader organizational goals;

(3) committed to faithful duty;

(4) committed to a program of individual self-development.

c. A program of self-development that enhances education and training is particularly important in developing and maintaining self-respect and confidence. If adequately developed, educated, and trained, the officer is more likely to have confidence in his ability to perform satisfactorily. Further, if the education and training are relevant to Army needs, the officer is more likely to feel confident of contributing directly to successful mission accomplishment.

d. Self-development strategies implemented for the Army officer corps will have a major impact on the commitment of its members. To the extent that such strategies improve the quality of education and training and address the mission needs of the Army, self-respect and confidence of its officers will be enhanced. Further, to the extent that such self-development strategies are perceived to signal continuation of an organizational value pattern with which the individual has found compatibility, conditions potentially favorable to his success, as he defines it, will continue to exist.

e. Increased complexity within both the branches and functional areas of the Army has made it increasingly difficult for individual Army officers, other than through a comprehensive self-development program, to relate their respective skills to a central, unifying skill and to place these skills in a meaningful relationship to the many and varied skills practiced by Army officers. The intensive specialization demanded of officers is, necessarily, so absorbing that it is difficult in an increasing number of functional areas, other than through a comprehensive self-development program, to find either the time or the context within which to view and understand the overall relationship of Army career requirements in a resident school experience.

f. The need for self-development among Army officers is real and enduring. Nevertheless, specialization and the trend to reduce the amount of time officers spend in a schoolhouse setting directly reinforces the need to provide guidelines to help officers establish professional self-development programs.

g. It is the responsibility of an officer to learn that which is necessary to perform his duties in an effective fashion. It is the responsibility of the Army to state the skills and knowledge which the officer should learn and to provide the basic wherewithal for him to learn. It is the responsibility of the officer's commander to provide the officer with the opportunity, the guidance, the example and the inspiration to learn and to become a qualified officer. Military Qualification Standards (MQS) is one part of self-development designed to support the officer, the Army, and the officer's commander in fulfilling those responsibilities (Appendix M-1).

h. A program of self-development will further enable officers to deal more effectively with the changing nature of tasks brought about through rapid technological changes. Tasks of the future will tend to increase in complexity and uncertainty. As tasks become more complex, task activities become more unstructured, more novel, and less defined. The officer corps will seek direction, guidance, and feedback through a professional development program.

3. RECOMMENDATIONS. (See Appendices 1 and 2).

4. CSA REMARKS. Approved in concept.

Appendices

1 Military Qualification Standards (MQS)
2 Assessmen Program
3 Action Plan
4 Phasing Plan

Author: MAJ Lumpkin
Team Chief: COL Johnson

Appendix I to Annex H

Officer Military Qualification Standards (MQS), Pre-Commissioning Through Lieutenant Colonel

1. **PURPOSE.** To examine officer education and training and the establishment of branch and functional area qualification standards from pre-commissioning through lieutenant colonel.

2. **DISCUSSION.**

a. The Aim of MQS. It is the responsibility of an officer to learn that which is necessary to perform his duties effectively. It is the responsibility of the Army to state the skills and knowledge which the officer should learn and to provide the basic wherewithal for him to learn. It is the responsibility of the officer's commander to provide the officer with the opportunity, the guidance, the example and the inspiration to learn and to become a qualified officer. Military Qualification Standards (MQS) are designed to support the officer, the Army, and the officer's commander in fulfilling those responsibilities.

b. MQS Content. There are currently three levels of MQS: MQS I, pre-commissioning; MQS II, OBC through lieutenant; MQS III, OAC through captain. PDOS has recommended that MQS be expanded to include two additional field grade levels: MQS IV through major; and MQS V through lieutenant colonel. Each MQS is divided into two components: Military Skills and Knowledge, those immediate skills and knowledge which an officer requires to perform successfully in his branch or functional area; and Professional Military Education, the broader knowledges, skills and insights which form the basis for an officer's continuing professional development. A notional organization to support and sustain the MQS process is at Tab B.

(1) MQS I: The purpose of MQS I is to provide the officer with the military skills, knowledge and education which are required to embark upon a successful career in the US Army. MQS I is the same for all branches. The Military Skills and Knowledge component consists of common skills and knowledge which should be possessed by all officers during their initial period of service. The Professional Military Education component provides the officer with a foundation upon which to develop the judgment, knowledge and conceptual skills necessary to perform at higher levels of responsibility (Tab A).

(2) MQS II: The purpose of MQS II is to provide the officer with the skills and knowledge for initial branch qualification for the grade of lieutenant and to continue to broaden and deepen his professional military education. The Military Skills and Knowledge component consists of the following: individual branch skills; collective branch skills up to the platoon or equivalent level; administrative and logistical skills necessary at the platoon or equivalent level; and organizational effectiveness or human skills. In those branches with a high percentage of troop-leading positions, the content of MQS II will be focused on those skills and knowledge required to lead and manage troops. In other branches, the contents of MQS II will be balanced between troop leading and staff branch skills. The Professional Military Education component at MQS II consists of a direct-reading course (Tab A).

(3) MQS III: The purpose of MQS III is to qualify the officer in his branch at the intermediate level for the grade of captain and to continue the broadening and deepening of his professional military education. The Military Skills and Knowledge component will contain the same types of skills found at MQS II. However, the mix of skills, their nature, and their focus will be determined by the qualification requirements for captains in each branch or functional area. In some branches there will be heavy focus on command-type skills. In those branches in which only a few officers will command, the focus will be on staff skills, with only those officers who do command, learning and validating command skills. The Professional Military Education com-

ponent will consist of a broadly focused, directed reading program (Tab A).

(4) MQS IV and V: The purpose of MQS IV and MQS V for the field grade officer is to provide the officer a broader understanding of human and conceptual skills. It is essential that all officers acquire the fundamentals of Army and Joint Staff procedures and expand their basic knowledge of the doctrinal basis for combined-arms employment. The Military Skills and Knowledge component will consist of the following: coordination and integration of combined arms formations, high-level staff skills of personnel management, all source intelligence collection and evaluation, and logistics on the modern battlefield. The Professional Military Education component will consist of a broadly focused reading program. Officers will also be expected to become proficient in maximizing analytical techniques, conceptual skills, and communicative arts (Tab A).

c. At each MQS level the officer will receive an MQS Booklet and an MQS Qualification Card. The booklet contains all of the tasks, accomplishment of which will produce the skills required for that MQS. Task standards are criterion referenced and the booklets contain lists of applicable references for self-study or review. The MQS Qualification Card is currently constructed to show each task with a space where the commander/supervisor "signs off" to indicate that the officer or cadet has successfully validated that task; MQS I will still maintain this procedure. However, for MQS II through MQS V this procedure will change to reflect each officer "signing off" to validate his own accomplishment of the task and have provisions for comments by his commander/supervisor.

d. MQS Milestones—Implementation. TRADOC published the last complete MQS Milestone Schedule in Feb 83. MQS I based programs of instruction were implemented by TRADOC in school year (SY) 82-83; however, MQS I will not be fully implemented until SY 85-86. Cadets fully MQS I trained will begin graduating in SY 87-88. The perceptions of MQS, generated by feedback from the field, are based on lieutenants not fully MQS I trained. The MQS based officer training system recommended by RETO, and supported by PDOS, needs time to mature before a completely accurate assessment of its effectiveness can be made. The Officer Training Directorate, TRADOC has managed the individual changes to that schedule on a school-by-school basis. Current status of MQS implementation is as follows:

(1) MQS I: Deputy Chief of Staff, ROTC (DCSROTC), TRADOC managed the implementation of MQS I. However, MQS I was implemented without DA (CSA) formal approval. DCSROTC implemented the MQS I as a complete package for ROTC units beginning in Sep 82. OCS and USMA have integrated MQS I material within their training beginning in Sep. 82 and used MQS I training material as a basis for their instruction. PDOS findings revealed that the MQS I manual contained too many critical military skills (64 standardized task summaries). The goal PDOS established was to reduce the number of standardized tasks to approximately 50 and then designate no more than 25 of these standardized tasks as critical. This will permit each PMS to follow a standard procedure for certifying all critical tasks.

(2) MQS II: Four MQS pilot schools (IN, FA, MP, and MMCS) completed a front-end analysis of branch specialty tasks and conducted an MQS II AC/RC field evaluation in CONUS and Germany in 1983. All other service schools have completed a front-end analysis for their branches. Several service schools have initiated action to integrate MQS II within their OBCs. TRADOC is in the process of preparing an MQS II Decision Brief for the CSA. Full MQS II implementation is pending CSA decision, Feb 85. The goal PDOS established for the MQS II Common Tasks Manual (which contains 133 tasks) is to designate no more than 50 of these common tasks as critical and no more than 25 branch-specific tasks as critical from the MQS II Branch Specialty Tasks Manual.

(3) MQS III: While awaiting final CSA decision to implement MQS II, TRADOC has proceeded with pilot school development of MQS III. Pilot schools are scheduled to conduct a field evaluation of the MQS III concept in Jan 85. Again, service schools are in various stages of MQS III development. The goal PDOS established for the MQS III is to designate no more than 25 additional tasks from the Common Tasks manual as critical and no more than 50 branch-specific tasks as critical from the MQS III Branch Tasks Specialty Manual.

(4) MQS IV and MQS V: A complete front-end task analysis must be conducted to define both the branch and functional area tasks in addition to the common tasks and limit to no more than 50 critical tasks in each of these categories. A method of validation and self-certification needs to be developed. A professional reading program must also be included for these MQS levels. A distribution plan must be established

that will insure the MQS IV and MQS V manuals are in the hands of the field grade officers upon promotion.

3. BASE POLICIES SUPPORTING MQS ARE:

a. Standardize MQS manuals and Soldiers manuals: format, content, and where possible the numbering system.

b. Standardize institutional training of common skills and tasks in all schools.

c. Designate the critical standardized tasks summaries from the Common Tasks Manuals and limit the number of critical tasks in both the Common and the Branch Specialty Tasks Manuals.

d. Standardize the certification process for each MQS level: self-certification, comments by rater or mentor and not initially tied to the evaluation system (OER).

e. Continue to test, validate and field MQS I, II, and III.

f. Expand MQS to field grades (MQS IV for majors and MQS V for lieutenant colonels).

g. Develop marketing plan.

4. CSA REMARKS. Approved in concept.

Tabs

- A Military Qualification Standards (MQS)
- B Notional Organization to Support MQS
- C Notional Organization to Support Professional Development

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Team Chief: COL Johnson

Tab A to Appendix I

Officer Military Qualification Standards (MQS), Pre-Commissioning Through Lieutenant Colonel

1. PURPOSE. This Tab addresses the skills and knowledge common to pre-commissioning through lieutenant colonel in terms of what most cadets, officer candidates and officers in these grades will do and what they need to perform effectively.

2. DISCUSSION.

a. The extraordinarily heavy demands upon the United States Army to do more with less is expected to continue. The Army Officer Corps will continue to bear the brunt of these demands which includes such things as increasing readiness and competing for scarce resources. The ability of the Army officer to achieve and maintain high standards of professionalism may depend on the guidance provided through a "common core" of military skills, knowledge and proficiencies required to perform military tasks (Annex O). The MQS is an excellent mechanism, that is not tied to the evaluation system (OER), which allows individuals to become qualified with a systematic assessment of how well they are doing in relation to how the Army expects them to perform. There is a "common core" of skills, knowledge and profiencies required from Pre-commissioning through the grade of lieutenant colonel.

b. The DA proponency and notional organizational structure at the proponent schools to support MQS is at Tab B.

c. The levels of MQS include:

(1) MQS I: Upon entry into precommissioning training, cadets/officer candidates will be oriented on the MQS program and will receive their MQS I Booklets and their MQS I Qualification Cards. In the case of USMA and most ROTC programs, some learning and validation of skills will take place on the campus during the academic year, with the remainder of the skills being learned and validated during summer training. In the case of OCS, all learning of skills and validation will take place during the course. Successful validation will be entered in the cadet/officer candidate's Qualification Card by either a designated military faculty member or a tactical officer. Certification of completion of "qualification" in MQS I is done by the officer candidate's battalion commander at OCS or by the PMS of the civilian school which the cadet attends. To expedite the standardization of the MQS I certification process, each OBC will validate certification and provide feedback to TRADOC and the institution.

(2) MQS II: Upon entry into OBC, the newly commissioned lieutenant receives his MQS II Booklet and the MQS II Qualification Card. The ideal sequence for the Military Skills and Knowledge component of MQS II is the acquisition of the essential knowledge at the OBC and validation of the resulting skills in later on-the-job performance. In practice, some of the MQS II skills, particularly individual and collective subordinate skills, will best be validated in the OBC to reduce the validation load when the officer reaches his unit. Each branch proponent will determine which skills are best validated at the OBC and which skills are best validated in the units. Since all officers will not serve in initial duty positions which will allow validation of all MQS II skills as an integral part of their duties, commanding officers must be given latitude in selecting the means by which the officer validates the task.

(3) MQS III: Like MQS II (almost all of the Military Skills and Knowledge component is learned in the OBC) almost all MQS III skills are learned in a resident mode in the OAC. However, MQS III learning will take place in either the unit or schoolhouse. The branch proponents will develop short, functional TDY courses to teach those critical skills not learned in OAC. The unit-based learning, on the other hand, may take many forms: Correspondence courses, installation schools, supervised OJT, TEC lessons, instructional TV tapes, computer wargames and

simulations, commander/staff-conducted classes and seminars and simple home study, to name a few. The important role which the commander plays in supervising learning will necessitate an *extensive commander's MQS manual.*

(4) MQS IV and MQS V: Like preceeding MQS levels, MQS IV and MQS V address the skills and knowledge common to majors and lieutenant colonels in terms of what most officers in these grades will do and what they need to perform effectively. No attempt is made to prescribe the methods by which those officers will gain the required skills and knowledge. Majors and lieutenant colonels have a considerable number of common duties that are best described as staff, administrative or managerial. These duties are supported with executive skills requiring both broad-conceptual knowledge and specific technical knowledge. Several of the common duties for majors and lieutenant colonels involve staff and management activities of a general nature. The skills and knowledge common to majors and lieutenant colonels seem to involve more intellectual processes; such as problem solving, decision making and reactions to varied military, economic, political and social situations, than specific hard skills such as fire-support planning and weapons employment. The intellectual nature of the skills and knowledge does not mean that hard technical skills have become unimportant when the officer reaches the field grade level. They must always apply technical leadership to whatever organization they belong. In this sense, the skills are oriented toward Army-relevant administration, supply, maintenance, training, and employment of troops on the battlefield. The knowledge elements associated with the skills are heavy in concepts and procedures rather than specific details or individual facts. Obviously some specifics must be known (e.g., how the personnel system works) to be able to apply the concepts. However, specific facts have a limited life while the concepts associated with decision making, problem solving, management, and articulation of ideas usually change very slowly. The MQS IV and MQS V will also have a broadly focused reading program to enhance the officers professional military education.

d. In August 1984, the TRADOC Commander sought the personal view of the school commandants on Army-wide implementation of MQS; particularly on whether the system will provide a framework for organizing professional development programs in units which frequently have no organized structure. He also stated that, although MQS I may require some additional refining, the system is in place, and by year group 86 all lieutenants entering OBC will be MQS I qualified. At that time, school commandants will begin to appreciate its effects.

e. The second level of the system, MQS II (lieutenant's training), has progressed through the pilot stage. Results of the field evaluation conducted by pilot schools form the basis for implementation plans which will be briefed to CSA, Feb 85. MQS II will include a Common Tasks Manual, Branch Specialty Tasks Manuals for each accession branch, and a commander's guide explaining implementation. A major recommendation of the pilot evaluation is that officers will be certified on MQS tasks. Certification procedures are described below.

(1) Branch schools will determine tasks or skills which officers in their branch will be required to perform and to certify. Tasks/skills trained to performance standard during OBC will be school commandant certified. Lieutenants should be able to perform these tasks/skills upon arrival in their units with no further training. The number of tasks certified by the branch school will be determined, but it is expected that approximately 85 percent or more of the total task list would fall into this category. Currently the remaining certifiable tasks would require unit certification, however PDOS recomends self-certification with comments from the commander/supervisor.

(2) Method for tracking and monitoring self-certification would be through the officer's self-development notebook, with the unit commander/supervisor commenting on the officer's progress in meeting MQS goals and objectives. The OER support form may be one way to accomplish this tracking. A formal testing program, similar to SQT, will not be imposed. Commanders would observe the officer's job performance, or set up training situations to evaluate performance on tasks/skills that the officer must certify at his duty station.

f. RETO and PDOS initiatives that support the MQS system include:

(1) Develop a system of interconnected officer training courses that perform the following functions:

(a) Define the training strategy.

(b) Standardize doctrine.

(c) Eliminate redundancy.

(d) Develop training based on job/task analysis.

(e) Define training certification.

(2) The method used to accomplish this task includes:

4 L

(a) Develop an officer job/task analysis.

(b) Survey.

(c) Commander/supervisor's input.

(d) Proponent service schools.

—Critical tasks selection board.

—Site selection board.

(e) Define and establish training strategy manuals.

(f) Develop training material.

(g) Validate concepts with pilot program (FA, IN, MP, MMCS).

(h) CSA decision to implement.

(i) Implement training in service schools and units.

g. To operationalize the concepts, a training strategy and certification matrix has been developed. It identifies the duty positions and the location where the task must be taught and certified. This matrix provides each officer a permanent record of the tasks completed and the date of completion.

h. Standardization of Officer and Enlisted Training Publications.

(1) On 21 Jun 84, the Commander of the Army Training Support Center, in a memorandum for the Deputy Chief of Staff for Training (TRADOC), stated that standardization of training is a top priority within the TRADOC training community. In a 1984 visit to ATSC, the TRADOC IG verified a lack of training standardization between officer and enlisted training publications. One of the reasons for the inconsistency is a disconnect between the training format and content found in the MQS Manuals and the Soldiers Manuals.

(2) The difference in format and content between MQS Manuals and Soldiers Manuals came about when the TRADOC RETO implementation team developed the MQS pilot manual. They felt that there was a significant difference in the education level and learning methods between officers and enlisted personnel, and that officers would not accept or use an MQS manual that resembled an enlisted soldiers manual. This has resulted in the development of different training products being produced for tasks that should be common to every individual in the Army.

(3) The TRADOC IG recommended that TRADOC standardize the officer and enlisted training products by adopting a standard tasks summary format and numbering system as currently used in soldiers manuals. The TRADOC IG felt this would effectively satisfy MQS program requirements while standardizing officer and enlisted individual training products across the Army.

(4) On 13 Jul 84, TRADOC agreed with ATSC and further stated that standardization of doctrinal information in training products must come from the TRADOC proponent school. The TRADOC proponent schools must create an atmosphere whereby officer and enlisted training developers interact so that when required, one common task is developed for both officer and enlisted personnel. The MQS Manuals, Soldier Training Publications (STP), Extension Training Materials, SMART Books, etc., must reflect the same task standards and performance measures for tasks common to all. PDOS strongly agrees with this position.

(5) To assure standardization of officer and enlisted training products, it was recommended that TRADOC adopt a standard task summary format and numbering system. By standardizing the format, it would not only assure standardization of content, but would realize a number of other benefits.

(a) By standardizing the task summary format, it would assure that the training objective (conditions, standards and performance measures) provided to officer and enlisted personnel in the MQS manual and STP are the same.

(b) It would avoid costly duplication of effort by officer and enlisted task developers. A standard task summary could be used for both MQS manual and STP. This would decrease the resource expenditures by eliminating duplication of effort by tasks developers.

(c) It would establish closer development ties and improved communications between officer/enlisted task developers. Officer and enlisted personnel would be forced to coordinate training development activities.

(d) It would enhance the establishment of a more effective automated management system for managing the development of tasks by proponents. A single format and numbering system would reduce the requirements associated with the management and assurance of standardization of training and development of tasks common to both officer and enlisted personnel.

(6) However, on 18 July 1984, the TRADOC DCS, Training, made the following policy decision: Prior to final publication of MQS manuals, the format will be changed to emphasize task, conditions and standards in the order displayed in soldiers manuals. The remaining

elements in the format will remain as they are now shown. TRADOC believes the emphasis, purpose, and target audience of MQS manuals are better served by this format. This change can be made through deleting "context" and "cues" in the existing format or merging them with conditions as task pages are updated. It will not necessarily require rewrite of task performance measures. PDOS concurs with this position.

(7) TRADOC believes there is no overriding benefit derived by a change to the numbering system in MQS manuals. They feel numbering would cause the schools to change all references to numbers in the body of task sheets in manuals as well as rework training support packages. TRADOC schools were opposed to a numbers change when queried on the issue in 1983. To add other changes to the priority, other unresourced taskings could not be justified.

(8) PDOS has determined in coordination with ODCSOPS, TRADOC, and ATSC that standardization of content, format and where possible the numbering system will be revised with the 1988 scheduled revision of MQS I, II and III manuals.

i. TRADOC complete review of officer and enlisted training publications (e.g., MQS and Soldiers Manual of Common Tasks) and standardize format, content, and where possible the numbering system.

3. RECOMMENDATIONS.

a. Develop a field grade MQS IV for majors and MQS V for lieutenant colonels.

(1) Complete a front-end task analysis. (NOTE: The task analysis may indicate that one MQS will suffice for both majors and lieutenant colonels. If so, PDOS would support that conclusion.)

(2) Develop both critical branch and functional area tasks in addition to common tasks with no more than 50 tasks in each category.

b. Monitor the fielding/implementation of MQS I. (DCSROTC, TRADOC managed the implementation of MQS I. However, MQS I was implemented without DA (CSA) formal approval. DCSROTC implemented the MQS I as a complete package for ROTC units beginning in Sep 82. OCS and USMA have integrated MQS I material within their training beginning in Sep 82 and used MQS I training material as a basis for their instruction.)

(1) Review the common tasks with the objective of reducing the number to approximately 50.

(2) Designate no more than 25 of the common tasks as critical.

(3) Develop and implement a standardized certification plan.

c. Proceed with the fielding/implementation of MQS II. (Four MQS pilot schools (IN, FA, MP, and MMCS) completed a front-end analysis of branch specialty tasks and conducted an MQS II active component and reserve component (AC/RC) field evaluation in CONUS and Germany in 1983. All other service schools have completed a front-end analysis for their specialties. Several service schools have initiated action to integrate MQS II within their OBCs. TRADOC is in the process of preparing an MQS II Decision Brief for the CSA. Full MQS II implementation is pending CSA decision Feb 85.

(1) Obtain CSA formal approval of MQS II.

(2) Review, standardize and validate the critical tasks in MQS II.

(3) Designate no more than 50 tasks from the Common Tasks Manual as critical.

(4) Designate no more than 25 tasks from the Branch Specialty Tasks Manual as critical.

d. Proceed with the testing/fielding and implementation of MQS III. (While awaiting final CSA decision to implement MQS II, TRADOC has proceeded with Pilot School development of MQS III. Pilot schools (IN, FA, MP, and MMCS) are scheduled to conduct a field evaluation of the MQS III concept in Jan 85. Again, service schools are in various stages of MQS III development.)

(1) Obtain CSA formal approval of MQS III concept.

(2) Review, standardize and validate the critical tasks in MQS III.

(3) Designate no more than 25 tasks from the Common Tasks Manual as critical.

(4) Designate no more than 50 tasks from the Branch Specialty Tasks Manual as critical.

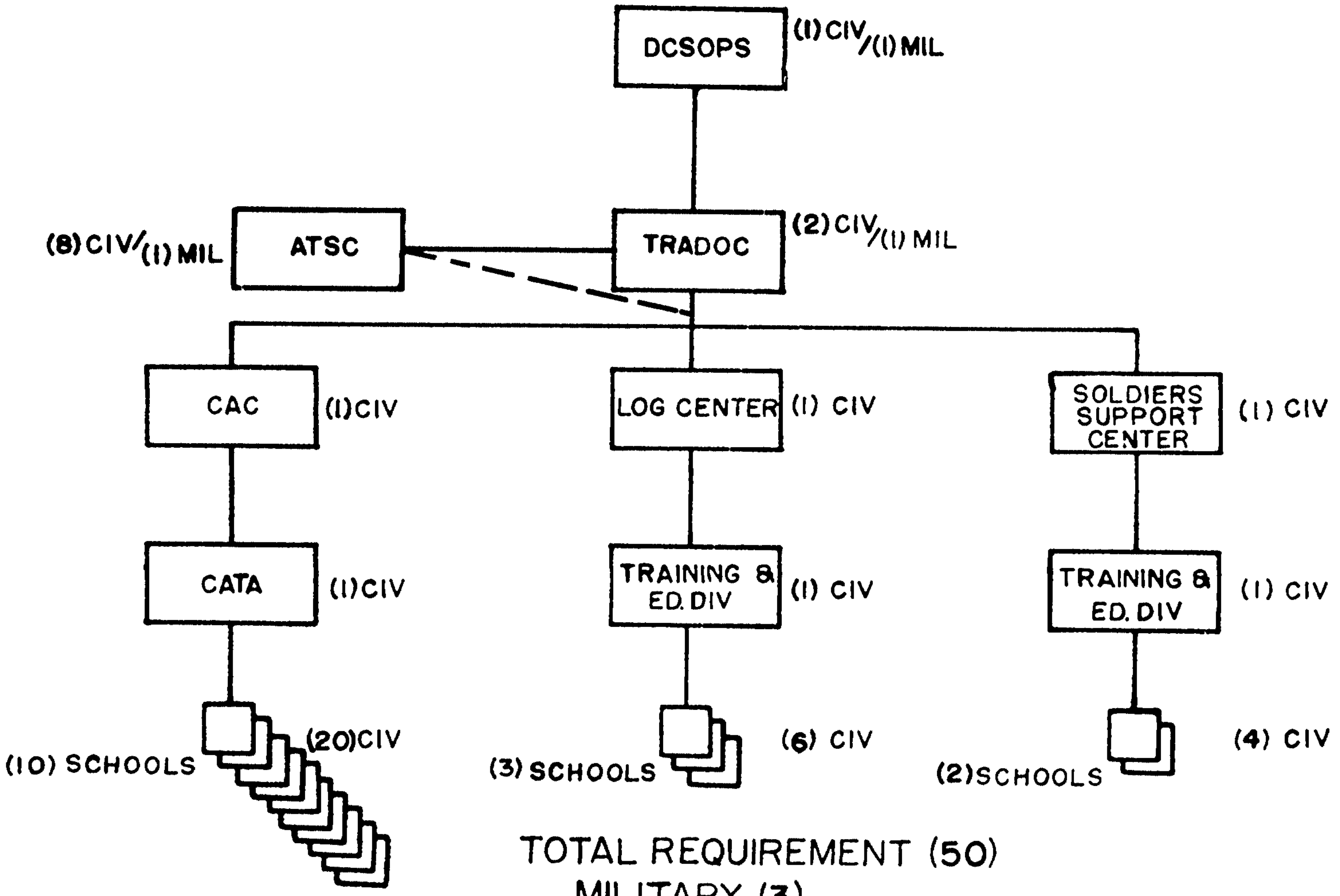
e. TRADOC develop a standardized certification process for each MQS level.

(1) Certification process will include provisions for individual *self-certification* of all tasks not certified in the institution.

(2) Standardize certification procedures for all critical common tasks.

4. CSA REMARKS. Approved in concept.

MILITARY QUALIFICATION STANDARDS


DCSOPS
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TRADOC
(2) CIV/(1) MIL
ATSC
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CAC
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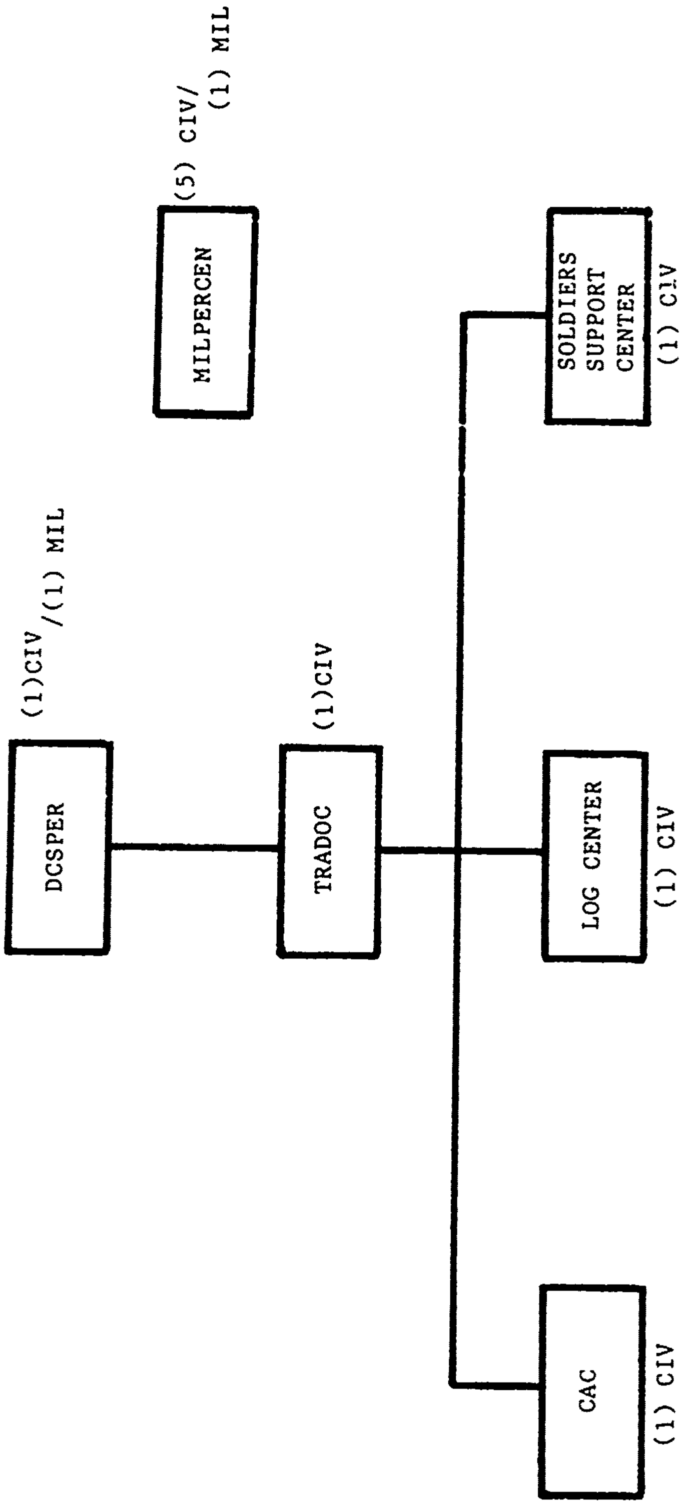
CATA
(1)CIV
(10) SCHOOLS
(20)CIV
LOG CENTER
(1) CIV
TRAINING & ED. DIV
(1) CIV
(3) SCHOOLS
(6) CIV
SOLDIERS SUPPORT CENTER
(1) CIV
TRAINING & ED. DIV
(1) CIV
(2) SCHOOLS
(4) CIV

TOTAL REQUIREMENT (50)
MILITARY (3)
CIVILIAN (47)

Tab C to Appendix 1

PROFESSIONAL DEVELOPMENT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TRADOC
(1)CIV
MILPERCEN
(5) CIV/
(1) MIL
SOLDIERS
SUPPORT
CENTER
(1) CIV
LOG CENTER
(1) CIV
CAC
(1) CIV

TOTAL REQUIREMENT (12)

(2) MILITARY

(10) CIVILIAN

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Appendix 2 to Annex H

Individual Assessment Program

1. PURPOSE.

a. To develop, validate and implement an individual assessment program for all officers and cadets to provide feedback for professional development;

b. To provide feedback to individual officers to assist them in their professional self-development efforts;

c. To provide the education and training system with a data base which will facilitate development of programs and techniques which assist in the professional development of officers;

d. To provide the basis to develop a knowledge and skills evaluation program.

2. DISCUSSION.

a. The use of an individual assessment program for personal and professional development in conjunction with education and training is of substantial value. The objective of an assessment program is to provide assessment learning experience aimed at increasing the cadets' and the officers' understanding of their strengths and weaknesses. The assessment program will evaluate the level of knowledge, skills and proficiencies at each professional development level and provide feedback to both the individual (to assist in self-development i.e., tell him where he stands in relation to established standards) and the system.

b. The individual assessment system is developed as a feedback mechanism in response to a greater emphasis on each officer's responsibility for self-development and the development of a "Common Core" of skills, knowledge and proficiencies for the officer corps (Annex P). This assessment program will be developed and designed to prevent duplication of effort and to help standardize the selection and screening of the numerous different assessment instruments currently being ultilized. For example, at the senior officer level, emphasis is on self-assessment with confidential feedback on one's approach to life, work, goal clarification and some reorientation of personal and/or professional objectives. At the junior officer level emphasis is on the common individual and collective military skills and knowledge which all soldiers must possess, such as those identified in MQS (Appendix 1 to Annex M). Currently, there is no logical process to provide feedback to the officer as he progresses from heavy skill assessments techniques used at the junior officer level to self-assessment techniques used at the senior officer level, nor to determine the proper mix of methods or area of emphasis. To preclude a reduction in the effectiveness of the valuable feedback that the assessment process offers, assessment will not be linked to the present evaluation system (OER). However, it may be used to assist the officer in setting his objectives and goals (e.g., an individual officer could elect to provide his assessment results to his mentor to be used in this process).

c. As the life experiences of the individual being assessed increase, the assessment becomes more meaningful. However, assessment instruments must be administered early in each professional development period to enable the individual to benefit from the feedback and initiate change based on the profile of himself as revealed by the assessment process. The form of assessment used must be relatively simple to administer because of the large number of officers involved. For example, currently, at the SSC, a series of pencil and paper instruments are used from which the assessee receives feedback, which is designed to provide personal insights in areas such as interpersonal relations, problem-solving ability, likes and dislikes, leadership style and ability to conceptualize.

d. The "assessment centers" recommended by PDOS are administrative and serve primarily as control and data collection and analysis agencies. The assessment centers currently being effectively used in the Army's executive/general officer training, conduct a much more intense and extensive assessment process than is envisioned initially under the PDOS individual assessment program (for all officers [01-06] and individuals in pre-commissioning programs) as they are very expensive from a resource (time, personnel and dollars) perspective. However, should experience indicate that it is cost effective, this type of assessment center can aid the Army in the early identification of officer potential and in the diagnosis of individual officer development needs so that an effective training and development program can be initiated. Centers can also act as a powerful stimulant to an officer's development, providing self-insight into possible problem areas and identifying possible corrective actions. Assessment centers differ greatly in length, costs, contents, and staff and administration depending on the objectives of the center, the dimensions to be assessed and the size and composition of the officer population.

e. The assessment data control cells or centers recommended by PDOS will review the missions, requirements and status of all agencies currently engaged in individual assessment and testing programs. The initial programs will be administered at the schools for ease of control and administration. This will allow for maximum use of resources of organizations and agencies currently engaged in assessment programs by providing guidance and direction to ensure standardization and to prevent duplication of effort. The assessment cells or centers will determine the Army's assessment needs, categorize the requirements, develop and validate the new programs through a pilot test. The assessment cell or center will direct the research effort to validate and revise the general assessment categories and determine which skills and profiencies can be placed in each assessment category (Tab A). After extensive research, a recommendation will be made regarding the possibility of expanding the assessment program to include an evaluation program. The assessment data control cell or center must be established early so that the data from individual learning instruments can be synthesized into a composite that represents the profile of the Army officer at various ranks and years of service. Given this composite profile, the officer being assessed can then compare his specific profile with the Army profile for that rank, year group and specific learning instrument to see how his responses compare to that of other officers of similar grade and experience.

f. The short-term goal of the assessment process is to provide the individual the result of the assessment instruments for use in his personal and professional development. In addition, the data collected from these assessment instruments will form a data base to be used as the basis to restructure school POIs and develop remedial training programs. This includes providing performance data (not tied to specific individuals) to pre-commissioning sources to enable them to track their graduates in comparison to an entire year group.

g. One long-term goal of the assessment process is to afford the Army an additional measurement instrument to better assist in determining where an individual best fits and what his potential performance may be in positions of increased responsibility. It will provide a uniform evaluation of the mental, physical and medical qualifications of the officer corps and the Army's pre-commissioning programs.

h. The proposed assessment program will be implemented in four phases:

Phase I

- ODCSPER designated individual assessment program coordinator: close coordination with ODCSOPS, TRADOC and ARI.
- Develop mission and scope of the individual assessment program.
- Establish assessment data collection and control cell(s) or center(s).
- Validate general assessment categories (Tab A).

Phase II

- Group assessment instrument(s) and procedures under general categories.
- Group skill, knowledge and proficiency requirements and standards under general categories.
- Develop and define "core" skill requirements.

Phase III

- Validate and implement initial individual assessment program.
- Begin development of individual evaluation program.
- Determine which of the "core" skill and knowledge requirements will be evaluated initially.
- Develop and validate remedial training programs to be used in conjunction with assessment program.
- Implement individual assessment program.

Phase IV

- Validate individual evaluation program.

- Implement remedial training program to be used in conjunction with the assessment and evaluation program.

i. At the beginning of Phase IV of the assessment program, a review will be conducted to establish the feasibility of developing and implementing an individual knowledge and skills evaluation program in conjunction with the assessment program.

3. CSA REMARKS. Individual assessment policies approved in concept:

Tabs

A Individual Assessment Concept

Author: MAJ Lumpkin
Team Chief: COL Johnson

Tab A to Appendix 2

Individual Assessment Program

1. **PURPOSE.** To examine the need for an assessment program that supports the proposed officer education and training system. The objective of this assessment program is to provide a learning experience aimed at increasing the officer's understanding of his strengths and weaknesses. Such an experience will facilitate the officer's personal and professional development thereby leading to a greater long-term professional contribution.

2. **DISCUSSION.**

a. As the assessment coordinator, ODCSPER, in coordination with TRADOC and ARI, must develop, validate and implement an individual assessment program for officers, cadets, and officer candidates to provide feedback for professional development. One example of a assessment type instrument is the test being administered to students in pre-commissioning, OBC and OAC to measure basic 3R's skill ability. TRADOC implemented this program to insure standardization, establish a data base, and to develop an officer corps profile in regard to the 3R's. The following tests are being used:

-Nelson-Denney Reading Test published by Riverside Publishing Co.

-Missouri College English Test published by Psychological Corp.

-Stanford Math Test published by the Psychological Corp.

b. Tests are administered for two purposes:

(1) Diagnose deficiencies in basic skills, and direct students to take remedial training if deficiencies are identified.

(2) Build an assessment data base which will be used by Army Research Institute (ARI) for the Behavioral and Social Sciences in developing officer profiles.

c. TRADOC has determined that these tests will be used for diagnostic purposes with the following guidelines:

(1) Tests will be scored locally to provide immediate feedback to students and to begin remedial training if deficiencies are revealed.

(2) TRADOC has developed the following interim standards that may be adjusted as test data is analyzed:

(a) Attainment of 12th grade reading level on Nelson-Denney Reading Test.

(b) Attainment of 50th percentile on Missouri College English Test.

(c) Standards have not been established for the Stanford Math Test.

d. Officers who do not meet the above standards will be required to take remedial training. Remedial training will not be included in the POI, but will be accomplished after duty hours. The program will be set up to make maximum use of existing resources—Educational Service Centers, correspondence courses, programmed texts, local colleges, and contract training. Students will remain in remedial training until they have met the standards described above, or until course completion.

e. Tests will be readministered to students who did not initially attain standards near the completion of OBC or OAC to determine improvement. When students are not able to attain standards when retested, they will be counseled to continue a remedial program during their next assignment. Commanders of receiving units will be notified by letter of the need for the officer to continue remedial programs. Letters for National Guard members will be sent to the NGB Operating Activity Center, who will forward them to the appropriate unit.

3. **RECOMMENDATIONS.**

a. Establish individual assessment control mechanisms.

(1) Review missions, requirements and status of all agencies currently engaged in individual assessment and testing programs. Making

maximum use of the resources of organizations and agencies currently engaged in the programs. develop an organizational structure consisting of assessment cells and/or center(s). Develop mission. resource requirements and an implementation plan for the new individual assessment cells and center(s). Revise and assign missions to current agencies based on the mission and implementation plan for the new assessment cells and center(s). Examine. and revise as required. current data base composition and control procedures.

(2) Develop a tracking system to provide institutions feedback on the status of their graduates as they progress through the Army. The tracking system will not be tied to a specific individual by name. but only track by branch. functional area. SSN and year group. Data will only be displayed and analyzed by branch. functional area and year group (e.g.. high. low and average scores for their graduates by branch and year group compared to those of the entire Army in the same categories).

b. Validate. and revise as required. the following as general assessment categories.

(1) The categories are:

(a) General Knowledge Familiarity gained by actual experience required by all officers (e.g.. current events. strategy. leadership. and communication).

(b) Military knowledge Specific mission-related know-how (professional reading program).

(c) Abilities Power to perform (e.g.. physical. moral or intellectual).

(d) General skills Ability to use one's knowledge effectively through a broad range of actions (e.g.. teaching. speaking. writing and counseling).

(e) Military skills Specific mission-related actions acquired and maintained to be combat-ready and competent (MQS skills).

(f) Other.

(2) Include the following requirements when validating and revising general assessment categories:

(a) A review of all assessment instruments and procedures currently being used. or under review. and group under one or more of the general assessment categories.

(b) A review of all current. or proposed. skill. knowledge or proficiency requirements or standards and group under one or more of these assessment categories.

(c) Evaluate match of assessment instruments and procedures with requirements and standards to determine the requirements for additional assessment or evaluation instruments.

(d) Develop and define the "core" skills. knowledge and proficiencies required of all officers and cadets.

c. ODCSPER is designated individual assessment program coordinator.

(1) Overwatch for the professional development system.

(2) Responsible for OPMS implementation. the *ROTC Study* and the *Total Warrant Officer Study*.

(3) Overwatch for the ROTC Study and the Total Warrant Officer Study.

(4) Select and assign officers to schools.

(5) Accession. retention and separation of officers.

(6) Officer distribution.

(7) Address professional development problems (MILPERCEN).

(8) Lead agent for the Army Leadership goal (to align the personnel system and the training system).

d. Develop and define the "core" skills. knowledge and proficiencies required of all officers and cadets. Ensure that the critical skills in MQS (Appendix 1) and the common core (Annex O) of the service schools are consistent with these "core" requirements and standards. TRADOC. in conjunction with the review and development of MQS common tasks. ensure linkage and compatibility with the development of common core skills. knowledge and proficiencies through each professional developent level (e.g.. vertical linkage between MQS II and III common tasks development and compatibility with OAC and OBC common core development).

e. Select the critical assessment instruments to be used to provide feedback to the individual officer at each professional development level. Validate the instruments and implement pilot individual assessment program.

(1) Pre-commissioning

(a) Leadership assessment program (LAP).

(b) 3R's achievement testing program (pilot test).

(2) OBC

(a) Pilot test 3R's achievement testing program.

(b) Leadership styles (limited use).

(3) OBC

(a) Pilot test 3R's achievement testing program.

(b) Leadership styles (limited use).

(4) CSC "Army Leadership Assessment Program" (ALAP).

(5) SSC Self-Assessment Program.

Myers Briggs
Health
Values and Attitudes
Interpersonal Relations
Leader effectiveness

(6) General Officers and Senior Executive Service assessment centers (limited attendance in the past).

f. Implement the individual assessment program.

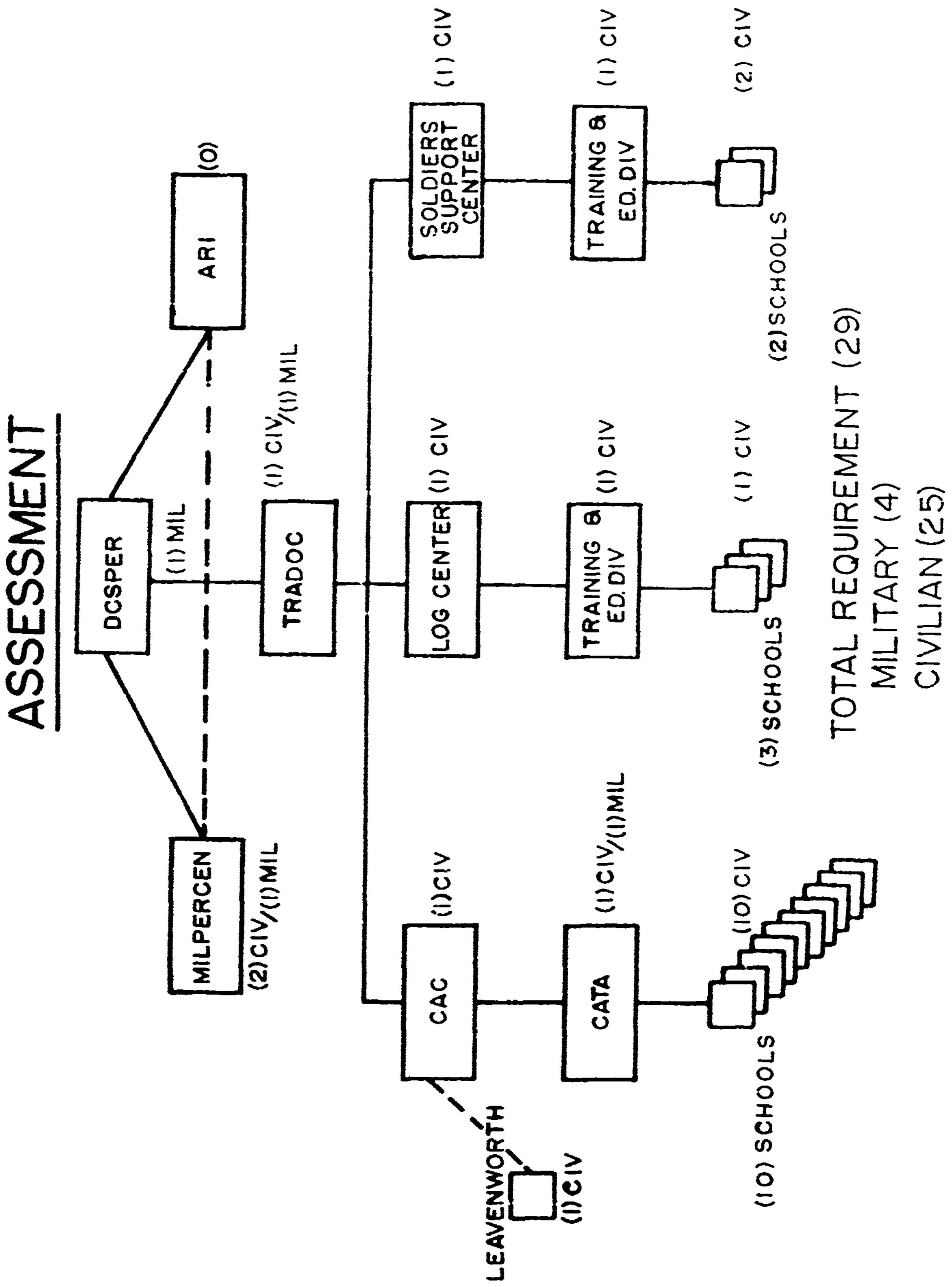
g. Develop, validate and implement an individual knowledge and skills evaluation program. Determine which of the "core" skills and knowledge requirements and standards will be evaluated. Assessment cells or center(s) will recommend when assessment instruments have been deemed sufficiently accurate to be used to validate standards and are suitable for use in either the evaluation or selection process (competency testing). Verify or develop assessment or evaluation instruments and procedures to be used. Verify institutions to participate in the individual evaluation program test. Develop information plan to publicize the effort to the officer corps. Implement initial individual evaluation program as a test.

h. Implement individual evaluation program.

i. Expand remedial training program to include individual evaluation program.

Enclosure–Notional Assessment Organization

Enclosure to Tab A to Appendix 2


ASSESSMENT
DCSPER
(1) MIL
MILPERCEN
(2) CIV/(1) MIL
ARI
(0)
TRADOC
(1) CIV/(1) MIL
CAC
(1) CIV
CATA
(1) CIV/(1) MIL
(10) CIV
(10) SCHOOLS
LEAVENWORTH
(1) CIV
LOG CENTER
(1) CIV
TRAINING & ED. DIV
(1) CIV
(1) CIV
(3) SCHOOLS
SOLDIERS SUPPORT CENTER
(1) CIV
TRAINING & ED. DIV
(1) CIV
(2) CIV
(2) SCHOOLS
TOTAL REQUIREMENT (29)
MILITARY (4)
CIVILIAN (25)

Appendix 3 to ANNEX H
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
J 91 Self-Development The process by which each individual officer accepts primary professional development responsibility to progressively grow in mind, body and spirit to meet his/her individual potential.				
o Develop and implement a program to support professional self-development throughout each officer's career.		ODCSPER	1Q FY 86	
o Emphasize the role of commanders and supervisors at all levels in supporting individual self-development in units and organizations		ODCSPER	1Q FY 86	

NOTES:

Appendix 3 to ANNEX H
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
Develop and publish professional development publication(s) which describe the fundamental principles and policies and outline the responsibilities of the individual officer and the system for professional development.		ODCSPER	1Q FY 87 - 1Q FY 88	
o Develop and publish a professional development roadmap (PD roadmap) which outlines and describes the Officer Professional Development System.	oo Include responsibilities of the individual and the role of the service schools, units, organizations and the individual assessment and evaluation programs at each professional development level. If differences exist in the career patterns for women officers they should be highlighted.	ODCSPER	1Q FY 87 - 1Q FY 88	
	oo Address branch and functional area development in addition to that which is standard for all officers (the Common Core).	ODCSPER.	1Q FY 88	
	oo Describe the MQS system, to include the certification procedures.	TRADOC	(see MQS LEVELS)	
	oo List and describe professional publications (e.g., PD periodical, Infantry Magazine, Military Review).	ODCSPER	1Q FY 87	

NOTES:

Appendix 3 to ANNEX H
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
o Determine which professional publications, in addition to the professional development periodical, will be forwarded to each officer at no cost to the officer.		ODCSPER	1Q FY 87	
o Develop and publish a professional development periodical ("The Army Officer") which will be mailed to each individual officer. This will include sections which apply to the branch and functional area of each officer in addition to news and policies which apply to all officers (e.g., policy changes, board dates and zones of consideration, changes in the Common Core).		ODCSPER	1Q FY 88	
o Develop and publish a professional development notebook (PD notebook) for use by each officer. This notebook will include the following sections as a minimum: 1. Index for use by each officer which will reference professional development roadmap, professional development periodical and any other publications, reference or policies the officer requires to assist in his personal management and assessment of his career development program.		TRADOC	4Q FY 87	

NOTES:

Appendix 3 to ANNEX H
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
2. A Section for self-assessment. 3. A section for self-certification of MQS tasks. 4. A section for comments by raters and mentors.				
NOTES:				

Appendix 3 to ANNEX H
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
O 94 ASSESSMENT AND EVALUATION Develop, validate and implement an individual assessment program for all officers and cadets to provide feedback for professional development. The purpose of the individual assessment program is threefold: 1. To provide feedback to the individual officer to assist him in his professional self-development efforts. 2. To provide the education and training system with a data base which will facilitate development of programs and techniques to assist in the professional development of officers. 3. To provide the basis for the development of a knowledge and skills evaluation program.		ODCSPER (P) TRADOC/ARI	3QFY87	
o DCSPER designated the individual assessment program development and implementation coordinator.			2QFY85	

NOTES

Appendix 3 to ANNEX H
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
o Develop mission and scope of the individual assessment program.		ODCSPER(P) TRADOC ARI SUPPORT	1QFY86-4QFY87	
	oo Assessment results will be used only for diagnostic purposes to provide feedback to individuals on their status relative to established standards and to other groups within the system and to assist the system in adjusting performance and standards as required.	TRADOC(P) ARI SUPPORT	4QFY87	
o Establish program assessment control mechanism.		ODCSPER(P) TRADOC and ARI SUPPORT	2QFY88-4QFY89	
	oo Review missions, requirements and status of all agencies currently engaged in individual assessment and testing programs.	ODCSPER(P) TRADOC and ARI SUPPORT	4QFY89	
	oo Develop a tracking system to provide institutions feedback on the status of their graduates as they progress through the Army. The tracking system will not be tied to a specific individual by name, but only track by branch and year group (e.g., high, low and average scores for their graduates by branch and year group compared to those for the entire Army in the same catagories).	ODCSPER(P) TRADOC and ARI SUPPORT	4QFY88	

NOTES:

Appendix 3 to ANNEX H
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
o Review all assessment instruments and procedures currently being used, or under review, and group under one or more of the general assessment categories.		ODCSPER(P) TRADOC, ARI SUPPORT	2QFY89-4QFY90	
o Review all current, or proposed, skill, knowledge or proficiency requirements or standards and group under one or more of these assessment categories.		ODCSPER(P) TRADOC, ARI SUPPORT	2QFY89-4QFY90	
o Evaluate match of assessment instruments and procedures with requirements and standards to determine the requirements for additional assessment or evaluation instruments.		ODCSPER.(P) TRADOC, ARI SUPPORT	2QFY89-4QFY90	
o Develop and define the "Core" skills, knowledge and proficiencies required of all officers and cadets.		ODCSPER(P) TRADOC, ARI SUPPORT	1QFY89-4QFY90	
	oo Ensure that the critical skills in MQS and the Common Core of the service schools are consistent with these "Core" requirements and standards.	ODCSPER	4QFY90	

NOTES

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
	oo Making maximum use of the resources of organizations and agencies currently engaged in the programs, develop an organizational structure consisting of assessment cells and center(s) (See Appendix on Assessment, for suggested notional organizational structures).	ODCSPER(P) TRADOC SUPPORT	1QFY88	
	ooo Develop mission, resource requirements and an implementation plan for the new individual assessment cells and center(s).	ODCSPER(P), TRADOC and ARI SUPPORT	1QFY88	
	ooo Revise and assign missions to current agencies based on the mission and implementation plan for the new assessment cells and center(s).	ODCSPER	1QFY88	
	oo Examine, and revise as required, current data base composition and control procedures.	ODCSPER	1QFY88	
o Validate, and revise as required, the following as general assessment categories. 1. General knowledge 2. Military knowledge 3. Abilities 4. General skills 5. Military skills 6. Other		ODCSPER(P) TRADOC, ARI SUPPORT	2QFY89 4QFY90	

NOTES:

Appendix 3 to ANNEX H
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
o Select the critical assessment instruments to be used to provide feedback to the individual officer at each professional development level.	oo Validate the instruments. oo Implement initial individual assessment program.	TRADOC	1QFY90-4QFY91	
o Ensure that current TRADOC achievement testing program complements the initial individual assessment program.		TRADOC	1QFY90-4QFY91	
o Develop and implement remedial training program for use in conjunction with the individual assessment program.		TRADOC	1QFY90	
o Develop and implement an individual assessment program information plan to explain the purpose and scope of the program to the officer corps.		TRADOC	1QFY86	
o Implement the individual assessment program.		TRADOC	1QFY92	
Develop, validate and implement an individual knowledge and skills evaluation program.				
o Determine which of the "Core" skill and knowledge requirements and standards will be evaluated.		TRADOC	1QFY89-4QFY90	

NOTES:

Appendix 3 to ANNEX H
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
	oo Verify or develop assessment or evaluation instruments and procedures to be used.	TRADOC	1QFY89-90	
	oo Verify institutions to participate in the individual evaluation program test.	TRADOC	1QFY89-90	
	oo Develop information plan to publicize the effort to the officer corps.	TRADOC	1QFY89-90	
	oo Implement initial individual evaluation program.	TRADOC	1QFY89-90	
o Assessment cells or center(s) will recommend when assessment instruments have been deemed sufficiently accurate to be used to validate standards and are suitable for use in either the evaluation or selection process (competency testing).		TRADOC	1QFY95-4QFY96	
o Expand remedial training program to include individual evaluation program.		TRADOC	1QFY95-4QFY96	
o Implement individual evaluation program.		TRADOC	4QFY96	

NOTES:

Appendix 3 to ANNEX H
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
J93 Military Qualification Standards (MQS) System:				
o TRADOC complete review of officer and enlisted training publications (e.g., MQS and Soldiers Manual of Common Tasks) and standardize format, content, and where possible the task numbering system.		TRADOC	2Q FY 88 - 1Q FY 90	
o TRADOC complete review of officer and enlisted institutional training and establish procedures to insure common skills and tasks are taught in a uniform manner.		TRADOC	2Q FY 88	
o TRADOC, in conjunction with the review and development of MQS core tasks, insure linkage and compatibility with the development of Common Core Skills, knowledge and proficiencies through each professional development level (ANNEX P) (e.g. vertical linkage between MQS II and III common tasks development and capability with OAC and OBC Common Core development).		TRADOC	2Q FY 86	

NOTES:

Appendix 3 to ANNEX H
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTE
o TRADOC develop a standardized certification process for each MQS level.		TRADOC	1Q FY 88	
	oo Certification process will include provisions for individual self-certification of all tasks not certified in the institution.	TRADOC	1Q FY 88	
	oo Certification process will include provisions for comments by the individual officer's rater regarding MQS tasks completion.	TRADOC	1Q FY 88	
	oo The certification process will not initially be tied to the evaluation system (OER).	TRADOC	1Q FY 88	
	oo Standardize certification procedures for all critical common tasks.	TRADOC	(See each MQS level)	
	oo Include evaluation of MQS learning, retention and validation of the certification process as an objective in the individual assessment program.	TRADOC	1Q FY 88	
o Develop and implement standard block of instruction and supporting materials explaining the MQS system for use in the service schools, units and organizations.		TRADOC	1Q FY 88	
o Develop articles explaining MQS system for use in all professional publications.		TRADOC	4Q FY 85 - 4Q FY 86	

NOTES:

Appendix 3 to ANNEX H
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
o Monitor the fielding/implementation of MQS I.				
	oo Review the standardized task summaries with the objective of reducing the number to approximately 50.	TRADOC	4Q FY 86	
	oo Designate no more than 25 of of standardized task summaries as critical.	TRADOC	1Q FY 86	
	oo Develop and implement a standardized certification plan.	TRADOC	4Q FY 86	
	ooo Provide certification guidance for all tasks.	TRADOC	3Q FY 86	
	ooo Each PMS will certify all critical tasks and follow standard procedures for certification of all other standardized task summaries.	TRADOC	3Q FY 86	
	oo Develop method of validating MQS I task certification process for officers beginning OBC as part of the individual assessment program.	TRADOC	4Q FY 86	
	oo MQS I implementation.	TRADOC	1Q FY 89	

NOTES:

Appendix 3 to ANNEX H
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
o Proceed with the fielding/ implementation of MQS II.	oo Obtain CSA formal approval of MQS II.	TRADOC	2Q FY 85	
	oo Review, standardize and validate the critical tasks in MQS II.	TRADOC	4Q FY 86	
	ooo Designate no more than 50 tasks from the Common Tasks Manual as critical.	Proponents	4Q FY 85	
	ooo Designate no more than 25 tasks from the Branch Specialty Tasks Manual as critical.	Proponents	4Q FY 85	
	ooo Designate branch specific critical task certification procedures.	TRADOC, and Proponent	1Q FY 86	
	ooo Establish standard format for all MQS II manuals.	TRADOC, Proponents and ATSC	1Q FY 86	
	ooo Publish critical common task certification procedures.	TRADOC and ATSC	2Q FY 86	
	oo Standardize MQS II certification process for all proponents.	TRADOC lead and Proponents	1Q FY 86	
	oo Develop method of validating MQS II task certification process for officers beginning OAC as part of the individual assessment program.	TRADOC	4Q FY 87	
	oo Implementation of MQS II.	TRADOC	4Q FY 86	

NOTES:

Appendix 3 to ANNEX H
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
o Proceed with the testing/fielding and implementation of MQS III.		TRADOC	3Q FY 88	
	oo Obtain CSA formal approval of MQS III concept.	TRADOC	3Q FY 87	
	oo Review, standardize and validate the critical tasks in MQS III.	TRADOC	3Q FY 87	
	ooo Designate no more than 25 tasks from the Common Tasks Manual as critical.	TRADOC	3Q FY 87	
	ooo Designate no more than 50 tasks from the Branch Specialty Tasks Manual as critical.	Proponents	3Q FY 87	
	oo Establish standard certification procedures for all proponents.	TRADOC	3Q FY 87	
	ooo Publish common critical task certification procedures.	TRADOC	4Q FY 87	
	ooo Designate branch specific critical task certification procedures.	TRADOC	4Q FY 87	
	oo Develop and institute instruction on MQS III certification.	TRADOC	1Q FY 88	
	oo Implement MQS III.	TRADOC	3QFY88	

NOTES

Appendix 3 to ANNEX H
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
o Develop a field grade MQS IV for 04's and MQS V for 05's.		TRADOC	1Q FY 92	
	oo Obtain CSA formal approval of MQS IV and MQS V concept.	TRADOC	1Q FY 90	
	oo Complete a front-end task analysis.	TRADOC	2Q FY 88	
	ooo Develop both branch and functional area tasks in addition to common tasks.	TRADOC	2Q FY 88	
	ooo Tasks must include planning and conducting division level and above and joint operations. Determine proficiencies required for high level TOE and TDA assignments.	TRADOC	2Q FY 88	
	ooo Tasks will address doctrine on how the Army runs.	TRADOC	2Q FY 88	
	oo Develop method of validation and self-certification.	TRADOC	2Q FY 88	
	oo Designate MQS IV and MQS V critical common tasks as well as critical branch and functional area tasks and limit to no more than 50 critical tasks in each of these categories.	TRADOC	2Q FY 88	
	oo Include a professional military reading program.	TRADOC	1Q FY 90	
	oo Implement MQS IV and MQS V.	TRADOC	1QFY92	

NOTES

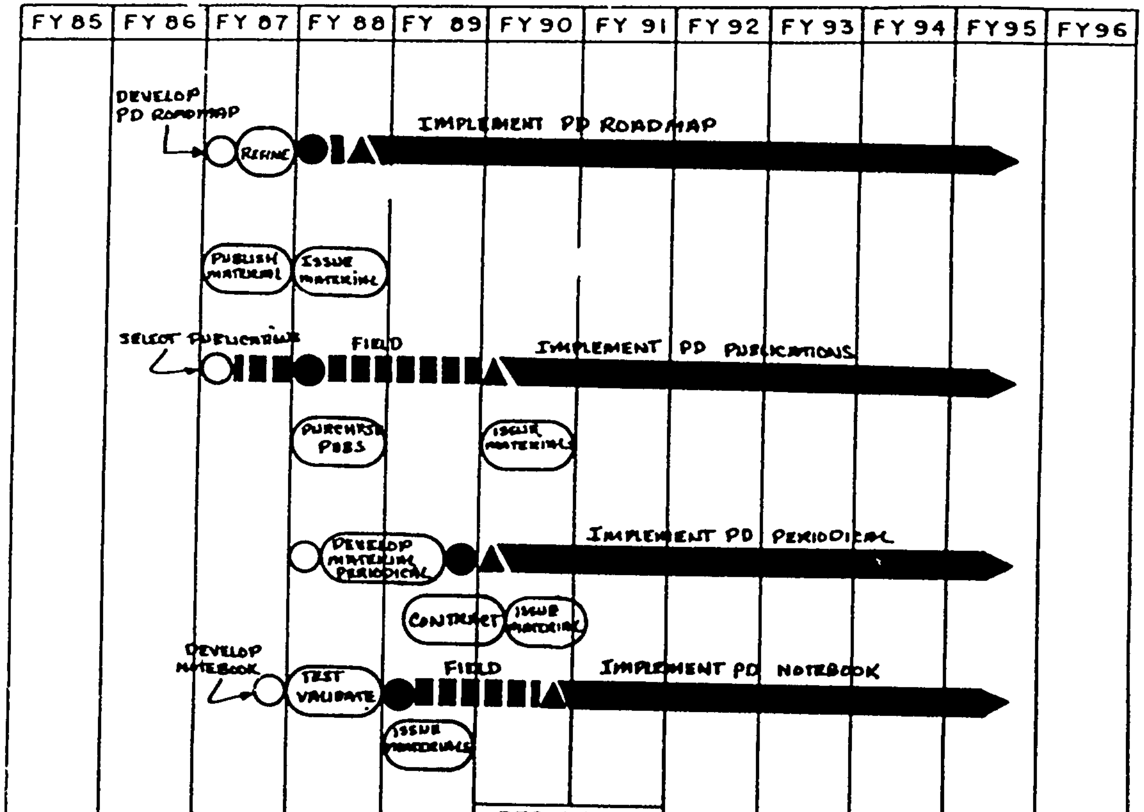
Appendix 4 to ANNEX H

PHASING PLAN

PROFESSIONAL DEVELOPMENT (PD)

J91

- o DEVELOP AND PUBLISH A PD ROADMAP.
  - oo ROLE OF SCHOOL, UNIT, ORGANIZATION AND THE INDIVIDUAL.
  - oo BRANCH AND FUNCTIONAL AREA DEVELOPMENT.
  - oo DESCRIBE MOS.
  - oo PROFESSIONAL PUBLICATION.
- o PROFESSIONAL PUBLICATIONS
  - oo MAIL TO EACH OFFICER - FREE.
- o DEVELOP NEW PD PERIODICAL.
- o DEVELOP PD NOTEBOOK.
  - oo SELF-ASSESSMENT.
  - oo VALIDATION OF MQS TASKS.
  - oo RATER/MENTOR'S COMMENTS.



RESOURCES

FY 85	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY93	FY94	FY95	FY 96
				STUDENTS NR/MY							
				STAFF AND FACULTY-MIL/CIV							
		2/4	2/4	2/4	2/10	2/10	2/10	2/10	2/10	2/10	2/10
				TDA CHANGE-$ MILLIONS							
		.5	.75	.85	1.1	1.1	1.1	1.1	1.1	1.1	1.1

Appendix 4 to ANNEX H

PHASING PLAN

MILITARY QUALIFICATION STANDARDS (MQS)

193

o CONTINUE FIELDING/IMPLEMENTATION OF MQS I, II, AND III.

MQS I (PRE-COMMISSIONING)

MQS II (LIEUTENANT)

MQS III (CAPTAIN)

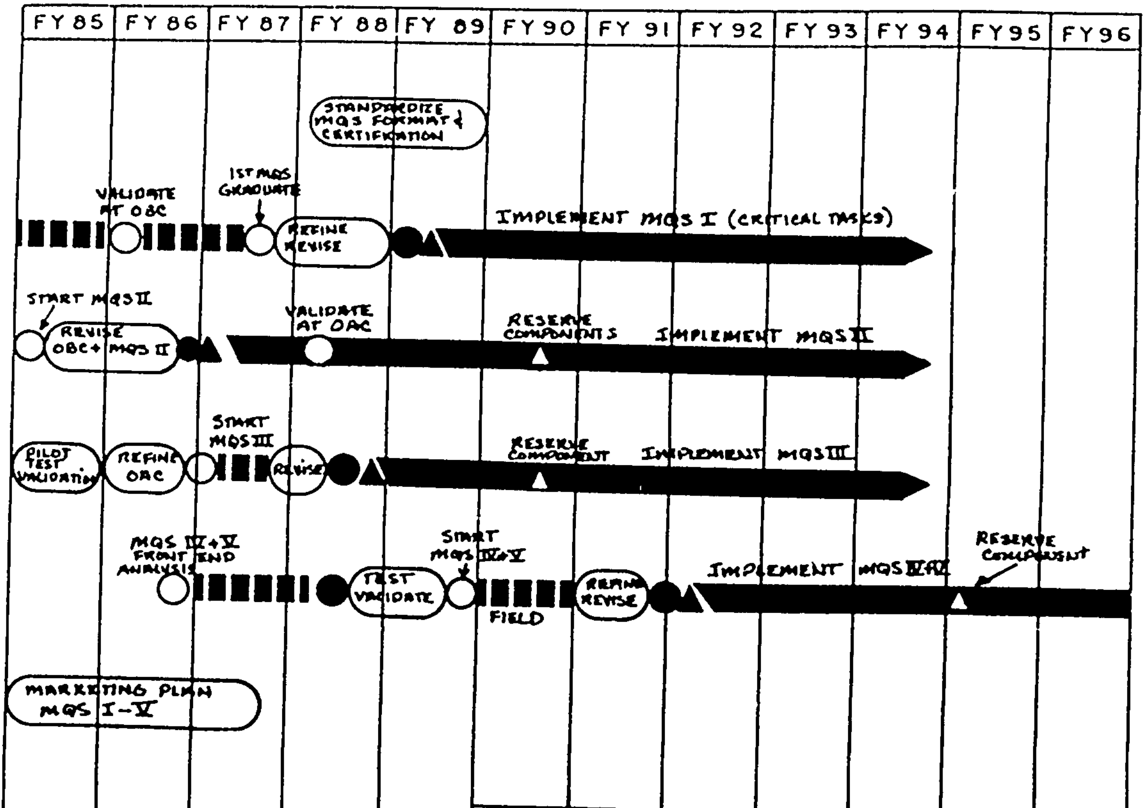
o EXPAND MQS TO FIELD GRADES.

MQS IV (MAJOR)

MQS V (LIEUTENANT COLONEL)

o RESERVE COMPONENT MQS FOCUS ON MOBILIZATION DUTY POSITIONS.

o DEVELOP MQS MARKETING PLAN AND INSTITUTE INSTRUCTION ON MQS SYSTEM THROUGHOUT EACH TRADOC SCHOOL.



RESOURCES

	FY 85	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY93	FY94	FY95	FY 96
STUDENTS NR/MY												
STAFF AND FACULTY–MIL/CIV			3/47	3/47	3/47	3/47	3/47	5/57	5/57	5/57	5/57	5/57
TDA CHANGE–$ MILLIONS			1.85	1.85	1.85	1.85	1.85	2.25	2.25	2.25	2.25	2.25

Appendix 4 to ANNEX H

PHASING PLAN

ASSESSMENT

094 DEVELOP, VALIDATE AND IMPLEMENT AN INDIVIDUAL ASSESSMENT PROGRAM FOR ALL OFFICERS AND CADETS TO PROVIDE FEEDBACK FOR PROFESSIONAL DEVELOPMENT.

DESIGNATE ODCSPER INDIVIDUAL ASSESSMENT PROGRAM COORDINATOR.

DEVELOP MISSION AND SCOPE OF INDIVIDUAL ASSESSMENT PROGRAM.

ESTABLISH ASSESSMENT CELLS AND CONTROL CENTER(S).

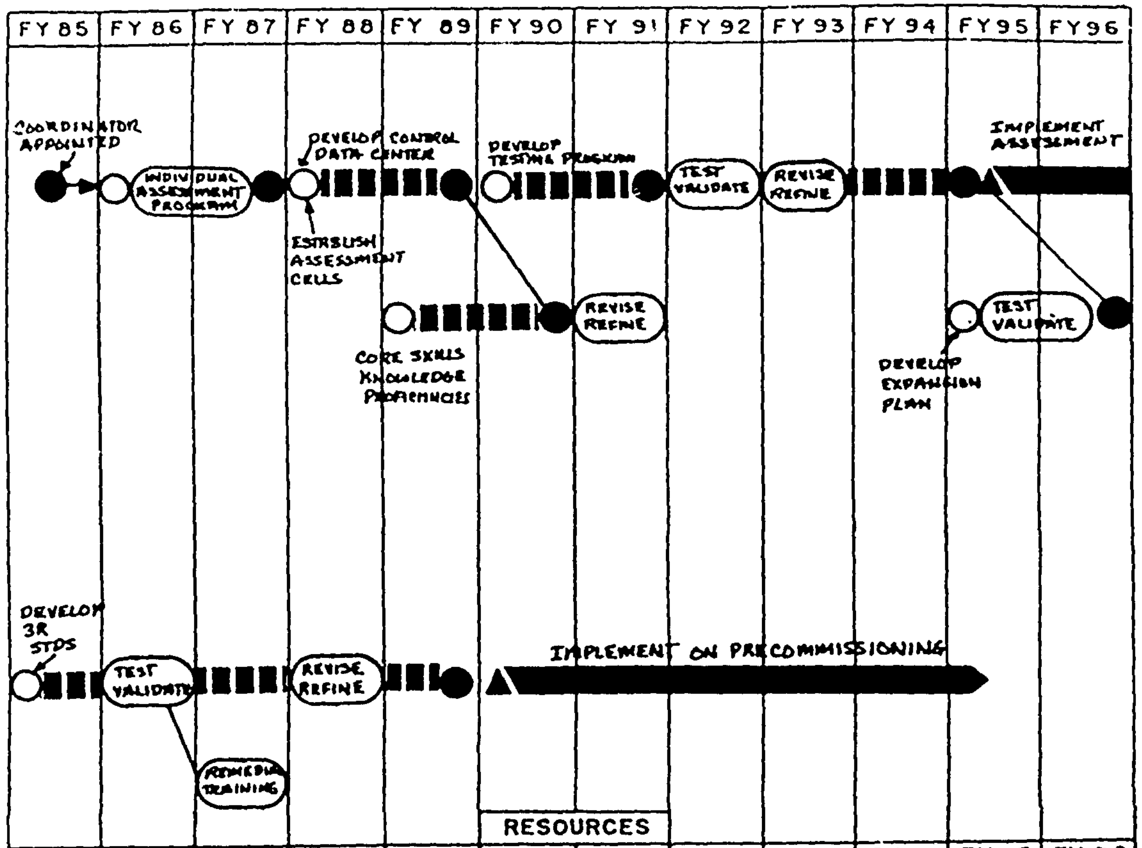
ESTABLISH ASSESSMENT CONTROL DATA CENTERS.

DEVELOP INDIVIDUAL TESTING PROGRAM.

VALIDATE AND REVISE ASSESSMENT CATEGORIES.

DEVELOP "CORE" SKILLS. KNOWLEDGE AND PROFICIENCIES.

DEVELOP AND IMPLEMENT REMEDIAL TRAINING PROGRAM AND TIE TO 3Rs, COMPUTER LITERACY AND FOREIGN LANGUAGE (SEE POLICY J01).



RESOURCES

FY 85	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY93	FY94	FY95	FY 96
				STUDENTS NR/MY							
				STAFF AND FACULTY-MIL/CIV							
	0/2	2/2	4/25	4/25	4/25	4/25	4/25	4/25	4/25	4/25	4/25
				TDA CHANGE-$ MILLIONS							
	.1	.175	.9	2.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7

Author: MAJ Meriwether
Team Chief: COL Dunn

Annex I

A Mentorship Based Development Strategy

1. **PURPOSE.** To propose a mentorship based strategy to develop an officer corps that possesses the knowledge, skills, abilities and character to be able to both think about the conduct of war in broad terms and adapt to the demands of a fast-paced tactical environment.

2. **DISCUSSION.**

a. Challenge. The challenges facing the Army through the remainder of this century and into the next mandate that officers be educated and trained in sufficient numbers, capable of thinking about the conduct of war in broad terms and adapting to the demands of a fast-paced, highly stressful tactical environment.

(1) New Challenges. General William R. Richardson describes in his Kermit Roosevelt Lecture the disturbing environment the American officer faces today: the increasing tempo in the rate of advance in weapons systems, organization, and doctrine; the increased scope and complexity of operations; the accelerated tempo of battle; the rapid change in technology; the proliferation of nuclear arms; worsening world disorder; diffusion of terrorism; growth of technically sophisticated armies; and our increased dependence on foreign markets and materials. General Richardson also cites the formidable military force possessed by the Soviet Union -a country with idealogies and purposes imcompatible with those of the United States.

(2) Future Challenges: Colonel Huba Wass de Czege identifies in the June 1984 *Military Review* the challenges that face the American officer in the future: changing missions, changing threat, changing society, changing force structure, accelerating rates of technological change, and changing competencies. This delta requires an increased emphasis on lower-level leadership caused by the requirements for both battlefield dispersal and the need to rapidly concentrate forces to conduct high speed attacks.

(3) New Battlefield Challenges: FM 100-5 *Operations*, cites the new battlefield challenges that will face the American officer: blurred distinctions between front and rear lines; requirements to rapidly concentrate and disperse forces; nuclear proliferation; need to understand/employ sophisticated information acquisition devices; growth of ability and willingness of adversaries to use chemical weapons; increasingly disruptive effects of electronic warfare; wide-ranging environments within which American forces are expected to be able to fight; longer and more vulnerable supply lines; and a generally enlarged battlefield perspective at all levels.

b. Characteristics Needed to Meet the Challenges. In the face of the severe challenges identified above, the orchestration and synchronization of warfighting assets have become too complex to ignore the need to develop officers who know how to think, rather than what to think; whose action-oriented decision skills include an ability to conceptualize, to innovate, to synthesize disparate information so as to assess a situation, to adapt to the unexpected, and, while understanding doctrine, be able to temper this with the willingness to take the measured risk when necessary to wrest victory from almost certain defeat. These characteristics—what a leader must BE, KNOW, and DO—are ably described by the late LTC Boyd M. Harris in FM 22-100, *Leadership*. To develop sufficient numbers of officers who possess these characteristics will not be easy.

c. Educating and Training Officers in Schools. Recent studies suggest that Army education and training instituions can and must do a better job in developing officers. New methods and a new orientation toward officer education and training are required. For example:

(1) The 1979 RETO Study, in particular, focused on the need to enhance staff training (CAS3 is a premier legacy of this study) and develop critical-thinking skills in officers.

(2) The 1982 Meloy Study (a report to CSA General E. C. Meyer that updates 1933 criticisms of Leavenworth by General Marshall) finds too much crammed into the one-year CGSOC curriculum, a faculty inadequate in number and only marginally qualified to teach, a student body with diverse needs, a slack method of evaluation, and a situation where the talented students are kept very busy, but only marginally challenged.

(3) The 1982 Strategic Studies Institute report entitled "Operation Planning: An Analysis of the Education and Development of Effective Army Planners" recognizes serious deficiencies in all Joint and Army planning systems. Specific deficiencies in identification, education, and development of operation planners are noted. Additionally, the inadequate teaching and use of planning logic and associated frameworks (i.e., decision-making process), as well as a need for a highly experienced faculty with sufficient time to guide students toward meaningful alternative solutions to problems are discussed.

(4) The 1982 LTG Trefrey Report to CSA on Problems of the Army School System points out the belief that a school assignment is no longer desirable, that perhaps officers should be assigned directly to units for training rather than attending a basic course; that 26 weeks is insufficient time to teach officers the principles of command, leadership, and management at the advanced course; that OAC standards should be raised; that all should attend CAS3; that the window of eligibility of attendance at CGSC should be extended to 18 YOS and class size reduced to 450 with an 18-month curriculum plus attendance at AFSC so as to provide an exacting and detailed education; similar recommendations are made for the Army War College.

(5) The 1983 Army Staff College level training study conducted by Colonel Huba Wass de Czege analyzes CGSOC's ability to train and educate the officer corps, finds that an education/training gap exists and recommends: that CAS3 continue and that CGSOC become more rigorous, be taught with more appropriate methods, to a less heterogeneous student body, by a first-rate faculty in adequate numbers.

(6) The 1984 ARI study entitled "Training Needs for OAC Curriculum" identifies: the belief that an OAC instructor assignment is not career enhancing; that instructors lack the requisite grade and relevant experiences to be credible to the students; that more experiential training is needed with simulations that force students to apply schoolhouse knowledge to real world situations.

(7) The 1984 Professional Development of Officers Study Survey finds that while the schoolhouse is not perceived to be broken, and CAS3 receives high grades, the advanced and basic courses are seen as lagging in instructor expertise and methodology. Additionally, officers cite the value of practical experience as key to the learning process, and identify a requirement for increased emphasis on learning operational level warfighting skills within the context of a development-oriented climate.

d. A Mentor-Based Schoolhouse Strategy. All the studies above suggest that a renewed emphasis on warfighting is necessary in educational institutions. Consequently, new teaching and learning methods are needed (based on an updated education/knowledge theory (see Annex P) to develop officers with the expertise and flexibility in thinking required to outthink a potential adversary.

(1) The following recommendation of the 1983 Army Staff College Level Training Study is applicable to all Army schools with the exception of CAS3 and AMSP. Specifically, the Army School System:

> ". . . needs a fundamental reorientation of teaching philosophies and methods. The application of the 'syndicate method' to the 'main effort' curriculum has already been mentioned. Concurrent with the development of the new curriculum, new and more effective teaching methodologies need to be adopted which feature less student/faculty contact in the classroom and more use of wargaming as well as more time outside the classroom. Students should be challenged to solve case study type problems either individually or by small groups with less "spoon feeding" of facts in class. Students should be required to consult references to acquire those facts. Evaluation should be more intense and personal."

(2) To achieve the reorientation mentioned above, a new schoolhouse strategy is needed. Specifically, the faculty must assume the role of a mentor to the student while simultaneously serving as the doctrine writer and course/courseware developer. The instructor must be the subject matter expert in fact as well as name. Consequently, a long-term schoolhouse strategy is needed that: modifies staffing guides to accommodate the role of the faculty mentor; reviews allocation of officers to service schools to

ensure appropriate seniority and expertise for a "mentoring" faculty; provides school commandants the flexibility to selectively extend a limited number of key, experienced staff and faculty members to function as "mentors to the faculty", and provide stability and credibility. Finally, current OAC faculties must be transitioned from the model based on current instructor staffing standards to one with a full-time faculty which teaches/leads only one small student group at any time in addition to writing doctrine, course, and courseware development.

e. Educating and Training Officers in Units and Organizations. The mentor-based schoolhouse strategy is only one part of the equation. To succeed in developing the professional, competent, and thinking officer a similar "mentorship" approach is needed in units and organizations. A review of recent studies on mentorship and a corresponding strategy for unit application is as follows:

(1) Rudi Klauss (1981) describes the mentor relationship as one of the most complex and developmentally important relationships an individual can have in early adulthood. Additionally, he provides a useful background to the term mentor—a term that conveys the image of the seasoned, senior executive/leader who can offer the wisdom of years of experience from which to counsel and guide younger individuals during career progression.

(2) Kathy Kram (1983) reports that the mentor relationship can significantly enhance development in early adulthood and also in the midcareer stage of the more experienced individual. She also identifies the four phases of the mentorship relationship: initiation, cultivation, separation, and a redefinition phase during which time the relationship evolves into a new form that is significantly different from the past - or the relationship ends completely. Mentoring functions may be either career functions (e.g., sponsorship, exposure and visibility, coaching, protection, and challenging assignments) or psychosocial functions (e.g., role modeling, acceptance-and-confirmation, counseling, and friendship).

(3) Mentorship is a critical career training and development tool. In a review of the literature, Hunt and Michael (1983) demonstrate that it is an important tool for upward professional progression in organizations: that most corporate presidents have had mentors who were vital to their success; that mentors have an important influence on promotion decisions; that serving as a mentor also may be professionally rewarding and that mentorship is equally important for the career success of women.

(4) The Woodlands Group (1980) reports that while the mentor relationship depends upon a rich interpersonal relationship, it also relies upon such systems as performance appraisals, career planning, and assessment centers.

(5) In a military context, officers desire to be on the receiving end of a mentoring style of leadership. For example, PDOS survey results indicate that 88 percent agree that the officer should first be a mentor and a role model who instills Army values and develops subordinates; 96 percent agree that commanders should be evaluated on the extent they develop the officers serving under them. Also, general officers strongly state that the leader is responsible not only for mission accomplishment, but also for the simultaneous development of subordinates. However, 59 percent of all officers do not perceive themselves as having a mentor in their current assignment, and leadership related instruction in schools is not seen to be very effective (i.e., not sufficiently experiential nor taught by experienced faculty).

(6) T. O. Jacobs, an Army Research Institute Scientist, explains how the thinking skills required by the future battlefield constitute the longest growth requirement in officer development. To impart the requisite skills, certain changes to the current system for educating and training officers in units and organizations are needed: leaders at all levels must become teachers (i.e. adopt a "mentorship" style of leadership) who foster a climate of command to encourage young leaders to think for themselves during peacetime, when logic errors can be coached away.

f. A Mentor-Based Strategy for Units/Organizations. The specific mentor-based strategy for educating and training officers in units requires a parallel approach to the one recommended in the schoolhouse—and yet it is one which will be perhaps the more difficult to achieve. To have a chance for success at developing these critical thinking and warfighting skills required by the challenges of the future battlefield, the junior officer must have the time, opportunity, and climate to develop them. The experiential mentorship-based teaching model recommended for the school is exactly the same model needed in the unit or organization. Senior leaders must teach and mentor junior officers. Learning in the unit must be systematic, progressive, and experientially based. Training the officer to fight and think involves the maximum use of simulations.

realistic training, TEWT's, battle planning, and just plain old-fashioned sessions of "what-iffing." Practice and feedback are key ingredients, accomplished in an environment where an officer is challenged to experiment without fear of failure. For these things to happen requires that commanders acknowledge and claim responsiblity for the mentorship role, adopt experiential learning/teaching methodologies, and establish the necessary developmental climate within which constructive feedback is provided to the individual officer.

g. Key Points to be Stressed.

(1) The challenge to educating and training the officer through the next century is to develop those knowledges, skills, and abilities that will provide the officer the capability to be flexible, to innovate, to be able to think and adapt to the demands of a fast-paced rapidly changing environment.

(2) A renewed emphasis on warfighting is necessary in educational institutions; this requires new, small group oriented, experientially based strategies with an experienced faculty capable of providing a mentorship based method of instruction.

(3) A parallel emphasis is required in educating and training officers in units—i.e., experientially based teaching by mentoring leaders at all levels who provide a developmental climate in which the officer has the optimum opportunity to develop those critical thinking and warfighting skills needed to win on the battlefield.

3. **RECOMMENDATIONS.** To develop an officer corps characterized by an ability to think and adapt to the demands of a fast-paced tactical situation requires that a long-term "mentorship" strategy be adopted—both in the schoolhouse and in units. Specific recommendations include:

a. Allow Comander, TRADOC and Commandant, AWC to create a very limited number (notionally 25 total) of extended tour senior mentor faculty positions at service schools.

b. TRADOC commit to a long-term "schoolhouse" strategy which:

(1) Establishes positions of faculty mentors (teacher, advisor, guide, role model, small student group leader, doctrine writer, course developer).

(2) Modifies staffing guides to accommodate the mentor role.

(3) Develops a plan to transition OAC from current model to one with full-time faculty mentors (teach only one small student group at a time in addition to doctrine writing/course and courseware development responsibilities).

c. TRADOC and ODCSPER review allocation of officers to service schools insuring appropriate maturity and experience for a "mentoring" faculty.

d. Commanders at all levels apply a mentorship based strategy in developing officers

4. **CSA REMARKS:** Approved in concept.

Appendices

1 Battalion Commander Distribution
2 Bibliography
3 Action Plan
4 Phasing Plan

Author:LTC Kasik
Team Chief: COL Isaac

Appendix 1 to Annex I

Former Battalion Commander Distribution

1. **PURPOSE.** To provide recommendations concerning priorities for assignment and utilization of former battalion commanders (FBC) to meet Army-wide requirements.

2. **DISCUSSION.**

a. The Army has had an ongoing effort to establish a formal distribution plan to capitalize on the unique skills and future potential exhibited by former battalion commanders. Since 1977 various options have been implemented based on guidance by the CSA or VCSA. Their policies have ranged from various floor-percentage concepts to minimum numerical goals for selected organizations and activities. Tab A provides an historical synopsis of major actions taken to distribute former battalion commanders to the present. The primary issues for use of FBCs have centered around the fact that these individuals represent a small percentage of the total lieutenant colonel population and are normally available for only one utilization tour as a lieutenant colonel before being selected for Senior Service College or selection for promotion to the rank of colonel. In the case of the former, only a few individuals are selected for Senior Service College who are not FBCs; in the latter case, statistics indicate that 95 percent of FBCs will be selected for promotion to colonel. These two quality indicators, plus the fact that FBCs have developed extensive command and leadership skills, make them highly desirable assets for any unit or organization. Currently, the Army produces an average of 425 FBCs a year. This number can vary significantly due to a wide range of variables.

b. At Tab B is the FBC distribution as of first quarter FY 85. It should be noted that the Army staff and its FOAs, TRADOC, FORSCOM, and USAREUR, have the largest concentrations of FBCs in terms of gross numbers. This distribution is based on priority guidance which was developed by MILPERCEN derived from a series of senior officer decisions and guidance. This priority is:

1. USAREC – 28 (1/2 of number of battalions)

2. TRADOC Leavenworth

3. Corps/Division Staff and other TRADOC schools

c. Although the data displayed in Tab B indicates that 142 FBCs are assigned to TRADOC (85 are LTC not in a promotable status), 45 are assigned to Fort Leavenworth with 35 being dedicated to CAS3. A sampling by the PDOS group indicated that as of the beginning of FY 85 the following numbers of LTC FBCs were being utilized in instructor-related positions at various service schools:

Infantry	6	SC	0
Armor	4	QM	0
FA	0	AG	0
ADA	1	FIN	0
ENG	0	ORD	0
Chem	1	MP	1

d. Data developed by various studies (Meloy and Trefrey Reports) indicate that officers who are assigned as instructors in Army Service Schools have an unsatisfactory level of expertise. CAS3 is the only company grade educational experience that is perceived as being heavily staffed by "quality" instructors. The lack of real or perceived quality on the platform in the Army's service schools is a matter which demands further attention and solution by the Army Staff and TRADOC. Such an action should be part of a total effort to redefine the assignment/distribution priorities for FBCs among competing claimants within the total force.

3. **RECOMMENDATIONS.**

a. The assignment/distribution of former battalion commanders should be made according to an overall Army plan based on realistic priorities. Since the Army has an immediate requirement to deploy and fight in a span of time much shorter than any in our history, it would seem that a priority should go to providing FBC's to serve as principal staff officers at the division and corps levels. Secondly, the Army has a requirement to develop and train leaders for the immediate time frame and for the future; therefore, another priority should go to the use of former battalion commanders as teachers/mentors/coaches for the immediate and future development of our officer corps. Thirdly, we have a requirement to develop doctrine and policy to maintain the Army in peace and in war. In the vast majority of instances, successful battalion command is a prerequisite for advancement to senior leadership positions that include responsiblity for providing overall direction in terms of Army doctrine and policy. Accordingly, former battalion commanders should be assigned to positions relating to this effort. Restated, the Army priority for use/assignment of FBCs should focus on three areas:

(1) Operational staff officers at the division and corps levels.

(2) Teachers/instructors/coaches within the education and training system.

(3) Doctrine and policy developers for maintaining and sustaining the force.

b. Assignment of FBC in the areas of priority listed above would serve to enhance the readiness of our Army. Additionally, it would provide a leavening effect for further development and commitment by our junior officers.

c. The following general policy should be implemented for action by the Army staff:

DCSPER review requirements for former battalion/brigade commander expertise throughout the Army. Emphasis should be on utilization of their experience in cells of quality throughout the Army as operational staff officers, instructors/coaches, and doctrine, combat and policy developers. Determine an appropriate distribution method to provide equitable distribution based on Army priorities and mission requirements. The ODCSPER review should remain cognizant of the fact that quality is not limited to former battalion and brigade commanders as there are significant numbers of other officers who, due to sharply constrained opportunities, were not selected to exercise formal command.

Tabs

A Historical Information
B Sample Distribution Display

Author: MAJ Meriwether
Team Chief: COL Dunn

Tab A to Appendix 1

Historical Information

Apr 1977	VCSA directed MILPERCEN to establish a former battalion commanders' distribution plan using the 80% floor concept.
May 1979	VCSA abolished plan based on conclusion that the plan created false expectations for field commanders and unfixed supply of officers in the population made plan impossible to meet. VCSA directed that an informal floor of 70% be used internally as a guide.
Feb 1980	CSA extended command tour length to 30 months, further reducing the population.
Sep 1980	DCSPER stopped 70% "informal floor" and directed where possible meet following goals of: USAREC 57, ARMR 27, USMA 4, RG BN 2, TRADOC schools 100, total of 190.
Apr 1981	VCSA established individual qualification as the primary assignment consideration for matching an FBC to a particular job. Priority of FBC assignment should be given to corps and division staffs and TRADOC schools (not necessarily in that order).
Aug 1982	CSA reaffirmed policy of Apr 81 in message to Gen Smith.
Jul 1983	CSA reduced cmd tour from 30 to 24 months.
Jul 1988	CSA excepted Ft Leavenworth for quality.
Sep 1983	MILPERCEN commitment of 45 former battalion commanders to Ft Leavenworth initiated.

Author: MAJ Meriwether
Team Chief: COL Dunn

Appendix 2 to Annex I

Bibliography

Lieutenant Colonel Boyd M. Harris. "A New Army Emphasis on Leadership: Be. Know. Do." *Military Review*. 1983.

David M. Hunt and Carol Michael." Mentorship: A Career Training and Development Tool." *Academy of Management Review*. 1983. V.8. No.3.

Rudi Klauss. "Formalized Mentor Relationships for Management and Executive Development Programs in the Federal Government." *Public Administration Review*. July-August. 1981.

Kathy E. Kram. "Phases of the Mentor Relationship." *Academy of Management Journal*. 1983. V. No 4.

MG G.S. Meloy. Memorandum for Chief of Staff. Army. February 1982. subject: Evaluation of CGSC Curriculum.

Earl C. Pence. William P. Burke and Alma G. Steinberg. "The Interview Phase of the OAC Leadership Needs Analysis: Interim Report." Working paper 84-3 for Army Research Institute (ARI) for the Behavioral and Social Sciences. Alexandria. VA 22333. 1984.

Review of Education and Training of Officers (RETO) Study. Headquarters. Department of the Army. Washington. D.C.. 1979.

General William R. Richardson. "Kermit Roosevelt Lecture" Presented at the Royal Military College of Science. Shrivenham. 22 May 1984. the Staff College. Comberlay. 24 May 1984 and the Royal Military Academy. Sandhurst. 29 May 1984.

Strategic Studies Institute. "Operation Planning: An Analysis of the Education and Development of Effective Army Planners." 1982.

Lieutenant General Richard G. Trefrey. Memorandum for the Chief of Staff. Army. 21 August 1983. subject: Problems of the Army School System.

U.S. Department of the Army Field Manual. FM 100-5. *Operations.*

Colonel Huba Wass de Czege. "Challenge for the Future: Field Grade Battle Leaders and Staff Officers." *Military Review*. June 1984.

Colonel Huba Wass de Czege. Final Report: Army Staff College Level Training Study. 1983 Army Research Associate. US Army War College.

The Woodlands Group. "Management Development Roles: Coach. Sponsor and Mentor." *Personnel Journal*. November 1980.

Appendix 3 to ANNEX I
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
084 Commit to a long-term schoolhouse strategy which: a. Redefines the role of the instructor so that he serves as "mentor" to students--i.e., functions as small group leader, teacher, role model, doctrine writer, course and courseware developer for only one small student group at a time. b. Modifies staffing guide to accomodate the broadened role of faculty mentor. c. Develops a pilot plan to gradually transition current OAC's to a "faculty as mentor" model.	(1) Modify instructor staffing standards to permit adequate time for single group mentoring, doctrine writing, and computer courseware development by faculty. Use OAC's for pilot testing.	ODCSOPS (P); TRADOC; DAS; ODCSPER	3Q FY 85	(1)
	(2) Request added OAC staffing support per new staffing guides.	TRADOC (P); ODCSPER	3Q FY 85	(2)
	(3) Transition pilot program OAC's to support the new model.	TRADOC (P); ODCSPER	2Q FY 86	
	(4) Pilot test mentor program at selected OAC's; assess and decide "go - no go"; revise/expand programs as necessary based on assessment.	TRADOC	1Q FY 87	

NOTES:

(1) (086) Create a limited number of senior faculty/staff positions in schools (notionally 25 total) for experienced senior officers to serve extended tours so as to enhance credibility, expertise, and stability. This should not be interpreted as a policy to encourage "homesteading".

(2) Review allocation of officers assigned as instructors to ensure appropriate maturity and expertise.

Appendix 4 to ANNEX I

PHASING PLAN

OBJ COMMIT TO A LONG-TERM SCHOOLHOUSE STRATEGY WHICH.

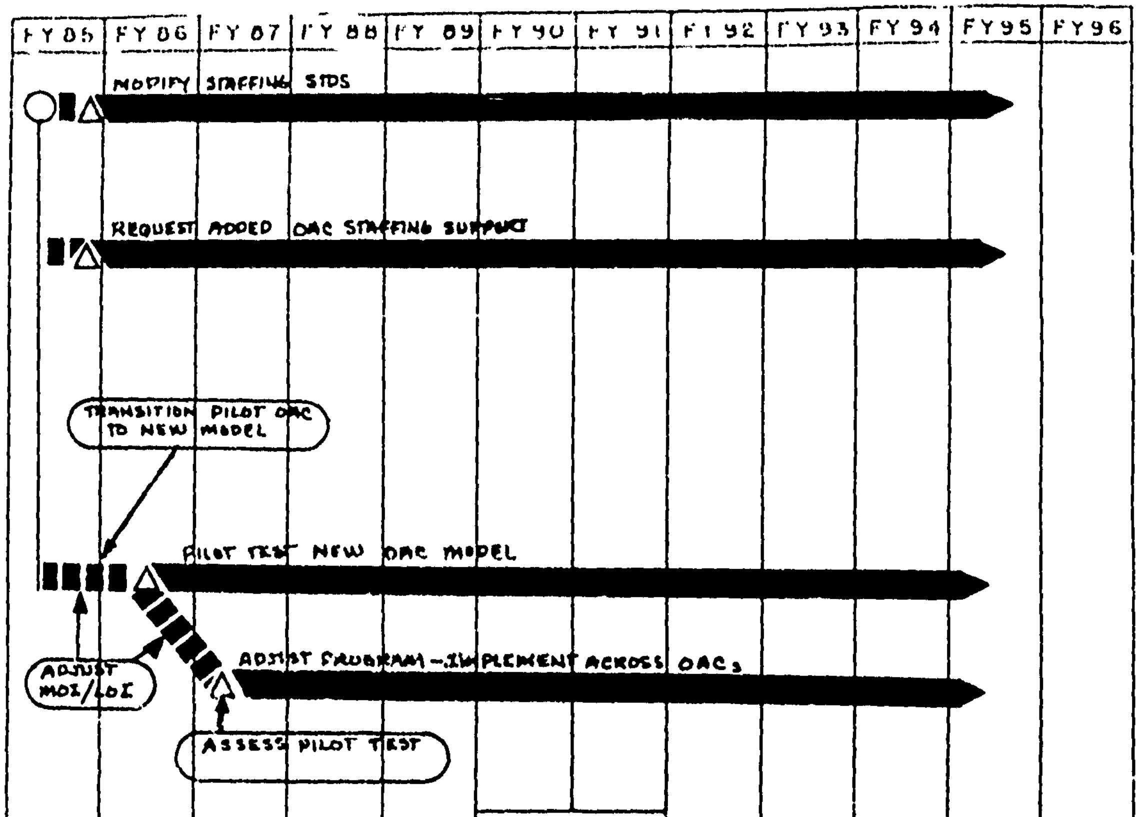
A. REDEFINES THE ROLE OF THE INSTRUCTOR SO THAT HE SERVES AS "MENTOR" TO STUDENTS--I.E.. FUNCTIONS AS SMALL GROUP LEADER, TEACHER, ROLE MODEL DOCTRINE WRITER, COURSE AND COURSEWARE DEVELOPER FOR ONLY ONE SMALL STUDENT GROUP AT A TIME.

B. MODIFIES STAFFING GUIDES TO ACCOMODATE THE BROADENED ROLE OF FACULTY MENTOR.

C. DEVELOPS A PILOT PLAN TO GRADUALLY TRANSITION CURRENT OAC'S TO A "FACUTLY AS MENTOR" MODEL.

D. TRADOC CREATE A LIMITED NUMBER (NOTIONALLY 25) OF EXTENDED TOUR SENIOR FACULTY MENTOR POSITIONS AT SERVICE SCHOOLS.

(NOTE: STAFF AND FACULTY RAMP UP INCLUDES PERSONNEL FOR COURSEWARE DEVELOPMENT PLUS OAC SEMINARS GROUP MENTORING, RESOUCES WITH POLICY F95 ARE ALSO INCLUDED)


FY 85
FY 86
FY 87
FY 88
FY 89
FY 90
FY 91
FY 92
FY 93
FY 94
FY 95
FY 96
MODIFY STAFFING STDS
REQUEST ADDED OAC STAFFING SUPPORT
TRANSITION PILOT OAC TO NEW MODEL
PILOT TEST NEW OAC MODEL
ADJUST MOI/LOI
ADJUST PROGRAM—IMPLEMENT ACROSS OACs
ASSESS PILOT TEST

RESOURCES

	FY 85	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY93	FY94	FY95	FY 96
STUDENTS NR/MY												
STAFF AND FACULTY-MIL/CIV		20/10	60/20	60/20	60/20	60/20	60/20	60/20	60/20	60/20	60/20	60/20
TDA CHANGE $ MILLIONS		.9	2.0	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2

Author: LTC Sterbenz
Team Chief: COL Johnson

Annex J

Warrior Spirit

1. PURPOSE. To define the Warrior Spirit and demonstrate that it is an essential part of every officer's professional development.

2. BACKGROUND. The Warrior Spirit is an essential part of being an Army officer. Every officer must have the Warrior Spirit, but it is not necessary for every officer to be a full time warrior. Understanding this difference is key to understanding the concept of the Warrior Spirit and providing the leadership the Army needs today and tomorrow as it prepares for future war.

a. Simply stated, the Army's mission is protecting the Nation from external aggression. The officer corps provides leadership for the Army; so each officer must be ready, willing, and able—even eager—to accept this responsibility for protecting the Nation.

b. When officers enter the Army they are eager to do their jobs as well as possible, to lead soldiers, and to provide their part of the national deterrence. They have accepted the characteristics for the Warrior Spirit as an essential part of becoming an officer. As officers progress through their careers, the majority of assignments are to staffs, taking them farther and farther from the field Army focus. Increased pressure in a managementoriented environment makes it much more difficult to remember the basic reason the Army exists. Developing a program to reinforce the Warrior Spirit throughout an officer's career recognizes these pressures and assists each officer in maintaining the proper focus. For if an officer loses sight of the Army mission and his full role in supporting it, he can have a degenerative effect on his subordinates. Those officers

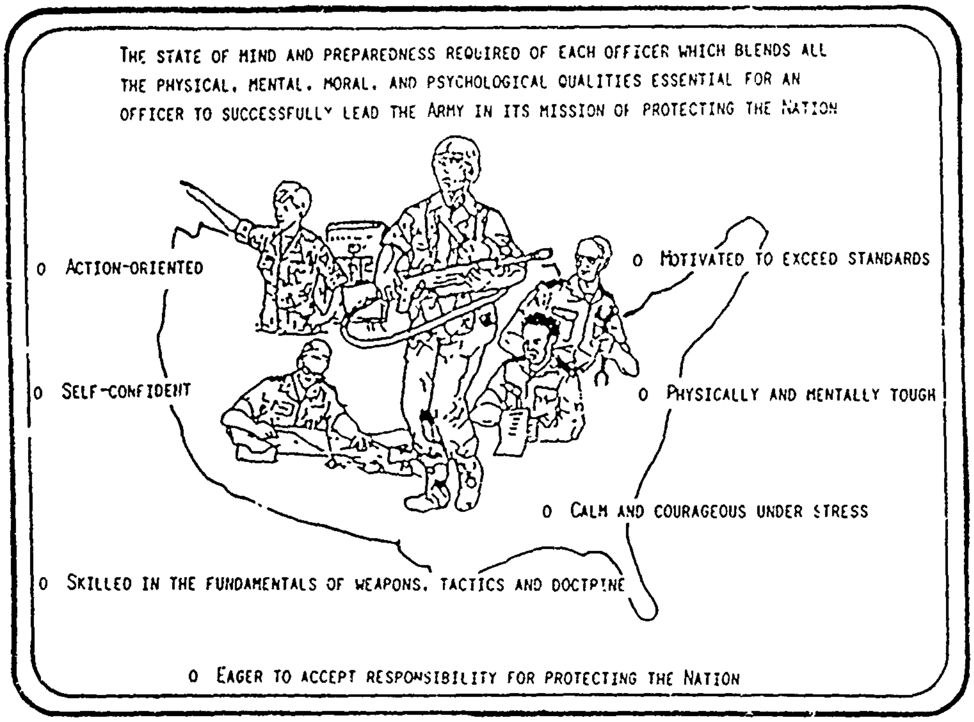

THE STATE OF MIND AND PREPAREDNESS REQUIRED OF EACH OFFICER WHICH BLENDS ALL THE PHYSICAL, MENTAL, MORAL, AND PSYCHOLOGICAL QUALITIES ESSENTIAL FOR AN OFFICER TO SUCCESSFULLY LEAD THE ARMY IN ITS MISSION OF PROTECTING THE NATION
O ACTION-ORIENTED
O MOTIVATED TO EXCEED STANDARDS
O SELF-CONFIDENT
O PHYSICALLY AND MENTALLY TOUGH
O CALM AND COURAGEOUS UNDER STRESS
O SKILLED IN THE FUNDAMENTALS OF WEAPONS, TACTICS AND DOCTRINE
O EAGER TO ACCEPT RESPONSIBILITY FOR PROTECTING THE NATION

Figure J-1: The Warrior Spirit and its characteristics apply to all officers in all branches who are skilled in their functional areas on high level staffs, for example, may not consciously think about the Warrior Spirit. Although it is very easy to regain this focus once they return to "the field", while they are relearning it they may "turn off" some of their subordinates, doing damage over time rather than keeping all officers and soldiers "up to speed" in understanding the Warrior Spirit.

c. Soldiers and subordinate officers look to their more senior officers for the example of what to do, for guidance on how to do it, and for the resources adequate to accomplish assigned and implied tasks. This requires that officers be competent in their profession, as appropriate to their branch, functional area and grade level. In addition to branch and functional area knowledge and skill, each officer must know the tools of the soldier's trade—weapons, tactics and doctrine. By the very nature of the military profession, every officer is a soldier first. He must understand the Army and how it operates at several levels of conflict in various theaters of war. He must understand contemporary threats, how to accomplish his tasks in those threat environments and how to protect himself and his soldiers from the threat while carrying out his missions. The reality of today's and tomorrow's threats to the Army and the Nation range from terrorism through low and high intensity conventional conflict, to theater and strategic nuclear war. Officers with the Warrior Spirit understand the threat and are prepared to counter it. For example, they protect themselves and their organizations from terrorist attack; they understand the implications of deep thrust attacks into rear echelons and how to organize contingency defenses and plans to address this threat; and they realize that their professional education requires continuing effort to ensure that they remain current in their profession.

d. While every officer needs to be a soldier first, not every officer needs to have frontline warfighting as his primary focus. The Army is a team, and every officer must understand his role in optimizing the overall team effort. He is an expert in the duties of his present position and in other positions appropriate to his branch, functional area and grade level. He provides the leadership needed to keep his part of the Army functioning as an efficient part of the Total Army effort. He understands and can endure the rigors of combat and approaches his duties confidently, willing to accept the challenges they present and motivated to take those actions required to accomplish the mission.

e. The Warrior Spirit is a "state of mind and preparedness" that does not develop overnight.

(1) It requires steady and continuing preparation to develop physical and mental toughness.

(2) It requires practice and dedicated effort to handle stress calmly and courageously.

(3) It requires vision and self-discipline to seek to exceed standards.

f. The Warrior Spirit concept applies to combat support and combat service support officers as well as those in the combat arms; to women as well as men; and to doctors, lawyers, nurses, and chaplains. In other words, the Warrior Spirit applies to all officers, in all branches and functional areas, at all grade levels, and during all assignments worldwide. The Warrior Spirit happens "between the ears" and in the heart of each officer. Officers in the Infantry, Armor and Artillery must have the Warrior Spirit and must be warriors as well, leading soldiers in combat. The Warrior Spirit does not require each officer to be a full-time warrior, but does require each officer to have those attributes, qualities, knowledge and attributes that allow him to be a contributing leader on the Total Army team and to be a warrior when circumstances require him to be one.

3. Definition and Characteristics.

a. Definition. The Warrior Spirit is the state of mind and preparedness required of each officer which blends all the physical, mental, moral and psychological qualities essential for an officer to successfully lead the Army in its mission of protecting the Nation.

b. Characteristics. Officers with the Warrior Spirit are:

(1) Physically and mentally tough.

(2) Self-confident.

(3) Motivated to exceed standards.

(4) Skilled in the fundamentals of weapons, tactics and doctrine.

(5) Calm and courageous under stress.

(6) Eager to accept responsibility for protecting the Nation.

(7) Action-oriented.

4. Warrior Spirit Aim and Major Thrusts.

a. Aim. The aim of the Warrior Spirit program is to develop officers with the Warrior Spirit and its characteristics.

b. Major Thrusts. The major thrusts to accomplish this aim are:

(1) Develop an understanding of the Warrior Spirit concept at the beginning of each officer's career.

(2) Internalize and reinforce the Warrior Spirit throughout each officer's career.

(3) Provide periodic reminders of the Army mission (protecting the Nation) and how each officer's branch and functional area fit into this mission, using understated, subtle reminders and reinforcements.

5. RECOMMENDATIONS.

a. The Army trains the Warrior Spirit and develops it in each officer by:

(1) Developing and implementing a precommissioning Warrior Spirit program.

(2) Reinforcing the Warrior Spirit throughout each officer's career.

b. This is accomplished by providing:

(1) Common blocks of instruction and readings during school experiences and for individual development programs.

(2) The means to build confidence and competence in basic tactics, current doctrine and weapons employment.

(3) Challenging and stressful training experiences (e.g., Air Assault, Airborne, and Ranger) for all officers who volunteer and quality.

(4) Continued emphasis on physical fitness.

(5) Opportunities for annual weapons firing.

6. CSA REMARKS. Approved in concept.

Appendices

1 Warrior Spirit: The Need and Characteristics
2 Warrior Spirit: Supporting Policies
3 Warrior Spirit: Concerns With The Concept And The Policies
4 Warrior Spirit: Glossary
5 Warrior Spirit: Bibliography
6 Warrior Spirit: Action Plan
7 Warrior Spirit: Phasing Plan

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Appendix 1 To Annex J

Warrior Spirit: The Need And Characteristics

1. PURPOSE: To develop the rationale for the Warrior Spirit program and to establish its definition and enumerate its characteristics.

2. DISCUSSION.

a. Background. Some of our earliest colonial beginnings grew from a thirst for independence. Many early immigrants sought religious freedom. Others sought the profit they believed existed in the New World. As generations took root and the colonies expanded, our practice of self-government and our desire to rule ourselves flourished. We formed a confederation to stand up for our rights and win our independence when our masters attempted to continue to rule by tyranny. When we declared our independence, we stated our right to do so by force:

> "But when a long Train of Abuses and Usurpations, pursuing invariably the same object, evinces a Design to reduce them under absolute Despotism, it is their Right, *it is their Duty, to throw off such Government, and to provide new Guards for their future Security*".[1] (Emphasis added).
>
> We further asserted our right " . . . *to levy War, conclude Peace,* contract Alliances, establish Commerce, and to do all other Acts and Things which Independent States may of right do".[2] (Emphasis added).

(1) After we earned our independence, we drew up a constitution that acknowledged the need to "Provide for the common defence [sic] . . . "[3]

(2) Each officer swears allegiance to the Constitution in his oath of office.

(3) Thus, the principles established early in our national history provide the basis for our Army today.

b. There is no reason to make an exhaustive review of U.S. history here:

(1) Every officer knows the salient events of our history and the Army's role in maintaining our freedom from the War of 1812 through the Civil War, two world wars, and the limited wars and conflicts of the second half of the 20th century;

(2) Every officer understands that the nature of our Army has changed from essentially a militia backing up a small regular Army, through various phases of conscription, to today's all-volunteer standing Army;

(3) Every officer realizes that industrial modernization has greatly increased the mobility and firepower of our modern Army compared to any other previous phase of our history;

(4) Every officer realizes that today's equipment modernization and doctrinal developments are essential to carrying out our mission of protecting our Nation at several levels of conflict.

c. While every officer needs to know these essentials, the overriding consideration in each officer is the understanding of the Army mission and how each officer himself fits into the total Army as an aggregation of individuals, groups, and systems comprising a total team effort. Each officer today is learning that material and doctrinal modernization will continue to require intelligent, capable, committed leadership at every echelon to make the Total Army work at its optimum efficiency. Those officers who have already learned this lesson are teaching it to others, helping all to understand the need for dedication and selfless service to protect our Nation and its people. Officers:

(1) Dedicate themselves to this team effort in their oath of office.

(2) Follow the policies of the national leadership.

(3) Accept an unlimited liability contract with the Nation and its people for their services.

(4) Dedicate themselves to the leadership of the Total Army team.

d. While each officer position requires a primary day-to-day focus to ensure that his or her part of the Army is running well and contributing to the overall team effort, each officer must also be prepared to do more than this current focus requires:

(1) More, in terms of providing a greater level of effort, a greater amount of work, and a greater breadth of focus;

(2) And more, in terms of changing and expanding the current focus, to include providing the leadership required to lead and support soldiers in combat.

e. Army officers are professionals who accept the need for special values such as integrity, discipline, dedication, competence, and compassion. They realize the need to be proactive leaders of soldiers who are also dedicated to our Nation, its ideals, and its people, but who look to the officer corps for guidance and competent leadership, especially leadership under the stress of combat. Officers who understand their position as officers in this light carry this understanding forward into action. These officers begin to appreciate their duty not only to carry out the Army mission of protecting the Nation but of the need to embrace the full ramifications of what carrying out this mission entails. These ramifications include the need to be professionals with a sense of the values inherent in the profession, and a practical sense of purpose acknowledged in such ways as physical readiness to perform their duties during the rigors of combat and the competence to perform the duties of at least their current position if the Nation were to enter combat. But there is something more that pervades the profession of arms and overlays itself onto the duties of all officers.

f. Officers are commissioned and appointed to be leaders—leaders who know their trade, who can perform it under stress, and who can teach others to perform as well. Soldiers and officers junior to them look for leadership and guidance. This mantle of leadership is a responsibility that each of us accepts. It may weigh heavily at times, but it is a requirement of our calling that we develop the moral and mental fiber needed to carry it and the stamina to carry it well. While our leadership may develop and grow in peacetime, every officer knows the true measure of his leadership is not in a peacetime Army. The "sound of guns" provides the ultimate test, and it is the need to perform our duties to the utmost of our ability under the stress of leading or supporting combat action that overlays itself onto the duties of each officer. Understanding and accepting this requirement to lead soldiers in time of war requires that each officer approach his or her duties with a state of mind and preparedness to provide the leadership the Army requires. This understanding pervades the officer corps. It is a spirit that is understood, felt, and acknowledged, but intangible and difficult to measure.

g. This spirit that pervades the officer corps is called the Warrior Spirit. While not every officer leads soldiers directly in combat, each officer realizes that current and future doctrinal developments, combined with recent events, require officers to be alert, proactive, action-oriented leaders who perform their duties professionally and lead their subordinates intelligently.

h. The Army and the Nation look to the officer corps for leadership and direction within the scope of the goals and policies established by our national leaders. We must provide this leadership at all levels of conflict, in all areas of the world, and in all assigned positions. Officers must be alert to protect themselves and those they lead in a world in which terrorism is the weapon of choice for some. We must make ourselves and our soldiers physically and mentally prepared to perform under the stress of combat. We must particularly be alert to the threat of deep thrust tactics which might find highly trained and dedicated enemy soldiers striking deep into our lines of communication, our support units and installations, and our means of command and control - officers leading soldiers in these areas accept the double challenge of performing not only their normal team role of providing the "muscle" behind the mailed "fist" of our combat units, but also of picking up the sword themselves for self-defense while continuing to function in their team role.

i. This Warrior Spirit that permeates the officer corps must be the state of mind and state of preparedness that blends all the physical, mental, and moral qualities essential for an officer to successfully lead and support the Army mission of protecting the Nation. To require any lesser standard of all of our officers would not allow the Total Army team to work as efficiently as it should.

j. As we look to the future, the need for this Warrior Spirit will grow. The recent OPMS Study Group estimates of the effects of current trends in force structure, future missions, and materiel and doctrinal development indicate that the number of soldiers in direct conflict with the enemy will decrease and the number of soldiers supporting him will increase.[5] All soldiers must pull together as a team to provide the strongest combat power punch possible, sustaining it over time. The leadership to keep the Army focused on the mission and to inspire the feats of superlative effort required of all, regardless of physical location on and off the battlefield, requires a continuing understanding and appreciation of the

Warrior Spirit among all members of the officer corps.

k. Characteristics. There is neither the need nor the opportunity for all officers to be "warriors", that is, leaders of soldiers at the cutting edge of battle. There is, however, a need to possess the spirit of dedication to the Army mission that supports the frontline. The platoon leader, battalion staff officer, and brigade commander of a division in contact with the enemy obviously have The Warrior Spirit if they perform the duties of their respective positions well and to the utmost of their ability. Moreover, those officers and soldiers supporting the combat forces must possess no less a dedication to mission accomplishment for the divisions in contact to carry out their tasks. The need for dedication in those supervising the repair and replacement of combat equipment is obvious, as is the need for medical, food service, pastoral and administrative support of soldiers and their leaders.

(1) Officers who do not permit obstacles to block their progress possess The Warrior Spirit. The company commander who maneuvers his platoons under fire, integrates mortar and artillery fires, makes the best use of the terrain, and employs smoke effectively, all in a coordinated effort to accomplish his mission, has the Warrior Spirit.

(2) The maintenance shop officer who supervises the repair of the combat equipment systems, integrating repair parts with workload scheduling, repairman time under expert supervision ensuring the job is done properly the first time, and fabricating needed parts when standard ones are not available, has the Warrior Spirit.

(3) The medical doctor serving as division or corps surgeon, who, before the battle is joined, thinks through the problems of providing medical care and evacuation services for all soldiers in his area of responsibility and takes appropriate action to optimize medical care within available resources has the Warrior Spirit.

(4) The material and systems developers who dedicate their organizations to the tasks of thinking through the exigencies of combat before the campaign begins, thereby providing system redundancy and robustness in support of soldiers on the ground, have the Warrior Spirit.

(5) These examples begin to characterize the Warrior Spirit in an action-oriented framework, and it must necessarily be so for appropriate thoughts without appropriate actions do not change the world.

l. Competent, properly motivated officers are eager to accept the responsibility for working to accomplish the Army mission—protecting the Nation. They know the details of their current jobs as well as the skills required for their branch, functional area, and professional development level. This results in not only confidence in themselves, because they are as comfortable as possible with their own responsibilities; but they are also able to exude that confidence and inspire it in others to result in a synergism that makes the whole greater than the sum of its parts. This confidence , as well as practice and experience, helps to develop officers who can handle the stress and tension of important positions during both peace and war. As indicated in the examples above, officers with the Warrior Spirit are action-oriented and obtain results. While not as clear, however, these officers also understand the range of contemporary threats (e.g., terrorism and deep thrust attack forces) that require skill in the fundamentals of weapons, tactics and doctrine to protect themselves and their organizations from these threats and can plan to counter them appropriately. The physical and mental stress of leadership requires officers who are physically and mentally tough. Officers with the Warrior Spirit seek to exceed established standards—they view the standard as the minimum acceptable goal, the minimum qualification that they try to better rather than the result to be content with.

m. Officers with the Warrior Spirit are:

(1) Physically and mentally tough.

(2) Self-confident.

(3) Motivated to exceed standards.

(4) Skilled in the fundamentals of weapons, tactics and doctrine.

(5) Calm and courageous under stress.

(6) Eager to accept responsibility for protecting the Nation.

(7) Action-oriented.

1. "The Declaration of Independence", p.1. *The Declaration of Independence and The Constitution of The United States of America.* House Document No. 92-328, US Government Printing Office, Washington, D.C., 1972.

2. *Ibid.*, p.4.

3. "The Constitution of the United States of America in Preamble", p. 11. *The Declaration of Independence and The Constitution of The United States of America.* House Document No. 92-328, U.S. Government Printing Office, Washington, D.C. 1972.

4. "OPMS Study Group After Action Report", *Commander's Call.* DA Pam 360-885, September-October 1984, pp. 28-30.

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Appendix 2 To Annex J

Warrior Spirit: Supporting Policies

1. **PURPOSE.** To provide Warrior Spirit supporting policies and rationale.

2. **DISCUSSION.**

a. Background. The following policies are designed to maintain a proper mission focus for the officer corps:

(1) Develop a pre-commissioning Warrior Spirit program.

(2) Reinforce the Warrior Spirit throughout each officer's career.

b. The pre-commissioning Warrior Spirit program. The intent of this policy is to introduce the Warrior Spirit concept early in each officer's professional development. This provides a solid, common basis for all officers and ensures each officer has a clear understanding of the Army mission and its ramifications for all branches working together as a team to protect the Nation.

(1) Officers with the Warrior Spirit are physically and mentally tough, self-confident, motivated to exceed standards, calm and courageous under stress, and action-oriented, among other characteristics. Officers can learn and develop these attributes if we provide the proper environment and opportunity for self-motivation so that cadets and officer candidates understand the Army mission and embrace it. Solid pre-commissioning training provides the basis for continuing positive professional development throughout his career or term of service. The following supporting policies develop and enhance these Warrior Spirit characteristics:

Continue physically challenging/training experiences (e.g., obstacle courses, confidence courses, and leader reaction courses).

Examine the feasibility of allowing airborne and/or air assault training for all cadets who volunteer and qualify for entry (standards for entry and graduation will remain high).

Examine feasibility of implementing other challenging and stressful training experiences (e.g., escape and evasion training, mountaineering, rappeling, patrolling, RECONDO, combatives, and combat sports) during precommissioning programs.

(2) Officers with the Warrior Spirit are skilled in the fundamentals of weapons, tactics, and organizations, eager to accept responsibility for protecting the Nation, motivated to exceed standards, calm and courageous under stress and action-oriented. Cadets and officer candidates can learn these characteristics in appropriate training environments. Therefore, the Army must create these environments to ensure appropriate education and training prior to commissioning. The following supporting policies do this:

Develop and implement a common block of instruction for all pre-commissioning programs which defines and emphasizes the Warrior Spirit concept (Policy J-80D).

- Ensure cadre training includes instruction on Warrior Spirit.
- Select readings which reflect the Warrior Spirit and ensure that they are part of professional development readings.
- Instruction will reference readings.
- Ensure current service school POI includes readings and instruction on the "threat."
- Examine feasibility of implementing familiarization firing program with foreign small arms (e.g., British Czech, Soviet, and CHICOM) during all pre-commissioning programs.
- Train/continue to train each cadet/candidate in the fundamentals of tactics, camouflage, and the employment of individual and crew-served weapons for the express purpose of gaining confidence in their use and employment.

- Train/continue to train each cadet/candidate to qualify with a rifle or pistol (preferably both) at least once prior to commissioning.

— Review ROTC POI (including Basic and Advanced Summer Camps) to ensure that training reinforces Warrior Spirit characteristics (Policy J80E).

- Intent is to review steps of policy J80-D after changes have been in place for about one year to ensure the system fits together well.

— Review USMA and OCS POIs to ensure that training reinforces Warrior Spirit characteristics (Policy J80F).

- Intent is to review steps of policy J80-D after changes have been in place for about one year to ensure the system fits together well.

c. Reinforce The Warrior Spirit During Each Officer's Career. It is not enough to introduce the Warrior Spirit prior to commissioning and expect it to continue through an officer's career. Warrior Spirit characteristics, appropriately reinforced, are essential to each officer regardless of his branch, functional area, or professional development level.

(1) Officers with the Warrior Spirit are physically and mentally tough, self-confident, motivated to exceed standards, calm and courageous under stress and action-oriented. The Army begins developing these attributes by tough training experiences during pre-commissioning programs. It is appropriate to enhance the Warrior Spirit characteristics with formal school, unit and organization programs for all officers. The following supporting policies provide these formal programs:

Continue semi-annual physical fitness testing (Policy J81A).

Examine the feasibility of permitting all officers who volunteeer and qualify for Airborne, Air Assault, and/or Ranger to attend (Policy J81B).

- Course standards for entry and graduation will remain high.

Examine the feasibility of implementing challenging and stressful training experiences (e.g., obstacle courses, confidence courses, leader reaction courses, escape and evasion training, mountaineering training, rappeling, combatives, combat sports, patrolling, and RECONDO) during the resident portions of each school experience (OBC, OAC, CGSOC, SSC) (Policy J81C).

(2) It is important to remind officers of what the Warrior Spirit is, the latest information on the threat, and emerging concepts in force modernization, doctrine, weapons employment, and wargaming. Such training and refreshers support the Warrior Spirit characteristics of skill in the fundamentals of weapons, tactics, and doctrine, build self-confidence, and help promote an action-oriented attitude.

(3) Keeping up to date in the military profession should be an intellectually enjoyable, as well as a physically challenging program. Learning via wargaming and simulations in schools, units and organizations with individual and team play during duty time is an excellent way to promote continuous professional development. Discussion seminars on aspects of the threat (especially as appropriate for each officer's time and place in the Army), the art and science of war, possible wartime contingency missions and the ethics required of "warriors" all enhance the Warrior Spirit in a positive way. The following supporting policies focus on the intended reminders and training:

Ensure the professional development reading program (e.g., MQS) contains readings on the Warrior Spirit and the "threat" (Policy J81D).

- Readings should be appropriate for combat arms, combat support and combat service support.

- Give each officer the books and reading for his professional development level.

Develop and implement blocks of instruction and readings on the Warrior Spirit in all schools (OBC, OAC, CGSOC, SSC) (Policy J81E).

- Incorporate readings and instruction on the "threat."

- Examine the feasibility of implementing familiarization firing with foreign small arms (e.g., British, Czech, Soviet, and CHICOM) at all service schools (OBC through SSC).

  - •• If resource constraints preclude this, consider selective implementation (e.g., all infantry officers during OBC, then OAC).

Ensure that seminars and lectures highlighting Warrior Spirit are included in school and unit/organizational professional development programs (cover the ways Warrior

Spirit is applicable to the officers of each particular branch and organization at their particular place and time in the Army) (Policy J81G).

- Ensure service school instructor training programs include instruction on Warrior Spirit.

- Begin Warrior Spirit lectures and seminars in all service schools.

- Prepare Warrior Spirit discussion leader packages suitable for export Army-wide for all type units to facilitate these discussions.

- Begin Warrior Spirit seminars in all unit/organizational professional development programs worldwide.

J81G: Build and reinforce individual confidence and competence during each school experience through study and practical exercises involving basic tactics, current doctrine, and weapons employment.

- Develop a series of "how to" books to teach/refresh the basics of weapons, tactics, doctrine, and organizations.

- Develop wargames for individual and/or group use.

  - For use in schools and/or units/organizations.

  - To reinforce principles of doctrine, encourage experimentation and innovation, and build individual and team skills.

(4) If we believe current and projected threat estimates concerning, for example, terrorism and deep thrust attacks into rear echelons, it is important to recognize that individual marksmanship skill is fundamental to our profession. As leaders, officers must set the example for their subordinates to follow and must know the basic skills he expects of his soldiers so he can properly supervise and teach. Therefore, it is essential for officers to maintain current weapons qualification.

Examine feasibility of implementing annual weapons qualification firing (with at least a rifle or pistol, preferably both) for all officers.

- Examine and implement in phased manner:

  - Phase 1: Provide the resources to do the firing now required by regulation.

  - Phase 2: Add officers during the resident portions of all school experiences (OBC, OAC, CGSOC, SSC)

  - Phase 3: Add all officers in all forward deployed organizations.

  - Phase 4: Add all officers in CONUS organizations.

Consider adding Reserve Component (RC) officers in troop program units (TPUs) for familiarization firing.

RC officers in Individual Ready Reserve (IRR) will conduct weapons qualification or familiarization when mobilized or within one year after assigned to a TPU.

  - Phase 5: Add all officers worldwide in all organizations not yet included in the program.

3. CSA REMARKS. Approved in concept.

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Appendix 3 To Annex J

Warrior Spirit: Concerns With The Concept And The Policies

1. **PURPOSE.** To address concerns with the Warrior Spirit concept and the supporting policies.

2. **DISCUSSION.** The following issues concerning the Warrior Spirit concept and supporting policies arose during PDOS discussions, briefings and staffing of emerging study results. They are consolidated here as a ready reference source for the intent behind the Warrior Spirit concept and as an aid to understanding the rationale behind the recommended policies.

a. Definitions. Why use the word "warrior"? Why not "soldier"?

(1) Soldier: A man or woman serving in an army; member of an army; an enlisted man or woman; a person of military experience or military skill; a person who works for a specified cause; a skilled warrior; a militant leader, follower, or worker.

(2) Warrior: A person engaged or experienced in war, warfare, or battle; a fighting man; soldier, serviceman, military man; brave fighting man, legionary, man-at-arms, rifleman; warrioress, Amazon.

b. Alternatives.

(1) Alternative 1. Use the word "soldier" in lieu of "warrior."

- Advantages:

—Less threatening across entire officer corps than "warrior".

—Immediate context of military service as part of an Army (implies teamwork).

—Direct reference to military skills and experience.

- Disadvantages:

—Definition specifies enlisted man or woman and excludes commissioned and warrant officers, although contemporary normal usage encompasses commissioned and warrant officers as well as enlisted personnel.

—Only indirect reference to wartime/warfighting skills and/or experience.

—No direct connotation of tenacity and audacity in battle (either in definition or in normal usage).

—Normal usage infers plodding work rather than innovation.

(2) Alternative 2. Use the word "warrior."

- Advantages:

—Immediate and direct connotation of an individual skilled and/or experienced in warfare/warfighting/battle.

—Directly includes service as part of an Army (implies teamwork).

—Specifically includes idea of women as fighters (but does not *require* women to be included as fighters).

—Context/normal usage gives direct connotation of tenacity and audacity in battle.

—Does not specifically exclude commissioned and warrrant officers.

- Disadvantages:

—Less immediate acceptability to the officer corps than "soldier".

—May never be acceptable to part of the officer corps.

—Some middle to senior grade officers (LTC through MG) uncomfortable with this term, possibly because they feel it excludes them.

—Many contexts imply skilled individual combatant rather than skilled member of a well-organized and efficient team.

(3) Consideration of Alternatives.

- Both "soldier" and "warrior" refer to an individual.

- "Warrior" is the stronger word and includes (either directly or by implication and normal usage) the ideas of:

—Skill and/or experience in warfare/ warfighting/ battle.

—Tenacity and audacity in battle.

—Teamwork, as part of an Army.

- "Warrior" requires clear articulation to reach a general level of understanding and acceptability among middle to senior grade officers.

- "Soldier" is the more readily acceptable word and includes:

—Direct reference to military (but not warfighting/wartime) skills and experience.

—"Soldier" lacks the connotation of audacity, tenacity, and innovation.

- "Warrior" is the right word in its broadest context, it is what we (the members of the officer corps) are.

- Some middle and senior grade officers (LTC through MG) feel threatened by the word "warrior," perhaps because they:

—Have lost sight of the Army mission (protecting the Nation).

—Don't completely understand the Army mission.

—Are afraid of what the Army mission requires of them (e.g., "unlimited liability contract" for their services with the Nation).

- The Warrior Spirit concept does not engender the same negative reaction as the word "warrior" itself.

—Warrior Spirit refers to a "state of mind and preparedness" rather than a state of being and therefore is less threatening to the officer corps as a whole.

c. Discussion of alternatives:

(1) Is the "Warrior Spirit" a turn-off for the officer corps?

(a) The concept of Warrior Spirit does not engender the same negative reaction as the word "warrior" itself. Warrior Spirit differs from warrior in that it is a "state of mind and preparedness" rather than a state of being and therefore is less threatening to the officer corps as a whole.

(b) If we reject Warrior Spirit in favor of Soldier Spirit, we are not using a strong enough phrase and are excluding such current contexts as skills and knowledge required of all officers because no area of the world or battle field is excluded from the violence of terrorism (in peacetime as well as wartime) or deep thrust attacks (during war).

(2) Does the Warrior Spirit apply to women? Does it apply that the special branches (Chaplain Corps, Judge Advocate General Corps, Medical Corps, Medical Service Corps, Nurse Corps, and other medical branches)?

(a) The Warrior Spirit applies to all officers regardless of gender or branch (whether the branch is "OPMD" or "special").

(b) The Warrior Spirit is a "state of mind and preparedness" rather than a state of being. It requires certain minimum common skills and knowledge so that officers can perform the duties of their branch or functional area as well as possible as a true team member and can provide the leadership for the enlisted soldiers and other officers under their charge.

(c) We do not intend to lay unacceptable burdens on any officer or soldier, however. For example, some officers sincerely believe it is wrong to carry and/or use a weapon (rifle or pistol) even for self defense or for defense of those around them. We do not intend to force these officers (or enlisted soldiers) to carry and/or use individual weapons and/or crew-served weapons. We must recognize the dignity and sincerity of those who make such courageous and open decisions (e.g., chaplains and medical personnel) and remain flexible in the execution of the policies we advocate to give appropriate recognition to individual concerns as well as to the needs of the Army and the mission assigned to various Army organizations worldwide.

d. Decision. Accept Alternative 2—use the word "warrior," especially in the sense of Warrior Spirit.

e. Why do you advocate "Challenging and stressful training experiences (e.g., Air Assault, Airborne, Ranger)"?

(1) The specific policies are as follows:

Examine the feasibility of allowing Airborne and/or Air Assault training for all cadets who volunteer and qualify for entry.

—Standards for entry and graduation will remain high.

Examine the feasibility of permitting all officers who volunteer and qualify for Airborne, Air Assault, and/or Ranger to attend.

—Course standards for entry and graduation will remain high.

(2) The rationale for these policies is that they:

(a) Extend officers beyond normal stress found in training.

(b) Assist officers in understanding that they are capable of doing more than they may have thought possible.

(c) Provide the opportunity to earn a "success" under recognized conditions of duress.

(d) Develop the pride and self-confidence that accompanies the wear of a special tab or badge that not all soldiers are privileged to wear.

f. What is the current status of Ranger, Airborne, and Air Assault courses?

(1) The total cost and affect of these courses on the officer corps and the Army are under review by the ARSTAF (Dec 84).

(2) Ranger.

(a) Course expansion from 2100 ATR to 3000 ATR by FY 87 approved by DA (Nov 84).

(b) Number of rangers to produce is unclear ARSTAF is working this issue.

Requirements include light infantry divisions (LIDs), Ranger unit expansion, and long-range surveillance units.

(c) Other issues currently under review by the ARSTAF:

—Course length (7, 8, or 9 weeks).

—Desert phase.

—How to incorporate (add 1 week or take out of current course).

—Where to conduct (Ft Bliss or Dugway).

—Improve the instructor-to-student ratio (from 1:15 to 1:9).

—Improve the Officer-to-NCO instructor ratio (from 1:13 to 1:6).

(d) All officers who volunteer as 1LT-CPT attend.

—Current MILPERCEN priority is to enlisted Rangers and LID.

(e) In Dec 1984, HQDA approved adding 130 military and 20 civilian spaces to the Ranger Dept in FY 86.

(3) Airborne.

(a) Currently enough course spaces to send all officers who volunteer.

Heavy summer training load may preclude some officers who are not going to an airborne assignment from attending.

(b) Basic Airborne training conducted at Ft Benning.

(c) Because of summer training load, ROTC cadets taking basic Airborne training take it at Ft Bragg in conjunction with ROTC Advanced Camp.

(4) Air Assault.

(a) Courses available at Ft Campbell, KY, and Schofield Barracks, HI.

Conducted as mission-oriented schools for soldiers assigned to 101st Div and 25th Div, respectively.

(b) TRADOC has proponency for POI.

(c) Training allocations are not centrally managed at DA level.

g. We live in a real world of limited resources. Suppose we make the realistic assumption that resources are not available to train all officers in Ranger, Airborne, and Air Assault schools. How does this assumption affect your policy?

(1) Resource constraints are understood.

(2) Training an officer early in his career pays dividends to both the officer and the Army throughout his service.

(3) We do not intend to send all officers to all courses or even all officers to any one of these courses.

(a) Ranger, Airborne, and Air Assault training should remain voluntary.

(b) Making it mandatory for any group detracts from value gained from the course and takes course spaces away from volunteers.

(4) Standards for entry and graduation remain high.

(5) According to MILPERCEN, few officers who volunteer for these training courses as 1LT-CPT are turned down.

(6) Ranger course expansion from 2100 ATR to 3000 ATR approved by DA (Nov 84).

(a) Intended to fill LID, Ranger battalion, and similar needs.

(b) Today, up to 300 Ranger training spaces per year are unfilled because of "no-shows."

(7) First priority for Ranger quotas should go to Infantry officers regardless of follow-on assignment. However, intent is to allow officers of all branches, including CS and CSS, to volunteer and have as many as possible attend and graduate from at least one of these courses.

g. Why do we have to use the Army School System to provide challenging and stressful training? Doesn't the Army train hard in units?

(1) The benefits of hard, stressful training in units are recognized. Combat sports, orienteering meets, NTC, REFORGER, EDRE, and ARTEP all build cohesion and leader confidence (See policies J80C and J81C).

(2) Officers need to learn what they can do, how far they can push themselves and others if needed.

(3) Officers need to learn skills and leadership in a setting that is not threatening to their positions in their units. Officers are human and make mistakes, but the fewer made "in front of the troops" the better troops do not need to be gyrated or experimented with unnecessarily.

(4) Officers need periodic reminders of their role as leaders of an Army dedicated to protecting the Nation.

(a) Update their skills.

(b) Check their own reactions under stress periodically.

h. Why do you advocate annual weapons qualification for all officers? Isn't that unrealistic in view of limited resources?

(1) The specific policy is as follows:

Examine feasibility of implementing annual weapons qualification firing (with at least a rifle or pistol, preferably both) for all officers. Examine and implement in phased manner:

—Phase 1: Provide the resources to do the firing now required by regulation.

—Phase 2: Add officers during the resident portions of all school experiences (OBC, OAC, CGSOC, SSC).

—Phase 3: Add all officers in all forward deployed organizations.

—Phase 4: Add all officers in CONUS organizations.

—Consider adding Reserve Component (RC) officers in troop program units (TPUs) for familiarization firing.

—RC officers in Individual Ready Reserve (IRR) will conduct weapons qualification or familiarization when mobilized or within one year after assigned to a TPU.

—Phase 5: Add all officers worldwide in all organizations not yet included in the program.

(a) Build confidence in the use, employment, and maintenance of small arms.

(b) "Threat" requires improved confidence with weapons.

—Terrorism.

—Low intensity conflicts with "no front lines."

—"Deep thrust" forces attacking rear echelons.

(c) As leaders, officers must set the example for their subordinates.

—Similar to physical fitness and weight control.

—Do as I say and as I do—Follow me!

(d) Phased approach over several years allows logical implementation (FY 87-95).

(e) Initial phases provide greatest payoff. If resource constraints preclude full implementation, we should still institute as many phases as possible and increase our capabilities over what they are today.

i. Weapons, ammunition and time may not be available for all students to familiarize with foreign small arms.

(1) The specific policies are as follows:

Examine feasibility of implementing familiarization firing program with foreign small arms (e.g., British, Czech, Soviet, and CHICOM) during all precommissioning programs.

Examine the feasibility of implementing familiarization firing with foreign small arms (e.g., British, Czech, Soviet, and

CHICOM) at all service schools (OBC through SSC). If resource constraints preclude this, consider selective implementation (e.g., all infantry officers during OBC, then OAC).

(2) Rationale.

(a) Special constraints of this particular policy are recognized.

(b) This is a goal. To the degree that availability of weapons or time preclude this, then only implement for selected officers (e.g., all infantry officers during OBC, then OAC).

j. The Warrior Spirit is alive and well, especially at 0-3 and below. These initiatives strengthen it. But the buzz word "Warrior Spirit" could embarrass us. Critics could use a Warrior Spirit program as proof of Army recognition that we lack this quality, when in fact it has never been stronger. Recommend deleting the term "Warrior Spirit" but keeping the warfighting orientation.

(1) Agree the Warrior Spirit lives among company grade officers.

(2) However, some middle and senior grade officers (LTC through MG) take issue with the use of the term "warrior" and feel threatened by it, perhaps because they:

(a) Have lost sight of the Army mission (protecting the Nation).

(b) Don't completely understand the Army mission.

(c) Are afraid of what the Army mission requires of them (e.g., "unlimited liability contract" for their services with the Nation).

(3) Warrior Spirit refers to a "state of mind and preparedness" rather than a state of being and therefore is less threatening to the officer corps as a whole than the use of the term "warrior" by itself.

(4) The Warrior Spirit program is tied to the Common Core of knowledge, skills and attributes expected of an officer at each professional development level.

(5) The Warrior Spirit program provides subtle, understated, but effective reminders to the officer corps of each officer's commitment to leadership for the Army. It is not a whole new program to answer critics but rather an adjustment of what the Army is already doing, building on what we're doing well, and providing fixes where required.

k. PD materials are available without a massive publication/distribution effort. The specific policy is:

> Ensure the professional development reading program (e.g., MQS) contains readings on the Warrior Spirit and the threat.
>
> —Reading should be appropriate for combat arms, combat support, and combat service support.
>
> —Give each officer the books and readings for his professional development level.

(1) The policy in question is coordinated with the Self-Development system wide issue and is part of the overall professional development program.

(2) This is not a duplication of programs now in effect or recommended elsewhere but rather is an acknowledgement of the program.

(3) PD materials will be provided during service school experiences (OBC, OAC, CAS3, CGSOC, SSC) and at other times as needed.

(4) Effort will be to do away with all the other publications or articles in them, to focus attention on three basic documents: PD roadmap, PD periodical, and PD notebook.

l. The Army already has an excellent family of HOW TO FIGHT manuals. Why does PDOS recommend a "series of 'how to' books?" The specific policy is:

> Build and reinforce individual confidence and competence during each school experience through study and practical exercises involving basic tactics, current doctrine, and weapons employment.
>
> —Develop a series of "how to" books to teach/refresh the basics of weapons, tactics, doctrine, and organizations.
>
> —Develop wargames for individual and/or group use:
>
> —For use in schools/or units/organizations.
>
> —To reinforce principles of doctrine, encourage experimentation and innovation, and build individual and team skills.

(1) This policy does not address HOW TO FIGHT manuals.

(2) The "how to" books are envisioned as short (perhaps pocket-sized) summaries giving the fundamentals of single, narrowly defined subjects, such as:

(a) M16A1 rifle-e.g., nomenclature, safety procedures, loading unloading, clearing, operator maintenance, immediate action for misfires, how to inspect, setting battlesight zero, firing positions, qualification firing on a range, use in live fire exercises/combat, and range cards.

(b) Infantry platoon-organization under various TOEs (light, mechanized, airborne, air assault, Ranger), organic weapons, organic communications, transportation available, and missions typically asigned at various levels of conflict (low, mid, and high intensity; offense, defense; front line, reserves, rear area protection).

(c) Direct Support-(DS) maintenance company organization under various TOEs (non-divisional; light, mechanized, armored, airborne, air assualt divisions), organic weapons, organic communications, transportation, available capabilities, missions typically assigned at various levels of conflict (low, mid, high intensity), typical location on the battlefield (offense, defense) and typical contigency missions (rear area protection, counterattack, local security).

(3) The intent is to provide succinct summaries of specific topics in a readable, factual form for review during lulls in field exercises, during professional reading periods, riding to work on the bus, or enroute to a school or new assignment.

m. Why use the term "Warrior Spirit"-why not replace it with "combative", "warfighting", "warfighting orientation", or "military history and warfighting" in discussing Warrior Spirit policies?

(1) The use of the term "Warrior Spirit" is appropriate.

(2) Every officer needs the Warrrior Spirit even though not every officer is a full-time warrior. Warrior Spirit refers to a "state of mind and preparedness" rather than a state of being.

(3) The Warrior Spirit program is tied to the Common Core of knowledge, skills, and attributes expected of an officer at each professional development level.

(a) It provides subtle, understated, but effective reminders to the officer corps of each officer's commitment to leadership for the Army.

(b) It builds on what we are already doing well and provides fixes where required.

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Appendix 4 To Annex J

Glossary

ATR—Annual Training Requirement

IRR—Individual Ready Reserve

PDOS—Professional Development of Officers Study

RC—Reserve Components (i.e., US Army Reserve and National Guard)

Soldier—A man or woman serving in an Army; member of an Army; an enlisted man or woman; a person of military experience or military skill; a person who works for a specified cause; a skilled warrior; a militant leader, follower, or worker.

TPU—Troop Program Unit

Warrior—A person engaged or experienced in war, warfare, or battle; a fighting man; soldier, serviceman, military man; brave fighting man, legionary, man-at-arms, rifleman; warrioress, Amazon.

Warrior Spirit—The state of mind and preparedness required of each officer which blends all the physical, mental, moral, and psychological qualities essential for an officer to successfully lead the Army in its mission of protecting the Nation.

Warrior Spirit Characteristics—Officers with the Warrior Spirit are:

- Physically and mentally tough
- Self-confident
- Motivated to exceed standards
- Skilled in the fundamentals of weapons, tactics, and doctrine
- Calm and courageous under stress
- Eager to accept responsibility for protecting the Nation
- Action-oriented

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Appendix 5 To Annex J

Bibliography

Anderson, J.W. *Heroism - A Review of the Literature and an Operational Definition* (Working Paper 84-8). Alexandria, VA: U.S. Army Research Institute, Leadership and Management Technical Area, 1984.

Anderson, J.W. *The Warrior Spirit* (Working Paper 84-9). Alexandria, VA: U.S. Army Research Institute, Leadership and Management Technical Area, 1984.

Anderson, J.W. *Warrior Spirit II* (Working Paper 84-10). Alexandria, VA: U.S. Army Research Institute, Leadership and Management Technical Area, 1984.

"The Constitution of the United States of America." *The Declaration of Independence and The Constitution of The United States of America.* House Document No. 92-328, US Government Printing Office, Washington, D.C., 1972.

"The Declaration of Independence." *The Declaration of Independence and The Constitution of The United States of America.* House Document No. 92-328, US Government Printing Office, Washington, D.C., 1972.

Department of History, USMA. *Leadership In Combat: An Historical Appraisal.* Unpublished manuscript, United States Military Academy, West Point, New York, 1984.

Human Resources Research Office. *Fighter I: An Analysis of Combat Fighters and Non-Fighters* (HumRRO Technical Report No. 44). Washington, D.C.: Human Resources Research Office (DTIC No. AD 158 148), 1957.

US Army letter, DAPE-MP-OPMS, subject: USMA Historical Appraisal of Combat Leadership, with three enclosures, 6 September 1984.

Appendix 6 to ANNEX J
Action Plan

WARRIOR SPIRIT

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
J80 Develop a pre-commissioning Warrior Spirit program.		TRADOC (P) ODCSPER ODCSOPS	4Q FY 90	
	A. Continue physically challenging training experiences (e.g., obstacle courses, confidence courses, and leader reaction courses).	TRADOC (P) ODCSPER	NA	
	B. Examine the feasibility of allowing Airborne and/or Air Assault training for all cadets who volunteer and qualify for entry. o Standards for entry and graduation will remain high.	TRADOC (P) ODCSPER	2Q FY 86	
	C. Examine feasibility of implementing other challenging and stressful training experiences (e.g., escape and evasion training, mountaineering, rappeling, patrolling, RECONDO, combatives, and combat sports) during pre-commissioning programs.	TRADOC (P) ODCSPER	4Q FY 86	

NOTES:

Appendix 6 to ANNEX J
Action Plan

WARRIOR SPIRIT

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
	D. Develop and implement a common block of instruction for all pre-commissioning programs which defines and emphasizes the Warrior Spirit concept.	TRADOC (P) ODCSOPS ODCSPER	4Q FY 87	
	o Ensure cadre training includes instruction on Warrior Spirit.	TRADOC (P) ODCSPER	3Q FY 87	
	o Select readings which reflect the Warrior Spirit and ensure that they are part of professional development readings.	TRADOC (P)	4Q FY 87	
	o Instruction will reference readings.	TRADOC (P) ODCSPER	4Q FY 87	
	o Ensure current service school POI includes readings and instruction on the "threat".	TRADOC (P) ODCSOPS	4Q FY 87	
	o Examine feasibility of implementing familiarization firing program with foreign small arms (e.g., Brit, Czech, Soviet, and Chicom) during all pre-commissioning programs.	TRADOC (P) ODCSOPS ODCSPER	4Q FY 87	
NOTES:	o Train/continue to train each cadet/candidate in the fundamentals of tactics, camouflage, and the employment of individual and crew-served weapons for the express purpose of gaining confidence in their use and employment.	TRADOC (P) ODCSPER	4Q FY 87	
	o Train/continue to train each cadet/candidate to qualify with a rifle or pistol (preferably both) at least once prior to commissioning.	TRADOC (P) ODCSPER	4Q FY 87	

WARRIOR SPIRIT

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
	E. Review ROTC POI (including Basic and Advanced Summer Camps) to ensure that training reinforces Warrior Spirit characteristics.	TRADOC (P)	2Q FY 89	
	o Intent is to review steps of policy J80-D after changes have been in place for about one year to ensure the system fits together well.			
	F. Review USMA and OCS POIs to ensure that training reinforces Warrior Spirit characteristics.	ODCSPER (P) TRADOC	2Q FY 89	
	o Intent is to review steps of policy J80-D after changes have been in place for about one year to ensure the system fits together well.			
J81 Reinforce the Warrior Spirit throughout each officer's career.		TRADOC (P) ODCSOPS MACOMs	4Q FY 95	
	A. Continue semi-annual physical fitness testing.	ODCSOPS (P) MACOMs	NA	
	B. Examine the feasibility of permitting all officers who volunteer and qualify for Airborne, Air Assault, and/or Ranger to attend.	TRADOC (P) ODCSOPS	4Q FY 86	
	o Course standards for entry and graduation will remain high.			

NOTES:

Appendix 6 to ANNEX J
Action Plan

WARRIOR SPIRIT

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
	C. Examine the feasibility of implementing challenging and stressful training experiences (e.g., obstacle courses, confidence courses, leader reaction courses, escape and evasion training, mountaineering training, rappeling, combatives, combat sports, patrolling, and RECONDO) during the resident portions of each school experience (OBC, OAC, CGSOC, SSC).	TRADOC (P) ODCSOPS	4Q FY 87	
	D. Ensure the professional development reading program (e.g., MQS) contains readings on the Warrior Spirit and the "threat".	TRADOC (P)	4Q FY 87	
	o Readings should be appropriate for combat arms, combat support, and combat service support.			
	o Give each officer the books and readings for his professional development level.			
	E. Develop and implement blocks of instruction and readings on the Warrior Spirit in all schools (OBC, OAC, CGSOC, SSC).	TRADOC (P) ODCSOPS	4Q FY 88	
	o Incorporate readings and instruction on the "threat".	TRADOC (P) ODCSOPS	4Q FY 88	
NOTES:	o Examine the feasibility of implementing familiarization firing with foreign small arms (e.g., Brit, Czech, Soviet, and Chicom) at all service schools (OBC through SSC).	TRADOC (P) ODCSOPS	4Q FY 88	
	oo If resource constraints preclude this, consider selective implementation (e.g., all infantry officers during OBC, then OAC).			

Appendix 6 to ANNEX J
Action Plan

WARRIOR SPIRIT

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
	F. Ensure that seminars and lectures highlighting Warrior Spirit are included in school and unit/organizational professional development programs (cover the ways Warrior Spirit is applicable to the officers of each particular branch and organization at their particular place and time in the Army).	TRADOC (P) ODCSOPS MACOMs	4Q FY 89	
	o Ensure service school instructor training programs include instruction on Warrior Spirit.	TRADOC (P) ODCSOPS	3Q FY 88	
	o Begin Warrior Spirit lectures and seminars in all service schools.	TRADOC (P) ODCSOPS	4Q FY 88	
	o Prepare Warrior Spirit discussion leader packages suitable for export Armywide for all type units to facilitate these discussions.	TRADOC (P)	3Q FY 89	
	o Begin Warrior Spirit seminars in all unit/organizational professional development programs worldwide.	MACOMs (P)	4Q FY 89	

NOTES:

Appendix 6 to ANNEX J
Action Plan

WARRIOR SPIRIT

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
	G. Build and reinforce individual confidence and competence during each school experience through study and practical exercises involving basic tactics, current doctrine, and weapons employment.	TRADOC (P) ODCSOPS	4Q FY 90	
	o Develop a series of "how to" books to teach/refresh the basics of weapons, tactics, doctrine, and organizations.	TRADOC (P) ODCSOPS	3Q FY 89	
	o Develop wargames for individual and/or group use.	TRADOC (P) ODCSOPS	4Q FY 90	
	oo For use in schools and/or units/organizations.			
	oo To reinforce principles of doctrine, encourage experimentation and innovation, and build individual and team skills.			

NOTES:

Appendix 6 to ANNEX J
Action Plan

WARRIOR SPIRIT

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
	H. Examine feasibility of implementing annual weapons qualification firing (with at least a rifle or pistol, preferably both) for all officers.	ODCSOPS (P) TRADOC	4Q FY 95	
	o Examine and implement in phased manner.			
	- Phase 1: Provide the resources to do the firing now required by regulation.	ODCSOPS (P) MACOMs	4Q FY 87	
	- Phase 2: Add all officers during the resident portions of all school experiences (OBC, OAC, CGSOC, AWC).	TRADOC (P) ODCSOPS	4Q FY 89	
	- Phase 3: Add all officers in all forward deployed organizations.	Forward deployed MACOMs (P) ODCSOPS	4Q FY 91	
	- Phase 4: Add all officers in CONUS organizations.	CONUS MACOMs (P) ODCSOPS	4Q FY 93	
	-- Consider adding Reserve Component (RC) officers in troop program units (TPUs) for at least familiarization firing.			
NOTES:	-- RC officers in Individual Ready Reserve (IRR) will conduct weapons qualification or familiarization when mobilized or within one year after assigned to a TPU.			
	- Phase 5: Add all officers worldwide in all organizations not yet included in the program.	MACOMs (P) ODCSOPS	4Q FY 95	

Appendix 7 to ANNEX J

PHASING PLAN

WARRIOR SPIRIT

J80 DEVELOP A PRE-COMMISSIONING WARRIOR SPIRIT PROGRAM.

o CONTINUE PHYSICALLY CHALLENGING TRAINING EXPERIENCES.

o EXAMINE THE FEASIBILITY OF ALLOWING AIRBORNE AND/OR AIR ASSULT TRAINING FOR ALL CADETS WHO VOLUNTEER AND QUALIFY FOR ENTRY.

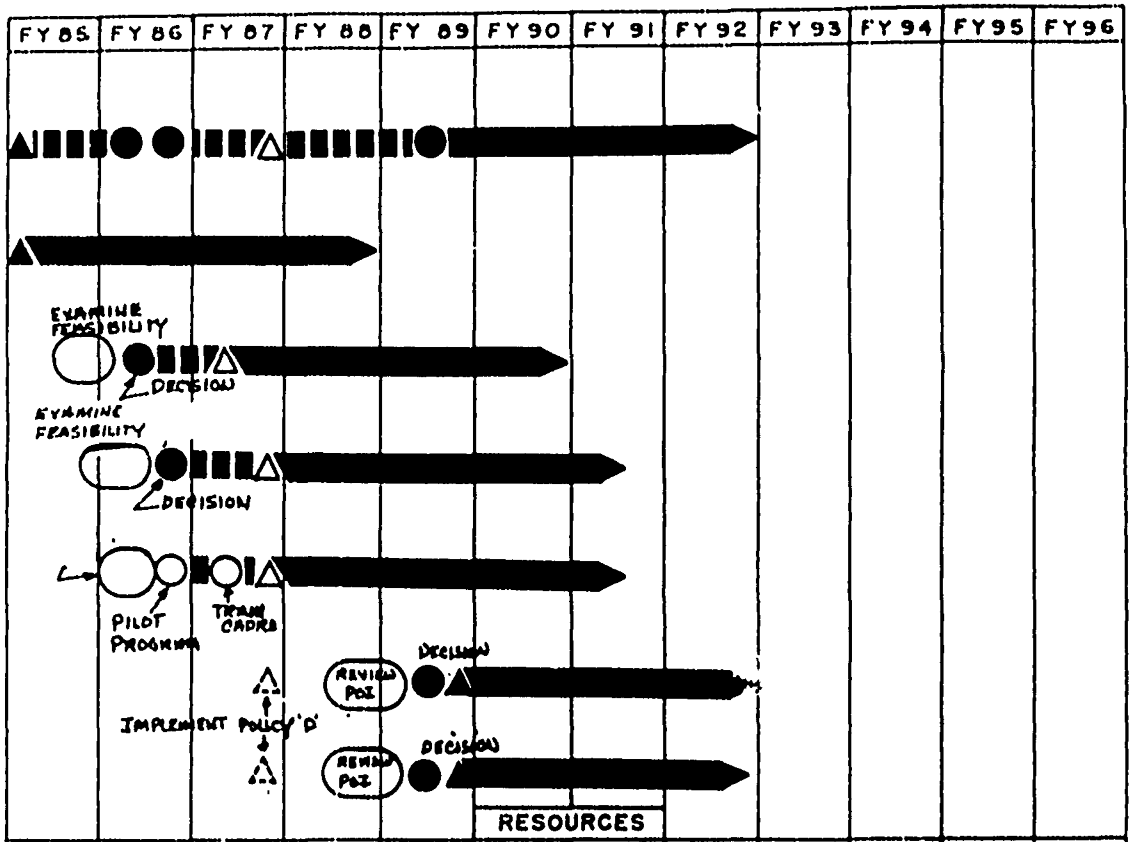
o EXAMINE FEASIBILITY OF IMPLEMENTING OTHER CHALLENGING AND STRESSFUL TRAINING EXPERIENCES DURING PRE-COMMISSIONING PROGRAMS.

o DEVELOP AND IMPLEMENT A COMMON BLOCK OF INSTRUCTION FOR ALL PRE-COMMISSIONING PROGRAMS WHICH DEFINES AND EMPHASIZES THE WARRIOR SPIRIT CONCEPT.

o REVIEW ROTC POI (INCLUDING BASIC AND ADVANCED SUMMER CAMPS) TO ENSURE THAT TRAINING REINFORCES WARRIOR SPIRIT CHARACTERISTICS.

o REVIEW USMA AND OCS POIs TO ENSURE THAT TRAINING REINFORCES WARRIOR SPIRIT CHARACTERISTICS.

• THIS STUDENT LOAD DOES NOT RESULT IN A STUDENT MANYEAR INCREASE BECAUSE THESE STUDENTS ARE CADETS, NOT OFFICERS. INCREASES IN THE STUDENT TRAINING LOAD, IN TDY AND EQUIPMENT COSTS, AND IN INSTRUCTORS, ARE ALL ACCOUNTED FOR IN THE APPROPRIATE LINES UNDER "RESOURCES."



RESOURCES

	FY 85	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96
STUDENTS NR/MY		100/0*	200/0*	300/0*	300/0*	300/0*	300/0*	300/0*	300/0*	300/0*	300/0*	300/0*
STAFF AND FACULTY-MIL/CIV		1/0	2/0	3/0	3/0	3/0	3/0	3/0	3/0	3/0	3/0	3/0
TDA CHANGE-$ MILLIONS		.6	1.7	2.3	2.3	1.9	1.9	1.9	1.9	1.9	1.9	1.9

Appendix 7 to ANNEX J

PHASING PLAN

WARRIOR SPIRIT

IR: REINFORCE THE WARRIOR SPIRIT THROUGHOUT EACH OFFICER'S CAREER.

O CONTINUE SEMI-ANNUAL PHYSICAL TESTING.

O EXAMINE THE FEASIBILITY OF PERMITTING ALL OFFICERS WHO VOLUNTEER AND QUALIFY FOR AIRBORNE, AIR ASSAULT, AND/OR RANGER TO ATTEND.

O EXAMINE THE FEASIBILITY OF IMPLEMENTING CHALLENGING AND STRESSFUL TRAINING EXPERIENCES DURING THE RESIDENT PORTIONS OF EACH SCHOOL EXPERIENCE (OBC, OAC, CGSOC, SSC).

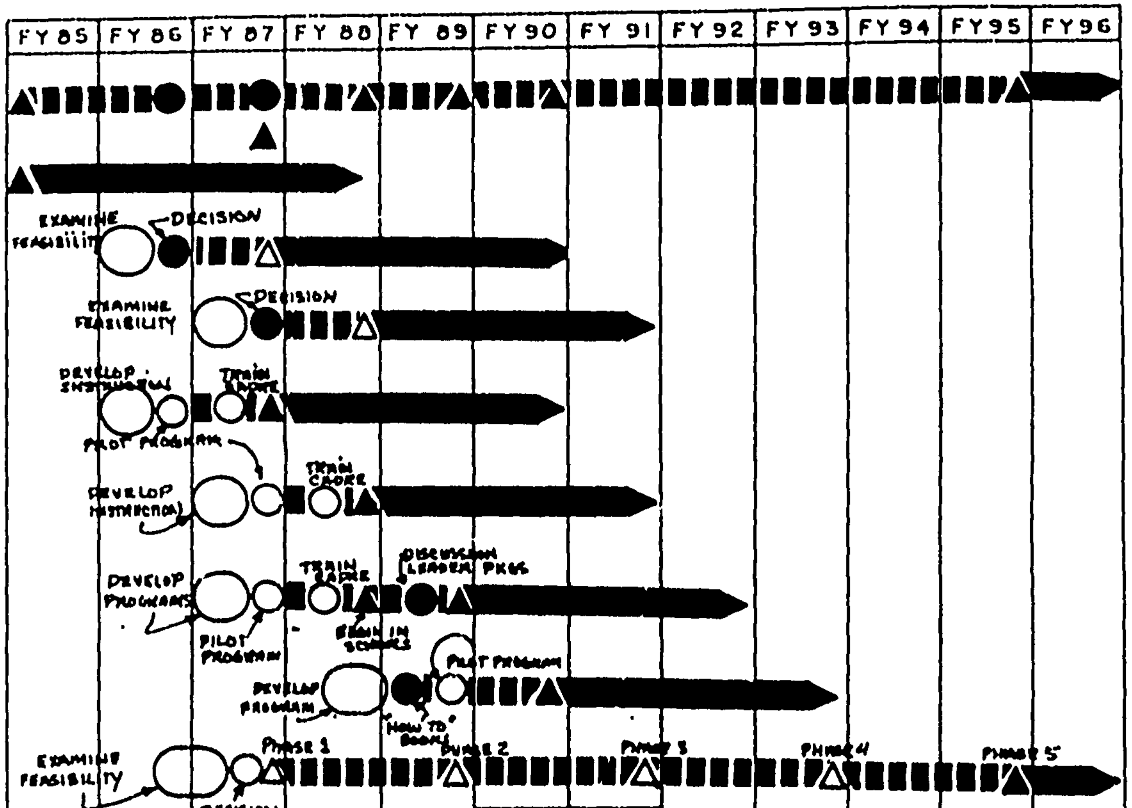
O ENSURE THE PROFESSIONAL DEVELOPMENT READING PROGRAM (E.G., MOS) CONTAINS READINGS ON THE WARRIOR SPIRIT AND THE "THREAT."

O DEVELOP AND IMPLEMENT BLOCKS OF INSTRUCTION AND READINGS ON THE WARRIOR SPIRIT IN ALL SCHOOLS (OBC, OAC, CGSOC, SSC).

O ENSURE THAT SEMINARS AND LECTURES HIGHLIGHTING WARRIOR SPIRIT ARE INCLUDED IN SCHOOL AND UNIT/ORGANIZATIONAL PROFESSIONAL DEVELOPMENT PROGRAMS.

O BUILD AND REINFORCE INDIVIDUAL CONFIDENCE AND COMPETENCE DURING EACH SCHOOL EXPERIENCE THROUGH STUDY AND PRACTICAL EXERCISES INVOLVING BASIC TACTICS, CURRENT DOCTRINE, AND WEAPONS EMPLOYMENT.

O EXAMINE FEASIBILITY OF IMPLEMENTING ANNUAL WEAPONS QUALIFICATION FIRING (WITH AT LEAST A RIFLE OR PISTOL, PREFERABLY 9OTH) FOR ALL OFFICERS.



RESOURCES

	FY 85	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96
STUDENTS NR/MY			100/6	200/12	200/12	200/12	200/12	200/12	200/12	200/12	200/12	200/12
STAFF AND FACULTY–MIL/CIV			1/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0
TDA CHANGE–$ MILLIONS			1.6	3.2	5.7	5.7	5.2	5.2	6.2	6.2	7.2	7.2

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Annex K

Be-Know-Do Concept

1. **PURPOSE.** To define and discuss the desired attributes for each officer at the end of each development period in terms of what each officer must *BE*, what he must *KNOW*, and what he must be able to *DO*.

2. DISCUSSION.

a. Background. FM 22-100, *Military Leadership* (October 1983), develops a philosophy of leadership and describes that philosophy in terms of the attributes desired of Army officers. These attributes build a model of an ideal officer in terms of what he must BE (his personal attributes), what he must KNOW (his perspective of the military profession) and what he must be able to DO (the proficiencies he exhibits).

(1) PDOS used this general philosophy of leadership and expanded on it to define the desired attributes for each officer at the end of each professional development period. PDOS used the BE-KNOW-DO framework because it not only provides an excellent analytical basis for specifying officer attributes, but facilitates following their growth through the various levels of the system as officers progress in maturity, knowledge and experience. These attributes serve as guides for individual officers, as well as their leaders, commanders and the Army school system in their roles in developing and improving officers as leaders.

(2) The PDOS desired system acknowledges that as officers advance in rank and responsibility, the tasks they are assigned at each level are more complex in nature and require a different frame of reference or operational perspective. The expanded frame of reference for each officer's next series of possible assignments in each of the seven development periods is achieved with formal schooling.

(3) The officer BE-KNOW-DO attributes help to define the required frame-of-reference shift at each transition point and outline an officer's development through his career by building on the qualities, knowledge and proficiencies during each development period. This model represents a set of attributes to serve the officer corps as proper goals for each officer to strive to attain. Recording and publicizing these attributes assists the Army in striving for the ideal.

(4) The specific BE-KNOW-DO attributes for officers during each professional development period are discussed briefly in Volume 1 (Chapter V) and are listed in the spread sheets at Volume 1 (Annex A).

b. Leader Attributes. Competent leaders accomplish their missions and are concerned with the well-being of their soldiers. The leadership framework in Figure 7-1, adapted from FM 22-100, summarizes the general attributes for competent leaders in terms of what he must BE, KNOW, and DO.

(1) What a leader must BE. Beliefs, values and ethics are the foundations of leader competence. They guide leaders as they lead. The BE attributes enumerated by PDOS include officer commitment to the high ideals and values of the officer corps in serving the Nation. They also describe attributes that are sometimes taken for granted, such as physical fitness, mental preparation for war and plain old common sense judgement. It is important to acknowledge these qualities to provide guidance to individual officers and to indicate possible fruitful projects for leadership research organizations in the future.

(2) What a leader must KNOW. Leaders must understand the four factors of leadership and their affect on each other, as well as know himself his unit, his job and human nature. The KNOW attributes enumerated by PDOS describe the depth and the breadth of the knowledge and perspective an officer must possess by the end of each development period. This knowledge is extensive. It develops over the several years an officer spends in each development period, beginning with the expansion of his frame of reference in a service school and continuing through his

assignment experience, coaching from his leaders and his own self-development efforts. The breadth and depth of knowledge required of officers are an acknowledgement of the growing complexity of the Army as it continues to operate in a complex, high-technology world. Army officers must be experts in their branches and functional areas to provide the informed leadership the Army needs to operate successfully in this environment.

(3) What a leader must DO. The leadership action skills are directing, implementing and motivating. The DO attributes enumerated by PDOS describe the action proficiencies officers must exhibit as leaders. Even though the knowledge expected of an officer is extensive if he is to perform well in his branch and/or functional area, an officer is a leader and leaders take action. As experts in their branches and/or functional areas, officers make decisions, provide guidance, develop individuals into teams, integrate the work of others and take responsibility for the performance of their part of the Army.

(4) FM 22-100, *Military Leadership*, summarizes its discussion of the BE-KNOW-DO concept as follows:

"Taken together, the definition, the factors, and the required *be*, *know*, and *do* leadership attributes provide a philosophy or concept of professional leadership that will help you develop yourself, your subordinates and your unit. It will also help you address the challenges that every leader faces."

"The leadership principles were developed by soldiers many years ago to train and develop their subordinates. Those principles have withstood the test of time and the foremost test—the battlefield. These principles are guideposts."

3. **RECOMMENDATION**. PDOS recommends that the Army accept and act upon the leader attributes enumerated and discussed in Appendix 1.

4. **CSA REMARKS**. The Chief of Staff approved in concept.

Appendices

1 - Discussion of Attributes and Growth
2 - Glossary
3 - Bibliography

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Appendix 1 To Annex K

Discussion of Attributes and Growth

1. **PURPOSE.** To discuss the BE-KNOW-DO attributes for each professional development period and to show their growth through the Officer Professional Development System.

2. **DISCUSSION.**

a. Background. PDOS developed the desired Officer Professional Development System in part by using the BE-KNOW-DO attributes. These attributes describe the officer at the end of a particular development period in terms of his person (what he must BE), his perspective (what he must KNOW), and his proficiencies (what he must DO). PDOS used the BE-KNOW-DO framework because it provides an excellent analytical basis for specifying officer attributes and follows their growth through the various levels of the system as officers progress in maturity, knowledge and experience. These attributes also help to define the required frame-of-reference shift at each transition point and outline an officer's development through his career by building on these qualities, knowledge and proficiencies during each development period. PDOS developed this set of attributes to serve the officer corps as proper goals for each officer to strive to attain. Recording and publicizing these attributes assists the Army in striving for the ideal.

b. What a leader must BE. Beliefs, values and ethics are the foundations of leader competence. They guide leaders as they lead. The BE attributes enumerated by PDOS include officer commitment to the high ideals and values of the officer corps in serving the Nation. They also describe attributes that are sometimes taken for granted, such as physical fitness, mental preparation for war and plain old common sense judgment. It is important to acknowledge these qualities to provide guidance to individual officers and to indicate possible fruitful projects for leadership research organizations in the future. Tab A summarizes the BE attributes in general terms.

(1) Commitment to the professional Army ethic begins during pre-commissioning and grows throughout each officer's professional development. The commitment begins with an officer understanding and accepting officer professional values and his role in carrying forward the Army mission of protecting the Nation. The commitment expands as officers exhibit appropriate behavior and seek substantive excellence rather than a superficial veneer on top of hollow capabilities. Substance will shine through to the surface. The commitment develops into internalized behavior and an ever-expanding understanding and appreciation of the Army mission and its interrelationship with other branches and functional areas, other services, and other nations. The specific attributes that indicate this commitment and its growth through each development period are at Tab B.

(2) The development of the professional officer characteristics begins early in an officer's professional development and continues throughout his career. Officers learn these attributes through experience. They learn to handle stress well and to model this capability for their subordinates. They enter the Army physically fit and dedicated to a philosophy of total health and fitness, and they sustain this outlook throughout their careers. They develop tenacity of purpose, focusing on assigned and implied tasks. Moreover, because they understand their commander's intent, they are able to retain a flexible outlook and are courageous enough to modify their actions and orders as required by the situation. As they grow in rank and responsibility, they develop and retain the capability to exercise practical judgment and common sense. These attributes develop earlier in some officers than in others, but all officers need to possess them early in their professional development and retain them throughout their service. The specific attributes that indicate these traits across the seven development periods are at Tab C.

c. What a leader must KNOW. A leader must understand the four factors of leadership and their affect on each other, as well as know himself, his unit, his job and human nature. The KNOW attributes enumerated by PDOS describe the depth and the breadth of the knowledge and perspective an officer must possess by the end of each development period. This knowledge is extensive. It develops over the several years an officer spends in each development period, beginning with the expansion of his frame of reference in a service school and continuing through his assignment experience, coaching from his leaders and his own self-development efforts. The breadth and depth of knowledge required of officers are an acknowledgement of the growing complexity of the Army as it continues to operate in a complex, high-technology world. Army officers must be experts in their branches and functional areas to provide the informed leadership the Army needs to operate successfully in this environment. Tab D summarizes the KNOW attributes in general terms.

(1) Officers learn leadership doctrine early in their careers and practice it throughout their service because every officer is a leader as well as an expert in his job (see paragraph c (4), below, for "KNOW his job" attributes). Subordinates look to their officers for leadership, guidance, direction and help. Leadership is central to the practice of officership. Officers lead by example, and that example must demonstrate sincere emulation of professional values and care for subordinates. The understanding of professional values becomes an integral part of all officers early in their development. That understanding matures by the colonel level in an understanding of how various value systems develop. Care for subordinates requires the knowledge to help them with their genuine concerns, therefore demanding familiarity with both the Officer and Enlisted Personnel Management Systems (OPMS/EPMS) and both the Officer and Enlisted Professional Development Systems (OPDS/EPDS). The specific attributes that address this development across the seven development periods are at Tab E.

(2) Leaders understand themselves. They know their own strengths and weaknesses and understand the professional development system well enough to use the tools provided by the Army to assess and improve their professional qualifications. The self-development and individual assessment programs are discussed in Volume 3, Annexes H. These annexes provide additional details on the professional development (PD) roadmap and assessment program as they relate to individual self-development responsibilities. The specific attributes that address this development across the seven development periods are at Tab F.

(3) Officers are leaders who work with and through people. It is essential for officers to understand human nature, human needs and emotions and the impact of actions (or lack of actions) on subordinates and those in other organizations who are likely to be affected by actions, orders and guidance. The specific attributes that address this development are at Tab G.

(4) As leaders, officers must know their jobs, including all tasks for their branch, functional area and/or skill, as appropriate to their grade and organizational level. The Military Qualification Standards (MQS) system provides an excellent guide to officers in defining many of the specific job and branch/functional area immaterial requirements by grade level. PDOS expanded the MQS system from three levels (MQS I, II and III for pre-commissioning, lieutenants and captains, respectively) to five levels (adding MQS IV and V for majors and lieutenant colonels, respectively). The MQS system is discussed in detail in Annex H.

(a) Officers expand their professional horizons through an aggressive professional reading program appropriate to their grade level, branch, functional area and skill. They understand the concept of the threat and know threat strengths and vulnerabilities appropriate to their grade and organizational level. Officers develop an understanding and appreciation of terrain early in their careers and expand it as they continue in the profession. They analyze terrain and use it well to protect soldiers and accomplish their missions. This view and appreciation of terrain expands to a knowledge of the geographic variations among prospective theaters of war at various levels of conflict; and the capability to integrate Army organizations with terrain to maximize its use to accomplish missions appropriate to their branch, functional area, grade and organizational level.

(b) Officers of all branches and functional areas know the fundamentals of employing crew-served weapons, maneuver and supporting fires and integrate these with terrain to execute defensive missions. Every officer must know these fundamentals and have at least a minimum level of competence in them. This confidence and competence is required by an understanding of contemporary threats, specifically: terrorism; low intensity conflicts with "no front lines"; and "deep thrust" forces attacking rear echelons in mid to high-intensity conflicts. As leaders, officers must set the example of this competence in defensive tactics for their subordinates to emulate as well as to protect themselves and their soldiers while accomplishing their missions.

(c) Officers learn specific grade level skills as they progress through their careers, such as the ability to use application software on various electronic systems, appropriate branch and functional area doctrine and combat developments, a working knowledge of PPBES and knowledge related to their responsibilities involving the Reserve Components and civilian work forces. The specific attributes that address this development across the seven Development Periods are at Tab H.

(5) As leaders, officers know their units and accept responsibility for unit and organizational success regardless of their position in the organization. They assess and develop unit esprit and discipline as they ensure a mission-oriented focus for their subordinates. They know the threats that impact on their units and how to develop appropriate measures to counteract the threat. The specific attributes that address this and other development across the seven development periods are at Tab I.

d. What a leader must DO. The leadership action skills are directing, implementing and motivating. The DO attributes enumerated by PDOS describe the action proficiencies officers must exhibit as leaders. Even though the knowledge expected of an officer is extensive if he is to perform well in his branch and/or functional area, an officer is a leader and leaders take action. As experts in their branches and/or functional areas, officers make decisions, provide guidance, develop individuals into teams, integrate the work of others and take responsibility for the performance of their part of the Army. Tab J summarizes the DO attributes in general terms.

(1) Officers provide direction by taking action and making decisions. They expand their decision-making capability from simply using standard techniques (such as giving a platoon operations order) to the synthesizing and conceptualizing processes used by senior-level decision makers and combat and materiel developers. Their role model qualities as leaders and patriots become measureable outside the Defense establishment for senior field grade officers. They synthesize the lessons of history and integrate national political-military capabilities to achieve national goals. The specific attributes that address this development across the seven development periods are at Tab K.

(2) As leaders, officers implement and follow through once decisions are made. They ensure understanding of their commander's intent by integrating and coordinating staff functions throughout the Army and the Defense Department. Officers are teachers and ensure high standards for the instruction in the Army service school system. The specific attributes that address this and other development across the seven development periods are at Tab L.

(3) As leaders, officers motivate themselves and others to accomplish assigned tasks. They develop a healthy organizational climate that encourages development, initiative, innovation and mission accomplishment. The specific attributes that address this development across the seven development periods are at Tab M.

e. Conclusion: The BE-KNOW-DO attributes enumerated by PDOS and listed in the tables of this appendix provide guidance to individual officers, their commanders and leaders and the Army school system as an aid to building the high quality officer corps needed to lead the Army to meet the challenges of leadership today and tomorrow.

TAB A - Leadership Framework - What A Leader Must Be
TAB B - Be - Committed To The Professional Army Ethic
TAB C - Be - Possess Professional Character Traits
TAB D - Leadership Framework - What A Leader Must Know
TAB E - Know - Four Factors Of Leadership And How They Affect Each Other
TAB F - Know - Himself
TAB G - Know - Human Nature
TAB H - Know - His Job
TAB I - Know - His Unit
TAB J - Leadership Framework - What A Leader Must Be Able To Do
TAB K - Do - Provide Direction
TAB L - Do - Implement
TAB M - Do - Motivate

Tab A to Appendix 1

LEADERSHIP FRAMEWORK — WHAT A LEADER MUST BE

Each leader must:	Examples:
1. Be committed to the professional Army ethic	• Loyalty to the Nation's ideals • Loyalty to unit • Selfless service • Personal responsibility
2. Possess professional character traits	• Courage • Competence • Candor • Commitment • Integrity

(Adapted from FM 22-100, *Military Leadership*, p. 49).

Tab B to Appendix 1

BE — COMMITTED TO THE PROFESSIONAL ARMY ETHIC

As a leader at the end of Development Period:	Each officer must be committed to the professional Army ethic:	
Pre-Commissioning	1-01	Accepts officer values of integrity, selflessness, honesty, special trust, loyalty and care for soldiers
	1-02	Accepts responsibility for protecting the Nation
Lieutenant	1-01	Exhibits integrity, selflessness, honesty, special trust, loyalty, care for soldiers and families
	1-02	Accepts excellence in performance of all duties as his part of executing the Army mission of protecting the Nation
Captain	1-01	Internalizes moral, ethical, and professional standards and care for soldiers and families
	1-02	Behaves consistent with professional values
	1-03	Appreciates what the Army mission of protecting the Nation entails for his branch and/or functional area
Major - Lieutenant Colonel	1-01	Behaves consistent with high moral and ethical values
	1-02	Appreciates what the Army mission of protecting the Nation entails for his branch and/or functional area
Colonel	1-01	Behaves consistent with high moral and ethical values
	1-02	Appreciates what the Army mission of protecting the Nation entails at the highest levels of responsibility in the Army
Brigadier and Major General	1-01	Epitomizes a life-long commitment to the Nation, to Army values and to soldier welfare
	1-02	Appreciates what the Army mission of protecting the Nation entails at the highest levels of responsibility in DOD
Senior General Officer	1-01	Epitomizes a life-long commitment to the Nation, to Army values and to soldier welfare
	1-02	Appreciates what the Army mission of protecting the Nation entails at the highest levels of responsibility in national and international affairs

Tab C to Appendix 1

BE — POSSESS PROFESSIONAL CHARACTER TRAITS

As a leader at the end of Development Period:	Each officer must possess professional character traits:	
Pre-Commissioning	2-01	Is physically fit and able to perform under stressful conditions
Lieutenant	2-01	Is physically fit and performs well under stressful conditions
	2-02	Is a role model and coach for subordinates and peers
	2-03	Has single-minded tenacity to accomplish the mission and the flexibility to change when necessary
Captain	2-01	Prepares physically and psychologically for the rigors of war
	2-02	Is a role model and mentor
	2-03	Has single-minded tenacity to accomplish the mission and the flexibility to change as required by the situation
	2-04	Has practical judgment and solid common sense
Major - Lieutenant Colonel	2-01	Prepares physically and psychologically for rigors of war
	2-02	Is a role model and mentor
	2-03	Has single-minded tenacity to accomplish the misthesion and the flexibility and courage to change as required by the situation
	2-04	Has practical judgment and solid common sense
Colonel	2-01	Prepares physically and psychologically for the rigors of war
	2-02	Is a role model and mentor
	2-03	Has single-minded tenacity to accomplish the mission and the flexibility and courage to change as required by the situation
	2-04	Has practical judgment and solid common sense
Brigadier and Major General	2-01	Prepares physically and psychologically for the rigors of war
	2-02	Is a role model and mentor
	2-03	Has single-minded tenacity to accomplish missions and the flexibility and courage to change as required by the situation
	2-04	Has practical judgment and solid common sense

Senior General Officer	2-01	Pre physically and psychologically for the rigors of war
	2-02	Epitomizes the Army officer role model
	2-03	Has single-minded tenacity to accomplish missions and the flexibility and courage to change as required by the situation
	2-04	Has practical judgment and solid common sense

Tab D to Appendix 1

LEADERSHIP FRAMEWORK — WHAT A LEADER MUST KNOW

Each leader must:	Examples:
3. Know the four factors of leadership and how they affect each other	• Follower • Leader • Communication • Situation
4. Know himself	• Strengths and weaknesses of his character, knowledge and skills
5. Know human nature	• Human needs and emotions • How people respond to stress • Strengths and weaknesses of the character, knowledge and skills of his people
6. Know his job	• Technical and tactical proficiency
7. Know his unit	• How to develop necessary individual and team skills • How to develop cohesion • How to develop discipline

(Adapted from FM 22-100. *Military Leadership*, p. 49).

Tab E to Appendix 1

KNOW — FOUR FACTORS OF LEADERSHIP AND HOW THEY AFFECT EACH OTHER

As a leader at the end of Development Period:	Each officer must know the four factors of leadership (follower, leader, communication, situation) and how they affect each other:	
Pre-Commissioning	3-01	Relationship of officer behavior to professional values
	3-02	Limited preparedness to lead small units in combat
Lieutenant	3-01	Relationship of officer behavior to professional values
	3-02	Basic leadership doctrine, reinforced by practical experience
	3-03	Basic military writing and communication skills
Captain	3-01	How to plan for and manage limited change
	3-02	How OPMS/OPDS and EPMS/EPDS function
	3-03	Military communication skills
Major - Lieutenant Colonel	3-01	How OPMS/OPDS and EPMS/EPDS function
Colonel	3-01	Historical, philosophical, sociological bases for value system development
	3-02	Interrelationships among OPMS/OPDS, EPMS/EPDS and other military systems
Brigadier and Major General	3-01	How values and behavior in the highest echelons of the Army affect all of its elements
	3-02	Intps among OPMS/OPDS, EPMS/EPDS and other military and societal systems
Senior General Officer	3-01	How values and behavior in the highest echelons of the Army affect all of its elements
	3-02	Interrelationships among OPMS/OPDS, EPMS/EPDS and other military and societal systems

Tab F to Appendix 1

KNOW — HIMSELF

As a leader at the end of Development Period:	Each officer must know himself:	
Pre-Commissioning	4-01	Basic education skills
	4-02	Principles of individual responsibility relating to the requirements for officer self-development
	4-03	Familiar with "professional development (PD) roadmap"
	4-04	Familiar with officer career individual assessment program
Lieutenant	4-01	PD roadmap and its importance and role in self-development
	4-02	How to use assessment system feedback results (e.g., PT, diagnostic, achievement, MQS) to guide self-development
Captain	4-01	PD roadmap and its importance and role in self-development
	4-02	How to use assessment system feedback results and other sources to guide self-development
Major - Lieutenant Colonel	4-01	How to use PD roadmap for continued self-development
	4-02	How to use assessment system feedback results and other sources to guide self-development
Colonel	4-01	How to use assessment system feedback results and other sources to diagnose strengths and weaknesses and guide self-development
Brigadier and Major General	4-01	How to use assessment system feedback results and other sources to diagnose strengths and weaknesses and guide self-development
Senior General Officer	4-01	How to use assessment system feedback results other sources to diagnose strengths and weaknesses and guide self-development

Tab G to Appendix 1

KNOW — HUMAN NATURE

As a leader at the end of Development Period:	Each officer must know human nature:	
Pre-Commissioning	5-01	Basic military leadership and communication skills
	5-02	Human needs and emotions
Lieutenant	5-01	Human dimensions of units and organizations and the impact of his own decisions on soldiers and families
Captain	5-01	Human dimensions of units and organizations and the impact of his own decisions on soldiers. families. DOD civilians and lower level organizations
Major - Lieutenant Colonel	5-01	Human dimensions of units and organizations the impact of his own decisions on soldiers. families. DOD civilians and organizations
Colonel	5-01	Human dimensions of units and organizations and the impact of his own decisions on soldiers. families. DOD civilians. organizations and systems
Brigadier and Major General	5-01	Human dimensions of organizations and the his own decisions have on soldiers. families. civilians and the Total Army
Senior General Officer	5-01	Human dimensions of organizations and the impac his own decisions have on soldiers. families. civilians (government and non-government) and the Total Army

Tab H to Appendix 1

KNOW — HIS JOB

As a leader at the end of Development Period:	Each officer must know his job:	
Pre-Commissioning	6-01	MQS I tasks
	6-02	Practical approaches to military problem solving
	6-03	Introduction to military history
	6-04	Introduction to professional military literature pertaining to experiences at individual and small unit level
	6-05	General concept of the "threat"
	6-06	How to use a map and compass to navigate cross-country
	6-07	Fundamentals of infantry tactics, weapons and camouflage at the individual, squad and platoon level
	6-08	How to maintain a personal weapon and equipment
	6-09	How to fire individual weapons (rifle or pistol, preferably both)
Lieutenant	6-01	In-depth expert in branch skills at platoon or equivalent level and below
	6-02	Fundamentals of Army organization and doctrine appropriate to his branch and level, reinforced through practical experience
	6-03	MQS II tasks
	6-04	How to use application software programs on computers
	6-05	Professional reading program that emphasizes general military history, including readings at the platoon and company level
	6-06	Practical terrain appreciation analyzes terrain
	6-07	Fundamentals of employing machine guns, anti-tank weapons, maneuver, and fire support and how to integrate with terrain in a defensive role
Captain	6-01	In-depth expert in company and battalion or equivalent level branch skills, procedures, doctrine and tactics
	6-02	Interrelationships among combat/combat support/combat service support arms in conducting combined arms operations
	6-03	MQS III tasks
	6-04	How to use application software on computers
	6-05	Branch qualified
	6-06	Fundamental proficiencies associated with his designated functional area or skill

	6-07	Professional reading program that emphasizes general military history to include readings at company, battalion and brigade/regimental levels
	6-08	Threat strengths and vulnerabilities at tactical levels
	6-09	How to visualize and analyze terrain and maximize its use to accomplish missions appropriate to his branch and/or functional area
	6-10	Fundamentals of employing machine guns, anti-tank weapons, maneuver and fire support and how to integrate with terrain in a defensive role
	6-11	How to work with and evaluate Reserve Components (RC) during their annual training and inactive duty training periods
Major - Lieutenant Colonel	6-01	"Expert" in branch and/or functional area; capab of applying expertise on Army, joint or combined staffs
	6-02	Operations and support doctrine at the corps level and below
	6-03	MQS IV and V tasks
	6-04	"How the Army fights" including how other branches, functional areas, Army as a whole and other Services work together to multiply combat power and attain national and operational objectives
	6-05	"How the Army Runs" functions: structure, station, man, equip, train, manage, mobilize, deploy, sustain and manage info
	6-06	Working knowledge of PPBES
	6-07	How Army fits into current economic and political environment and implications of public interest to the Army
	6-08	Professional reading program emphasizes the operational level of war and the impact of CS and CSS integration on the total battlefield
	6-09	Reading includes an overview of the subjects which impact on the Army and potential Army missions (e.g., political and economic systems; human and organizational behavior)
	6-10	Threat strengths and vulnerabilities at the operational and tactical levels
	6-11	How to visualize and analyze terrain and maximi its use to accomplish missions appropriate to his branch and/or functional area for each assignment
	6-12	Fundamentals of employing machine guns, anti-tank weapons, maneuver, fire support and air defense support and how to integrate with terrain in a defensive role
	6-13	Civilian personnel management procedures
	6-14	How the Reserve Components (RC) differ from the Active Component (AC) and appreciates the difference between the two
Colonel	6-01	Role as an integrator and functional expert in leading and staffing Army and Defense organizations at the highest levels of responsibility
	6-02	Interrelationships among combat arms, combat support and combat service support systems on the current and future battlefield

	6-03	Operations and support doctrine at the theater level and below
	6-04	How Army and other Services integrate their capabilities to achieve national strategic objectives
	6-05	"How the Army Runs" in relation to society and the national defense establishment
	6-06	National and military (all Services) implications of the full spectrum of conflict
	6-07	Working knowledge of PPBS and PPBES
	6-08	Professional reading program that emphasizes the strategic level of war and the challenges involved in mobilizing, training, deploying, sustaining and integrating Army forces in joint and combined operations
	6-09	Readings include political, economic, social systems and military interrelationships with these systems throughout the world
	6-10	Threat military, political and economic strengths and vulnerabilities at the strategic level and below
	6-11	Geographic variations among prospective theaters of war and their military, political and economic implications
	6-12	Rear area defensive tactics (e.g., integrating the employment of crew-served weapons, maneuver and supporting fires with terrain)
Brigadier and Major General	6-01	How Army and other Services integrate their capab to achieve national strategic objectives across the full spectrum of conflict
	6-02	Operations and support doctrine at the theater level and below
	6-03	How to integrate logistical constraints and opportunities in warfare
	6-04	Army/DOD organization and their relationships with major American institutions
	6-05	Implications of force modernization plans for the future battlefield
	6-06	Working knowledge of PPBS and PPBES
	6-07	National defense strategies
	6-08	Evolution of US and adversarial alliances
	6-09	Professional reading program that emphasizes the strategic level of war and the challenges involved in mobilizing, training, deploying, sustaining and integrating Army forces in joint and combined operations, particularly the "nation at war"
	6-10	Readings include political, economic and social systems and military interrelationships with these systems throughout the world
	6-11	Threat military, political, economic and technological strengths and vulnerabilities at the strategic level
	6-12	Geographic variations among prospective theaters of war and their military, political, economic and technological implications
	6-13	Rear area defensive tactics and how to integrate combat support and combat service support organizations with combat arms for rear area protection
Senior General Officer	6-01	How to envision application of landpower in multiple scenarios within the context of national strategy

6-02	Global operations and support doctrine
6-03	Army/DOD organization and their relationships with major national and international institutions
6-04	How Army and other Services integrate their capabilities to achieve national strategic objectives across the full spectrum of conflict
6-05	Working knowledge of PPBS and PPBES
6-06	Professional reading program
6-07	Threat military, political, economic and technological strengths and vulnerabilities at the strategic level
6-08	Geographic variations among prospective theaters of war and their military, political, economic and technological implications

Tab I to Appendix 1

KNOW — HIS UNIT

As a leader at the end of Development Period:		
Pre-Commissioning	7-01	Importance of discipline and esprit to unit performance
Lieutenant	7-01	Need for individual and small unit physical conditioning
	7-02	Basic teaching skills
	7-03	Tactical threat strengths and vulnerabilities impacting on his unit and how to prepare countermeasures (e.g., physical security, counterattack plans and exercises) to counteract the threat
	7-04	How to build discipline and esprit in small units
Captain	7-01	Role of physical fitness in the Army
	7-02	Teaching and coaching skills
	7-03	Threat capabilities and limitations appropriate to his time and place (organizational level and geographic location) in the Army and knows how to prepare countermeasures (e.g., OPSEC, SIGSEC, physical security and counterattack plans and exercises) to counteract the threat
	7-04	How to build discipline and esprit in company size units
Major - Lieutenant Colonel	7-01	Role of physical fitness in the Army
	7-02	Expert teacher, coach and mentor
	7-03	Threat capabilities and limitations appropriate to his time and place (organizational level and geographic location) in the Army and knows how to prepare countermeasures (e.g., OPSEC, SIGSEC, physical security and counterattack plans and exercises) to counteract the threat
	7-04	Installation (i.e., post, camp and station) and community operations
	7-05	How to assess and affect discipline and esprit in battalion size organizations and on staffs
Colonel	7-01	Expert teacher, coach and mentor

	7-02	Threat capabilities and limitations appropriate to his time and place (organizational level and geographic location) in the Army and knows how to prepare countermeasures (e.g., OPSEC, SIGSEC, physical security and counterattack plans and exercises) to counteract the threat
	7-03	Community and installation management
	7-04	How to assess and affect discipline and esprit in battalion size organizations and on staffs
Brigadier and Major General	7-01	Expert teacher, coach and mentor
	7-02	Threat capabilities and limitations appropriate to his time and place (organizational level and geographic location) in the Army and knows how to prepare countermeasures (e.g., OPSEC, SIGSEC, physical security and counterattack plans and exercises) to counteract the threat
	7-03	Community and installation management
	7-04	How to assess and affect the state of readiness, discipline and esprit in large organizations
Senior General Officer	7-01	Threat capabilities and limitations appropriate to his time and place (organizational level and geographic location) in the Army and knows how to integrate systems and procedures to counteract the threat
	7-02	How to assess and affect the state of Army-wide readiness, esprit and discipline

Tab J to Appendix 1

LEADERSHIP FRAMEWORK — WHAT A LEADER MUST BE ABLE TO DO

Each leader must:		Examples:
8.	Provide direction	• Goal setting • Problem solving • Decision making • Planning
9.	Implement	• Communicating • Coordinating • Supervising • Evaluating
10.	Motivate	• Applying principles of motivation, such as developing morale and esprit in his unit • Teaching • Coaching • Counseling

(Adapted from FM 22-100, *Military Leadership*, p. 49).

Tab K to Appendix 1

DO — PROVIDE DIRECTION

As a leader at the end of Development Period:	Each officer must provide direction:	
Pre-Commissioning	8-01	Applies elementary decision making techniques
Lieutenant	8-01	Applies analytical decision making tools and techniques
	8-02	Leads and instructs platoons and platoon level organizations
	8-03	Takes bold, decisive action
	8-04	Maintains personal weapon and equipment
Captain	8-01	Commands at company level (or in organizations headed by captains)
	8-02	Puts together and programs a series of direct operating tasks at company or equivalent level
	8-03	Uses military-oriented thought process: establishes goals and objectives; identifies problems; develops, evaluates, chooses alternatives; implements the decision; controls and evaluates the results
	8-04	Takes bold, decisive action
Major - Lieutenant Colonel	8-01	Commands, leads, directs, organizes and units and organizations at the battalion or equivalent TDA level
	8-02	Molds operating tasks/methods into functional systems
	8-03	Adjusts systems to cope wth changes in the environment
	8-04	Applies quantitative techniques and sophisticated analytical skills to military problem solving
	8-05	Takes bold, decisive action
	8-06	Develops doctrine and supports R&D to assist long-term growth of the Army and to build on the synergism of light and heavy force trains
Colonel	8-01	Commands, leads, directs, organizes and trains brigades or equivalent level TDA organizations
	8-02	Shapes the environment for the development of personal and unit values congruent with Army values
	8-03	Models officer attributes within the Armed Forces and in public
	8-04	Deploys and modifies interrelated operating systems
	8-05	Uses synthesizing and conceptualizing processes for non-programmed decision making while improving analytic skills developed earlier

	8-06	Assesses, allocates and integrates forces required to execute tactical and operational plans
	8-07	Synthesizes the lessons of history
	8-08	Formulates Army positions on national policy
	8-09	Develops doctrine and supports R&D to assist long-term growth of the Army and to build on the synergism of light and heavy forces
	8-10	Takes bold, decisive action
Brigadier and Major General	8-01	Commands, leads, directs installations and operational/tactical organizations
	8-02	Models officer attributes not only within the Armed Forces but with the media, other government activities, academia, industry and the public
	8-03	Operates and modifies complex systems and copes with second and third order effects
	8-04	Uses cognitive synthesizing processes for decision making
	8-05	Uses conceptual skills to formulate policies in response to and in anticipation of global political-military situations
	8-06	Synthesizes the lessons of history
	8-07	Supervises and directs doctrine development and R&D to support long term growth of the Army and to build on the synergism of light and heavy forces
	8-08	Takes bold, decisive action
Senior General Officer	8-01	Commands, leads, directs major commands, operational organizations and high level staffs
	8-02	Develops and deploys a multitude of large, complex systems
	8-03	Integrates national and multinational policy and diplomacy with military, technological and economic capabilities to achieve US national policy goals and objectives
	8-04	Synthesizes the lessons of history
	8-05	Takes bold, decisive action

Tab L to Appendix 1

DO — IMPLEMENT

As a leader at the end of Development Period:	Each officer must implement:	
Pre-Commissioning	9-01	Uses common operational language to direct actions and conduct planning in small unit operations
Lieutenant	9-01	Works directly with soldiers
	9-02	Integrates weapon systems, other equipment or information relating to small unit activities and operations
	9-03	Coordinates and supervises in a staff section
	9-04	Uses judgment and common sense in practical problem solving
	9-05	Inspects personnel and equipment
	9-06	Conducts drills and ceremonies
	9-07	Trains platoon level organizations in defensive tactics
	9-08	Supervises platoon/section level maintenance
	9-09	Uses common operational language to direct actions/ conduct planning in small unit operations
	9-10	Uses company orders and issues patrol/platoon orders and estimates of the situation
	9-11	Drafts military correspondence
	9-12	Writes information and decision papers and after-action reports
	9-13	Conducts briefings
Captain	9-01	Supervises other officers and delegates authority
	9-02	Participates in combined arms and services operations
	9-03	Integrates operations and activities of company-size units and individual battalion level staff elements
	9-04	Provides high quality instruction in units and within the Army education system
	9-05	Uses common operational terms and graphics
	9-06	Develops intent of commander in terms of estimates and orders at company, battalion and brigade levels
	9-07	Performs detailed staff operations and procedures on combined arms and services, installation and higher staffs
	9-08	Applies functional area expertise to meet Army needs
	9-09	Drafts, reviews, edits military correspondence
Major - Lieutenant Colonel	9-01	Integrates, coordinates, directs staff functions as principal or member in any staff position at tactical/installation level and above, to include joint and combined staffs

	9-02	Provides and supervises high quality instruction within the Army education system
	9-03	Uses, manages and articulates requirements for computer systems applications in military organizations
	9-04	Applies operational terms and graphics as appropriate to both branch and functional area
	9-05	Writes plans, orders, estimates at all levels
	9-06	Articulates commander's intent
	9-07	Translates commander's intent to direct functional activities
Colonel	9-01	Integrates, coordinates and directs staff functions as a principal or a member in any staff position at tactical/installation level and above, including joint and combined staffs
	9-02	Provides and supervises high quality instruction within the Army education system
	9-03	Integrates advances in specialized fields into Army systems and missions
	9-04	Recognizes, analyzes, articulates US policy impact on national security and other nations
	9-05	Applies operational terms and graphics
	9-06	Writes plans, orders, estimates at all levels
	9-07	Articulates commander's intent
	9-08	Translates commander's intent to direct functional activities
	9-09	Speaks publicly on military subjects
Brigadier and Major General	9-01	Integrates staffs and large organizations and/or complex systems within the combined arms, support and staff arena at MACOM through joint/combined and JCS levels
	9-02	Supervises and directs high quality instruction within the Army education system
	9-03	Applies and enforces the use of operational terms and graphics
	9-04	Speaks publicly on military subjects
Senior General Officer	9-01	Accepts final responsibility for the of the Army to accomplish missions, including specific responsibilities for: force structure, modernization, sustainability, readiness, personnel and integrating forces to take advantage of the synergism of light and heavy forces
	9-02	Accepts final responsibility for the honor and reputation of the Army; to that end: insures self-correcting mechanisms are present and functioning, identifies and corrects system flaws and establishes and maintains relations with the media and public
	9-03	Coordinates and integrates operations and support functions in multiple theaters ndfficerceptsability
	9-04	Acts as Army spokesman with Congress, American society, other Services and other nations

Tab M to Appendix 1

DO — MOTIVATE

As a leader at end of Development Period:	Each officer must motivate:	
Pre-Commissioning	10-01	Practices peer leadership
Lieutenant	10-01	Exhibits basic leadership skills
	10-02	Builds and sustains teams
	10-03	Develops subordinates
Captain	10-01	Establishes an organizational climate which produces initiative, trust, coaching, self-development and physical fitness
	10-02	Establishes and maintains unit discipline, health and welfare
	10-03	Motivates subordinates to set common purpose, direction and commitment to establish responsive channels for disseminating intent
	10-04	Teaches and coaches small unit leaders
Major - Lieutenant Colonel	10-01	Establishes an institutional climate which produces initiative, trust, coaching, self-development and physical fitness
	10-02	Motivates staffs and subordinate echelons to set common purpose, direction and commitment and to establish responsive channels for disseminating intent
	10-03	Develops coaching skills in subordinates and students
	10-04	Reinforces appropriate role model behavior in subordinates
Colonel	10-01	Establishes an organizational climate which produces initiative, trust, coaching, self-development and physical fitness
Brigadier and Major General	10-01	Establishes an organizational climate which produces initiative, trust, coaching, self-development and physical fitness
	10-02	Motivates staffs and subordinate echelons to set common purpose, direction and commitment and to establish responsive channels for disseminating intent
Senior General Officer	10-01	Establishes an institutional climate for the development of subordinates

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Appendix 2 To Annex K

Glossary

AC - Active Component.

Assessment - The measure of the growth or decline in educational or skill attainment that takes place over time in key learning areas. PDOS specifically intends that assessment not be used as part of the formal evaluation system (OER) nor tied to a selection process. Its purpose is to provide feedback to the individual and to the system for recalibration. (PDOS)

Attribute - Any belief, value, ethic, character trait, knowledge, or skill possessed by a person. (FM 22-100)

Beliefs - Assumptions or convictions that a person holds to be true regarding people, concepts, or things. (FM 22-100)

Character - The sum total of an individual's personality traits and the link between a person's values and his behavior. It allows a person to behave consistently according to individual values, regardless of the circumstances. (FM 22-100)

Coaching - A form of teaching that involves communicating detailed instructions and on-the-spot feedback in a way that helps one learn a skill or accomplish a task. (FM 22-100)

Cohesion - The mental, emotional, and spiritual bonding of unit members that results from respect, confidence, caring, and communication. It is intertwined with discipline and is necessary for a unit to work as a smoothly functioning team. (FM 22-100)

Communication - The exchange or flow of information and ideas from one person to another. The process involves a sender transmitting an idea, information, or feeling to a receiver. (FM 22-100)

Coordination - Bringing into a common action, movement, or condition; regulating and combining in harmonious action. (FM 22-100)

Counseling - Talking with a person in a way that helps that person solve a problem or helps to create conditions that will cause the person to improve his behavior, character, or values. (FM 22-100)

CS - Combat support.

CSS - Combat service support.

Directing - The thinking skills of leadership, including setting goals, problem solving, decision making and planning. (FM 22-100)

Discipline - The prompt and effective performance of duty in response to orders, or taking the right action in the absence of orders. A disciplined unit forces itself to do its duty in any situation. (FM 22-100)

EPDS - Enlisted Professional Development System.

EPMS - Enlisted Personnel Management System.

Esprit - The spirit, the soul, the state of mind of the unit. It is the overall consciousness of the unit that the soldier identifies with and feels a part of. (FM 22-100)

Ethics - Rules or standards that guide individuals or groups to do the moral or right thing. A code of ethics is a set of moral principles or values. (FM 22-100)

Evaluation - Judging the worth, quality, or significance of people, ideas, or things. (FM 22-100)

Evaluation - A systematic process of determining the effectiveness of educational endeavors in light of evidence. It includes appraisal of achievement, diagnosis of learning and assessment of progress. PDOS specifically intends this term to be part of the formal evaluation system (OER) and selection processes. (PDOS)

Human Nature - The common qualities of all human beings. (FM 22-100)

Implementing - The action skills used to achieve goals, including communicating, coordinating, supervising and evaluating. (FM22-100)

Leadership that implements - Communicating, coordinating, supervising, and evaluating. (FM 22-100)

Leadership that motivates - Applying the principles of motivation, teaching, coaching, and counseling. (FM 22-100)

Leadership that provides direction - Goal setting; identifying, analyzing, and solving problems; decision making; and planning. (FM 22-100)

Military ethics - Guidelines that help leaders lead in a professional manner. (FM 22-100)

Military leadership - The process by which a soldier influences others to accomplish the mission. He carries out this process by applying his leadership attributes (beliefs, values, ethics, character, knowledge, and skills). (FM 22-100)

Morale - The mental, emotional, and spiritual state of an individual. It is how a soldier feels - happy, hopeful, confident, appreciated, or worthless, sad, unrecognized, depressed. High morale strengthens courage, energy, and the will to fight. (FM 22-100)

Motivating - The skills necessary to influence human nature, and to guide motivated people to carry out plans and programs, including applying the principles of motivation (such as aligning unit and individual goals and rewarding behavior that leads to the achievement of unit standards and goals), teaching and counseling. (FM 22-100)

Motivation - The combination of a person's desire and energy directed at achieving a goal. It is the cause of action. Influencing people's motivation means getting them to want to do what you know must be done. (FM 22-100)

MQS - Military Qualification Standards.

OER - Officer evaluation report.

OPDS - Officer Professional Development System.

OPMS - Officer Personnel Management System.

OPSEC - Operations security.

PD - Professional development.

PDOS - Professional Development of Officers Study.

PPBES - Planning, Programming, Budgeting and Execution System

Professional Army Ethic - The basic professional beliefs and values that should be held by all soldiers: loyalty to the ideals of the Nation, loyalty to the unit, personal responsibility, and selfless service. (FM 22-100)

Professional Development (PD) Roadmap - An aid describing and providing guidance for the officer professional development system. (PDOS)

Quality - A trait or characteristic of a person. (FM 22-100)

RC - Reserve Components, i.e., US Army Reserve and National Guard.

R&D - Research and development.

Self-Development - The process by which each individual officer accepts primary professional development responsibility to progressively grow in mind, body and spirit to meet his individual potential. (PDOS)

SIGSEC - Signal security.

Stress - Pressure or tension. It is any real or perceived demand on the mind, emotions, spirit, or body. (FM 22-100)

Supervision - Keeping a grasp on the situation and ensuring that plans and policies are implemented properly. (FM 22-100)

Teaching - Creating the conditions that cause someone to learn and develop. Coaching, counseling, rewarding and taking disciplinary measures are all part of teaching. (FM 22-100)

Trait - Any distinguishing quality or characteristic of a person. A person demonstrates that he possesses a trait, such as moral courage, by consistently behaving in a morally courageous way, regardless of the situation. For a trait to be developed in a person, the person must first believe in and value that trait. For example, before a person can have moral courage, he must believe in and value moral courage. Therefore, moral courage must be a belief and a value of a person before it can become a trait of that person. Traits must first be believed in and valued before a person can possess them as traits. (FM 22-100)

Values - Ideas about the worth or importance of things, concepts, and people. They come from a person's beliefs. (FM 22-100)

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Appendix 3 To Annex K

Bibliography

Department of History, USMA. *Leadership In Combat: An Historical Appraisal.* Unpublished manuscript, US Military Academy, West Point, NY, 1984.

Harris, Boyd M. "A New Army Emphasis on Leadership: Be, Know, Do." *Military Review*, February 1984, pp. 62-71.

Pittard, Robert C. "The Making of an Infantry Lieutenant." *Infantry*, September - October 1984, pp. 27-28.

US Army Field Manual, FM 22-100, *Military Leadership.* October 1983.

US Army letter, DAPE-MP-OPMS, subject: USMA Historical Appraisal of Combat Leadership, with three enclosures, 6 September 1984.

US Army Manual, *Military Qualification Standards II Manual, Common Tasks,* (Test Edition), 1982.

US Army Manual, MQSM 145-1-00D, MQSM-I, *Military Qualification Standards Manual I,* June 1984.

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Annex L

Mastery Of Art And Science Of War

1. PURPOSE. To describe the art and science of war and its application to every Army officer.

2. DISCUSSION.

a. Background. The art and science of war is the body of theoretical knowledge and a set of practical skills which accompany such knowledge as it applies to the military profession. Since professional expertise is more elusive and expansive than merely that of armed combat, the mastery of the art and science must include all officers and not just those who manage violence. Every officer has the responsibility to focus his attention and expertise to accomplish the wartime mission of the Army. This single factor is that which differentiates an officer from a civilian with a similiar skill. This includes:

(1) The logistician who must supply, evacuate, repair, overhaul, refit, and sustain a theater with industrial mobilization.

(2) The transportation officer responsible for planning road movements.

(3) Civil Affairs officers responsible for solving problems with local governments.

(4) Medical Corps officers responsible for taking care of typical war injuries, evacuating wounded and getting medical support to the front lines.

(5) Judge Advocate General officers responsible for dealing with problems in such areas as confiscating supplies and the law of land warfare.

b. Definitions.

(1) Due to the broad spectrum of missions assigned the Army, it is first necessary to define the term "war" to gain a complete appreciation of what the art and science incorporates. As you will notice this term is defined in very broad terms to capture all the "conflict" situations and the preparation for conflict the Army becomes involved in, and includes the roles of every officer. Therefore, the term "war" can be interpreted as:

(a) Organizing, equipping, supporting, and training the force.

(b) Planning its activities.

(c) Directing its operations in and out of combat.

(d) Combating terrorism.

(e) Deterrence.

(f) Nation-building.

(g) Revolutionary development.

(h) Civic action or pacification.

(i) Rescuing people.

(j) Overseeing the withdrawal of hostile forces from occupied territory.

(k) Training and advising the armed forces of other countries.

(l) R & D and doctrine development for equipment, organization and personnel duties.

(2) Flowing from the definition of war will fall the definition of "mastery of the art and science of war" and its components. Therefore, mastery of the art and science of war is a progressive state, moving through transitions in a career pattern requiring mastery of required skills directed at that point. It is the possession of:

(a) Appropriate theoretical knowledge and a set of practical skills/proficiencies at each level of responsibility.

(b) Knowledge of the human dimension of combat.

(c) A historical perspective of war.

(d) The ability to envision future war.

c. Theoretical knowledge and practical skills/proficiencies.

(1) The theoretical knowledge and practical skills/proficiencies vary by level, duty, and unit or organization. A common core exists which includes a set of terms, phrases, and decision logic which can only be at best partially understood by the layman. As part of the common core, all officers must know at a minimum:

(a) How to prepare for and conduct war at each level.

(b) The Army functions and systems at each level, to include:

Structure
Man
Equip
Train
Mobilize/Deploy
Station
Command
Control
Communicate
Sustain
Manage
Manage information

(c) The organization, structure and people, and their interface.

(d) The interface of organizations and their respective capabilities.

(e) The tactics, operations and strategy associated with their organization.

(2) This common core must be supplemented by branch, unit, and duty specific proficiencies. These grow over time and, where major shifts occur, tend to signal major education/training requirements for officers.

(3) The body of knowledge and practical skills are not static. The responsibility for the perpetuation, dissemination and future development of the skills and knowledge reside with the schools. However, it is essential that field practitioners provide input on new requirements, ideas, and techniques.

d. Human dimension of combat.

(1) The human dimension includes base values, leadership, character traits and man-machine interface.

(a) Base-value development is the inculcation of the foundation values, espoused by the warrior spirit, necessary to perform in a military environment and form the fabric of the officer corps e.g., loyalty to the Nation, institution, and others; personal responsibility; selflessness; and dedication, which breeds committment, competence, courage and candor. While generally held as ideals by laymen, those who make the military a profession are asked for something vastly different from any other group in society. Their part of the bargain is, quite simply, the willingness to forfeit life at the direction of the country. The teaching of a higher standard is essential to ensuring that this harsh, lopsided bargain will be kept.

(b) Leadership character traits, which provide the guidance and support to accomplish missions under great pressure and against all odds, maintain unit cohesion in the process. An extensive study by USMA revealed five personal characteristics that were present in every successful officer in combat:

—Terrain sense

—Single-minded tenacity

—Audacity

—Physical confidence and health

—Practiced, practical judgment

(c) Man-machine interface is the application of men to equipment, to get the most of the system. As weapons and command and control systems become more complex, it is crucial that leaders know how to train and lead soldiers to achieve the design specifications of this technology

(2) Base-value development is now accomplished somewhat in schools, but much more is needed in the units similiar to that developed at the Center for Army Leadership. For example, the Center for Army Leadership has developed a circular on military professionalism designed for different levels in the Army (platoon/squad, company/battery, battalion). The purpose is to provide easy-to-use "off the shelf" instruction as part of an overall professional development program.

e. Historical development.

(1) Historical development helps identify and illuminate the character traits and leadership skills that tended to make the difference in successful combat. It also provides an appreciation of historical development of force, use of force, lessons learned over history and theory. It is hard to replicate "combat" (the pressures, unexpected, fears, friction); therefore, we must identify/absorb lessons learned and capitalize on others experiences.

(2) We do some historical development in schools, little in the field and need to do more and better in both places. Reading lists and MQS are supporting, but we need an overall program as a part of longrange professional development which is embraced in the warrior spirit program. We must teach how to study history and how to use history in unit/organizational situations by developing a "level" oriented historical program.

f. Vision of future wars.

(1) Vision of future wars is a key component of doctrinal and combat development (only

a few people are involved in the formal development of Army doctrine; however we must improve the mechanism to take advantage of the ideas of the professional soldiers who are experiencing the day-to-day needs and application of our doctrine and equipment).

(a) All professionals should routinely consider the application of their organization in the next war, identify changes needed and ensure that all in the organization understand how they should be employed if necessary.

(b) Permeation of the warrior ethic reinforces this vision.

(2) Within operational security constraints, unit training should include exercise/rehearsal of real contingencies at the lowest levels to reinforce the committment of the unit.

3. RECOMMENDATIONS.

a. The aim of the art and science of war core is to ensure all officers are technically competent for their grade and branch, and/or functional area, and understand the application of their skills to support the Army mission.

b. The major thrusts of this program are to:

(1) Develop an art and science of war-common core component to ensure it is progressive through a career and used to support unit training.

(2) Ensure the Army continues to focus on its wartime mission.

(3) Provide realistic fighting simulations/exercises designed to exercise all components.

c. The base policy was: there will be a common core component to provide officers the road map to progressively master the art and science of war. The map will show transitions in a career pattern which require mastery of common-core skills needed in that period.

(1) The core skills will include as a minimum:

(a) Appropriate theoretical knowledge and a set of practical skills/proficiencies at each level of responsibility oriented on "how the Army fights" and "how the Army runs."

(b) The knowledge of the human dimension of combat.

(c) A historical perspective of war.

(d) The ability to envision future war.

(2) The common-core component will be the basis which the primary Army schools will use to support the development period experience. This common core will be used to support training and professional development at units and organizations.

d. The following subordinate policies implement the base policies by affixing responsibility for implementation.

(1) Develop exportable simulations (wargames) for units/organizations which can be used during small unit training or off duty by the officer.

(2) Commanders will have a program of warfighting seminars at units and in organizations focusing the officers attention on the unit/organization's mission in a wartime situation.

(3) Service school commandants will have a program of warfighting seminars focusing student attention on the branch/functional area missions in a wartime situation.

4. CSA REMARKS: Approved in concept.

Appendices

1 Glossary
2 Bibliography
3 Action Plan
4 Phasing Plan

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Appendix 1 To Annex L

Glossary

ATR: Annual Training Requirement.

Audacity: The willingness to take reasoned but enormous risks.

IRR: Individual Ready Reserve.

PDOS: Professional Development of Officers Study.

Physical confidence and health: Vigorous, demanding physical activity, physical well-being and the self confidence engeneredby regular physical activity regardless of age. Physical confidence also enhances the self-image.

Practiced, practical judgment: An ability to determine the vital from the unimportant, the immediate from the casual, and truth from deception, whether deliberate or accidental. It is improved by experience.

RC: Reserve Components (i.e., US Army Reserve and National Guard).

R & D: Research and Development.

Single-minded tenacity: An imaginative, driving intensity to accomplish the mission using everything that was available or could be created.

Soldier: A man or woman serving in an army; member of an army; an enlisted man or woman, as distinguished from one holding a warrant or commission; a person of military experience or military skill; a person who works for a specified cause; a skilled warrior; a militant leader, follower, or worker.

Terrain sense: The ability to quickly, almost intuitively, tactically judge terrain.

Warrior: A person engaged or experienced in war, warfare, or battle; a fighting man; soldier, serviceman, military man; brave fighting man, legionary, man-at-arms, rifleman; warrioress, Amazon.

Warrior Spirit: The state of mind and preparedness required of each officer which blends all the physical, mental, moral, and psychological qualities essential for an officer to successfully lead the Army in its mission of protecting the Nation.

Warrior Spirit Characteristics Officers with the Warrior Spirit are:

- Physically and mentally tough
- Self-confident
- Motivated to exceed standards
- Skilled in the fundamentals of weapons, tactics, and doctrine
- Calm and courageous under stress
- Eager to accept responsibility for protecting the Nation
- Action-oriented

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Appendix 2 To Annex L

Bibliography

Claxton, Bernard D. ed. *Military History and Theory*. Vol 9: *Warfare Studies Phase I*, Maxwell AFB: 1984.

Drisko, Melville A., *An Analysis of Professional Military Ethics: Their Importance, Development and Inculcation* Study Project. Carlisle Barracks: US Army War College, Sep 1977.

Department of History, USMA (1984). *Leadership in Combat: An Historical Appraisal*, Unpublished manuscript, United States Military Academy, West Point, New York.

Downes, C. J., *To Be or Not to Be a Profession: The Military Case*, Thesis unpublished.

Human Resources Research Office, (1957). *Fighter I: An Analysis of Combat Fighters and Non-fighters* (HumRRO Technical Report No. 44). Washington, D.C.: Human Resources Research Office (DTIC No. AD 158 148).

Isaac, A. G., *Sun Tzu-A Codification*. Unpublished manuscript.

Kotz, Nick, Nancy B. Nathan, and Cathryn Donohoe. "Where Have all the Warriors Gone?" *The Washingtonian*, July 1984, p. 82.

Record, Jeffrey, "It's Full of Bureaucrats Instead of Warriors." *The Washington Post*, January 1984.

Reed, Fred. "'Military Mind' Not so Prussian." *The Washington Times*, October 1984, p. 4a.

Stein, Benjamin J., "Valley Girls View the World." *Public Opinion*, September 1983, p. 18.

U. S. Army War College, *Study on Military Professionalism*, Carlisle Barracks, June 1970.

Vaughn, Thomas B. "Clausewitz and Contemporary American Professionalism." *Military Review*, December 1982, p. 39.

Wickham, John A. Jr. "The Professional Soldier and History." *The Army Historian*, Vol 4, Summer 1984, p. 1.

Wilkerson, Spenser. *The Brain of an Army a Popular Account of the German General Staff*, Carlisle Barracks: U. S. Army War College, 1983.

"Warriors: An Endangered Species." *Armed Forces Journal*, September 1984, pp. 117-118.

Appendix 3 to ANNEX L
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
I81 There will be a common core to provide officers the roadmap to progressively master the Art and Science of War. The map will show transitions in a career pattern which require mastery of common core skills needed in that period. oo The core skills will include as a minimum: - Appropriate theoretical knowledge and a set of practical skills/proficiencies oriented on "How the Army Fights" and How the Army Runs" at each level of responsibility. - The knowledge of the human dimension of combat. - A historical perspective of war. - The ability to envision futur war. oo The common core will be the basis the primary Army schools (eg., OBC, OAC, CGSC, AWC) will use to support the transition period developmental experience. This common core will be used to support training and professional developmen at units and organizations.	a. Develop common core.	TRADOC (P), USACAC ODCSOPS, FORSCOM	2d Qtr FY86	1
	b. Coordinate common core with AWC.	TRADOC (P), USACAC	2d Qtr FY86	
	c. Provide common core to all servic schools and MACOMS.	TRADOC (P), USACAC	2d Qtr FY86	
	d. Service schools implement common core for courses supporting transition periods.	TRADOC (P), USAWC	1st Qtr FY87	2
	e. MACOMS incorporate common core in all training programs.	All MACOMS	1st Qtr FY87	

NOTES:

1/ Common core development is also reflected in the various transition periods as related to other policies

2/ Common core development must be coordinated between DCSOPS, for the AWC, TRADOC for the TRADOC schools and FORSCOM for the reserve component schools.

Appendix 3 to ANNEX L
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
I82 Develop exportable simulations (wargames) for units/organizations which can be used during small unit training or off duty by the officer.	a. Determine the types of simulations required by all MACOMS to support their missions and include the common core.	TRADOC (P), all MACOMS, ODCSOPS	2d QTR FY86	1
	b. Determine the hardware requirements to support the simulation	TRADOC (P), all MACOMS, USAISC	4th QTR FY86	
	c. Develop wargame simulations.	TRADOC (P), USACAC	4th QTR FY88	2
	d. Procure hardware.	TRADOC (P), USAISC	4th QTR FY88	
	e. Distribute hardware to MACOMS.	TRADOC (P), all MACOMS, USAISC	1st QTR FY 89	

NOTES:
1/ This initiative is a component of the CCBI package which will be emphasized during Development Periods LT and CPT. Assessment of new simulations will follow some assessment cycle as other computer technologies.
2/ Computer simulations will require continuous upgrade and maintenance based upon new weapon systems deployment and mission changes.

Appendix 3 to ANNEX L
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
183 Commanders will have a program of warfighting seminars at units and in organizations focusing officers' attention on the unit/organizations mission in a wartime	a. Develop guidelines for seminars at units to include requirement to discuss common core requirements.	ODCSOPS	3d QTR FY86	
	b. All MACOM's institute unit seminars.	All MACOMS	1st QTR FY87	
	c. Incorporate simulations in the unit seminars.	All MACOMS	2d QTR FY89	1
	d. Include in the seminar program discussions on the warrior spirit.	All MACOMS	5th QTR FY89	2
184 Service school commandants will have a program of warfighting seminars focusing student attention on the branch/functional area missions in a wartime situation	a. Develop guidelines for seminars at service schools.	TRADOC (P) ODCSOPS	3d QTR FY85	3
	b. All service schools implement seminars.	TRADOC	1st QTR FY87	

NOTES:

1. Wargame simulations are covered in a separate policy.
2. Literature for the warrior spirit program and implementation are covered in the warrior spirit policies.
3. Seminars do not necessarily have to be incorporated in the course curriculum. It may be conducted after hours.

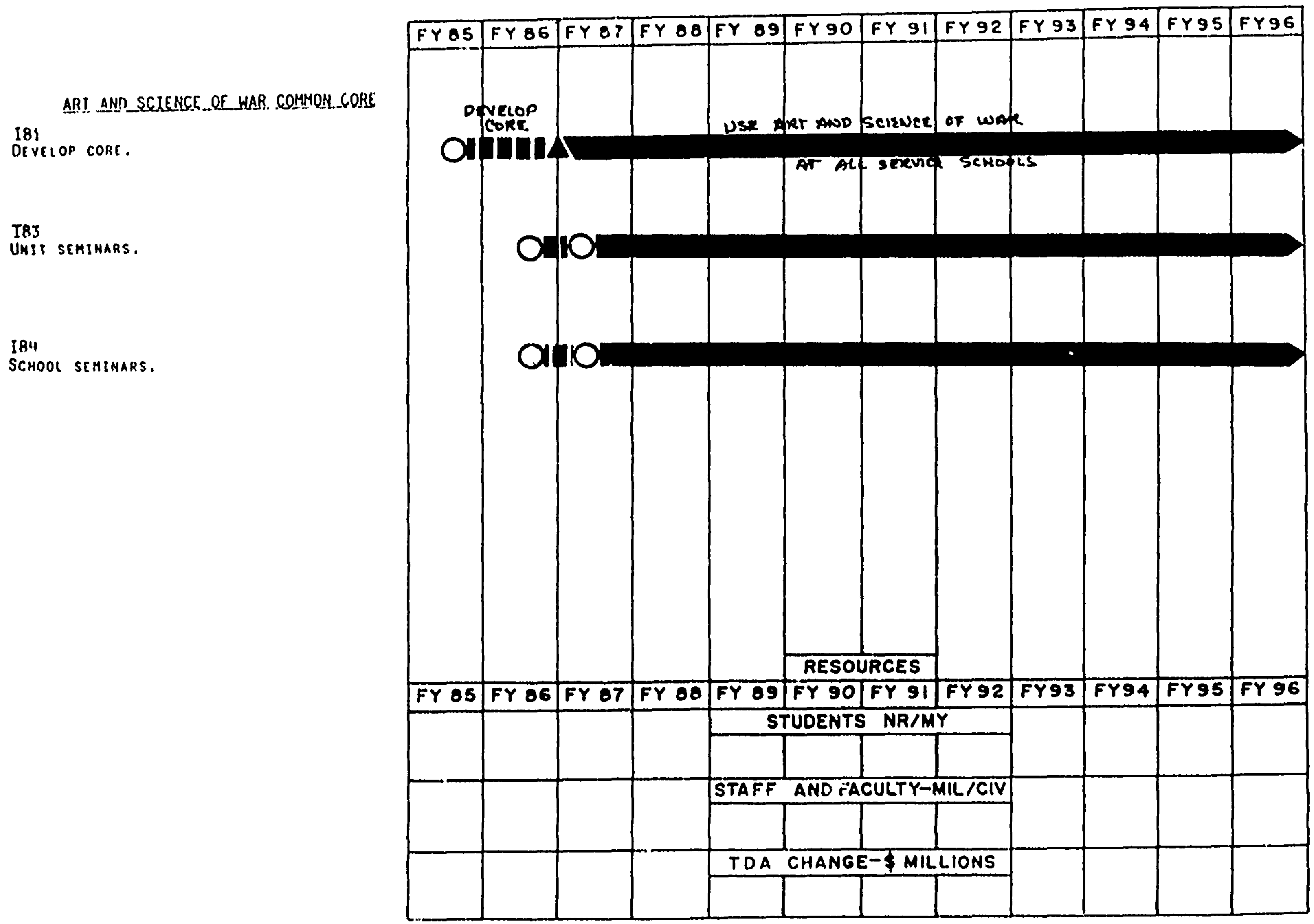
Appendix 3 to ANNEX L
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
Z11 Each branch school will provide a course of instruction, or package for field grade officers to refresh and acquaint them with the latest branch doctrine and new equipment. o All field grade OPMD managed officers will receive branch refresher prior to branch assignment from a functional area or branch immaterial assignment.	a. Design program of instruction.	TRADOC (P) Branch Proponents	4Q 85	(1)
	b. Develop refreshers packages.	TRADOC (P) Branch Proponents	2Q 86	
	c. Conduct pilot courses for branches with resident refresher.	TRADOC (P) Branch Proponents	4Q 86	
	d. Develop LOI for assignment officers to implement assignment policy.	ODCSPER (P) USAMILPERCEN	3Q 86	
	e. Implement policy.	ODCSPER (P) USAMILPERCEN TRADOC	ONGOING	(2)

NOTES: (1) Program of instruction could be either resident or non-resident as determined by the branch proponents.

(2) Costing was based on 2000 officers a year needing refresher and one half (1000) taking resident course of two weeks.

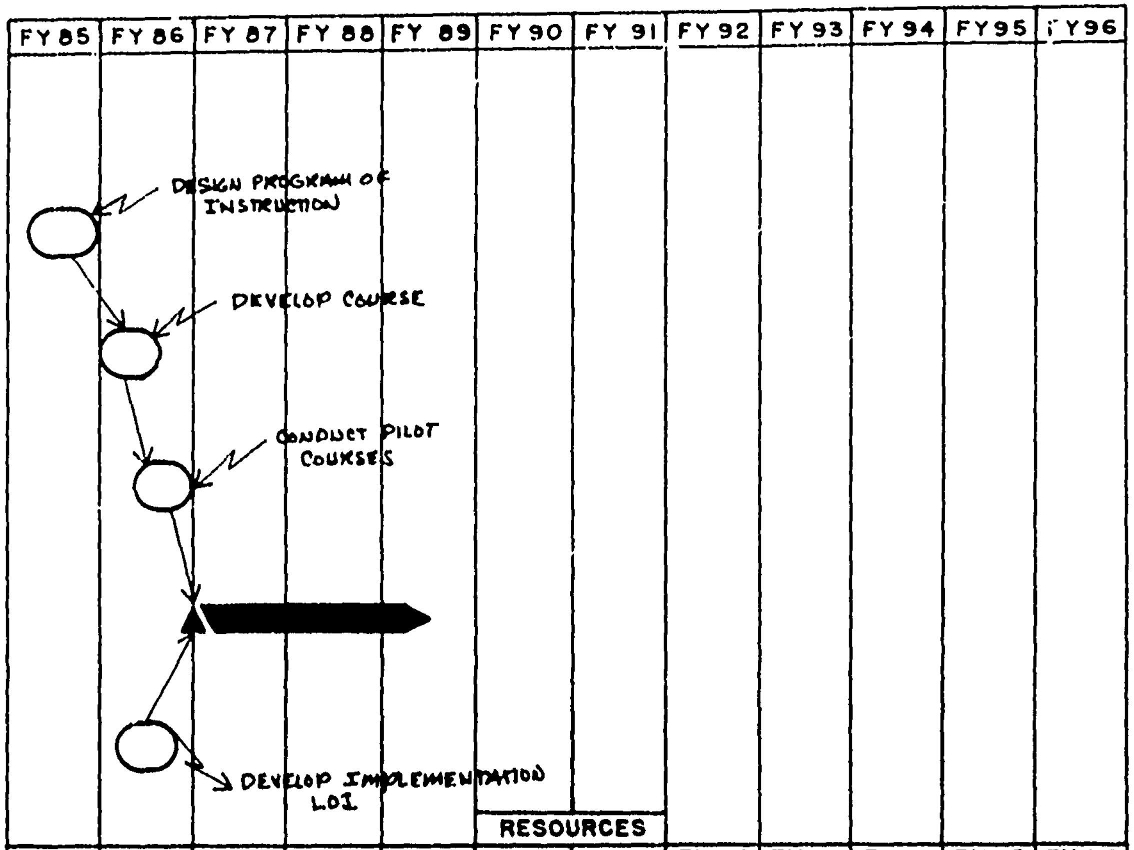
Appendix 4 to ANNEX L
Phasing Plan



Appendix 4 to ANNEX L
Phasing Plan

III

BRANCH REFRESHER TRAINING AVAILABLE FOR FIELD GRADE OFFICERS.


FY 85
FY 86
FY 87
FY 88
FY 89
FY 90
FY 91
FY 92
FY 93
FY 94
FY 95
FY 96
DESIGN PROGRAM OF INSTRUCTION
DEVELOP COURSE
CONDUCT PILOT COURSES
DEVELOP IMPLEMENTATION LOI

RESOURCES

	FY 85	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96
STUDENTS NR/MY			13	13	13	13	13	13	13	13	13	13
STAFF AND FACULTY-MIL/CIV												
TDA CHANGE-$ MILLIONS			.4	.4	.4	.4	.4	.4	.4	.4	.4	.4

Author: LTC Sims
Team Chief: COL Rowe

Annex M

Expert Integrator

1. PURPOSE. To deal with the problem of developing sufficient numbers of officers with the proper mix of skills and knowledge to meet Army requirements.

2. BACKGROUND.

a. All officers are expected to achieve proficiency in their basic branch. Subsequently, the officer prepares to become either an "expert" whose responsibilities, duties and professional contributions are in a single branch, functional area or area of concentration—or an "integrator" whose primary responsibilities, duties and professional contributions will cross branches, functional areas or areas of concentration. The goal is to develop an officer corps that is capable, competent and committed.

b. On the whole this goal has been met. In those instances where the Army has fallen short, this failure has not gone unnoticed. Articles in two magazines asked the question: "Where have all the warriors gone?" and each received much attention. Both of these articles made the argument that senior officers were oriented too much on managerial techniques and not enough on development of warfighting skills. Another set of concerns were addressed in numerous articles critical of the military's ability to manage the procurement of weapons and spare parts. Criticism from the academic community is typified by a remark of Edward Luttwaks' that: "The technological managerial education given to our young officers has become less and less useful if not actually counter-productive." While one may disagree with the criticisms, they challenge the Army to develop an officer corps that can deal effectively with an increasingly complex environment and a variety of missions. With that, we can all agree.

c. Several institutional distractors exist which affect the Army's ability to develop officers with the needed skills. These distractors are not the result of the Army's failure to recognize the demands of increasing specialization and complexity. Rather, they represent improper responses by the various management systems to meet these demands. In other words, most of the distractors result either from information the system needs but does not have, or from routines established by the system whose outputs are dysfunctional. A listing of some of the key distractors illustrates the thrust of this argument:

(1) The present authorization system (TAADS) does not accurately reflect requirements (absence of information).

(2) Criteria for assigning functional areas to officers is imprecise (absence of information).

(3) There is no commonly agreed upon definition of what constitutes "branch qualification"—particularly after the grade of captain (absence of information).

(4) The role of proponents within OPMS is not clear (dysfunctional routine).

(5) Officers do not always receive required training prior to an assignment (dysfunctional routine).

(6) Time limitations and competing career requirements often preclude officers from mastering both branch and functional area skill requirements. (dysfunctional routine)

(7) Branch and functional area pairings vary widely in common skills and compatibility thus hampers effective development in both for some officers (dysfunctional routine).

(8) The Army school system does not deliberately and progressively teach the skills required by officers (dysfunctional routine).

(9) Selection for key educational experiences (CSC and SSC) has too often been viewed as a quality cut, rather than based on need (dysfunctional routine).

d. The particular mix of cognitive skills (analytical, conceptual and integrative abilities) that an individual officer will require varies by specialty, assignment and by where the officer is in his career. These cognitive skills serve as a "catalyst." The combination of them that an officer applies to a situation will impart a particular perspective or definition of the situation—and ideally lead to appropriate action. Thus it is not enough that an officer possesses these abilities—but also that he or she is proficient in their application. A distinguished scholar, Dr Elliott Jacques, defines the application of these abilities as *cognitive power*. In a recent paper he explains its significance:

> "Cognitive power is of course not the only component of the competencies required in work. A person must also possess the psychological tools—the knowledge, experience, skill, temperament, character and values required by particular types of work. But cognitive power is of special importance when it comes to assessing the *level* of work, or responsibility, that a person might be capable of carrying in the present or at some future point."

e. There has been considerable conflict and debate over "matching-up" the most compatible mix of skills required between a branch and functional area, meeting individual officer desires and satisfying Army requirements. There are informally identified branch/functional area pairings which have a high level of compatibility with one another and which allow officers to acquire he skills they need. For example a pairing of 12/54 (Armor/ Operations, Plans and Training) is much more compatible and more easily mastered than a pairing of 12/48 (Armor/Foreign Area Officer). The problem identified by this study and others is the lack of information which would identify:

—commonality of skills required

—number and complexity of unique skills required

—time required for training and education

—peacetime versus wartime requirements

—ability to alternate assignments between skills and still remain competitive in both categories

f. Equally important as identifying what skills are needed is the issue of identifying required levels of proficiency which must be maintained. Early in an officer's career he acquires a set of branch skills which are almost immediately used. Afterwards, as shown in the figure below, opportunities for branch assignments and utilization of field grade officers decline sharply. This is particularly true for combat arms and combat support officers in the field grade ranks.

Even so, the officer is frequently reminded of the need to maintain "branch qualification." This latter term is ill-defined and means different things to different individuals. It would seem prudent that a requirement to maintain proficiency should be based on a reasonable expectation that these skills will be used. The thrust of several OPMS Study Group recommendations

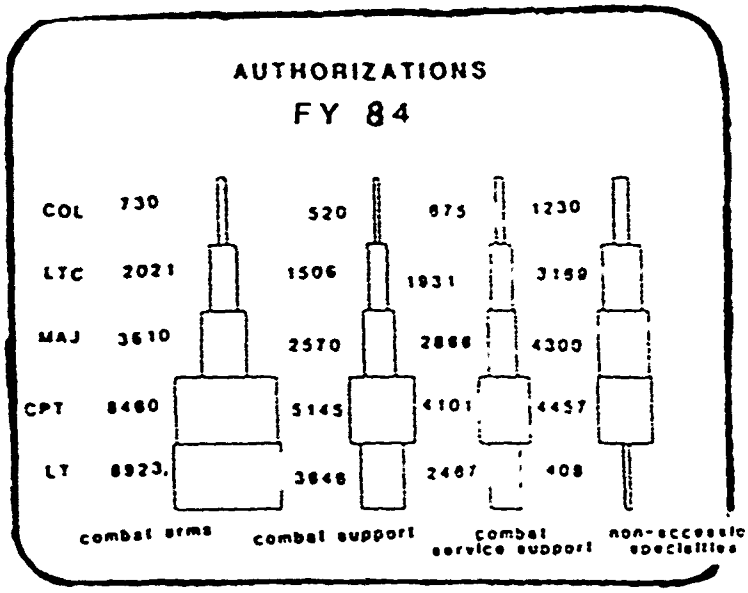


Figure M-1: Authorizations FY 84 (Source: OPMS Study Group) and this study have been in that direction. For example, the OPMS Study Group recognized the key role that proponents should play in validating branch skill requirements, developing a uniform branch qualification structure and ensuring that the qualification structure addresses branch skill requirements. Consequently, they recommended that the branch/functional area proponent concur with any changes to TAADS documents. The CSA approved this recommendation and the result should be the development of appropriate definitions of what constitutes branch qualification.

g. While there has been an emphasis on sequential balanced skill development, priority has been given to the development of integrative skills. These skills are essential to the Army officer in his role as a decision maker. Why? Integrative skills:

(1) Assist the decision maker in understanding relationships between and among various operating levels.

(2) Focus the decision-makers's attention on mission accomplishment through optimum utilization of all resources.

(3) Provide opportunities to combine capabilities to achieve synergistic results.

(4) Sensitize decision makers to the impact of external influences.

h. Requirements for integrative skills exist throughout the Army at all operating levels. For the "would-be integrator" the level of detail becomes progressively less as the officer progresses in rank. As the officer assumes higher rank and greater responsibilities, there is an increase in complexity he is called upon to manage across the entire organization. The development of integrative skills begins shortly after commissioning. The young officer quickly learns the need for coordination and the value of team-building which are the initial steps towards acquiring a mastery of integrative skills. The integrator comes to fill a contextual function: seeing the interrelationships between the various parts of the organization and utilizing this understanding to accomplish the mission. Key issues in the development of integrative skills are:

(1) Identifying individuals with exceptional integrative ability to meet Army needs.

(2) Determining the best means of imparting integrative skills.

(3) Developing assessment techniques that will effectively measure integrative ability.

i. Mastery of these skills becomes critical in preparing officers for command since at battalion level/equivalent and higher the commander has as his most important role that of being an integrator. As noted elsewhere in this report concern has been expressed regarding the professional preparation of officers for command. This is reflected in the PDOS General Officer Survey. Asked to identify the weakest area of professional development for each grade level the response most typically given was that lieutenant colonels and colonels lacked essential operational skills (e.g., integration of combined arms elements, management of battlefield resources)—in short, a lack of integrative ability. An obvious and simple solution to overcoming these deficiencies is to create more opportunities for achieving "systems proficiency." In this case, "systems proficiency" means nothing more than identifying and providing those skills needed at each level and practicing their use until they are mastered. The more time spent in practice and repetition, the greater the level of proficiency. Once this is achieved an officer will know how to get the maximum out of the soldiers, machines, and resources for which he is responsible. On the battlefield this will mean a synergistic employment of battle systems and the soldiers who employ them.

j. The need for integrative skills is not restricted to commanders. These skills are also needed in functional areas—which would first appear to be the domain of "the expert." This is true only in a few cases. The majority of these officers are really "functional generalists," (e.g., individuals whose duties are primarily of an integrative nature within the functional area). The president of the 1986 Project Manager Selection Board (LTG Robert L. Moore) recently noted that, "We are looking for top notch acquisition managers, not just engineers..." additional recognition of the need for integrative expertise. Similarly, other field grade officer assignments involve tasks and responsibilities that cross organizational boundaries. Field grade officers are frequently involved in actions where success is dependent upon "selling" an idea/proposal to someone outside their immediate organization. Integrative skills help impart an understanding of the other individual's point-of-view—thus make success more likely. Recognition of the importance of developing integrative skills is apparent in several PDOS recommendations.

3. RECOMMENDATIONS. As PDOS group developed policies in their respective areas, they also developed policies addressing the issue of "expert integrator." Similarly, the OPMS Study Group researched the problem with emphasis on functional expert requirements. Their recommendations, pertinent to this issue, proposed conducting a "scrub" of authorization documents (define requirements), returning to the branch concept of management (simplify the management process) and identifying specific requirements for single and sequential tracking of selected officers (provide flexibility in meeting Army requirements). PDOS also examined this facet of the issue but focused on the development of "integrator" skills. The PDOS recommendations fall under four broad headings:

a. Identify skill requirements by job: Identify in TDA and TOE units what skills are required by branch, functional area, grade etc.

b. Emphasize sequential, progressive development: Priority is given to ensuring all officers first become branch qualified and then subsequently receive training in a functional area as appropriate. Efforts will be made to "pair up" branch skills and functional areas that are most compatible with one another. Assignment of a functional area will consider the officer's branch skills, complexity of the functional area, the officer's preference, Army requirements and any available assessment data.

c. Establish standards of proficiency that can be understood by all: Clarify for officers what branch proficiency they are expected to maintain when serving outside their branch, especially if for an extended period of time, i.e., in a functional area or as a senior officer in staff/integrator positions.

d. Increase opportunities for development of integrative skills: Policies under this heading provide increased opportunities for MEL 1 and MEL 4; provide improvement to general officer transition training and consolidate management of General Officer Education and Training. (A complete listing of OPMS and PDOS recommendations are at Appendix 1 and 2 respectively). These policies and recommendations seek to foster the development of officers, in the appropriate numbers, with the skills and abilities needed by the Army. Several factors impact on the Army's ability to accomplish this. Most significant is the absence of information which would identify officer skill requirements, required levels of expertise and development opportunities. Other serious deficiencies include a lack of consistency between existing requirements, imprecise definition of key terms and a failure to clearly define responsibilities of key participants in the officer professional development process. PDOS recommendations, along with those of the OPMS Study Group, propose solutions that seek to overcome these shortfalls and will provide the Army with the experts and integrators it needs.

4. CSA REMARKS. Base policies were approved in concept

Appendices

1 Supporting PDOS Policies.
2 Supporting OPMS Recommendaions.
3 Bibliography.

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Team Chief: COL Rowe

Appendix 1 to Annex M

PDOS Policies in Support of "Expert-Integrator" Issue

Development Period 1

Policy #	SUBJECT
J-10	Officer Basic Course
J-11	Assnt of Lieutenants

Development Period 2

Policy #	SUBJECT
J-20	Officer Advance Course
J-21	Officer Advance Course
J-22	Branch Qualification
J-23	Utilization of Former Battalion Commanders
I01	CAS3
I12	Eligibility for Advanced Civil Schooling
I13	Branch Qualification
I14	CAS3 (Reserve Components)
I15	Utilization of Former Battalion Commander
I17	CAS3 (RC Correspondence Option)

Development Period 3

Policy #	SUBJECT
I02	MEL 4 (Required Completion)
I06	MEL 4 (Alternative Opportunities)
I07	MEL 4 (Emphasis on Warfighting Skills)
I16	MEL 4 (Emphasis on Warfighting Skills)
I10	MEL 4 (Advanced Military Studies Program)

Development Period 4

Policy #	SUBJECT
S01	MEL 1 Opportunities
S02	MEL 1 Opportunities
S03	MEL 1 Warfighting Module
S04	Curriculum Coordination (AWC/CAC)

Development Period 5

Policy #	SUBJECT
S31	BG Transition Program
S32	Consolidation of GO Professional Development
S34	GO Professional Development Opportunities

Development Period 6

Policy #	SUBJECT
S51	LTG Transition Program

Art and Science of War

Policy #	SUBJECT
I81	Professional Development Roadmap
I82	Use of Wargames/Simulations
I83	Warfighting Seminars (units)
I84	Warfighting Seminars (service schools)
I85	Revision of Military Courses
I86	Civil Schooling Opportunities
I87	RC Full-time Support Officers

Mentor

Policy #	SUBJECT
081	OER entry re: Potential for Instructor Duty
082	Instructions to Promotion Boards
083	Progressive Training
084	Strategy for Army School System
085	Faculty Mentors
086	Senior Mentors
087	Mobile Training Teams
080	Core Military Skill and Knowledge

Self-Development

Policy #	SUBJECT
J91	Professional Development Program
J93	MQS System

Decision Making

Policy #	SUBJECT
F91	Officer Distribution
F95	Emphasis on Decision Making Skills
I59	Army Civil Schooling Policies

Common Shared Operational Language

Policy #	SUBJECT
I90	Development of Standard Terms
I91	Use of Technology

Control and Coherence

Policy #	SUBJECT
O95	Assessment Program

Author: LTC Sims
Team Chief: COL Rowe

Appendix 2 to Annex M

Summary Of OPMS Study Group Recommendations In Support Of "Expert-Integrator" Issue

STRUCTURE:

That ODCSPER approve the establishment of three immaterial position codes to identify officer positions.

That ODCSPER coordinate a one-time review by the proponents, with input from the HQDA staff and the MACOMs, to determine which battalion staff positions should be branch coded and which should be functionally coded, for each type battalion.

That the ODCSOPS develop guidance for and direct a detailed review and update of all commissioned officer positions in TAADS.

That a detailed review and update of all commissioned officer positions in TAADS to identify commissioned officer positions.

That ODCSOPS develop procedures to lengthen the time between submission of future changes and the effective date of those changes, so that they are submitted prior to the POM for effective dates in the first program year or later.

That ODCSOPS change AR 310-49, TAADS, and establish procedures requiring the branch/functional area proponent to concur/nonconcur with any changes to TAADS documents prior to submission to HQDA for approval.

That once proponents are identified for each skill, ODCSOPS direct a review of all skill requirements by the proponents, allow top loading of document where necessary, and then require proponents to monitor changes to the documenting of skills.

PROFESSIONAL DEVELOPMENT & SELECTION:

That ODCSPER approve a policy change which will prohibit the designation of a branch-related initial entry specialty as an additional specialty and substitute a policy of single tracking a portion of the officer corps. Force Alignment Plan III, approved by the Chief of Staff of the Army in Mar 84, will utilize branch transfers (involuntary if necessary) to assist in solving the authorizations inversion problem.

That ODCSPER direct MILPERCEN that officers selected from below a board initial "best qualified" determination, solely to satisfy floors, will be thereafter single tracked in that branch/functional area.

That ODCSPER change policy concurrent with the impliemntation of the OPMS Study recommendation to restore primacy and instruct selection boards to meet floors only with officers designated prime in that branch/functional area.

PROPONENCY:

That ODCSPER designate proponency as appropriate for each functional area and skill. Delete any skill for which there is no proponent available or identifiable.

That ODCSPER require the proponents to concur/nonconcur with any changes to positions involving their branch, functional area, or skill in TOE, MTOE, or TDA organizations.

That ODCSPER expand AR 600-3 to clarify the relationship between MILPERCEN and the proponents for professional Development, strength management, and assignment of officers. Proposed updated AR 600-3 is attached to finding.

That ODCSPER revise the definitions in the appropriate regulations to reflect the elimination of specialty codes and the establishment of branch, functional area, areas of concentration, and skill.

That MILPERCEN develop policies which designate branch as "primary" for each officer initially; later allow some dual tracked officers to hold their functional area "primary" to meet the needs of the Army and coincide with their qualifications and preferences.

That ODCSPER substitute branch, functional area, area of concentration, and skill for specialty code, specialty skill identifier, and additional skill identifier.

That MILPERCEN manage officers, to include identification of positions, officer skills, qualifications, schooling, and officer assignments at the branch and/or functional area.

That MILPERCEN develop officers in different career patterns to meet Army requirements through single, dual and sequential tracking.

That ODCSPER limit each branch to only one entry designation window for combat arms, combat support arms, and combat service support at different points to meet group needs and when the Army requirements dictate the designation be made.

That MILPERCEN designate functional areas only when the officer becomes qualified through education, training, or experience, normally after initial assignment and no later than at promotion to lieutenant colonel.

That MILPERCEN prohibit functional area designation into another branch.

That MILPERCEN designate officers in functional areas to meet Army requirements.

That ODCSPER and MILPERCEN include information regarding branch and functional area compatibility in appropriate Army Publications as guidance for proponents and Army officers (i.e., DA Pam 600-3, LOI regarding functional area designation process).

That ODCSPER survey the proponents and officers regarding branch and functional area compatibility on a periodic basis in support of recommendation 11.

That ODCSPER approve the revised Officer Classification System.

That MILPERCEN review their internal management organization to determine which changes should be made to adjust to the approved OPMS changes.

Author: LTC Sims
Team Chief: COL Rowe

Appendix 3 To Annex M

Bibliography

Jacques, Elliot, "Stratification of Cognitive Complexity," research paper for the US Army Research Institute for the Behavioral and Social Sciences (Grant No. DAJA 37-80-C-007).

Luttwak, Edward N, "On the Meaning of Victory," The Washington Quarterly, Autumn, 1982.

Newsweek, "The New Warriors", 9 July 1984.

The Washingtonian, "Where Have All The Warriors Gone?" July 1984.

Author: LTC Kasik
Team Chief: COL Isaac

Annex N

Common Shared Operational Language

1. PURPOSE. To outline the need for increased emphasis on a common shared operational language in military decision making, operations, and education and training.

2. DISCUSSION.

a. Background.

(1) Common shared operational language is those doctrinal terms and processes such as the estimate of the situation, operations plans and order format, and radio telephone procedures, which provide a clear and rapid transmission of the commander's intent. It is a tool of the profession by which a commander or leader expresses his intent or needs in action-oriented terms to conduct the art and science of war. In doing so he relies on a broad base of proficiencies, knowledge and expertise in himself and others. The ultimate goal is to allow the commander to express his intent in clear terms to achieve victory in battle.

(2) Future war will be very rapid and complex, requiring clear and concise identification and analysis of requirements, and communication of the commander's intent. Commanders and staff must share a common understanding to operate quickly enough to stay inside their opponent's decision cycle. A body of doctrinal terms and processess currently exists in our Army to aid this need. These terms and processes tend to facilitate and expedite communications and orientation. However, some are not always applied universally to the same standard and some definitions are inconsistent from one publication to another.

(3) Training observations from the National Training Center have indicated that all echelons rarely understand the intent of the commander. While some subordinates may understand, it is rare that all subordinates will have the same distinct understanding of those actions necessary to successfully accomplish the mission. The result can be confusion and poor execution. Without clear understanding by subordinate commanders, command and control is complicated and degraded during the heat of battle. Orders do not generally indicate a clear picture of the operation.

(4) The speed and complexity of future war points to a need to improve and refine the Development and use of a common shared operational language. However, a caution is in order since excessive control or regimentation of common operational terms and graphics can stifle imagination and innovation and make it easier for enemy forces to template our expected courses of action.

(5) Common shared operational language should facilitate and support decision making at all echelons. It should support distributed decision making as outlined in Senior Leadership (working papers) ARI. A common shared operational language should foster correct decision making by a large number of leaders throughout the command in consonance with the intent of the commander. In the context of distributed decision making, a common shared operational language should directly support:

(a) A shared sense of purpose.

(b) An agreement between shared and operating values.

(c) A commonsense orientation.

(d) Shared frames of reference.

(6) To continue to develop and refine a workable common shared operational language, schools, units and organizations should use the same doctrine, terms, and frames of reference. Commanders should be taught and should be expected to establish a common understanding within their organizations to support distributed decision making. Commanders and staffs should write and speak about all plans, orders and other directive communications in a common format with a common language. Testing for proficiency in the art and science of war at all levels should

be done in common operational terms. Common shared operational language should serve as a supporting tool for a systematic and progressive program that is appropriate for each professional Development period.

b. Findings.

(1) The system is not broken but does need emphasis and continuing attention.

(2) There is a body of doctrinal terms and processes in our Army which facilitate and expedite communications and orientation.

(a) Terms and processes are not always applied universally to the same standard.

(b) Some definitions are inconsistent.

(c) Desire for results (substance over form, use of initiative) may inhibit a common language.

(d) A rigid operational language may inhibit initiative and inventiveness.

(3) A "common language" is taught in schools.

(a) Based on doctrine, common thread, integration in common scenario.

(b) Varied interpretations sometimes occur.

(4) The aim of a common shared operational language should be to allow the commander to:

(a) Establish the mission context and a frame of reference.

(b) Communicate his intent in clear, concise terms to all concerned (up, down, laterally). Thereby units and individuals will know and understand the concept, be able to adjust rapidly to changes, and continue successfully in the absence of further instructions.

(5) Major thrusts for the Army to follow in the refinement of a common shared operational language are:

(a) Doctrine/terms/frames of reference cordinated between schools.

(b) Emphasize basic educational competencies to achieve a firm foundation for effective communication.

(c) Be consistent with Joint/Combined operational language.

3. RECOMMENDATIONS. The following base policies will be established and implemented in order that the aims and major thrusts listed above are met and continued as part of an ongoing, long-range action.

a. Doctrine, standardized terms and frames of reference to support a common shared operational language will continue to be developed and refined by TRADOC.

(1) Emphasize the Development of common frames of reference and shared operational language at each level throughout formal Development systems.

(2) Emphasize common understanding and use of estimates of the situation, operational plans and orders, and action-oriented operational terms and graphics that enable the commander to clearly and quickly express his intent.

(3) Common shared operational language will be integrated with the Joint Operation Planning and Execution System to facilitate joint operations.

(4) Proficiency testing in the art and science of war will be done in terms of the common shared operational language.

b. New tools will be developed to exploit the use of latest technology in automated systems to enhance communications and decision making in terms of a common shared operational language.

4. CSA REMARKS. The base policies were approved in concept.

Appendix

1 Bibliography

Author: LTC Kasik
Team Chief: COL Isaac

Appendix 1 To Annex N

Bibliography

Senior Level Leadership, Working Papers ARI.

US Army Forces Command, National Training Center, Training Observations, Fort McPherson GA.30330, 18 Nov 82.

Author: LTC Pennington
Team Chief: COL Johnson

Annex O

Common Core

1. PURPOSE. To describe a common core of officer attributes, skills and knowledge which can be incorporated throughout all professional Development levels.

2. DISCUSSION.

a. A common core of officer attributes, skills, knowledge and proficiencies extends through all levels of professional Development. From the time an individual makes a decision to pursue a career in the military, he begins to adopt certain characteristics that exemplify the Army officer: high professional values; a warrior spirit; a mastery of the art and science of war; leader/mentor; an action-oriented thought process: and a broad base of general knowledge. All of these characteristics are components of the common core. The professional Development system must support the officer with training and education to nurture this common core so that it can grow as the officer's career progresses.

b. The common core should be based on the PDOS developed Fundamental Principles of Officer Professional and Leadership Development. This common core is best initiated and reinforced during a resident-schooling experience and serves as the common base for further, specilized Development of officers. Definition of the common core provides officers with a professional Development guide for what they must be, should know and should be able to do.

c. The grouping of these attributes, skills, knowledge and proficiencies into common-core components identifies the general areas of concentration to be further refined over time. Initially, the following components and suggested subelements should be addressed in the Development of the common core.

(1) Professional Values:

-Loyalty to the Nation
-Loyalty to the Army and the unit
-Worthy of special trust
-Courageous
-Self-disciplined
-Character and Integrity above reproach
-High ethical standards
-Commitment to excellence in their profession
-Exhibits selfless service

(2) Warrior Spirit:

-Physically and mentally tough
-Self-confident
-Exceeds standards
-Calm and courageous under stress
-Action-oriented
-Skilled in fundamentals of weapons and tactics
-Accepts responsibility for protecting the nation

(3) Mastery of the Art and Science of War:

-Knows how the Army fights
-Has historical perspective
-Envision what war would be
-Skilled in tactics
-Knows how the Army runs
-Recognizes human dimension
-Technically competent
-Skilled in strategy

(4) Leader/Mentor:

-Develops and cares for subordinates
-Is a Role Model
-Coaches
-Teaches
-Guides
-Advises

(5) Action-Oriented Thought Process:

-Intellectual agility
-Expands cognitive skills
-Makes timely decisions
-Takes bold and decisive action

(6) Broad Base of General Knowledge:

-Knows national heritage
-Knows environment
-Knows potential enemies
-Remains current in world events

d. These components of the common core must be introduced to all military courses from ROTC/USMA/OCS through OBC, OAC, CAS3, CSC, SAMS and SSC. The common core is the thread that ties together the things that all officers should Be, Know and Do.

e. As programs recommended by this study are implemented, a relationship must be established between common-core components and individual assessment program categories via required skills, proficiencies, knowledge and attributes to ensure that the school evaluation process and individual assessment program are complementary. In addition, the Self-Development program and its relation to the common core must be addressed. Specifically, the critical common tasks defined by the MQS system (MQS I through MQS V) must be incorporated in the common core so that MQS is coordinated within and between all professional Development levels.

f. The aim for the common core is to identify those fundamental elements common to all officers, regardless of branch or functional area, and ensure that they serve as the common core for the education and training system.

g. The major thrusts in this area are to:

Identify for each development period the knowledge, skills and attributes expected of an officer — i.e., those things he must BE-KNOW-DO.

Incorporate a common-core curriculum throughout the school system.

Institute Self-Development/individual-assessment programs to support the common core.

3. RECOMMENDATION. The basic policies developed for the common core are to:

a. Develop and define the content of the common core, identifying the attributes, skills, knowledge and proficiencies which provide for what an officer must be, should know and should be able to do across all Development levels (see Appendix 1).

b. Incorporate common-core curriculum in all levels of schooling from pre-commissioning through SSC (see Appendix 1).

4. CSA REMARKS. CSA approved, in concept, the base policies for the common core.

Appendices

1 Common Core
2 Action Plan
3 Phasing Plan

Author: LTC Pennington
Team Chief: COL Johnson

Appendix 1 to Annex O

Common Core

1. PURPOSE. To provide supporting policies and rationale to support the recommendations of this annex.

2. DISCUSSION.

a. At the current time, there is no common core of instruction that is included in each course in the officer education/training system. Prior to January, 1985, there was no requirment for commonality at any one level of military schooling such as at the entry level (OBC) and definitely not between CSC and SSC. As of January, 1985, the new 20 week OAC resident course is required to have a common core so that OAC graduates will have received comparable training in those areas initially identified as common to all officers at the captain level. This is a positive step in the right direction and the common-core concept is being further reinforced by the introduction of a common core in OBC.

b. The approach thus far has been a good start but it does not go far enough and it does not address the total education and training system. It also is being approached in different manners by different proponents, e.g., some schools are presenting the OAC common core in modular form while others have interspersed the learning objectives of the common core throughout the course. The best method of presenting the common core must be determined and instituted in courses at the same level (e.g., OBC or OAC)and must be consistent with courses presented at different levels (e.g., OAC and CSC level). Further, the actual attributes, skills, knowledge and proficiencies that extend throughout an officer's career must be identified for all levels and an overall system, tied together through a common core, and must be implemented.

c. The common-core approach, especially in the modular format, will greatly facilitate education and training for officers that branch transfer after attendance at their first branch OAC. They need only to take those courses particular to their new branch to bring them up to a comparable level with their peers. It also facilitates education/training for Reserve Component officers who take the OAC in a non-resident mode. Common-core modules can be transported to the RC officer or can become a part of the required resident portion of the course.

d. The first step in establishing a common core is to identify the components of the common core that extend through all professional Development periods. Thus, the following policy:

> Develop/define the content of the common core, identifying the attributes, skills, knowledge and proficiencies which provide for what an officer must be, should know and should be able to do across all Development levels.

(1) The common core must have a stable foundation that is constant and consistent over time. Therefore, the common core will be designed so that it incorporates the fundamental principles of officer professional and leadership Development.

(2) Not all aspects of the common core need to be tied to the resident school system so it must be determined which elements will be part of the common-core curriculum at each of the branch schools, CAS3, CSC and SSC and which will be part of the self-Development process. Those critical common MQS tasks that link the MQS system together between the various MQS levels will become part of the common core.

(3) The common core will be coordinated with the individual assessment program but not every aspect of the common core must be assessed. Therefore, those elements of the common core that should be incorporated into the individual assessment program must be identified.

e. After the contents of the common core have been identified, implementation within the school system must be accomplished. Thus the following policy was developed:

Incorporate common-core curriculum in all levels of schooling from pre-commissioning through SSC.

(1) Implementation of the common core will require a coordinated effort over a period of about five years. In order to properly direct this effort, a single responsible staff agency will be given the implementation mission. In this light, the following actions are felt to be necessary for a successful program.

(2) To ensure that the common core is introduced uniformly, the responsible staff agency will monitor and direct the development and implementation of the common core. This will ensure continuity between courses from pre-commissioning through SSC and will ensure continuity between the common core, Self-Development and individual assessment programs.

(3) The responsible staff agency will also determine the best method of presenting the common core—modular, integrated or a combination of both—and ensure that the common core is presented uniformly for each course level and is coordinated between course levels.

(4) To ensure that this will be a living system, responsive to the changing needs of the officer, the responsible staff agency will develop and publish a method by which a common-core component can be added or deleted from the common core.

(5) To provide a guide for the officer as to what he should be, should know and should be able to do, the common-core concept will be incorporated in the professional development roadmap and will be periodically updated.

f. The detailed implementation plan with supporting actions, responsible agencies and required completion times is at Appendix 2.

Appendix 2 to ANNEX O
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
J70 Develop/define contents of Common Core identifying those attributes, skills, knowledge and proficiencies which provide for what an officer must be, should know and should be able to do across all development levels. Design Common Core so that it incorporates the Fundamental Principles of Officer Professional Development.	a. Components of the Common Core will include as a minimum: -Professional Values. -Warrior Spirit. -Leadership/Mentoring. -Art and Science of War. -Broad General Knowledge. -Action Oriented Thought Process.	a. TRADOC	a. 4QFY90	
	b. Determine which elements of the Common Core will be part of the Common Core curriculum in the schoolhouse and which will be part of the self-development program. o Ensure that those critical common tasks indentified for MQS I through MQS V are incorporated into the Common Core.	b. TRADOC	b. 1QFY89	
NOTES				

Appendix 2 to ANNEX O
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
	c. Determine which elements of the Common Core should be incorporated into the individual assessment program.	c. TRADOC	c. 1QFY89	
J71 Incorporate Common Core Curriculum in all levels of schooling from precommissioning through SSC.	a. Designate a responsible agency to coordinate the implementation of the Common Core into the school system.	a. TRADOC	a. 1QFY87	
	b. Task responsible agency to monitor Common Core POIs throughout school system to ensure continuity between courses--Precommissioning programs, OBC, OAC, CAS3, CGSOC and SSC.	b. TRADOC	b. 1QFY87	
	c. Determine best methods of presenting the Common Core--modular, integrated or combination of both -- and ensure that the Common Core is presented uniformly for each course level and is coordinated between course levels.	c. TRADOC	c. 1QFY90	

NOTES

Appendix 2 to ANNEX O
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (I. PRIMARY RESP.	REQUIRED COMPLETION	NOTES
	d. Task responsible agency to monitor relationship of schoolhouse and self-development Common Core requirements to ensure coninuity.	d. TRADOC	d. 1QFY87	
	e. Task responsible agency to develop and publish method by which a Common Core component can be added or deleted from the Common Core.	e. TRADOC	e. 1QFY90	
	f. Incorporate Common Core concept in a Professional Development Road Map to provide a guide for what an officer must be, should know and should be able to do.	f. TRADOC	f. 1QFY90	

NOTES:

Appendix 3 to ANNEX O

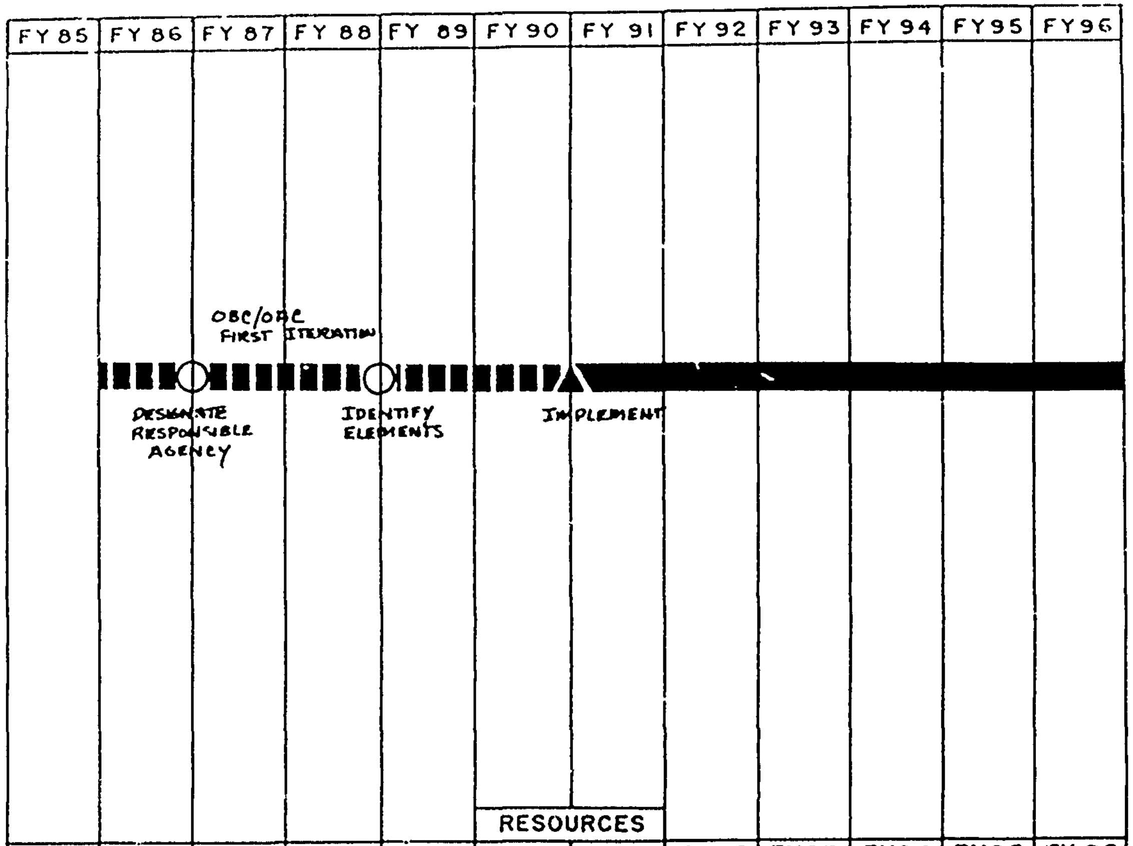
PHASING PLAN

COMMON CORE

J70
DEVELOP/DEFINE CONTENTS OF COMMON CORE IDENTIFYING THOSE ATTRIBUTES, SKILLS, KNOWLEDGE AND PROFICIENCIES WHICH PROVIDE FOR WHAT AN OFFICER MUST BE, SHOULD KNOW, AND SHOULD BE ABLE TO DO ACROSS ALL DEVELOPMENT LEVELS.

DESIGN COMMON CORE SO THAT IT INCORPORATES THE FUNDAMENTAL PRINCIPLES OF OFFICER PROFESSIONAL DEVELOPMENT.

J71
INCORPORATE COMMON CORE CURRICULUM IN ALL LEVELS OF SCHOOLING FROM PRE-COMMISSIONING THROUGH SSC.



RESOURCES

	FY 85	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY93	FY94	FY95	FY 96
STUDENTS NR/MY												
STAFF AND FACULTY-MIL/CIV												
TDA CHANGE-$ MILLIONS			.05	.05	.05	.05						

Authors: COL DUNN/COL POLO/
LTC STOUT/DR PENCE
Team Chief: COL Dunn

NOTE: The reader is encourged to read Chapter 4 of Main Report (Vol I) prior to reading this Annex to obtain the background on Adult Learning and Decision Making Theory.

Annex P

Education and Training Methods

1. INTRODUCTION.

a. The officer corps is faced with ever more complex challenges. The trends of increasing complexity and rate of change are not likely to decrease in the foreseeable future. Today, officer professional development, and more specifically, the education and training components, are driven by where one learns—at a service school, through occasional excursions into correspondence courses, or civil schooling to obtain a degree or added training. As the complexity of an officer's environment increases, so does the stress of living in that environment. The pressures to keep-up, stay current and comprehend the proper utilization of more complex systems, all add to time pressures which make it difficult to ponder, reflect and draw insights about the profession. We are approaching a state of "undoability."

b. It is no longer realistic to think that a few years of college or graduate school is an adequate foundation for a lifetime of service. There is too much to learn and retain for the status quo education and training system to remain intact. A thoughtfully created and executed program of ongoing, *continious* training and education is required of every officer to avoid having his knowledge become obsolete. A lifestyle of life-long education is a must, not an option. An officer must be *expected* to study, not just allowed to.

c. The PDOS desired professional development system seeks to meet today's education and training challenges through an evolutionary movement toward an "education and training life-style model." The principal ways this is achieved is through active involvement by all major actors in the professional development process—the individual officer, the mentor in the school and in the unit, the unit and organization and the school. These players use an array of methods to achieve the desired BE-KNOW-DO outcomes. Collectively, these methods must help make success at education and training achievable. Successful methods are defined as those which:

(1) Provide a disciplined way to group knowledge and skills so they can be effectively learned.

(2) Help the officer learn the knowledge and skills faster and retain them longer.

(3) Make things *simpler* so officers make smart decisions at the right time.

d. The PDOS education and training methods strategy seeks to provide the major players the means to successfully meet today's and tomorrow's challenges. These means use both traditional education and training technologies as well as electronic methods. The mentorship portion of the study (VOL III, Annex I) will deal in some depth with this vitally important method to aid in professional development. Other important "non-electronic" methods are addressed throughout each development period [e.g., field training, exercises at the National Training Center and throughout the Army, professional reading, case studies, face-to-face seminars, etc.]. The intent of the PDOS effort is to stress both the proven conventional methods and those advanced computer technologies which are determined to be most promising in assisting officers to meet today's and tommarow's challenges. As advanced computer technologies are less developed than noncomputer techniques, the major focus of this annex is directed toward the "tech" applications. These must be used to their full potential in making success achievable on the battlefield.

2. PURPOSE.

a. To describe which computer technologies and non-electronic methods should be emphasized during each officer development period in support of the professional development roles of all major participants and the varied training and education needs of officers.

b. To define what new initiatives and policies are necessary which, when implemented, will enhance the efficient and effective use of computer technologies in support of the overall PDOS education and training strategies.

3. Discussion.

a. Background.

(1) Definitions:

(a) PDOS education and training methods: Are those which should be emphasized to support the individual officers, units and organizations and unit and school MENTORS in performing their professional development roles during each development period.

(b) TRAINING: Involves learning some specified pattern of behavior. The result is performance involving a skill. Training teaches someone how to perform a task. It transmits past experience or "known" knowledge.

(c) EDUCATION: Involves how to think and decide. It involves new concept formulations. The result is development and growth of the individual. A result of education is the acquisition of insights—an understanding of the meaning of concepts; an understanding of how to articulate one's intent and frame of reference; and, an understanding of context. The distinction between training and education is important in that it permits a comparison of present with future needs for the Army and this distinction underlies the general thrust of this annex.

(d) COMPUTER COMMUNICATION-BASED INSTRUCTION (CCBI): Is the umbrella term used in the PDOS analysis for the family of electronic technologies used in training and education. The word "communication" is added to the more common term, CBI, as communications technologies are now inseparable from those associated with the more traditional educational uses of the computer.

(e) COMPUTER LITERACY: Is the knowledge of what a computer is and the functions it may perform. One who is computer literate has the ability to apply computer-related terms, concepts and capabilities to one's job. Computer literacy skills equate to oral and reading skills. The concept of computer literacy in an education setting is not simply learning to manipulate a word processor or spread sheet nor is it learning how to program a computer. Those tasks are skills-based which are learned through training. Within an educational context, computer literacy refers to the capability to use the computer as a tool for gathering, processing and communicating information related to the learning process. In one's organizational setting, it refers to using it for intelligent application and amplification of learned knowledge and skills.

(f) ARTIFICIAL INTELLIGENCE (AI): Is the science of giving human-like learning and thinking qualities to machines. Although there are a number of sub-fields in AI, the major focus of the PDOS education and training methods analysis is on the use of AI for knowledge acquisition and retention and the application of AI to provide a new level of speed and simplicity to the decision-making process.

(2) Assumptions:

(a) We are at the leading edge of the electronic technology revolution. Electronic technology is not now sufficiently advanced to proliferate its development and use in an organizational environment, however. Computers have been in wide use for only about 25 years. The first decade in which computers were used saw supplementation of accounting and clerical functions. In the 1970's, the emphasis was moved up in the organization to aid first-line operational personnel. The earliest attempts to use computers for educational purposes were fledgling trials that had only limited success. In the 1980's, a third wave of complex applications has begun which has assisted users in higher-level functions such as learning, concept acquisition and development of decision-making stategies.

(*1*) It is appropriate, therefore, to pursue the development of computers to assist in officer professional development in the school environment.

(*2*) The PDOS computer development stategy proposes a three-phase process for the implementation of a typical development cycle for advanced education computer tehnology. The process begins in one or more schools as a pilot project, goes through an assessment phase and then reaches a decision point where expansion options are considered (e.g., to other schools, to special branches, to Reserve Components, collaboration with civilian higher education, with other services, and even to individual officers' homes for their personnal (and family use). See Figure P-1.

(b) We must invest in technologies which increase our human capability. We are not limited to simply teaching officers how to use technology to learn subject material faster. Rather, we assume that we must make technology a natural expansion of the officer's environment in a peacetime or wartime setting.

(c) We must use CCBI to assist commanders, staffs and key decision makers in making sound decisions in a high-stress, fast-paced, rapidly-changing, complex environment. Without some aids being made available to discipline the officer's decision process, the officer will take many "short cuts" in that process. If developed properly, CCBI will help discipline that process and thereby minimize an officer's imprudent short cuts while increasing the tempo of decision making in the combat and peacetime decision-making cycle.

(d) Resource assumptions:

(*1*) In those cases where it cannot be objectively shown that losses to effectiveness will outweigh gains in efficiency, there will be heavy DoD and Congressional pressure to consolidate among the services these functions and tasks not unique to the land, sea or air battle. The expenses and long-term commitment associated with computer technologies will be particularly scrutinized for pooled resource opportunities.

(*2*) The various services will be expected to look to civilian institutions of higher learning and to their service research agencies to assist in the orderly transition from the existing "book and oral-based" educational models to an educational system based on the addition of computer and other technologies.

(*3*) Pressure will increase to provide Reserve Component units and personnel with rapid and efficient training and education assistance using computer technologies. It is assumed that the factors which have been determined to be important to economically justify computer learning techniques will be met. Automated training techniques have proven to be highly economical when the following general conditions are met.* Other recent researchers have noted additional factors as important to student efficiency and learning comprehension, however, this list appears common to all of the reference sources investigated:

(*a*) There is no significant change in the learning objectives to a target course for a minimum of three years during the development of the computer-based courseware and after the fielding of the training package.

(*b*) There is a student population base of sufficient size to amortize courseware development and hardware acquisition costs at an acceptable budget ratio.

(*c*) The automated learning courseware is accessed by users without undue negative environmental experiences (e.g., requiring that students time-share during off-duty hours or other highly inconvenient times such as early morning hours).

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* Analytical Systems Engineering Corporation, Automated ISM Training Technical Report, Contract No MDA903-83-C-0474, p. 3.

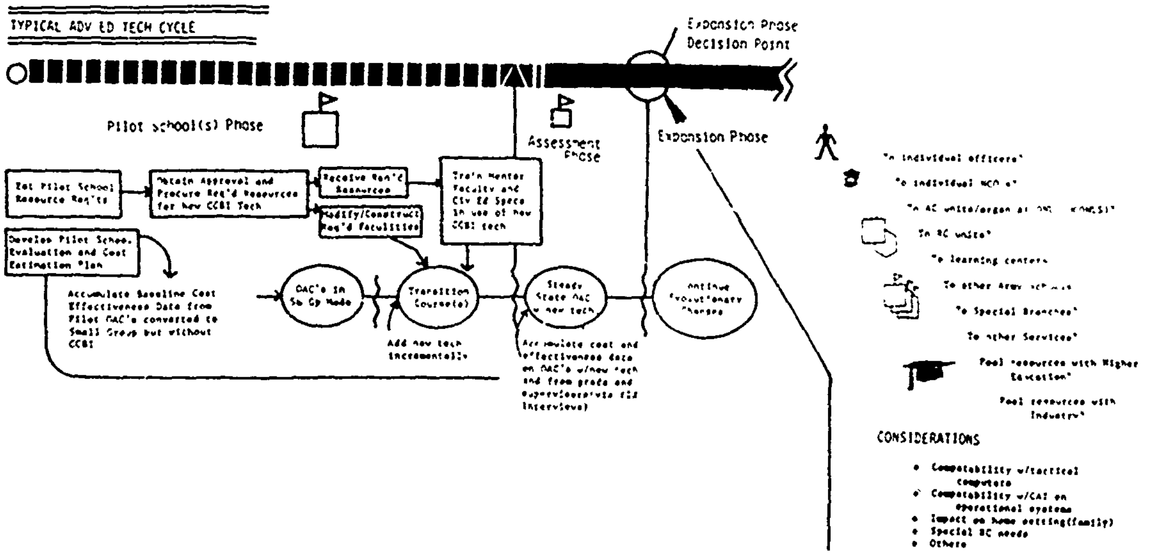
TYPICAL ADV ED TECH CYCLE
Expansion Phase Decision Point
Pilot School(s) Phase
Assessment Phase
Expansion Phase
Est Pilot School Resource Req'ts
Obtain Approval and Procure Req'd Resources for New CCBI Tech
Receive Req'd Resources
Modify/Construct Req'd Facilities
Train Mentor Faculty and Civ Ed Specs in use of new CCBI tech
Develop Pilot School Evaluation and Cost Estimation Plan
Accumulate Baseline Cost Effectiveness Data from Pilot OAC's converted to Small Group but without CCBI
OAC's in Sm Gp Mode
Transition Course(s)
Steady State OAC w new tech
Continue Evolutionary Changes
Add new tech incrementally
Accumulate cost and effectiveness data on OAC's w/new tech and from grads and supervisors (via Interviews)
To individual officers
To individual NCO s
To AC units/organ at
To RC units
To learning centers
To other Army schools
To Special Branches
To other Services
Pool resources with Higher Education
Pool resources with Industry
CONSIDERATIONS
• Compatability w/tactical computers
• Compatability w/CAI on operational systems
• Impact on home setting (family)
• Special RC needs
• Others

Figure P-1: Typical Advanced Education Technology Cycle (*d*) Maintaining the quality of the performance of Army leaders is the most important responsibility of the education and training system. Although many factors affect leader performance, the emphasis on education and training methods to obtain and retain the depth of officer knowledge, their retention of technical and tactical skills and the need for an enhanced officer decision-making capability will continue to be vital to having an officer corps capable of preparing Army units for war, leading and sustaining them in combat and winning.

b. Assessment Of The Education And Training Needs Of The Officer Professional Development System.

(l) The officer corps is faced with ever more complex challenges in its peacetime and battlefield environments and will experience new challenges for the future. In the face of these challenges, we must develop new methods to learn and make decisions better, faster and smarter. The education and training system must be designed to meet these new challenges:

(a) New Peacetime Challenges: There is less time to learn on the job. Peacetime tasks are more complex. There are more missions to prepare for. There is less time available to maintain readiness. A higher level of unit training and unit readiness is required because the battlefield of the future will be more complex and more immediately demanding. Better resource management is immediately required. It is hard to retain skill competency and currency, it is continuously being used as part of ongoing activities.

(b) Modern Battlefield Challenges: The modern battlefield is more complex and requires a greater scope and a greater range of operations at all levels. There are more sophisticated systems to integrate and in greater numbers. We must be able to do more with less forces and with less resources. It is more important to achieve excellence on the battlefield from a "standing start."

(c) New Challenges for the Future: Missions will change at a rapid rate. Technological change will accelerate. The Threat will continuously change. Society will be in a continous state of evolutionary change. The officer corps will face changes in concepts, doctrines and force structures. The competencies required of officers will change.

(2) During the course of this study, the study group received a number of letters addressing the high-technology environment with respect to these challenges. One letter, in particular for a US Army service school commander sullinctly, summed up the delemma facing the Army's professional development system.

> "The 'System' or 'technology' of the battlefield may be overtaking our hopes of progressively mastering the art and science of warfare."
>
> "The time required for mastery of the mechanics of our new systems, as well as that needed to effectively utilize and manage them, is becoming unacceptable."
>
> "We have successfully used technology to increase our capabilities—we have not yet exploited technolgy to simplify procedures."

(3) The 1982 Defense Science Board Summer Study on Training and Training Technology recommended that the Services ". . . accelerate the introduction of Computer Assisted Instruction into the schoolhouse and transportability to the field."

The 1984 Army Science Board Summer Study on "Leading and Manning Army 21" reflected the following in its interim out-brief: "The current Army informal leadership development system does not enhance the qualities necessary for leader independence, creativity and flexibility in battlefield decision making on the Army 21 battlefield and in peacetime." Taken together these two findings suggest a need for an increased effort to be spent on using technology to assist all Army leaders in developing decision-making skills and solving problematic situations. This is a need which can only be satisfied through education. These efforts must be undertaken in such a manner that they are not at the expense of the critical need for officer to maintain their in-depth technical and tactical competence and skills learned through training.

The annex introduces an evolving education and training model which, when fully implemented, will permit the transfer of knowledge and inquire more rapidly than is experienced now under the present operative education model. The time it takes today to learn the necessary knowledge and skills is so great that there is insufficient time avilable in school or the unit for leaning how to conduct effective decisionmaking or learning other critical educationoriented concepts.

Previous studies, notable RETO, estimated that officers spend about 80 percent of their post-commissioning Army school time in matters associated with training. Tomorrow's challenge is to operate under an education and training strategy using advanced technologies which will meet future education needs without sacrificing today's successes in training.

(4) Findings from the PDOS-Conducted Survey Relating to Education and Training Methods:

(a) A number of PDOS survey findings relate to education and training methods. Overall, 47 percent of the respondents agree (53 percent disagree) that the current education and training system prepares them to keep pace with the fielding of high-technology operational systems. The most severe problem, however, is perceived to be at the major and lieutenant colonel levels, as Figure P-3 affirms:

(b) Other findings indicate that the current instructional methods and service school instructor experience, quanity, and quality is not adequate.

(c) Respondents perceive that there is a lack of adequate preparation for officer students to become mentors (a leader, teacher, coach and guide). See Figure P-4. This may be the result of TRADOC service schools, with the exception of CAS3 not having enough mature and experienced mentor role models. Fully, 73% of the lieutenant through colonel respondents and 70% of the general officer respondents agreed that the mode of service school instruction needs to be expanded to include small groups with mentor insturctors. See Figure P-5.

Figure P-3: Percent of Surveys Respondents Indicating that the Education and Training Systems Prepare Officers to Keep Pace With the Fielding of High Technology Systems.

	Agree	50%	*Disagree*
2LT	56%		44%
1LT	52%		48%
CPT	51%		49%
MAJ	38%		62%
LTC	41%		59%
COL	54%		46%

Figure P-4: Percent of Survey Respondents Indicating That Their Most Recent School Experience Effective Prepared them to Become Mentors.

	Agree	50%	*Disagree*
OBC	36%		68%
OAC	34%		66%
CAS3*	67%		23%
CGSC (R)	56%		34%
AWC (R)	75%		25%

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* This is a captain school where there is close contact with mentor role models.

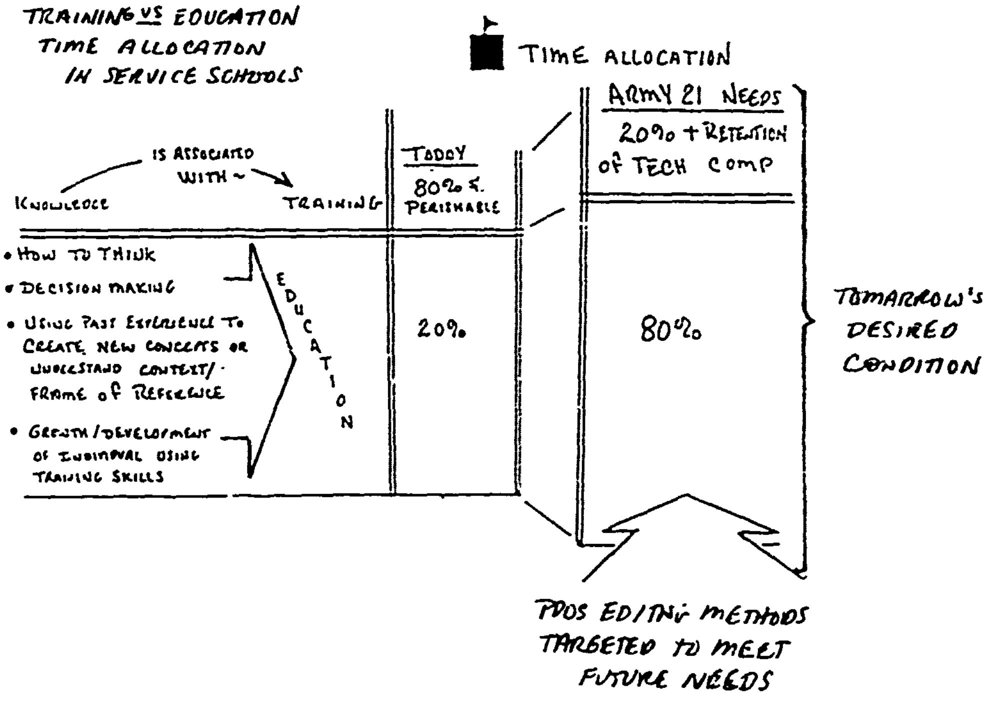

TRAINING VS EDUCATION
TIME ALLOCATION
IN SERVICE SCHOOLS
TIME ALLOCATION
KNOWLEDGE
IS ASSOCIATED WITH ~
TRAINING
TODAY
80% ≤ PERISHABLE
ARMY 21 NEEDS
20% + RETENTION OF TECH COMP
• HOW TO THINK
• DECISION MAKING
• USING PAST EXPERIENCE TO CREATE NEW CONCEPTS OR UNDERSTAND CONTEXT/FRAME OF REFERENCE
• GROWTH/DEVELOPMENT OF INDIVIDUAL USING TRAINING SKILLS
EDUCATION
20%
80%
TOMORROW'S DESIRED CONDITION
PDOS ED/TNG METHODS TARGETED TO MEET FUTURE NEEDS

Figure P-2 Tomorrow's Challenges

Figure P-5: Percentage Of Survey Respondents Who Agree That The Method Of Teaching Small Groups Of Students Wtih A "Mentoring" Faculty Should Be Expanded.

	Agree	*Disagree*	*No Opinion*
		50%	
Commissioned Officer	73%	11%	17%
General Officer	70%	20%	10%

c. Assessment of the Current Training And Education Methods Found In the Officer Professional Development System:

(1) Education/Knowledge Models: There is no readily identifiable nor commonly used theoretical model for education and training upon which the current post-commissioning professional development system is based.

(*a*) Current Philosophy: PDOS constructed a model to reflect the major components of the current education and training philosophy which is based on study group members' experiences within the existing system and their reviews of civilian education theories.

1 Aim of Education: The current philosophy sees the aim of education to be to: join discrete elements under the structure provided by the instructor; pass on the tradition of "know" knowledge, thought and action; and, develop character and critical thinking.

2 Methodologies: The methodologies used to carry out this aim are traditionally: training, the use of the printed word and verbal expressions, using the instructor as an "information and feedback conduit," and using a prescribed curriculum to guide the development of learning as a "product."

3 Strengths: The strengths of the current philosophy are found in its reliance on the richness and variety of experiences of the instructor and the student as a context against which one can teach and the other learn. Insights, however, tend to be mediated by the "rationality" of those experiences. The linkages of what are considered desired behavior to what are considered desired principles are, of necessity, traditional. The experiences are generally understood by all in the system. The emphasis in the training system focuses student attention on remaining current and developing expertise in the knowledge of narrow areas.

4 Difficulties: What is a strength, also, presents difficulties—education and training is limited by the depth and breadth of previous experience. The primary "sources" of learning are "book knowledge," "teacher knowledge" and verbal dialogue. The conceptual dimensions of these sources are constrained by the limited capabilities of the verbal, sensory and printed media. In addition, there is an inherent lack of understanding of the place of innovation and creativity in learning. As such, major new techniques are slow to evolve and there is a strong built in resistance to change. The "rules" portrayed are based on experience and are pooled into principles. To a degree this is appropriate as new initiatives should have to withstand rigid scrutiny to replace existing principles. There is a tendency though for rules to become "fossilized" and unresponsive to future needs. As the Army post-commissioning school system applies the current behavior/rule education model, the difficulties are compounded in that the teacher of knowledge and the course developer are, in most cases, different individuals. Finally, a major challenge to the training using the current education model is the retention of knowledge and skills before they become obsolete. See Figure P-6, following this discussion of education and training models for further details on the current model used in post-commissioning military schools.

(*b*) Model Based On The Acquisition Of Insight: Another model, generally not found in Army schools nor used widely in American civilian education, is based on a philosophy of the acquisition of insights.

1 Aim of Education: The aim of this philosophy is to stimulate the occurrence of insights and understanding for the student.

2 Methodologies: The methodologies require higher orders of stimulation of the student's cognitive processes.

3 Strengths: Allows growth and development of new knowledge, innovation and understanding for the student. The instructional mode orients on the individual student deriving his own insights. This model enhances the prospects for an internalization of higher frames of reference (see Vol I, Chap 4 for discussion of Frames of Reference).

4 Difficulties: The "vision" created by the student is often too simplistic—too cognitive—and does not deal with practical matters such as the execution of orders, the development of attitudes, the establishment of traditions and principles, and the development of proper conduct. The insights described above as a strength are not derived until the later practical application phase of the learning cycle—too late if Army officers are to be ready to fight at the appropriate level of excellence from a "standing start." In short, this model promotes the development of new information and profound insights but is too slow. A surrogate is needed to speed the process. For a description of this model see Figure P-7 on the next page.

(c) Communications Education/Knowledge Model: This model, along with the discussion of adult learning theory in Annex F, serves as the theoretical foundation for the PDOS education and training strategy. It seeks to add interdisciplinary computer dimensions to the strengths of current models plus adds a broader

CURRENT EDUCATION/KNOWLEDGE MODEL AS GENERALLY PRACTICED IN POST COMMISSIONING MILITARY SCHOOLS

MODEL	METHODOLOGY	EDUCATIONAL AIM	STRENGTHS	DIFFICULTIES
Mixture of im- IMPRESSION, BEHAVIOR and RULE models ORIGIN External Sensory Language Experience ACTIVITIES OF THE MIND Preception Retention Recall Discerning Comparing Abstracting Assessment	Training Construction of arguments Printed word and verbal expressions are vehicles to transmit information and dialogue Teacher is primarily an "information and feedback conduit" "School" is place where initial learning takes place Learning is a "product" obtained thru a prescribed curriculum	Join discrete elements under structure of teacher Pass on tradition of "known" knowledge, thought and action Develop character and critical thinking	Experienced based; richness and variety of experience important Insights mediated by rationality Links desired behavior to desired principles and tradition Understood by all in system An established educational model "mix" Training (vice Education) focus helps students remain current and develop knowledge expertise in narrow areas	Limited by previous experience; primary reliance is on "book knowledge" No guarantee that desired "rule following" will take place Actual behavior may be individually defined and not "rule bound" Conceptual dimensions constrained by capability of verbal, sensery and printed mediums Lack of understanding of innovation and creativity in learning. Slow to evolve to incorporate major new techniques Teacher and course developers are different people Knowledge/skill retention and obsolescence are major challenges "Billpayer" is long term Education (areas such as how to think, decision making/conceptual skill growth, development of new concepts, mastery of "Art" as well as "Science", how to articulate intent and frame of reference)

NOTE: The degree to which this model is applicable varies as one moves up through the Army school system. Generally, training is emphasized at OBC level ard education takes on an increased role as one attends more senior schools (see graph).

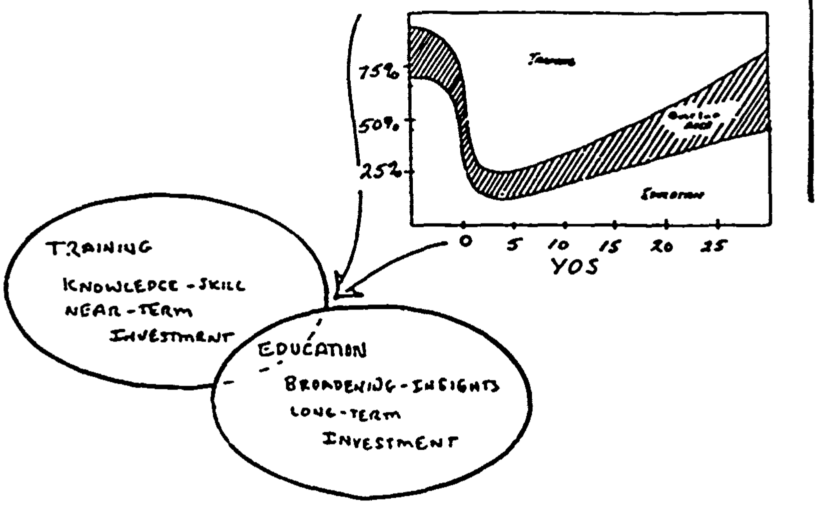


Figure P-6: Current Post Commissioning Military School Model

Figure P-6: Current Post-Commissioning Military School Model exposure to problematic situations than can an analytical problem solving approach. *This model uses simulations and the computer as the surrogate needed to speed the learning cycle process.* This PDOS communications model is based on a four month literature review and series of interviews and field visits. It draws heavily on the work of Dr. Doreen Steg (Drexel University), recent research by the Army Research Institute (ARI), publications by the Carnegie-Mellon/IBM sponsored consortium of universities, work by AT&T and Bell laboratories and a report by Dr. Arnold G. Fisch (Center of Military History), dated 3 November 1984 (refer to bibliography).

1 Aim of Education: The aim of this philosophy of education is to transmit values, formulate new concept, create for the student a continued lifestyle of learning, cause the acquisition of skills through the use of technology, use technology for training in skills and education by increasing the student's mastery and retention of skills and knowledge while decreasing the time required to gain that mastery; use technology to enhance decision making, reduce complexity in the mastery of the Art of War; and, aid in the management of uncertainty.

2 Methodologies: The methodologies to carry out this aim include the addition of computers to the dimensions of printed word and verbal expression, the teacher with an "enriched" guide/mentorship role, and initial and refresher learning in a variety of settings—not just the school.

3 Strengths: The strengths of this newer model are that it accounts for traditional education and training proven methods while absorbing new concepts. The techniques proposed by this education model permit the student to use both adaptive (reactive) and adapting (proactive) behavior. The learner is in control—not the instructor. Skill learning and skill retention are enhanced when the courseware is matched to the learner's dominant modality. The model is experienced-based, yet open for growth, new knowledge and insights. It accounts for self-motivation, self-assessment and self-regulation, with necessary system controls. As one of the aims of education for this model is the transmission of values, their acquisition can be evaluated. Finally, it incorporates advances in adult learning theory and the theories associated with cognitive complexity.

4 Difficulties: This model is new (only about 35 years old) and is not yet fully developed—there is only limited use to date. Were this model accepted by the Army, it would take time to transition faculty to the new role for the teacher/mentor in this learner-controlled system. It will take several years to reestablish a new unity of training and education to be able to do both in less time than is takes in today's Army school environment. The development of new courseware is a critical activity under this model—service schools are not currently resourced to do this. Once initiated, this model will see hardware and software development progress at a rapid rate -much faster than can be assimilated by the existing organization structure. See Figure P-8 for further details.

(2) Review of the current conditions:

(a) TRADOC activities which have responsibilities for developing training methods and incorporating new technologies are vigorously carrying out those responsibilities within the limits of their current mission statements and resources. A review of their major projects reveals a clear emphasis on the use of technology to support immediate training and skill needs.

[illegible] CHARACTERISTICS OF ANOTHER EDUCATION/KNOWLEDGE MODEL GENERALLY NOT USED IN POST COMMISSIONING MILITARY SCHOOLS

MODEL	METHODOLOGY	EDUCATIONAL AIM	STRENGTHS	DIFFICULTIES
Insight ORIGIN Vision Gestalt-based Internal	Simulation Cognition Insights ACTIVITIES OF THE MIND Search for new insights and vision	Stimulate occurrence of insights and understanding	Allows growth/ development of new knowledge, innovation and understanding Oriente on individual deriving own insights	"Vision" too simplistic; too cognitive, does not deal with practical matters like: o execution o attitudes o tradition o principles o conduct

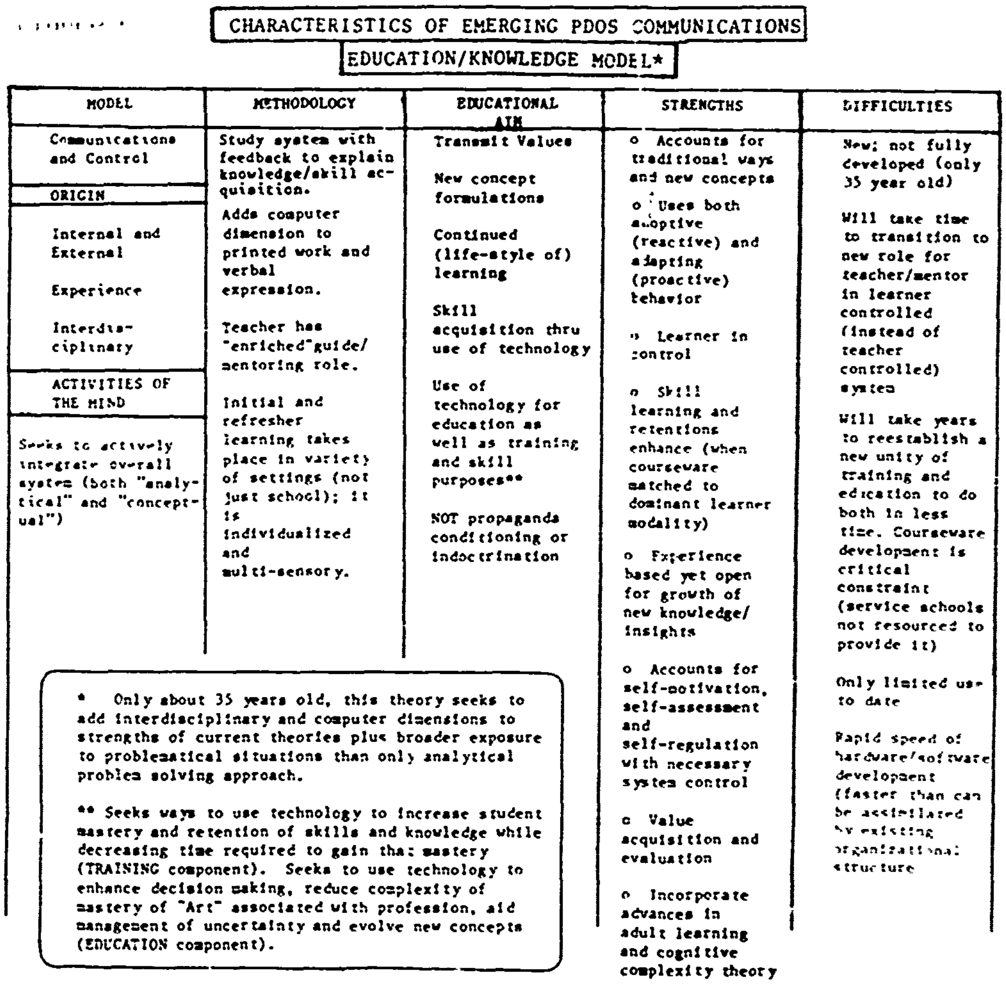
Figure P-7: Characteristics of Another Education/Knowledge Model.

What is sacrificed under the current system, however, are the longer-term education needs which address how one thinks, makes decisions, conceptualizes, develops new concepts and how one articulates his intent and his frame of reference. In other words, the education component associated with mastering the Art of War needs more attention.

(b) There are many agencies seeking to gain control of the many players on the "computer technology bandwagon." The principal players are the TRADOC Army Training Support Center, the TRADOC Training Technology Agency, the TRADOC Joint Committee on Computer-Based Instruction, the Army Research Agency, the TRADOC/AMC Army Communications Technology Office, the ARI for Management and Computer Science, the TRADOC Combined Arms Training Activity, the Soldiers Support Center (lead TRADOC agent for Artificial Intelligence), Fort Gordon [TRADOC lead agent for Automation] and the Defense Training Data and Analysis Center.

(c) Several ventures are underway which focus the use of technology on specific training/skill needs. Some examples are the TRADOC "School of the Air," the Intelligence School's computer literacy training, the Engineer School's computer courseware packages, and the Army Training Support Center's and Training Technology Agency's activities.

(d) The current mission of the Army Training Support Center (ATSC) is to support the development, conduct, evaluation, management and implementation of Army training for all levels of the Active and the Reserve Components. This mission is carried out through directorates which assure an integration of the various training centers, management information systems and electronic (computer-communication) technology. A review of the major initiatives of



CHARACTERISTICS OF EMERGING PDOS COMMUNICATIONS EDUCATION/KNOWLEDGE MODEL*

MODEL	METHODOLOGY	EDUCATIONAL AIM	STRENGTHS	DIFFICULTIES
Communications and Control ORIGIN Internal and External Experience Interdisciplinary ACTIVITIES OF THE MIND Seeks to actively integrate overall system (both "analytical" and "conceptual")	Study system with feedback to explain knowledge/skill acquisition. Adds computer dimension to printed work and verbal expression. Teacher has "enriched" guide/mentoring role. Initial and refresher learning takes place in variety of settings (not just school); it is individualized and multi-sensory.	Transmit Values New concept formulations Continued (life-style of) learning Skill acquisition thru use of technology Use of technology for education as well as training and skill purposes** NOT propaganda conditioning or indoctrination	o Accounts for traditional ways and new concepts o Uses both adoptive (reactive) and adapting (proactive) behavior o Learner in control o Skill learning and retentions enhance (when courseware matched to dominant learner modality) o Experience based yet open for growth of new knowledge/insights o Accounts for self-motivation, self-assessment and self-regulation with necessary system control o Value acquisition and evaluation o Incorporate advances in adult learning and cognitive complexity theory	New; not fully developed (only 35 year old) Will take time to transition to new role for teacher/mentor in learner controlled (instead of teacher controlled) system Will take years to reestablish a new unity of training and education to do both in less time. Courseware development is critical constraint (service schools not resourced to provide it) Only limited use to date Rapid speed of hardware/software development (faster than can be assimilated by existing organizational structure

* Only about 35 years old, this theory seeks to add interdisciplinary and computer dimensions to strengths of current theories plus broader exposure to problematical situations than only analytical problem solving approach.

** Seeks ways to use technology to increase student mastery and retention of skills and knowledge while decreasing time required to gain that mastery (TRAINING component). Seeks to use technology to enhance decision making, reduce complexity of mastery of "Art" associated with profession, aid management of uncertainty and evolve new concepts (EDUCATION component).

Figure P-8 Characteristics of Emerging PDOS Communications Education/Knowledge Model

ATSC revealed that they are focused on the clear need to reduce instruction time, save dollars associated with courseware development, emphasize simulation and hands-on training and make more simulations available to Reserve Component units and organizations so as to increase their level of training proficiency. It is equally apparent that the current training missions of the ATSC provide that agency with a full array of activities and an endless list of needs in skill training which need to be enhanced through simulations and technology. However, the "needs lists" are based on the behavior/rule education model (Figure P-6) and are susceptible to deterioration over time.

(e) The current mission of the TRADOC Training Technology Activity (TTA) is to implement training research and institutionalize successful results to improve Army training *

TTA seeks to bridge the gap between training researchers (e.g., Army Research Institute) and the field users. Their focus is on user problems and providing test beds [currently Forts Knox, Lee and Rucker].

(f) *What is generally missing from current initiatives is a focused effort at using technology to aid in the education component of professional development and an updating of the model used as a basis for our approach to education and training.* If new technology initiatives were based on the newer communications model (Figure P-8), it would be possible to develop computer training based on indvidualized courseware with an

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* per discussion with ODCSOPS, DAMO-TRS based on 1984 PDIP 3S6Q.

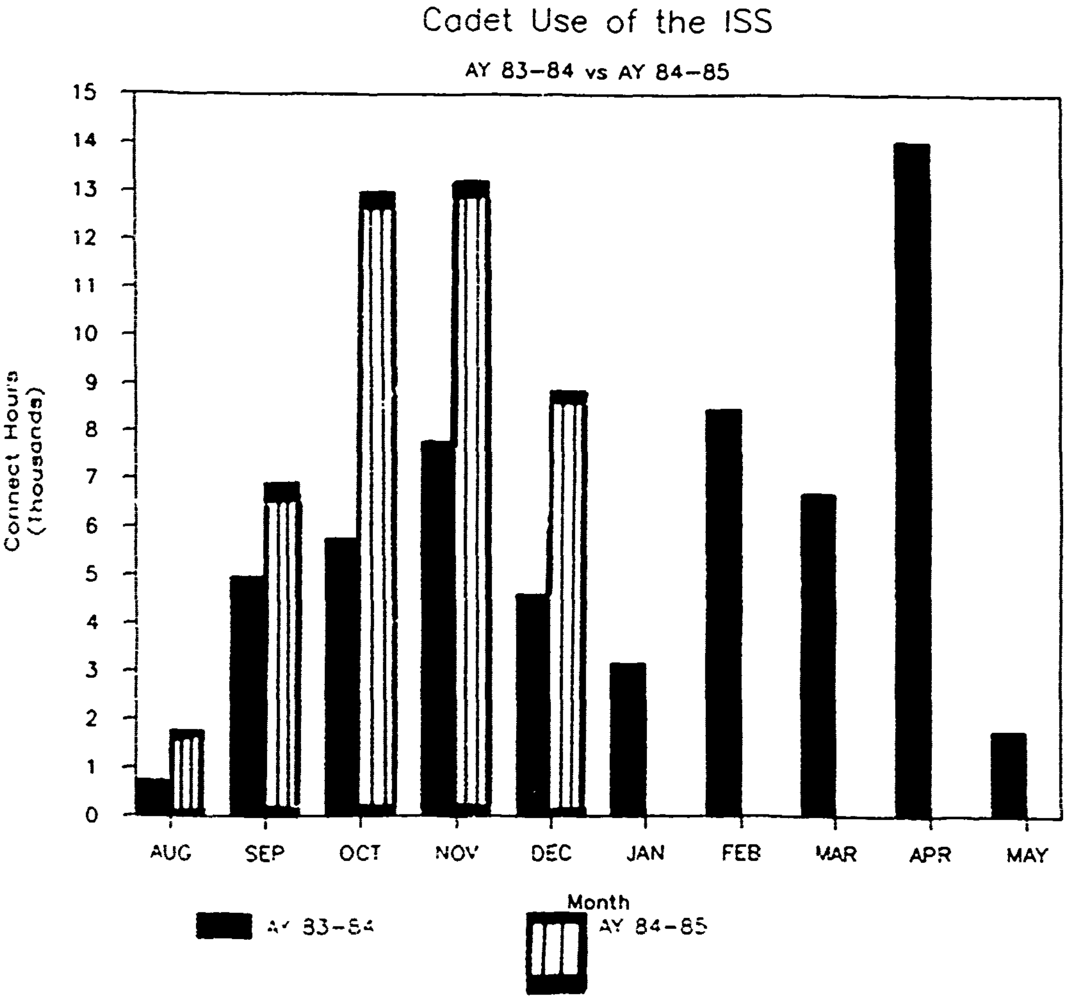

Figure P-9: Increase in USMA Cadet Utilization of ISS between AY83-84 and AY84-85 authoring package and menudriven system rather than having to use a single-sensory language. In addition, the coherent development of decision making and other cognitive processes throughout an officer's career is a long-term, continuous effort.

1 ARI is conducting research on the application of artificial intelligence (AI) and cognitive science to computer-based instruction targeted at making courseware more effective in meeting the more complex cognitive-skill needs of officers (i.e.,how to think and conduct decision making).

2 Additionally, there are some TRADOC initiatives in these areas such as the family of TRADOC wargames, NTC computer-aided simulations, work being done by the AI-Robotics office at the Soldiers Support Center, the computer-based, interactive obstacle-planning practical exercise courseware developed for the Engineer School and the SIMCAT exercise at Fort Knox. PDOS concluded that more resources must be allocated to TRADOC in order to add an even stronger capability to develop courseware for education purposes in addition to that for training. The proposed education and training policies will enable strong, proactive links to those university communities pioneering "smart" courseware designed to enhance decision making and more efficient mastery of skills.

3 Outside the TRADOC community, the United States Military Academy has also been involved in the application of technology for educational purposes. As a post-secondary institution of higher education, USMA's focus is primarily on education and the cognitive processes. It provides a unique environment for the development of "smart courseware". It is an ideal candidate to serve as an "institutional mentor" for CCBI education initiatives. With a controlled environment and a faculty responsive to Army needs, they can lend stability to a dynamic process, develop and test new courseware and prepare it for "organizational cloning" as appropriate in service schools. USMA has experienced a dramatic growth in the use of its Instruction Support System (ISS) by cadets (see Figure P-9). It is therefore in a good position to offer service schools assistance in how to absorb rapid increases in the use of computers for education/cognitive development purposes based upon their "lessons learned." Moreover, West Point clearly enjoys a strong proactive relationship with the academic communty and is already supporting the Army in many areas (e.g.,leadership development, military history, integration of women officers and dual service member families into the Army, and economic and manpower analysis). The PDOS group strongly supports building on this Army-USMA relationship in the exercise of the PDOS CCBI initiatives.

4 Recently US News and World Report examined a sampling of the Department of Education's 354 "honor role" of public secondary schools to determine what makes great schools great. Teachers and students were surveyed as to where more money could best be spent in their school. The top item on the list was buying better instructional material (47.3 percent of the responses.)*

It is hypothesized that this is also true in the military school system. Better, smarter courseware is clearly perceived as a high pay-off area in which to place more resources.

d. Education And Training Methods Strategies.

(1) Given the identified needs and background research related to past and present education theories, the PDOS group has formulated a general statement, in diagram form, of the current Army post-commissioning education system.

(2) The educational strategy proposed here to support the major PDOS initiatives sees changes in each of the components presented above. In general, the PDOS model places more responsibility on the individual officer for initial learning and promotes a role for the school faculty that extends beyond the initial phase of the learning cycle. Recent TRADOC initiatives have been supportive of a mentor faculty role provided that the necessary quality, numbers and experience of anticipated mentor faculty can be provided the service schools to make this a reality. In the long term, this mentor-faculty role approach will provide the kind of resident school experience required at the start of each development period which provides the context for the kind of leadership which an officer experiences in follow-on assignments.

(3) The strategies for installing the PDOS-recommended education and training methods are developed with an understanding of the need to prioritize limited resources, to more effectively incorporate computer technology especially to enhance decision-making and cognitive develop-

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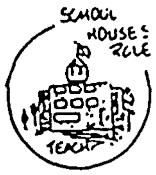
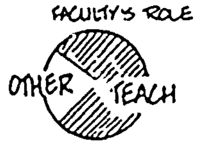
* US News and World Report, Aug 27, 84: "What Makes Great Schools Great," by Lucia Solorzano, p. 51.


SCHOOL HOUSE'S ROLE
TEACH

CURRENT EDUCATIONAL STRATEGY

ROLE OF 🏫:	TEACH	- PLACE TO LEARN
ROLE OF FACULTY:	TEACH	- "INFORMATION CONDUIT" - AMT OF INFO IS DSN PARAMETER
EMPHASIS ON:	"CONTENT"	🏫 IS A PLACE WHERE ONE GOES TO OBTAIN KNOWLEDGE AND SKILLS -- THEN APPLY IN 🏢 AND 🏠
ASSUMES:		-LEARNING IS A "PRODUCT" OBTAINED THRU PRESCRIBED 🏫 POI - 🏫 HAS PRIMARY RESPONSIBILITY FOR "PASSING OUT KNOWLEDGE"
SKILL OBSOLESCENCE DEALT WITH VIA:		-MORE TIME IN 🏫 TO OBTAIN REFRESHER TRAINING
CONSEQUENCE:		-MID AND SENIOR LEVEL SCHOOLS ARE "SIEVE" FOR PROMOTION



CENTER OF FOCUS 🏫 ON LEARNING CYCLE *

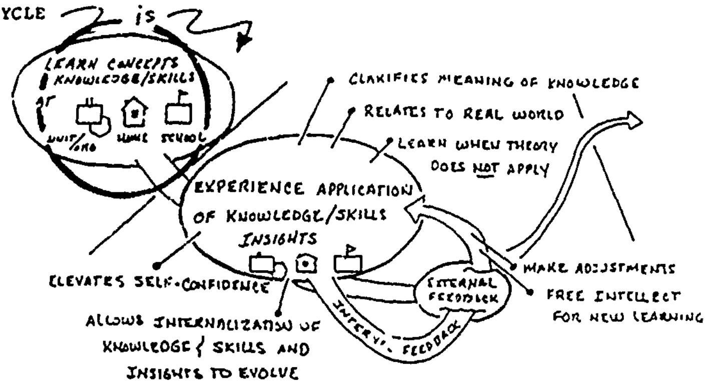
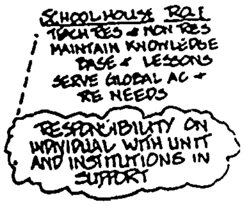
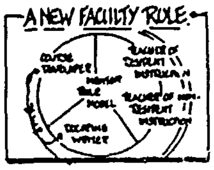
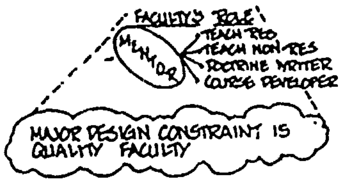

IS
LEARN CONCEPTS & KNOWLEDGE/SKILLS AT
UNIT/ORG
HOME
SCHOOL
EXPERIENCE APPLICATION OF KNOWLEDGE/SKILLS INSIGHTS
CLARIFIES MEANING OF KNOWLEDGE
RELATES TO REAL WORLD
LEARN WHEN THEORY DOES NOT APPLY
MAKE ADJUSTMENTS
FREE INTELLECT FOR NEW LEARNING
EXTERNAL FEEDBACK
INTERN. FEEDBACK
ELEVATES SELF-CONFIDENCE
ALLOWS INTERNALIZATION OF KNOWLEDGE & SKILLS AND INSIGHTS TO EVOLVE

Figure P-10: Current Education Strategy. (* Refer to Annex F for explanation of learning cycle.)

EDUCATIONAL STRATEGY TO SUPPORT PDOS PHILOSOPHY


SCHOOLHOUSE ROLE
TEACH RES & NON RES
MAINTAIN KNOWLEDGE BASE & LESSONS
SERVE GLOBAL AC & RE NEEDS
RESPONSIBILITY ON INDIVIDUAL WITH UNIT AND INSTITUTIONS IN SUPPORT


A NEW FACULTY ROLE
COURSE DEVELOPER
MENTOR ROLE MODEL
TEACHER OF RESIDENT INSTRUCTION
TEACHER OF NON-RESIDENT INSTRUCTION
DOCTRINE WRITER


FACULTY'S ROLE
MENTOR
TEACH RES
TEACH NON-RES
DOCTRINE WRITER
COURSE DEVELOPER
MAJOR DESIGN CONSTRAINT IS QUALITY FACULTY

ROLE OF ⚑	-TEACH RES AND NON-RES -ESTABLISH/MAINTAIN ELECTRONIC KNOWLEDGE BASE FOR COMMON USE (DOCTRINE; COURSE DEVELOPMENT; COMPETENCY TESTING, ETC.)
ROLE OF FACULTY:	-MENTOR = TEACH/COACH/ADVISE/COURSE DEVEL DOCTRINE DEVEL SME - QUALITY of FACULTY is KEY DESIGN PARAMETER
ROLE OF LEADER IN ⚑ AND ⬡	-MENTOR SUBORDINATES
EMPHASIS AT ⚑ ON:	"CONTEXT" ⚑ -IS PLACE ONE LEARNS HOW TO STUDY DIFF SUBJECTS -HOW TO ASSESS INFO -HOW TO TEACH
ASSUMES:	-MENTORSHIP IN ⚑ AND ⬡ REQUIRES HELP FROM ⚑ (⚑'s HAVE TO STAY FOCUSED ON MISSION PERFORMANCE) -LEARNING IS LIFE-LONG PROCESS IN WHICH INDIV BEARS PRI RESPONSIBILITY TO OBTAIN KNOWLEDGE AND ⚑ , ☐ AND ⬡ LEND SUPPORT AND PROVIDE "EXPERIENCE CONTEXT."
SKILL OBSOLESCENCE DEALT WITH VIA:	-SUPPORT PKGS PREPARED BY ⚑ FROM KNOWLEDGE BASE AND MADE ELECTRONICALLY AVAILABLE TO ALL AC AND RC OFFICERS.
CONSEQUENCE:	-SINCE ALL "SURVIVORS" ATTEND RES OR NON-RES INSTRUCTION AT EACH TP, ⚑ NOT A SIEVE FOR PROMOTION.

CENTER OF FOCUS OF ⚑ ON LEARNING CYCLE 2

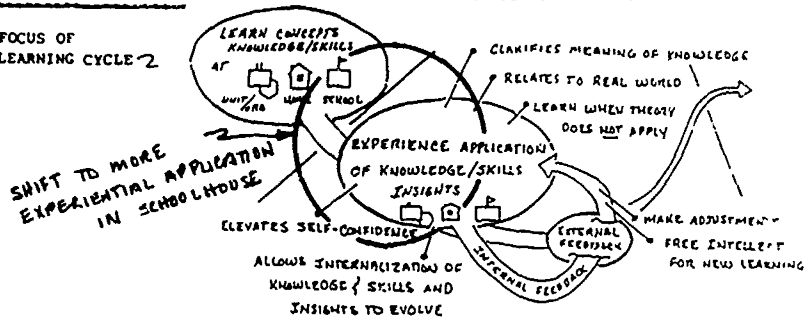

LEARN CONCEPTS KNOWLEDGE/SKILLS
AT
UNIT/ORG
HOME
SCHOOL
SHIFT TO MORE EXPERIENTIAL APPLICATION IN SCHOOLHOUSE
EXPERIENCE APPLICATION OF KNOWLEDGE/SKILLS INSIGHTS
CLARIFIES MEANING OF KNOWLEDGE
RELATES TO REAL WORLD
LEARN WHEN THEORY DOES NOT APPLY
ELEVATES SELF-CONFIDENCE
ALLOWS INTERNALIZATION OF KNOWLEDGE & SKILLS AND INSIGHTS TO EVOLVE
INTERNAL FEEDBACK
EXTERNAL FEEDBACK
MAKE ADJUSTMENT
FREE INTELLECT FOR NEW LEARNING

Figure P-11: Education Strategy To Support PDOS Philosophy.

ment and to support the varied roles of the student, mentor, school and unit. The aims of both the education and training strategies are to:

(a) Make computer technologies a natural extension of the officer in the peacetime and the wartime workplaces without sacrificing the value of non-electronic methods:

(b) Make the transition to major new education and training methods in an evolutionary way over the next decade;

(c) Provide a concept that is acceptable to the current Army culture and leadership—this is not an overnight strategy;

(d) Meet the "Army 21" challenges which officers face in terms of sound officer decision making under the stresses of combat.

The unique aims and major thrusts of each of these strategies are shown in Figure P-12 (next page foldout).

e. The Mix Of Non-Electronic And Electronic Education And Training Methods.

(1) The resident school experience at the beginning of each development period introduces the student to methods which will be emphasized throughout that schooling as well as in assignments during the follow-on development period. The methods mix is specifically designed to support the roles of the major participants in officer education and training: the student/officer, the mentor, the unit/organization and the school. The mix of methods and roles was determined with an awareness of several factors: the various kinds of proficiency needed (e.g., technical, human interaction, communication, conceptual, etc.). changes in the importance of each type of proficiency over time as the officer progresses in his work or level of responsibility and the degree of responsibility the officer is expected to assume for his own self-development. For a description of the development roles and methods which are to be emphasized. see Figure P-13 foldout). For futher details as to how this analysis was conducted. refer to the work by Dunn, entitled "Detailed Analysis of Best Education and Training Mix," October, 1984.

(a) There is no evidence that any one method of instruction is most cost effective for all types of military instruction.* Latitude must be given to each school to define and refine the media used for specific lessons. This study offers guidance as to which methods to emphasize and when, in order to target research, development and the allocation of limited resources. The recommended mix (see Figure P-13) retains proven non-electronic methods such as field training, military reading programs and exercises at the National Training Center. The electronic methods which are emphasized feature:

1 Computer-Assisted Instruction (CAI) which relies on a common data base and instructional packages to provide the student with in-depth knowledge or information at a refresher or familiarization level via multi-sensory courseware;

2 Computer simulations (wargames), specifically emphasized for captains through colonels;

3 Computer teleconferencing such as the TRADOC "School of the Air" and the US Army Forum;

4 Artificial Intelligence—Expert Systems for officers to use to acquire knowledge and use it in the decision-making process;

5 Strategic planning/future policy impact analysis aid for use by senior Army decision makers to assist them in their own development and to with a long-range navigation tool/aid for the monitoring of PDOS major thrusts.*

(2) The overall aim of the mix of electronic methods, referred to throughout this study as CCBI is to increase the tempo of prudent officer decision making under battlefield and peacetime stress. The intermediate aims of CCBI policies are to teach officers to learn smarter and faster, to combat skill obsolescence, improve knowledge and skill retention and make computers a natural addition to the tools used in an officer's environment.

4. Recommendations.

a. Education And Training Methods Base-Policies. The education and training methods

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* "Cost Effectiveness of Computer Based Instruction in Military Training," by Orlansky and String, Institute for Defense Analysis, IDA Paper P1375, April, 1979; p 78.

* In the "Concept for General Officer/Senior Executive Service Development" and the Army Research Institute DRAFT FM 22-999, Senior Army Leadership Manual, multidimensional integrative skills are stressed as important to executive performance at the most senior levels This is realized primarily through the impact senior leaders can potentially have through proactive planning in peace or war. The computer assisted aid developed by the PDOS team while conducting its futures analysis is believed to be a useful process for assisting senior leaders in performing better long range planning. It is, also, believed to be a key part of the PDOS Implementation strategy as it provides a continuous review of the direction to which the major thrusts are headed.

(SUPPORTS STRATEGIC GOAL 4B SHORT-TERM FOCUS)

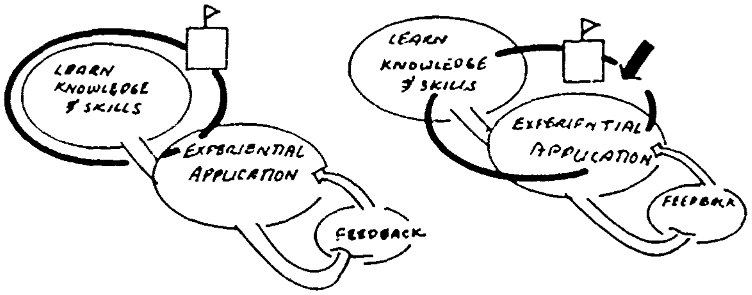
AIMS: TRAINING

- PROVIDE COHERENT, RATIONAL STRATEGY FOR PREPARING OFFICERS FOR EACH ASSIGNMENT (SUSTAIN COMBAT READINESS AND TECHNICAL PROFICIENCY).
- MAXIMIZE EACH OFFICER'S CAPABILITY FOR EXCELLENCE IN SKILLS NECESSARY IN CURRENT AND NEXT ASSIGNMENT.
- INCREASE SPEED OF LEARNING TECHNICAL SKILLS AND SKILL RETENTION
- PROVIDE WORKABLE CONCEPT TO COMBAT SKILL OBSOLESCENCE
- GAIN FACTUAL KNOWLEDGE WITH ASSISTANCE OF LEARNER CONTROLLED SOFTWARE

EDUCATION AND TRAINING STRATEG

TRAINING STRATEGY MAJOR THRUSTS

- REINFORCE EACH OFFICER'S RESPONSIBILITY FOR OBTAINING/MAINTAINING FACTUAL KNOWLEDGE NEEDED TO BE TECHNICALLY PROFICIENT (A PREREQUISITE FOR SKILL TRAINING).
- GRADUALLY MOVE CAPTAIN LEVEL RESIDENT SCHOOL FOCUS TO INCLUDE MORE EXPERIENTIAL APPLICATION OF SKILL PORTION OF LEARNING CYCLE AND LESS ACQUIRING KNOWLEDGE PORTION.

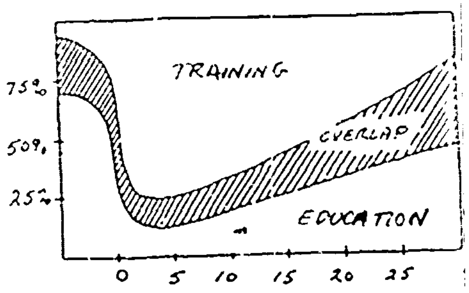


THIS PERMITS SCHOOLS TO PLACE EVEN MORE EMPHASIS ON TRAINING SUPPORT FOR UNITS/ORGANIZATIONS

TRAINING STRATEGY MAJOR THRUSTS (CONT)

- CONDUCT ARRAY OF SHORT, FUNCTIONAL MODULES OR COURSES (BY SVC SCHOOLS AND CIVILIAN INSTITUTIONS) TARGETED TO SPECIFIC CURRENT OR NEXT ASSIGNMENT NEEDS.
- PROVIDE COMMON CORE CURRICULUM STRATEGY.
- PROVIDE UMBRELLA EVALUATION (SELF-ASSESSMENT AND SKILL COMPETENCY) STRATEGY.
- BUILD/MAINTAIN COMPUTER KNOWLEDGE BASES (MAINTAINED BY SERVICE SCHOOLS) TO SUPPORT MILITARY SUBJECTS (COMMON CORE AND SPECIFIC TECHNICAL FIELDS).

  -- HELPS INDIVIDUAL OFF, CBT DEVELOPER, COURSE DEVELOPER, DOCTRINE WRITER, SUBJECT MATTER EXPERT, ETC...
- CONTINUE EXISTING TRAINING, R & D AND INFORMATION MGT (OACSIM/DCSRIM) INITIATIVES TO DEVELOP COMPUTER SOFTWARE TUTORIALS AIMED AT INCREASING SKILL LEVELS AND/OR SAVING TRAINING TIME OR RESOURCES.
- PROVIDE TRAINING RATIONALE NEEDED TO ARTICULATE ADVANCED CIVIL SCHOOLING REQUIREMENTS TO DOD AND CONGRESS.



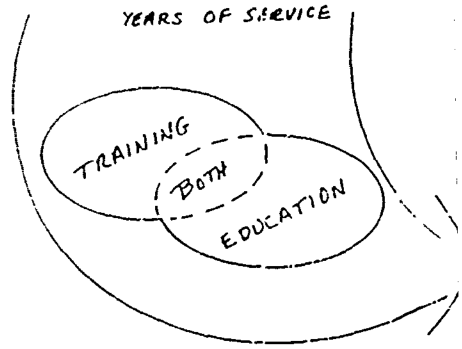


Figure P-12: Aims and Major
Education and Tr

ON AND TRAINING STRATEGIES

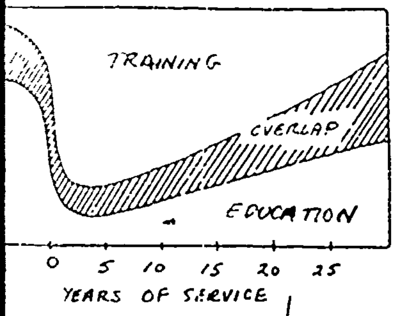
(SUPPORTS STRATEGIC GOAL 4A LONG-TERM FOCUS)

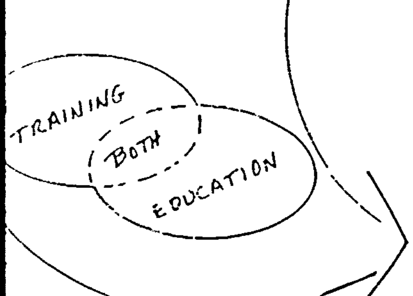
AIMS: EDUCATION

- PROVIDE COHERENT, RATIONAL STRATEGY FOR LONG-RANGE INVESTMENT IN OFFICER'S POTENTIAL
- MAXIMIZE EACH OFFICER'S CAPABILITY FOR EXCELLENCE AND CONTRIBUTION TO PROFESSION OVER SERIES OF ASSIGNMENTS
- TRANSMIT VALUES IMPORTANT TO SOCIETY AND ARMY
- ACQUIRE NEW LEARNING RAPIDLY WHILE RETAINING TRAINING SKILLS
- UNDERSTAND CONTEXT/FRAME OF REFERENCE ASSOCIATED WITH RANGE OF UPCOMING ASSIGNMENTS (W/I DEVELOPMENT PERIOD)
- INCREASE RATE/QUALITY OF OFFICER DECISION MAKING UNDER STRESS

EDUCATION STRATEGY MAJOR THRUSTS

- TARGET EDUCATION, R & D AND INFORMATION MGT COMMUNITIES OR NEED TO DEVELOP COMPUTER TECHNOLOGIES WITH AIM OF INCREASING TEMPO OF SOUND OFFICER DECISION MAKING UNDER STRESS.
- PROVIDE MORE ASSISTANCE TO IN PERFORMING THEIR EDUCATION DEVELOPMENT ROLES AND OPERATIONAL MISSIONS THRU USE OF COMPUTER-COMMUNICATION TECHNOLOGIES.
- CLEARLY DEFINE NEED FOR INSTITUTIONAL EXPERIENCE AT BEGINNING OF EACH DEVELOPMENT PERIOD IN TERMS OF ESTABLISHING FRAME OF REFERENCE NECESSARY FOR EDUCATIONAL GROWTH.
- PROVIDE EDUCATIONAL RATIONAL NEEDED TO ARTICULATE ADVANCED CIVIL SCHOOLING REQUIREMENTS TO DOD AND CONGRESS.
- BROADEN ROLE OF SERVICE SCHOOL INSTRUCTOR UNTIL IT EVOLVES (OVER NEXT 10 YEARS) INTO PRIMARILY A MENTORING (RATHER THAN "INFORMATION CONDUIT") ROLE.
  - -- SCHOOL MENTOR DEFINED AS TEACHER, COACH, ROLE MODEL, DOCTRINE WRITER AND COURSE DEVELOPER; WILL NEED TO MODIFY STAFFING GUIDES TO ACCOMPLISH THIS.
- MORE SPECIFICALLY STATE LEADER'S ROLE IN SUBORDINATE PROFESSIONAL DEVELOPMENT PROCESS.
- MORE ☐ EMPHASIS ON "HOW TO THINK" COMPONENT OF LEARNING AND SMALL GROUP EXPERIENTIAL EXERCISES.





EDUCATION AND TRAINING

- MAKE COMPUTER NATURAL EXTENSION OF OFFICER IN PEACETIME AND WARTIME WORKPLACE WITHOUT SACRIFICING VALUE OF NONELECTRONIC METHODS
- MAKE TRANSITION TO MAJOR ED/TNG METHODS IN EVOLUTIONARY WAY (OVER NEXT DECADE)
- PROVIDE CONCEPT THAT IS ACCEPTABLE TO CURRENT ARMY CULTURE AND LEADERSHIP (NOT A MAJOR REFORM "OVER NIGHT")

BOTTOM LINE -- MEET "ARMY 21 TYPE" OFFICER CHALLENGES IN TERMS OF SOUND OFFICER DECISION MAKING UNDER STRESS OF COMBAT

e P-12: Aims and Major Thrusts of PDOS
Education and Training Strategies

DEVELOPMENT PERIOD THE LIEUTENANT

DEVELOPMENTAL ROLE

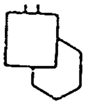
INDIVIDUAL

O ASSUMES RESPONSIBILITY FOR OWN LEARNING AND DEVELOPMENT. REMAINS CURRENT IN SUBJECT AREA VIA READY ELECTRONIC ACCESS TO KNOWLEDGE BASES MAINTAINED BY THE SERVICE SCHOOLS. IS COMMITIED TO A LIFESTYLE OF PHYSICAL/MENTAL WELL-BEING AND LIFE-LONG IMPROVEMENT OF OWN EDUCATION. PROACTIVELY SEEKS INFORMATION AND IS RECEPTIVE TO CONSTRUCTIVE FEEDBACK.

MENTOR

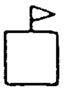
O EXEMPLIFIES PROFESSIONAL VALUES. SHAPES AND MOLDS LIEUTENANT INTO ARMY CULTURE. STRESSES HANDS-ON. EXPERIENTIAL EXERCISES. HELPS LIEUTENANT KEEP CURRENT IN BRANCH SUBJECTS. ASSURES LIEUTENANTS' EXPERTISE IN CRITICAL TASKS ASSOCIATED WITH EMPLOYING WEAPONS (AND OTHER MOS II REQUIREMENTS). EXPLAINS. COMPANY AND BATTALION LEVEL FRAME OF REFERENCE. FACULTY MENTOR AT LIEUTENANT LEVEL IS A CAPTAIN PLATOON TACTICAL OFFICER OR TRAINER WHO STRESSES MISSION ACCOMPLISHMENT THRU DEVELOPMENT OF SUBORDINATES.

UNIT/ORG



O PROVIDES DEVELOPMENTAL OPPORTUNITIES TO ENHANCE COMMAND CLIMATE CONDUCTIVE TO LEARNING. CREATIVITY AND INITIATIVE. IN UNIT. HAS PROGRAM TO MONITOR LIEUTENANTS' COMPETENCY IN LEARNING HOW TO LEAD AND FIGHT A PLATOON (AND OTHER MOS II TASKS). STRESSES FIELD TRAINING THROUGH EXPERIENTIAL PHASE OF LEARNING CYCLE. REVIEWS MATERIAL ON SERVICE SCHOOLS' COMPUTER KNOWLEDGE BASES FOR RELEVANCE TO "REAL WORLD" SETTING. SUPPORTS INDIVIDUAL OFFICER'S CONTINUED USE OF KNOWLEDGE BASE TO REMAIN CURRENT AND MILITARY READING TO BROADEN THE OFFICERS' PERSPECTIVE.

SCHOOLS



O FACULTY MENTORS MODEL PROFESSIONAL VALUES AND CONDUCT EXPERIENTIAL TRAINING DESIGNED TO PREPARE LIEUTENANT FOR ASSIGNMENTS AT THE LIEUTENANT LEVEL. PROVIDES CONTEXT FOR LEARNING KNOWLEDGE AND SKILLS AND ENSURES OFFICER KNOWS HOW TO STUDY VARIOUS TYPE SUBJECTS. INSTRUCTS IN HOW TO USE VARIOUS REFERENCE SOURCES IN REMAINING CURRENT IN BRANCH SUBJECTS. INTRODUCES LIEUTENANT TO AIDS AVAILABLE TO SUPPORT THE TRAINING AND EDUCATION. VALIDATES APPROXIMATELY 80% OF MOS TASKS.

METHODS TO EMPASIZE

CONVENTIONAL	ELECTRONIC
INDIVIDUAL:	
FIELD TRAINING PROFESSIONAL READING	COMPUTER ASSISTED INSTRUCTION (CAI) PACKAGES
MENTOR:	
FIELD PRACTICAL EXERCISES SMALL GROUPS (LESS THAN OR EQUAL TO PLT) HANDS-ON TRAINING PROFESSIONAL READING	COMPUTER ASSISTED INSTRUCTION (CAI) PACKAGES
UNIT/ORGANIZATION:	
FIELD TRAINING EXPERIENTIAL APPLICATION	COMPUTER ASSISTED INSTRUCTION (CAI) PACKAGES
SCHOOLS:	
FIELD TRAINING PROFESSIONAL READING FIELD PRACTICAL EXERCISES SMALL GROUPS (LESS THAN OR EQUAL TO PLT) HANDS-ON TRAINING	COMPUTER ASSISTED INSTRUCTION (CAI) PACKAGES MAINTAINING COMPUTER KNOWLEDGE BASES

DEVELOPMENT PERIOD THE CAPTAIN

DEVELOPMENTAL ROLE

INDIVIDUAL

O FOCUS ON CEMENTING BRANCH PROFICIENCIES. CONTINUES LIFE
TRAINING AND EDUCATION. ASSESSES OWN SHORTFALLS WHILE REMA
MENTOR CRITIQUE. USES CAI AND PROFESSIONAL READING TO REMAI
BRANCH. FUNCTIONAL AREA OR AREAS OF CONCENTRATION.

MENTOR

O CONTINUES TO EXEMPLIFY PROFESSIONAL VALUES. IS A ROLE MO
FITNESS AND CONTINUED EDUCATION LIFESTYLES. ASSURES CAPTAIN
DEMONSTRATED EXPERTISE IN CRITICAL SKILLS ASSOCIATED WITH F
IMMEDIATE BATTLE. EXPLAINS AND REINFORCES BRIGADE LEVEL FRA
FACULTY MENTOR STRESSES COACHING AND GUIDING ASPECTS OF MENT
CHALLENGING SETTING. PROVIDES COURSEWARE AND DOCTRINAL INPU
KNOWLEDGE BASE WITHIN APPROPRIATE BRANCH. FUNCTIONAL AREA OR
CONCENTRATION.

UNIT/ORG

O IN UNIT. PROVIDES DEVELOPMENTAL OPPORTUNITIES. ESPECIALLY
FOSTER SKILLS AT FIGHTING AND SUPPORTING A COMPANY. USES CO
SIMULATIONS. CAI AND OTHER TRAINING TECHNOLOGIES INTRODUCED
SUPPORT UNIT/ORGANIZATION PROFESSIONAL DEVELOPMENT PROGRAM A
MISSIONS. MONITORS CAPTAINS' COMPETENCY IN MOS III TASKS.

SCHOOLS

O ROLE OF SCHOOL IS TO MENTOR RESIDENT AND NON-RESIDENT STU
TRAINING SUPPORT MATERIALS (E.G.. SIMULATIONS. CAI PACKAGES.
INDIVIDUAL. UNIT AND ORGANIZATIONAL USE AND DEVELOP COMPUTER
FOR AC AND RC USAGE. HOLDS STUDENT RESPONSIBLE FOR FACTUAL
MORE EXPERIENTIAL APPLICATION EXERCISES IN THE SCHOOL SETTIN
SELF-ASSESSMENT OPPORTUNITIES FOR INDIVIDUAL DEVELOPMENT PUR

METHODS TO EMPHASIZE

CONVENTIONAL	ELECTRONI
INDIVIDUAL:	
FIELD TRAINING PROFESSIONAL READING	COMPUTER ASSISTED INST COMPUTER SIMULATIONS (
MENTOR:	
FIELD PRACTICAL EXERCISES SMALL GROUPS CASE STUDIES PROFESSIONAL READING	COMPUTER ASSISTED INST COMPUTER SIMULATIONS (
UNIT/ORGANIZATION:	
FIELD TRAINING EXPERIENTIAL APPLICATION EXERCISES	COMPUTER ASSISTED INST COMPUTER SIMULATIONS (
SCHOOLS:	
FIELD PRACTICAL EXERCISES SMALL GROUPS CASE STUDIES PROFESSIONAL READING FACULTY MENTORS @ SERVICE SCHOOLS	COMPUTER ASSISTED INST COMPUTER SIMULATIONS (

Figure P-13: Development Period Roles and Mix of Methods to Emphasize.

THE CAPTAIN DEVELOPMENTAL ROLE	DEVELOPMENT PERIOD: THE MAJOR AND LIEUTENANT COLONEL DEVELOPMENTAL ROLE
BRANCH PROFICIENCIES. CONTINUES LIFESTYLE OF CONTINUED N. ASSESSES OWN SHORTFALLS WHILE REMAINING RECEPTIVE TO S CAI AND PROFESSIONAL READING TO REMAIN CURRENT IN EA OR AREAS OF CONCENTRATION.	INDIVIDUAL O FOCUS ON GAINING IN-DEPTH TRAINING AND CONTINUED EDUCATION IN APPROPRIATE "TRACK" CAREER PATTERN. USES MILITARY READING PROGRAM, CAI PACKAGES, "SCHOOL OF THE AIR" TELECONFERENCES AND WARGAMES TO AUGMENT FIELD TRAINING OPPORTUNITIES. CONTINUES USE OF ASSESSMENT TECHNOLOGY TO MONITOR STRENGTHS AND WEAKNESSES THEN PROGRESSES WITH HELP OF MENTOR. EVOLVE INSIGHTS FROM EDUCATION AND DEVELOPMENTAL OPPORTUNITIES IN UNIT/ORGANIZATIONAL ASSIGNMENTS. SEEK TO BECOME A MENTOR FOR JUNIOR OFFICERS IN UNIT AND SCHOOLHOUSE SETTINGS.
PLIFY PROFESSIONAL VALUES. IS A ROLE MODEL FOR PHYSICAL EDUCATION LIFESTYLES. ASSURES CAPTAINS HAVE E IN CRITICAL SKILLS ASSOCIATED WITH FIGHTING THE XPLAINS AND REINFORCES BRIGADE LEVEL FRAME OF REFERENCE. SES COACHING AND GUIDING ASPECTS OF MENTORSHIP IN PROVIDES COURSEWARE AND DOCTRINAL INPUT TO COMPUTER APPPOPRIATE BRANCH, FUNCTIONAL AREA OR AREAS OF	MENTOR: O BOTH SCHOOL AND UNIT MENTORS: EXPLAIN/REINFORCE DIVISION AND INSTALLATION LEVEL FRAME OF REFERENCE. ASSURES MAJORS AND LIEUTENANT COLONELS HAVE DEMONSTRATED EXPERTISE IN INTEGRATION OF WEAPONS SYSTEMS AND SUPPORT FUNCTIONS NECESSARY TO OBTAIN AND SUSTAIN THESE SYSTEMS AND GENERATE MAXIMUM COMBAT POWER (EXTENSIVE USE OF COMPUTER SIMULATIONS, FIELD TRAINING AND VISITS TO NATIONAL TRAINING CENTER TO SUPPORT THIS TASK). SERVE AS MENTOR INSTRUCTORS IN USE OF SIMULATIONS, TELECONFERENCING AND CAI PACKAGES TO ENHANCE LEARNING AND DECISION MAKING CAPABILITIES. PROVIDE ASSESSMENT FEEDBACK ON MQS IV AND V TASKS.
DEVELOPMENTAL OPPORTUNITIES, ESPECIALLY THOSE WHICH TING AND SUPPORTING A COMPANY. USES COMPUTER OTHER TRAINING TECHNOLOGIES INTRODUCED BY SCHOOL TO TION PROFESSIONAL DEVELOPMENT PROGRAM AND OPERATIONAL APTAINS' COMPETENCY IN MQS III TASKS.	UNIT/ORGAN: O PROVIDE EXPERIENTIAL DEVELOPMENTAL OPPORTUNITIES TO RELATE SCHOOL THEORIES TO REAL WORLD. INCLUDE MULTIPLE ELECTRONIC TRAINING SUPPORT AIDS IN OFFICER DEVELOPMENT PROGRAMS AND CONDUCT OF OPERATIONAL MISSIONS. MONITOR MAJOR AND LIEUTENANT COLONEL VALIDATION OF MQS IV AND V TASKS.
O MENTOR RESIDENT AND NON-RESIDENT STUDENTS, PROVIDE IALS (E.G., SIMULATIONS, CAI PACKAGES, ETC.) FOR RGANIZATIONAL USE AND DEVELOP COMPUTER KNOWLEDGE BASE HOLDS STUDENT RESPONSIBLE FOR FACTUAL CONTENT, ENABLING ICATION EXERCISES IN THE SCHOOL SETTING. PROVIDES UNITIES FOR INDIVIDUAL DEVELOPMENT PURPOSES.	SCHOOLS: O SCHOOL ROLE REMAINS ORIENTED ON TEACHING, PROVIDING TRAINING SUPPORT MATERIALS FOR UNIT/ORGANIZATION AND KEEPING KNOWLEDGE BASE CURRENT FOR MULTIPLE USERS AND FUNCTIONS. STRESS NEED FOR MORE COMPLEX INTEGRATION AND SYNTHESIS SKILLS. INTRODUCE STUDENTS TO NEW TOOLS AVAILABLE TO ENHANCE THEIR OPERATIONAL PERFORMANCE AND CONTINUED EDUCATION PLUS CONCEPT OF UNIT/ORGANIZATION MENTORING OF SUBORDINATES. CONTINUE TO PROVIDE ASSESSMENT OPPORTUNITIES. WHEN DEVELOPED, ADD USE OF EDUCATIONAL ARTIFICIAL INTELLIGENCE, EXPERT SYSTEMS AND SMART COURSEWARE TO CURRICULUM. VALIDATE MQS TASKS AND PROVIDE FOUNDATION FOR NEXT MQS LEVEL.

	METHODS TO EMPHASIZE		METHODS TO EMPHASIZE	
	ELECTRONIC		CONVENTIONAL	ELECTRONIC
	COMPUTER ASSISTED INSTRUCTION PACKAGES COMPUTER SIMULATIONS (WARGAMES)	INDIVIDUAL:	FIELD TRIPS CASE STUDIES PROFESSIONAL READING	COMPUTER ASSISTED INTRUCTION PACKAGES "SCHOOL OF THE AIR" COMPUTER TELECONFERENCING (VIDEO/AUDIO MODE) COMPUTER SIMULATIONS (WARGAMES)
S	COMPUTER ASSISTED INSTRUCTION PACKAGES COMPUTER SIMULATIONS (WARGAMES)	MENTOR:	FIELD TRIPS SR FACULTY MENTORS CASE STUDIES @ SERVICE SCHOOLS FIELD PRACTICAL EXERCISES SMALL GROUPS PROFESSIONAL READING	COMPUTER ASSISTED INSTRUCTION PACKAGES "SCHOOL OF THE AIR" COMPUTER TELECONFERENCING (VIDEO/AUDIO MODE) COMPUTER SIMULATIONS (WARGAMES)
	COMPUTER ASSISTED INSTRUCTION PACKAGES COMPUTER SIMULATIONS (WARGAMES)	UNIT/ORGANIZATION:	FIELD TRAINING (UNIT) EXPERIENTIAL APPLICATION EXERCISES	COMPUTER ASSISTED INSTRUCTION PACKAGES "SCHOOL OF THE AIR" COMPUTER TELECONFERENCING (VIDEO/AUDIO MODE) COMPUTER SIMULATIONS (WARGAMES) (UNIT)
SCHOOLS	COMPUTER ASSISTED INSTRUCTION PACKAGES COMPUTER SIMULATIONS (WARGAMES)	SCHOOLS	FIELD TRIPS SR FACULTY MENTORS CASE STUDIES @ SERVICE SCHOOLS FIELD PRACTICAL EXERCISES SMALL GROUPS PROFESSIONAL READING	COMPUTER ASSISTED INSTRUCTION PACKAGES "SCHOOL OF THE AIR" COMPUTER TELECONFERENCING (VIDEO/AUDIO MODE) ARTIFICIAL INTELLIGENCE, EXPERT SYSTEMS AND "SMART COURSEWARE"

nt Period Roles and Mix of
o Emphasize.

3

DEVELOPMENT PERIOD. THE COLONEL

DEVELOPMENTAL ROLE

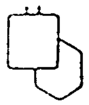
INDIVIDUAL

o Continue focus on gaining education and expanded frame of reference thru corps and EAC. Uses military reading program, CAI packages, Artificial Intelligence, expert systems, "smart courseware" (as developed). Teleconferencing and wargames to augment field training opportunities. Continues use of assessment technology to monitor strengths and weaknesses. Evolve insights from education and developmental opportunites in unit/organizational assignments. Serve as a senior mentor "expert" in area of concentration, functional area or branch. Shift decision style to handle "non-programmed," higher-level decision making in addition to analytical decision making skills used at lower levels.

MENTOR

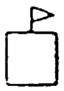
o Both school and unit mentors: Explain/reinforce corps and EAC frame of reference. Have demonstrated expertise in integration of weapons systems and support functions necessary to obtain and sustain these systems (extensive use of computer simulations, field training and visits to NTC to support this task). Serve as mentor instructors in use of advanced technologies to enhance learning and decision making capabilities. Use assessment technology as appropriate in interaction with colonels.

UNIT/ORG



o Provides experiential developmental opportunities to relate school theories to real world. Include multiple electronic training support aids in officer development programs and conduct of operational missions.

SCHOOLS



o School role remains oriented on teaching the frame of reference for assignments as Colonels, providing training support materials for field and keeping knowledge base current for multiple users and functions. Stress operation shift in use of more complex integration and synthesis skills. Introduce students to use of new tools to enhance this operational effectiveness and continue education from work and home environments. Continue to provide assessment opportunities. When developed, add use of educational artificial intelligence, expert systems and "smart courseware" to curriculum.

METHODS TO EMPHASIZE

CONVENTIONAL		ELECTRONIC
INDIVIDUAL:		
Field Trips		Computer Assisted "Refresher" Packages
Case Studies		Computer Teleconferencing (Video/Audio)
Professional Reading		Artificial Intelligence, Expert Systems and "Smart Courseware"
MENTOR:		
Field Trips	Sr Faculty Mentors	Computer Assisted "Refresher" Packages
Case Studies	at Service Schools	Computer Teleconferencing (Video/Audio)
Field Practical Exercises		Artificial Intelligence, Expert Systems and "Smart Courseware"
Small Groups		
Professional Reading		
UNIT/ORGANIZATION:		
Field Training		Computer Assisted "Refresher" Packages
Experiential Application		Computer Teleconferencing (Video/Audio)
		Artificial Intelligence, Expert Systems and "Smart Courseware"
SCHOOLS:		
Field Trips	Sr Faculty Mentors	Computer Assisted "Refresher" Packages
Case Studies	at Service Schools	Computer Teleconferencing (Video/Audio)
Field Practical Exercises		Artificial Intelligence, Expert Systems and "Smart Courseware"
Small Groups		
Professional Reading		

DEVELOPMENT PERIOD THE BRIGADIER AND MAJOR GENERAL

DEVELOPMENTAL ROLE

INDIVIDUAL

o Determines own development needs from knowledge of responsibi communication with superiors and opportunities made available by a professional reading program that expands executive capacity a understanding of politico-military affairs. Learn to use new t in the management of information and decision making process. A mentor for subordinates and learns art of influencing command cl direct and indirect actions.

MENTOR

o Similar to COL development period except broadened frame of r national level. Concentrate on distributed decision making ba communicating intent and creating a command climate which is dem supportive of independent decision making by the BG or MG.

UNIT/ORG

o Gives emphasis to and time for GO professional development. to have deputies fill principals' positions for short periods of and education. MACOMs hold periodic seminars and exercises to e decision making skills and achieve other GO development objectiv

SCHOOLS

o Include short policy impact/strategic planning exercise during Transition Course to assist in determining the long term impact Increase awareness of how frame of reference shifts to national multiple sectors of society and joint service. Sponsor short co collegiums (aided by video-audio teleconferencing). Incorporate level decision support aids as developed. Produce senior level CAI packages. Develop and distribute recommended readings and s

METHODS TO EMPHASIZE

CONVENTIONAL		ELECTRONIC
INDIVIDUAL:		
Collegiums	Tailored "prep"	Computer Assisted "Refreshe
Seminars	period before	Computer Teleconferencing (
Field Visits	new assignment	Artificial Intelligence & E
Professional Reading		
Strategic Planning/Policy Impact Aid		
MENTOR:		
Seminars		Computer Teleconferencing (
Collegiums		
UNIT/ORGANIZATION:		
Field Training		Computer Teleconferencing (
Experiential Application		
Command Conferences		Computer Assisted Exercise
SCHOOLS:		
Short Courses		Computer Assisted "Refresh
Seminars		Computer Teleconferencing
Collegiums		Artificial Intelligence
		Expert Systems
		Strategic Planning/Policy

Figure 1-13 continued:

TH BRIGADIER AND MAJOR GENERAL DEVELOPMENTAL ROLE	DEVELOPMENT PERIOD: THE SENIOR GENERAL OFFICER DEVELOPMENTAL ROLE
OPMENT NEEDS FROM KNOWLEDGE OF RESPONSIBILITIES. RIORS AND OPPORTUNITIES MADE AVAILABLE BY DA. SUSTAINS PROGRAM THAT EXPANDS EXECUTIVE CAPACITY AND AN CO-MILITARY AFFAIRS. LEARN TO USE NEW TOOLS TO ASSIST FORMATION AND DECISION MAKING PROCESS. ACTS AS A AND LEARNS ART OF INFLUENCING COMMAND CLIMATE THROUGH IONS.	INDIVIDUAL O SIMILAR TO BG/MG DEVELOPMENT PERIOD. ADDITIONALLY, LTG'S AND GEN'S MUST HONE PERSONAL TALENTS OF PERSUASIVE COMMUNICATION, CONCEPTUAL THINKING AND ANTICIPATION OF EVENTS TO OPERATE EFFECTIVELY IN OVERSEEING THE ARMY AND IN RELATING TO OTHER MAJOR AMERICAN INSTITUTIONS.
OPMENT PERIOD EXCEPT BROADENED FRAME OF REFERENCE TO TRATE ON DISTRIBUTED DECISION MAKING BASED ON CREATING A COMMAND CLIMATE WHICH IS DEMANDING YET T DECISION MAKING BY THE BG OR MG.	MENTOR O HIGHLY INDIVIDUALIZED RELATIONSHIPS WITH MORE SENIOR OR RETIRED GENERALS OR PROMINENT CIVILIANS PROVIDING PERSPECTIVE AND GUIDANCE TO LTG'S AND GEN'S. ALSO, LTG'S AND GEN'S USE EYES ONLY MESSAGE TRAFFIC AND TELECONFERENCING TO EXCHANGE INFORMATION AND ASSIST SUBORDINATES. WHEN DEVELOPED, TAILORED EXPERT SYSTEMS AND "SMART COURSEWARE" WILL ENHANCE THEIR MENTORING AND CONTINUED EDUCATION CAPABILITIES.
D TIME FOR GO PROFESSIONAL DEVELOPMENT. ACCEPTS NEED RINCIPALS' POSITIONS FOR SHORT PERIODS OF GO TRAINING HOLD PERIODIC SEMINARS AND EXERCISES TO ENHANCE WARTIME AND ACHIEVE OTHER GO DEVELOPMENT OBJECTIVES.	UNIT/ORG O SIMILAR TO BG/MG DEVELOPMENT PERIOD.
IMPACT/STRATEGIC PLANNING EXERCISE DURING GO IST IN DETERMINING THE LONG TERM IMPACT OF POLICIES. FRAME OF REFERENCE SHIFTS TO NATIONAL STRATEGIES, ETY AND JOINT SERVICE. SPONSOR SHORT COURSES, SEMINAR EO-AUDIO TELECONFERENCING). INCORPORATE ADDED SENIOR IDS AS DEVELOPED. PRODUCE SENIOR LEVEL "REFRESHER" ND DISTRIBUTE RECOMMENDED READINGS AND SYNOPSES.	SCHOOLS O SIMILAR TO BG/MG DEVELOPMENT PERIOD BUT WITH MORE RELIANCE ON CIVILIAN UNIVERSITIES OR INSTITUTES FOR EXECUTIVE DEVELOPMENT PROGRAMS. ARMY/DOD SCHOOLS RESPONSIVE TO SENIOR GO NEEDS WITH DISTRIBUTED EDUCATION OR TRAINING PROGRAMS.

METHODS TO EMPHASIZE

	ELECTRONIC
PREP" ORE MENT IMPACT AID	COMPUTER ASSISTED "REFRESHER" PACKAGES COMPUTER TELECONFERENCING (VIDEO/AUDIO) ARTIFICIAL INTELLIGENCE & EXPERT SYSTEMS
	COMPUTER TELECONFERENCING (VIDEO/AUDIO)
	COMPUTER TELECONFERENCING (VIDEO/AUDIO) COMPUTER ASSISTED EXERCISES
	COMPUTER ASSISTED "REFRESHER" PACKAGES COMPUTER TELECONFERENCING (VIDEO/AUDIO) ARTIFICIAL INTELLIGENCE EXPERT SYSTEMS STRATEGIC PLANNING/POLICY IMPACT AID

METHODS TO EMPHASIZE

CONVENTIONAL	ELECTRONIC
INDIVIDUAL:	
COLLEGIUMS SEMINARS FIELD VISITS PROFESSIONAL READING	INFORMATION STORAGE & DECISION AIDS COMPUTER TELECONFERENCING (VIDEO/AUDIO) ARTIFICIAL INTELLIGENCE EXPERT SYSTEMS STRATEGIC PLANNING/POLICY IMPACT AID
MENTOR:	
SEMINARS COLLEGIUMS	COMPUTER TELECONFERENCING (VIDEO/AUDIO)
UNIT/ORGANIZATION:	
FIELD TRAINING EXPERIENTIAL APPLICATION COMMAND CONFERENCES	COMPUTER TELECONFERENCING (VIDEO/AUDIO) COMPUTER ASSISTED EXERCISES
SCHOOLS:	
SHORT COURSES SEMINARS COLLEGIUMS	INFORMATION STORAGE & DECISION AIDS COMPUTER TELECONFERENCING (VIDEO/AUDIO) ARTIFICIAL INTELLIGENCE EXPERT SYSTEMS STRATEGIC PLANNING/POLICY IMPACT AID

aim, major thrusts and policies follow. At Appendix 3 is a discussion of the anticipated long-range impact on the officer and family of the education and training initiatives.

AIM

To increase the tempo of prudent, sound officer decision making under the stresses of combat and the hectic workplace.

MAJOR THRUSTS

Use mentoring concepts and "smart" technology aids as major initiatives to attain aims.

Be *proactive* in incorporating evolving learning concepts associated with computer technology while providing safeguards and re-assessment checkpoints.

Support evolving efforts to provide a senior leader aid in strategic planning/future policy impact analysis using the PDOS product as a theme. This will support the long-term navigation and refinement of the professional development desired system.

BASE POLICIES

TRADOC accelerate development of Computer Communication-Based Instruction (CCBI) technologies for use in schools, units/organizations and by individual officers so as to:

Capitalize on educational advantages of emerging technologies and the communications education model:

Provide decision aids to increase the tempo of prudent, sound decision making under stress.

HQDA approve resources to accomplish approved CCBI-related policies, to include:

Task and fund the Corps of Engineers' CERL laboratory to evaluate the most cost effective ways to apply PDOS-recommended CCBI technologies and identify CCBI applications for other populations.

Provide one Directed Military Overstrength space for ODCSOPS -Training to coordinate the CCBI expansion program. (Note: Resource estimates are based on the addition of a CCBI Directorate within existing TRADOC structure. See b. below.)

MILPERCEN send five majors to obtain post-masters level education in Intelligent Educational systems for eventual assignment to TRADOC, USMA, ARI and the Army Staff.

DAS sponsor, for at least the next five years, a Senior Service College Army Research Associate to monitor instutionalization of PDOS CCBI and other major PDOS initiatives.

ODCSPER/ODCSOPS incorporate a two day strategic planning/future policy impact analysis exercise for new brigadier generals with Officer Professional Development as the theme; use exercise insights to assist senior Army leadership in navigation of the desired PDOS system state.

OACSIM mature PDOS process as a strategic planning/policy impact analysis model to anticipate long-term professional development needs and to assist in senior leader development.

(See Appendix 1 of this Annex, Discussion of Policies, for a detailed discussion of all policies relative to education and training methods.)

b. That A New CCBI Directorate Under The Deputy Chief Of Staff, Training (DCST) At The Soldier's Support Center (SSC), Fort Benjamin Harrison (see PDOS Base Policy F70 And Policy F71).

(1) Many options are available to TRADOC as to how to undertake an expanded computer-technology mission. The study recommends that strong consideration be given to an action which places a CCBI Directorate under the TRADOC Deputy Chief of Staff, Training (DCST), co-located at the SSC. This would set up a relationship similar to that experienced between the DCS for Training and Evaluation (DCSTE) and the Combat Development Experimentation Command (CDEC). Such a link would place the directorate in close proximity to the lead agent for artificial intelligence. By making these added manpower and funding resources available, partnerships between TRADOC, universities and ARI could function with the Army being a strong, proactive influence in the direction courseware development takes using the pooled resources of large university consortiums. The link between the TRADOC Deputy Chief of Staff, Training and the PDOS suggested CCBI directorate might include the Training Technology Agency as they currently perform a *training* role which parallels the *education* role emphasized in the PDOS CCBI initiatives.

(2) Figures P-14 and P-15 diagram the CCBI directorate concept and various options available to TRADOC. The university consortium mentioned is just one of a number which are available for the Army to join as participants in the "smart courseware" development process. A more complete description of the review of current initiatives is contained in the 3 November 1984 report by Dr. Arnold Fisch and COL C.H.

Dunn entitled "Education and Training Methods to Support Professional Development of Officers Desired System."

NOTE: There are other university-private industry consortiums worth participating in by the Army. The PDOS group was also aware of the progressive courseware development of AT&T and Bell Laboratories but did not attempt to develop a complete list of candidate universities or private businesses.

c. Critical Education/Training Factors For Command Emphasis. There are seven areas which this study presents as requiring intensive monitorship by senior Army leadership and the ARSTAF so the aims and major thrusts of the PDOS education and training methods strategies can be realized over the next decade. These seven areas are identified below:

(1) *Modifing instructor staffing guides to accommodate the needs of faculty mentors.* See policies O84 and O85, recommended in Annex I. A Mentorship Strategy.

Discussion: At the "end of the pipeline" where the instructor student contact takes place. the critical planning factor is how the instructors spends their time. Existing staffing guides are not tailored to meet the courseware development and doctrine writing requirements of a mentor faculty. HQDA and TRADOC must take action to adjust staffing standards so enough *mentor* faculty members are provided to the service schools to permit fulfilling their intended mentor roles (i.e.. teach. coach. guide. advise. write doctrine. develop courses and computer courseware).

(2) *Establishing appropriate seniority for "mentoring" faculty.* See recommended policies O84. O85 and O86. Annex I.

(3) *Extending the tour of a selected few senior faculty mentors.* See recommended policies O84. O85 and O86, Annex I.

Discussion: Items (2) and (3) are major factors in obtaining and maintaining sufficient *experience* on the service school faculty to have actual *mentors.* Practices such as substitution of lieutenants for majors or lieutenant colonels on a service school's Officer Distribution Plan allocation are not consistent with mentorship initiatives.

(4) *Establishing and long-term maintenance of balanced cells of quality.* See recommended policy F91. Annex X. Balanced Cells of Quality.

Discussion: This is a major factor in obtaining enough *quality* (nonpromotion risk officers) in

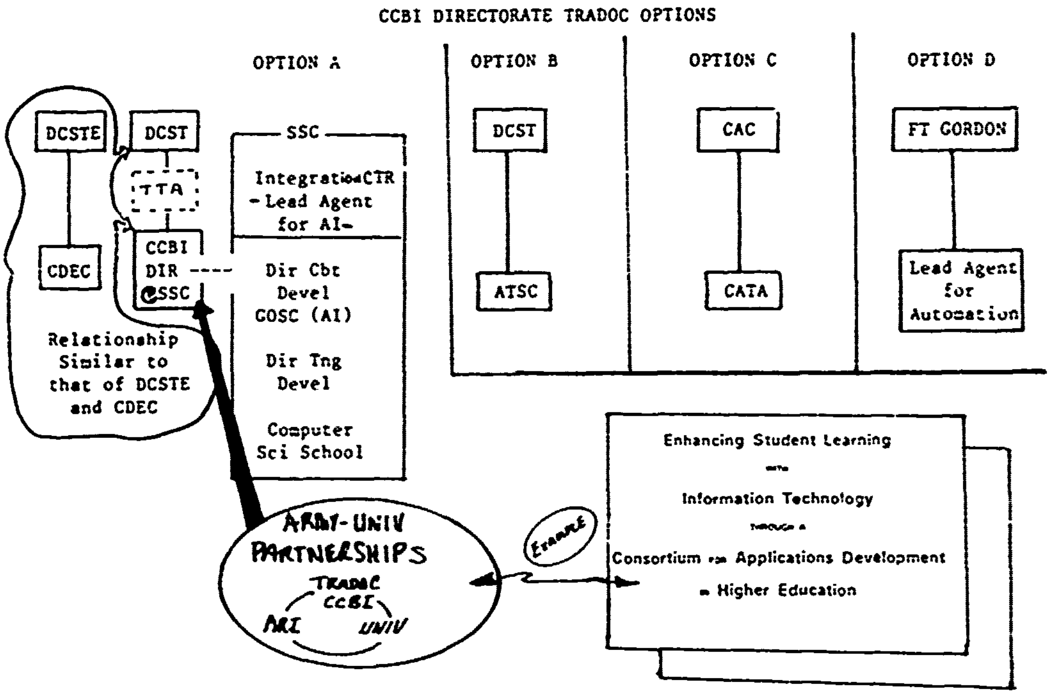

CCBI DIRECTORATE TRADOC OPTIONS
OPTION A
OPTION B
OPTION C
OPTION D
DCSTE
DCST
TTA
CCBI DIR @SSC
CDEC
Relationship Similar to that of DCSTE and CDEC
SSC
IntegrationCTR - Lead Agent for AI-
Dir Cbt Devel GOSC (AI)
Dir Tng Devel
Computer Sci School
DCST
ATSC
CAC
CATA
FT GORDON
Lead Agent for Automation
ARMY-UNIV PARTNERSHIPS
TRADOC
CCBI
ARI
UNIV
Example
Enhancing Student Learning
with
Information Technology
through a
Consortium for Applications Development
in Higher Education

Figure P-14: CCBI Directorate. TRADOC Options.

service schools so real faculty mentoring can be established.

(5) *Reinforcing the development of decision-making skills by officer students.* See recommended policy F95 Appendix 1.

Discussion: This policy seeks to focus emphasis on methods which are crucial to enhancing officer decision-making skills.

(6) *Accelerating the educational uses of computer technology by Army schools and the individual officer.* See recommended policies F70 and F71, Appendix 1.

Discussion: Major policies to assure that enough *focus* (F70) and enough *resources* (F71) are provided to add the *education* oriented uses of computer technology and to provide a linkage to higher education universities. The current Army initiatives are, with a few exceptions, oriented on training and skills acquisition operating under the increasingly outmoded behavior/rule education model.

(7) *Implementing PDOS-recommended policies and navigating PDOS desired system through time.*

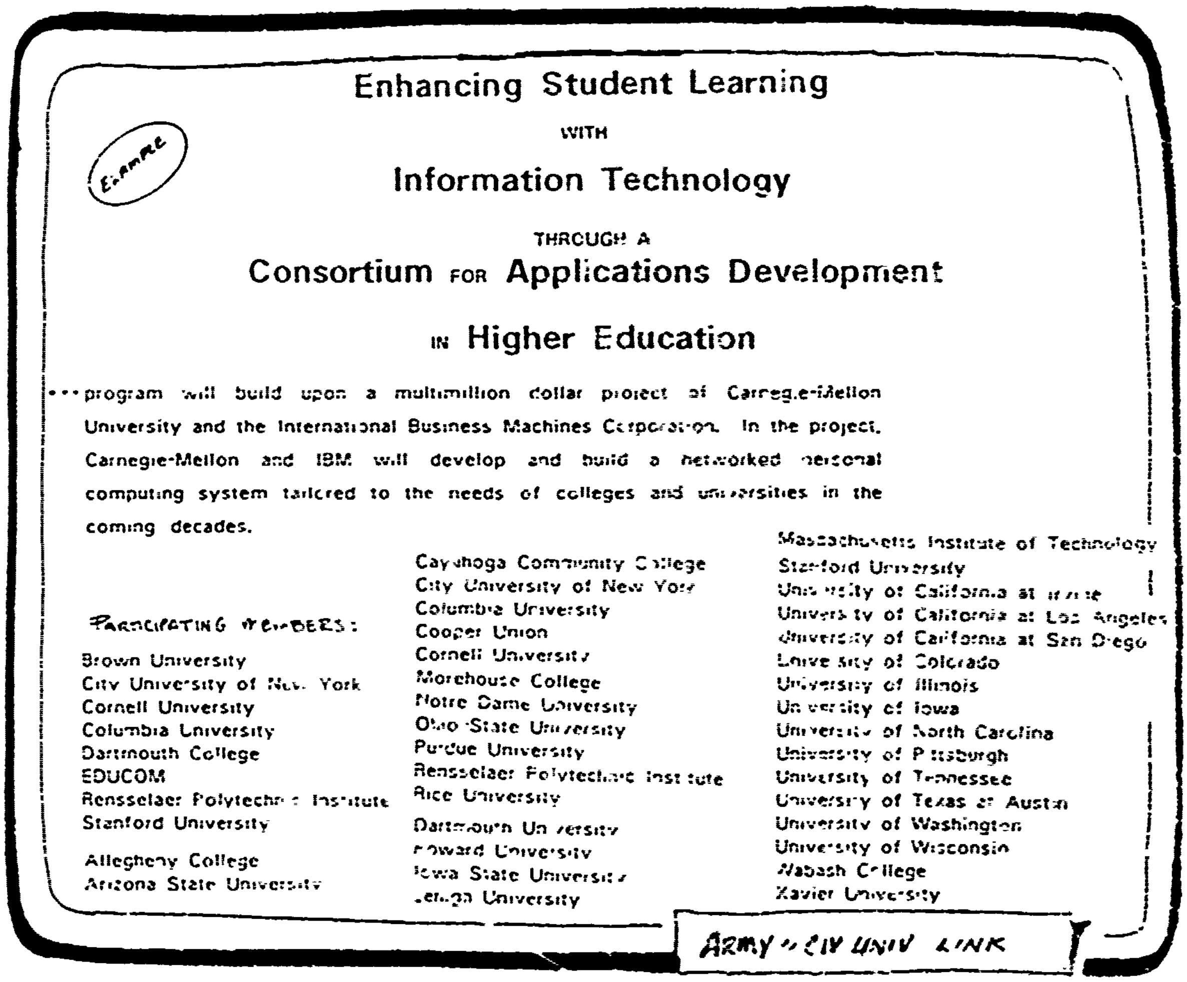
(a) Establish a PDOS cell in ODCSOPS. See Policies F70 and O71: Annex W, Control and Coordination.

(b) ODCSPER over-watch and interface with other studies. See recommended policies O70 and O72: Annex W, Control and Coordination.

(c) Establish linkage to new information management regulation—AR 25-5. See policy F73, Appendix 1.

(d) Send officers to post-masters level education in advanced educational technologies. See policy F75, Appendix 1.

(e) CERL study most cost effective ways to



Enhancing Student Learning

WITH

Information Technology

THROUGH A

Consortium FOR Applications Development

IN Higher Education

...program will build upon a multimillion dollar project of Carnegie-Mellon University and the International Business Machines Corporation. In the project, Carnegie-Mellon and IBM will develop and build a networked personal computing system tailored to the needs of colleges and universities in the coming decades.

PARTICIPATING MEMBERS:

Brown University
City University of New York
Cornell University
Columbia University
Dartmouth College
EDUCOM
Rensselaer Polytechnic Institute
Stanford University

Allegheny College
Arizona State University

Cayahoga Community College
City University of New York
Columbia University
Cooper Union
Cornell University
Morehouse College
Notre Dame University
Ohio State University
Purdue University
Rensselaer Polytechnic Institute
Rice University

Dartmouth University
Howard University
Iowa State University
Lehigh University

Massachusetts Institute of Technology
Stanford University
University of California at Irvine
University of California at Los Angeles
University of California at San Diego
University of Colorado
University of Illinois
University of Iowa
University of North Carolina
University of Pittsburgh
University of Tennessee
University of Texas at Austin
University of Washington
University of Wisconsin
Wabash College
Xavier University

ARMY – CIV UNIV LINK

Figure P-15: Enhancing Student Learning With Information Technology Through a Consortium for Applications Development in Higher Education.

apply PDOS CCBI recommended technologies using the communications education model. See policy F77, Appendix 1.

(f) Conduct a Joint Service investigation into use of artificial intelligence using the communications education model. See policy F79, Appendix 1.

(g) Conduct a new brigadier general policy impact analysis exercise to provide annual feedback on the navigation of the professional development system to the CSA, VCSA and the ARSTAF. See policy F80, Appendix 1.

(h) Keep OACSIM involved in the educational uses of the computer. See policies F82 and F83, Appendix 1.

(i) Annually provide an Army Research Associate to monitor the PDOS major thrusts. See policy F88, Appendix 1.

(j) Conduct an Army Science Board Summer Study in 1985 which analyzes PDOS use of advanced technologies to support education and training. See policy F89, Appendix 1.

(k) ODCSOPS rewrite AR350-1, Training and Education Systems to incorporate PDOS major thrusts. See policy F90, Appendix 1.

Discussion: These policies exist to implement and institutionalize the education and training methods by helping to combat the natural tendency of existing systems to resist the influences of change. The difference between near-term aims and long-term goals must be constantly emphasized to preclude confusion in understanding by the major players. Finally, a quantitative and qualitative evaluation of the entire program should be initiated once the major initiatives have had the opportunity to germinate.

5. CSA Remarks. The aim, major thrusts and base policies in paragraph 4a, above, were approved in concept.

Appendices

1. Discussion of Policies.
2. Policy Spread Sheets - Education and Training Policies.
3. Anticipated Long-Range Impact on the Officer Family of Education and Training Initiatives.
4. Action Plan.
5. Phasing and Resource Plan.
6. Information and Media Plan.
7. Glossary.
8. Bibliography.

Author: COL Dunn
Team Chief: COL Dunn

Appendix 1 to Annex P

Discussion of Policies

1. PURPOSE. To present all of the PDOS-recommended policies associated with education and training methods.

2. **DISCUSSION.** Following each policy number is found a code which refers to the purpose of the policy. The codes are:

S—Policy intended to support an education and training NEED. An area requiring added emphasis.

I—Policy intended to support INSTUTIONALIZATION of PDOS CCBI (and other major) thrusts.

B—BASE policy; one which is essential for supporting the need and/or implementation.

SP—SUPPORTING POLICY: one which supports a Base Policy and reflects only one of many ways that the major thrusts could be supported.

a. *Policy F70*: S/I/B

(1) Direct TRADOC to accelerate the introduction and use of computer-communication based instruction (CCBI) technologies, as indicated for Development Periods 1-6, into military schools, initially, then into units/organizations and ultimately for use by individual officers. The aim is to use these technologies in the school setting first in order to:

(a) Capitalize on the educational advantages of emerging technologies.

(b) Make officers comfortable with routine use of electronic technologies.

(c) Develop officer decision-making skills which carry over into operational applications.

(d) Accelerate the introduction and the development of decision-making aids in the Army with the overall aim of increasing the tempo of prudent, sound decision making under the stresses of combat.

(2) Recommend TRADOC consider adding a new CCBI Directorate under the TRADOC Deputy Chief of Staff for Training and locating it at the Soldiers' Support Center (SSC).

(3) Discussion:

(a) CCBI includes all uses of the computer to support training and educational instruction in schools, units and organizations and by individual officers. Examples are: knowledge bases, computer-assisted instruction (CAI) programs, "School of the Air" video/audio teleconferencing, interactive video disk systems, simulations, information and policy impact analysis decision-support aids and artificial intelligence—expert systems.

(b) The new CCBI charter would integrate all educational CCBI technologies. Funds to procure systems and support training necessary for their acceptance and use would be provided separately from the TRADOC budget. Acquisition and procurement authority under the provisions of AR 25-5 would reside with the center/agency director. The CCBI Directorate will act as the service schools' agent in gaining administrative approvals. It will establish bonus incentives for schools to create centers of quality and excellence in CCBI education. The CCBI Directorate will develop training programs to gain acceptance of CCBI technologies by school faculties. Their aim is to "make CCBI happen in support of the faculty mentor" by performing a service for schools and units and organizations. The Directorate will interface with ODCSOPS (Director of Training), OCSA (US Army FORUM), OACSIM, USMA, AMC, other services, DOD, other Federal agencies and civilian higher educational institutions. Coordination with OACSIM is vital to tracking the myriad of information communication technologies that impact on CCBI. Examples of the complexity of the technology are: data bases, laser printers, AI, microchips, robotics, fiber-optics, graphics, microwave and satellite communications.

(c) A link to Training Technology Agency and/or Army Training Support Center is also appropriate. From the study group's pcrespective, the missions of the CCBI directorate and TTA are most compatible. The SSC location recommendation is based primarily on the artificial intelligence activities there. The most potentially useful technologies in the efforts to enhance officer decision making under stress are felt to be wargames, artificial intelligence and expert systems.

(d) Under the PDOS concept, the service schools are the place where new learning technologies are "pilot tested" prior to decisions to expand to other schools or other populations. USMA is an ideal partner in this development and testing process as their focus is primarily on education and the cognitive, decision-making processes.For a number of reasons, they should be the "organizational mentor" for "smart courseware" experimentation and work closely with the TRADOC CCBI directorate and any partnerships established for education-oriented courseware development.

b. *Policy F71*: S/I/B

HQDA approve the resource augmentation necessary to accomplish Policy F70. An estimate of the resource requirements is provided with the provisions for further analysis of cost effectiveness and overlap with parallel computer technology initiatives; see Policy F77, below.

c. *Policy F72*: I/SP

Augment ODCSOPS, Training with one officer space to monitor the CCBI expansion program and effect the necessary coordination with OACSIM and OCSA (US Army FORUM).

d. *Policy F73*: S/I/SP

Direct ODCSOPS to coordinate with OACSIM to arrange the necessary acquisition and procurement authority for the CCBI Directorate under the provisions of the new AR 25-5, which replaces AR 18-1 on matters pertaining to information management and computer acquisition and procurement; concurrently, pursue authority to purchase "audio-visual"type items under AR 108-2.

e. *Policy F74*: S/SP

(1) Direct ODCSPER to investigate the potential impact on officers' families and the family environment of the widespread use by all family members of computer technology in the home setting.

(2) Discussion: The widespread use of computers in the home is likely to alter work habits and schedules. A concerted effort should be made to responsibly absorb the negative impact of CCBI which individuals may experience in both the work and the home settings.

f. *Policy F75*: S/SP

(1) Send five majors to obtain post-masters level education in programs tailored to provide the Army with expertise in the field of intelligent educational systems.

(2) Disperse these assets to OACSIM, TRADOC (e.g., to the CCBI Directorate); USMA and the Army Research Institute.

(3) Discussion: This policy is strongly supported by the

g. *Policy F76*: S/SP

(1) Direct DCSPER to task the Army Research Institute to validate the PDOS analysis with regards to the match of CCBI systems to varied types of knowledge/skill proficiencies.

(2) Provide the findings to ODCSOPS, Training; OACSIM and TRADOC (and to the CCBI Directorate when formed).

h. *Policy F77*: S/I/SP

(1) Direct the Chief of Engineers to task and fund the Construction Engineers Research Laboratory (CERL) to evaluate the most cost effective ways to apply Computer Communications Based Instruction technologies and identify applications of CCBI to other populations (e.g., enlisted soldiersor civilians) and mission areas (e.g., Army Continued Education Program).

(2) Provide the findings to ODCSOPS, Training to TRADOC Training Technology Agency (TTA), Army Training Support Center (ATSC), Combined Arms Training Activity (CATA), USMA and CCBI Directorate, when formed.

(3) Discussion: Work would be based on the new communications education model (Figure P-8) and include, as advisors, prominent educators in the theory of knowledge and adult learning. This analysis would be used by ODCSOPS and TRADOC to help justify their CCBI requirements. CERL analysis would provide the following deliverables:

(a) Potential CCBI applications beyond officer population.

(b) Potential CCBI use strategies.

(c) Potential cost savings/avoidance measures.

(d) A cross-training effectiveness analysis.

(e) A sample front-end procedure to use to implement CCBI pilot projects.

i. *Policy F78*: S/SP

Direct TRADOC (working with USMA) to develop mentor training programs to help gain acceptance of CCBI technologies in the schools and in units and organizations and oversee computer courseware development by civilian education specialists. Action should be initiated upon completion of the actions in Policy F77.

j. *Policy F79*: S/SP

Direct OACSIM to allocate research funds to pursue a Joint service initiative for the development of educational uses of Artificial Intelligence-Expert Systems (AI-ES) and related technologies. Action should be initiated upon completion of the actions in Policy F77.

k. *Policy F80*: S/I/SP

(1) Direct ODCSOPS/ODCSPER to include the design of a two day "user friendly" strategic planning/ futures policy impact analysis exercise in the evolving educational program for new brigadier generals. The planning exercise will use the professional development of officers as a theme. The output from this sub-course is a set of recommended adjustments in the professional development of officers strategy: it is a tool/aid for senior Army leaders (CSA, VCSA and ARSTAF) as they "navigate" the Army towards the professional development desired system state.

(2) Discussion:

(a) LTC's Carl Stout and Carolyn Russell will design the exercise by 31 Mar 85 for subsequent turnover to ODCSPER/ODCSOPS

GO/SES development transition team and incorporation in the overall brigadier general course plan.

(b) Effort will be monitored by ODCSOPS planners to assure that there is compatibility with Army long-range planning initiatives.

(c) Effort will be tied to the work in Expert Systems by OACSIM, Futures and Concepts Directorate and the participation of the Joint ACSIM/ARI participation in research with MIT, Harvardand other prominent universities.

(d) Effort will be made to arrange sponsorship of theexercise by the Strategic Studies Institute at AWC as they already havea Futures Group linked to DA DCSOPS. They would be an appropriate "home" for the exercise conducted under the direction of the ODCSPER/ODCSOPS GO/SES development team.

l. Policy F81: S/SP

Direct ODCSPER to purchase an artificial intelligence-expert system software package for the existing FORECAST system. This will assist in making the strategic planning exercise for new brigadier generals simple and "user friendly" (see Policy F80, above).

m. Policy F82: S/I/SP

Direct OACSIM, Futures and Concepts Directorate to work with ODCSPER, GO/SES Development Team to continue development of the PDOS futures process as a strategic planning/policy impact analysis model for use in senior Army leader development program.

n. Policy F83: I/SP

(1) Direct OACSIM and ARI to include the implications for officer education training in their participation with the MIT Sloan School of Management's "Management in the 90's" program and the Harvard Center for Information Policy Research's "Program on Information Resource Policy."

(2) Discussion: These efforts are aimed at the development of technology scenarios based on the experiences of leading-edge organizations, the definitions of the policies surrounding the use of computer technologies and the discussions designed to explore the insights gained from research. The Army (OACSIM) is one of the major participating organizations. An active feedback link between OACSIM and the TRADOC CCBI Directorate is essential to the latter's efforts to responsibly manage the assimilation of CCBI into all military schools plus the work and home settings of Army officers.

o. Policy F84: S/SPDirect AMC to build computer assisted instruction (CAI) into all new equipment training packages for new major operational systems.

p. Policy F86: S/B

(1) FOR RESERVE COMPONENT—Direct TRADOC, together with NGB and OCAR, to concentrate on the development of an education and training methods support strategy which is aligned with the Active Component strategy.

(2) Discussion: The methods selected will concentrate on assisting individual officer self-development with a minimum of in-residence schooling required. The CERL study (Policy F77) will incorporate this in its recommendations.

q. Policy F87: S/SP

(1) FOR RESERVE COMPONENT—Direct ODCSPER, together with NGB and OCAR, to study the impact of PDOS policies, specifically those related to resident and non-resident school instruction, unit training requirements and use of CCBI, on the Reserve Component officer, his family and civilian employer.

(2) Discussion: The study will look at officer willingness to remain in the Reserve Component as time requirements for professional development increase.

r. Policy J26: S/SPDirect TRADOC to develop in-resident and non-resident military instruction programs simultaneously and maintain them current, together.

s. Policy F88: I/SP

Direct DAS to sponsor a Senior Service College Army Research Associate to continue to look for ways to institutionalize PDOS CCBI initiatives and other major PDOS thrusts within the Army's existing systems. Continue this sponsorship for at least the next five years.

t. Policy F89: I/SP

(1) Direct the Army Science Board (ASB) to conduct the 1985 Summer Study on education and training technologies.

(2) Discussion: The study will build on the 1982 DSB Summer Study on training technology, the PDOS CCBI initiatives and the CERL report (Policy F77), if available by the 1985 ASB Summer Study.

u. Policy F9C. I/SP

Direct DCSOPS to incorporate the PDOS education and training strategies and major thrusts in the new AR 350-1, Army Training and Education System.

v. Policy F95: S/I/B/SP

Direct TRADOC to support and develop officer decision skills at all levels of school instruction and in the unit and organization through the frequent use of simulations, experiential exercises and in small group settings using mentor instructors who teach, coach and guide (refer to policy 084).

Author: COL Dunn
Team Chief: COL Dunn

Appendix 2 to Annex P

Policy Spread Sheets

PURPOSE: To present, in concise format, the policies for education and training methods.

NOTE: This Appendix does not include the small group method policies as they are covered in the MENTOR Spread Sheet.

RECOMMENDED SY
PDOS EDUCATION AND TRAI

DISCUSSION

FOLLOWING EACH POLICY NUMBER IS FOUND A CODE WHICH REFERS TO THE PURPOSE OF THE POLICY. THE CODES ARE:

S - POLICY INTENDED TO SUPPORT AN EDUCATION AND TRAINING NEED. AN AREA REQUIRING ADDED EMPHASIS.

I - POLICY INTENDED TO SUPPORT INSTITUTIONALIZATION OF PDOS CCBI (AND OTHER MAJOR THRUSTS).

B - BASE POLICY: ONE WHICH IS ESSENTIAL FOR SUPPORTING THE NEED AND/OR IMPLEMENTATION.

SP - SUPPORTING POLICY: ONE WHICH SUPPORTS A BASE POLICY AND REFLECTS ONLY ONE OF MANY WAYS THAT THE MAJOR THRUSTS COULD BE SUPPORTED.

POLICIES

PDOS EDUCATION AND TRAINING METHODS

(WITH EMPHASIS ON ELECTRONIC TECHNOLOGIES

POLICIES

F70 S/I/B
(1) DIRECT TRADOC TO ACCELERATE THE INTRODUCTION AND
COMMUNICATION BASED INSTRUCTION (CCBI) TECHNOLOGIES, A
DEVELOPMENT PERIODS 1-6, INTO MILITARY SCHOOLS. INITI
UNITS/ORGANIZATIONS AND ULTIMATELY FOR USE BY INDIVIDUAL OFF
TO USE THESE TECHNOLOGIES IN THE SCHOOL SETTING FIRST IN ORDE

(A) CAPITALIZE ON THE EDUCATIONAL ADVANTAGES OF EMERGING

(B) MAKE OFFICERS COMFORTABLE WITH ROUTINE USE OF ELECTR

(C) DEVELOP OFFICER DECISION MAKING SKILLS WHICH
OPERATIONAL APPLICATIONS.

(D) ACCELERATE THE INTRODUCTION AND THE DEVELOPMENT O
AIDS IN THE ARMY WITH THE OVERALL AIM OF INCREASING THE
SOUND DECISION MAKING UNDER THE STRESSES OF COMBAT.

(2) RECOMMEND TRADOC CONSIDER ADDING A NEW CCBI DIRECTORATE
DEPUTY CHIEF OF STAFF FOR TRAINING AND LOCATING IT AT THE
CENTER (SSC).

(3) DISCUSSION:

(A) CCBI INCLUDES ALL USES OF THE COMPUTER TO SUPP
EDUCATIONAL INSTRUCTION IN SCHOOLS, UNITS AND ORGANIZATIONS
OFFICERS. EXAMPLES ARE: KNOWLEDGE BASES, COMPUTER ASSISTED
PROGRAMS, "SCHOOL OF THE AIR" VIDEO/AUDIO TELECONFERENCING,
DISK SYSTEMS, SIMULATIONS, INFORMATION AND POLICY IMPACT
SUPPORT AIDS AND ARTIFICIAL INTELLIGENCE -- EXPERT SYSTEMS.

(B) THE NEW CCBI CHARTER WOULD INTEGRATE ALL
TECHNOLOGIES. FUNDS TO PROCURE SYSTEMS AND SUPPORT TRAINI
THEIR ACCEPTANCE AND USE WOULD BE PROVIDED SEPARATELY FROM T
ACQUISITION AND PROCUREMENT AUTHORITY UNDER THE PROVISIONS
108-2 WOULD RESIDE WITH THE CENTER/AGENCY DIRECTOR. THE CCBI
ACT AS THE SERVICE SCHOOLS' AGENT IN GAINING ADMINISTRATIV
WILL ESTABLISH BONUS INCENTIVES FOR SCHOOLS TO CREATE CENTE
EXCELLENCE IN CCBI EDUCATION. THE CCBI DIRECTORATE WILL
PROGRAMS TO GAIN ACCEPTANCE OF CCBI TECHNOLOGIES BY SCHOOL
AIM IS TO "MAKE CCBI HAPPEN IN SUPPORT OF THE FACULTY MENTOR"
SERVICE FOR SCHOOLS AND UNITS AND ORGANIZATIONS. THE
INTERFACE WITH ODCSOPS, TRAINING; OCSA (US ARMY FORUM); A
SERVICES; DOD; OTHER FEDERAL AGENCIES AND CIVILIAN H
INSTITUTIONS. COORDINATION WITH OACSIM IS VITAL TO TRACK
INFORMATION COMMUNICATION TECHNOLOGIES THAT IMPACT ON CCBI.
COMPLEXITY OF THE TECHNOLOGY ARE: DATA BASES, LASER PRINTERS
ROBOTICS, FIBER-OPTICS, GRAPHICS, MICROWAVE AND SATELLITE COM

(C) A LINK TO TTA AND/OR ACTO IS ALSO APPROPRIATE.
GROUP'S PERSPECTIVE, THE MISSIONS OF THE CCBI DIRECTORATE
COMPATIBLE. THE SSC LOCATION RECOMMENDATION IS BASED
ARTIFICIAL INTELLEGENCE ACTIVITIES THERE. THE MOST PO
TECHNOLOGIES IN THE EFFORTS TO ENHANCE OFFICER DECISION MA
ARE FELT TO BE WARGAMES AND ARTIFICIAL INTELLIGENCE - EXPERT

(D) UNDER THE PDOS CONCEPT, THE SERVICE SCHOOLS ARE TH
LEARNING TECHNOLOGIES ARE "PILOT TESTED" PRIOR TO DECISIONS T
SCHOOLS OR OTHER POPULATIONS. USMA IS AND IDEAL PARTNER IN
AND TESTING PROCESS AS THEIR FOCUS IS PRIMARILY ON E
COGNITIVE, DECISION MAKING PROCESSES. FOR A NUMBER OF REASO
THE "ORGANIZATIONAL MENTOR" FOR "SMART COURSEWARE" EXPERIME
CLOSELY WITH THE TRADOC CCBI DIRECTORATE AND ANY PARTNERSHIP
EDUCATION ORIENTED COURSEWARE DEVELOPMENT.

F71 S/I/B
HQDA APPROVE THE RESOURCE AUGMENTATION NECESSARY TO ACCOMPLIS
AN ESTIMATE OF THE RESOURCE REQUIREMENTS IS PROVIDED WITH T
FURTHER ANALYSIS OF COST ESTIMATES AND OVERLAP WITH
TECHNOLOGY INITIATIVES: SEE POLICY F77, BELOW.

2

MMENDED SYSTEM
ON AND TRAINING METHODS

POLICIES

EDUCATION AND TRAINING METHODS
PHASIS ON ELECTRONIC TECHNOLOGIES)

POLICIES

CCELERATE THE INTRODUCTION AND USE OF COMPUTER-
RUCTION (CCBI) TECHNOLOGIES, AS INDICATED FOR
INTO MILITARY SCHOOLS, INITIALLY, THEN INTO
IMATELY FOR USE BY INDIVIDUAL OFFICERS. THE AIM IS
N THE SCHOOL SETTING FIRST IN ORDER TO:

EDUCATIONAL ADVANTAGES OF EMERGING TECHNOLOGIES.

ORTABLE WITH ROUTINE USE OF ELECTRONIC TECHNOLOGIES.

DECISION MAKING SKILLS WHICH CARRY OVER INTO

NTRODUCTION AND THE DEVELOPMENT OF DECISION MAKING
OVERALL AIM OF INCREASING THE TEMPO OF PRUDENT,
THE STRESSES OF COMBAT.

IDER ADDING A NEW CCBI DIRECTORATE UNDER THE TRADOC
TRAINING AND LOCATING IT AT THE SOLDIERS' SUPPORT

L USES OF THE COMPUTER TO SUPPORT TRAINING AND
SCHOOLS, UNITS AND ORGANIZATIONS AND BY INDIVIDUAL
NOWLEDGE BASES, COMPUTER ASSISTED INSTRUCTION (CAI)
IR" VIDEO/AUDIO TELECONFERENCING, INTERACTIVE VIDEO
INFORMATION AND POLICY IMPACT ANALYSIS DECISION
INTELLIGENCE -- EXPERT SYSTEMS.

CHARTER WOULD INTEGRATE ALL EDUCATIONAL CCBI
OCURE SYSTEMS AND SUPPORT TRAINING NECESSARY FOR
ULD BE PROVIDED SEPARATELY FROM THE TRADOC BUDGET.
AUTHORITY UNDER THE PROVISIONS OF AR 25-5 OR AR
CENTER/AGENCY DIRECTOR. THE CCBI DIRECTORATE WILL
S' AGENT IN GAINING ADMINISTRATIVE APPROVALS. IT
IVES FOR SCHOOLS TO CREATE CENTERS OF QUALITY AND
ON. THE CCBI DIRECTORATE WILL DEVELOP TRAINING
OF CCBI TECHNOLOGIES BY SCHOOL FACULTIES. THEIR
IN SUPPORT OF THE FACULTY MENTOR" BY PERFORMING AS
UNITS AND ORGANIZATIONS. THE DIRECTORATE WILL
AINING, OCSA (US ARMY FORUM), AMC, OACSIM, OTHER
ERAL AGENCIES AND CIVILIAN HIGHER EDUCATIONAL
WITH OACSIM IS VITAL TO TRACKING THE MYRIAD OF
ECHNOLOGIES THAT IMPACT ON CCBI. EXAMPLES OF THE
ARE: DATA BASES, LASER PRINTERS, AI, MICROCHIPS,
HICS, MICROWAVE AND SATELLITE COMMUNICATIONS.

D/OR ACTO IS ALSO APPROPRIATE. FROM THE STUDY
SSIONS OF THE CCBI DIRECTORATE AND TTA ARE MOST
TION RECOMMENDATION IS BASED PRIMARILY ON THE
CTIVITIES THERE. THE MOST POTENTIALLY USEFUL
TO ENHANCE OFFICER DECISION MAKING UNDER STRESS
ARTIFICIAL INTELLIGENCE - EXPERT SYSTEMS.

CEPT. THE SERVICE SCHOOLS ARE THE PLACE WHERE NEW
ILOT TESTED" PRIOR TO DECISIONS TO EXPAND TO OTHER
S. USMA IS AND IDEAL PARTNER IN THIS DEVELOPMENT
HEIR FOCUS IS PRIMARILY ON EDUCATION AND THE
ROCESSES. FOR A NUMBER OF REASONS, THEY SHOULD BE
FOR "SMART COURSEWARE" EXPERIMENTATION AND WORK
I DIRECTORATE AND ANY PARTNERSHIPS ESTABLISHED FOR
DEVELOPMENT.

MENTATION NECESSARY TO ACCOMPLISH POLICY F7C.
REQUIREMENTS IS PROVIDED WITH THE PROVISIONS FOR
ESTIMATES AND OVERLAP WITH PARALLEL COMPUTER
OLICY F77, BELOW.

POLICIES CONT.

F72 I/SP
AUGMENT ODCSOPS, TRAINING WITH ONE OFFICER SPACE TO MONITOR THE CCBI EXPANSION PROGRAM AND EFFECT THE NECESSARY COORDINATION WITH OACSIM AND OCSA (US ARMY FORUM).

F73 S/I/SP
DIRECT ODCSOPS TO COORDINATE WITH OACSIM TO ARRANGE THE NECESSARY ACQUISITION AND PROCUREMENT AUTHORITY FOR THE CCBI DIRECTORATE UNDER THE PROVISIONS OF THE NEW AR 25-5, WHICH REPLACES AR 18-1 ON MATTERS PERTAINING TO INFORMATION MANAGEMENT AND COMPUTER ACQUISITION AND PROCUREMENT. CONCURRENTLY, PURSUE AUTHORITY TO PURCHASE "AUDIO-VISUAL" TYPE ITEMS UNDER AR 108-2.

F74 S/SP
(1) DIRECT ODCSPER TO INVESTIGATE THE POTENTIAL IMPACT ON OFFICERS' FAMILIES AND THE FAMILY ENVIRONMENT OF THE WIDESPREAD USE BY ALL FAMILY MEMBERS OF COMPUTER TECHNOLOGY IN THE HOME SETTING.

(2) DISCUSSION: THE WIDESPREAD USE OF COMPUTERS IN THE HOME IS LIKELY TO ALTER WORK HABITS AND SCHEDULES. A CONCERTED EFFORT SHOULD BE MADE TO RESPONSIBLY ABSORB THE IMPACT OF CCBI WHICH INDIVIDUALS WILL EXPERIENCE IN BOTH THE WORK AND THE HOME SETTINGS.

F75 S/SP
(1) SEND FIVE MAJORS TO OBTAIN POST-MASTERS LEVEL EDUCATION IN PROGRAMS TAILORED TO PROVIDE THE ARMY WITH EXPERTISE IN THE FIELD OF INTELLIGENT EDUCATIONAL SYSTEMS.

(2) DISPERSE THESE ASSETS TO OACSIM, TRADOC (E.G., TO THE CCBI DIRECTORATE); USMA AND THE ARMY RESEARCH INSTITUTE.

(3) DISCUSSION: THIS POLICY IS STRONGLY SUPPORTED BY THE OPMS STUDY GROUP'S RECOMMENDATION TO CONSIDER ADVANCED CIVIL SCHOOLING REQUIREMENTS FOR ANTICIPATED FUTURE NEEDS. CONSIDERATION SHOULD ALSO BE GIVEN TO A PARALLEL CIVILIAN CAREER PROGRAM.

F76 S/SP
(1) DIRECT DCSPER TO TASK THE ARMY RESEARCH INSTITUTE TO VALIDATE THE PDOS ANALYSIS WITH REGARDS TO THE MATCH OF CCBI SYSTEMS TO VARIED TYPES OF KNOWLEDGE/DKILL PROFICIENCIES.

(2) PROVIDE THE FINDINGS TO ODCSOPS, TRAINING, OACSIM AND TRADOC (AND TO THE CCBI DIRECTORATE WHEN FORMED).

F77 S/I/SP
(1) DIRECT THE CHIEF OF ENGINEERS TO TASK AND FUND THE CORPS OF ENGINEERS RESEARCH LABORATORY (CERL) TO EVALUATE THE MOST COST EFFECTIVE WAYS TO APPLY COMPUTER COMMUNICATIONS BASED INSTRUCTION TECHNOLOGIES AND IDENTIFY APPLICATIONS OF CCBI TO OTHER POPULATIONS (E.G., ENLISTED SOLDIERS OR CIVILIANS) AND MISSION AREAS (E.G., ARMY CONTINUED EDUCATION PROGRAM).

(2) PROVIDE THE FINDINGS TO ODCSOPS, TRAINING TO TRADOC TRAINING TECHNOLOGY AGENCY (TTA), ARMY TRAINING SUPPORT CENTER (ATSC), COMBINED ARMS TRAINING ACTIVITY (CATA), USMA AND CCBI DIRECTORATE, WHEN FORMED.

(3) DISCUSSION: THIS ANALYSIS WOULD BE USED BY ODCSOPS AND TRADOC TO HELP JUSTIFY THEIR CCBI REQUIREMENTS. CERL ANALYSIS WOULD PROVIDE THE FOLLOWING DELIVERABLES:

(A) POTENTIAL CCBI APPLICATIONS BEYOND OFFICER POPULATION.

(B) POTENTIAL CCBI USE STRATEGIES.

(C) POTENTIAL COST SAVINGS/AVOIDANCE MEASURES.

(D) A CROSS-TRAINING EFFECTIVENESS ANALYSIS.

(E) A SAMPLE FRONT-END PROCEDURE TO USE TO IMPLEMENT CCBI PILOT PROJECTS.

F78 S/SP
DIRECT TRADOC TO DEVELOP MENTOR TRAINING PROGRAMS TO HELP GAIN ACCEPTANCE OF CCBI TECHNOLOGIES IN THE SCHOOLS AND IN UNITS AND ORGANIZATIONS AND OVERSEE COMPUTER COURSEWARE DEVELOPMENT BY CIVILIAN EDUCATION SPECIALISTS. ACTION SHOULD BE INITIATED UPON COMPLETION OF THE ACTIONS IN POLICY F77.

F79 S/SP
DIRECT OACSIM TO ALLOCATE RESEARCH FUNDS TO PURSUE A JOINT SERVICE INITIATIVE FOR THE DEVELOPMENT OF EDUCATIONAL USES OF ARTIFICIAL INTELLIGENCE-EXPERT SYSTEMS (AI-ES) AND RELATED TECHNOLOGIES. ACTION SHOULD BE INITIATED UPON COMPLETION OF THE ACTIONS IN POLICY F77.

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RECOMMENDED SYST
PDOS EDUCATION AND TRAINI

POLICIES CONT.

F80 S/I/B
(1) DIRECT ODCSOPS/ODCSPER TO INCLUDE THE DESIGN OF A TWO DAY "USER FRIENDLY" STRATEGIC PLANNING/FUTURES POLICY IMPACT EXERCISE IN THE EVOLVING EDUCATIONAL PROGRAM FOR NEW BRIGADIER GENERALS. THE PLANNING EXERCISE WILL USE THE PROFESSIONAL DEVELOPMENT OF OFFICERS AS A THEME. THE OUTPUT FROM THIS SUB-COURSE IS A SET OF RECOMMENDED ADJUSTMENTS IN THE PROFESSIONAL DEVELOPMENT OF OFFICERS STRATEGY: IT IS A TOOL/AID FOR SENIOR ARMY LEADERS (CSA, VCSA AND ARSTAF) AS THEY "NAVIGATE" THE ARMY TOWARDS THE PROFESSIONAL DEVELOPMENT DESIRED SYSTEM STATE.

(2) DISCUSSION:

(A) LTC'S CARL STOUT AND CAROLYN RUSSELL WILL DESIGN THE EXERCISE BY 31 MAR 85 FOR SUBSEQUENT TURNOVER TO ODCSPER/ODCSOPS GO/SES DEVELOPMENT TRANSITION TEAM AND INCORPORATION IN THE OVERALL BRIGADIER GENERAL COURSE PLAN.

(B) EFFORT WILL BE MONITORED BY ODCSOPS PLANNERS TO ASSURE THAT THERE IS COMPATIBILITY WITH ARMY LONG-RANGE PLANNING INITIATIVES.

(C) EFFORT WILL BE TIED TO THE WORK IN EXPERT SYSTEMS BY OACSIM, FUTURES AND CONCEPTS DIRECTORATE AND THE PARTICIPATION OF THE JOINT ACSIM/ARI PARTICIPATION IN RESEARCH WITH MIT AND HARVARD.

(D) EFFORT WILL BE MADE TO ARRANGE SPONSORSHIP OF THE EXERCISE BY THE STRATEGIC STUDIES INSTITUTE AT AWC AS THEY ALREADY HAVE A FUTURES GROUP LINKED TO DA DCSOPS. THEY WOULD BE AN APPROPRIATE "HOME" FOR THE EXERCISE CONDUCTED UNDER THE DIRECTION OF THE ODCSPER/ODCSOPS GO/SES DEVELOPMENT TEAM.

F81 S/SP
DIRECT ODCSPER TO PURCHASE AND ARTIFICIAL INTELLIGENCE-EXPERT SYSTEM SOFTWARE PACKAGE FOR THE EXISTING FORECAST SYSTEM. THIS WILL ASSIST IN MAKING THE STRATEGIC PLANNING EXERCISE FOR NEW BRIGADIER GENERALS SIMPLE AND "USER FRIENDLY" (SEE POLICY F80, ABOVE).

F82 S/I/SP
DIRECT OACSIM, FUTURES AND CONCEPTS DIRECTORATE TO WORK WITH ODCSPER, GO/SES DEVELOPMENT TEAM TO CONTINUE DEVELOPMENT OF THE PDOS FUTURES PROCESS AS A STRATEGIC PLANNING/POLICY IMPACT ANALYSIS MODEL FOR USE IN SENIOR ARMY LEADER DEVELOPMENT PROGRAM.

F83 I/SP
(1) DIRECT OACSIM AND ARI TO INCLUDE THE IMPLICATIONS FOR OFFICER EDUCATION TRAINING IN THEIR PARTICIPATION WITH THE MIT SLOAN SCHOOL OF MANAGEMENT'S "MANAGEMENT IN THE 90'S" PROGRAM AND THE HARVARD CENTER FOR INFORMATION POLICY RESEARCH'S "PROGRAM ON INFORMATION RESOURCE POLICY."

(2) DISCUSSION: THESE EFFORTS ARE AIMED AT THE DEVELOPMENT OF TECHNOLOGY SCENARIOS BASED ON THE EXPERIENCES OF LEADING-EDGE ORGANIZATIONS. THE DEFINITIONS OF THE POLICIES SURROUNDING THE USE OF COMPUTER TECHNOLOGIES AND THE DISCUSSIONS DESIGNED TO EXPLORE THE INSIGHTS GAINED FROM RESEARCH. THE ARMY (OACSIM) IS ONE OF THE MAJOR ORGANIZATIONS PARTICIPATING. AN ACTIVE FEEDBACK LINK BETWEEN OACSIM AND THE TRADOC CCBI DIRECTORATE IS ESSENTIAL TO THE LATTER'S EFFORTS TO RESPONSIBLY MANAGE THE ASSIMILATION OF CCBI INTO ALL MILITARY SCHOOLS PLUS THE WORK AND HOME SETTINGS OF ARMY OFFICERS.

F84 S/SP
DIRECT AMC TO BUILD COMPUTER ASSISTED INSTRUCTION (CAI) INTO EQUIPMENT TRAINING PACKAGES FOR NEW MAJOR OPERATIONAL SYSTEMS WHICH HAVE COMPUTER TRAINING CAPABILITIES.

POLICIES CONT.

F86 S/B
(1) FOR RESERVE COMPONENT--DIRECT TRADOC, TOGETHER WITH NGB AN
CONCENTRATE ON THE DEVELOPMENT OF AN EDUCATION AND TRAINING METH
STRATEGY WHICH IS ALIGNED WITH THE ACTIVE COMPONENT STRATEGY.

(2) DISCUSSION: THE METHODS SELECTED WILL CONCENTRATE ON
INDIVIDUAL OFFICER SELF-DEVELOPMENT WITH A MINIMUM OF IN-RESIDEN
REQUIRED. THE CERL STUDY (POLICY F77) WILL INCORPORATE TH
RECOMMENDATIONS.

F87 S/SP
(1) FOR RESERVE COMPONENT--DIRECT ODCSPER, TOGETHER WITH NGB AN
STUDY THE IMPACT OF PDOS POLICIES, SPECIFICALLY THOSE RELATED TO R
NON-RESIDENT SCHOOL INSTRUCTION, UNIT TRAINING REQUIREMENTS AND
ON THE RESERVE COMPONENT OFFICER, HIS FAMILY AND CICIVILIAN EMPLOYE

(2) DISCUSSION: THE STUDY WILL LOOK AT OFFICER WILLINGNESS TO RE
RESERVE COMPONENT AS TIME REQUIREMENTS FOR PROFESSIONAL DEVELOPMENT

J26 S/SP
DIRECT TRADOC TO DEVELOP IN-RESIDENT AND NON-RESIDENT MILITARY
PROGRAMS SIMULTANEOUSLY AND MAINTAIN THEM CURRENT, TOGETHER.

F88 I/SP
DIRECT DAS TO SPONSOR A SENIOR SERVICE COLLEGE ARMY RESEARCH AS
CONTINUE TO LOOK FOR WAYS TO INSTITUTIONALIZE PDOS CCBI INITIATIVES
MAJOR PDOS THRUSTS WITHIN THE ARMY'S EXISTING SYSTEMS. CON
SPONSORSHIP FOR AT LEAST THE NEXT FIVE YEARS.

F89 I/SP
(1) DIRECT THE ARMY SCIENCE BOARD (ASB) TO CONDUCT THE 1985 SUM
EDUCATION AND TRAINING TECHNOLOGIES.

(2) DISCUSSION: THE STUDY WILL BUILD ON THE 1982 DSB SUMMER
TRAINING TECHNOLOGY. THE PDOS CCBI INITIATIVES AND THE CERL REP
F77), IF AVAILABLE BY THE 1985 ASB SUMMER STUDY.

F90 I/SP
DIRECT DCSOPS TO INCORPORATE THE PDOS EDUCATION AND TRAINING STRA
MAJOR THRUSTS IN THE NEW AR 350-1, ARMY TRAINING AND EDUCATION SYSTE

F95 S/I/B
DIRECT TRADOC TO REINFORCE AND DEVELOP OFFICER DECISION SKILLS AT
OF SCHOOL INSTRUCTION AND IN THE UNIT AND ORGANIZATION THROUGH TH
USE OF SIMULATIONS, EXPERIENTIAL EXERCISES AND IN SMALL GROUP SET
MENTOR INSTRUCTORS WHO TEACH, COACH AND GUIDE (REFER TO PO

MMENDED SYSTEM
ION AND TRAINING METHODS

OLICIES CONT.

ONENT--DIRECT TRADOC, TOGETHER WITH NGB AND OCAR, TO
ELOPMENT OF AN EDUCATION AND TRAINING METHODS SUPPORT
ED WITH THE ACTIVE COMPONENT STRATEGY.

E METHODS SELECTED WILL CONCENTRATE ON ASSISTING
F-DEVELOPMENT WITH A MINIMUM OF IN-RESIDENCE SCHOOLING
STUDY (POLICY F77) WILL INCORPORATE THIS IN ITS

NENT--DIRECT DCSPER, TOGETHER WITH NGB AND OCAR, TO
S POLICIES, SPECIFICALLY THOSE RELATED TO RESIDENT AND
TRUCTION, UNIT TRAINING REQUIREMENTS AND USE OF CCBI.
F OFFICER, HIS FAMILY AND CICIVILIAN EMPLOYE.R

TUDY WILL LOOK AT OFFICER WILLINGNESS TO REMAIN IN THE
E REQUIREMENTS FOR PROFESSIONAL DEVELOPMENT INCREASE.

OP IN-RESIDENT AND NON-RESIDENT MILITARY INSTRUCTION
AND MAINTAIN THEM CURRENT, TOGETHER.

A SENIOR SERVICE COLLEGE ARMY RESEARCH ASSOCIATE TO
TS TO INSTITUTIONALIZE PDOS CCBI INITIATIVES AND OTHER
ITHIN THE ARMY'S EXISTING SYSTEMS. CONTINUE THIS
THE NEXT FIVE YEARS.

IENCE BOARD (ASB) TO CONDUCT THE 1985 SUMMER STUDY ON
ECHNOLOGIES.

STUDY WILL BUILD ON THE 1982 DSB SUMMER STUDY ON
E PDOS CCBI INITIATIVES AND THE CERL REPORT (POLICY
E 1985 ASB SUMMER STUDY.

ORATE THE PDOS EDUCATION AND TRAINING STRATEGIES AND
AR 350-1, ARMY TRAINING AND EDUCATION SYSTEM.

FCE AND DEVELOP OFFICER DECISION SKILLS AT ALL LEVELS
ED IN THE UNIT AND ORGANIZATION THROUGH THE FREQUENT
RIENTIAL EXERCISES AND IN SMALL GROUP SETTINGS USING
TEACH, COACH AND GUIDE (REFER TO POLICY O84).

POLICIES CONT.

Author: LTC Magnusson
Team Chief: COL Isaac

Appendix 3

Anticipated Long-Range Impact on the Officer and Family of Education and Training Initiatives

1. **PURPOSE:** To present an analysis of the anticipated long-range impact on the officer family of the education and training policies recommended in this annex.

2. **DISCUSSION:**

a. Annex T, Impact on Families, discusses the general considerations identified in this study as to the impact of PDOS policies on the officers' home environments.

b. The policies associated with education and training methods rely heavily on educational technologies to lessen the burden on officers, families, units and the schoolhouse. A portion of Annex T is repeated here, to emphasize the role which technology is expected to play in decreasing the demands of time on the key actors in the professional development process.

(1) The long-term decreases in impact in the school environments for Development Periods 1-4 are the result of all officers having acquired a core foundation in the schoolhouse at the start of a development period. During subsequent assignments, officers receive shorter functional courses which update and reinforce this foundation.

(2) The long-term decreases in impact in the unit and organization environments for Development Periods 1-4 result from learning uses of technology during a resident school experience. These tools can then enhance the operational missions of units and organizations.

(3) The long-term decreases in impact for the officer results from the widespread uses of smart courseware at the school and othersettings as the officer assumes more responsibility for his professional development.

c. In general, the long-term positive benefits which accrue as a result of the establishment of PDOS-recommended education and training methods policies is in the implementation of improved education and training technologies through computer communications based instruction which permits all involved to learn, teach, manage andmake decisions "smarter" and "faster."

d. In general, the negative detractors which could result from the implementation of PDOS education and training methods policies are in the potential loss of "socialization" which accrues to officers during an extensive resident school experience. This loss is not possible to measure. It is possible to conceive of a different sort of socialization, one similar to that currently experienced by officers who utilize the US Army FORUM networks.

Near and Long-Term Impacts of PDOS Policies on the Officer the Family and the Army

	SCHOOL		*UNIT/ORG*		*SELF*	
DP	NEAR TERM	LONG TERM	NEAR TERM	LONG TERM	NEAR TERM	LONG TERM
0			NA	NA	D	D
1		D		D	D	D
2	I	D		D	D/I	D
3	D/I	D		D	I	D
4		D		D	I	D
5	I	I			I	D
6	I	I			I	D

I = Increase D = Decrease NA = Not Applicable Blanks = No Major Change From Current State.

Author: COL Dunn
Team Chief: COL Dunn

Appendix 4 to Annex P

Action Plan

PURPOSE:

To present the action plan worksheets for the education and training methods policies.

Appendix 4 to ANNEX P
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
Policy F70: (1) Direct TRADOC to accelerate the introduction and use of computer-communication based instruction (CCBI) technologies, as indicated, for development periods 1-6, into military schools, initially, then into units/organizations and ultimately for use by individual officers.	o Obtain CSA/VCSA approval for DMO for CCBI nucleus cell.	PDOS Group (P) OAS	Dec 84	
	o Obtain $ to operate CCBI nucleus cell (FY 85 - 75K for ADP and 32K TDY) (FY 86 - 32K for TDY).	ODCOPS-TNG (P)	3Q85	See P-5-3
	o Prepare INFO/MEDIA plan and execute.	PDOS GP (P) w/PAO ODCSOPS-TNG w/PAO	2Q85	See P-6-2
	o Coordinate with TRADOC on location and office space.	ODCSOPS-TNG (P) SSC, ATSC or CATA	3Q85	NOTE 3
	o Activate CCBI nucleus cell. Obtain personnel for CCBI nucleus cell/1-Col, 2 civ, 4(AC), 1(RC).	TRADOC (P) ODCSPER/MILPERCEN ODCSOPS-TNG	Early 4Q85 (target 31 Jul 85)	
(2) Recommend consider adding a new CCBI Directorate under the TRADOC Deputy Chief of Staff for Training and located at the Soldiers' Support Center.	o Monitor progress on policies F-73 (for + $ eff for OPS TNG) F71 & F-73 (for Year 8) F-74 (Impact in home"contract) F-75 (5 Post Master's officers) F-76 (ARI Contract) F-77 (CCBL Contract) F-78 (CCBL Trng) (Faculty) F-79 (Selec At SSM) F-83 (OACSIM MIT & Harvard) F-84 (AMC-CAL) F-87 (RC contract) F-88 (ARA sponsored by DAJ) F-89 (ARI summer study) F-90 (AR 350-1) O-81 & F-93 (Monitor staffing)	TRADOC DCST [TRADOC CCBI DIR (P)] • ODCSOPS-TNG • [illegible] • MACSIM • ARI • CCBL • MILPERCEN • AMC • SSC • ODCSPER • AVC of PHC (FEB)	4Q85	NOTE 1 See P-5-11 P-5-12 P-5-13
Policy F71:	o Create DA directed PDIP for proponent costing.	ODCSOPS-TNG (P)	3Q85	NOTE 2
HQDA approve the resource augmentation necessary to accomplish Policy F70. An estimate of the resource requirements is provided (Vol III, Annex P, App 4) with the provisions for further analysis of cost estimates and overlap with parallel computer technology initiatives; see Policy 77.	o Formalize CCBI Dir charter & relationships with other agencies. o Select which Education Institutions to establish formal link with (some possibilities: Carnegie-Mellon, Drexel, Yale, MIT, Harvard, U of Ill, Stanford, U of Mass).	• TRADOC CCBI DIR (P) • ODCSOPS-TNG 2Q 86 • TRADOC TNG TECH FLD Activities • TITAD • ODCSPER (cont of prog) • OACSIM/ODCSOPS • SSC • Other services • DOD & other fed agencies • Civ higher ed institutions • All	1Q 86	See P-5-11 P-5-12 P-5-13

NOTES:

1. Initial PDIP for CCBI funds will be prepared by ODCSOPS-TNG by end of Mar 85.
2. "Users" of CCBI funds include schools (AC), special BR's, RC and Army continued Education Program.
3. Suggested TRADOC organization option: Set up for DCST a situation like that between DCSTE and CDEC. This would create an SES level CCBI counterpart for MG Edwards similar to that between MG Drummond and CDEC SR Grade civilian (Dr. Bryson). Locate CCBI directorate at SSC.

Appendix 4 to ANNEX P
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
Policy F72 Augment ODCSOPS, Training with one officer space to monitor the CCBI expansion program and effect the necessary coordination with OACSIM and OCSA (US Army FORUM).	Obtain CSA/VCSA approval for DHO of 1 officer to ODCSOPS-TNG.	PDOS Study GP(P)	Dec 84	See P-5-4 P-5-11
	Arrange for Assignments of 1 officer to new position.	ODCSOPS-TNG MILPERCEN (P)	Jan 85	
	Submit documentation to make position a permanently authorized space.	ODCSOPS-TNG	Mar 85	
	Fill requirement.	MILPERCEN	Jun 85	

NOTES:

Appendix 4 to ANNEX P
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
Policy F73 Direct ODCSOPS to coordinate with OACSIM to arrange the necessary acquisition and procurement authority for the CCBI Directorate under the provisions of the new AR 25-5 which replaces AR 18-1 on matters pertaining to information management and computer acquisition and procurement.	o Determine precise acquisition and procurement procedures(IAW AR 25-5) to be used by CCBI DIR to obtain "user" CCBI funds for disbursement by CCBI Ofc beginning 2Q87.	ODCSOPS-TNG(P) OACSIM	3Q85	See P-5-4
	o Take results of CERL study and update DA directed PDIP for user $ (AC, RC, cont ed prog, tng and AMC-operational system's CAI); send to proponents for costing.	PA & E (P) ODCSOPS-TNG CCBI NUCLEUS CELL OCASIM TRADOC AMC NGR OCAR	4Q85	See P-5-3
	o Justify CCBI funding as required.	ODCSOPS-TNG (P) PA & E TRADOC CCBI NUCLEUS CELL	4Q85	

NOTES:

Appendix 4 to ANNEX P
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
Policy F74 (1) Direct ODCSPER to investigate the potential impact on officers' families and the family environment of the widespread use by all family members of computer technology in the home setting. (2) Discussion: The widespread use of computers in the home is likely to alter work habits and schedules. A concerted effort should be made to responsibly absorb the negative impact of CCBI which individuals may experience in both the work and the home settings.	o Obtain 50K study funds in FY 87 program.	o PA & E (P) o ODCSOPS-Tng o ARI o SSC	4Q85	
	o Draft contract.	CCBI NUCLEUS CELL (P)	2Q86	
	o Award contract.	TRADOC-CCBI Ofc Contracting Officer (P)	4Q86	
	o Complete contract.	Contractor	4Q87	
	o Incorporate contract recommendations in CCBI office actions.	TRADOC-CCBI Ofc (P)	1Q88	
	o Prepare INFO/MEDIA plan and execute.	CCBI Ofc PAO (P)	1Q88	See P-6-3

NOTES:

Appendix 4 to ANNEX P
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
Policy F75 (1) Send five majors to obtain postmasters level education in programs tailored to provide the Army with expertise in the field of intelligence educations systems. (2) Disperse these assets to OACSIM, TRADOC (e.g., to the CCBI Directorate), USMA and the Army Research Institute. (3) Discussion: This policy is strongly supported by OPMS Study Group's recommendation to consider advanced civil schooling requirements for anticipated future needs.	o Select schools and specific programs.	MILPERCEN	3Q86	
	o Request 75K/yr (beginning in FY 87 budget).	ODCSPER	3Q85	
	o Select candidates.	CCBI DIR (P) in coord w/MILPERCEN & ARI	2Q86	
	o Prepare necessary modifications to Technology Enrichment Program to incorporate 5 adv ed tech officers.	MILPERCEN (P)	4Q85	
	o Execute program (five students every 2 years).	CCBI DIR (P) monitors thesis work	FY 87	Note 1
	o Prepare info/media plan and execute.	ODCSOPS-TNG (P) MILPERCEN CCBI DIR PAO (P)	3Q85	See P-6-4

NOTES:

1. Course level should be Ph. D. equivalent, but not include Ph. D. research requirement. In order to minimize time spent in student status, course should not exceed 24 months. It should include core requirements in computer based instruction, artificial intelligence education systems, expert system decision aids and teleconferencing. It should include electives in the same areas, but at an advanced level. Disperse these assets initially among ARSTAF (OCSA, OACSIM , others), USMA, ARI, and TRADOC CCBI Directorate; later among participating TRADOC schools.

Appendix 4 to ANNEX P
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
Policy F76 (1) Direct ODCSPER to task the Army Research Institute to validate the PDOS analysis with regards to the match of CCBI systems to varied types of knowledge/skill proficiencies. (2) Provide the findings to ODCSOPS, Training; ODCSPER and TRADOC (and to the CCBI Directorate, when formed).	o Obtain 10K study funds in FY 85 program.	OCSA (PA & E) (P) ODCSOPS-TNG ODCSPER ARI	2Q FY 85	
	o Draft Study Directive.	o ODCSPER (P) o ODCSOPS-TNG	2Q FY 85	Note 1
	o Initiate study.	o ODCSPER (P) o ODCSOPS-TNG	2Q FY 85	
	o Complete study.	o ARI (P)	4Q FY 85	
	o Incorporate contract recommendations in CCBI directorate actions.	CCBI NUCLEUS CELL	1Q FY 86	

NOTES:
1. ODCSPER coordinate with ODCSOPS-TNG to assure ARI contract fits with CERL Charter (policy F77).

Appendix 4 to ANNEX P
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
Policy F77				
(1) Direct the Chief of Engineers to task and fund the Construction Engineers Research Laboratory (CERL) to evaluate the most cost effective ways to apply Computer Communications Based Instruction technologies and identify applications of CCBI to other populations (e.g., enlisted soldiers or civilians) and mission areas (e.g., Army Continued Education Program).	o Obtain 62K study funds in FY 85 program.	DAS - PA&E (P) ODCSOPS - TNG	Jan 85	
	o Draft contract charter.	PDOS Trans Tm (P) ODCSOPS -TNG	Jan 85	Note 1
	o Award contract.	ODCSOPS - TNG	Feb 85	
	o Complete contract.	CERL	Aug 85	
	o Report reviewed by Summer 85 Army Science Board.	ASB (P) ODCSOPS - TNG ODCSPER	Late Summer 85	
(2) Provide the findings to ODSOPS, Training and to TRADOC Combined Arms Training Activity (CATA), Army Training Technology Activiety (TTA), Army Training Support Center (ATSC) and CCBI Directorate when formed.	o Incorporate contract recommendations in CCBI actions.	CCBI nucleus cell upon activation.	As recommended by ASB.	
	o Create DA directed user PDIP for proponent costing.	ODCSOPS - TNG	1Q FY85	
	o Prepare any refinements for "user" requests (AC/RC/Cont ed/tng and AMC CAI).	CCBI nucleus cell (1st priority upon activation)	4Q FY85	

NOTES:

1. Crucial need to cost out options which consider various "joint venture" strategies, interoperability with other systems (to minimize "stovepiping"), communications costs, timing of decisions, validated training requirements and means to simplify mastery of art and science of war using advanced educational technology.

Appendix 4 to ANNEX P
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
Policy 78 Direct TRADOC to develop mentor training programs to help gain acceptance of CCBI technologies in the schools, units and organizations and oversee computer courseware development by civilian education specialists. Action should be initiated upon completion of the actions in Policy 77.		CCBI Office	1Q FY86	See F77

NOTES:

Appendix 4 to ANNEX P
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
Policy F79 Direct OACSIM to allocate research funds to pursue Joint service initiative for the development of educational uses of Artificial Intelligence-Expert Systems (AI-ES) and related technologies. Action should be initiated upon completion of the actions in Policy F77.	o Obtain 100K study funds in FY 87 program.	OACSIM (P) ODCSRDA ODCSOPS - Tng ARI	4Q85	See pol F77
	o Develop joint service commitment to joint AI-Expert System (for education) initiative and develop scope.	OACSIM (P) ODCSOPS - Tng CCBI Nucleus Cell	4Q85	
	o Initiate research initiative.	Army (OACSIM) (P) Air Force Navy/Marines	1Q87	
	o Complete research initiative.	Contractor (P)	4Q87	
	o Incorporate findings as appropriate.	Army TRADOC CCBI Dir (P)	1Q88	

NOTES:

Appendix 4 to ANNEX P
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
Policy F80 (1) Direct ODCSOPS/ODCSPER to include the design of a two day "user friendly" strategic planning/futures policy impact analysis exercise in the evolving educational program for new brigadier generals. The planning exercise will use the professional development of officers as a theme. The output from this sub-couse is a set of recommended adjustments in the professional development of officers strategy--the output is a tool/aid for senior Army leaders (CSA, VCSA and ARSTAF) as they "navigate" towards the professional development desired system state.	o Develop BG Course exercise.	PDOS Futures cell (P) ODCSPER GO/SES Tr Tm ODCSOPS-Tng	31 Mar 85	See P-5-15
	o Retain needed PDOS PCs and software.	PDOS Futures cell (P) coord w/OCSA--DAS	31 Jan 85	
	o Obtain 7K for added software, 5K for TDY and programer (60 days/Mar-Apr).	ODCSPER GO/SES Tr Tm ODCSOPS-Tng	28 Feb 85	
	o Align stakeholders and determine their roles.	PDOS Futures cell (P) AWC-SSI OCSA-DM MILPERCEN OACSIM-Tng & Concepts Div ODCSOPS-Tng & Long Range Planning OCSA Army Forum Ft Belvior Fusion Ctr. OE School	31 Mar 85	
(2) LTC Carl Stout and Carolyn Russell will design the exercise by 31 Mar 85 for subsequent turnover to ODCSPER/ODCSOPS GO/SES development transition team and incorporation in the overall brigadier general course plan.	o Turn over Strategic Planning/Policy Impact Exercise.	PDOS Futures cell (P) ODCSPER GO/SES Tr Tm	31 Mar 85	
	o Pilot test exercise w/AWC or NWC students (w/approval of Cmdt).	PDOS Futures cell (P) AWC	1 Jun 85	See P-5-15

NOTES:

Appendix 4 to ANNEX P
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
Policy F80 (continued)	o Brief Senior Advisory Group.	AWC-SSI	Mid Jun 85	Note 1 See P-5-6 P-5-15
	o Prepare INFO/MEDIA plan and execute.	PDOS Futures cell (P) w/PAO	31 Mar 85	See P-6-6
	o Execute SP/PI exercise for each GO course.	ODCSPER GO/SES Tr Tm AWC-SSI	As Scheduled	
	o Provide input from ea SP/PI exercise to CSA, VCSA, DCSOPS, DCSPER and ARI.	ODCSPER GO/SES Tr Tm AWC-SSI	w/i 30 days of exercise completion	Note 2
	o Take actions to institutionalize SP/PI exercise (permanent spaces/$)	ODCSPER GO/SES Tr Tm ODCSOPS-Tng	31 Jul 85	

NOTES:

1. Intent is for LTC Stout and LTC Russell to turn exercise over to AWC-SSI (Futures Group) who will conduct exercise for GO/SES Development Transition Team each time the BG course meets. AWC will keep program up to date and call on LTC Russell, programmed to be in OACSIM, to run the INTERAX Model.
2. Input provides for "navigation to desired PDOS state" based on strategic insights.

Appendix 4 to ANNEX P
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
F81 ODCSPER purchase artificial intelligence (AI) - Expert system generator for existing forecast system. Use capability as a means to assist in making strategic planning exercise for new BGs simple and "user friendly."	o Obtain AI - Expert System (ES) Generator.	ODCSPER	1 Feb 85	
	o Use ES Generator to simplify BG course strategic planning exercise.	PDOS Fut Cell (P) MILPERCEN ODCSPER OACSIM ARI	30 Mar 85	Notes 1 & 2
F82 Direct that OACSIM Futures and Concepts Directorate work with ODCSPER GO/SES development team to continue development of PDOS Futures process as a strategic planning/impact analysis model for use in senior leader development program.	o "Mature strategic planning process thru contact with universities (e.g., MIT & Harvard) and other agencies.	OACSIM Futures & Concepts Div (P) GO/SES Tr Tm ODCSOPS - Tng	30 Apr 85	Note 3

NOTES:

1. Obtain assistance from ARI in use of AI-ES (or "intelligent CAI" - as referred to by ARI).
2. Alternative ES generator (adaptable to PCs) in "teknowledge" at cost of 10K plus 2.5K for training. For more information contact MAJ Ken Rose, CH AI-Robatics, SSC.
3. OACSIM, as principal DA proponent for Artificial Intelligence, should continue to mature the INTERAX process as a decision support aid for senior leaders. LTC Russell (PDOS Team Member who ran INTERAX model) is programmed to join OACSIM after completion of PDOS effort (31 Mar 85).

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
F83 Direct that OACSIM and ARI include the implications for officer education training in their participation with MIT Sloan School of Management's "Management in the 90s Program" and Harvard's Center for Information policy research on "program of information resource policy." o These efforts are aimed at development of technology scenarios based on facts from leading edge organizations, definition of policies surrounding the use of computer technologies and discussion designed to explore insights gained from research. The Army (ACSIM) is one of the major organizations participating. An active feedback link between ACSIM and CCBI Office is essential to the latter's efforts to responsibly manage the assimilation of CCBI into all military schools, plus the work and home settings of Army officers.	o Same as F82.	OACSIM Fut & Concepts (P) GO/SES Tr Tm ANC-SSI ODCSOPS-Tng TRADOC CCBI Directorate	30 Apr 85	

NOTES:

Appendix 4 to ANNEX P
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
F84 AMC Build CAI into training packages for new major operational system.	o Coordination between AMC & TRADOC CCBI Office to mesh CAI systems.	AMC-PM's CCBI Nucleus Cell (P)	3Q85 - NLT 4Q86	
	o Request funds (after CERL Study complete).	CCBI Nucleus Cell (AMC-PMs)	4Q85	
	o Allocate funds for CAI system's (into modernization requirements accounts).	PMs (AMC)	1Q87	

NOTES:

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
Policy F86 FOR RESERVE COMPONENT -- Direct TRADOC, together with NGB and OCAR, to concentrate on the development of an education and training methods support strategy which is aligned with the Active Component strategy.	o Implemented thru CCBI Ofc (F70) NGB & OCAR Representatives.			See Policy F70 See P-4-2 P-5-8

NOTES:

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
Policy F87 FOR RESERVE COMPONENT -- Direct ODCSPER, together with NGB and OCAR, to study the impact of PDOS policies, specifically those related to resident and non-resident school instruction, unit training requirements and use of CCBI, on the Reserve Component officer, his family and civilian employer.	o Obtain 75 K study funds in FY 87 program. o Draft study directive.	ODCSPER (P) ARI ODCSOPS-TNG	4Q85	
	o Initiate study.	Contractor	1Q87	
	o Complete study.		4Q87	
	o Incorporate recommendations in CCBI office actions.	CCBI Ofc	1Q88	

NOTES:

Appendix 4 to ANNEX P
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
Policy F88 Direct DAS to sponsor a Senior Service College Army Research Associate to continue to look for ways to institutionalize PDOS CCBI initiatives and other major PDOS thrusts within the Army's existing systems. Continue this sponsorship for at least the next five years.	Identify Army Research Associate Candidate.	PDOS Study Gp (P) Initially; DAS-DM (follow on years) ODCSOPS-TNG; ARI	Dec 84 (then annually)	
	Obtain DAS, MILPERCEN CG & SSC Cmdt Approval of ARA Candidate.	PDOS transition cell DAS-DM SSC (AWC or or NWC)	Feb 85	
	Notify officer.	DAS-DM	Feb 85 (then annually)	
	Begin ARA project.	Army Research Associate officer	Aug 85 (then annually)	
	Provide findings to DAS, ARSTAF & ARI.	Army Research Associate officer	May 86 (then annually)	
	Recycle program in December of each year.	DAS-DM	Annually	

NOTES:

Appendix 4 to ANNEX P
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
Policy F89 (1) Direct the Army Science Board (ASB) to conduct the 1985 Summer Study on education and training technologies. (2) Discussion: The study will build on the 1982 DSB Summer Study on training technology, the PDOS CCBI initiatives and the CERL report (Policy F77), if available by the 1985 ASB Summer Study.	Obtain ASA-RD & A approval of Training & Education technology as topic for Army Science Board 85 study.	ODCSOPS-TNG (P) ODCSPER	Dec 84	
	Coordinate with ARSTAF to arrange 85 ASB study.	ODCSOPS-TNG ODCSPER	Feb 85	
	Obtain CERL Report (at least preliminary RPT).	ODCSOPS-TNG ODCSPER	Prior to ASB '85 summer sessions	See pol 77 P-4-8
	Execute.	ASB	Summer 85	

NOTES:

Appendix 4 to ANNEX P
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
Policy F90 Direct ODCSOPS to incorporate the PDOS education and training strategies and major thrusts in the new AR 350-1, Army Training and Education System.	Provide PDOS Final Report to ODCSOPS-TNG.	PDOS Study GP (P) ODCSOPS-TNG	Jan 85	
	Incorporate (as approved by CSA).	ODCSOPS-TNG	Jan 85	

NOTES:

Appendix 4 to ANNEX P
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
Policy J26 Develop resident and non-resident instruction programs simultaneously and maintain current.	a. Evaluate all current programs of non-resident instruction to determine those that are under-subscribed, unneeded or out of date.	TRADOC PROPONENTS (P)	4Q FY86	
	b. Establish a procedure that will ensure that programs of non-resident instruction are developed concurrently with resident programs of instruction.	TRADOC	2Q FY36	
	c. Develop resource requirements and program funds.	TRADOC	2Q FY87	
	d. Establish a procedure that will ensure all programs of non-resident instruction are reviewed and updated at least annually.	TRADOC PROPONENTS (P)	3Q FY86	
	e. Implement procedures that ensure programs of non-resident and resident instruction are developed concurrently and adequately maintained.	TRADOC (P) PROPONENTS	1Q FY88	

NOTES:

Author: COL Dunn
Team Chief: COL Dunn

Appendix 5 to Annex P

Phasing And Resource Plan

PURPOSE: To present the plan which reflects:

a. The phasing of each education and training policy over the next few years.

b. The dollar and manpower requirements.

Appendix 5 to ANNEX P
Phasing Plan

Policy ⓕ70:

(1) Direct TRADOC to accelerate the introduction and use of computer-communication based instruction (CCBI) technologies, as indicated for Development Periods 1-6, into military schools, initially, then into units/organizations and ultimately for use by individual officers. The aim is to use these technologies in the school setting first in order to:

(a) Capitalize on the educational advantages of emerging technologies.

(b) Make officers comfortable with routine use of electronic technologies.

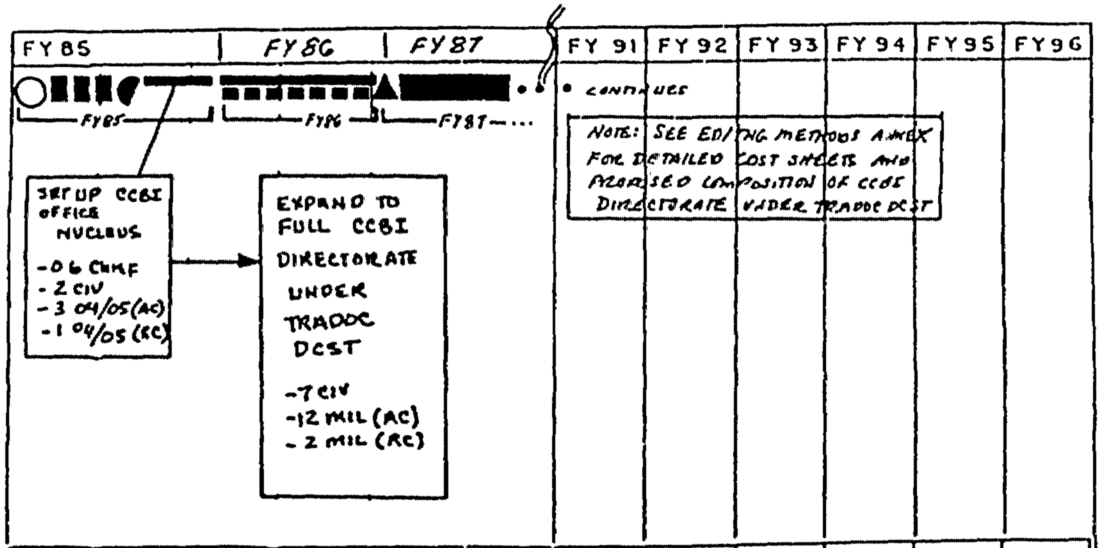
(c) Develop officer decision making skills which carry over into operational applications.

(d) Accelerate the introduction and the development of decision making aids in the Army with the overall aim of increasing the tempo of prudent, sound decision making under the stresses of combat.

(2) Recommend TRADOC consider adding a new CCBI Directorate under the TRADOC Deputy Chief of Staff for Training and locating it at the Soldiers' Support Center (SSC).

Policy (F71:)

HQDA approve the resource augmentation necessary to accomplish Policy F70. An estimate of the resource requirements is provided with the provisions for further analysis of cost estimates and overlap with parallel computer technology initiatives; see Policy F77, below.



RESOURCES

	FY 85	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY93	FY94	FY95	FY 96
STUDENTS NR/MY												
STAFF AND FACULTY-MIL/CIV	5-AC 1-RC / 2	5-AC 1-RC / 2	12 AC 2 RC / 7	12AC 2RC / 7	12AC 2RC / 7	12AC 2RC / 7	12AC 2RC / 7	12AC 2RC / 7	12AC 2RC / 7	12AC 2RC / 7	12AC 2RC / 7	12AC 2RC / 7
TDA CHANGE-$ MILLIONS	.269	.122	19.6	44.4	74.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4

Appendix 5 to ANNEX P
Phasing Plan

(POLICIES F70-F71 CONTINUED DETAILED COST BREAKOUT)	FY 85	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96
PEOPLE	5-0(AC) 1-0(RC) 0-C	5-0(AC) 1-0(RC) 2-C	12-0(AC) 2-0(RC) 7-C	12-0(AC) 2-0(RC) 7-C	12-0(AC) 2-0(RC) 7-C	12-0(AC) 2-0(RC) 7-C	12-0(AC) 2-0(RC) 7-C	12-0(AC) 2-0(RC) 7-C	12-0(AC) 2-0(RC) 7-C	12-0(AC) 2-0(RC) 7-C	12-0(AC) 2-0(RC) 7-C	12-0(AC) 2-0(RC) 7-C
Ⓐ CCBI DIRECTORATE OFFICE COSTS DOLLARS	0.197	0.122	0.344	0.319	0.319	0.319	0.344	0.319	0.319	0.319	0.344	0.319
Ⓑ USER COSTS (CCBI FOR AC)			5.0	15.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Ⓒ USER COSTS (CCBI FOR RC)				5.0	15.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Ⓓ USER COSTS (CCBI FOR CONTINUED EDUCATION PROGRAMS)			5.0	15.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Ⓔ USER COSTS (CCBI FOR FACULTY TNG)			2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
TOTAL A-E COSTS FOR CCBI DIRECTORATE + USERS	0.197	0.122	12.344	37.319	67.319	77.319	77.344	77.319	77.319	77.319	77.344	77.319
F70 SUPPORTING POLICY COSTS F71,72,73,74,75,76,77,78 79,84,85,86,87,88,89,90.	0.072		2.300	2.075	2.075	2.075	2.075	2.075	2.075	2.075	2.075	2.075
TOTAL CCBI DIR COSTS, USER COSTS AND SUPPORTING POLICY COSTS	0.269	0.122	14.644	39.394	69.394	79.394	79.419	79.394	79.394	79.394	79.419	79.394
F74 AMC COST FOR CAI ON OPERATIONAL SYSTEMS			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
						RESOURCES						
	FY 85	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96
					STUDENTS - NR/MY							
					STAFF AND FACULTY - MIL/CIV							
					TDA CHANGE - $ MILLIONS							
TOTAL COSTS	0.269	0.122	19.644	44.394	74.394	84.394	84.419	84.394	84.394	84.394	84.419	84.394

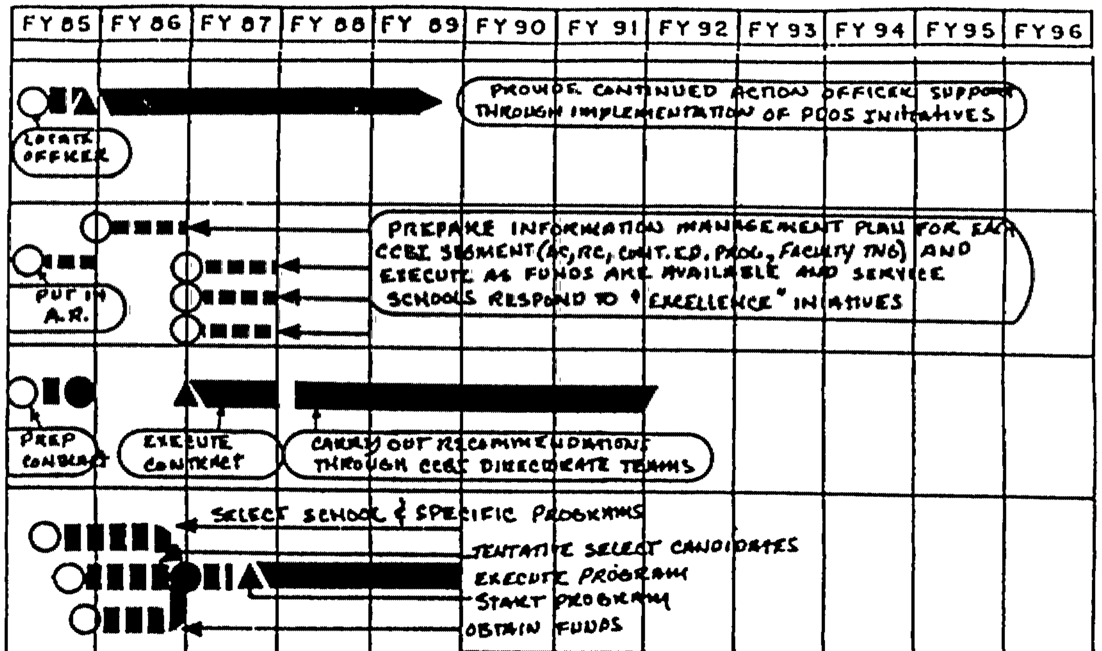
Appendix 5 to ANNEX P
Phasing Plan

F72 AUGMENT ODCSOPS. TRAINING WITH ONE OFFICER SPACE TO MONITOR THE CCBI EXPANISION PROGRAM AND EFFECT THE NECESSARY COORDINATION WITH DACSIM AND OCSA (US ARMY FORUM).

F73 DIRECT ODCSOPS TO COORDINATE WITH OACSIM TO ARRANGE THE NECESSARY ACQUISITION AND PROCUREMENT AUTHORITY FOR THE CCBI DIRECTORATE UNDER THE PROVISIONS OF THE NEW AR 25-5 WHICH REPLACES AR 18-1 ON MATTERS PERTAINING TO INFORMATION MANAGEMENT AND COMPUTER ACQUISITION AND PROCUREMENT.

F74 1. DIRECT ODCSPER TO INVESTIGATE THE POTENTIAL IMPACT ON OFFICERS' FAMILIES AND THE FAMILY ENVIRONMENT OF THE WIDESPREAD USE BY ALL FAMILY MEMBERS OF COMPUTER TECHNOLOGY IN THE HOME SETTING.
2. DISCUSSION: THE WIDESPREAD USE OF COMPUTERS IN THE HOME IS LIKELY TO ALTER WORK HABITS AND SCHEDULES. A CONCERTED EFFORT SHOULD BE MADE TO RESPONSIBLY ABSORB THE NEGATIVE IMPACT OF CCBI WHICH INDIVIDUALS MAY EXPERIENCE IN BOTH THE WORK AND THE HOME SETTINGS.

F75 1. SEND FIVE MAJORS TO OBTAIN POSTMASTERS LEVEL EDUCATION IN PROGRAMS TAILORED TO PROVIDE THE ARMY WITH EXPERTISE IN THE FIELD OF INTELLIGENCE EDUCATIONS SYSTEMS.
2. DISPERSE THESE ASSETS TO OACSIM, TRADOC (E.G., TO THE CCBI DIRECTORATE) AND THE ARMY RESEARCH INSTITUTE.
3. DISCUSSION: THIS POLICY IS STRONGLY SUPPORTED BY OPMS STUDY GROUPS'S RECOMMENDATION TO CONSIDER ADVANCED CIVIL SCHOOLING REQUIREMENTS FOR ANTICIPATED FUTURE NEEDS.



RESOURCES

FY 85	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY93	FY94	FY95	FY 96
				STUDENTS NR/MY							
		5	5	5	5	5	5	5	5	5	5
				STAFF AND FACULTY-MIL/CIV							
				TDA CHANGE-$ MILLIONS							
		.125	.075	.075	.075	.075	.075	.075	.075	.075	.075

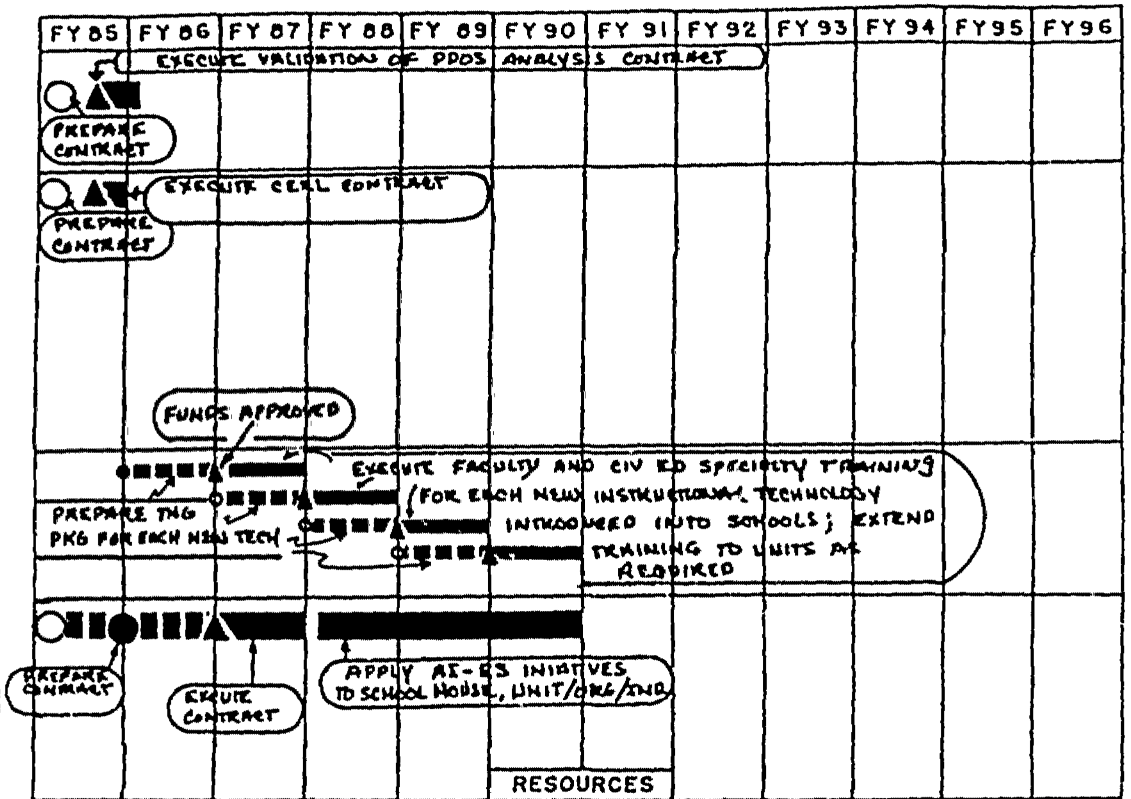
Appendix 5 to ANNEX P
Phasing Plan

F76 1. DIRECT ODCSPER TO TASK THE ARMY RESEARCH INSTITUTE TO VALIDATE THE PDDS ANALYSIS WITH REGARDS TO THE MATCH OF CCBI SYSTEMS TO VARIED TYPES OF KNOWLEDGE/SKILL PROFICIENCIES.
2. PROVIDE THE FINDINGS TO ODCSOPS. TRAINING: OACSIM AND TRADOC (AND TO THE CCBI DIRECTORATE, WHEN FORMED).

F77 1. DIRECT THE CHIEF OF ENGINEERS TO TASK AND FUND THE CORPS OF ENGINEERS RESEARCH LABORATORY (CERL) TO EVALUATE THE MOST COST EFFECTIVE WAYS TO APPLY COMPUTER COMMUNICATIONS BASED INSTRUCTION TECHNOLOGIES AND IDENTIFY APPLICATIONS OF CCBI TO OTHER POPULATIONS (E.G., ENLISTED SOLDIERS OR CIVILIANS) AND MISSION AREAS (E.G., ARMY CONTINUED EDUCATION PROGRAM).
2. PROVIDE THE FINDING TO ODCSOPS. TRAINING, TRADOC COMBINED ARMS TRAINING ACTIVITY (TTA), USMA, ARMY TRAINING SUPPORT CENTER (ATSC) AND CCBI DIRECTORATE WHEN FORMED.

F78 DIRECT TRADOC TO DEVELOP MENTOR TRAINING PROGRAMS TO HELP GAIN ACCEPTANCE OF CCBI TECHNOLOGIES IN THE SCHOOLS, UNITS AND ORGANIZATIONS AND OVERSEE COMPUTER COURSEWARE DEVELOPMENT BY CIVILIAN EDUCATION SPECIALISTS. ACTION SHOULD BE INITIATED UPON COMPLETION OF THE ACTIONS IN POLICY 77.

F79 DIRECT OACSIM TO ALLOCATE RESEARCH FUNDS TO PURSUE JOINT SERVICE INITIATIVE FOR THE DEVELOPMENT OF EDUCATIONAL USES OF ARTIFICIAL INTELLIGENCE-EXPERT SYSTEMS (AI-ES) AND RELATED TECHNOLOGIES. ACTION SHOULD BE INITIATED UPON COMPLETION OF THE ACTIONS IN POLICY F77.



RESOURCES

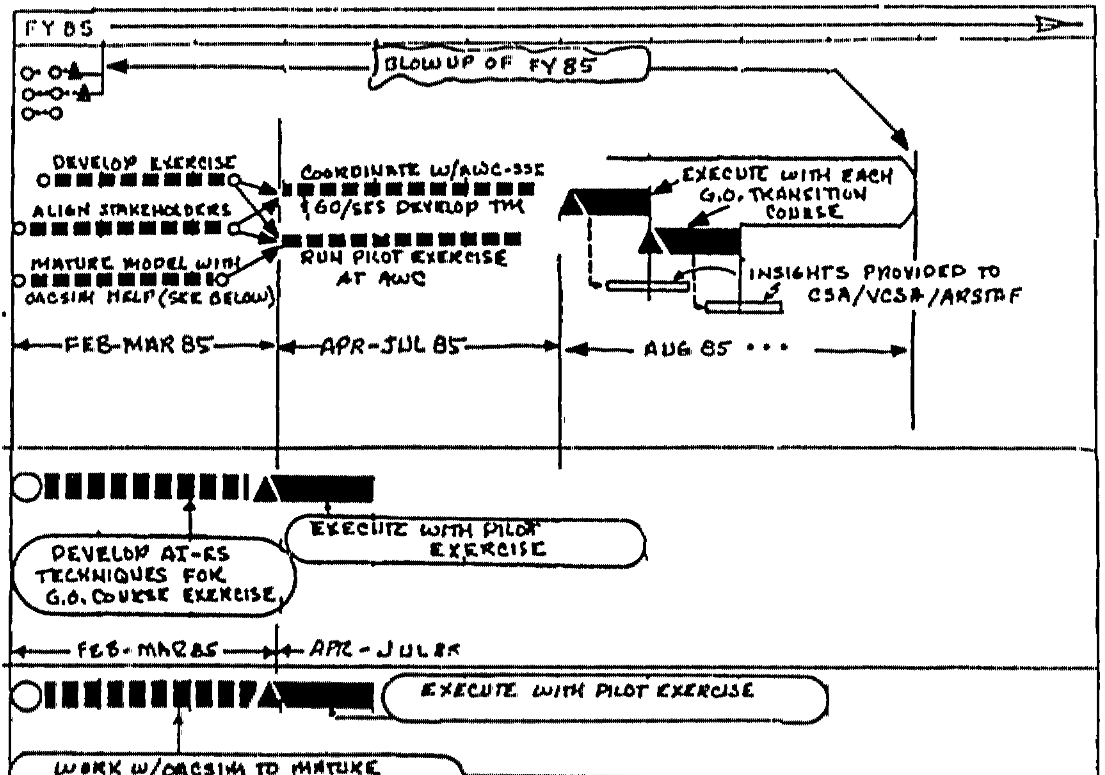
	FY 85	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY93	FY94	FY95	FY 96
STUDENTS NR/MY												
STAFF AND FACULTY-MIL/CIV												
TOA CHANGE-$ MILLIONS	.072		2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0

Appendix 5 to ANNEX P
Phasing Plan

F80 1. DIRECT ODCSOPS/ODCSPER TO INCLUDE THE DESIGN OF A TWO DAY "USER FRIENDLY" STRATEGIC PLANNING/FUTURES POLICY IMPACT ANALYSIS EXERCISE IN THE EVOLVING EDUCATIONAL PROGRAM FOR NEW BRIGADIER GENERALS. THE PLANNING EXERCISE WILL USE THE PROFESSIONAL DEVELOPMENT OF OFFICERS AS A THEME. THE OUTPUT FROM THIS SUB-COURSE IS A SET OF RECOMMENDED ADJUSTMENTS IN THE PROFESSIONAL DEVELOPMENT OF OFFICERS STRATEGY--THE OUTPUT IS A TOOL-AID FOR SENIOR ARMY LEADERS (CSA, VCSA AND ARSTAF) AS THEY "NAVIGATE" TOWARDS THE PROFESSIONAL DEVELOPMENT DESIRED SYSTEM STATE.
2. LTC CARL STOUT AND CAROLYN RUSSELL WILL DESIGN THE EXERCISE BY 31 MAR 85 FOR SUBSEQUENT TURNOVER TO ODCSPER/ODCSOPS GO/SES DEVELOPMENT TRANSITION TEAM AND INCORPORATION IN THE OVERALL BRIGADIER GENERAL COURSE PLAN.

F81 ODCSPER PURCHASE ARTIFICIAL INTELLIGENCE (AI) - EXPERT SYSTEM GENERATOR FOR EXISTING FORECAST SYSTEM. USE CAPABILITY AS A MEANS TO ASSIST IN MAKING STRATEGIC PLANNING EXERCISE FOR NEW BGS SIMPLE AND "USER FRIENDLY."

F82 DIRECT THAT OACSIM FUTURES AND CONCEPTS DIRECTORATE WORK WITH ODCSPER GO/SES DEVELOPMENT TEAM TO CONTINUE DEVELOPMENT OF PDOS FUTURES PROCESS AS A STRATEGIC PLANNING/IMPACT ANALYSIS MODEL FOR USE IN SENIOR LEADER DEVELOPMENT PROGRAM.


FY 85
BLOWUP OF FY 85
DEVELOP EXERCISE
ALIGN STAKEHOLDERS
MATURE MODEL WITH OACSIM HELP (SEE BELOW)
COORDINATE W/AWC-SSE & GO/SES DEVELOP TM
RUN PILOT EXERCISE AT AWC
EXECUTE WITH EACH G.O. TRANSITION COURSE
INSIGHTS PROVIDED TO CSA/VCSA/ARSTAF
FEB-MAR 85
APR-JUL 85
AUG 85 ...
DEVELOP AI-ES TECHNIQUES FOR G.O. COURSE EXERCISE
EXECUTE WITH PILOT EXERCISE
FEB-MAR 85
APR-JUL 85
EXECUTE WITH PILOT EXERCISE
WORK W/OACSIM TO MATURE PROCESS

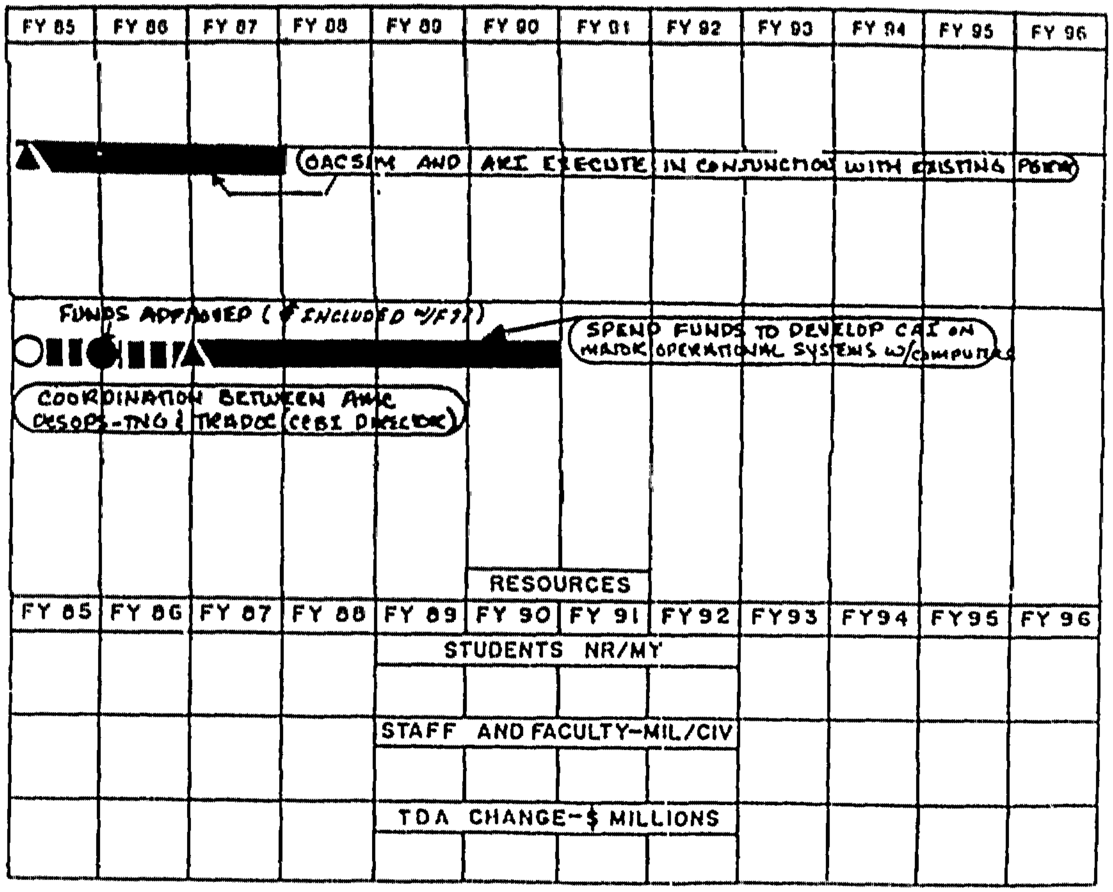
RESOURCES

	FY 85	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY93	FY94	FY95	FY 96
STUDENTS NR/MY												
STAFF AND FACULTY-MIL/CIV	1/0	2/0	2/1	2/1	2/1	2/1	2/1	2/1	2/1	2/1	2/1	2/1
TDA CHANGE-$ MILLIONS	.066	.005	.045	.037	.035	.035	.05	.035	.035	.035	.035	.035

Appendix 5 to ANNEX P
Phasing Plan

F83 DIRECT THAT OACISM AND ARI INCLUDE THE IMPLICATIONS FOR OFFICER EDUCATION TRAINING IN THEIR PARTICIPATION WITH MIT SLOAN SCHOOL OF MANAGEMENT'S "MANAGEMENT IN THE 90s PROGRAM" AND HARVARD'S CENTER FOR INFORMATION POLICY RESEARCH ON "PROGRAM OF INFORMATION RESOURCE POLICY".

F84 AMC BUILD CAI INTO TRAINING PACKAGES FOR NEW MAJOR OPERATIONAL SYSTEM.

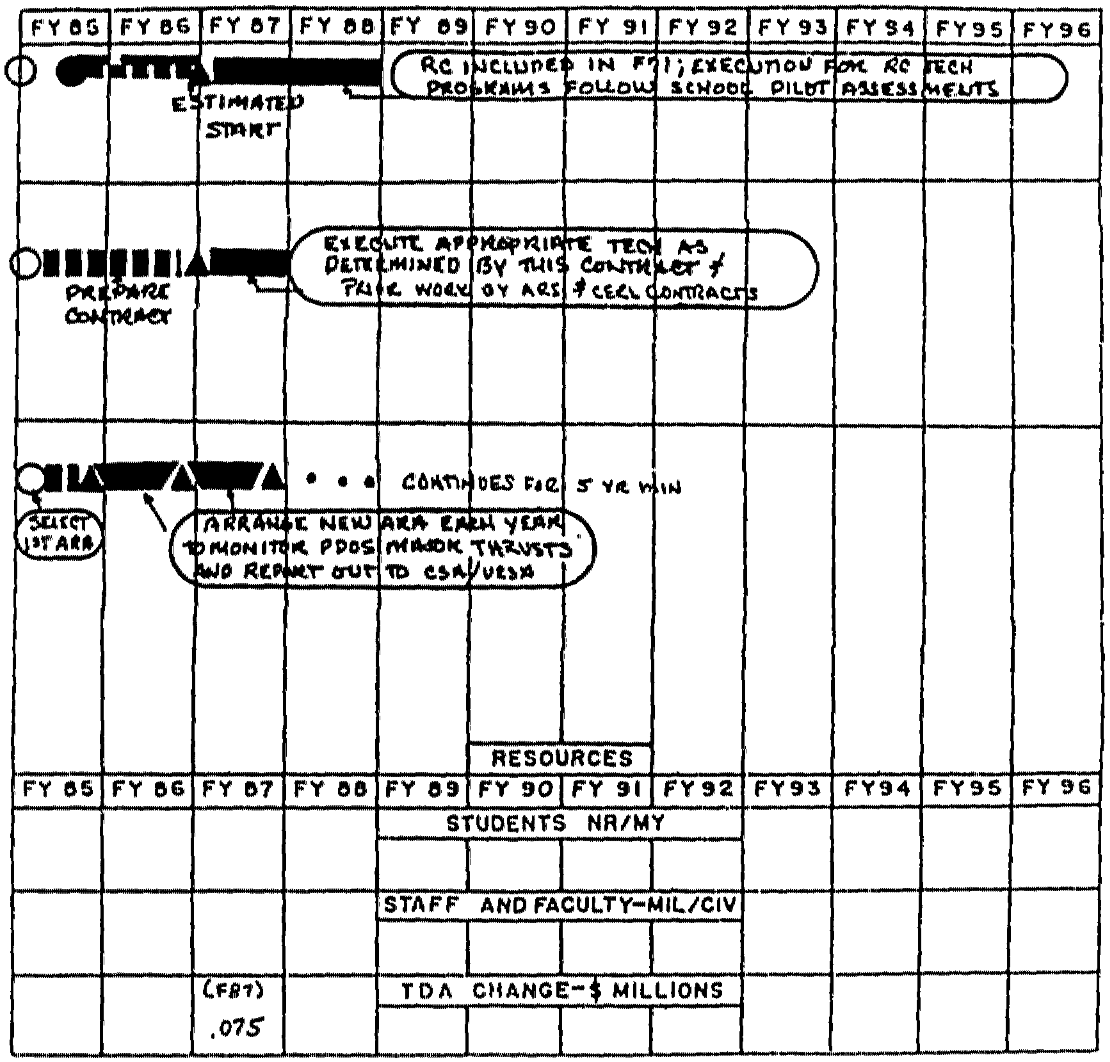


Appendix 5 to ANNEX P
Phasing Plan

F86 FOR RESERVE COMPONENT -- DIRECT TRADOC, TOGETHER WITH NGB AND OCAR, TO CONCENTRATE ON THE DEVELOPMENT OF AN EDUCATION AND TRAINING METHODS SUPPORT STRATEGY WHICH IS ALIGNED WITH THE ACTIVE COMPONENT STRATEGY.

F87 FOR RESERVE COMPONENT -- DIRECT ODCSPER, TOGETHER WITH NGB AND OCAR, TO STUDY THE IMPACT OF PDOS POLICIES, SPECIFICALLY THOSE RELATED TO RESIDENT AND NON-RESIDENT SCHOOL INSTRUCTION, UNIT TRAINING REQUIREMENTS AND USE OF CCBI, ON THE RESERVE COMPONENT OFFICER, HIS FAMILY AND CIVILIAN EMPLOYER.

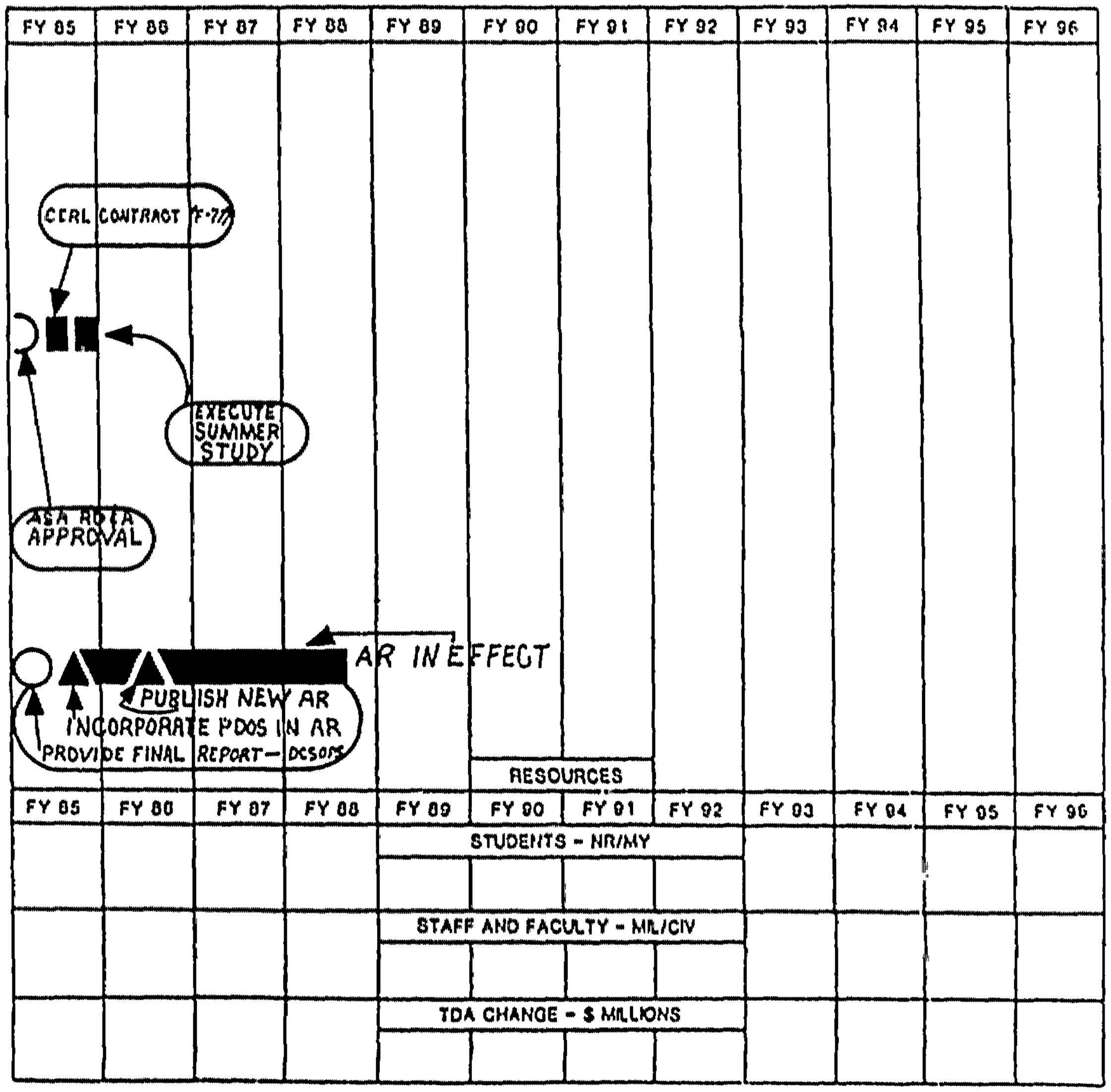
F88 DIRECT DAS TO SPONSOR A SENIOR SERVICE COLLEGE ARMY RESEARCH ASSOCIATE TO CONTINUE TO LOOK FOR WAYS TO INSTITUTIONALIZE PDOS CCBI INITIATIVES AND OTHER MAJOR PDOS THRUSTS WITHIN THE ARMY'S EXISTING SYSTEM. CONTINUE THIS SPONSORSHIP FOR AT LEAST THE NEXT FIVE YEARS.



Appendix 5 to ANNEX P
Phasing Plan

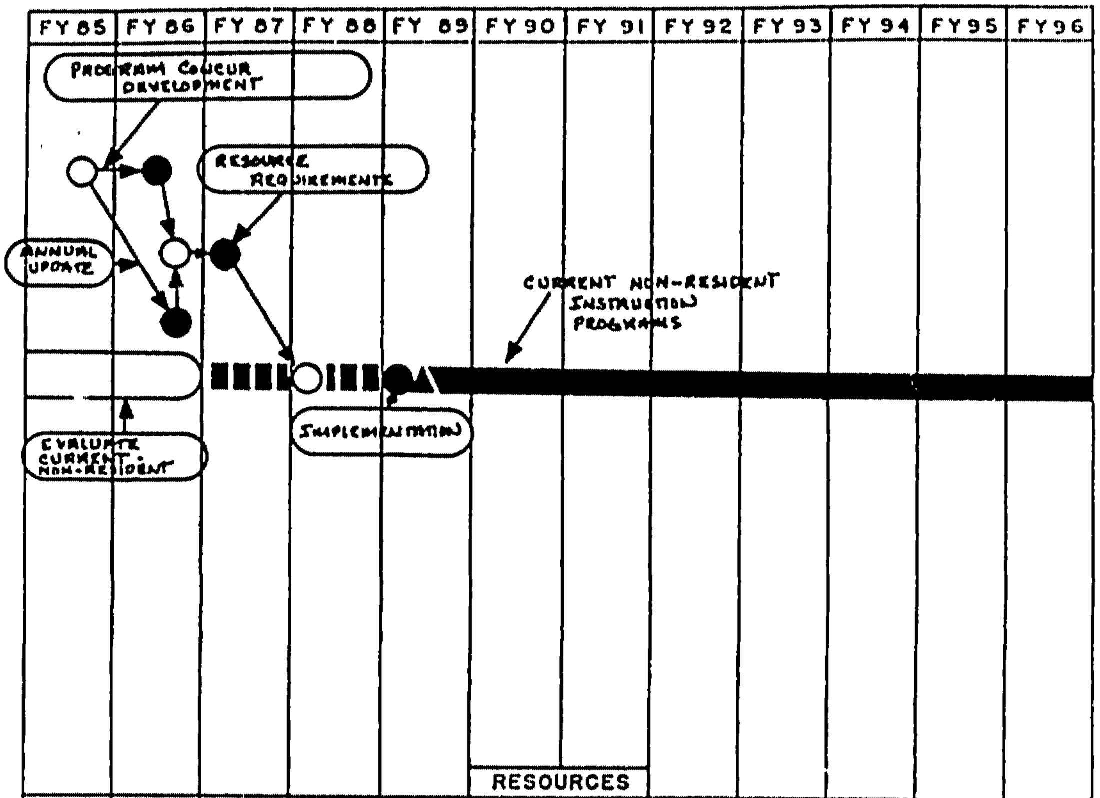
F39 1. DIRECT THE ARMY SCIENCE BOARD (ASB) TO CONDUCT THE 1985 SUMMER STUDY ON EDUCATION AND TRAINING TECHNOLOGIES.
2. DISCUSSION: THE STUDY WILL BUILD ON THE 1982 DSB SUMMER STUDY ON TRAINING TECHNOLOGY, THE PDOS [illegible] INITIATIVES AND THE CERL REPORT (POLICY F-77).

F30 DIRECT ODCSOPS TO INCORPORATE THE PDOS EDUCATION AND TRAINING STRATEGIES AND MAJOR THRUSTS IN THE NEW AR 350-1, ARMY TRAINING AND EDUCATION SYSTEM.


FY 85
FY 86
FY 87
FY 88
FY 89
FY 90
FY 91
FY 92
FY 93
FY 94
FY 95
FY 96
CERL CONTRACT F-77
EXECUTE SUMMER STUDY
ASA RDA APPROVAL
AR IN EFFECT
PUBLISH NEW AR
INCORPORATE PDOS IN AR
PROVIDE FINAL REPORT—DCSOPS
RESOURCES
STUDENTS - NR/MY
STAFF AND FACULTY - MIL/CIV
TDA CHANGE - $ MILLIONS

Appendix 5 to ANNEX P
Phasing Plan

J26 DEVELOP RESIDENT AND NON-RESIDENT INSTRUCTION PROGRAMS SIMULTANEOUSLY AND MAINTAIN CURRENT.


FY 85
FY 86
FY 87
FY 88
FY 89
FY 90
FY 91
FY 92
FY 93
FY 94
FY 95
FY 96
PROGRAM CURICULUM DEVELOPMENT
RESOURCE REQUIREMENTS
ANNUAL UPDATE
CURRENT NON-RESIDENT INSTRUCTION PROGRAMS
EVALUATE CURRENT NON-RESIDENT
IMPLEMENTATION

RESOURCES

	FY 85	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY93	FY94	FY95	FY 96
STUDENTS NR/MY												
STAFF AND FACULTY-MIL/CIV	1/1	6/6	6/6	18/20	18/20	18/20	18/20	18/20	18/20	18/20	18/20	18/20
TDA CHANGE-$ MILLIONS	.07	.42	.42	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3

PROFESSIONAL DEVELOPMENT OF OFFICERS STUDY (PDOS) - - EDUCATION & TRAINING METHODS POLICIES

TIMELINE & RESOURCE WORKSHEETS

BACKUP EXPLANATORY WORKSHEET - CCBI DIRECTORATE NOTIONAL ORGANIZATION (POLICY F70)

F70 GIVE TRADOC MISSION TO ACCELERATE CCBI* TECHNOLOGIES, AS INDICATED FOR TRANSITION PERIODS 1-6, INTO MILITARY SCHOOLS (INITIALLY), THEN UNITS/ORGANIZATIONS AND ULTIMATELY FOR USE BY INDIVIDUAL OFFICERS. INITIAL AIM IS TO USE THESE TECHNOLOGIES IN THE SCHOOL SETTING FIRST IN ORDER TO:

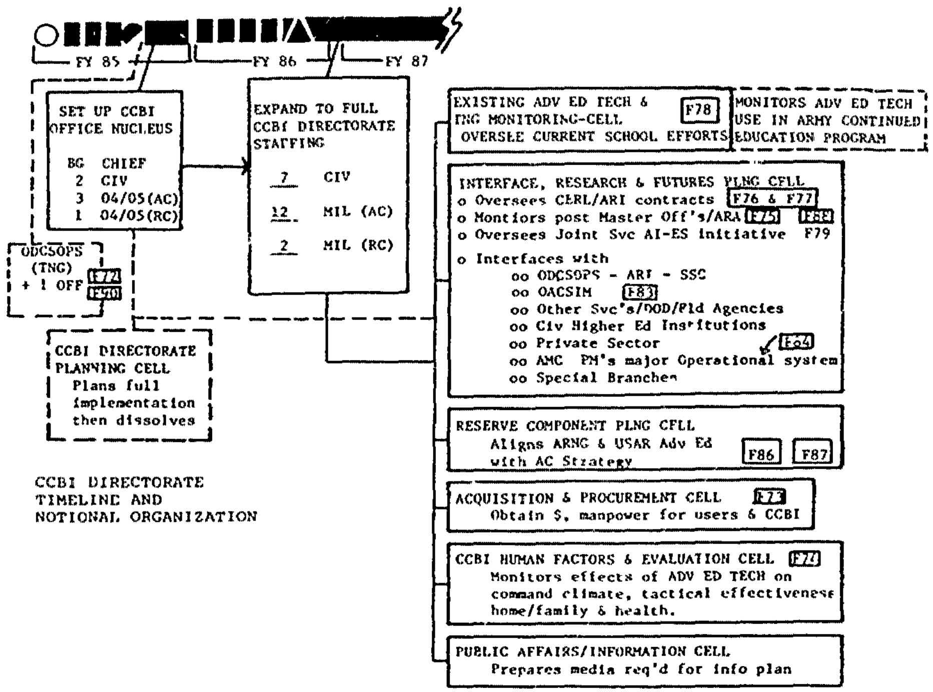
1. CAPITALIZE ON EDUCATIONAL ADVANTAGES OF EMERGING TECHNOLOGIES.
2. MAKE OFFICERS COMFORTABLE WITH ROUTINE USE OF ELECTRONIC TECHNOLOGIES.
3. DEVELOP OFFICER DECISION MAKING SKILLS WHICH CARRY OVER INTO OPERATIONAL APPLICATIONS.
4. ACCELERATE DEVELOPMENT/INTRODUCTION OF DECISION MAKING AIDS IN THE ARMY OVERALL AIM IS TO INCREASE THE TEMPO OF PRUDENT, SOUND DECISION MAKING UNDER THE STRESS OF COMBAT. (SUGGEST CONSIDER ADDING A NEW CCBI DIRECTORATE SUBORDINATE TO TRADOC DCST AND LOCATED AT SSC OR AN ORGANIC DIRECTORATE AT EITHER ARMY TRAINING SUPPORT CENTER (ATSC) OR COMBINED ARMS TRAINING ACTIVITY (CATA)..

O *CCBI INCLUDES ALL USES OF COMPUTER TO SUPPORT TRAINING AND EDUCATIONAL INSTRUCTION IN SCHOOLS, UNITS, ORGANIZATIONS AND BY INDIVIDUAL OFFICERS. (E.G., KNOWLEDGE BASES, COMPUTER ASSISTED INSTRUCTION (CAI) PROGRAMS, "SCHOOL OF THE AIR" VIDEO/AUDIO TELECONFERENCING, INTERACTIVE VIDEO DISK SYSTEMS, SIMULATIONS, INFORMATION AND POLICY IMPACT DECISION SUPPORT AIDS AND ARTIFICIAL INTELLIGENCE -- EXPERT SYSTEMS).

O *NEW CCBI CHARTER WOULD INTEGRATE ALL EDUCATIONAL CCBI TECHNOLOGIES. FUNDS TO PROCURE SYSTEMS AND SUPPORT TRAINING NECESSARY FOR THEIR ACCEPTANCE AND USE WOULD BE PROVIDED SEPARATE FROM THE TRADOC BUDGET. ACQUISITION AND PROCUREMENT AUTHORITY (UNDER AR 25-5) WOULD RESIDE WITH CENTER/AGENCY DIRECTOR. CCBI DIRECTORATE WILL ACT AS SERVICE SCHOOLS' AGENT IN "WORKING THROUGH THE BUREAUCRATIC MAZE." IT WILL ESTABLISH BONUS INCENTIVES FOR SCHOOLS TO CREATE CENTERS OF QUALITY AND EXCELLENCE IN CCBI EDUCATION. CCBI DIRECTORATE WILL DEVELOP TRAINING PROGRAMS TO GAIN ACCEPTANCE OF CCBI TECHNOLOGIES BY SCHOOL FACULTIES. THEIR AIM IS TO "MAKE CCBI HAPPEN IN SUPPORT OF THE FACULTY MENTOR" BY PERFORMING A SERVICE FOR SCHOOLS, UNITS AND ORGANIZATIONS. DIRECTORATE WILL INTERFACE WITH ODCSOPS (TNG), OCSA (USA FORUM), AMC, OACSIM**, OTHER SERVICES, DOD, OTHER FEDERAL AGENCIES, AND CIVILIAN HIGHER EDUCATIONAL INSTITUTIONS.

O **COORDINATION WITH OACSIM IS VITAL TO TRACKING MYRIAD OF INFORMATION COMMUNICATION TECHNOLOGIES THAT IMPACT ON CCBI (E.G., DATA BASES, LASER PRINTERS, ARTIFICIAL INTELLIGENCE, MICROCHIPS, ROBOTICS, FIBER-OPTICS, GRAPHICS, MICROWAVE AND SATELLITE COMMUNICATIONS.)

O LOCATION OF CCBI DIRECTORATE AT SSC HAS ADVANTAGE OF CLOSE TIES TO THE INTEGRATION CENTER WHICH IS LEAD AGENT FOR ARTIFICIAL INTELLIGENCE (THE CORNERSTONE "DECISION AID" TECHNOLOGY).


FY 85
FY 86
FY 87
SET UP CCBI OFFICE NUCLEUS
BG CHIEF
2 CIV
3 04/05(AC)
1 04/05(RC)
ODCSOPS (TNG) + 1 OFF
F72
F90
EXPAND TO FULL CCBI DIRECTORATE STAFFING
7 CIV
12 MIL (AC)
2 MIL (RC)
CCBI DIRECTORATE PLANNING CELL
Plans full implementation then dissolves
EXISTING ADV ED TECH & TNG MONITORING-CELL
OVERSEE CURRENT SCHOOL EFFORTS
F78
MONITORS ADV ED TECH USE IN ARMY CONTINUED EDUCATION PROGRAM
INTERFACE, RESEARCH & FUTURES PLNG CELL
o Oversees CERL/ARI contracts
F76 & F77
o Monitors post Master Off's/ARA
F75
F88
o Oversees Joint Svc AI-ES initiative F79
o Interfaces with
oo ODCSOPS - ARI - SSC
oo OACSIM
F83
oo Other Svc's/DOD/Fld Agencies
oo Civ Higher Ed Institutions
oo Private Sector
F84
oo AMC PM's major Operational system
oo Special Branches
RESERVE COMPONENT PLNG CELL
Aligns ARNG & USAR Adv Ed with AC Strategy
F86
F87
ACQUISITION & PROCUREMENT CELL
Obtain $, manpower for users & CCBI
F73
CCBI HUMAN FACTORS & EVALUATION CELL
F74
Monitors effects of ADV ED TECH on command climate, tactical effectiveness home/family & health.
PUBLIC AFFAIRS/INFORMATION CELL
Prepares media req'd for info plan

CCBI DIRECTORATE
TIMELINE AND
NOTIONAL ORGANIZATION

BACKUP EXPLANATORY WORKSHEET--RELATIONSHIP BETWEEN F70 SUPPORTING POLICIES AND TRADOC CCBI DIRECTORATE (F70)

F71 HQDA APPROVE THE RESOURCE AUGMENTATION NECESSARY TO ACCOMPLISH POLICY (AN ESTIMATE OF THE RESOURCE REQUIREMENTS IS PROVIDED WITH PROVISIONS FOR FURTHER ANALYSIS OF COST ESTIMATES AND OVERLAP WITH PARALLEL COMPUTER TECHNOLOGY INITIATIVES--REFER TO POLICY F77.)

F72 AUGMENT ODCSOPS-TNG WITH ONE OFFICER SPACE TO MONITOR THE CCBI EXPANSION PROGRAM AND EFFECT NECESSARY COORDINATION WITH OACSIM AND OCSA-USA FORUM.

F73 DIRECT DCSOPS TO COORDINATE WITH OACSIM TO ARRANGE NECESSARY ACQUISITION AND PROCUREMENT AUTHORITY FOR CCBI DIRECTORATE UNDER THE PROVISIONS OF NEW AR 25-5 (THIS AR WHICH WILL SOON REPLACE AR 18-1 ON MATTERS PERTAINING TO INFORMATION MANAGEMENT AND COMPUTER ACQUISITION AND PROCUREMENT)

F74 DIRECT ODCSPER TO INVESTIGATE THE POTENTIAL IMPACT ON FAMILY MEMBERS AND FAMILY ENVIRONMENT OF WIDESPREAD USE BY MILITARY MEMBERS OF COMPUTER TECHNOLOGY IN THE HOME SETTING.

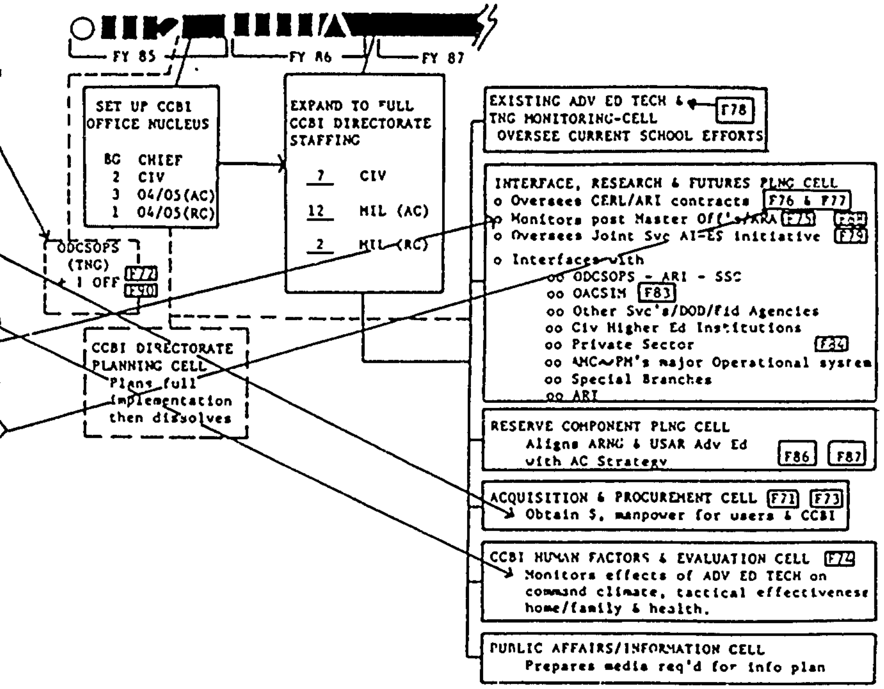
F75 STRONGLY SUPPORT OPMS GROUP RECOMMENDATION TO CONSIDER ADVANCED CIVIL SCHOOLING REQUIREMENTS FOR ANTICIPATED FUTURE NEEDS. IN AREA OF EDUCATIONAL TECHNOLOGY, SEND FIVE MAJORS TO OBTAIN POST MASTERS LEVEL EDUCATION IN PROGRAM TAYLORED TO PROVIDE ARMY WITH EXPERTISE IN FIELD OF INTELLEGENT EDUCATIONAL SYSTEMS. DISPERSE THESE ASSETS TO OACSIM, TRADOC (CCBI DIRECTORATE, ET. AL) AND ARMY RESEARCH INSTITUTE.

F76 TASK THE ARMY RESEARCH INSTITUTE (ARI) TO VALIDATE THE PDOS ANALYSIS WITH REGARD TO MATCH OF CCBI SYSTEMS TO VARIED TYPES OF KNOWLEDGE/SKILL PROFICIENCIES. PROVIDE FINDINGS TO ODCSOPS (TNG) AND TRADOC (INITIALLY) AND CCBI DIRECTORATE (WHEN FORMED).

F77

(1) DIRECT THE CHIEF OF ENGINEERS TO TASK AND FUND THE CORPS OF ENGINEERS RESEARCH LABORATORY (CERL) TO EVALUATE THE MOST COST EFFECTIVE WAYS TO APPLY COMPUTER COMMUNICATIONS BASED INSTRUCTION TECHNOLOGIES AND IDENTIFY APPLICATIONS OF CCBI TO OTHER POPULATIONS (E.G., ENLISTED SOLDIERS OR CIVILIANS) AND MISSION AREAS (E.G., ARMY CONTINUED EDUCATION PROGRAM).

(2) PROVIDE THE FINDINGS TO ODCSOPS, TRAINING TO TRADOC TRAINING TECHNOLOGY AGENCY (TTA), ARMY TRAINING SUPPORT CENTER (ATSC), COMBINED ARMS TRAINING ACTIVITY (CATA) AND CCBI DIRECTORATE, WHEN FORMED.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FY 86
FY 87
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1 04/05(RC)
ODCSOPS (TNG) + 1 OFF
F72
F90
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7 CIV
12 MIL (AC)
2 MIL (RC)
CCBI DIRECTORATE PLANNING CELL
Plans full implementation then dissolves
EXISTING ADV ED TECH & TNG MONITORING-CELL
OVERSEE CURRENT SCHOOL EFFORTS
F78
INTERFACE, RESEARCH & FUTURES PLNG CELL
o Oversees CERL/ARI contracts
F76 & F77
o Monitors post Master Off's/KRA
F75
F84
o Oversees Joint Svc AI-ES initiative
F79
o Interfaces with
oo ODCSOPS - ARI - SSC
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F84
oo AMC~PM's major Operational system
oo Special Branches
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Aligns ARNG & USAR Adv Ed with AC Strategy
F86
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ACQUISITION & PROCUREMENT CELL
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Prepares media req'd for info plan

BACKUP EXPLANATORY WORKSHEET--RELATIONSHIP BETWEEN F70 SUPPORTING POLICIES AND TRADOC CCBI DIRECTORATE (F70)

F78 DIRECT TRADOC TO DEVELOP MENTOR TRAINING PROGRAMS (WITH ASSISTANCE OF CCBI OFFICE) TO HELP GAIN ACCEPTANCE OF CCBI TECHNOLOGIES IN THE SCHOOLHOUSE AND EVENTUALLY IN UNITS AND ORGANIZATIONS (DO NOT INITIATE ACTION ON THIS POLICY UNTIL CERL REPORT IS COMPLETED).

F79 DIRECT THAT OACSIM ALLOCATE RESEARCH FUNDS TO PURSUE JOINT SERVICE INITIATIVE FOR DEVELOPMENT OF ARTIFICIAL INTELLIGENCE-EXPERT SYSTEMS (AI-ES) FOR EDUCATION PURPOSES (DO NOT INITIATE ACTION ON THIS POLICY UNTIL CERL REPORT IS COMPLETED).

F84 AMC BUILD COMPUTER ASSESSED INSTRUCTION (CAI) INTO TRAINING PACKAGES FOR NEW MAJOR OPERATIONAL SYSTEMS.

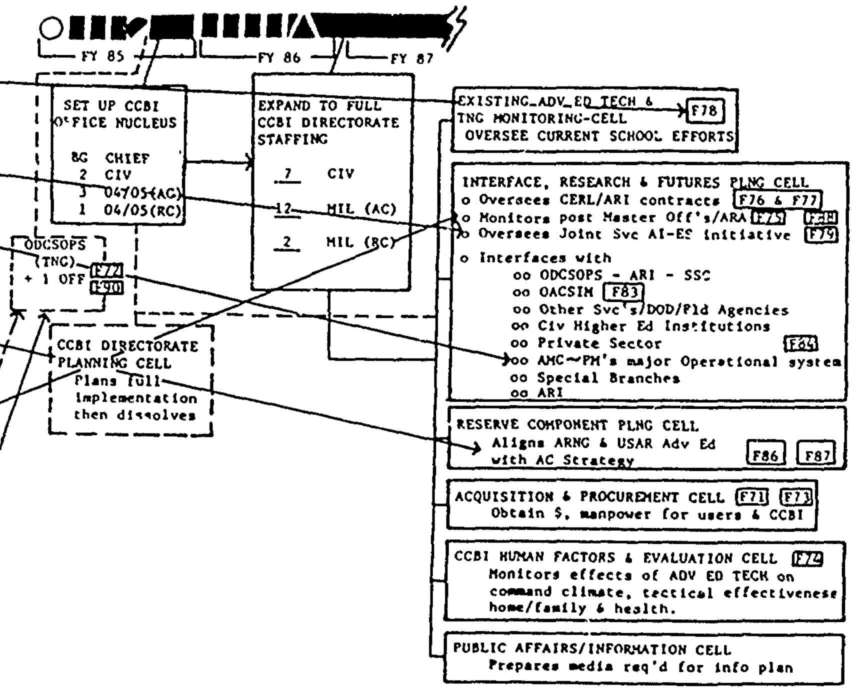
F86 (FOR RESERVE COMPONENTS) TRADOC, TOGETHER WITH NGB AND OCAR, WILL CONCENTRATE ON DEVELOPMENT OF EDUCATION/TRAINING METHODS SUPPORT STRATEGY WHICH IS ALIGNED WITH THE ACTIVE COMPONENT STRATEGY HERETOFORE DESCRIBED. MODALITIES WILL ASSIST INDIVIDUAL SELF-DEVELOPMENT WITH MINIMUM IN RESIDENT SCHOOLING REQUIRED. MORE SPECIFIC RECOMMENDATION AS TO USE OF CCBI TECHNOLOGIES WILL FOLLOW FROM CERL ANALYSIS.

F87 (FOR RESERVE COMPONENTS) DIRECT A STUDY TO ASSESS THE IMPACT ON THE RESERVE COMPONENT OFFICER, HIS/HER FAMILY AND CIVILIAN EMPLOYER OF PDOS POLICIES (ESPECIALLY THOSE RELATED TO RESIDENT AND NON RESIDENT SCHOOL INSTRUCTION AND USE OF COMPUTER-COMMUNICATION BASED INSTRUCTION). STUDY WOULD LOOK AT OFFICER WILLINGNESS TO REMAIN IN RC AS PROFESSIONAL DEVELOPMENT TIME REQUIREMENTS INCREASE.

F88 DAS SPONSOR A SENIOR SERVICE COLLEGE ARMY RESEARCH ASSOCIATE TO CONTINUE TO LOOK FOR WAYS TO INSTITUTIONALIZE PDOS CCBI INITIATIVE (AND OTHER MAJOR PDOS THRUSTS) WITHIN ARMY'S EXISTING SYSTEMS. CONTINUE SPONSORSHIP FOR AT LEAST NEXT FIVE YEARS.

F89 ARMY SCIENCE BOARD CONDUCT 85 SUMMER STUDY ON TRAINING AND EDUCATION TECHNOLOGY. (STUDY WOULD BUILD ON 82 DSB SUMMER STUDY ON TRAINING TECHNOLOGY AND 84 PDOS CCBI INITIATIVES). REVIEW CERL REPORT IF AVAILABLE FOR SUMMER 85 ASB SESSIONS.

F90 DIRECT THAT DCSOPS INCORPORATE PDOS EDUCATION AND TRAINING STRATEGIES AND MAJOR THRUSTS IN THE NEW AR 350-1. ARMY TRAINING AND EDUCATION SYSTEM.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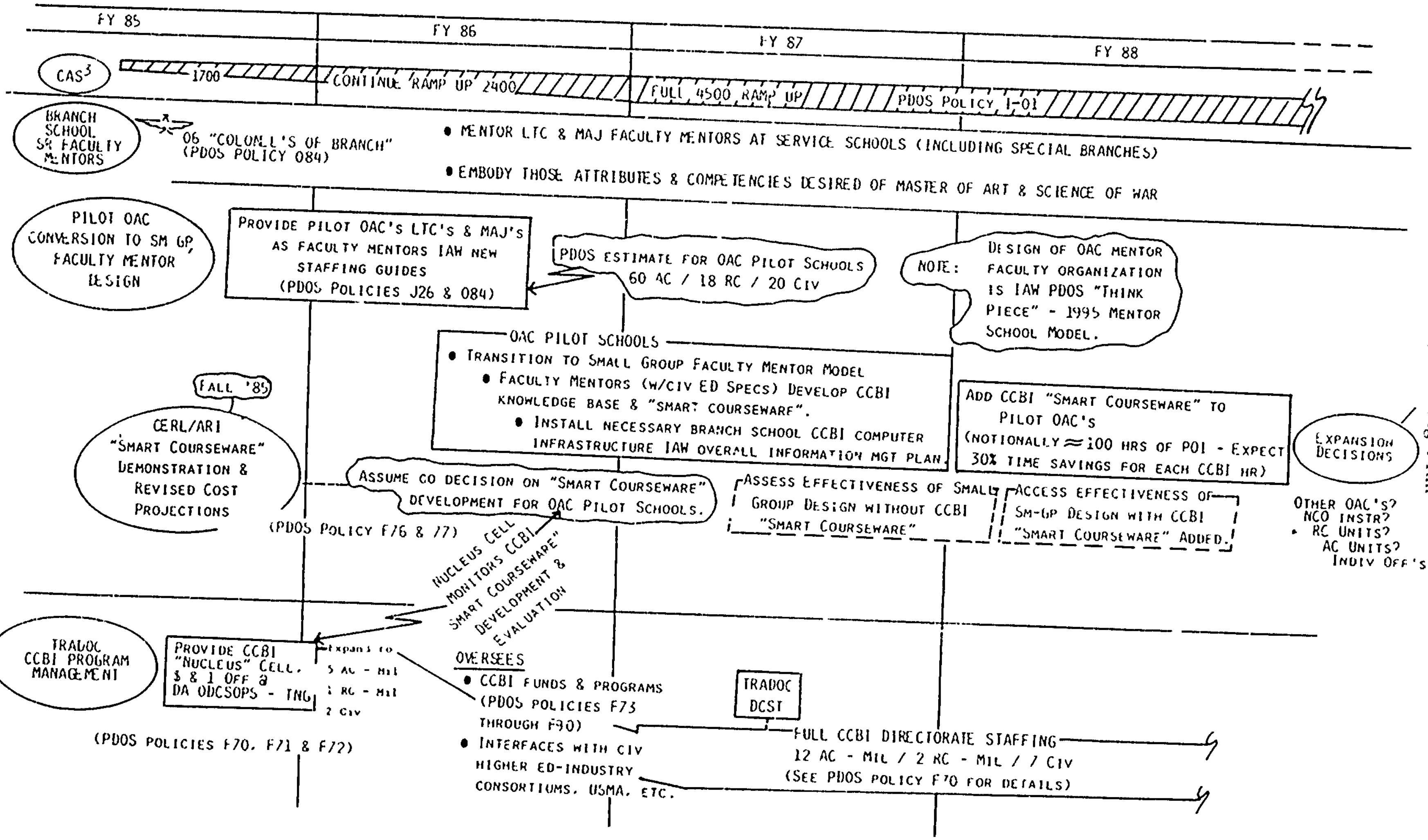
Prepares media req'd for info plan

PDOS CAPTAIN LEVEL, SMALL-GROUP FACULTY MENTOR AND COMMUNICATION-COMPUTER BASED INSTRUCTION (CCBI) MANAGEMENT INITIATIVES

- - GENERAL FLOWCHART - -

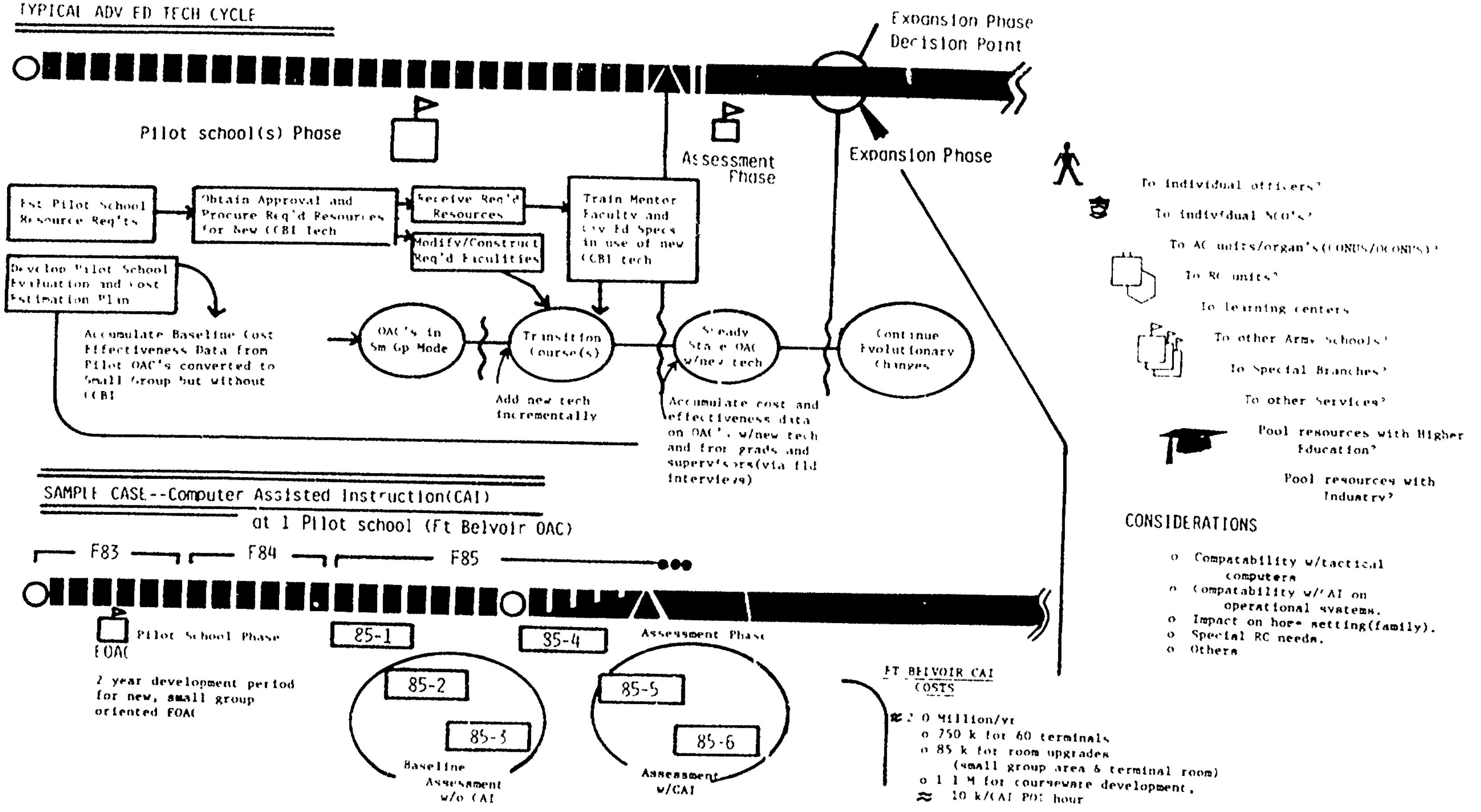

FY 85
FY 86
FY 87
FY 88
CAS3
1700
CONTINUE RAMP UP 2400
FULL 4500 RAMP UP
PDOS POLICY 1-01
BRANCH SCHOOL SR FACULTY MENTORS
06 "COLONEL'S OF BRANCH" (PDOS POLICY 084)
• MENTOR LTC & MAJ FACULTY MENTORS AT SERVICE SCHOOLS (INCLUDING SPECIAL BRANCHES)
• EMBODY THOSE ATTRIBUTES & COMPETENCIES DESIRED OF MASTER OF ART & SCIENCE OF WAR
PILOT OAC CONVERSION TO SM GP, FACULTY MENTOR DESIGN
PROVIDE PILOT OAC'S LTC'S & MAJ'S AS FACULTY MENTORS IAW NEW STAFFING GUIDES (PDOS POLICIES J26 & 084)
PDOS ESTIMATE FOR OAC PILOT SCHOOLS 60 AC / 18 RC / 20 CIV
NOTE: DESIGN OF OAC MENTOR FACULTY ORGANIZATION IS IAW PDOS "THINK PIECE" - 1995 MENTOR SCHOOL MODEL.
OAC PILOT SCHOOLS
• TRANSITION TO SMALL GROUP FACULTY MENTOR MODEL
• FACULTY MENTORS (W/CIV ED SPECS) DEVELOP CCBI KNOWLEDGE BASE & "SMART COURSEWARE".
• INSTALL NECESSARY BRANCH SCHOOL CCBI COMPUTER INFRASTRUCTURE IAW OVERALL INFORMATION MGT PLAN.
FALL '85
CERL/ARI "SMART COURSEWARE" DEMONSTRATION & REVISED COST PROJECTIONS
ASSUME CG DECISION ON "SMART COURSEWARE" DEVELOPMENT FOR OAC PILOT SCHOOLS.
(PDOS POLICY F76 & 77)
ADD CCBI "SMART COURSEWARE" TO PILOT OAC'S (NOTIONALLY ≈ 100 HRS OF POI - EXPECT 30% TIME SAVINGS FOR EACH CCBI HR)
ASSESS EFFECTIVENESS OF SMALL GROUP DESIGN WITHOUT CCBI "SMART COURSEWARE"
ACCESS EFFECTIVENESS OF SM-GP DESIGN WITH CCBI "SMART COURSEWARE" ADDED.
EXPANSION DECISIONS
OTHER OAC'S?
NCO INSTR?
• RC UNITS?
AC UNITS?
INDIV OFF'S?
NUCLEUS CELL MONITORS CCBI "SMART COURSEWARE" DEVELOPMENT & EVALUATION
TRADOC CCBI PROGRAM MANAGEMENT
PROVIDE CCBI "NUCLEUS" CELL. $ & 1 OFF @ DA ODCSOPS - TNG
Expands to 5 AC - Mil 1 RC - Mil 2 Civ
(PDOS POLICIES F70, F71 & F72)
OVERSEES
• CCBI FUNDS & PROGRAMS (PDOS POLICIES F73 THROUGH F90)
• INTERFACES WITH CIV HIGHER ED-INDUSTRY CONSORTIUMS, USMA, ETC.
TRADOC DCST
FULL CCBI DIRECTORATE STAFFING 12 AC - MIL / 2 RC - MIL / 7 CIV (SEE PDOS POLICY F70 FOR DETAILS)

TYPICAL ADVANCED EDUCATION TECHNOLOGY CYCLE

(SCHOOL ~ ASSESSMENT ~ EXPANSION)

TO BE SUPPORTED BY CCBI DIRECTORATE (F70)

EXAMPLE CASE ~ CAI AT FT BELVOIR


TYPICAL ADV ED TECH CYCLE
Pilot school(s) Phase
Assessment Phase
Expansion Phase Decision Point
Expansion Phase
Est Pilot School Resource Req'ts
Obtain Approval and Procure Req'd Resources for New CCBI Tech
Receive Req'd Resources
Modify/Construct Req'd Facilities
Train Mentor Faculty and Dev Ed Specs in use of new CCBI tech
Develop Pilot School Evaluation and Cost Estimation Plan
Accumulate Baseline Cost Effectiveness Data from Pilot OAC's converted to Small Group but without CCBI
OAC's in Sm Gp Mode
Transition Course(s)
Add new tech incrementally
Steady State OAC w/new tech
Accumulate cost and effectiveness data on OAC's w/new tech and from grads and supervisors(via fld interviews)
Continue Evolutionary Changes
To individual officers?
To individual NCO's?
To AC units/organ's(CONUS/OCONUS)?
To RC units?
To learning centers
To other Army Schools?
To Special Branches?
To other Services?
Pool resources with Higher Education?
Pool resources with Industry?
CONSIDERATIONS
o Compatability w/tactical computers
o Compatability w/CAI on operational systems.
o Impact on home setting(family).
o Special RC needs.
o Others
SAMPLE CASE--Computer Assisted Instruction(CAI)
at 1 Pilot school (Ft Belvoir OAC)
F83
F84
F85
Pilot School Phase
FOAC
2 year development period for new, small group oriented FOAC
85-1
85-2
85-3
Baseline Assessment w/o CAI
85-4
85-5
85-6
Assessment Phase
Assessment w/CAI
FT BELVOIR CAI COSTS
≈ 2 0 Million/yr
o 750 k for 60 terminals
o 85 k for room upgrades (small group area & terminal room)
o 1 1 M for courseware development.
≈ 10 k/CAI POI hour

BASIC BG COURSE POLICY(F80) AND SUPPORTING POLICIES

(F80)
BACKUP EXPLANATORY
WORKSHEET

SUGGESTED
STAKEHOLDERS
& POTENTIAL AIDS
TO ASSIST IN
EXERCISE

F80 DIRECT THAT ODCSOPS/ODCSPER INCLUDE THE DESIGN OF A 2 DAY "USER FRIENDLY" STRATEGIC PLANNING/FUTURE POLICY IMPACT EXERCISE IN EVOLVING EDUCATIONAL PROGRAM FOR NEW BRIGADIER GENERALS. PLANNING EXERCISE WILL USE THE PROFESSIONAL DEVELOPMENT OF OFFICERS AS A THEME. USE OUTPUT FROM BG COURSE EXERCISES TO CONSIDER ADJUSTMENT IN PROFESSIONAL DEVELOPMENT STRATEGY DURING NAVIGATION TO DESIRED SYSTEM STATE.

o EFFORT WILL BE MONITORED BY ODCSOPS PLANNERS TO ASSURE COMPATABILITY WITH ARMY LONG-RANGE PLANNING INITIATIVES.

o EFFORT WILL BE TIED TO WORK BY OACSIM FUTURES AND CONCEPTS DIRECTORATE IN EXPERT SYSTEMS AND JOINT OACSIM/ARI PARTICIPATION IN RESEARCH EFFORTS WITH MIT AND HARVARD. OUTPUT FROM EACH BG SCHOOL SESSION WILL BE PROVIDED TO ARSTAF FOR CONSIDERATION IN LONG-TERM NAVIGATION OF PDOS.

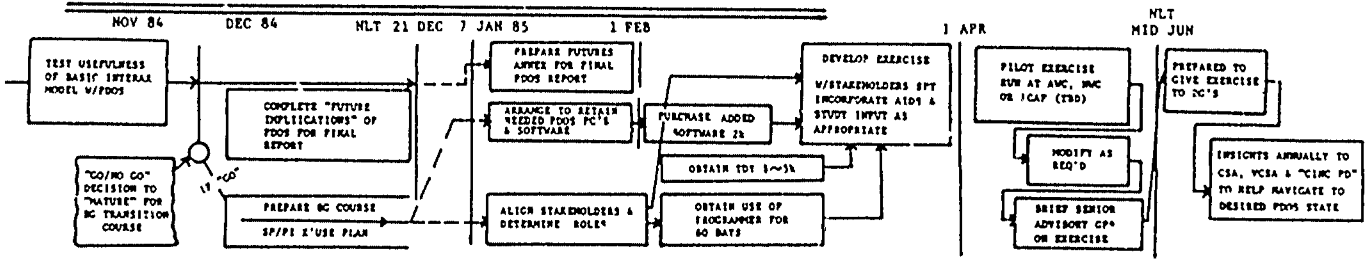
F81 ODCSPER PURCHASE AI - EXPERT SYSTEM GENERATOR FOR EXISTING FORCAST SYSTEM USE CAPABILITY AS A MEANS TO ASSIST IN MAKING STRATEGIC PLANNING EXERCISE FOR NEW BRIGADIER GENERALS MORE SIMPLE AND "USER FRIENDLY."

F82 DIRECT THAT OACSIM FUTURES AND CONCEPT DIRECTORATE WORK WITH ODCSPER GO/SES DEVELOPMENT TEAM TO CONTINUE DEVELOPMENT OF PDOS FUTURES PROCESS AS A STRATEGIC PLANNING/IMPACT ANALYSIS MODEL FOR USE IN SENIOR LEADER DEVELOPMENT PROGRAM.

F83 DIRECT THAT OACSIM AND ARI INCLUDE THE IMPLICATIONS FOR OFFICER EDUCATION TRAINING IN THEIR PARTICIPATION WITH MIT SLOAN SCHOOL OF MANAGEMENT'S "MANAGEMENT IN THE 90'S PROGRAM" AND HARVARD'S CENTER FOR INFORMATION POLICY RESEARCH ON "PROGRAM OF INFORMATION RESOURCE POLICY."

o THESE EFFORTS ARE AIMED AT DEVELOPMENT OF TECHNOLOGY SCENARIOS BASED ON FACTS FROM LEADING EDGE ORGANIZATIONS. DEFINITION OF POLICIES SURROUNDING THE USE OF COMPUTER TECHNOLOGIES AND DISCUSSION DESIGNED TO EXPLORE INSIGHTS GAINED FROM RESEARCH. THE ARMY (OACSIM) IS ONE OF THE MAJOR ORGANIZATIONS PARTICIPATING. AN ACTIVE FEEDBACK LINK BETWEEN OACSIM AND CCBI OFFICE IS ESSENTIAL TO THE LATTER'S EFFORTS TO RESPONSIBLY MANAGE THE ASSIMILATION OF CCBI INTO ALL MILITARY SCHOOLS, PLUS THE WORK AND HOME SETTINGS OF ARMY OFFICERS.

BG COURSE STRATEGIC PLANNING/POLICY IMPACT EXERCISE TIMELINE


NOV 84
DEC 84
NLT 21 DEC
7 JAN 85
1 FEB
1 APR
NLT MID JUN
TEST USEFULNESS OF BASIC INTERAX MODEL W/PDOS
"GO/NO GO" DECISION TO "MATURE" FOR BG TRANSITION COURSE
IF "GO"
COMPLETE "FUTURE IMPLICATIONS" OF PDOS FOR FINAL REPORT
PREPARE BG COURSE
SP/PI X'USE PLAN
PREPARE FUTURES ANNEX FOR FINAL PDOS REPORT
ARRANGE TO RETAIN NEEDED PDOS PC'S & SOFTWARE
ALIGN STAKEHOLDERS & DETERMINE ROLES
PURCHASE ADDED SOFTWARE 2X
OBTAIN TDY $~3K
OBTAIN USE OF PROGRAMMER FOR 60 DAYS
DEVELOP EXERCISE W/STAKEHOLDERS SPT INCORPORATE AIDS & STUDY INPUT AS APPROPRIATE
PILOT EXERCISE RUN AT AWC, NWC OR ICAF (TBD)
MODIFY AS REQ'D
BRIEF SENIOR ADVISORY GP* ON EXERCISE
PREPARED TO GIVE EXERCISE TO BG'S
INSIGHTS ANNUALLY TO CSA, VCSA & "CINC PD" TO HELP NAVIGATE TO DESIRED PDOS STATE

- * SR ADVISORY GP

LTC BAGNAL (UNTIL DEPARTURE)
LTC ELTON
MG J. JOHNSON (ODCSOPS TAG)
MG EDMONDS (TRADOC DCST)
DR SHIELDS (ARI)
DR POSCHECK (AWC)
DR GALLAGHER (CIV ED)

POSSIBLY USN FLAG OFFICER (TBD)
POSSIBLY USAF GO (TBD)

SUGGESTED STAKEHOLDERS	ACTUAL OR POTENTIAL ADDED AIDS OR STUDY INPUTS	USE
• ODCSPER - GO/SES TRANSITION TM(P) LONG RANGE PLANNING STUDIES OFFICE	FORCAST EXPERT SYSTEM GENERATOR (FUNDS ALREADY AVAILABLE)	• SIMPLIFY PROCEDURES
• MILPERCEN	INTERAX (ALREADY PURCHASED) EXPERT CHOICE (ALREADY PURCHASED) FORCE MOD OPERATIONS CENTER	• BASIC EXERCISE MODEL • PROPER GO VOTING • POTENTIAL LOCATION FOR COURSE • POTENTIAL WORK AREA
• OACSIM & ARI - FUTURES & CONCEPTS	MIT "MGT IN 90's" HARVARD "PROGRAM OF INFORMATION RESOURCE POLICY"	• UPGRADE TECHNOLOGY INPUT TO MODEL • GAIN INSIGHTS BASED ON MULTI-AGENCY/ORGANIZATIONAL LOOK AT COMPUTER TECH RESEARCH
• ODCSOPS - TAG (LONG RANGE PLNG)		• STAY CURRENT IN ARMY LONG RANGE PLANNING PROCESS
• POTENTIAL (?)		
• OCSA - ARMY FORUM		• TELECONFERENCING
• FORT BELVOIR	FUSION CENTER (NEEDS $5K IF USE)	• POTENTIAL LOCATION FOR COURSE • POTENTIAL WORK AREA
• OE SCHOOL	?	
• AWC - STRATEGIC STUDIES INSTITUTE		• CONDUCT EXERCISE FOR GO/SES DEVELOPMENT TEAM

Author: COL Dunn
Team Chief: COL Dunn

Appendix 6

Information and Media Plan

PURPOSE: To present the information and media plan for the education and training methods policies.

The attached Information/Media Plan for Education/Training Methods reflects the views of the PDOS Study Group Author as to which policies are appropriate to cover in the media and which form they should take; this will be modified by PAO based on overall PDOS Media Plan.

SHORT RANGE INFORMATION PLAN

MAJOR MILESTONES FOR DEVELOPMENT AND IMPLEMENTATION

SUBJECT	TARGET AUDIENCE	TYPE MEDIA														OBJECTIVE
		CSA WEEKSUM	SOLDIERS	ARMY PER LETTER	ARMY NEWS FEATURE	AFRTS	ARMY TIMES	ARM FOR JOURNAL	MINORITY MEDIA	CORS CALL	CMD INFO SPOTLIGHT	STARS AND STRIPES	CIV NEWS MEDIA	BRIEFING TEAM	OTHER MIL PUBS	
Policy ⓕ70: (1) Direct TRADOC to accelerate the introduction and use of computer-communication based instruction (CCBI) technologies, as indicated for Development Periods 1-6, into military schools, initially, then into units/organizations and ultimately for use by individual officers. The aim is to use these technologies in the school setting first in order to: (a) Capitalize on the educational advantages of emerging technologies. (b) Make officers comfortable with routine use of electronic technologies. (c) Develop officer decision making skills which carry over into operational applications. (d) Accelerate the introduction and the development of decision making aids in the Army with the overall aim of increasing the tempo of prudent, sound decision making under the stresses of combat.	ALL MACOM ALL OFF (AC & RC)	✓	✓	✓			✓	✓		✓	✓	✓	✓	✓	✓	

SHORT RANGE INFORMATION PLAN
MAJOR MILESTONES FOR DEVELOPMENT AND IMPLEMENTATION

SUBJECT	TARGET AUDIENCE	CSA WEEKSUM	SOLDIERS	ARMY PER LETTER	ARMY NEWS FEATURE	AFRTS	ARMY TIMES	ARM. FOR. JOURNAL	MINORITY MEDIA	CORS CALL	CIAO INFO SPOTLIGHT	STARS AND STRIPES	CIV NEWS MEDIA	BRIEFING TEAM	OTHER MIL PUBS	OBJECTIVE
F73 DIRECT ODCSOPS TO COORDINATE WITH OACSIM TO ARRANGE THE NECESSARY ACQUISITION AND PROCUREMENT AUTHORITY FOR THE CCBI DIRECTORATE UNDER THE PROVISIONS OF THE NEW AR 25-5 WHICH REPLACES AR 18-1 ON MATTERS PERTAINING TO INFORMATION MANAGEMENT AND COMPUTER ACQUISITION AND PROCUREMENT.	ARSTAF MACOMS													✓		
F74 1. DIRECT ODCSPER TO INVESTIGATE THE POTENTIAL IMPACT ON OFFICERS' FAMILIES AND THE FAMILY ENVIRONMENT OF THE WIDESPREAD USE BY ALL FAMILY MEMBERS OF COMPUTER TECHNOLOGY IN THE HOME SETTING. 2. DISCUSSION: THE WIDESPREAD USE OF COMPUTERS IN THE HOME IS LIKELY TO ALTER WORK HABITS AND SCHEDULES. A CONCERTED EFFORT SHOULD BE MADE TO RESPONSIBLY ABSORB THE NEGATIVE IMPACT OF CCBI WHICH INDIVIDUALS MAY EXPERIENCE IN BOTH THE WORK AND THE HOME SETTINGS. F87 FOR RESERVE COMPONENT -- DIRECT ODCSPER, TOGETHER WITH NGB AND OCAR, TO STUDY THE IMPACT OF PDOS POLICIES, SPECIFICALLY THOSE RELATED TO RESIDENT AND NON-RESIDENT SCHOOL INSTRUCTION, UNIT TRAINING REQUIREMENTS AND USE OF CCBI, ON THE RESERVE COMPONENT OFFICER, HIS FAMILY AND CIVILIAN EMPLOYER.	ALL AC & RC OFF's ARI & HUMAN RESEARCH COMMUNITY		✓				✓			✓		✓		✓	✓	

SHORT RANGE INFORMATION PLAN
MAJOR MILESTONES FOR DEVELOPMENT AND IMPLEMENTATION

SUBJECT	TARGET AUDIENCE	TYPE MEDIA															OBJECTIVE
		CSA WEEKSUM	SOLDIERS	ARMY PER LETTER	ARMY NEWS FEATURE	APRTS	ARMY TIMES	ARM. FOR. JOURNAL	MINORITY MEDIA	CORS CALL	CMD INFO SPOTLIGHT	STARS AND STRIPES	CIV NEWS MEDIA	BRIEFING TEAM	OTHER MIL PUBS	
F75 1. SEND FIVE MAJORS TO OBTAIN POSTMASTERS LEVEL EDUCATION IN PROGRAMS TAILORED TO PROVIDE THE ARMY WITH EXPERTISE IN THE FIELD OF INTELLIGENCE EDUCATIONS SYSTEMS. 2. DISPERSE THESE ASSETS TO OACSIM, TRADOC, USMA ,(E.G. TO THE CCBI DIRECTORATE) AND THE ARMY RESEARCH INSTITUTE. 3. DISCUSSION: THIS POLICY IS STRONGLY SUPPORTED BY DPMS STUDY GROUPS'S RECOMMENDATION TO CONSIDER ADVANCED CIVIL SCHOOLING REQUIREMENTS FOR ANTICIPATED FUTURE NEEDS.	ALL AC OFFICERS			✓			✓			✓				✓	✓	
F77 1. DIRECT THE CHIEF OF ENGINEERS TO TASK AND FUND THE CORPS OF ENGINEERS RESEARCH LABORATORY (CERL) TO EVALUATE THE MOST COST EFFECTIVE WAYS TO APPLY COMPUTER COMMUNICATIONS BASED INSTRUCTION TECHNOLOGIES AND - IDENTIFY APPLICATIONS OF CCBI TO OTHER POPULATIONS (E.G.. ENLISTED SOLDIERS OR CIVILIANS) AND MISSION AREAS (E.G.. ARMY COTINUED EDUCATION PROGRAM). 2. PROVIDE THE FINDING ODCSOPS. TRAINING AND TO TRADOC COMBINED ARMS TRAINING ACTIVITY (TTA). ARMY TRAINING SUPPORT CENTER (ATSC) AND CCBI DIRECTORATE WHEN FORMED.	TRADOC ARI									✓				✓	✓	

SHORT RANGE INFORMATION PLAN
MAJOR MILESTONES FOR DEVELOPMENT AND IMPLEMENTATION

SUBJECT	TARGET AUDIENCE	TYPE MEDIA														OBJECTIVE
		CSA WEEKSUM	SOLDIERS	ARMY PER LETTER	ARMY NEWS FEATURE	APRTS	ARMY TIMES	ARM FOR. JOURNAL	MINORITY MEDIA	CORS CALL	CAO INFO SPOTLIGHT	STARS AND STRIPES	CIV NEWS MEDIA	BRIEFING TEAM	OTHER ML PUBS	
F78 DIRECT TRADOC TO DEVELOP MENTOR TRAINING PROGRAMS TO HELP GAIN ACCEPTANCE OF CCBI TECHNOLOGIES IN THE SCHOOLS, UNITS AND ORGANIZATIONS AND OVERSEA COMPUTER COURSEWARE DEVELOPMENT BY CIVILIAN EDUCATION SPECIALISTS. ACTION SHOULD BE INITIATED UPON COMPLETION OF THE ACTIONS IN POLICY 77.	USMA SERVICE SCHOOL FACULTY						✓			✓				✓	✓	
F79 DIRECT OACSIM TO ALLOCATE RESEARCH FUNDS TO PURSUE JOINT SERVICE INITIATIVE FOR THE DEVELOPMENT OF EDUCATIONAL USES OF ARTIFICIAL INTELLIGENCE-EXPERT SYSTEMS (AI-ES) AND RELATED TECHNOLOGIES. ACTION SHOULD BE INITIATED UPON COMPLETION OF THE ACTIONS IN POLICY F77.	JOINT & ARMY RESEARCH COMMUNITY						✓	✓		✓				✓	✓	

SHORT RANGE INFORMATION PLAN
MAJOR MILESTONES FOR DEVELOPMENT AND IMPLEMENTATION

SUBJECT	TARGET AUDIENCE	TYPE MEDIA															OBJECTIVE
		CSA WEEKSUM	SOLDIERS	ARMY PER LETTER	ARMY NEWS FEATURE	ARNS	ARMY TIMES	ARM FOR JOURNAL	MINORITY MEDIA	CINCS CALL	CMD INFO SPOTLIGHT	STARS AND STRIPES	CIV NEWS MEDIA	BRIEFING TEAM	OTHER (ML PLAN)		
F30 1. DIRECT ODCSOPS/ODCSPER TO INCLUDE THE DESIGN OF A TWO DAY "USER FRIENDLY" STRATEGIC PLANNING/FUTURES POLICY IMPACT ANALYSIS EXERCISE IN THE EVOLVING EDUCATIONAL PROGRAM FOR NEW BRIGADIER GENERALS. THE PLANNING EXERCISE WILL USE THE PROFESSIONAL DEVELOPMENT OF OFFICERS AS A THEME. THE OUTPUT FROM THIS SUB-COURSE IS A SET OF RECOMMENDED ADJUSTMENTS IN THE PROFESSIONAL DEVELOPMENT OF OFFICERS STRATEGY--THE OUTPUT IS A TOOL-AID FOR SENIOR ARMY LEADERS (CSA, VCSA AND ARSTAF) AS THEY "NAVIGATE" TOWARDS THE PROFESSIONAL DEVELOPMENT DESIRED SYSTEM STATE. 2. LTC CARL STOUT AND CAROLYN RUSSELL WILL DESIGN THE EXERCISE BY 31 MAR 85 FOR SUBSEQUENT TURNOVER TO ODCSPER/ODCSOPS GO/SES DEVELOPMENT TRANSITION TEAM AND INCORPORATION IN THE OVERALL BRIGADIER GENERAL COURSE PLAN.	GENERAL OFFICERS NEW BG's	✓								✓				✓	✓	
F82 DIRECT THAT DACSIM FUTURES AND CONCEPTS DIRECTORATE WORK WITH ODCSPER GO/SES DEVELOPMENT TEAM TO CONTINUE DEVELOPMENT OF PDOS FUTURES PROCESS AS A STRATEGIC PLANNING/IMPACT ANALYSIS MODEL FOR USE IN SENIOR LEADER DEVELOPMENT PROGRAM.	VCSA ARSTAF LONG RG PLANNERS													✓	✓	

SHORT RANGE INFORMATION PLAN
MAJOR MILESTONES FOR DEVELOPMENT AND IMPLEMENTATION

SUBJECT	TARGET AUDIENCE	TYPE MEDIA														OBJECTIVE
		CSA WEEKGRAM	SOLDIERS	ARMY PER LETTER	ARMY NEWS FEATURE	AFRTS	ARMY TIMES	ARM FOR JOURNAL	MINORITY MEDIA	CDRS CALL	CMD INFO SPOTLIGHT	STARS AND STRIPES	CIV NEWS MEDIA	BRIEFING TEAM	OTHER MIL PUBS	
F84 AMC Build CAI into training packages for new major operational system.	AMC													✓	✓	
F86 For Reserve Component -- Direct TRADOC, together with NGB and OCAR, to concentrate on the development of an education and training metods support strategy which is aligned with the Active Component strategy.	RC OFFICERS						✓			✓				✓	✓	
J26 Develop resident and non-resident instruction programs simultaneously and maintain current.	TRADOC RC OFF's													✓	✓	

SHORT RANGE INFORMATION PLAN
MAJOR MILESTONES FOR DEVELOPMENT AND IMPLEMENTATION

SUBJECT	TARGET AUDIENCE	TYPE MEDIA															OBJECTIVE
		CSA WEEKSUM	SOLDIERS	ARMY PER LETTER	ARMY NEWS FEATURE	AFRTS	ARMY TIMES	ARM. FOR. JOURNAL	MINORITY MEDIA	CDRS CALL	CMD INFO SPOTLIGHT	STARS AND STRIPES	CIV NEWS MEDIA	BRIEFING TEAM	OTHER MIL PUBS		
F88 DIRECT DAS TO SPONSOR A SENIOR SERVICE COLLEGE ARMY RESEARCH ASSOCIATE TO CONTINUE TO LOOK FOR WAYS TO INSTITUTIONALIZE PDOS CC5I INITIATIVES AND OTHER MAJOR PDOS THRUSTS WITHIN THE ARMY'S EXISTING SYSTEM. CONTINUE THIS SPONSORSHIP FOR AT LEAST THE NEXT FIVE YEARS.	ALL SSC SELECTEES									✓				✓	✓		
F89 1. DIRECT THE ARMY SCIENCE BOARD (ASB) TO CONDUCT THE 1985 SUMMER STUDY ON EDUCATION AND TRAINING TECHNOLOGIES. 2. DISCUSSION: THE STUDY WILL BUILD ON THE 1982 DSB SUMMER STUDY ON TRAINING TECHNOLOGY. THE PDOS CC3I INITIATIVES AND THE CERL REPORT (POLICY F77). IF AVAILABLE BY THE 1985 ASB SUMMER STUDY.	ARSTAF ARMY RESEARCH COMMUNITY													✓	✓		
F90 DIRECT DCSOPS TO INCORPORATE THE PDOS EDUCATION AND TRAINING STRATEGIES AND MAJOR THRUSTS IN THE NEW AR 350-1, ARMY TRAINING AND EDUCATION SYSTEM.	ARSTAF TRADOC									✓				✓	✓		

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Appendix 7 to Annex P

Glossary

1. **PURPOSE:** To define terms which are new, unique or critical to this study.

2. **GLOSSARY:**

a. *ARTIFICIAL INTELLIGENCE (AI).* In general, is the science of giving human-like learning and thinking qualities to machines. Specific sub-fields are knowledge acquisition ("learning"); knowledge retention ("memory"); application of knowledge ("common sense," logic, complex cognitive processes); language and speech recognition and voice digitizing. The major focus of the PDOS education and training methods analysis is on the use of AI for knowledge acquisition and retention and the application of AI to provide a new level of speed and simplicity to the decision making process.

b. *COMPUTER ASSISTED INSTRUCTION (CAI):* Any instruction which uses a computer to manage, generate or deliver instruction. In the PDOS desired system it is intended that CAI include:

(1) A data base which is common to and accessible by doctrine developers, combat developers, instructors, units in the field and individuals.

(2) Instructional packages which provide to the student an in-depth knowledge or may provide information at a refresher or familiarization level.

(3) Testing packages.

(4) Teaching aid packages for unit development programs.

(5) Authoring systems.

(6) Menu driven access to above packages.

c. *COMPUTER - COMMUNICATION BASED INSTRUCTION (CCBI)*—The electronic methods component of the overall PDOS education and training methods strategy. The overall aim of CCBI is to increase the tempo of prudent, sound officer decision making under stress. The intermediate aims are to teach officers to learn faster and smarter; overcome combat skill obsolescence; enhance knowledge and skill retention and make computers a natural extension of the officer in peacetime and wartime workplaces. CCBI places an emphasis on the following electronic technologies:

(1) Computer Assisted Instruction (CAI) and interactive video disk (IVD) systems.

(2) Computer simulations (wargames).

(3) Computer teleconferencing.

(4) Artificial intelligence.

(5) Strategic planning/futures policy impact analysis tools/aids.

(6) Information storage and decision tools/aids.

(7) Knowledge bases.

d. *COMMUNICATION/CONTROL MODEL.* A relatively new education and knowledge model which seeks to add an interdisciplinary and computer technology dimension to the existing widely used educational theories. For further details, refer to the works of Dr. Doreen Steg referenced in the bibliography.

e. *COMPUTER LITERACY.* The knowledge of what a computer is and the functions it may perform. One who is computer literate has the ability to apply computer-related terms, concepts and capabilities to one's job. Computer literacy skills equate to oral and reading skills. The concept of computer literacy in an education setting is not simply learning to manipulate a word processor or spread-sheet nor is it learning how to program a computer. Those tasks are skills-based which are learned through training. Within an educational context, computer literacy refers to the capability to use the computer as a tool for gathering, processing and communicating information related to the learning process. In an organizational setting, it refers to using it for intelligent application and amplification of learned knowledge and skills.

f. *COURSEWARE.* This term came into use as computer assisted instruction grew in order to provide a distinction between the software programs that contArol the hardware devices and the software tailored to providing instructional interactions. As it has come to be used, courseware refers to the materials of instruction that constitute applications programs administered by computer delivery systems. "SMART" COURSEWARE. Refers to computer courseware aimed at enhancing officer decision making capabilities. Such courseware will enable students to work smarter and faster by providing:

(1) Good access to relevant knowledge.

(2) Ease of computation.

(3) Ability to simulate situations that are too expensive, dangerous or impossible to observe directly.

As a result of using "smart" courseware, officers can focus on concepts, theories, models, problem solving and decision making rather than on clerical tasks. They can achieve mastery of the art and science of war rather than on just becoming familiar with it.

g. *EDUCATION.* This involves how to think and decide. It involves learning new concept formulation. The result is the development and growth of the individual. A product of education is the acquisition of insights—an understanding of the meaning of concepts; an understanding of how to articulate one's intent and frame of reference; an understanding of contexts. The distinction between training and education is important in that it permits a comparison of present with future needs for the Army and this distinction underlies the general thrust of Annex P.

h. *EDUCATION AND TRAINING METHODS.* Those methods which should be emphasized to support the individual officer, units and organizations and unit and school MENTORS in performing their professional development roles during each Development Period.

i. *GESTALT BASED.* A school of thought which affirms that responses to experiences are based on an unanalyzable whole rather than on specific elements of a situation.

j. *IMPRESSION/BEHAVIOR/RULE MODELS.* Theoretical education and knowledge models which form the basis for a majority of the Army's post-commissioning service school training.

k. *INSIGHT.* Ideas and thoughts derived internally from an ability to see and understand clearly the nature of things. A necessary part of making judgments, of deciding, of "putting it all together," "of being aware," of wisdom and farsightedness. Answers the question: What does this mean? What is important in this situation? Insight cannot be taught directly, but can be induced by well educated, experienced faculty, using appropriate teaching methods. Generally, a product of education rather than of training.

l. *INSIGHT MODEL.* Another education and knowledge model which has been widely used in some educational situations but not in general in the American education system.

m. *KNOWLEDGE.* Information, data, facts, theories, concepts. The factual basis of any course of learning. Answers the question: What should I know? May be achieved by many learning methods. Knowledge is highly perishable if not used routinely.

n. *MENTOR.* A leader involved in developing (through education, socializing and training) an individual by being for that individual a role model, teacher, coach, advisor and guide. A school faculty mentor has the additional responsibilities of writing doctrine and developing courses.

o. *SKILLS.* Abilities which can be developed and are manifested in specific levels of performance. They may not be manifested in the"potential" to do other or higher levels of performance. Are developed through learning to manipulate "known" knowledge. Answers the question: What should I be able to do? Categories of skills include:

(1) Information-retrieval skills—reading, researching, hearing.

(2) Communication skills—writing, speaking, using languagesand technology; communications with people and through objects.

(3) Technical and tactical skills—performance within a specific activity; e.g., map reading, marksmanship.

(4) Human relationship skills—the ability to work effectively as a group member and to build cooperative efforts within a team; self awareness and interpersonal skills.

(5) Leadership skills (e.g., counseling).

(6) Analytical and conceptualization skills—problem identification, problem solving, decision making, planning, estimating the situation, synthesizing, inducing, structuring, cyber-

netic systems analyzing. These skills vary at different cognitive levels.

p. *TRAINING.* Yields skills for performing duties in specific work assignments. Teaches individuals how to do something. Learning some specified pattern of behavior. It transmits past experience or "known" knowledge.

q. *VALUES.* Convictions, fundamental beliefs, standards governing the behavior of people. Includes attitudes toward professional standards such as duty, integrity, loyalty, patriotism, public service, taking care of ones subordinates, accomplishing the mission. Answers the questions: What do I believe? Where do I draw the line? Values, like insights, must be derived by the individual if values are to have meaning. Values may be derived, induced or precipitated by knowledge about values, their importance to professionalism and the statements and behaviors of others (specifically mentors) about personal commitment to values.

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Appendix 8 to Annex P

Bibliography

Analytical Systems Engineering Corporation. *Automated ISM Training Report.* Contract MDA903-83-C: August 20, 1984.

Andriole, Stephen J., PhD. "Teleconferencing Advances."*National Defense*, December, 1983, pp. 16-20.

"Artificial Intelligence is Here." *Business Week*, July 9, 1984, pp.54-62.

Clement, Stephen B. and Ayers, Donna B. *A Matrix of Organizational Leadership Dimensions.* Leadership Monograph Series 8.

"Computerized Training May Finally Be About to Take Off." *Business Week*, March 28, 1983, p. 88.

Dilworth, "Lex", Colonel, United States Military Academy, Director of Resources Management. Series of coordination conference calls with Colonel Dunn, Jan 1985.

Dunn, C. Hilton "Stretch," Colonel. *An Experiment in Creative, Constructive Change Within an Army Ad Hoc Study Group Setting.* Carlisle Barracks, PA: US Army War College, Army Research Associate Project, 1984.

Dunn, C. Hilton "Stretch," Colonel. *Comments With Respect to TRADOC Non-concurrence With Separate CCBI Office.* November, 1984.

Dunn, C. Hilton "Stretch," Colonel. *Detailed Analysis of Best Education and Training Methods Mix to Support PDOS Strategy.* October, 1984.

Dunn, C. Hilton "Stretch," Colonel. *Education and Training Methods- Backup Briefing.* December 21, 1984.

Farr, Beatrice, PhD. Army Research Institute. Personal Interview With Arnold G. Fisch, Jr., PhD. Alexandria, VA: October 15, 1984.

Fisch, Arnold G., Jr., PhD. *Education and Training Methods to Support Professional Development of Officers Desired System.* November 2, 1984.

Forrester, Jay W. *World Dynamics.* Cambridge, MA: Wright Allen Press, 1971.

Holt, Robert W., PhD. George Mason University. Telephone Conversation with Arnold G. Fisch, Jr., PhD. Arlington, VA: October 10, 1984.

Horn, D., Captain. Fort Belvoir, VA. Interview with Arnold G. Fisch, Jr., PhD. Fort Belvoir, VA: October 4, 1984.

Jacobs, Owen, PhD, *et al. Concepts for GO/SES Development.* Alexandria, VA: Army Research Institute, 1984.

Jacobs, Owen, PhD, *et al. Senior-Level Leadership*, Army Research Institute Draft FM 22-999. Alexandria, VA: Army Research Institute, 1984.

Kreiger, Greg, PhD. *Assessment of Training Technology at Selected Service Schools.* Briefing. Fort Monroe, VA: 1984.

Kreitler, Hobart C., Chairman of Pioneer Video, Inc. "Videodiscs and Computers: A Dynamic Duo." *Business Week*, February 7, 1983, pp. 109-110.

LeHardy, Ward, Colonel (Promotable). Officer Personnel Management Study, HQDA, ODCSPER. Memorandum for the Chief of Staff, Army, Subject: Strengths of the Officer Corps, July 20, 1984.

Livsey, William J., General, Commander, Eighth US Army, Korea. Personal Comments Given At Conclusion Of PDOS Briefing. Seoul, Korea: November 8, 1984.

"Management in the Nineties." Boston, MA: Massachusetts Institute of Technology, Sloan School of Management, May, 1984.

Meriwetner, Thomas, Major. Professional Development of Officers Study, OCSA. Discussion Paper, Subject: PDOS Survey Results, October 30, 1984.

Morris, Gary, et al. *Environmental Scan Artificial Intelligence.* Washington, DC: Department of the Treasury, Internal Revenue Service, December, 1983.

Office of the Under Secretary of Defense for Research and Engineering. *Report of the Defense Science Board 1982 Summer Study Panel on Training and Training Technology.* Washington, DC: November, 1982, p. 22.

O'Neil, Harold F., Jr., PhD, ed. *Computer-Based Instruction: A State of the Art Assessment.* Alexandria, VA: Army Research Institute, 1981, pp. 91-02.

Orlansky, Jesse and String, Joseph. *Cost Effectiveness of Computer- Based Instruction in Military Training.* Washington, DC: Institute for Defense Analysis Paper P-1375, April, 1979.

Psotka, Joseph, PhD, et al. *ARI/USAES Research on the Application of Artificial Intelligence and Cognitive Science to Computer-Based Instruction.* Presentation. USAES: November 19, 1984.

Richardson, William R., General, Commander, US Army TRADOC. Letter to HQDA, Subject: MACOM FY 86-90 POM Assessment, September 21, 1984.

Roberts, Steven. *Artificial Intelligence.* Mini-Micro Systems: December, 1983, p. 229.

Rodier, Michael, Lieutenant Colonel. *US Army FORUM: Mission and Functions.* 1984.

Rogers, T.D., Major General, Commander, Fort Gordon, GA. Letter to Director, Professional Development of Officers Study, October 23, 1984.

Scribner, Barry L., *et al Are Smart Tankers Better Tankers. AFQT and Military Productivity.* West Point, New York: US Military Academy, Office of Economic and Manpower Analysis, December 5, 1984.

Serio, Frank, Vice President, Analytical Systems Engineering Corp. Interview with Arnold G. Fisch, Jr., PhD. Washington, DC: October 4, 1984.

Solorzano, Lucia. "What Makes Great Schools Great." *US News and World Report.* August 27, 1984, pp. 46-51.

Steg, Doreen R., PhD *Cybernetics Revisited.* Namur, Belgium: International Association for Cybernetics, presented August 13, 1983, Publication 1984.

Steg, Doreen R., PhD. "Models in Education" Conference on Evaluation, Harrisburg, Pa. October, 1978, Latest draft, December 1984.

Steg, Doreen R., PhD. "Learning and Some Limitations of Equipment for Learning." Focus on Learning, Vol I, No 1, Davis Hall, Indiana: University of Pennsylvania, Pa. 1971 (Revised 1984).

TRADOC-FORSCOM Resource Factor Handbook. TRADOC, DCSRM and FORSCOM, DCSCOMPT, Vol I & II, Mar, 1984.

"Three Big Backers Give VIDEOTEX a Shot at Success." *Business Week,* February 27, 1984, pp. 36-37.

US Congress. House. *Computers and the Learning Society.* Hearings, 95th Congress, 1st Session. Washington DC: US Government Printing Office, October, 1977, pp. 75.

US Army Engineer School. *Computer Courseware Catalog.* 1984.

US Army Science Board 1984 Summer Study, Message, Subject: Leading and Manning, August 21, 1984.

US Army Training Support Center. *Mission and Items of Interest.* November, 1984.

Van Houweling, Douglas, *et al Enhancing Student Learning with Information Technology Through a Consortium for Applications Development in Higher Education.* Proposal to Carnegie Corporation New York, NY. Pittsburgh, PA: Carnegie-Mellon University, May 31, 1983.

"The VIDEOTEX Revolution." *Newsweek,* August 2, 1982, p. 55.

Zawack, Stephen J. Analytical Systems Engineering Corp. Interview with Arnold G. Fisch, Jr., PhD. Washington, DC: October 22, 1984.

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Annex Q

Officer Functional Education and Training

1. **PURPOSE.** To provide the PDOS findings and recommendations concerning officer functional education and training.

2. **DISCUSSION.**

a. Scope. The scope of this study did not include the unique education and training requirements for each branch or functional area nor the requirements for individual functional courses. Instead functional education and training was examined at the macro level and broad policy recommendations developed. More detailed analysis was conducted where shortfalls were found and suggestions are made in this annex that should be a starting position for proponents to address the issue.

b. Definitions.

(1) For the purpose of this study, functional education is defined as providing the broad-based and technical knowledge required for a career in a functional area. Examples are the Military Comptrollership Course at the Soldier Support Center, the Comptrollership Program at Syracuse University, the Material Acquisition Management Course at the Army Logistics Management Center, and the Program Management Course at the Defense Systems Management College.

(2) Functional training provides for those skills that are atypical to a branch or not included in the common core of officers' proficiencies and which are necessary for specific duty requirements. The training may result in the award of a skill identifier. Examples of functional training are the Airborne Course at Ft Benning, the U.S. Army Installation Management Course at Ft Lee, the Joint Command, Control, and Communications Operations and Staff Officer Course at the Armed Forces Staff College, and the Battalion S-1 Course at the Soldier Support Center.

c. Current system strengths.

(1) Under the current dual-specialty concept an officer is normally designated with an additional specialty before reaching the eighth year of commissioned service. As a general rule, education and training are available or being developed to prepare an officer for duty in the additional specialty. (NOTE: Based on OPMS Study Group's recommendations, "additional specialty" is being changed to "functional area" and additional specialties that were branches are not allowed as second specialties).

(2) The proponency system is having a positive effect on officer professional development. Previous shortfalls in the system are being addressed and corrected by the proponents. Viable career paths are being defined. Duty descriptions are being standardized. Education and training shortfalls are being identified and courses being developed. The overall positive effect of the proponency system cannot be overemphasized. (See Appendix 1 for further discussion of proponency system).

d. Current system weaknesses.

(1) Overall the functional education and training is working well and is meeting the documented needs. There are areas that could use improvement, and the following discussions of these should not lead the reader to assume that the system is in need of major overhaul. Also, some of the areas discussed below were outside the scope of the PDOS and covered by the OPMS Study Group. They are discussed for the purpose of showing the effect on PDOS and to provide support to the OPMS Study Group's recommendations. Refer to the OPMS Study Group Final Report for detailed discussion of their findings and recommendations.

(2) Position coding does not accurately reflect requirements. The manning documents, especially Table of Distribution and Allowances (TDA), change frequently and make it difficult for personnel planners to develop an inventory to meet the Army's requirement. These manning

documents are the basis for modeling to determine future needs This is analogous to building a house on a sandbar. The education and training requirements are also derived from the same base. Actions being taken as a result of the OPMS Study Group concerning document control will "firm" up the base and provide more predictable requirements.

(3) Management by entire position code is lacking. Manning documents and requisitions are based on a coding system that identifies a primary specialty, a second specialty, and skills required for a position. The US Army Military Personnel Center management system keys on the primary specialty and, only if possible, consideration is given to the second specialty and skill. This causes several problems. An officer can be assigned to a position and not have received the required education and/or training. The position will probably be recoded to meet the officer's specialties thus increasing the problem addressed in the previous paragraph. Also, the inventory requirements are based only on the primary specialties without consideration of the second specialty requirements. This leads to a continued inability to fill a requisition based on second specialty. For example, for SC54 (Operations, Plans, and Training) more than half the positions requiring SC54 have SC54 as the second code (i.e. 2414 of 4604 positions). The inventory (5547) was developed using only the number of positions (2190) with SC54 as first specialty code. By comparsion, SC41 (Personnel Management) has 1812 positions where SC41 is indicated first, 1044 positions with SC41 indicated second, supported by an inventory of 5210 officers with SC41. The result of current inventory determination method is 5210 SC41 officers to fill 2856 positions requiring SC41 and 5547 SC54 officers to fill 4604 positions requiring SC54. The method to determine inventory requirements will have to be changed. The actions, as a result of the OPMS Study Group recommendations concerning skill proponency, single, dual tracking and branch immaterial codes, should help reduce this problem. (For discussion of skills see Appendix 2.)

(4) Entry-level military courses are not available for all functional area specialties. Functional areas such as ADP System Officer (SC 53) and Operations, Research and Systems Analysis SC 49) can be entered through civilian graduate studies. These studies provide the technical knowledge in the functional area but do not provide the required military perspective. (See Appendix 5 for further discussion of Advanced Civil Schooling.) Some functional areas hav no formal entry-level education or training available, nor is any planned. These are Personnel Management (SC 41) and Operations, Plans, and Training (SC 54). (See Appendix 3 for further discussion of entry level courses.)

(5) Functional training time, when coupled with "primary" courses (i.e., OBC, OAC, CAS3, and CGSOC), is extensive for some specialties such as Foreign Area Officer, Research and Development, and Logisticians, which makes dual tracking difficult. (See Appendix 4 for further discussion.)

(6) The current education and training system is not designed to implement the OPMS Study Group's recommendations that there be multiple career tracks (i.e., dual, single, and/or sequential). The 20 percent of the officers that are single-tracked in a branch can be accommodated since the system is oriented toward branch requirements. The current system has been designed for dual-tracking, therefore, no major changes are anticipated. The system, however, needs adjustment to recognize the education and training requirements for sequentially tracked officers. As members of the officer corps, these officers will still require education and training in the common core and will require additional education and training to become "in-depth" experts in their fields.

c. Desired system.

(1) The underlying premise for functional development is that every officer receives the required functional education and training prior to any assignment. This places greater emphasis on managing by the entire position code. If an officer is slated for a position that requires functional area expertise, the officer will have completed the entry-level military course prior to reporting to that assignment. If the position requires a skill, the officers will have completed the requirements for designation of the skill identifier prior to the assignment. The rationale for the preceding is that when a position is coded with a functional area or skill designator, that position requires an officer with proficiencies not common to all officers of the rank associated with the position. Otherwise the position would have been coded as branch immaterial. Also, for a specialty or skill to be designated as such, unique proficiencies will have been identified. If no such proficiencies were identified, the specialty or code would not have qualified or been designated as a separate specialty or skill. Given then that there are proficiencies associated with a specialty or code, the officer needs an educational or training experience to provide the proper frame of reference to

develop the proficiencies. In the case of some skills, the experience can be gained through civilian education and/or experience. The same is true for areas of concentration. (See Annex G, for further discussion of frame of reference.)

(2) Dual-tracked officers whose functional area specialty holds primacy (primacy defined as that specialty under which the officer is primarily developed and which career management division in USAMILPERCEN holds and controls the officer's records) and sequentially tracked officers may be so designated after selected for major and considered for command and staff college attendance. However, those who have been identified prior to consideration for command and staff college present a unique challenge. Their field grade intermediate-level education and training should compliment their functional area while still placing the proper emphasis on general military skills. The Army should consider their unique needs and possibly expand the opportunities for Mel 4 education. Appendix 5 discusses some of the alternatives that could be a starting point for functional area proponents to design or select the field grade intermediate education and training suited for these officers.

(3) Officers who have a specialty that is comparable to a civilian career field, have a wealth of opportunities within the civilian sector for professional development. Within these fields, the civilian community has associations and society that hold seminars where new ideas are presented and information is exchanged. These associations and societies also publish periodicals that are similar to branch magazines. The civilians view membership in these organizations as an essential part of professional development. The military should share that view and encourage membership for its officers. That encouragement is already present for branch association, Association of the U.S. Army, and civilian legal and medical societies. Officers who sequentially track in a functional area are in essence divorced from branch; thus do not have an appropriate military organization. The functional area proponents, as well as branch proponents, should inform the officers within their respective branch or functional area of the recommended association or societies. Once this list is established, the officers who are being developed as "in-depth" experts in these fields may be sent by the military on a biannual basis to seminars. In addition to the professional development, this provides recognition of the professionalism of these officers. This program will be controlled by MILPERCEN in conjunction with the proponents to ensure the meetings/seminars/conventions have professional development value and are not just a social gathering.

(4) A conclusion reached by the study group was that every officer needs to be branch qualified at the company level prior to entry into a functional area. Through the branch training and experience an officer builds the foundation for application of functional areas to the Army mission. A supporter needs an understanding and appreciation of the mission and tasks of the supported organization; otherwise, the supporter will tend to operate in a vacuum without sufficient regard for the needs of the receiver of the support.

3. Recommendations.

a. Aim.

(1) To prepare officers for duty assignments in functional areas after company-level branch qualification.

(2) To prepare officers for duty assignments requiring unique skills.

b. Major Thrusts.

(1) To define education and training requirements for areas of concentration, functional areas, and skills.

(2) Provide for initial and continued functional area development after company-level branch qualification.

(3) Identify training needs a part of the requisition process and assign properly trained officers.

c. Base Policies.

(1) Company level branch qualification will precede functional area development.

(2) Develop or revise, as needed, military courses to support all areas of concentration and functional areas.

(3) OPMD managed officers will be eligible for assignment to positions coded with area of concentration, functional area or, if applicable, skill codes after completion of the appropriate military course or equivalent experience.

(4) Officers who are single or sequentially tracked into a branch or functional area that has a comparable civilian profession will be afforded the opportunity of, and funded for, biannual attendance at a civilian society or association national or international seminar/meeting supporting the profession.

4. CSA Remarks. Recommendations approved in concept.

Appendices

1 Proponency System
2 Skill Management
3 Functional Area Entry Level Courses
4 Professional Development Time Requirements
5 Field Grade Functional Area Education and Training
6 Glossary
7 Bibliography
8 Action Plans
9 Phasing Plans

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Team Chief: COL Isaac

Appendix 1 to Annex Q

Proponency System

1.PURPOSE. To describe the impact of the proponency system on PDOS.

2. DISCUSSION.

a. General. To gain an appreciation of the various specialties and to determine the current efforts of proponents in the area of professional development, field trips were taken to proponents of the specialties that could be designated as addition specialties. (Note: As a result of the OPMS Study, "additional specialty" is being changed to "functional area" and whereas branches could have been an additional specialty, an officer's second specialty will be from a functional area only.) Table Q-1-1 indicates those visited.

PROPONENT VISITS

BRANCHES		*FUNCTIONAL AREAS*	
SC (25, 27, 72)	CM (74)	SP OPNS (18)	FOR DEV (50)
MP (31)	OD (73, 75, 91)	PEP MGMT (41)	NUC WPN (52)
MI (35, 36, 37)	QM (81, 82, 92)	COMP (45)	ADP (53)
AG (42)	TC (95)	PA (46)	OPS PLANS, TNG (54)
FI (44)		FAO (48)	P&P (97)
		ORSA (49)	

Table Q-1-1 Proponent visits

b. Impact of Proponency System.

(1) As a result of the field trips, the study group was encouraged by the efforts of the proponents and the resulting effect on professional development. In terms of an Army system, the current proponency system is relatively young and is improving greatly over time. It became apparent early on in the study that they are the key player in the definition of education and training requirements

(2) Functional area proponents are defining career paths and opportunities. The proponent for Procurement, for example, has taken actions to provide for career progression including increased command selection opportunities. When the OPMS Study Group's recommendations are implemented and officers are single, dual, and sequentially tracked, career progression and opportunities in functional areas must be defined. This is needed so the Army can be candid with officers as to what are the true opportunities associated with pursuing a specific career track. For example, if an officer elects to pursue a career in a technical field and become an "in depth" expert, the opportunities for command will be diminished and opportunity for general officer selection will be greatly reduced when compared to an officer who elected a troop unit oriented career. For example, there are no command positions for SC53 or SC49 officers

(3) In addition to defining career paths, the proponents are standardizing the duty descriptions and defining the criteria for position coding. Many of the proponents are in the process of or have done document reviews and are challenging the field when coding doesn't make sense. Unfortunately, this is taking place after the document has been approved. The OPMS Study Group recommended the proponents be included in the approval process. Implementation of this recommendation will put the proponents review in the right timeframe and prevent having to go back and correct erroneously coded documents.

(4) The proponents are starting to inform the officer corps of the actions affecting the specialty. Newsletters are being sent and some proponents have gone so far as to send congratulatory letters to officers in the specialty who are board selectees. This has a positive effect on the attitude of the officers by providing evidence that

the officer's chosen field has a spokesman and someone is looking out for the health and welfare of the specialty.

(5) In defining the education and training requirements, the proponents have identified shortfalls and taken corrective action. For example, the proponent for the Nuclear Weapons Staff specialty recognized the need for an entry level course and initiated actions to have one established. The pilot course will be conducted during FY 85. The field artillery proponent recognized the need for a cannon officer course and subsequently an add-on module to OAC was developed for officers being assigned to cannon units. Add-on modules were already available for missile officers. Other courses being developed or recently implemented include entry-level courses for Force Development and Combat Development; and a non-resident course for Operations, Plans, and Training.

c. Summary. The proponency system is working and is maturing over time. The current efforts to improve the system should be continued.

3. **CSA Remarks:** None

Author: LTC Magnusson
Team Chief: COL Isaac

Appendix 2 to Annex Q

Skill Management

1. PURPOSE. To provide the study group's findings and suggestions concerning skill management.

2. DISCUSSION.

a. General. As a part of the PDOS study, skills were reviewed to determine if the training requirements have been identified. Unlike specialties (branches and functional areas), skills do not have a formal proponency system in place; therefore, AR 611-101, 30 Oct 84, effective 1 Mar 85, and an Officer Management File inventory count as of 17 Aug 84 were used as the basis for the review.

b. Current System.

(1) Managed skills are identified by an Additional Skill Identifier (ASI). The ASI is defined by AR 611-101 as an identification of specific skills which are required to perform the duties of a position, but are not necessarily related to any one particular specialty and also as an identification of the additional skill possessed by an officer. Language skills are identified separately with a Language Identification Code.

(2) For a skill to qualify for designation as an ASI, it will "be judged on its own merit; however, as a guide, the criteria for establishment of an ASI are as follows:

(a) Qualification of the individual for the skill being identified must result from two or more weeks of formal training or equivalent.

(b) There should be a requirement for 20 or more positions to be identified by the proposed new ASI.

(c) The tangible or intangible advantages to be derived from a more precise occupational classification must be clearly evident.

(d) The ASI must be applicable for both postions and personnel classification.

(e) "Applicable to more than one specialty."

(3) AR 611-101 lists 185 ASIs in Table 4-1 and 188 in Table 4-2 which provides the classification guidance for each ASI. Table 4-1 has 10 ASIs not found in Table 4-2 and Table 4-2 has 13 ASIs not found in Table 4-1. Table 4-2 was used for this analysis since it is more up to date than Table 4-1.

(4) For purposes of analysis the 188 ASIs were broken out as follows:

(a) There are 74 ASIs that are applicable to only Special Branches and are outside the scope of this study.

(b) The remaining 114 ASI relate to OPMD managed officers and are further broken out as follows:

1. There are 32 aviation related ASIs. Aviator qualifications are governed by AR 95-1 and are not addressed herein.

2. There are 10 Foreign Area Officer related ASIs. The OPMS Study Group recommend that these ASIs be converted to areas of concentration under Functional Area 48; therefore, they are not adressed.

3. The remaining 72 ASIs thus become the basis of this analysis.

c. Results of analysis, due to inconsistency in the formating and wording of the classification guidance, had to be general in nature and only general observations could be drawn. The specific numbers used herein by the analyst are not to be construed as exact because of interpretation in some cases of the wording of the classification guidance. The tables referred to below list each ASI under the category in which it fell and lists the inventory indicated in the Officer Management File. Specific results of the analysis are indicated in paragraph below.

(1) There are 28 ASIs that, when specified on an Officer Record Brief, indicate completion of a specific course of instruction (see Table Q-2-1).

(2) There are five ASI's that indicate an officer is, or in some cases, has been in a specific development program (see Table Q-2-2).

(3) There are 17 ASI's that require a specific course of instruction or equivilant training experience (see Table Q-2-3).

(4) There are five ASI's that can be awarded only after serving in a position for a specified length of time (see Table Q-2-4).

(5) There are six ASI's that require "formal" or "appropriate" training or education (see Table Q-2-5).

ASI	*INV*	*TITLE*	*QUALIFYING COURSE*
3A	32	M60A2 Tank	M60A2 (Ft Knox) (Note 1)
3B	25	M551 Armor Recon Veh	M551 (Ft Knox)
3C	855	M60A1-A3 and M48 Series Tank	M60&M48 (Ft Knox)
3K	377	Joint C3	Joint C3 (AFSC)
3M	423	M1 Abrams Tank	M1 Tank (Ft Knox)
3Q	(Note 2)	Strat Debriefer & Interrogator	Strat Debriefer and Interrogator (Ft Huachuca)
3R	1250	NBC Officer	80-hour NBC
3X	176	M2/M3 Fighting Veh	M2/M3 Fighting Veh (Ft Benning)
4D	(Note 2)	TACFIRE Remote Terminal Off	TACFIRE Tac Opns Ctr (Ft Sill or 7th CATC)
4F	(Note 2)	TACFIRE Direction Ops Off	TACFIRE Support (Ft Sill or 7th CATC)
4W	(Note 2)	Underwater Special Opns	Army Underwater Opns, SCUBA
4X	(Note 2)	Mil Free Fall Special Opns	Special Mil Freefall
4Y	(Note 2)	Both 4W & 4X	
5A	17	Advanced Marksman	Marksman Sniper Instructor (Ft Benning)
5G	2230	Special Forces	SF qualification (Ft Bragg)
5H	4502	Nuc Chem Target Analyst	Nuc Chem Target Analyst
5P	19606	Parachutist	Basic Parachute Qualification
5R	1041	Ranger	Ranger (Ft Benning)
5S	9428	Both 5P&5R	
5T	243	Equal Opportunity	Defense EO Management Institute (Note 3)
5V	36	Marine Diver	IAW AR 46-501 & AR 611-75
5Z	807	OE Staff Off	US Army OE Tng Center
6B	779	Bn/Bde C-E Staff Off	Comm-Elect Staff off
6C	21	Economist	Bach degree in specified major
6D	1	Metalurgist	Bach degree in specified major
6G	56	Mechanical Engineer	Bach degree in specified major
6L	17	Meteorolgist	Bach degree in specified major
6Q	11	Chemist	Bach degree in specified major

Notes: (1) When location specified in AR 611-101 it is indicated above.

(2) ASI not included in Officer Management File

(3) When institution is indicated the specific course at the institution was not stated in AR 611-101.

Table Q-2-1: ASI Requiring Specific Course for Award

CODE	*INV*	*PROGRAM*
3W	33	NSA Junior Officer Cryptologic Career
6A	138	Defense Sensor Interpretation and Application Training
6T	1668	Material Acquisition Management
6X	30	Army Research Associates
7Z	404	Logistician

Table Q-2-2: ASI Reflecting Participation in a Program

(6) There are four ASI's that require a specific course of instruction or service in a position for a specific length of time (see Table Q-2-6).

(7) There are two ASI's that do not specify training or experience requirements, they only indicate knowledge of an area. They are Air Operations Off (5U), (Inventory 2327); and Dog Handling Off (6M), (Inventory 17).

(8) There are two ASI's that require an "approved" course of instruction or service of one year in a position. These are Training Devel-

CODE	*INV*	*TITLE*	*COURSE*
3E	184	TAC Exploration Space Capabilities	Code word course
3H	1692	Joint Planner	AFSOC or JOPS User
3S	45	Unit Air Movements Off	Air Trans Planning, Strat Mobility Planning
3T	21	Def Traffic Manager	Def Advanced Traffic Management
3U	8	Installation Traffic Manager	Installation Traffic Management
3V	8	Joint Personal/Property Off	Joint Personal Property
6E	31	Production Engineer	College level training in specific area
6F	16	Safety Engineer	College level training sin specific area
6H	412	Aeronautical Engineer	Bachelors degree in specific major
6J	238	Electronic Engineer	Bachelors degree in specific major
6K	30	Electrical Engineer	Degree in specific major
6N	51	Statistician	College level training in specific area
6P	23	Physicist	Bachelors degree in graduate training
6R	4	Organic Chemist	Bachelors degree in specific major
6S	11	Chemical Engineer	Bachelors degree in specific major
6U	2	Agricultural Off	Degree in specific major
6W	1	Archivist	Bachelors degree in specific major

Table Q-2-3: ASI Reflecting a Specific Course or Equivalent Training/Experience

CODE	*INV*	*TITLE*	*TIME IN POSITION REQUIRED*
5E	172	Psychological	6 months
5F	91	Technic Intelligence	6 months
5K	4160	Instructor	6 months
5L	967	Advisor	6 months
6Z	613	Strategist	1 year

Table Q-2-4: ASI Awarded by OJT Only

CODE	*INV*	*TITLE*
3Z	1422	Mortar Unit Officer
5B	140	Audiovisual Officer
5M	2624	Electronic Warfare
5Q	166	Guided Missile Systems Officer
5W	28	Civil Affairs Officer
5X	658	Historian

Table Q-2-5: ASI Requiring "Formal" or "Appropriate" Training or Education

CODE	*INV*	*TITLE*	*COURSE*	*TIME IN POSITION*
5C	61	Traffic	Northwestern University Traffic Institute	6 months
5D	53	Radio Freq Manager	Interservice Frequency Mgmt	Not specified
5J	37	Technical Escort	Technical Escort (Redstone Arsenal)	3 months
5Y	8	Civil Defense Officer	Civil Defense Preparedness Directors	Not specified

Table Q-2-6: ASI Requiring Specific Course or OJT in a Position opment (7Q), (Inventory 350), and Combat Development (7Y), (Inventory 27) (Note: Pilot courses bring developed by CAC).

(9) There are two ASI's that indicate that an officer has been detailed to a position. These are Inspector General (5N), (Inventory 705) and Installation Management (6Y), (Inventory 217).

(10) There is one ASI, Cultural Affairs Officer (6V), (Inventory 1), that specifies knowledge or experience in an area.

d. Conclusions.

(1) There is no uniformity in the format for providing position coding or personnel identification guidance and in some cases training requirements cannot be identified.

(2) A substantial number of ASI's do not meet the guidelines for establishment of an ASI (i.e., at least 27 of the 72 ASI have inventories less than 40 and seven have an inventory of eight or less. See attached tables and discussion above for specific ASI).

(3) There is insufficient emphasis on skills to prevent the inconsistencies present in Table 4-1 and 4-2 and the Officer Management File.

(4) ASIs are an ineffective management tool under the current system due to the inconsistencies

(5) AR 611-101 does not accurately reflect qualification criteria for ASI award. (e.g., Joint Planner ASI 3H can be awarded based on completion of elective program at Command and General Staff Officer Course and this is not reflected in the AR.)

(6) OPMS Study Group's recommendations concerning skills are valid and should be supported.

e. Suggestions:

(1) ODCSPER direct a revision of AR 600-3 to place skill proponents in the Army Proponent System.

(2) ODCSPER direct a revision of AR 611-101 to include a uniform format for specifying classification guidance for skills. Guidance will include education and training requirements and will not include OJT or appropriate training/experience as criteria. MILPERCEN should have the authority to award a skill identifier to an officer for any skill if the officer has demonstrated through previous education, training, or experience that he has the same level of expertise of the skill had he completed the required training course.

(3) MILPERCEN should direct a review of the Officer Management File to eliminate the inconsistencies between it and AR 611-101.

3. CSA Remarks: Approved in concept.

Author: LTC Magnusson
Team Chief: COL Isaac

Appendix 3 to Annex Q

Functional Area Entry Level Courses

1. **PURPOSE.** To provide the Study Group's findings and suggestions concerning functional area entry level courses.

2. **DISCUSSION.**

a. Table Q-3-1 identifies the current entry level courses functional areas and the associated areas of concentration. The table was developed based on review of AR 611-101 and DA Pam 600-3 and on discussions with functional area proponents.

b. Functional areas lacking formal entry level education and training.

(1) Personnel Management (SC 41). AR 611-101, effective 1 Mar 85, specifies as qualification for SC41 that the officer has "completion of a personnel manager staff officer's course, or equivalent training or experience." DA Pam 600-3, 10 Jul 84, specifies as an objective "attendance at the six-week battalion S-1 course for captains and majors." The shortfall is the timing of the course. Discussions with Soldier Support Center indicate that of the 289 FY 83 attendees, only about 5 percent were SC 41's and last year only four majors attended: most were first lieutenants and junior captains. The course has been reduced to five weeks and is now designed as a follow-on module to OAC for officers going to battalion or brigade S-1 jobs.

(2) Operations, Plans, and Training (SC 54). The "official" entry requirement into SC 54 is branch qualification with S-3/G-3 assignments desirable. There is no entry-level course. CGSOC or completion of a non-resident SC54 qualification course for those attending other service or joint staff colleges, is required for consideration for promotion to lieutenant colonel. The SC 54 community has been so informed by letter from the proponent.

c. Systems Automation Officer (SC 53). The SC 53 specialty is in a state of flux since the decision has been made that SC 53 will be both a skill and a functional area. Prior to that decision the proponent was working on the concept of having branch areas of concentration for branch automators. Under this concept, functional area SC 53 would be for pure technicians and the number required in the inventory would be less than the current 2000 SC 53's . The new AR 611-101 was written using that concept and indicates that the entry-level course is an advanced degree in computer science.

d. Suggestions for proponent consideration.

(1) Personnel Management. Develop a new course using the Battalion S-1 Course as the starting point. Include in the scope of the course the functions of personnel management officers at division and higher levels (including MILPERCEN and HQDA). The course should be designed as a course to prepare an officer for a career in personnel management.

(2) Operations, Plans and Training.

(a) SC54 should only be used to code field grade positions.

(b) Officers projected to be awarded SC 54 should attend CGSOC and be required to take a package of electives designed for SC 54. The package would include a course on corps and EAC operations, and a course on training management at division level and higher.

(c) For officers who do not attend the resident CGSOC and who are designated SC 54, the entry level training will be a resident course at the School of Professional Development at the Command and General Staff College. The resident course should consist of the same subjects included in the SC54 elective package for the resident CGSOC. An officer would attend the resident SC54 qualifier course only after completion of the non-resident CGSOC.

FA Code	Title	Course	Location	Length
18	Special Ops	(JFK Special Warfare Center)*		
A	Special Ops	Special Forces Detach Officer Qualif Course	JFKSWC	20 wks + 4 days
B	Psychological Ops	Psychological Ops Officer Course	JFKSWC	10 wks
C	Civil Affairs Ops	Civil Affairs Course	JFKSWC	6 wks
41	Personnel Mgmt	(Soldier Support Center)		
A	Personnel Mgmt	(see note 1)		
45	Comptroller	(Comptroller of the Army)		
A	Comptroller	Military Comptrollership Course	Soldier Support Center	5 wks
B	Program/ Budget	Planning, Programming, and Budgeting Systems Course	Soldier Support Center	3 wks
46	Public Affairs	(Chief of Public Affairs)		
A	Public Affairs	Public Affairs Officer Course	Defense Info School	10 wks
B	Broadcasting	Grad Degree		
47	USMA Permanent Professor	(United States Military Academy)		
A	USMA Permanent Professor	Doctorate Degree		
48	Foreign Area Officer	(DCSOPS)* (See note 2)		
A	Foreign Area, General	Foreign Area Officer Course	JFKSWC	24 wks
B-J	(Area Specific)	a-Grad Degree b-Language c-Incountry Orientation		
49	Ops Research/ Sys Analysis	(Combined Arms Center)		
A	ORSA, General	ORSA Mil Applications Course I	Army Logistics Management Center	12 wks
50	Force Develop	(See note 3)		
A	Force Develop	Force Integration-Developing the Force Course	Command and General Staff College	4 wks

Table Q-3-1: Entry Level Training

FA Code	Title	Course	Location	Length
51	Research and Development	(Army Material Command)		
A	Research & Development	Material Acquis Mgmt Course	ALMC	9 wks
B	Test and Evaluation	Material Acquis Mgmt Course	ALMC (See note 4)	9 wks
52	Nuclear weapons	(CAC)		
A	Nuclear weapons Staff (see note 5)	Nuclear Weapons Orientation Adv Course	Inter-service Nuclear Weapons School	1 wk
B	Nuc Weapons Research	Grad Degree		
53	Systems Automation Officer	(Soldier Support Center)*		
A	Software Eng	(see note 6)		
B	Hardware Eng	(see note 6)		
C	Automation Mgmt	(see note 6)		
54	Ops. Plans, and Tng	(Combined Arms Center)		
A	Ops. Plans and Tng	(see note 7)		
97	Procurement	(Army Material Command)		
A	Procurement Mgmt	Mgmt of Defense Acuis Contracts Course	ALMC	4 wks (see note 8)
B	Procurement	Mgmt of Defense Acquis Contracts Course	ALMC	4 wks
C	Production	Management of Defense Acquis Contracts Course	ALMC	4 wks
99	Cbt Development	(see note 9)		
A	Cbt Development	(see note 10)		

Notes:

1-No formal course exists. Based primarily on experience. A related course that is supportive is Bn S-1 course at SSC for (01,02, and 03's). There is also a DPCA course for 0-5's.

2-Proponency currently resides with ODCSOPS but there is a study being conducted to determine if it should be moved to OACSI.

3-New functional area. CAC proposed as proponent.

4-OTEA is studying feasibility of providing an additional course in training and education.

5-Designation as a SC52A should be preceded by an assignment in a job that is nuclear related. CAC is developing a new entry level course at CGSC, 3 weeks long. Pilot course projected for Aug 85. SC52B will also attend.

6-With SC53 also becoming a skill, the proponent is studying training requirements for SC53 as a functional area. AR 611-101, effective 1 Mar 85, specifies that advanced degree or TWI required.

7-No entry level course. Branch qualification required with S-3/G-3 staff experience desired.

8-Basic course followed up with a two-week advanced course after initial experience.

9-New functional area. CAC proposed as proponent.

10-Entry level course being developed at CGSC. The 4-week pilot course is projected for Apr 85.

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* Proponent shown in parenthesis.

TABLE Q-3-1 Continued

(d) Officers slated for resident staff college courses at other institutions and are designated SC54 should attend the resident SC54 course after completion of the warfighting and support course.

(3) System Automation Officer. The current course should be retained and revised as needed to provide the necessary training to award an automation skill identifier. A new course should be developed to provide for an entry level course into SC54 for those officers enroute to Advanced Civil Schooling or those who by virtue of previous civilian education are projected into SC53.

3. **CSA Remarks**. Approved in concept.

Author: LTC Magnusson
Team Chief: COL Isaac

Appendix 4 to Annex Q

Professional Development Time Requirement

1. PURPOSE. To illustrate the total education and training time required versus time available for duty assignments in functional areas.

2. DISCUSSION.

a. General.

(1) Professional development requirements for some functional areas are extensive when viewed from the total picture. In addition to education and training requirements for the functional area, the officer must also be developed first in a branch and subsequently continue to be developed in the common core by virtue of being an officer. When these requirements are combined, and applied to the career tracks (single, dual, and sequential) recommended by the OPMS Study Group, some conclusions can be drawn. These are discussed below.

(2) The figures used herein are for illustration purposes only. They are not intended to show the ideal or typical career path. At one time DA Pam 600-3 had a figure for every branch that showed a "typical" career pattern. The "typical" became the desired pattern as the officer corps preceived that if one did not follow the "ideal" path, one's promotion potential was reduced. The Army had and still has requirements such as recruiters, advisors, ROTC instructors that did not show up in these "ideal" paths. An officer felt cheated if assigned to one of these positions because the assignment officers was not keeping the officer in the desired path. This added credence to "ticket punching." The Army subsequently eliminated the figures from DA Pam 600-3. This may have been due in part to the perception that was being perpetuated within the officer corps. PDOS has opted not to define the "typical", "ideal", or even desired career path. Instead, the group is recommending a framework for professional development around which an officer can build his career. This is especially needed in light of the OPMS Study Group's recommendation that there be multiple career opportunities such as single, sequential, and dual tracks and the establishment of positions coded as branch immaterial. With these multiple paths and branch immaterial positions, it would be very difficult to define a "typical" career path as each officer's career will be unique based on his desires and the needs of the Army.

b. Time required for Foreign Area Officer (FAO) development. Figure Q-4-1 shows what is involved in developing a FAO and the subsequent utilization. The top half of the figure illustrates a career path for a dual tracked officer; the bottom half is for an officer sequentially tracked. In either case the first six years are the same since company-level branch qualification preceeds functional area development. The next four years are also the same, each receiving the FAO development education and training. It is clear that to get the most utilization for the training, an officer should be sequentially tracked. However, there are some FAO postions that also require a good branch grounding so it is recognized that some officers will still dual track with FAO as one of the specialties. The FAO proponent is currently studying ways to reduce the time required to develop FAOs. One means being explored is reducing the military FAO course. The figure does not show an assignment pattern after twenty years. If it did, it would show that the officer would serve additional tours as a FAO thus increasing the utilization of the training received in the first twenty years.

c. Single or dual-tracked combat arms officer. Figure Q-4-2 represents the other extreme of a single tracked combat arms officer or a dual tracked combat arms officer with Operations, Plans, and Training (SC54) as the other specialty. When compared to the FAO, there are three and one-half years less formal training, or from the other view, the combat arms officer is availble for duty three and one-half years more.

d. Generic Officer. Figure Q-4-3 represents a more representative time line for the officer

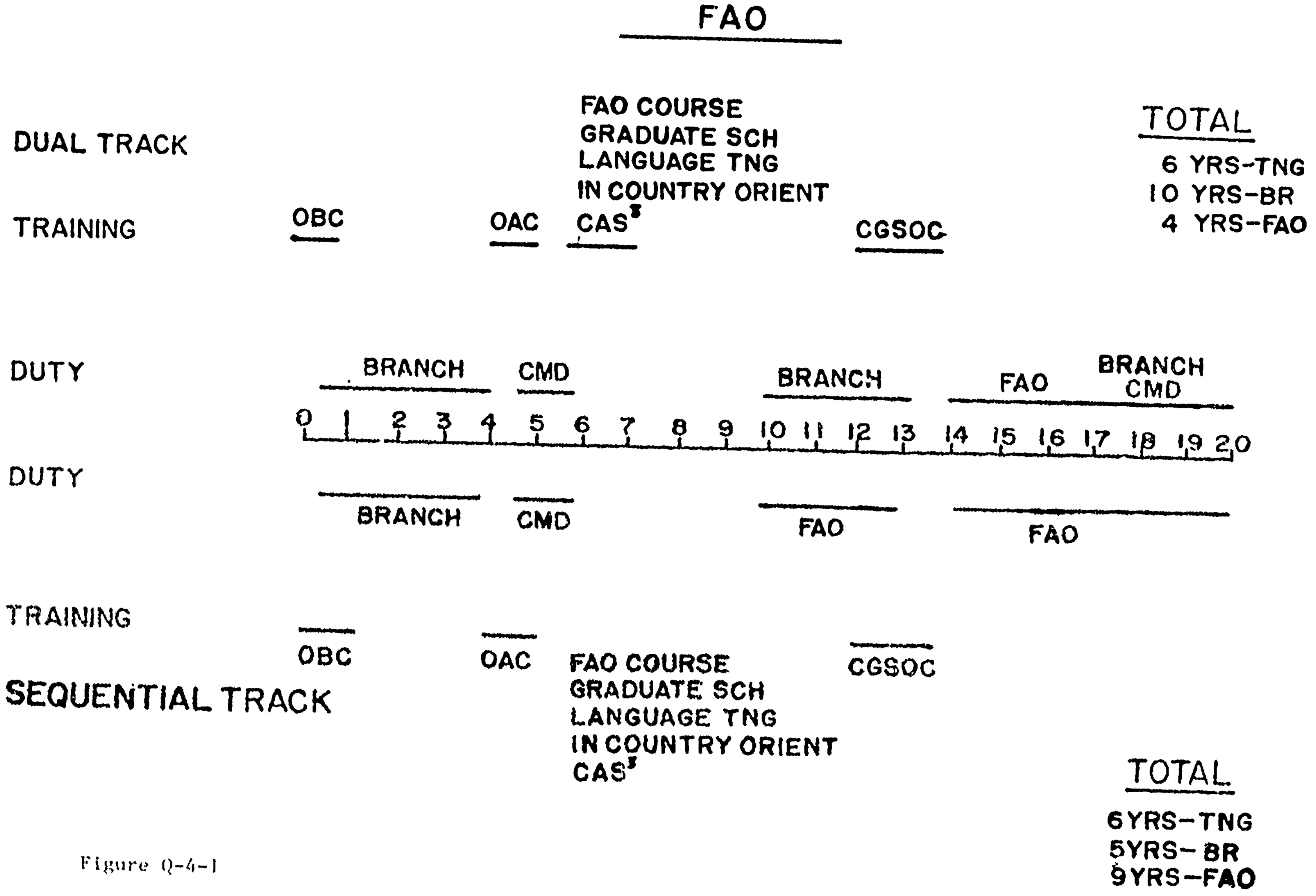

FAO
DUAL TRACK
TRAINING
OBC
OAC
FAO COURSE
GRADUATE SCH
LANGUAGE TNG
IN COUNTRY ORIENT
CAS[3]
CGSOC
TOTAL
6 YRS-TNG
10 YRS-BR
4 YRS-FAO
DUTY
BRANCH
CMD
BRANCH
FAO
BRANCH CMD
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
DUTY
BRANCH
CMD
FAO
FAO
TRAINING
OBC
OAC
FAO COURSE
GRADUATE SCH
LANGUAGE TNG
IN COUNTRY ORIENT
CAS[3]
CGSOC
SEQUENTIAL TRACK
TOTAL
6YRS-TNG
5YRS-BR
9YRS-FAO

Figure Q-4-1

COMBAT ARMS

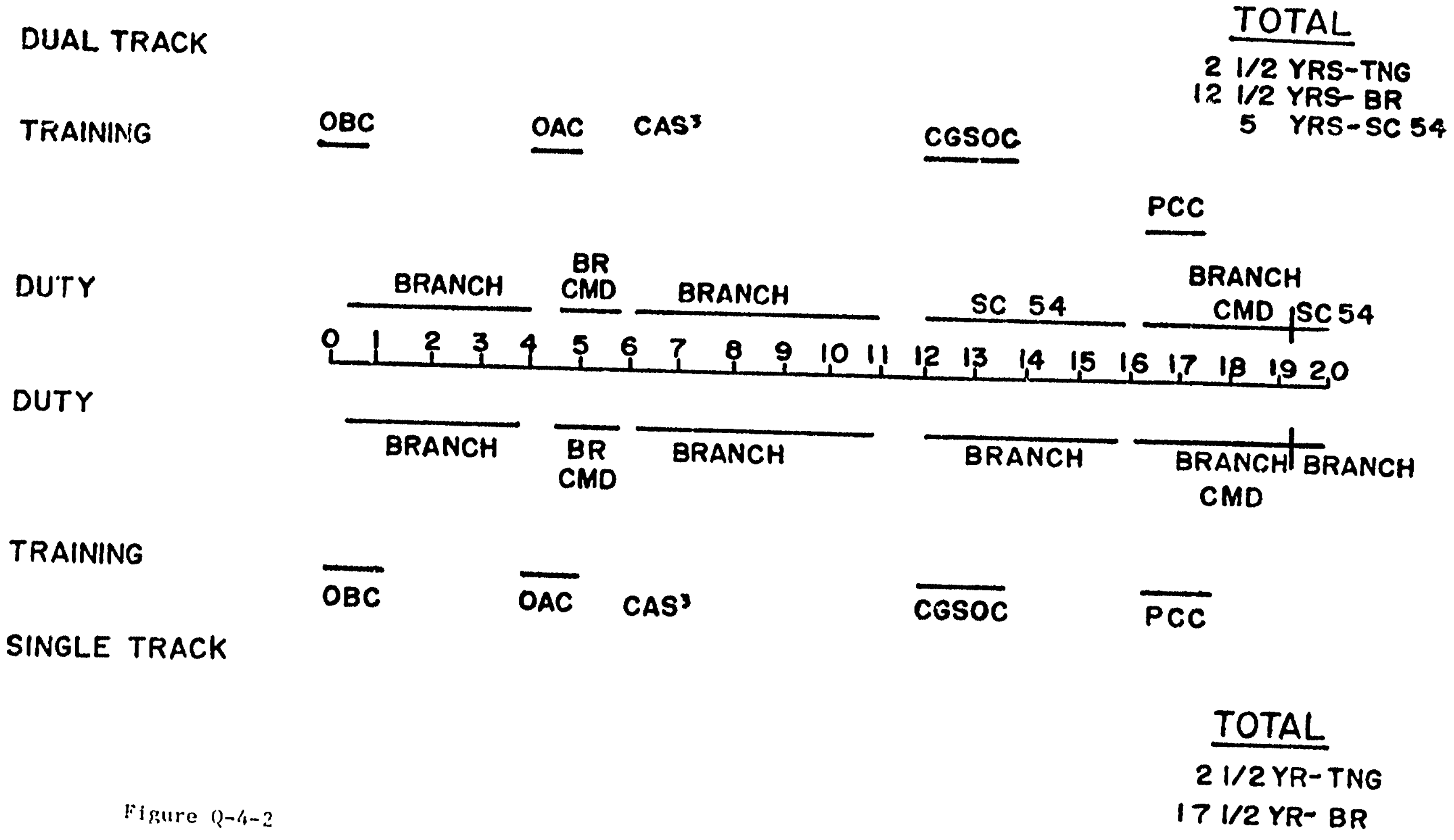

DUAL TRACK
TRAINING
OBC
OAC
CAS³
CGSOC
PCC
DUTY
BRANCH
BR CMD
BRANCH
SC 54
BRANCH CMD
SC 54
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
DUTY
BRANCH
BR CMD
BRANCH
BRANCH
BRANCH CMD
BRANCH
TRAINING
OBC
OAC
CAS³
CGSOC
PCC
SINGLE TRACK
TOTAL
2 1/2 YRS-TNG
12 1/2 YRS- BR
5 YRS-SC 54
TOTAL
2 1/2 YR-TNG
17 1/2 YR- BR

Figure Q-4-2

GENERIC OFFICER

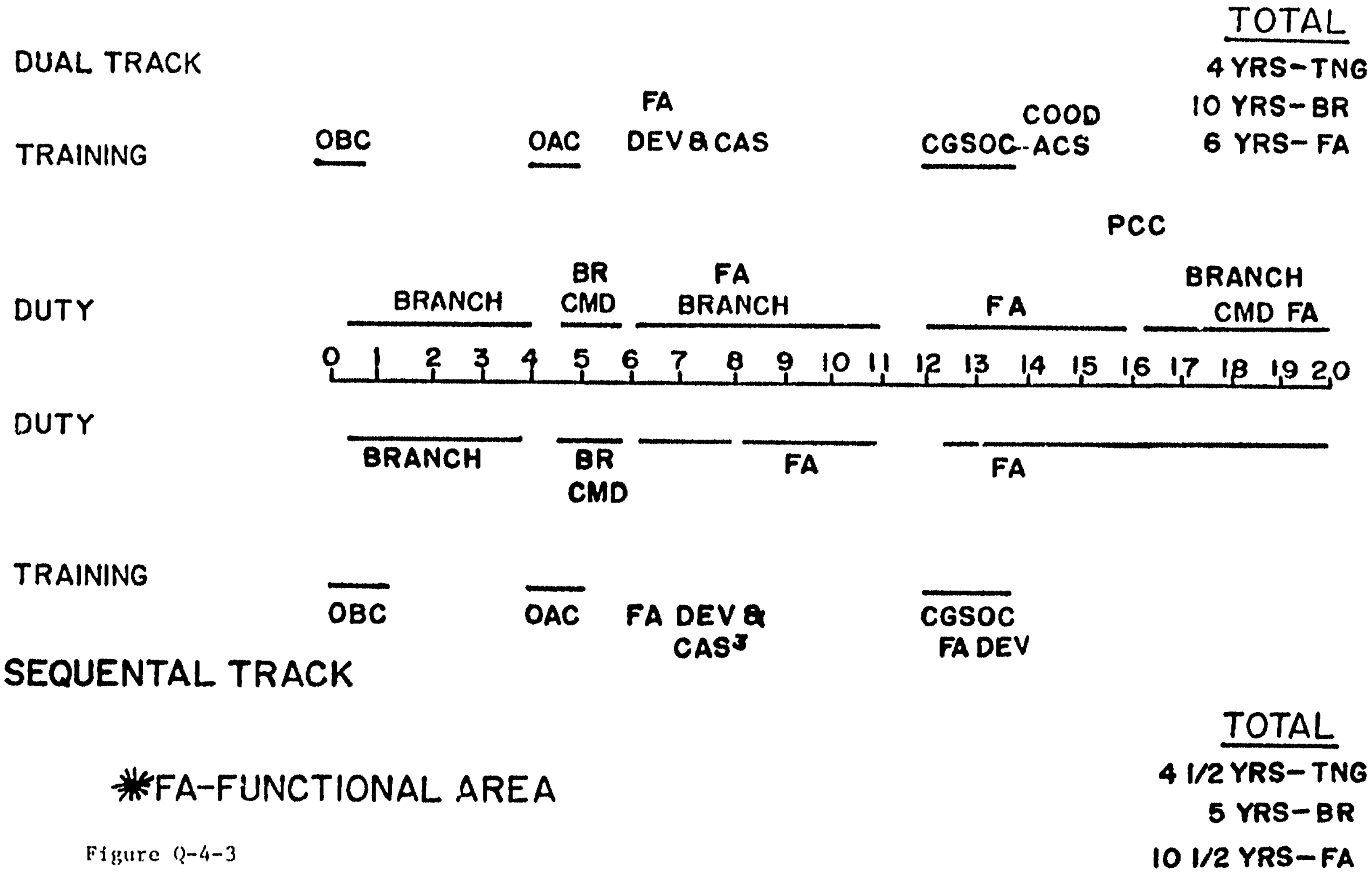

DUAL TRACK
TRAINING
OBC
OAC
FA
DEV & CAS
CGSOC-ACS
COOD
TOTAL
4 YRS-TNG
10 YRS-BR
6 YRS-FA
PCC
DUTY
BRANCH
BR
CMD
FA
BRANCH
FA
BRANCH
CMD FA
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
DUTY
BRANCH
BR
CMD
FA
FA
TRAINING
OBC
OAC
FA DEV &
CAS*
CGSOC
FA DEV
SEQUENTAL TRACK
TOTAL
4 1/2 YRS-TNG
5 YRS-BR
10 1/2 YRS-FA
*FA-FUNCTIONAL AREA

Figure Q-4-3

corps. The times are representative and will vary depending on the specific specialties involved.

e. Conclusions.

(1) Education and training requirements are specialty dependent, therefore, time spent in formal education and training varies by specialty. In the case of functional areas, training time tends to be greater than for branches. When the training time is extensive, the OPMS should provide more sequentially-tracked officers to reduce the overall effect on the utilization rate. Incentives must be established to increase the number of officers trained in these functional areas that remain on active duty after twenty years.

(2) The Army must develop improved education and training methods to reduce the training time required. (see Annex P, Education and Training).

(3) In the generic twenty year career, an officer spends approximately 20 percent or one out of five years in formal education and training. This is not considered excessive when one consideres that an officer cannot be "hired off the street". The Army must develop its own officers and then in some cases develop the functional area officer from within the officer corps. Again, functional area officers cannot be "hired off the street".

3. CSA Remarks. Approved in concept.

Author: LTC Magnusson
Team Chief: COL Isaac

Appendix 5 to Annex Q

Field Grade Functional Area Education and Training

1. PURPOSE. To provide a discussion of alternative field grade functional area education and training for consideration of functional area proponents.

2. DISCUSSION.

a. General. The functional area proponents will be required to define the alternatives available for officers sequentially tracked into the functional area and for dual-tracked officers whose functional area holds primacy.

b. Alternatives. In addition to completing the common core through a resident or non-resident course, the following alternatives should be considered as possible additional requirements for MEL 4 designation.

(1) Attendance at another military course. The Program Management Course at Defense Systems Management College is a prime candidate for those officers holding Research and Development as their specialty. That course could also apply to other officers in the Material Acquisition Management Program Other potential sources are the degree programs conducted at the Navy Postgraduate School or the Air Force Institute of Technology. Whatever course is selected, it should be of a length and scope that would be educationally equivalent to CGSOC.

(2) Completion of Advanced Civil Schooling (ACS). The purpose of ACS is to provide officers technical, functional and broad-based knowledge and to expand one's cognitive skills and frame of reference through a challenging educational experience within the civilian sector. When the ACS is completion of an advanced degree in a discipline that directly supports a functional area, an officer could qualify for a MEL 4 when the common core is completed. Each proponent will have to identify the disciplines for which this would apply. Training with Industry (TWI) could also be considered if the individual program supports the officer's functional area specialty. The decision on approval of the specific TWI as a portion of MEL 4 qualification will consider the proponent's recommendation.

(3) Intern Program. There is an intern program where the services assign captains to the Joint Staff as interns for one year to give them experience and insight at the national level. It is not suggested that officers in this program qualify for MEL 4. The illustration is used to suggest that some proponents may find it desirable to establish similiar programs for field grade functional area officers in other departments within the government and allow participation as qualifying criteria in addition to common core.

c. Timing considerations for MEL 4 qualification alternatives. The educational and training experience used in conjunction with the commmon core to qualify for MEL 4 should not necessarily have to occur immediately preceeding or following the common core. If an officer completed an advanced degree in a discipline approved for the functional area prior to completion of the common core, the officer could be awarded MEL 4 upon completion of the common core. If the officer completes the common core prior to the other qualifying course or program, the MEL 4 could be awarded upon completion of the qualifying course or program.

3. CSA Remarks. Approved in concept.

Author: LTC Magnusson
Team Chief: COL Isaac

Appendix 6 to Annex Q

Glossary

ACS: Advanced Civil Schooling.

ADP: Automatic Data Processing.

AG: Adjutant General Corps.

ASI: Additional Skill Identifier.

COMP: Comptroller.

CM: Chemical Corps.

EAC: Echelons Above Corps.

FAO: Foreign Area Officer.

FI: Finance Corps.

FOR DEV: Force Development.

INV: Inventory.

MI: Military Intelligence Branch.

MP: Military Police Corps.

NUC WPN: Nuclear Weapons.

OD: Ordnance Corps.

OPMD MANAGED OFFICERS: Officers who are managed by the Officer Personnel Management Directorate. US Army Military Personnel Center.

OPS, PLANS, TNG: Operations. Plans. and Training.

ORSA: Operations Research and Systems Analysis.

OTEA: Operational Test and Evaluation Agency.

PA: Public Affairs.

PER MGMT: Personnel Management.

P & P: Procurement and Production.

QM: Quartermaster Corps.

SC: Signal Corps.

SP OPNS: Special Operations.

TC: Transportation Corps.

Author: LTC Magnusson
Team Chief: COL Isaac

Appendix 7 to Annex Q

Bibliography

Department of the Army. *Army Regulation 600-3*: The Army Specialty Proponent System. Washington, November 15, 1983.

Department of the Army. *Army Regulation 611-101*: Commissioned Officer Specialty Classification System. Washington, October 30, 1984.

Department of the Army. *Army Pamphlet 600-3*: Commissioned Officer Professional Development and Utilization. Washington, July 10, 1984.

Review of Education and Training of Officers Study, 1977-1978.

Officer Personnel Management System Study, 1983-1984.

Appendix 8 to ANNEX Q
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
185 Develop or revise as needed military courses to support all areas of concentration and functional areas. o OPMD managed officers will be eligible for assignment to positions coded with area of concentration, functional area or, if applicable, skill codes after completion of the appropriate military courses or equivalent experience.	a. Identify proponents for skills.	ODCSPER	3Q 85	
	b. Initiate review of AR 611-101 and DA Pam 600-3 and update to reflect new OPMS classification system.	ODCSPER (P) PROPONENTS	4Q 85	
	c. Identify new courses and courses needing revision based on new OPMS classification system.	TRADOC (P) PROPONENTS	4Q 85	
	d. Review TAADS documents and recode positions IAW new OPMS classification system.	ODCSOPS (P) MACOM	4Q 85	
	e. Establish POI for new and revised courses.	TRADOC (P) PROPONENTS	3Q 86	
	f. Determine officer inventory requirements based on revised TAADS documents.	ODCSPER (P) MILPERCEN	1Q 87	
	g. Conduct pilot courses for new and revised TAADS documents.	TRADOC	2Q 87	
	h. Develop plan to adjust inventory to requirement.	ODCSPER (P) ODCSOPS TRADOC MILPERCEN	2Q 87	
	i. Implement plan.	MILPERCEN	4Q 88	

NOTES:

Appendix 8 to ANNEX Q
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
186 Officers who are single or sequentially tracked into a branch or functional area that has a comparable civilian profession, will be afforded the opportunity of, and funded for, biannual attendance at a civilian society or association national or international seminars/meetings supporting the profession.	a. Identify appropriate civilian professional societies and associations.	ODCSPER (P) PROPONENTS	4Q 86	
	b. Publish list of acceptable societies and associations.	ODCSPER	1Q 87	
	c. Officers join appropriate societies and association at own expense.	OFFICER CORPS	ONGOING	
	d. Annotate officer records with society/association membership.	MILPERCEN	ONGOING	
	e. Schedule and fund for officer attendence to seminars/meetings.	MILPERCEN	ONGOING	

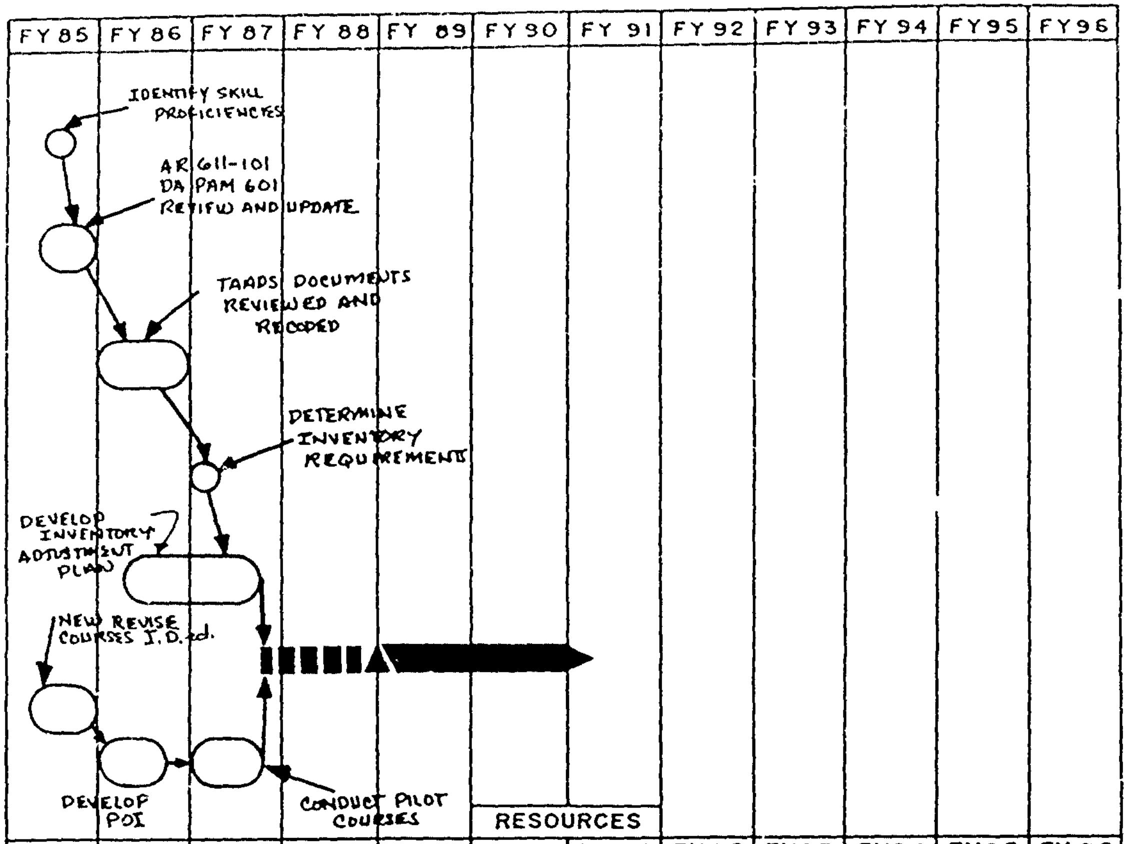
NOTES:

Appendix 9 to ANNEX Q

PHASING PLAN

FUNCTIONAL EDUCATION AND TRAINING

185
DEVELOP OR REVISE MILITARY COURSES TO SUPPORT AREAS OF CONCENTRATION, FUNCTIONAL AREAS, AND SKILLS


FY 85
FY 86
FY 87
FY 88
FY 89
FY 90
FY 91
FY 92
FY 93
FY 94
FY 95
FY 96
IDENTIFY SKILL PROFICIENCIES
AR 611-101
DA PAM 601
REVIEW AND UPDATE
TAADS DOCUMENTS REVIEWED AND RECODED
DETERMINE INVENTORY REQUIREMENTS
DEVELOP INVENTORY ADJUSTMENT PLAN
NEW REVISE COURSES I.D.ed.
DEVELOP POI
CONDUCT PILOT COURSES

RESOURCES

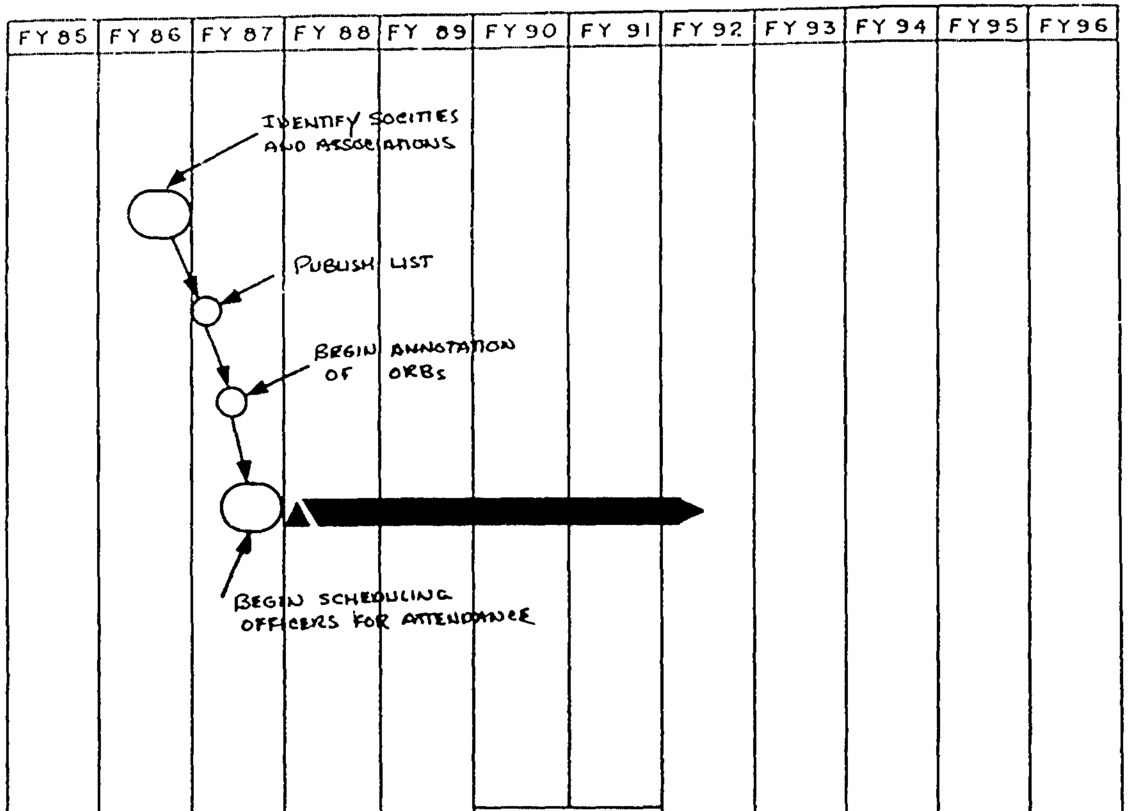
	FY 85	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY93	FY94	FY95	FY 96
STUDENTS NR/MY			40	60	60	60	60	60	60	60	60	60
STAFF AND FACULTY-MIL/CIV		0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
TDA CHANGE-$ MILLIONS			1.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0

Appendix 9 to ANNEX Q

PHASING PLAN

186

OFFICERS WHO ARE SINGLE OR SUBSEQUENTLY TRACKED INTO A BRANCH OR FUNCTIONAL AREA THAT HAS A COMPARABALE CIVILIAN PROFESSION. WILL BE AFFORDED THE OPPORTUNITY OF, AND FUNDED FOR, BIANNUAL ATTENDANCE AT A CIVILIAN SOCIETY OR ASSOCIATION NATIONAL OR INTERNATIONAL SEMINARS/MEETINGS SUPPORTING THE PROFESSION.


FY 85
FY 86
FY 87
FY 88
FY 89
FY 90
FY 91
FY 92
FY 93
FY 94
FY 95
FY 96
IDENTIFY SOCITIES AND ASSOCIATIONS
PUBLISH LIST
BEGIN ANNOTATION OF ORBS
BEGIN SCHEDULING OFFICERS FOR ATTENDANCE

RESOURCES

	FY 85	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY93	FY94	FY95	FY 96
STUDENTS NR/MY				34	34	34	34	34	34	34	34	34
STAFF AND FACULTY-MIL/CIV												
TDA CHANGE-$ MILLIONS				1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8

Author: LTC Sims
Team Chief: COL Rowe

Annex R

Preparation for Command

1. PURPOSE To discuss the current status of the pre-command training program and provide appropriate recommendations.

2. DISCUSSION.

a. Introduction. Across the entire officer corps there has been a significant increase in what is expected of the individual officer in terms of his professional competencies and scope of responsibilities. One author put it thusly:

> "The complex nature of modern weapons and supporting systems requires a vast amount of technical knowledge of those who lead modern armies, and as the pace of innovation accelerates, so does the requirement to understand not only the employment of new weapons but how to marshall the increased logistics tail required to support them. For example, the infantry subaltern of Napoleon's day needed only to understand the intricacies of drill in battle formation, volley musket fire, and the bayonet charge. His primary function was to be a courageous example to his men and maintain their resolve in the face of bayonet, musket fire, and cannon ball. Furthermore, he did this under the watchful eyes of not only his captain but, often, also his general. Today's infantry lieutenant must understand the intricacies of employment of not only the rifle, grenade launcher, machinegun, light antitank weapon, and medium antitank guided missile but also communications gear and four complex fighting vehicles capable of engaging the enemy to 3,000 meters. In addition, he must understand and work as a team within a tank company and be able to call for and adjust supporting mortars, artillery, Air Force close-support aircraft, and attack helicopters. If this were not enough, he must learn to master and train his soldiers to use night vision devices, chemical protective gear, man-packed scatterable mines, and other aids to fighting too numerous to mention here. And finally, because combat actions are longer and less compact, he must lead over longer periods of time and understand how to keep all of his gear operational. There are only two similarities between his world and the world of his forebears: he must still show and engender courage in the face of battle; and he must still supervise the onerous task of going to ground much as his predecessors did in Caesar's legions—with pick and shovel." (Appendix 1, NOTE 1)

(1) Preparation for command is not an easy task. It is inherently a long-term process with many obstacles to acquiring essential knowledge and operational skills along the way. One of the purposes of the Officer Professional Development System is to provide officers with this knowledge, the required operational skills and experience to assume positions of leadership and command. A portion of this can occur in a formal educational setting but must be reinforced and "cemented" through appropriate assignments. For combat leaders this means "duty with troops."

(2) Company command occurs at an opportune time for most officers. They are just completing an intensive period of grounding in their branch through troop duty assignments and appropriate schooling (basic and advanced courses). The challenge that officers selected for higher command (battalion, brigade, division, corps, and their equivalent in TDA organizations) face is a different one. Their job is one of dealing with the complex and the unexpected—and "winning." The consequences of failure, on the battlefield or elsewhere, are far-reaching. However these command opportunities frequently occur when the officer has served in several non-branch oriented assignments. The skills required for command need "sharpening" because of a lack of opportunity to practice and apply them.

(3) Currently, attendance at Command and General Staff Officers Course and Senior Service Schooling provides, for selected officers, a baseline educational experience. Even for graduates of these schools opportunities to practice the warfighting skills acquired and then demonstrate their mastery are limited. This is caused by the existence of other competing "requirements" such as: nominative or branch-immaterial assignments, functional and civil schooling, changes in doctrine, weapons, organization etc. Each of these "requirements" reduces the time that can be spent in practice and repetition—in preparing for war.

b. Establishing a pre-command program. In January 1977 these concerns and others prompted the CG, TRADOC to propose to the CSA that a three week pre-command course be established for combat arms battalion and brigade commanders. This recommendation was approved in April 1977 and a TDY enroute pre-command course for Infantry, Armor, and Engineer colonels and lieutenant colonels selected to command TOE units was initiated.

(1) Underlying this recommendation and its subsequent implementation were two factors—the excessive time spent away from troops by many command selectees prior to their selection and major changes to weapon systems and tactical doctrine. The RETO study group addressed the first of these thusly: "The battalion command selectee has served for some 14 to 17 years and has attended an advanced course and other resident military schooling. The brigade command selectee has served for some 18 to 24 years and has greater life and military experiences. A detailed review of recent command selectees, however, reveals that they have been away from troops for a considerable period of time. The lieutenant colonel has been away five to six years on the average and the colonel four to five years on the average. Two things must therefore be recognized One, is that the majority of near term prospective commanders last served with troops in Vietnam or in the sustaining base in the late 1960's or early 1970's—in any event, a different Army from that to which they will now go to command." (Appendix 1 Note 2)

(2) There was at least one historical precedent establishing such a program of instruction. At Fort Leavenworth from October 1945 until July 1946, a special, advanced course called the Command Class was conducted. The course lasted sixteen weeks, with two classes eventually completing it The special nature of this class is evidenced by the presence of student officers who had served as regimental commanders and corps and division G-3's during the recent war.

(3) The Command Class was designed as a high-level course for lieutenant colonels who were already familiar with general staff work and who had been specially selected for advanced command and staff training. The curriculum was oriented at a much higher level than courses conducted during the prewar or war period. The course consisted of a refresher phase called a "general review," followed by an analysis of selected operations during World War II, a study of the organization and functioning of the War Department, and instruction in theater planning. The traditional lectures and conferences were not emphasized, and the great majority of the instruction consisted of demonstrations, map/terrain exercises and maneuvers, committee work and tutorials. Considering the scope of the curriculum, the expertise and experience of the students, and the nature of the instruction, the role of the Command Class was closer to that of the Army War College, which had been disbanded before the war, than it was to the traditional role of Command and General Staff College. (Appendix 1 Note 3)

c. The Pre-Command Course Today. The Pre-Command Course as of the publication of this report, consists of four separate phases which are attended in sequential order before one assumes command. These phases generally follow the RFTO recommendations. The four phases are:

(1) Phase I. A self-study packet prepared and mailed by the Army Training Support Center. The packet is mailed to each command selectee upon publication of the selection list. Each packet is to be tailored by branch/command using material prepared by branch schools, Soldier Support Center (SSC), Logistics Center (LOGCEN), and the Command and General Staff College (CGSC). The packet's purposes are:

(a) To allow command selectees to bring themselves up-to-date on important command issues using self-study material, regulations, and directives.

(b) To provide command selectees the opportunity to assess their personal and professional strengths and weaknesses before beginning resident instruction. Each packet includes a self-graded diagnostic examination.

(2) Phase II A two-week branch refresher taught at the appropriate branch school except as noted for certain commanders listed below.

(a) Combat Arms and Combat Support. The first week is a training week, covering the Army training system and training management, including the relationship of Soldier's Manuals, Training Guides, the Integrated Training/Evaluation Program and the Army Training Evaluation Program. Command selectees are also updated on branch-specific tactics, equipment and NBC. Subjects deemed appropriate by the school commandant are taught the remainder of the first week. The second week consists of such subject areas as command management of preventive maintenance, inspections, standards, analysis of maintenance records, property acquisition, accountability and adjustment procedures, and logistics readiness. Practical exercises and hands-on training in maintenance fill the remaining time. Instruction for combat arms is directed at brigade level and below. Combat support schools adjust content to support the intent of this concept while providing for branch-specific requirements.

(b) Combat Service Support. Selectees who will command division support commands, forward support battalions, support groups, area support groups, separate support battalions, and corps support commands attend a two-week course at the Quartermaster School, Fort Lee, VA. The content of the functional material presented during this phase is determined based on the specific-command positions of the selectees attending. Training management is appropriately emphasized for each type command.

(c) Army Training Center battalion/brigade commanders attend two weeks of training at Fort Jackson, SC, in which specific required skills are taught. These include training, stress and resource management; the IET environment; cadre training; communications skills and counseling; and situational leadership.

(d) Selectees who will command TDA Logistics organizations (depots, arsenals, terminals, ports, etc.) attend Phase II at the Army Logistics Management Center, Fort Lee, VA.

(e) Army Medical Department command selectees attend Phase II at the Academy of Health Sciences, Fort Sam Houston, TX.

(f) Adjutant General's Corps command selectees attend Phase II at the US Army Soldier Support Center, Fort Benjamin Harrison, IN.

(g) Chemical Corps command selectees attend training at USAMPS followed by branch-specific training at the Chemical School.

(3) Phases III and IV. These phases are taught at Fort Leavenworth during a two-week period.

(a) PHASE III: "How to Fight" stresses combined arms doctrine. It builds on the instruction provided during Phase II and includes instruction on AirLand Battle, command guidance, offensive and defensive operations, and logistics.

(b) PHASE IV: "How to Command" is devoted to legal aspects of command, presentations by senior Army leaders, military personnel functions and systems, financial management and human resources developement to include organizational development. A program of electives provides the opportunity for additional instruction in other related subjects. As when first initiated, there are some follow-on phases which are attended by designated selectees—language training for USAREUR-bound commanders; the Senior Officer Legal Orientation (SOLO) course for selectees who will have special court-martial convening authority; and a National Training Center orientation for selectees who are not going to FORSCOM units.

d. Purpose of the Pre-Command Course Today. The purpose of the pre-command program continues to be to assist command selectees in their preparation for battalion and brigade-level command by ensuring a common understanding of current tactical doctrine and by providing both new and refresher training in selected functions and duties.

(1) Accomplishing these tasks has become much more difficult as the Pre-Command Program has grown in size and complexity. In FY 1985 for example, 619 officers were selected for lieutenant colonel-level command, in 32 separate command categories and 195 officers were selected for colonel-level command in 36 command categories. Because of increasing specialization within the Army, the needs of designees even within the same command category are frequently very dissimilar. As the program has grown it has continued to be scrutinized and studied. As a result, several major issues warrant discussion.

(2) Emphasis continues to be placed on such concerns as the need for "hands-on training," elimination of "soft" subjects, and the achievement of tactical proficiency. A substantial portion of the POI in Phase IV ("How to Command") at Fort Leavenworth has been criticized as being "soft" and as less critical to preparation for command than more tactically-oriented subjects. A similar concern is also reflected in the PDOS General Officer Survey. Asked to identify

the weakest area of professional preparation for each grade level—the response most typically given was that colonels and lieutenant colonels lacked essential operational skills (e.g., integration of combined arms elements and the management of battlefield resources.)

(3) The concern over the lack of these skills is valid but is not totally "on target." Command designees do have a responsibility to develop the prerequisite operational skills before they are selected. Ideally, long before this occurs these officers should have been given ample opportunity to learn and practice these skills and demonstrate a mastery of them in an operational setting.

(4) What must be achieved by all command designees is "systems proficiency." If an officer has achieved this he will know how to get the maximum out of the men, machines and resources for which he is responsible. On the battlefield this translates into the synergistic employment of battle systems and the men who will fight them. The ability to accomplish this represents technical competency for battalion and brigade commanders. This is the message that the professional development system must clearly send to the officer corps.

e. Criticality of Measurement Systems and the Command Climate. Measurement systems are those management tools and techniques whose purpose is to evaluate the efficiency and effectiveness of an organization—and its overall progress towards one or more organizational goals. These systems should focus the attention of commanders and their staffs on the highest priority tasks. Measurement systems which assign a high priority to one set of concerns but which reward attention to others, cause many problems in creating a proper command climate. Perceptions that this occurs are reflected in statements made by commanders in the field that:

> "If I get fired, it won't be because of tactics and training but rather because my unit was screwing up in administrative, supply, personnel, and safety matters...."

(1) During the course of this study, a visit was made to III Corps. In that real life leadership laboratory there is a recognition, at all levels, that it is critical to the command climate to not only know what is being "measured" by the various "indicators," but also why.

(2) The III Corps Commander's Handbook explains the necessity of this approach:

> "Every system has a finite amount of managerial energy. It can be expended in two ways: protective reaction or innovative excursion. If a commander is expending lots of energy looking over his shoulder preparing defenses against inspections from above, and building a statistical fortress, then he will have minimal energy left to coach and innovate. Our challenge, then, is to provide necessary guidance and quality assurance sampling without sucking upwards most of the energy that should be expended in the downward direction. (If a commander is tough and confident enough, he will not overreact upward.) But it is our responsibility to manage so intelligently and deftly that the typical commander feels that he is preparing his unit for its wartime role and not just protecting himself against some future inspection. His confidence in his own programs and in his ability to influence policy matters are the ultimate measures of a "Power Down" exercise" (Appendix 1, Note 4).

(3) When a proper command climate exists, "systems proficiency" becomes an operational adjunct to the "power down" leadership model. It is a restatement of the idea that:

> "The most productive expenditure of a commander's time is that devoted to explaining the mission, defining subordinate responsibilities and clarifying standards" (Appendix 1 Note 5).

(4) Commanders up and down the chain of command determine what will be "measured." If this is not done thoughtfully and systematically, it becomes ever more difficult for subordinates to confidently carry out their responsibilities and missions. Because "proper command climate" is such an intangible concept we tend to describe it by its attributes. We say that when it is present, subordinate commanders are proactive and understand without great elaboration their superiors plans or intentions (Appendix 2, Note 6). The necessity and "how to" of this process should be emphasized as part of the Pre-Command Program.

f. Recent Changes. Efforts to improve the Pre-Command Course continue. During the period December 1983 through February 1984, a comprehensive analysis was undertaken by Fort Leavenworth to determine the most critical subjects an officer needs to prepare for command. After this course list was compiled the items on the list were sorted into three categories:

- Those which every commander should be familiar with (taught at Ft. Leavenworth).

- Those with which every commander should be familiar but within the context of his branch or unit (taught at branch/specialty school).

- Those subjects which are branch/specialty/unit peculiar (taught at branch/specialty school).

(1) Implementation of this new program of instruction began in March 1984. Each of the 18 Army branch and specialty schools participated in developing the POI and concurred in its context. Additionally the CGSC faculty made visits to commanders in the field to make sure that they were "on target" with the planned instruction. As of early August 1984 implementation at the branch schools was in various stages as each of those institutions made adjustments.

(2) Most recently, as the result of a CG, TRADOC decision, Phases III and IV of the current course will be conducted prior to the current Phase II, thereby reordering the sequence:

(a) Self-study packet before resident instruction (Remains as Phase I).

(b) "How to fight"—conducted at CAC (Previously Phase III).

(c) "How to command"—conducted at CAC (Previously Phase IV).

(d) Branch/proponent training—at appropriate location (Previously Phase II).

The CAC phases will continue to emphasize those topics with which every commander should be familar and will remain two weeks in duration. Branch/proponent training will concentrate on "Hands-on" and technical subjects and will not exceed three weeks. The new sequence is scheduled to be implemented in July 1985.

(3) This program of instruction is a strong effort towards the development of a truly integrated Pre-Command Course. It is structured to meet those needs of commanders that the Army previously identified, e.g.:

(a) Assist the individual officer in his preparation for command.

(b) Provide training in selected functions and duties.

(c) Inculcate a common understanding of current tactical doctrine.

(4) Another new initiative is Pre-Command Course for division and assistant division commanders. This program of instruction, developed at the direction of the CSA, focuses on warfighting issues, the operational level of war and topics such as: Airland Battle, the "deep attack," Army of Excellence, etc. Class size is limited to five or six general officers enroute to an assignment as either a division commander or ADC. Much of the instruction and seminars are led by senior general officers—such as the CAC commander. Two pilot classes conducted in November and December 1984 were well received by participants. The first regular class is scheduled for late February 1985. It is expected that this course will be conducted several times a year with participants expanded to include corps artillery commanders.

g Phase I Package. As previously discussed Phase I of the Pre-Command Course is a self-study packet mailed to the command designee by the Army Training Support Center. The contents of the Phase I package orient on the needs of TOE combined arms unit commanders. For example the diagnostic test quizzes the designee on his knowledge of such topics as TAMMS and BTMS. Discussions with Pre-Command Course personnel at Fort Leavenworth indicated that branch schools declined an opportunity to provide input to the Phase I package.

h. Need for Pre-Command Course Directive. Even though the pre-command course is "alive and well" there is no single directive identifying the responsibilities of key participants. As a minimum the roles and responsibilities for DA DCSOPS, MILPERCEN, the various MACOMS and the Combined Arms Center who are key participants in the Pre-Command Program should be identified.

(1) Presently the Army Logistics Management Center provides pre-command instruction for officers who will command TDA logistics organizations such as depots, arsenals and terminals. Coordination with the Combined Arms Center on POI requirements has been excellent and needs to be formalized. Additionally a policy addressing exemptions and deferments from the PCC should be incorporated into the regulation.

(2) Likewise there is no central oversight of those funds expended for the Pre-Command Course. The RETO study estimated that based on an annual student load of 594 officers the per capita costs would range between $1000–$2100 with a total program cost of approximately $945,000. Today per capita costs range between $1200–$7200 with a total program cost of about $2.6 Million.

i. Reserve Components and the PCC. Ideally, Reserve Component (RC) officers selected for command would receive the same pre-command training as Active Component officers. Presently, participation by RC officers in the Pre-Command Course Program is limited. In terms of number of command billets, NG and USAR requirements are likely to equal or exceed that of the Active Army during a given year. Setting aside other constraints, it may be concluded that increased RC attendance at the PCC would require construction of new facilities and additional instructors at CAC and the branch proponent schools.

(1) The major constraint, however, is more basic. Civilian employment makes it extremely difficult for RC officers to attend two to three weeks at the branch proponent school and two weeks at Fort Leavenworth. This problem is further compounded by the command-selection process used by the RC which, because assumption of command quickly follows selection, makes it difficult for PCC to really be "pre-command" training.

(2) Another problem is the appropriateness of the POI at CAC and the branch proponent school in terms of being useful to the prospective RC commander. For example, several of the blocks of instruction at CAC (mainly in the "How to Command" phase) have only limited applicability to NG and USAR units (e.g., Force Integration, MILPERCEN, Financial Management, etc). Considering this, and the problems caused by time constraints, a course tailored for reserve components would be more useful to many RC officers than attending the AC Pre-Command Course. An even more attractive alternative, in terms of resource constraints, would be the development of an exportable training package.

(3) As a follow-on initiative to a RETO recommendation, a POI was developed in 1983 to provide Pre-Command Course training to RC officers. Late in 1983 pilot classes were conducted by the NG and USAR using this POI. The course was five days in length and addressed warfighting topics as well as administrative matters. This approach was well received by senior RC officers. The instructional package is exportable and could be taught offsite from CAC. It appears that CAC could provide off-site instructional support without significant resource impact. Updating and using this POI would resolve many of the problems discussed above (time constraints, appropriateness) and would not de-emphasize the desirability of RC officers attending PCC at either the branch proponent school and/or at the Fort Leavenworth phase of the PCC.

j. SUMMARY: The purpose of the Pre-Command Course will continue to be providing assistance to command designees in their preparation for command. Recommendations, made in this annex, reinforce this idea and can be achieved without a significant outlay of resources.

3. Recommendations.

a. The purpose of the Pre-Command Course should be to continue providing assistance to command designees in their preparation for command.

b. Emphasize instruction on establishing the "command climate" in the "How-to-Command" portion of the PCC.

c. The length of the Pre-Command Course will not exceed five weeks (two weeks at CAC and up to three weeks at the branch proponent school). Any additional training should be defined as functional or technical training, as appropriate. These requirements should be determined and agreed to jointly on a case-by-case basis by the command designee, the proponent and the gaining command. Examples are the Senior Officer Legal Orientation (SOLO) Course, language training, etc.

d. Tailor the contents of the Phase I package mailed to all command designees.

(1) Content will be based on the requirements for the command as defined by the proponent.

(2) Packet will include a copy of the core program of instruction and a "menu" of elective subjects available to the command designee through extra instruction at the school, correspondence course, computer-assisted export package, or material for self-study.

e. ODCSOPS publish a regulation which will define policies, purposes, and responsibilities, etc. for the Pre-Command Courses.

f. Develop a Pre-Command Course tailored to the needs of RC lieutenant colonel and colonel commanders.

4. CSA Remarks. Approved in concept.

Appendices
1 Notes
2 Bibliography
3 Action Plan
4 Phasing Plan

Author: LTC Sims
Team Chief: COL Rowe

Appendix 1 to Annex R

Notes

1. Huba Wass de Czege. *Preparing for War: Defining the Problem*, p. 12.

2. RETO Study, Final Report, 30 June 1978.

3. Special Study Project, *The Command and General Staff College in Transition, 1946-1976*, MAJ Robert A. Doughty and MAJ Kenneth V. Smith, May 1976

4. III Corps Commander's Handbook, April 1984.

5. III Corps Commander's Handbook, April 1984.

6. The German Army terms this concept "Auftragstaktik" Colonel Trevor Dupuy in his excellent book *A Genius for War: The German Army and General Staff, 1807-1945* notes that "Nothing epitomized the outlook and perfomance of the German General Staff, and of the German Army which it coordinated, more than this concept of mission tactics: the responsibility of each German officer and non-commissioned officer—and even Moltlke's "youngest soldier"—to do without question or doubt whatever the situation required, as he saw it. This meant that he should act without awaiting orders, if action seemed necessary. It also meant that he should act contrary to orders, if these did not seem to be consistent with the situation."

Author: LTC Sims
Team Chief: COL Rowe

Appendix 2 to Annex R

Bibliography

Briefing slides. 1984 ACC. Proposals on PCC Purpose of PCC.

Comments on PCC. 15 Aug 84.

Concept Paper for Development of POI/Division Commanders PCC.

Dupuy. Trevor Nevitt. *A Genius for War: The German Army and General Staff. 1807-1945.* Englewood Cliffs. N.J. 1977.

Engineer School PCC Program of Instruction July 1983.

Engineer School POI for PCC (Ft. Leonard Wood). undated. (For period 6-11 May 1984).

Engineer School POI Schedule for PCC. 13 July 1984.

HQDA DACS-ZB MSG. 022035Z Jul 84. SUBJ: Aviation Commander Qualification.

HQDA DAMO-M MSG. 261427Z Jul 84. SUBJ: PCC Curricula Review.

HQDA DAMO-TRI-E POINT PAPER. SUBJ: Pre-Command Course (PCC) Attendance. 8 Feb 79.

HQDA DAMO-TRI Information Memorandum. SUBJ: Impact of Command Tour Length Change on Pre-Command Course (PCC) Training at the National Training Center (NTC).

HQDA DAMO-TRI MEMO. SUBJ: PCC Information Memorandum. 13 July 1984.

HQDA DAMO-ZA MSG. 271620Z Feb 79. SUBJ: Pre-Command Course (PCC) Attendance.

HQDA OCSA letter to CDR. TRADOC. 1 May 1980. SUBJ: Division Commander PCC.

III Corps Commander's Handbook. April 1984.

OPMS Study Group briefing slide Definition of Branch. Functional Area. skills.

POI for Ft. Leavenworth PCC//Class #84-10. 23 July-3 August 1984.

RETO Study. Final Report. 30 June 1978.

Special Study Project. *The Command and General Staff College in Transition. 1946-1976.* MAJ Robert A. Doughty and MAJ Kenneth V. Smith. May 1976.

USACGSC ATTG-OT MSG. 101900Z Sep 84. SUBJ: Precommand Course.

USACGSC ATTG-OT MSG. 221250Z Oct 84. SUBJ: Systems Proficiency for Army Leaders.

USACGSC ATZL-CG LTR. SUBJ: LOI Battalion and Brigade Pre-Command Course. 22 Aug 83.

USACGSC ATZL-CG MSG. 222200Z Oct 84. SUBJ: Pre-command Course for Brigade And Battalion Level Commanders.

USACGSC ATZL-SWD MSG. 130800Z Feb 84. SUBJ: Integration of Pre-command Course For Brigade And Battalion Commanders.

USACGSC ATZL-SWD MSG. 291250Z Dec 83. SUBJ: Pre-command Course For Battalion And Brigade Commanders.

USACGSC ATZL-SWK LTR. SUBJ: The Pre-Command Course. 31 July 1984.

USACGSC ATZL-SWK MEMO. undated. SUBJ: Pre-Command Course Overview.

USACGSC ATZT-TD-BC-EEMC letter. SUBJ: Diagnostic Testing for Phase II Portion of the Pre-Command Course. 6 Apr 1984.

USATCS ATSPQ-PR LTR. SUBJ: Letter of Transmittal Transportation Pre-Command Course (PCC) Phase II. Program of Instruction (POI). 11 July 1984.

USATCS ATZA-TC-C Staffing Paper. 24 May 1984. SUBJ: PCC for District Engineers (DCE).

Wass de Czege. Huba. *Preparing for War. Defining the Problem* AMS paper 11-1. 8 May 1984.

Appendix 3 to ANNEX R
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
S08: Improve the pre-command course. o The purpose of the pre-command course will be to assist the command designee in preparation for command.	The branch or functional proponent of the command will define the requirements for their commanders.	MILPERCEN	3d QTR FY 86	
	The Officer Professional Development System (OPDS) will develop in the officer, prior to selection, the knowledge and skills needed to command in his branch or speciality.	MILPERCEN	ONGOING	
	In addition to the formal pre-command course, the command designee will have self development requirements and may, on a case-by-case basis, request additional training from his branch proponent.	MILPERCEN	ONGOING	
NOTES:				

Appendix 3 to ANNEX R
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
o The length of the pre-command course will not exceed five weeks, two weeks at CAC and up to three weeks at the branch or proponent school.	Opportunities for "hands-on"training will be maximized at the branch/proponent school.	BRANCH/PROPONENT SCHOOL (P) TRADOC	1st QTR FY 86	
	Common "How-to-Fight" and "How-to-Command" subjects will be emphasized at CAC.	CAC (P) TRADOC	ONGOING	
	Any additional preparation will be defined as additional pre-command training; these requirements will be determined and agreed to jointly on a case-by-case basis by the command designee, the proponent, and the gaining command. Examples are the Senior Officer Legal Orientation (SOLO) course, Language Training, etc.	MILPERCEN	ONGOING	
o In the "How-to-Command" portion of the course, emphasize instruction in how to establish and evaluate "command climate."	Review present POI and determine if it provides adequate emphasis to the issue of "command climate". If not, develop appropriate POI.	CAC (P) TRADOC	1st QTR FY 86	

NOTES:

Appendix 3 to ANNEX R
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
o Tailor the contents of the Phase I package mailed to all command designees. - Content will be based on the requirements for the command as defined by the proponent. - Packet will include a copy of the core program of instruction and a "menu" of elective subjects available to the command designee through extra instruction at the school, correspondence course, computer assisted export package, or material for self study. - Command designee will attend the entire two weeks at CAC and as much of the three weeks at the branch/proponent school as required to achieve "system proficiency". Recognize that 06 commanders also require additional and different proficiencies than the 05 commander and provide this instruction at both CAC and the branch/proponent school.		TRADOC (P) CAC BRANCH/PROPONENT SCHOOL	4th QTR FY 86	

NOTES:

Appendix 3 to ANNEX R
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
o Publish an Army Regulation delineating pre-command course policies and responsibilities.	Identify responsibilities of key participants. Establish requirements for formal coordination between TRADOC and AMC.	ODCSOPS	2d QTR FY 86	
o Develop a pre-command course tailored to the needs of RC 05/06 Commanders.	Review and update existing RC PCC POI. Insure POI for RC course addresses current tactical doctrine and the Airland Battle. Emphasize desireability of RC officers attending PCC branch proponent schools. Emphasize desireability of RC officers attending AC/PCC	ODCSOPS (P) NGB OCAR	1st QTR FY 87	

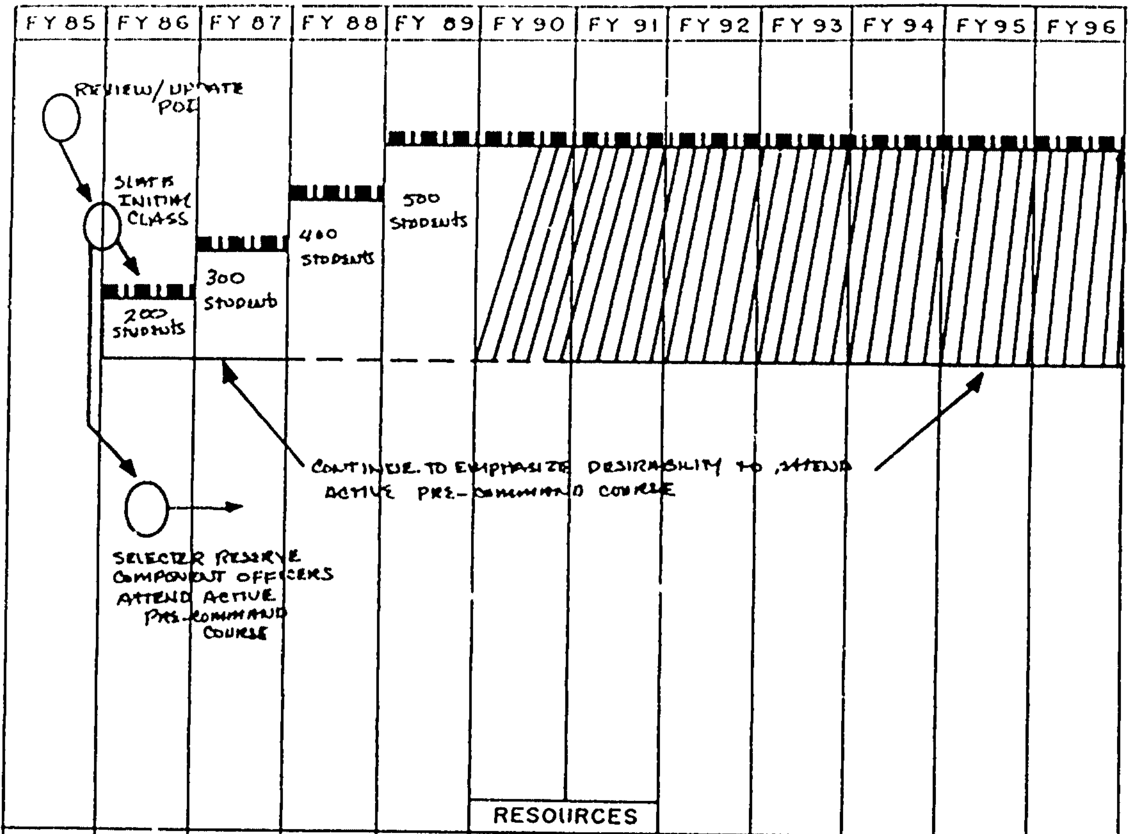
NOTES:

Appendix 4 to ANNEX R

PHASING PLAN

POLICY: DEVELOP A PRE COMMAND COURSE TAILORED TO THE NEEDS OF RC O5/O6 COMMANDERS.

NOTES:
1. MOST LIKELY SITE FOR RC PCC IS NATIONAL GUARD PROFESSIONAL EDUCATION CENTER. COULD PROBABLY SUPPORT BOTH NG AND USAR COMMANDERS.
2. RESPONSIBILITY FOR REVIEWING AND UPDATING POI IS CAC. NGB. OCAR AND FORSCOM.
3. DURATION OF RC PCC IS 5-7 CLASS DAYS.



RESOURCES

FY 85	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY93	FY94	FY95	FY 96
				STUDENTS NR/MY							
	200/3,8	300/5,8	400/7,7	500/9.6	500/9.6	500/9.6	500/9.6	500/9.6	500/9.6	500/9.6	500/9.6
				STAFF AND FACULTY-MIL/CIV							
	2/0	2/0	3/1	3/2	5/2	5/2	5/2	5/2	5/2	5/2	5/2
				TDA CHANGE-$ MILLIONS							
	.36	.54	.72	.72	.9	.9	.9	.9	.9	.9	.9

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Team Chief: COL Isaac

Annex S

Advanced Civil Schooling (ACS)

1. PURPOSE. To outline the policies and procedures necessary to establish an advanced civil schools (ACS) system which accurately identifies current and future Army requirements; provides officers technical, functional and broad based knowledge; and expands one's cognitive skills and frame of reference through a challenging educational experience within the civilian sector. The utility and benefit of such education will be realized by the Army and the individual throughout a career.

2. DISCUSSION.

a. Throughout the years, the role of the professional Army officer has become increasingly complex and diversified in an era of expanding technological sophistication. As a result, the Army (and the other services as well) has had to greatly increase its reliance on civilian institutions to educate officers in the skills necessary to stay abreast of scientific, technological and social changes. In 1963, the Army Educational Requirements Board (AERB) was established to validate Army graduate education requirements. This board meets periodically to review individual positions submitted by the field. Based on approved AERB validations, fully-funded quotas are annually established. Upon graduation, officers are required to serve three years in AERB validated positions.

b. In 1970, the General Accounting Office published a report critical of the services, charging mismanagement of graduate education programs. There have been several reports by other agencies since which have addressed similar shortcomings, namely, the Army's validation process and utilization rates of graduate educated officers. These shortcomings are the result of a narrow definition of requirements, e.g., by individual position; and defining "payback" as utilization in an individual validated position. RETO found that because of such constraints we "have defined ourselves into a position of appearing to be poor managers."

c. Management of the current ACS system is not the issue, especially in view of recent development by MILPERCEN of the Civil Schools Management Information System. The issue rests with how the Army circumscribes and meets its requirements and the philosophical basis for why the Army needs officers with advanced civil schooling.

(1) Requirements.

(a) Since the first AERB in 1963, the scope of validation has been restricted to individual positions. In fact, only those positions requested for validation or re-validation by the field are even considered by the board. Such a process of basing requirements on individual authorizations and then on only a select few cannot establish total Army requirements. The 1983 AERB was tasked to identify total Army requirements but at best only eight percent of OPMD authorizations were validated. However, much evidence exists showing that many positions worthy of validation are not—because they are never submitted for board consideration. Reasons for this vary, but center primarily on field misconceptions of validation criteria, oversight, or commander's hesitancy to tie his authorizations to extraordinary management constraints. On the other hand, some positions are submitted for the wrong reasons—quality cut aspects and an increase in the unit's Officer Distribution Plan (ODP) allowance. Although the validation rate is only eight percent, the OPMD managed officer corps believes at a much greater rate that graduate education is essential. Nearly sixty-seven percent of PDOS Survey respondents (see Appendix 6) claimed it is necessary for proficiency in one of their specialties, e.g., performance in their jobs. This fact influences officers to pursue graduate education on their own. Nearly half (48 percent) of all graduate-degree holders obtained theirs this way.

(b) The focal point of the requirements identification dilemma obviously rests with the scope. Pressuring the current system to "work better" is not a solution. We have tried that since 1963. An alternative process with broader scope is needed.

(c) Army Research Institute (ARI) behavioral research of units and organizations established a premise that the demand for cognitive, analytical and synthesization skills increase by unit or organization echelon (Figure 1). Furthermore, similar increases also occur with unit mission. This phenomenon primarily emanates from the following conditions: planning and execution times; uncertainty of the future; quantity, content and diversity of information to be assimilated; systems complexity; and perhaps most importantly, the impact of work performed upon the Nation, DoD and Army as a whole. Validating units and organizations recognizes the corporate nature of structures—all its individual components (positions) must perform at optimum levels to accomplish the aggregate task or mission. The corporate approach allows the commander the flexibility to use his officers wherever he deems necessary to accomplish assigned tasks and missions. No longer must he be forced to tie an officer with ACS to a singularly validated position for the duration of a tour in order to satisfy "utilization payback."

(d) In broadening the identification of requirements scope to include validating units and organizations, we must not eliminate the need to also review individual positions which represent specific, unique or standardized-type requirements. This is necessary to maintain system flexibility in meeting specific fields of study, academic discipline and doctoral level requirements (see Appendix 1 for amplification).

(e) In an environment of rapid technological changes, we must do better at anticipating future educational requirements, especially for new emerging disciplines. Considering the time it takes to produce an officer with the appropriate ACS, we must take a proactive approach to identifying future needs.

(f) An accurate requirements base will provide the CSA the empirical data to establish graduate education goals for the officer corps. Goals are important. They provide impetus, increase education levels and performance and the inventory of officers available to meet validated requirements. In 1973, based on the 1973 Army Civil Schooling Program Review recommendations, the CSA established a graduate education goal of 20 percent for the officer corps. We have exceeded that as 28 percent of OPMD-managed officers alone have graduate degrees. In 1978, the House Appropriations Committee recommended that the services eliminate the position validation process and instead established graduate education goals.

(2) Philosophical basis for advanced civil schooling.

(a) The worth of ACS has historically been measured in functional terms. That is, an officer is educated in an academic discipline which supports one of his specialties and then is "properly utilized" only when he works in a validated position requiring his grade, specialty and functional skill obtained through graduate education. A functionally competent officer corps is essential to the Army. We need in-depth experts in a variety of areas. However, the worth of a challenging advanced civil schooling experience cannot be measured exclusively in terms of functional preparation.

1. ACS is a broadening experience which raises one's frame of reference thereby stimulating vision. This is particularly important in a closed personnel system. The officer corps, as part of our society, must share its sociological and political values and be exposed to current academic and intellectual thinking in an atmosphere of analysis, reflection and discovery. Sarkesian and Taylor state that "For most officers the graduate school experience creates an awareness of society and reduces mental boundaries imposed by the military community."[1]

2. Research conducted by Raoul Alcala[2] shows that graduate education plays a dramatic role in sharpening one's reasoning and thinking powers; broadens the perspectives from which one defines reality; encourages innovation; and discourages dogmatism (in the pejorative sense), thereby expanding one's ability to develop and explore alternative solutions and select the best one in the decision-making process.

3. Those officers with graduate education believe it makes them better officers. Eighty-five percent of the PDOS Survey responses so indicated. Less than eight percent obtained graduate degrees to get a "good civilian job." In fact, the retention rate of those with advanced degrees is greater than the DA average.

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[1] Sam C. Sarkesian and William J. Taylor, Jr., "The Case For Civilian Graduate Education for Professional Officers," *Armed Forces and Society*, Vol. 1, No. 2, February 1975, p. 255

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[2] Raoul Alcala, "Education and Officer Attitudes", *The System for Educating Military Officers in the U.S.*, Lawerence J. Kolb, ed. International Studies Association, 1976, p. 133.

d. Not all graduate schools offer programs of equal quality and some schools are noted for particular fields of study. Accreditation is not a quality indicator but rather attainment of minimum institutional standards. Additionally, programs of study within the same academic discipline vary significantly between schools. They vary by content, subject matter, quantity of classroom hours, thesis or project requirements and standards. The graduate education experience must be a challenge which allows reflection, research and inquiry. Under current policy, officers may attend full-time ACS at any accredited college or university which offers study in a directed academic discipline. Considering the cost of full-time programs, especially fully funded, we must identify those schools which provide the best education for the investment. In so doing, however, we must ensure that a sufficient variety of schools are identified to provide necessary diversity.

e. The manpower investment in full-time ACS programs exceeded 900 manyears in FY 84 and by 1988 fully-funded tuition costs will exceed $16 million. Although ACS has valuable broadening aspects, as earlier discussed, maximum use of these talents, especially those of a functional nature, must be made. This is accomplished by assigning this inventory to validated units, organizations and positions for normal tours as soon as possible subsequent to schooling and, as appropriate, thereafter throughout a career.

3. Recommendations. Army full-time and Army-funded advanced civil schooling (ACS) programs will be designed to meet Army requirements and goals.

a. The scope of ACS will be expanded beyond functional requirements to also include the need for officer broad-based knowledge and cognitive skills.

b. Requirements and goals will be based on current and future unit, organization, or position needs.

c. Criteria will be established for identifying educational institutions which meet ACS requirements and goals and Army full-time students will attend only those institutions.

d. ACS graduates will serve a normal tour in a unit, organization, or position requiring increased knowledge and skills.

4. CSA Remarks. Conceptually approved the base policies. The CSA questioned whether the changes to the Army ACS system would require congressional approval.

a. ACS is not regulated by Congress except Title 10, USC which limits the services to no more than eight percent of the officer corps to be in civil schooling. However, ACS is periodically reviewed by the House Appropriations Committee (HAC) as part of its oversight responsibilities of the Armed Forces education and training appropriations.

b. For the next HAC review, it would be appropriate to provide them with an information report regarding changes to the Army ACS system. It should be noted that the recommended ACS policies contained herein have been briefed to the other Services program managers and the ACS program manager, Directorate of Training and Education, OSD with favorable response. Furthermore it should be noted that in 1978 the HAC recommended several changes contained in this annex.

Appendices

1 Identification of Advanced Civil Schooling Requirements and Goals
2 Establishment of Advanced Civil Schooling Quotas and Goals
3 Graduate Schooling Policies to Meet Army Requirements and Goals
4 Selection of Officers to Attend Full-Time Advanced Civil Schooling
5 Utilization of Officers With Advanced Civil Schooling
6 PDOS Survey
7 Glossary
8 Bibliography
9 Action Plan
10 Phasing Plan

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Team Chief: COL Isaac

Appendix 1 to Annex S

Identification of Advanced Civil Schooling (ACS) Requirements and Goals

1. PURPOSE. To outline policies and procedures for the identification of ACS requirements from which ACS goals for the officer corps will be established.

2. DISCUSSION.

a. As previously discussed in Annex S, the scope used in the identification of requirements process must be broadened to include units and organizations, as well as individual positions (see Tab A). To accurately establish the Army's ACS requirements, measurable definitive criteria must be identified for use by the Army Educational Requirements Board (AERB). The Army Research Institute (ARI) has conducted research in the behavioral aspects of units and organizations with emphasis on associated cognitive strata, echelon, mission and impact of work performed, and is in an authoritative position to develop this criteria.

b. Within the past forty years, the Army and our society, as well, has seen an evolution to higher education. Where a high school education once represented an accepted minimum standard, graduate education at the masters level is becoming the norm. When one considers that approximately 98 percent of the officer corps has a bachelors; 28 percent of those OPMD managed have completed the masters; and most senior officers (for example 81 percent of OPMD-managed colonels) have graduate degrees, the masters degree represents a standard goal. Considering this fact, the norm for AERB validation should likewise be at the masters level. Requirements for doctorate level or graduates of Training With Industry (TWI) should remain individually validated.

c. Essential to the identification of ACS requirements is accuracy in position coding and grading; and the flexibility to meet specific or unique position requirements. The AERB must continue, as was done by the 1983 AERB, to ensure that validated authorizations precisely reflect correct specialties, skills and grades. Furthermore, those unique positions which can only be satisfied by a specific academic discipline must be identified and specially managed.

d. The current AERB process considers for validation only those positions on current authorization documents. An educational requirement which is anticipated but not yet actual can neither be established nor an officer developed to meet it until an authorization exists. As such, the education process (18 months of graduate schooling alone) cannot always meet requirements in a timely manner. Unit and organization commanders must be allowed and encouraged to project their future educational requirements at least out five years to assist Army personnel planners to develop long-range plans and programs. This is especially crucial to the development of experts in new emerging technologies like artificial intelligence, robotics, parapsychology, ceramic engineering, etc; and the development of plans and programs for anticipated changing inventory needs. The Army Science Board must also continue to assist in this arena as should also ARI.

3. Recommendations.

a. Army ACS requirements will be based on unit, organization and position echelon, mission and impact of work.

b. The AERB will identify requirements based on measurable criteria. Criteria will address:

(1) Cognitive and knowledge levels required in work produced at the echelon and/or mission of the unit, organization or position.

(2) Significant impact of work, on the Nation, DoD or Army with regard to unit, organization, or position mission.

(3) Degree levels.

(4) Future fields or disciplines of study.

c. The AERB, composed of branch, functional area and skill proponent, ARI, and Army Science Board representatives, will:

(1) Identify which units, organizations and positions require officers with ACS by level (masters, doctorate or Training With Industry), based on established criteria.

(2) Identify future ACS requirements by fields of study, or particular academic disciplines with assistance from MACOMS, the Army Science Board and ARI.

(3) Ensure all authorizations within validated units, organizations, and separately validated positions are correctly coded and graded.

(4) Identify those particular positions which require a specific academic discipline.

4. **CSA Remarks.** See Annex S.

TAB — A Validation Of Advanced Civil Schooling Requirements.

Tab A to Appendix 1

Validation of Advanced Civil Schooling Requirements

1. Criteria based on cognitive and knowledge levels:

a. UNITS AND ORGANIZATIONS (Masters/Training With Industry): Where higher level skills are required.

(1) Echelon: For example. ARSTAF: HQ. MACOM: CORPS STAFF. certain Field Operating Agencies. etc.

(2) Mission and impact of work Army-wide: For example. the Center for Army Leadership (CAL):

b. "The mission of the Center for Army Leadership is to be the Army proponent for leadership and ethics. As proponent. the center develops and disseminates leadership and ethics concepts. doctrine. and training in all Army service schools and in the Army field forces. both active duty and reserve. Further. it monitors military and civilian leadership and ethics research activities. and it coordinates all such Army research."

(1) Authorizations: 35 officers of all arms including three from Special Branches.

(2) AERB validations: six positions

(3) What is CAL's need? Best thinkers and most knowledgeable officers available.

c. POSITION TYPES* (Masters/TWI): For the purpose of standardizing requirements. Examples:

(1) Instructor positions

(a) Senior Service College. Command and Staff College

(b) Degree producing institutions (USMA. ROTC. etc)

(2) Foreign area officer positions

(3) Battalion and brigade level command positions

(4) Project manager positions

(5) Civil works engineer positions

d. INDIVIDUAL POSITIONS: (Masters. Training With Industry. Doctorate): Flexibility to meet non-standard requirements.

(1) Generally atypical.

(2) Positions not in validated unit or organization (masters level).

(3) All doctoral requirements will be individually validated.

2. Position fields of study will be identified as follows:

a. Specialty supporting: The academic discipline need of the position controlling specialty is satisfied by any of those of the specialty (control branch. functional area. area of concentration) supporting set.

b. Specific: The academic discipline need is satisfied by only one discipline within the specialty supporting set.

c. Unique: The academic discipline need is satisfied by a discipline or several disciplines not contained in the specialty discipline set.

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*May or may not be in validated units or organizations

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Appendix 2 to Annex S

Establishment of Advanced Civil Schooling (ACS) Quotas and Goals

1. PURPOSE. To outline the procedures and policies to establish ACS quotas and goals.

2. DISCUSSION.

a. There exists primarily two full-time graduate programs. They are the Fully-Funded Program and the Partially-Funded Program where officers attend up to 18 months at an accredited college or university in a directed discipline of study which supports either or both of the individual's specialties. Two major differences exist between the two. Under the Fully-Funded Program, the Army pays all tuition costs and provides monetary assistance for books and fees. In the Partially-Funded Program, the officer is responsible for all schooling costs. The second difference is that the Fully-Funded Program is centrally managed within MILPERCEN and is based on annual quotas derived from AERB validations. The Partially-Funded Program (less the Cooperative Degree Completion Program) is managed separately within the OPMD assignment divisions and is not quota based. Consequently, some over production can occur.

b. The cost associated with Army full-time ACS programs is not in tuition dollars alone, but perhaps more importantly the manpower loss to the operational account. In FY 84, Army full-time graduate ACS programs exceeded 900 man-years. This represents nearly one-third of the current Operating Strength Deviation. Considering the significant manpower drain of the full-time programs, they must be carefully managed to ensure an appropriate inventory is maintained. Quotas must be developed for all such programs to eliminate the potential for costly over-production.

c. In 1977, OSD established validation ceilings for all the services in order to reduce fully-funded budget expenditures. The Army's ceiling was set at 4900. In 1982, General Thurman, as the DCSPER, lifted the ceiling. He believed that the identification of requirements, especially f r ACS, should not be inhibited. Constraints should be based on Transit, Holding, and Student (THS) account established limits and/or budget. Although budgets are established for the fully-funded program, this factor has never affected the program. However no optimum manpower limits have been determined, not withstanding the greatest cost of full-time ACS is in manpower. An analysis of affordability must be made.

d. The methodology (Future Army Requirements-FAR model) used by MILPERCEN to generate annual ACS quotas projects future inventory requirements by specialties and grades by considering utilization and continuation rates. The model projections are compared with existing inventories, the result of which provides the basis for annual Fully-Funded Program quotas and budget support.

e. As previously discussed in this annex, officer graduate education goals need revision as the 20 percent objective established in 1973 has been exceeded. With broader and more accurate ACS validation criteria and methodology, the AERB can provide the necessary empirical data to support realistic requirements based goals. Furthermore, these can be developed by grade, specialties and degree levels. Publishing goals will provide an impetus for officers.

3. **Recommendations.**

a. Based on AERB approved results, MILPERCEN will establish masters, doctorate, and TWI quotas for all full-time programs. Chief of Chaplains and The Judge Advocate General will establish quotas for their branches. Factors that will be considered are:

(1) Branch, functional area and area of concentration requirements by grade, degree level, fields of study and where required, specific academic discipline.

(2) Current inventory by branch, functional area, area of concentration, grade, degree level, field of study and where required, specific academic discipline.

(3) Future requirements by branch, functional area, area of concentration and fields of study using The Future Army Requirements (FAR) model.

(4) Manpower (Transit, Holding and Student-THS account) and budget.

b. Annual ACS full-time quotas will not exceed established THS limits and budget.

c. Annually, MILPERCEN will publish officer graduate education goals for officers by grade, branches, functional areas, areas of concentration, and degree levels. The Chief of Chaplains, The Judge Advocate General and the Surgeon General will publish goals for their branches.

4. CSA Remarks. Approved in concept.

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Team Chief: COL Isaac

Appendix 3 to Annex S

Graduate Schooling Policies to Meet Army Requirements and Goals

1. PURPOSE. To outline policies and procedures to ensure that Army sponsored graduate education programs meet Army requirements and goals.

2. DISCUSSION.

a. All Army-sponsored programs (in duty time and/or funding) must be designed to meet Army requirements and goals. This is true considering the manpower costs of these programs, especially those full-time. To maximize this investment, officers must attend the most appropriate colleges and universities and study must be in a field in which a need exists or may exist in the future.

(1) Selection of colleges and universities. Under current policy, officers selected for full-time graduate schooling may attend any accredited institution recognized by the US Department of Education which offers the directed academic discipline. Evidence exists which shows that, despite accreditation, not all graduate schools or programs are of equal quality or standards. Courses of study also vary significantly by content, subject matter, classroom hours, methods of instruction, and thesis or project requirement. For the educational experience to be meaningful, it must be challenging; promote expansion of one's cognitive and analytical skills; and demand exploration and discovery. Concurrently, this experience must provide functional knowledge with an application to military skills and proficiencies. In order to ensure Army full-time graduate students receive the greatest benefit, the Army must be selective in the institutions used. Accomplishing this task will require assistance from the academic community familiar with Army needs, namely the US Military Academy and Naval Postgraduate School (where approximately 100 Army officers obtain graduate education annually); ARI and specialty proponents. Care must be taken to ensure that a sufficient variety of institutions is used in order to maintain diversity.

(2) Fields of study. Until 1982, the AERB process had been academic discipline oriented. Positions were validated by specific academic disciplines. Based on the validations, "shortage discipline" quotas were developed from which fully-funded program quotas were established. Following graduate schooling, officers were assigned by their specific academic disciplines. Considering the large variety of disciplines, management of validated positions and the inventory of officers to fill them was difficult. This methodology also inhibited progressive utilization as the discipline requirements for lieutenant colonel or colonel may not be the same as for captain and major. To solve this dilemma, the 1983 AERB board validated positions by specialty and grade. MILPERCEN and the specialty proponents then developed and published DA Circular 621-84-1 containing a listing of specialty supporting discipline sets. Officers now must study in a discipline which supports one of their specialties. However, this listing neither provides definition to the disciplines nor does it identify courses or fields of study which support officer universal proficiencies.

(a) Defining disciplines: Definition is necessary to guide officers in their selection of courses for a particular discipline and related electives. The core courses for operations research/systems analysis (OR/SA), for example, could include statistics, qualitative methods, modeling, linear programming, computer programming, methods of analysis and calculus.

(b) Officer universal proficiencies: Intuitively, the Army needs some officers who are experts in fields of study which are common to all branches and functional areas—fields that support universal proficiencies (see BE-KNOW-DO in Annex K). Examples of these fields or courses are organizational behavior, humanities, psychology, interpersonal relationships, history, management principles, leadership, etc.

b. Because of significant dollar and particularly manpower costs accompanying full-time ACS programs, less expensive alternatives to meet Army requirements and goals must be encouraged, expanded or developed.

(1) The Command and General Staff College (CGSC) and the Army Logistics Management Center (ALMC) participate in the Cooperative Degree Program (COOP). During the military course, COOP participants take graduate courses for electives. CGSC students PCS to the university campus for six months after completion of the military phase to complete their degree. In the ALMC COOP, students remain at Ft Lee the additional six months following the Logistics Executive Development Course (LEDC). Florida Institute of Technology, the participating university, maintains supporting faculty and staff on main campus. COOP represents an excellent opportunity for officers to obtain graduate education in a relatively inexpensive manner as the officer pays tuition and fees through his own resources. Many obtain degrees in difficult disciplines (Tab A). However, in recent years the popularity of these programs has waned. This can be attributed as follows:

(a) Six months university phase: The CGSOC students begin this phase in about June after a PCS to the campus. Graduation occurs in December. This timing causes the officer two difficulties. First, it is very disruptive for the family. Most officers have school age children who have their school year interrupted; and the family must travel, often great distances when the weather and road conditions are at their worst. Second, there exist few assignment requisitions in the system for the winter cycles. ALMC COOP has two programs per year. One has the COOP portion with a start in January and subsequent completion in June. The other is timed with CGSOC graduation to accommodate CGSC COOP participants who then PCS to Ft Lee to complete their degree in the ALMC COOP program. This second program causes similar timing difficulties for both ALMC and CGSC COOP students.

(b) Learning compression: Although family and assignment considerations are important, the most significant negative impacts relate to the learning process. In the COOP programs, participants are required to complete intensive military courses concurrently with equally intense university courses. Many students have been away from the civilian academic arena for many years and require refresher courses, especially in mathematical based disciplines. However, the compression in content and heavy study demands during the military phase, and to some extent also the university phase, do not allow time for refresher courses. Moreover, this condition does not provide time or opportunity for students to do research theses or projects. As such, they are denied valuable benefits of a graduate education experience—reflection, inquiry and discovery.

(c) These aforementioned program shortfalls have caused recent reductions in program participation. Potential candidates decide not to enroll or some who have are forced to withdraw. This condition can be alleviated by extending the university phase by about six months. In fact, several participating universities have so recommended to program managers. An extension of this phase would eliminate a December move for most participants thereby reducing family turmoil. More importantly, it would allow time for refresher training, supplemental courses and research theses or projects. The associated cost would be manyears only, but much fewer than that associated with 18 month full-time programs.

(2) The Army Tuition Assistance Program provides 50 percent funding for eligible participants taking college-level courses during non-duty hours. AR 621-5, Army Continuing Education System (ACES), which governs this program requires that coursework must be "designed to provide vocational and education programs which can satisfy skill development and occupational needs of the Army in defense of the Nation and increase soldier career potential, job satisfaction and educational growth." In actuality, one is eligible to enroll in advanced degree programs which have little or no utility to the Army and neither support the officer's specialties nor universal proficiencies. As previously stated, all Army-funded ACS programs must support both Army requirements and individual aspirations. Perhaps as importantly, this program prohibits some who already have graduate degrees from seeking additional degrees. As such, self-development can be inhibited.

(3) In 1983, the Combined Arms Operations Research Activity (CAORA), with ODCSOPS approval, initiated a masters level intern work-study program at Fort Leavenworth for permanent party officers. The program is in operations research/systems analysis in cooperation with the University of Kansas. It provides an opportunity for participants to pursue graduate education tailored to their current duty position requirements. Classroom work occurs both during and after duty hours. Written projects have military application and often a direct relation-

ship with the individual's position. Normally, within a three year tour, one can complete degree requirements. The average cost to the government is approximately $1700 per student and little manyears (about three hours per week of duty time). Such programs could potentially be established at other installations, especially those where there is a concentration of a like branch or functional area, i.e., Fort Gordon and the Signal School or Fort Benjamin Harrison and the Computer Science School.

(4) Few situations lend themselves to obtaining graduation education as does an ROTC assignment. ROTC cadre should be strongly encouraged to participate whether it be at the initial masters, multiple masters or doctorate level. Many universities will provide reduced tuition rates. The cost to the Army is minimal.

3. Recommendations.

a. The ODCSPER establish policies and criteria for the identification of colleges and universities which meet Army ACS requirements in support of full-time study programs. This criteria will include:

(1) Accredited and recognized by the US Department of Education.

(2) Offer specific fields of study which meet Army requirements to include:

(a) Thesis or research project requirement.

(b) Quality of the program.

(c) Military application of courses/programs.

(d) Electives which support universal officer proficiencies.

(e) Tuition costs.

(3) The number of colleges and universities must provide sufficient diversity.

b. CGSC and ALMC Cooperative Degree Programs will be extended to a maximum of one year in order to allow for additional coursework and thesis or project completion.

c. MILPERCEN, with proponent and MACOM assistance will expand fields of study which support branches, functional areas, areas of concentration and officer universal proficiencies. For such fields of study, they will also identify supporting core courses for optimum military application.

(1) This information will be published and distributed Army-wide.

(2) Officers pursuing graduate degrees under an Army full-time program will study at Army recognized colleges and universities in fields of study which support Army requirements, the individal's branch, functional area, area of concentration, or officer universal proficiencies; and individual educational goals.

(3) Officers pursuing graduate degrees under the Army Tuition Assistance Program may attend for multiple graduate degrees at any level (masters or doctorate). Study will support Army requirements and individual educational goals.

d. To supplement existing education programs, the DCSPER will investigate establishing cooperative intern work-study programs similar to that at Ft Leavenworth; and Commander TRADOC will establish policies and guidelines which allow ROTC cadre to pursue on-campus educational opportunities.

4. CSA Remarks. Approved in concept.

TAB A — Cooperative Degree Program

Tab A to Appendix 3

Cooperative Degree Program

CGSC, FT LEAVENWORTH, KS

University of Kansas
- History
- Journalism
- Political Science

Kansas State
- ORSA

University of Missouri at Kansas City
- Accounting
- Comptrollership
- Organizational Behavior
- Public Administration

ALMC (LEDC), FT LEE, VA

Florida Institute of Technology, Ft Lee, VA
- Material Acquisition Management
- ADP
- Logistics (MBA)
- Logistics Management
- Transportation Management
- Contract & Acquisition Management

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Appendix 4 to Annex S

Selection of Officers to Attend Full-time Advanced Civil Schooling (ACS)

1. PURPOSE. To outline the policies and procedures to select officers for ACS attendance at civilian institutions.

2. DISCUSSION.

a. The Army's objective must be to develop an inventory of officers with ACS in the proper mix of fields of study to meet Army requirements. Historically, the Army has been unable to meet its ACS requirements through off-duty, cooperative, or pre-accession programs. Consequently, full-time programs were established to meet this need. As previously discussed and shown in this annex, full-time programs are expensive in both manpower and dollars. To maximize this investment, we should send our officers to the most appropriate colleges, universities; and for Training With Industry, to the most appropriate industries. Likewise, we should send the right officers at the right time in their careers.

(1) Timing: Generally, officers should have completed their branch qualification (see Annex CC). The importance of this foundation cannot be over emphasized. Branch qualification is usually accomplished by the sixth or seventh year of service, consequently, the ideal window of attendance is seven to nine years AFCS. Currently, that window is six to eight years AFCS. However, considering the demands placed on captains, the window should be flexible. In fact, it may be useful in select cases for officers to attend full-time ACS during the field grade years when it is appropriate to do so (for example, obtain a masters, doctorate or attend Training With Industry to support one designated to sequential track). Those officers to be schooled in fields of study which support a functional area must have completed OAC as part of their branch qualification (CAS3 can and should follow ACS). However, those to be schooled in fields supporting their branch may attend OAC after ACS. This will allow them to rapidly return to the same level as their peers.

(2) Manner of performance: Unquestionably, those officers with the best performance records and the greatest potential should be selected.

b. Officers who attend full-time ACS often do so in fields of study which support entry into additional specialties or functions in which they have little, if any, experience or knowledge. Hence, they have limited knowledge of the direction or emphasis their studies should take. The establishment of academic discipline core courses will help, but the individual should have some prior familiarity of the military application of his studies. Attendance at an appropriate functional course prior to ACS could alleviate this.

3. Recommendations. The Army's goal is to develop an inventory of officers with ACS at the grade of captain, prior to transition to field grade. The inventory will be developed by branch, functional areas, and areas of concentration of sufficient size to meet captain and future field grade validated ACS requirements.

a. MILPERCEN will select officers for full-time ACS to meet quotas using the following criteria:

(1) Officer has completed captain level branch qualification, company level command, as required, and OAC. Officers who will attend ACS in support of their branch may, as appropriate, attend OAC following civil schooling.

(2) Officer has a manner of performance necessary for transition to field grade (reinforce).

(3) Officer can be accepted at an Army recognized college and university in the required field of study or academic discipline.

(4) Upon graduation, officer will be available to serve a normal utilization tour without detriment to his career progression (reinforce).

(5) Officer can complete the degree requirements within 18 months; or two years for doctorate. Selection will be weighted to those who can complete degree requirements in less time (reinforce).

(6) Officer agrees in writing to a service obligation three times the schooling period, computed in days, to a maximum of six years (reinforce).

(7) Officer may attend for doctorate, masters or TWI level education regardless of source of funding for lower degree levels (publicize and reinforce).

(8) The ideal window of attendance for masters level education will be captains between 7-9 years AFCS; timing for doctoral attendance will be established based on force structure requirements.

b. Officers selected for full-time ACS will attend an appropriate military functional course in support of the designated area of concentration or functional area prior to ACS should the officer lack sufficient knowledge or experience in the area.

4. CSA Remarks. Approved in concept.

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Appendix 5 to Annex S

Utilization of Officers with Advanced Civil Schooling (ACS)

1. PURPOSE. To outline policies and procedures concerning the utilization of officers with ACS in order to meet Army requirements.

2. DISCUSSION.

a. The skills and knowledge of officers with ACS should be utilized at every available opportunity. This is especially true immediately following schooling when the knowledge is fresh. Knowledge and skills decline with time when not exercised, with the greatest deterioration occurring shortly following schooling. On the other hand, immediate utilization reinforces and expands newly acquired skills and knowldge. Considering the investment in full-time programs and historical congressional oversight, emphasis should be on using these assets in validated units, organizations and positions immediately. However, to meet all requirements, all officers with ACS, regardless of degree source, should be used to the maximum extent practical in validated units, organizations or positions.

b. In those cases where the best interests of the Army and the individual are not served, utilization right after ACS should be deferred. Deferrals should represent extreme exceptions and should be for no more than one operational tour.

c. As previously discussed in this annex, Army ACS requirements will be established to support units, organizations and individual positions. MILPERCEN must assign officers with ACS accordingly. Commanders of validated units and organizations may use these officers in any appropriate position but should do so judiciously.

d. When ACS requirements exceed the inventory, policies and procedures for distribution must be established. PDOS was unable to study this issue in detail; however, at least two alternatives exist. One is a process similar to the OPMD-managed Officer Distribution Plan (ODP) where the inventory is distributed by grade and specialty based on established priorities. The other, an equal cells of quality approach, would eliminate most or all priorities with each validated entity receiving a pro rata fair share of the ACS inventory.

e. During the past three years, MILPERCEN has been developing the Civil Schools Management Information System (CSMIS). CSMIS provides ADP support for MILPERCEN education program managers, assignment officers and field personnel officers in the management of validated requirements and officer personnel with ACS. This system has significantly improved the Army's management of its ACS system. Modifications to it should be made, as appropriate, to accommodate the policies contained within this annex.

3. Recommendations.

a. Officers attending ACS under any Army full-time program will serve a utilization tour in a validated unit, organization or position immediately following schooling or follow-on military schooling. Initial utilization may be deferred to the second operational tour or curtailed by Commander, MILPERCEN based on Army and individual needs.

b. Officers obtaining ACS through off-duty study or prior to commissioning should be utilized to the maximum extent possible to satisfy validated requirements (reinforce).

c. Officers must be assigned within the Officer Classification System; however, fields of study or specific academic discipline needs of the unit, organization or position must also be considered (reinforce).

d. Commanders and directors of AERB validated units and organizations have the authority to assign their officers with ACS (regardless of source) to any position to meet the command's mission.

e. MILPERCEN will establish procedures to ensure that officers with ACS are assigned to validated units, organizations or positions at appropriate times throughout the individual's career (reinforce).

f. When validated requirements exceed inventory, the DCSPER will establish a distribution plan.

g. MILPERCEN is responsible for establishing procedures to ensure that assignment and utilization policies are followed (reinforce).

4. CSA Remarks. None.

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Appendix 6 to Annex S

PDOS Survey Responses

1 Graduate education is helpful in current assignment

	Extremely	*Somewhat*	*Total*
Doctorate	60.5%	23.6%	84.1%
Masters	41.9	40.4	82.3
All	27.0	49.0	76.0

2 Sources of Degrees

	Doctorate & Masters
Fully Funded Program	30.2%
Degree Completion	5.7
Program Cooperative (COOP)	6.5
On Own Time	48.3
Preaccession	6.3

3 Primary intent in obtaining graduate degree.

	*ACS Respondents**	*All Respondents*
• Serve more effectively	28.1%	22.2%
• Enhance professional intellectual growth	33.9	32.9
• More competitive for selection boards	22.8	19.7
• Obtain a good civilian job	7.8	12.4
• Do not intend on obtaining a graduate degree	—	5.5

4. Does/did the opportunity to acquire ACS while on active duty influence your decision to remain?

	*ACS Respondents**	*All Respondents*
Influences	59.4%	59.7%
Would stay anyway	38.4	35.8
Plan to separate	2.2	4.5

5 Officers need ACS even if the Army does not fund.

	*ACS Respondents**	*All Respondents*
Agree	79.4%	70.0%

6. Satisfaction with current duty position

	*ACS Respondents**	*All Respondents*
Very satisfied	48.4%	42.3%
Total satisfied	87.4	85.2

7 ACS is necessary for proficiency in one of my specialties.

	*ACS Respondents**	*All Respondents*
Strongly agree	35.4%	30.0
Total agree	72.6	66.5

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*Those officers responding who have graduate degrees.

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Appendix 7 to Annex S

Glossary

Advanced Civil Schooling (ACS): ACS includes graduate education (masters and doctorate) and Training With Industry (TWI).

Army Educational Requirements Board (AERB): A DA board composed of specialty proponent representatives which reviews requests for ACS validation submitted by the field. Generally, the board meets every one to two years. Board recommendations are forwarded to the DCSPER for approval. The approved board results currently provide the basis for the Fully-Funded Program.

Fields of Study: A group of similar academic disciplines, e.g., business administration, banking and finance, comptrollership, accounting, etc.

Full-time ACS: The officer's duties are exclusively graduate schooling or Training With Industry (TWI) in excess of 20 weeks. Graduate schooling programs include the Fully-Funded Program & Partially-Funded Programs.

Training With Industry (TWI) Program: TWI is a cooperative training program between the Army and select civilian corporations. Participating officers generally are dedicated for a one-year tour. The program is not degree producing (See AR 621-108 & AR 621-1).

Unit/organization: For the purpose of this annex, an entity with a Unit Identification Code (UIC). "Unit" denotes MTOE element; "organization," TDA element.

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Appendix 8 to Annex S

Bibliography

Alcala, Raoul, "Education and Officer Attitudes," *The System for Educating Military Officers in the U.S.*, Lawrence J. Kolb, ed. International Studies Association, 1976.

Hannon, Clarence W. et.al., *Graduate Education Within the Armed Forces*, Group Research Project, Carlisle Barracks: US Army War College, May 31, 1974.

Janowitz, Morris, "Changing Patterns of Organizational Authority: The Military Establishment," *Administrative Science Quarterly*, Vol. III, March 1959.

Korb, Lawrence J. ed., *The System for Educating Military Officers in the U.S.*. International Studies Association, 1976.

Lang, K., "Military Career Structure: Emerging Trends and Alternatives," *Administrative Science Quarterly*, Vol. 17, December 1972.

Sarkesian, Sam C. and William J. Taylor, Jr.. "The Case for Civilian Graduate Education for Professional Officers," *Armed Forces and Society*, Vol. 1, No. 2, February 1975.

Schrader, Charles R., "The Case for Army Officer Sabbaticals," *Military Review*, Vol. 53, May 1973.

Department of Defense, *A Report to the House Appropriations Committee: Graduate Education In the Department of Defense*. Washington: March 1979.

Department of Defense, Office of the Inspector General. Audit Report. *Graduate Education Programs*. Washington: September 28, 1984.

Department of the Army. Office Chief of Staff. Army. *A Review of Education and Training for Officers*. Washington: June 30, 1978.

Department of the Army. US Military Personnel Center. *Army Civil Schooling Program Review*. Washington: February 1973.

Department of the Army, *Army Regulation 621-1*: Training of Military Personnel at Civilian Institutions. Washington: October 15, 1984.

Department of the Army, *Army Regulation 621-5*: Army Continuing Education System (ACES). Washington: October 15, 1981.

Department of the Army, *Army Regulation 621-108*: Military Personnel Requirements for Civilian Education. Washington: September 12, 1977.

Department of the Army. *Circular 621-84-1*: Civil Education for Officer Personnel at Civilian Institutions. Washington: October 15, 1984.

US Congress. House. Committee on Appropriations. *Department of Defense Appropriations Bill*. H. Rept. 1979. Washington: US Government Printing Office. 1978.

Appendix 9 to ANNEX S
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
150 Army ACS requirements will be based on unit, organization and position echelon, mission and impact of work.	1. Revise AR 621-108, Validation of Officer Advanced Civil Schooling Requirements.	MILPERCEN (P) ODCSPER, MACOMS PROPONENTS	3Q FY 86	
	2. Submit plan to House Armed Services Committee/House Appropriations Committee of validation/utilization change.	ODCSPER (P) MILPERCEN, ARI	2Q FY 86	
151 The AERB will identify requirements based on measurable criteria. Criteria will address: oo Cognitive and knowledge levels required in work produced at the echelon and/or mission of the unit, organization or position. oo Significant impact of work, on the Nation, DOD or Army with regard to unit, organization or position mission. oo Degree levels. oo Future fields or disciplines of study.	1. Develop, staff and submit to ODCSPER for approval.	ARI (P), MILPERCEN ODCSPER, MACOMS,	1Q FY 86	
	2. Include criteria in AR 621-108.	MILPERCEN	3Q FY 86	

NOTES:

Appendix 9 to ANNEX S
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP	REQUIRED COMPLETION	NOTES
152 The AERB, composed of branch, functional area and skill proponent, ARI, and Army Science Board representatives, will: oo Identify which units, organizations and positions require officers with ACS by level (masters, doctorate or Training With Industry), based on established criteria. oo Identify future ACS requirements by fields of study, or particular academic disciplines with assistance from MACOMS, the Army Science Board and ARI. oo Ensure all authorizations within validated units, organizations, and separately validated positions are correctly coded and graded. oo Identify those particular positions which require a specific academic discipline.	1. Prepare for FY87 AERB a. Announce board to the field. b. Field submits requirements. c. Proponents review submissions.	MILPERCEN(P), MACOMS, ARSTAFF, PROPONENTS, Army Science Board, ARI	3Q FY 87	
	2. Conduct FY87 AERB.	MILPERCEN(P), MACOMS, ARSTAFF, PROPONENTS, Army Science Board, ARI	3Q FY 87	
	3. Approve AERB results/recommendations.	ODCSPER	3Q FY 87	

NOTES

Appendix 9 to ANNEX S
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
153 Based on AERB approved results, MILPERCEN will establish masters, doctorate, and TWI quotas for all full-time programs. Chief of Chaplains and The Judge Advocate General will establish quotas for their branches. Factors that will be considered are: oo Branch, functional area and area of concentration requirements by grade, degree level, fields of study, and where required, specific academic discipline. oo Current inventory by branch, functional area, area of concentration, grade, degree level, field of study, and where required, specific academic discipline.	1. Obtain authorizations data of validated units, organizations and individual positions.	MILPERCEN	3Q FY 88	
	2. Apply authorizations data by branch, area of concentration and functional area and grade to Future Army Requirements (FAR) model to establish optimum ACS inventory size and speciality mix.	MILPERCEN	2Q FY 88	
	3. Compare FAR computations with existing ACS inventory to identify full-time ACS quota.	MILPERCEN	2Q FY 88	
	4. Adjust full-time quotas based on established THS limits and budget.	MILPERCEN	3Q FY 88	1
	5. Publish & implement FY 89 full-time ACS quota plan.	MILPERCEN	1Q FY 89	

NOTES

1. See Policy 154.

Appendix 9 to ANNEX S
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTE
oo Future requirements by branch, functional area, area of concentration, and fields of study using The Future Army Requirements (FAR) model. oo Manpower (Transit, Holding and Student-THS account) and budget.				
.54 Annual ACS full-time quotas will not exceed established THS limits and budget.	1. Determine THS allowable ACS full-time student load in manyears.	ODCSPER	4Q FY 85	1
	2. Determine FY 89 budget; approve; adjust FY 89 fully-funded quotas as required.	MILPERCEN(P), ODCSPER, TAG, COA	2Q FY 88	2

NOTES:

1. Revise prior to establishment of each FY full-time ACS quota plan.
2. Budget approved prior to publishing annual ACS quota plan.

Appendix 9 to ANNEX S
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
155 Annually, MILPERCEN will publish officer graduate education goals for officers by grade, branches, functional areas, areas of concentration, and degree levels. The Chief of Chaplains, The Judge Advocate General and the Surgeon General will publish goals for their branches.	1. Based on authorizations data by specialty & grades of validated units, organizations & individual positions, compute goals by specialty & grade.	MILPERCEN	1Q FY 88	
	2. Publish goals.	MILPERCEN	1Q FY 88	1

NOTES:

1. Readjust after each AERB.

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
157 The DCSPER will establish policies and criteria for the identification of colleges and universities which meet Army ACS requirements in support of full-time study programs. This criteria will include: oo Accredited and recognized by the US Department of Education. oo Offer specific fields of study which meet Army requirements to include: (1) Thesis or research project requirement (2) Quality of the program (3) Military application of courses/programs (4) Electives which support universal officer proficiencies (5) Tuition costs oo The number of colleges and universities must provide sufficient diversity.	1. Establish criteria.	MILPERCEN(P), ODCSPER, ARI, NPS, USMA, AFIT, PROPONENTS	4Q FY 85	
	2. Identify institutions which meet criteria.	MILPERCEN(P), NPS, AFIT, USMA, PROPONENTS	1Q FY 86	
	3. Notify & coordinate with institutions: o Agreements for cost breaks o Possible curriculum. changes or modifications.	MILPERCEN(P)	2Q FY 86	
	4. Publish approved universities in DA Circ 621-84-1.	MILPERCEN(P)	3Q FY 86	

NOTES:

Appendix 9 to ANNEX S
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
I58 CGSC and ALMC Cooperative Degree Programs will be extended to a maximum of one year in order to allow for additional coursework and thesis or project completion.	1. Coordinate extension with participating universities.	CGSC	3Q FY 85	
	2. Adjust Coop electives.	CGSC(P), ALMC	1Q FY 86	1
	3. Implement.	CGSC(P), ALMC	3Q FY 86	
I59 MILPERCEN, with proponent and MACOM assistance will expand fields of study which support branches, functional areas, areas of concentration and officer universal proficiencies. For such fields of study, they will also identify supporting core courses for optimum military application. oo This information will be published and distributed Army-wide. oo Officers pursuing graduate degrees under an Army full-time program will study at Army recognized colleges and universities in fields of study which support Army requirements, the individual's	1. Refine & adjust current supporting fields of study as contained in DA Circ 621-84-1.	MILPERCEN(P), PROPONENTS, MACOMS, ARSTAFF	4Q FY 85	
	2. Change DA Circ 621-84-1 to include Tuition Assistance (TA).	MILPERCEN(P), ODCSPER	4Q FY 85	
	3. Add list of Army approved universities to DA Circ 621-84-1.	MILPERCEN(P)	3Q FY 86	2

NOTES:

1. Participating universities will be required to meet criteria IAW Policy I57.
2. See Policy I57.

Appendix 9 to ANNEX S
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
branch, functional area, area of concentration, or officer universal proficiencies; and individual educational goals. oo Officers pursuing graduate degrees under the Army Tuition Assistance Program may attend for multiple graduate degrees at any level (masters or doctorate). Study will support Army requirements and individual educational goals.				

NOTES:

Appendix 9 to ANNEX S
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
160 To supplement existing education programs, the DCSPER will investigate establishing cooperative interm work-study programs similar to that at Ft Leavenworth; and Commander TRADOC will establish policies and guidelines which allow ROTC cadre to pursue on-campus educational opportunities.	1. Through installation education centers, determine for interm work-study: o Feasibility. o Ability of local universitie to support. o Costs.	ODCSPER	4QFY85	
	2. Coordinate establishment of intern work-study programs with MACOMS.	ODCSPER	4QFY85	
	3. Implement.	ODCSPER	2QFY86	
	4. Publish guidelines & policies which allow ROTC cadre to pursue on-campus educational opportunities.	TRADOC	3QFY85	

NOTES

Appendix 9 to ANNEX S
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
I61 MILPERCEN will select officers for full-time ACS to meet quotas using the following criteria: oo Officer has completed captain level branch qualification, company level command, as required, and OAC. Officers who will attend ACS in support of their branch may, as appropriate, attend OAC following civil schooling. oo Officer has a manner of performance necessary for transition to field grade (reinforce). oo Officer can be accepted at an Army recognized college and university in the required field of study or academic discipline. oo Upon graduation, officer will be available to serve a normal utilization tour without detriment to his career progression (reinforce).	1. Publish policies in AR621-1.	MILPERCEN	4Q FY 85	1
	2. Implement.	MILPERCEN	1Q FY 86	2

NOTES:

1. Publish and implement policy regarding using Army recognized universities in 3Q FY 86 -- see Policy I57.
2. For those officers selected to attend full-time ACS in FY 86.

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
oo Officer can complete the degree requirements within 18 months; or two years for doctorate. Selection will be weighted to those who can complete degree requirements in less time (reinforce). oo Officer agrees in writing to a service obligation three times the schooling period, computed in days, to a maximum of six years (reinforce). oo Officer may attend for doctorate, masters or TWI level education regardless of source of funding for lower degree levels (publicize and reinforce). oo The ideal window of attendance for masters level education will be captains between 7-9 years AFCS; timing for doctoral attendance will be established based on force structure requirements.				

NOTES

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
162 Officers selected for full-time ACS will attend an appropriate military functional course in support of the designated area of concentration or functional area prior to ACS if the officer lacks sufficient knowledge or experience in the area.	1. Revise AR621-1.	MILPERCEN	3Q FY 85	
	2. Implement.	MILPERCEN	4Q FY 85	
163 Officers who attend ACS under any Army full-time program will serve a utilization tour in a validated unit, organization or position immediately following schooling or follow-on military schooling. Initial utilization may be deferred to the second operational tour or curtailed by Commander, MILPERCEN based on Army and individual needs.	1. Revise AR 621-108.	MILPERCEN	3Q FY 86	1
	2. Implement following FY 87 AERB.	MILPERCEN	3Q FY 87	
164 Officers who obtain ACS through off-duty study or prior to commissioning should be utilized to the maximum extent possible to satisfy validated requirements.	1. Implement.	MILPERCEN	2Q FY 85	

NOTES:

1. See Policy 150, 151, 152.

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
165 Officers must be assigned within the Officer Classification System; however, fields of study or specific academic discipline needs of the unit, organization or position must also be considered (reinforce).	Implement.	MILPERCEN	2Q FY 85	
166 Commanders and directors of AERB validated units and organizations have the authority to assign their officers with ACS (regardless of source) to any position to meet the command's mission.	1. Revise AR621-108.	MILPERCEN	3Q FY 86	
	2. Policy becomes effective after FY 87 AERB.	MILPERCEN	3Q FY 87	
167 MILPERCEN will establish procedures to ensure that officers with ACS are assigned to validated units, organizations or positions at appropriate times throughout the individual's career (reinforce).	1. Establish procedures to ensure maximum use is made of officers with ACS.	MILPERCEN	3Q FY 85	
	2. Publish internal policies.	MILPERCEN	3Q FY 85	

NOTES:

Appendix 9 to ANNEX S
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
168 When validated requirements exceed inventory, the DCSPER will establish a distribution plan.	1. Establish methodology.	ODCSPER (P), MILPERCEN	4QFY86	1
	2. Implement as required.	MILPERCEN(P)	3QFY87	
169 MILPERCEN is responsible for establishing procedures to ensure that assignment and utilization policies are followed (reinforce).	1. Refine the Civil-Schools Management Information System (CSMIS).	MILPERCEN(P)	Continual	
	2. Establish data block denoting ACS utilization on the Officer Record Brief.	MILPERCEN(P)	4QFY85	
	3. Ensure TAADS reflects unit, organization & individual position validation (standard remark 96).	MILPERCEN(P), ODCSOPS	4QFY87	

NOTES:

1. This assumes the AERB validated requirements will eventually exceed inventory.

Appendix 9 to ANNEX S
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
180 Army full-time and Army funded Advanced Civil Schooling (ACS) programs will be designed to meet Army requirements and goals. oo The scope of ACS will be expanded beyond functional requirements to also include the need for officer broad-based knowledge and cognitive skills. oo Requirements and goals will be based on current and future unit, organization or position needs. oo Criteria will be established for identifying educational institutions which meet ACS requirements and goals and Army full-time students will attend only those institutions. oo ACS graduates will serve a normal tour in a unit, organization or position requiring increased knowledge and skills.	1. Establish annual ACS quotas for all full-time programs.	MILPERCEN	3 Q FY 85	1
	2. Centrally manage fully-funded and partially-funded/degree completion programs.	MILPERCEN	3 Q FY 85	2

NOTES:

1. For FY 86 Quota Plan.
2. Recommend Education and Training Management Branch, OPMD.

Appendix 10 to ANNEX B

PHASING PLAN

ISG-269. 190

ADVANCED CIVIL SCHOOLING

o DEVELOP ACS VALIDATION CRITERIA. CO ARI TAKES THE LEAD.

o ODCSPER PREPARE ACS VALIDATION/ UTILIZATION PLAN FOR SUBMISSION TO HOUSE APPROPRIATIONS COMMITTEE AND HOUSE ARMED SERVICES COMMITTEE.

o REVISE AR 621-108. VALIDATION OF OFFICER ACS REQUIREMENTS. TO CONTAIN NEW VALIDATION SCOPE AND CRITERIA.

o PREPARE FOR AND CONDUCT THE FY 87 AERB USING NEW VALIDATION SCOPE AND CRITERIA.

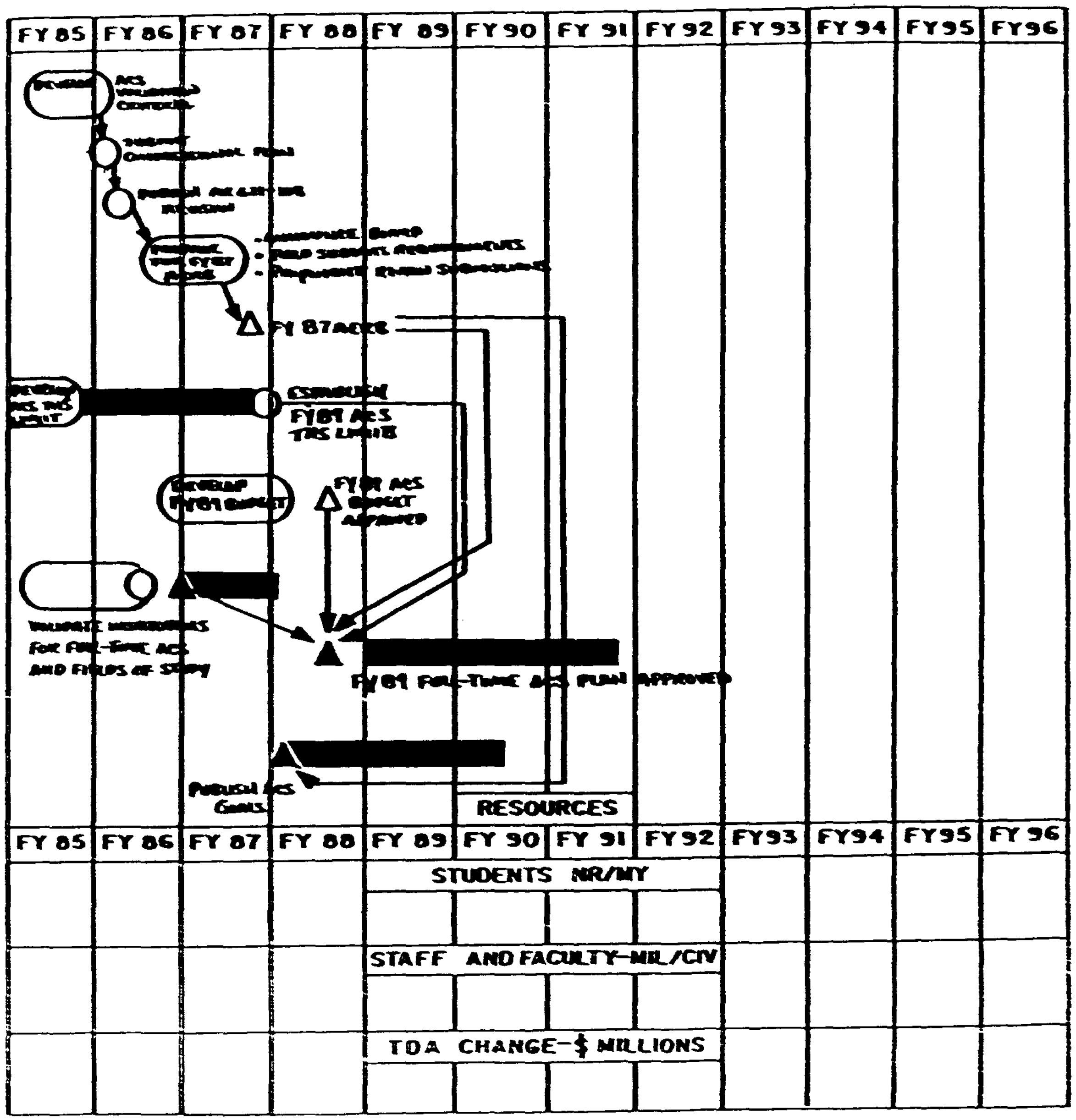
o ESTABLISH AND ANNUALLY REVISE ACS BUDGET AND THS LIMITS.

o IDENTIFY THE MOST APPROPRIATE UNIVERSITIES TO EDUCATE FULL-TIME GRADUATE STUDENTS.

o ESTABLISH AND PUBLISH ACS GOALS FOR THE OFFICER CORPS.

o BASED ON FY 87 AERB. DEVELOP FY 89 FULL-TIME ACS QUOTA PLAN; REVISE ANNUALLY THEREAFTER.

o ASSIGN OFFICERS WITH ACS TO VALIDATED UNITS, ORGANIZATIONS OR INDIVIDUAL POSITIONS.



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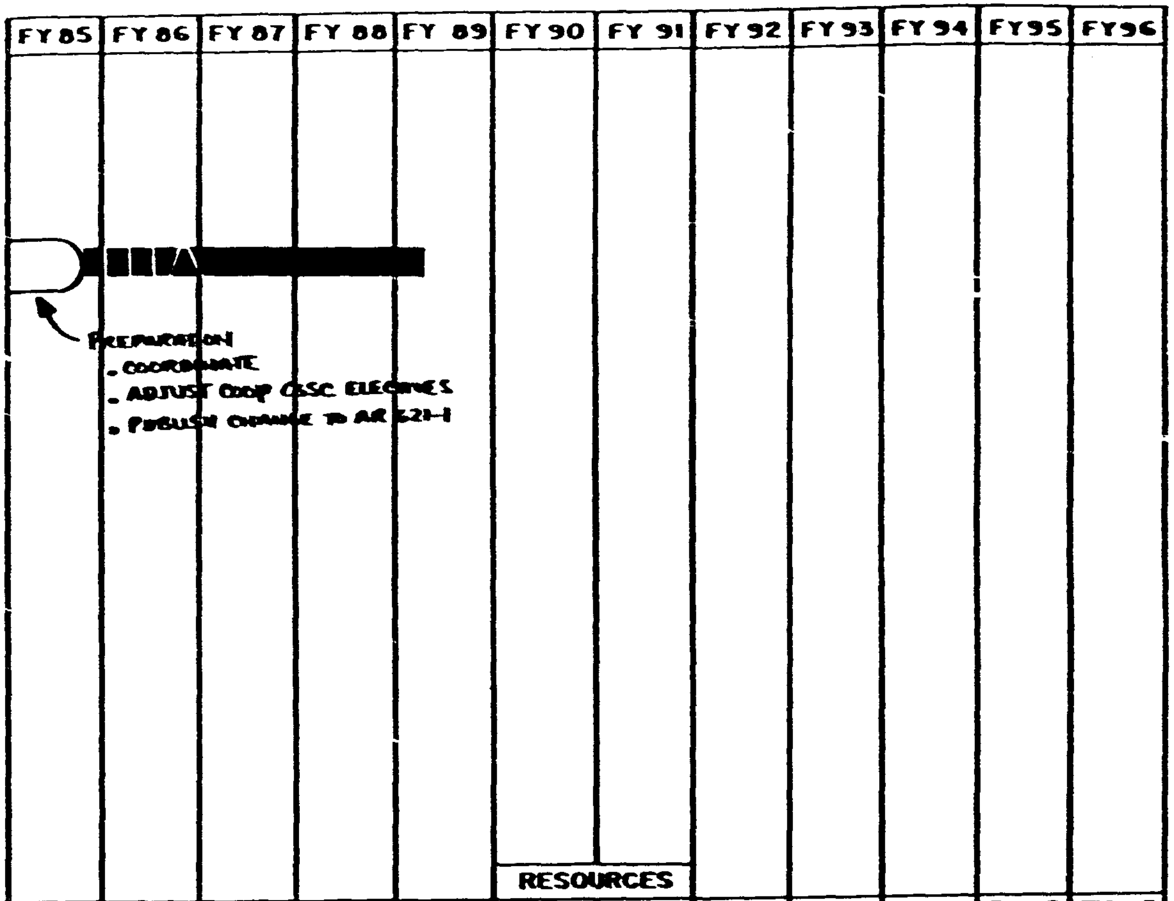
Appendix 10 to ANNEX 8

PHASING PLAN

ADVANCED CIVIL SCHOOLING

IS8
EXTEND CGSC AND LEDC COOPERATIVE DEGREE PROGRAMS TO A MAXIMUM OF ONE YEAR.



RESOURCES

	FY 85	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96
STUDENTS NR/MY		0/35	15/50	50/85	50/85	50/85	50/85	50/85	50/85	50/85	50/85	50/85
STAFF AND FACULTY-MIL/CIV												
TDA CHANGE-$ MILLIONS												

Author: LTC Magnusson
Team Chief: COL Isaac

Annex T

Impact on Officers and Their Families

1. PURPOSE. To discuss the impact of PDOS recommendations on the individual officer and the family.

2. DISCUSSION.

a. Background. Any requirement placed on a married officer affects the family in some way. PDOS recognized that during the course of the study the impact of a policy on an officer's family had to be considered. In addition, the aggregation of policies and the resulting impact had to be analyzed since a system approach was used. It also has to be recognized that when an officer chooses a career in the military, he accepts the inherent differences from a civilian profession. One difference is twenty-four hour a day availability to support the Army mission. An officer, by virtue of being in uniform, can expect to have requirements placed on him such as temporary duty, additional duty hours beyond "normal" hours and off duty self-development.

b. Goal. One PDOS goal was to develop policies that ultimately would reduce the time officers would be away from their families. This can be accomplished by defining the proficiencies required of an officer during each development period and by providing the needed tools to maximize the efficiency of time spent on professional development.

c. Results of Analysis.

(1) In the analysis, impact was assessed in both the near term (5-7 years) and long term. Judgments were made as to whether there would be an increase, decrease, or no change in impact when compared to the environment today without implementation of PDOS recommendations.

(2) In the near term, the factors that will cause a decrease in the impact on the officer and family include schooling which precedes assignment, mentor guidance and assessment feedback, and command climate emphasizing professional development. The Officer Advanced Course, Combined Arms and Services Staff School Course, Command and General Staff Officer Course, functional area courses, and skill training will be completed prior to assignment to positions requiring the frame of reference, knowledge, or skills provided by the course. Mentors will provide guidance and assessment feedback and will direct the officer to concentrate on the areas of weakness. With the additional requirements for self-development, the officer should be afforded additional time "on-duty" to conduct self-development.

(3) Factors that may absorb some additional time are increased use of non-resident courses, and the requirement to stay ahead of and mentor subordinates. There will be an increase in the use of non-resident courses to prepare officers for resident courses and for those who are not selected for attendance at resident courses. The core requirements will be met by some officers in the non-resident mode. As subordinates become "smarter," superior officers will need to keep pace with subordinates to properly mentor them.

(4) In the long term, decreases in impact will result from improved use of education and training technologies such as Computer Communications-Based Instruction to increase the ratio of knowledge and skills gained to time spent. Also, improved training tools such as computer wargames and simulations will be available to units to increase efficiency of training time.

(5) Table T-1, Near and Long Term Time Impact of PDOS Policies on Officer and Family, summarizes the results of the subjective analysis. There was no attempt to measure the magnitude of change. Coordination was made with ODCSPER to obtain their views on the impact of PDOS policies on the family. The aggregate long and short term impacts on the family are shown with those of the individual as the two are generally consistent. The reason for specific changes is provided in the notes with the table.

Near and Long Term Time Impact of PDOS Policies on Officer and Family

	SCHOOL UNIT/ORG		SELF/FAMILY			
DP	NEAR TERM	LONG TERM	NEAR TERM	LONG TERM	NEAR TERM	LONG TERM
0	NC	NC	N/A	N/A	(5) D***	
1	NC	D*	NC	D**	(5) D	D***
2	(1) I	D*	NC	D**	(6) D/I	D***
3	(2) D/I	D*	NC	D**	(7) I	D***
4	NC	D*	NC	D**	(8) I	D***
5	(3) I	I	NC	NC	(8) I	D***
6	(4) I	I	NC	NC	(8) I	D***

I - Increase D - Decrease NC - No Change

NEAR TERM

(1) Increase because of entry level training in functional areas and skills.

(2) Increase because of number of officers enrolled in nonresident CGSOC and the two week resident phase. Decrease due to the length of time some officers spend at resident CGSOC will be reduced for some officers.

(3) Increase due to increase length and content of GO orientation program.

(4) Increase due to establishment of senior GO seminars and development program.

(5) Decrease results from better defined and stated requirements.

(6) Same as (5) and increase in ACS goals will increase the number of officers involved in night classes to obtain a masters degree.

(7) Increase time required due to involvement in off duty studies (CGSC and ACS). Indirect increase from mentor role in having to sometimes perform duties in an off duty environment.

(8) Mentoring is key factor in increase. Also, as use of technology increases, as well as scope of responsibility, senior officers will be required to work "smarter" to prepare themselves for a job.

LONG TERM

* Functional courses to impart/update factual information are shorter given that all officers have acquired contextual foundation in school at start of development period and are able to gain knowledge updated remotely via electronic media.

** By learning in school the use of technology to enhance operational missions, the unit will benefit in multiple ways.

*** Individual will have more responsibility for professional development but "smart" courseware will be available to help the officer gain the required knowledge and decision making expertise more efficiently.

Table T-1 Near and Long Term Time Impact of PDOS Policies on Officer and Family.

3. Recommendations. None

4. CSA Remarks. None

Author: LTC Russell
Team Chief: COL Dunn

Annex U

Implications for Women Officers

1. PURPOSE. To describe PDOS professional development implications for women officers.

2. DISCUSSION.

a. Background.

(1) All officers must know the critical elements of professional development for their respective branch and/or functional area if they expect to remain competitive with their peers. PDOS designed an Officer Professional Development System (OPDS) which stresses long-term coherent development to establish foundations in values distinctive to the profession of arms and sustain current readiness. The system identifies major transition points and development periods in an officer's career and describes what the officer should BE-KNOW-DO during that period.

(2) All officers must be knowledgeable in their branch and/or functional area. To accomplish this they must be appropriately trained and given the assignments necessary to develop professional competence and expertise in their chosen field(s). Every officer is expected to possess a "common core" of knowledge. In addition, each branch and functional area will also have a "common core" of information associated with it. Women officers will be expected to posses the same knowledge and skills as the men officers in the same branch and/or functional area. They must be given the same schooling and assignment opportunities as the men if they are to be competitive. If Army policy precludes this, then serious thought must be given to either identifying alternate, but competitive, career patterns for women officers, or not assigning them to those fields where policy restrictions do not allow them to be competitive.

b. Review of Findings. All PDOS major thrusts and policies were reviewed to determine their implications for women officers. There is nothing inherent in PDOS that operates to the disadvantage of women officers.

3. **Recommendations.**

a. All proponents continue their review of career patterns for officers. Any branches or functional areas which do not allow men and women to have the same career patterns must be identified and action taken to develop viable alternatives for women. These alternatives should take the form of formal career patterns and should be published as part of the PDOS-recommended professional development roadmaps. Sequential tracking should be considered as a possible solution to "dead-ended" career paths, if appropriate training can be provided.

b. ODCSPER review/monitor, over a ten year period, the assignments of two year groups of officers to determine if the areas which have different assignment patterns have competitive patterns for both men and women, e.g. school selection and staff and command assignments should be considered. Year groups should be carefully chosen and the periods monitored should begin after 1978 when the Women's Army Corps was disestablished.

c. ODCSPER continue to review the Direct Combat Probability Coding (DCPC) to determine the following:

(1) To what degree does the DCPC policy preclude either men or women from having viable career patterns?

(2) In light of current tactical doctrine, should female assignments be made by functional area instead of geographic location?

d. ODCSPER develop a marketing plan which clearly identifies women's roles in relation to "Warrior Spirit" and monitor implementation of this fundamental principle to ensure that it is not misinterpreted. Current forms of conflict show that there are no clearly excepted areas of violence. Warriors are just as necessary in gathering a group of workers, staff members and service troops to repulse an attack on a warehouse, testing facility, or logistical center by enemy special operations forces as they are in leading mechanized forces in general war; or in adding fire from their own personal weapons to those of guards trying to stop an explosive-laden vehicle from crashing into the lobby of a major administrative or development agency headquarters. All officers must have an acute awareness of and be prepared to immediately preempt or react to violence at any level. Some officers may never be called upon to do so, but all officers must be prepared. A warrior accepts the responsibility of being entrusted with the protection of the Nation and its people; is prepared physically and psychologically to personally engage in and lead troops to fight and support in combat; is skilled in the use of weapons, organizations and tactics; is able to inspire confidence and an eagerness to be part of a team; has the intellectual capability to assess a situation, determine what is required, consider the means available, use innovation and boldness to quickly decide a course of action; and has the initiative to take rapid and decisive action to accomplish the mission. All these "warrior spirit" characteristics apply equally to men and women Army officers.

e. Army Research Institute (ARI) continue to analyze PDOS survey data to assess differences in perceptions of male and female officers (control for grade and branch).

4. CSA Remarks. General Wickham asked what the impact of "Warrior Spirit" was on women. "Warrior Spirit", as defined above, should not adversely affect women.

Appendices
1 Glossary
2 Bibliography
3 Action Plan
4 Phasing Plan

Author: LTC Russell
Team Chief: COL Dunn

Appendix 1 To Annex U

Glossary

Section 1. PURPOSE. To define terms which are new, unique or critical to this study.

DACOWITS: Defense Advisory Committee On Women In The Services. Established in 1951 by Secretary of Defense George C. Marshall under the leadership of Ms. Anna Rosenberg Hoffman. The Committee was formed to assist and advise the Secretary of Defense on policies and matters relating to women in the Military Services.

DIRECT COMBAT: Engaging an enemy with individual or crew-served weapons while being exposed to direct enemy fire, a high probability of direct physical contact with the enemy's personnel, and a substantial risk of capture. Direct combat takes place while closing with the enemy by fire, maneuver, or shock effect in order to destroy or capture him, or while repelling his assault by fire, close combat or counterattack.

DIRECT COMBAT PROBABILITY CODING: The classification of each officer, warrant officer, and enlisted job in the Army according to the probability of participating in direct combat. Seven codes are used to classify jobs, with a code of 1 representing high combat probability and a code of 7 representing no direct combat probability.

Author: LTC Russell
Team Chief: COL Dunn

Appendix 2 To Annex U

Bibliography

US Army, ODCSPER. Women In The Army Policy Review. Washington: HQDA, ODCSPER, 1982.

Department of Defense, Defense Advisory Committee on Women in the Services (DACOWITS). Meeting. The 1984 Fall Meeting: Recommendations, Requests for Information, and Continuing Concerns. Washington: DACOWITS, 1984.

Department of Defense, Defense Advisory Committee on Women in the Services (DACOWITS). Meeting. DACOWITS Spring Meeting: 30 April to 3 May 1984. Washington: DACOWITS, 1984.

Department of Defense, OASD (MI&L/MP&FM/O&EPM). Military Women in the Department of Defense, Vol II. Washington: Government Printing Office, 1984.

Appendix 3 to ANNEX U
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
R100 All proponents continue their review of career patterns for officers. Any branches or functional areas which do not allow men and women to have the same career patterns must be identified and action taken to develop viable alternatives for women.	o Identify areas requiring separate career patterns for men and women.	All Proponents	15 Mar 85	
	o Develop alternate career patterns for women officers.	All Proponents	4Q FY86	
	o Publish all career patterns as part of PDOS road maps.	ODCSPER	1Q FY87	
R200 ODCSPER review/monitor over a ten year period the assignments of officers to determine if the areas which have different assignment patterns have competitive patterns for both men and women, e.g., school selection and staff and command assignments should be considered. Year groups should be carefully chosen and the periods monitored should begin after 1978 when the Women's Army Corps was disestablished.	o Select year groups.	ODCSPER	4Q FY85	
	o Develop methodology.	ODCSPER	4Q FY85	
	o Conduct review.	ODCSPER	4Q FY95	
	o Document results.	ODCSPER	1Q FY96	
	o Publish findings.	ODCSPER	1Q FY96	

NOTES:

Appendix 3 to ANNEX U
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
R300 DCSPER continue to review the direct combat probability coding (DCPC) to determine the following: 1. To what degree does the DCPC policy precludes either men or women from having viable career patterns? 2. In light of current tactical doctrine, should female assignments be made by functional area instead of geographic locations?	o Complete review.	ODCSPER	Mar 85	
	o Analyze data.	ODCSPER	3Q FY85	
	o Publish findings.	ODCSPER	4Q FY85	
R400 DCSPER develop a marketing plan which clearly identifies women's roles in relation to "Warrior Spirit" Monitor implementation of this fundamental principle to ensure that it is not misinterpreted.	o Study "Warrior Spirit" concept and further define the roles of women officers as warriors.	ODCSPER	2Q FY85	
	o Develop a marketing plan for women worriors as part of the PDOS marketing plan.	ODCSPER	3Q FY85	
	o Implement plan and monitor results.	ODCSPER	4Q FY85	
	o Adjust as necessary.			

NOTES:

Appendix 3 to ANNEX U
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
R500 Army Research Institute (ARI) continue to analyze PDOS survey data to assess difference in perceptions between male and female officers (control for grade and branch).	o Obtain computer run of PDOS survey data sorted by sex, grade, branch.	ARI	2Q FY85	
	o Analyze data.	ARI	3Q FY85	
	o Publish results.	ARI	4Q FY85	

NOTES:

Appendix 4 to ANNEX U
Phasing Plan

R100 DEVELOP ALTERNATIVE CAREER PATTERNS FOR WOMEN OFFICERS.

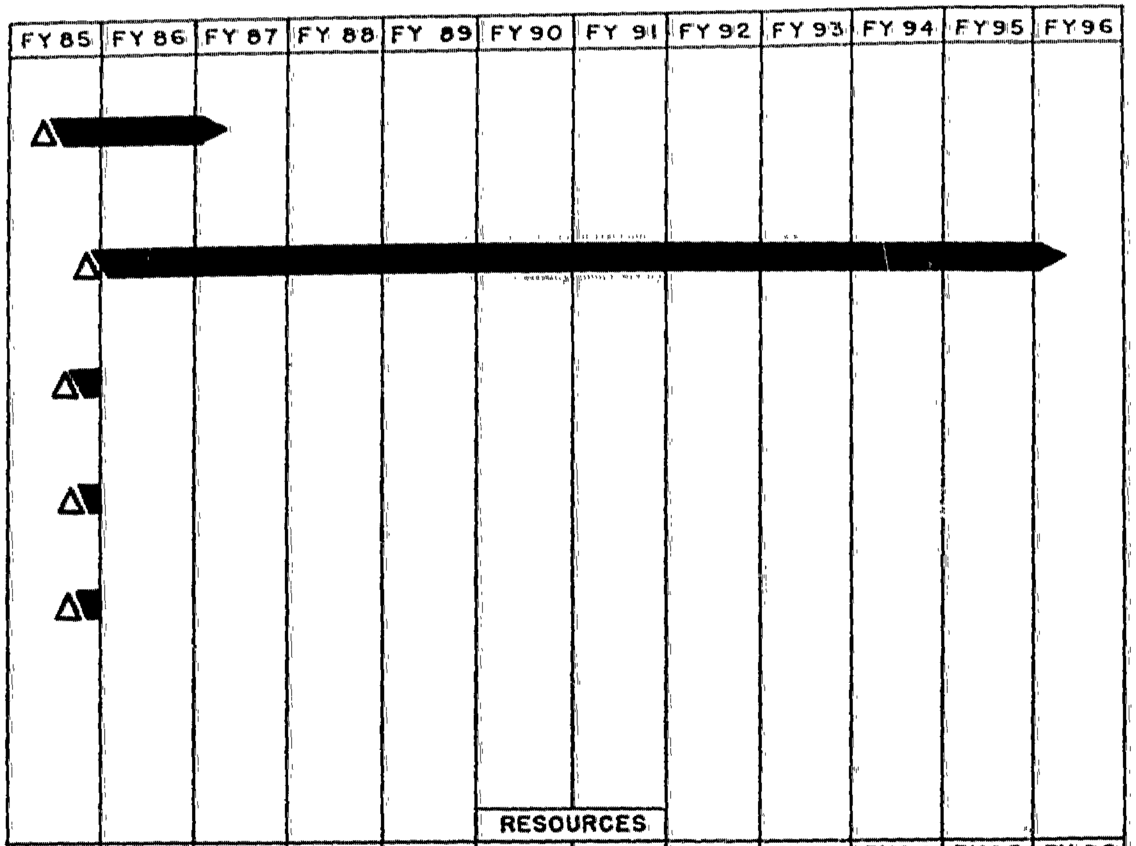
R200 MONITOR OFFICER ASSIGNMENTS AND IDENTIFY AREAS WITH DIFFERENT ASSIGNMENT PATTERNS FOR WOMEN.

R300 REVIEW DCPC POLICY TO DETERMINE:

1. DEGREE TO WHICH THE POLICY PRECLUDES EITHER MEN OR WOMEN FROM HAVING VIABLE CAREER PATTERNS.
2. IF WOMEN OFFICER ASSIGNMENTS SHOULD BE MADE BY FUNCTIONAL AREA INSTEAD OF GEOGRAPHICAL LOCATION.

R400 DEVELOP MARKETING PLAN FOR WARRIOR SPIRIT FOR WOMEN OFFICERS.

R500 ANALYZE PDOS SURVEY DATA TO ASSESS DIFFERENCES IN PERCEPTIONS BETWEEN MALE AND FEMALE OFFICERS.



RESOURCES

FY 85	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY93	FY94	FY95	FY 96
				STUDENTS NR/MY							
				STAFF AND FACULTY-MIL/CIV							
6/1	4/0	4/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0
				TDA CHANGE-$ MILLIONS							

uthor: CPT Combs
Team Chief: LTC Kempf

Annex V

MACOM Commander Comments

1. PURPOSE. To provide comments made by MACOM commanders concerning PDOS findings and recommendations.

2. DISCUSSION. Subsequent to the CSA IPR, given 5 November 1984, PDOS teams briefed the MACOM Commanders on PDOS findings, emerging data and proposed recommendations. Appendix 1 contains a record of their comments.

Appendix
1 MACOM Commanders Comments.

Appendix 1 to Annex V

MACOM Commanders Comments to PDOS Recommendations

1. USAREUR—GENERAL OTIS

a. General Otis wanted to ensure we were careful in our definition of "warrior spirit." His concern is that, without a clear, carefully thought out, widely disseminated definition, warrior spirit could be perceived as elitist, at the expense of combat support and combat service support branches. He was in full agreement with "warrior spirit" as explained and elaborated in the briefing.

b. We need to relook "no thought of personal gain." We desire aggressive, ambitious, achieving officers in the Army. What we should say is, "no thought of 'unfair' personal gain."

c. When PDOS emphasizes a broad, general education base for the majority of our officers, realize that this is a shift from the technically orientated educational philosophy in the recent past. General Otis agrees that, for a select number of officers (engineers, etc.), the hard sciences are appropriate; however, the broad-based core education should be our emphasis.

d. General Otis reminded us that we need to ensure any system we develop has the capability for (rapid) expansion. He gave the example of the decision to go into RVN with an expanded force without calling up the Reserves. Because of that decision, OCS went, in 90 days, from training and turning out 1000-1200 officers per year to 10,000. We need to have that flexibility in whatever system we recommend.

e. In our attempt to stress technical proficiency, we need to ensure that we do not go overboard in what we require of our mid to senior leaders. General Otis used the example of a lieutenant tank commander. He has to be as proficient as any man in his platoon in the fighting of his tank, because he is primarily a fighter. A captain company commander has to be proficient, but his primary concern is to fight the battle with his platoons. Likewise, a battalion commander has to orchestrate the battle and logistics for his units. General Otis concluded by relating that he met a Russian tank division commander who said he fired better than any other tank commander in his division. The Russian tank commander then asked General Otis what he thought of that. General Otis replied, "I'd fire a whole division's worth of tank commanders if I were you." All this is by way of saying that, while competency begets confidence, we need to make sure we are not placing unrealistic goals or priorities on the technical competency of our mid to senior level leaders. Their nature of work is different.

f. General Otis asked us to look at the consequences of preparing all officers for command. First, even in the event of full mobilization, all officers would not be battalion commanders. Second, in the event of attrition in war (KIA, WIA, etc.), the replacement battalion commander would, in all likelihood, be the major (executive officer), not a lieutenant colonel from some pool of "trained battalion commanders" in the rear. Finally, the Army set up the "if you don't get selected for battalion command, you're a failure" syndrome. We train all to be battalion commanders and yet provide such a small number the opportunity to do so.

g. Instructors as mentors. General Otis said the ultimate worth of a good (great) instructor is his ability to:

(1) be the subject expert in his field and

(2) have the ability or talent to teach that subject to others.

If an instructor can do the above, does he really need to be a mentor and/or have promotion potential? A lieutenant teaching OAC can be effective if he can do the above, but he will never be a mentor to those captains he teaches. However, he can be a role model in the sense he has the technical and/or tactical mastery of an area and students will attempt to emulate that subject mastery.

h. We need to look at the ratio between our "fighters" and "supporters." Depending on where you get the numbers and who you put in each category, only about 30 percent of our officers are "fighters." If we are operating with DOPMA fixed end-strength restrictions, why do we have branches or major subsets within branches whose peacetime functions are little or no different than their wartime function, i.e., Finance Corps, Adjutant General Corps, officers at fixed site signal installations, etc.? As such, these functions could be civilianized and the officer spaces gained could be redistributed accordingly.

i. General Otis asked that we look into who goes to CGSC/SSC and why. We need to carefully select those officers who are going to have an impact on the operational aspects of war, not merely be participants in it, i.e., JAGC, ANC, etc. Can we afford to send one or two nurses to CGSC/SSC each year at the expense of someone else? He added that he was shocked to learn that the Combined Arms Center sent letters to all ADSPEC 54's (Operations and Force Development) stating that if they had not been to CGSC (i.e. attended AFSC), they were not considered qualified as 54's. How could we allow this to happen and not involve the senior Army leadership?

2. FORSCOM—GENERAL SENNEWALD

a. General Sennewald and his staff were all in support of warrior spirit, balanced cells of quality, and competency testing.

b. General Sennewald said that self-development and commitment should be ahead of "mentor" in our strategic goals. He then went on to say that being a mentor should be included as a part of leadership/responsibility of the officer corps.

c. General Sennewald felt we needed to be practical when it came to CAS3. He was up front that he did not support CAS3. He felt that it took away the chance for repetitive command tours and/or more time away from the field. If possible, he felt two commands would be better that one command and CAS3. He held that CAS3 argues against the warrior spirit.

d. General Sennewald and LTG Jenes asked us to be cautious about even making a goal of all captains attending OAC prior to taking command (goal April 1985). First, "goals" have a nasty habit of becoming policy and/or regulatory in the blink on an eye. Second, such a goal would limit the prerogative of the commander in special cases, i.e., OCS, senior lieutenant or second tour captain who has not attended OAC. Finally, a former company commander brings a different perspective to his OAC, which adds to the interaction among his peers.

e. Somewhere in our system we need to instill the idea of "shared authority." By that, General Sennewald meant that, above a certain level, commanders cannot directly influence the action, but must work through others to control units.

f. LTG Jenes said that when he is through with schools (Airborne, Ranger, OBC, Flight, etc.) a lieutenant spends far too little time applying his newly acquired skills. We ought to look for more time as a lieutenant.

g. General Sennewald suggested we give the briefing to Martin van Creveld (author Fighting Power).

h. His concluding remarks were that this was the "best and most comprehensive briefing on a complex subject, and that we should be very proud of the product...if we can't afford this, we are in trouble."

3. KOREA—GENERAL LIVSEY

a. General Livsey suggested that the DA selection process for battalion command be changed to allow division commanders to select their future battalion commanders. He said that our desire for "fairness" has screwed up the system.

b. We need to send some of our stronger officers to the schoolhouse to up the credibility issue of our instructors. General Livsey said that he, as a field commander, would be willing to "pay the price" to get quality back into the schoolhouse.

c. General Livsey said we need to look hard at whatever self-development programs we come up with for our officers. Company commanders have no time do anything but command their company. Any requirement for self-development needs to take that into account.

d. LTG Menetrey said we are missing a key point if we don't ensure that our officers have "fun" in their profession.

e. General Livsey initially had concerns about our proposal to select Captains for promotions to major and CSC at the same board (some to resident, the remainder to non-resident). Toward the end of the briefing he indicated that it might be the best answer.

f. General Livsey is of the belief that to fully understand and integrate the operational aspects of war, a corps commander must have been a division commander, and a theater commander must have been a corps commander, etc.

g. General Livsey agreed that our high tech society is increasing our capabilities, but isn't simplifying our procedures.

h. Our service schools send out a plethora of training aids, field circulars, field manuals, etc., and some of these are, quite frankly, shoddy in content. We should impress upon the schools that we "need to do a few things well."

i. General Livsey's final comments were to caution us to: "Don't fix things that aren't broken, and, before we brief the officer corps at large, we need to 'simple it down'."

4. WESTCOM—LTG LEE

a. LTG Lee was concerned with our use of "mentor." He felt that "mentoring" might be a trendy word. It clearly should be a subset of leadership. Leadership should get "top billing" mentoring may not be something to be "carved in stone" in the same sense leadership is.

b. LTG Lee does not subscribe to "balanced cells of quality," for it is to him, a prescription for mediocrity. He felt the schools deserved a better than average officer.

c. LTG Lee made the point that "intellect" better portrayed our ideas than "thought process."

d. As LTG Menetrey, LTG Lee thought we should include in our philosophy some connotation that being an officer, along with all we expect in the sense of selfless service, etc., should be the idea of having fun and leisure in our profession.

e. As General Otis, LTG Lee felt the requirement for technical proficiency should be narrowed as we rise in rank. Do we really want every colonel in the Army proficient in the operation, employment, etc., of crew served weapons? Do not think that is what we want, so we should word it better or delete altogether.

f. LTG Lee concluded that this was a "brilliant study... and we need to sustain it."

5. TRADOC—GENERAL RICHARDSON

a. General Richardson was concerned with the acceleration of the implementation of MQS III to the end of FY 86. The CSA has not yet approved Army-wide implementation of MQS II. Upon arrival, lead time for manual publication will be 18 months. We anticipate that MQS II will be fully implemented by the end of 3d Qtr FY 86. The pilot of MQS III does not begin until Jan 85 and will not be completed until early FY 86. Allowing time for pilot evaluation, CSA approval, and manual publication, a realistic date for MQS III fielding is 4th Quarter FY 87. We cannot do it right much earlier than that.

b. Reference the design and implementation of an RC battalion/brigade level staff development course, General Richardson felt that implementing such a course for RC officers in lieu of attending the resident or USAR school version of CAS3 implies that the course would be primarily correspondence. This would provide the least learning potential and would degrade the CAS3 staff group instructional method. In addition, availability of a correspondence option would reduce the number officers who might otherwise attend the USAR school mode. He was opposed to to any version of CAS3 which would be primarily of a correspondence mode.

c. Reference the regulation change to require the completion of CAS3 prior to making RC major, he felt that requiring such by all RC officers would further erode the Reserve Component officer strength. With a 60 percent passover rate to major now because of non-completion of OAC, establishment of another required professional development course will only aggravate the situation. He added, that when an AC officer attends a professional development course, he can devote his full time to it. An RC officer must carefully balance his civilian employment, military unit, professional development requirements and family considerations at the same time. CAS3 is not required for AC officers and adding another required professional development course for RC officers will exacerbate an already difficult situation. The PDOS policy was ultimately changed to require completion of a staff development course or CAS3, any mode, within three years after promotion to CPT.

d. General Richardson felt that making Ranger, Airborne, and Air Assault courses available to all officers who volunteer and qualify, considering the Special Operating Force and Light Infantry Division initiatives, would severely strain our facilities that teach those courses. He did not believe that it would be possible to offer these courses to all officers. He recommended making Ranger, Airborne, or Air Assault training mandatory for all RA officers.

e. General Richardson felt that providing familiarization firing on foreign weapons (e.g., Soviet, Czech, British, etc.) at each service school for all students, while an attractive objective, could not be accomplished. Availability of foreign weapons, and especially ammunition, is not sufficient quantity Further, limited time and resources available for resident instruction, particularly field training, demands that we place first priority on qualification with US weapons and tactics. He felt that this policy should be scaled down or eliminated.

f. General Richardson did not agree with the creation of a limited number of permanent senior mentor faculty positions within the TRADOC service schools. He stated that officers in these positions would inevitably lose the close contact with the Army in the field that is essential to being a good military instructor or mentor. Requirements for faculty continuity can be met by civilian faculty.

g. With respect to the creation of a professional development notebook, General Richardson felt it is not clear how, or if, this proposal is related to MQS or to what extent it may be redundant. However, he felt it highlighted the larger issue of responsibility for professional development. Officer professional development is a training and education function and, as such, is the responsibility of the Army's G-3, DA DCSOPS, acting through HQ TRADOC and the branch proponents. To the extent that assignments are related to the professional development process, the personnel community (ODCSPER, MILPERCEN) should interface through the proponents, who are responsible for identifying appropriate assignment patterns for their branches. PDOS should clearly delineate professional development relationships and recommend overall responsibility be given to ODCSOPS.

h. General Richardson felt that TRADOC should review officer and enlisted training publications for standardization of tasks, format tasks and content, but also felt that we could not have identical formats for officer and enlisted publications. The Soldiers Manual of Common Tasks is written for supervisors and provides detailed instructions for setting up and conducting common task testing. MQS manuals are written for the officer himself, and since they cover a much larger number of tasks than enlisted manuals, are written in less detail. TRADOC has considered using identical formats for these publications, and after considerable study, has decided that different formats are required.

i. General Richardson expressed a concern with the requirement for TRADOC to develop a MQS IV and MQS V (field grade) in that TRADOC has significant difficulty in quantifying officer tasks for the lieutenant and captain level. Developing MQS for majors and lieutenant colonels will be much more difficult since the range of duties is broader and the skills are "softer." Before we expend the resources required to develop MQS IV and V, he believed that we should implement MQS II and III and evaluate the results.

j. That TRADOC designate a MQS "proponent," General Richardson felt that the responsibility is already delineated and does not need to be further specified. The Deputy Chief of Staff for Training (DCST) is responsible for establishing MQS policy and plans and supervising development and implementation. The proponents are responsible for developing MQS manuals and Army Training Support Center (ATSC) is responsible for manual publication. This system is well established and identical to the system used for enlisted manuals. No further action is required.

k. General Richardson stated that to create a separate office, headed by a BG (under TRADOC) with the aim of accelerating introduction of computer communication base instruction (CCBI) into military schools (initially), then to units/organizations and ultimately for use by individual officers was not necessary. He continued to state that the Army has much higher priorities for general officer positions.

6. AMC—GENERAL THOMPSON

a. General Thompson was impressed that we used mentoring as a basis for our philosophy. He added that mentoring should also imply that the mentor should be able to exert some influence in a career, not nepotism, but assist in career decisions (i.e., assignments).

b. General Thompson felt we must sort out the branch qualification issue. The first step is force the branch chiefs to define branch qualification. Then we need to coordinate with the other branches, and finally, to see what the OPMS structure imposes on each branch qualification standard. General Thompson said that this issue has to be pulled together at a level higher than the two-star branch chiefs.

c. Strategic Goals:

(1) In Strategic Goal 4, (Focus, long-term) General Thompson felt we should say, "..., expertise in the art and science of and support of war."

(2) In PDOS Strategic Goal 5, Scope of Development, General Thompson said "Army in the field" gives the perception that it excludes MACOMs, AMC, and the wholesale side of the Army. He would prefer it to be "...to meet the requirements of the Army, with emphasis on the Army in the field."

d. General Thompson concurred with our definition of Warrior Spirit, but cautioned us that we need to carefully market, not only Warrior Spirit, but our whole study. This is necessary to ensure that the CSS side of the Army feels they are included in our definitions and are perceived as equal partners.

e. General Thompson said he supported CAS3, but worried that for the next few years the CAS3 graduate is going to be cognitively ahead of, not only his peers and majors, but possibly of his lieutenant colonel battalion commander. We also should look at former project managers, not solely former battalion commanders, for instructors at CAS3. Finally, he said we should export CAS3 to get every captain through the course as soon as possible.

f. Core war fighting skills being taught at CGSOC and SSC is absolutely a must. Everyone must have a core understanding of the operational level of warfighting. As an aside, General Thompson said in over 40 years of service, he has had two weeks of resident warfighting instruction (one week at Air Staff College and one week at the Armed Forces Staff College).

g. General Thompson questioned the need to reinforce values at every level of schooling. Values are set early. If anything, the mentor, not the school, should reinforce values.

h. General Thompson said that if refresher courses for officers in off-line assignments, i.e., recruiting etc, were to give "hands on" to new technology, etc, that would be fine. However, the professional officer should not have t o be "spoon fed" his branch update. Staying current in his branch is implied in being a professional officer.

i. General Thompson mentioned that General Clark has often said that we talk about leadership, but yet the first and last leader title in the officer corps is the platoon leader. After that, we talk of commanders, and that our schools are orientated towards teaching "commandership," not leadership.

j. General Thompson cautioned us to "not close the door" on our NG State OCS programs, by requiring a BA degree for commissioning. We need some flexibility with this policy. We need a commitment to communicative skills (oral and written) at all levels. People just don't read anymore, the point is that professional reading is important. The AERB program is poor and "cries for help." We should send some of our Training With Industry (TWI) folks to look at Federal Express to see how they do their job because they are the best at what they do. Assessment testing is necessary; however, we need to be careful in our application and use of such a test and its results. We need to ensure that we package and market our alternate CSC schools (ALMC, DSMC, etc.) carefully. We cannot afford a First Team—CGSOC/Leavenworth and Second Team (all others) syndrome to develop. Finally, he stated that general officer education should be limited. "By the time an officer makes general, he should know how to be a general."

k. General Thompson said we need to redefine success in terms other than promotion to general officer. Each year, AMC and the Army loses too many good lieutenant colonels because they feel they are not successful by the current preceived definition of success, i.e., promotion, selection for program manager, battalion/brigade command and selection for resident schooling. One solution: why do not we publish the alternate list for battalion/brigade command and/or SSC level schooling? The mere fact of seeing one's name on the list, albeit alternate list, could satisfy the officer's sense of success. We need a professional development "career road map" for the officer corps. This would allow for self-assessment for each officer as he progresses though the system. General Thompson feels there is a valid place in the Army and the officer corps for a limited service (limited duty) officer. Given some of our technical fields, an officer who knows he will "cap out" at major, could perform a valuable function for the Army, remaining in that narrow technical field.

l. General Thompson is concerned with the lack of officer feedback in his travels and/or briefings. He feels we have lost the feedback loop in our system.

m. MG Ross, Chief of Staff, AMC, was concerned that the traditional socialization of our officer corps (Dining-ins/outs, officers' call, etc.) is fading out of our system. We need to reinforce this socialization in our professional system. He also outlined a program instituted at AMC where lieutenants are rotated in their jobs after 18 months to give depth to their skills. Additionally, a pilot program was initiated to send lieutenants to Fort Dix for four weeks in the summer to serve as a platoon leader with basic training soldiers. The "Lieutenants Program" in AMC HQ has great potential.

7. CENTCOM—GENERAL KINGSTON

a. We need to do a lot more in the units with respect to teaching the art and science of war.

b. We need to change the definition of success within the officer corps. This may mean that some of our officer corps would retire as majors, but they are not necessarily failures.

c. General Kingston stressed the need to infuse the final PDOS product, especially the Philosophy and Goals, into the officer corps, particularly in the pre-commissioning arena. It is most important to get the professional development picture to the younger officers.

d. He said that, in his opinion, the jump from BG to MG is a bigger leap than from MG to LTG. The responsibilities are greatly increased for a MG however the job satisfaction is lower. In short, do not lump BG and MG together in a development period.

e. General Kingston said that to be a mentor, an officer has to have confidence in his abilities. He felt that officers in command for the first time may not have that confidence, because the fear of failure is just too great. We need to focus on the commander, do not leave it up to boards. Truly good ones should be given the opportunity for repetitive commands. He also said that we need to ensure that in marketing mentor, we are careful in defining it to the field. "Mentor" carries the connotation of godfather patronage.

8. CHIEF OF ENGINEERS — LTG HEIBERG

a. LTG Heiberg agreed that the concept of balanced cells of quality needs to be institutionalized throughout the Army.

b. LTG Heiberg saw the PDOS system as reinforcing the needs of Engineer Officers.

c. We need to continue the programs to rotate officers through duty positions during the same tour, for example rotating engineer officers from the Divisional Engineer Battalions to the post DEH.

d. He stressed that the Army needs to do a better job of identifying and supporting functional training needs of the TDA Army.

e. He cautioned us that PDOS needs to be careful of the promises it, or the institution, makes to the officer corps. We must think out our policies and keep the promises given. He cited the Engineer District Advisor in the Republic of Viet Nam, which was at one time a battalion command equivalent, but was changed to a non-command billet. The other example he cited was the CSA "Pull up your socks" letter by General Abrahams in 1972 in which OERs were to be deflated. Many officers received "honest OERs" but the inflation crept back in the system and those officers were hurt by future boards.

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Annex W

Control and Coordination

1. PURPOSE. To provide for a mechanism to overwatch, monitor, and coordinate the implementation of approved PDOS policies and enhance efforts to coordinate the professional development of officers.

2. DISCUSSION.

a. Need for Coordination. The 5 Nov 84 PDOS briefing to CSA identified as a system weakness that "... no one single individual is in charge of professional development" and "... many players in the system ... are not fitted together." These observations resulted from:

(1) The self-evident need to pin down responsibility for overwatch of professional development to ensure coherence of the system. There are many players who currently can and do take unilateral actions to further their aims and goals. Although these actions are well intended, they represent suboptimizations due to the limitations inherent in the relatively narrower perspective of these decision makers below HQDA level. In the aggregate, these actions amount to random perturbations, are not coherently coordinated, and do not constitute a "system."

(2) Survey results indicate the officer corps is confused as to who is responsible for professional development of officers.

(3) The potential exists for duplication of effort, or worse yet, gaps in education and training.

(4) Confusion and uncertainty on the Army Staff as to who is or who should be in charge of officer professional development. Action officers from ODCSPER and ODCSOPS both indicate that their agency has or should have the lead.

b. Roles. ODCSPER and ODCSOPS both have critical (and at times overlapping) roles in the development process:

(1) The 1978 Long Study recommended:

(a) Consolidate responsibility for all military training under ODCSOPS.

(b) Continue ODCSPER responsibility for manning the training base, professional development, career management, civil education, ... and precommissioning training.

(2) AR 10-5, Organization and Functions (1 Jan 81) assigns:

(a) ODCSOPS responsibility for unit and individual training policies, Program 8 (training) resourcing, and supervision and control over certain institutional schools.

(b) ODCSPER responsibility for military personnel management and associated functions and management systems (OPMS), pre-commissioning training, and leadership development.

(3) The 1984 Haldane Study noted that training responsibilities within current HQ DA regulations are unclear and fragmented, and recommended:

(a) ODCSPER have responsibility to conduct leadership training in consonance with ODCSOPS guidance.

(b) ODCSOPS be proponent for Learning Centers and transfer ACES from ODCSPER to ODCSOPS.

(c) ODCSOPS be reorganized to establish ADCSOPS for Training and Education.

(d) Day-to-day responsibilities preclude the full participation in training oversight by CSA/VCSA.

c. Findings.

(1) Necessary Steps. Retention of the current status quo in professional development on the Army Staff will detract from the PDOS aim to provide for an agency on the Army General Staff to function in a long-term overwatch capacity so as to monitor implementation of approved PDOS recommendations. Consequently, the following steps should be taken to enhance efforts to coordinate officer professional development:

(a) Create a fourth objective to the Leadership Goal entitled "Professional Development" so as to monitor professional development through the Performance Management Army process in consonance with DA Memo 5-10.

(b) Create a PDOS cell in ODCSOPS to coordinate implementation of approved PDOS education and training policies/programs.

(2) Leadership Goal. The supporting objectives of the Leadership Goal suggest a natural framework to centrally monitor professional development. The three existing objectives and a fourth proposed objective are as follows.

(a) Systems. Align the personnel system and the training system to support unit performance and the leader development process in units.

(b) Doctrine and Training. Leadership doctrinal training materials to provide for a leader development program which is comprehensive, sequential, progressive and integrates the school with the field.

(c) Climate. An environment in each Army unit that reinforces values and empowers leaders at all levels to seize the initiative and act innovatively and creatively; in short, to be "prudent risk-takers." The desired concept is much like the german "Auftragstaktic" nation which stressed acting as the situation required (see Annex R, App 1).

(d) Professional Development. The preparation of officers and noncommissioned officers to effectively lead the Army and efficiently manage its resources.

(3) PDOS Cell. A PDOS cell in ODCSOPS would effectively be able to coordinate implementation of approved PDOS recommendations (to include overwatch of CGSC-AWC cooperation). Placement of this cell in ODCSOPS is necessary because revised TRADOC policies and accompanying resource matters are central to many recommendations. Also, ODCSOPS currently manages training policy and resources.

3. Recommendations.

a. ODCSPER add a fourth objective to the Leadership Goal entitled, "Professional Development."

b. ODCSOPS create a long-term PDOS cell to coordinate approved PDOS education/training policies related to Army schools and individual/unit training (initially with a minimum of three field grade officers—directed military overstrength).

c. ODCSPER overwatch Professional Development under the Leadership Goal; coordinate approved education/training/development policies related to the management of officers and to other related studies(TWOS, ROTC and OPMS).

4. CSA Remarks. Approved in concept.

Appendices
1 Action Plan
2 Phasing Plan

Appendix 1 to ANNEX W
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
070 ODCSPER add a fourth objective to the Leadership Goal entitled "Professional Development. The preparation of officers and non-commissioned officers to effectively lead the Army and efficiently manage its resources."		ODCSPER (P) DAS	3Q FY85	
071 ODCSOPS create a long-term PDOS cell to coordinate approved PDOS education/training policies related to Army schools and individual/unit training (initially with a minimum of three field grade officers DMO)		ODCSOPS (P) DAS	2Q FY85	
072 ODCSPER overwatch Professional Development under the Leadership Goal; coordinate approved education/training/development policies related to the management of officers and to other related studies (e.g., TWOS, ROTC, and OPMS).		ODCSPER	2Q FY85 ongoing	

NOTES:

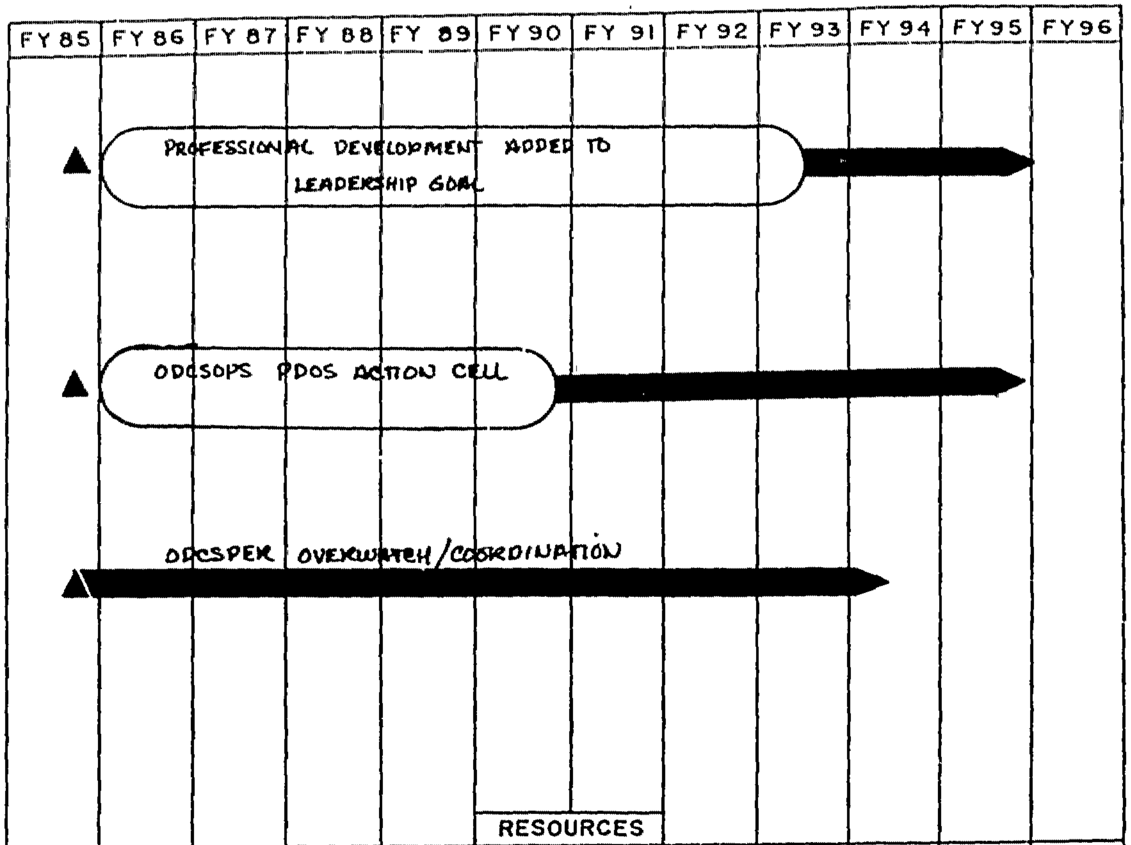
Appendix 2 to ANNEX W
Phasing Plan

CONTROL AND COORDINATION

070 ODCSPER ADD A FOURTH OBJECTIVE TO THE LEADERSHIP GOAL ENTITLED, "PROFESSIONAL DEVELOPMENT. THE PREPARATION OF OFFICERS AND NON-COMMISSIONED OFFICERS TO EFFECTIVELY LEAD THE ARMY AND EFFICIENTLY MANAGE ITS RESOURCES."

071 ODCSOPS CREATE A LONGTERM PDOS CELL TO COORDINATE APPROVED PDOS EDUCATION/TRAINING POLICIES RELATED TO ARMY'S SCHOOLS AND INDIVIDUAL UNIT TRAINING (INITIALLY WITH A MINIMUM OF THREE FIELD GRADE OFFICERS DMO).

072 ODCSPER OVERWATCH PROFESSIONAL DEVELOPMENT UNDER THE LEADERSHIP GOAL: COORDINATE APPROVED EDUCATION/TRAINING/DEVELOPMENT POLICIES RELATED TO THE MANAGEMENT OF OFFICERS AND TO OTHER RELATED STUDIES (E.G., TWOS, ROTC, AND OPMS).


FY 85
FY 86
FY 87
FY 88
FY 89
FY 90
FY 91
FY 92
FY 93
FY 94
FY 95
FY 96
PROFESSIONAL DEVELOPMENT ADDED TO LEADERSHIP GOAL
ODCSOPS PDOS ACTION CELL
ODCSPER OVERWATCH/COORDINATION

RESOURCES

	FY 85	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96
STUDENTS NR/MY												
STAFF AND FACULTY-MIL/CIV	3/1	3/1	3/1	3/1	3/1	3/1	3/1	3/1	3/1	3/1	3/1	3/1
TDA CHANGE-$ MILLIONS	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03

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Annex X

Creation of Balanced Cells of Quality Across the Army

1. PURPOSE. To create balanced cells of officer quality throughout the Army and to eliminate excepted units for quality distribution of officers.

2. DISCUSSION.

a. Think Piece on Quality Distribution.

(1) On 20 August 1984, a memorandum prepared by PDOS and entitled "A Think Piece on Quality Distribution" was sent to all serving general officers (Appendix 1) with a request for input on this issue that appears to be "prickly to handle but is of crucial importance in fulfilling Army needs."

(2) The basic thesis of the think piece is that the distribution policy of having excepted units for quality be eliminated, and that officers be assigned from captain through lieutenant colonel based upon their qualifications, with instructions to MILPERCEN to maintain the balance by promotion potential across all MACOMs and activities.

b. General Officer Responses. Responses from 205 generals was received as of 6 November 1984.

(1) A response table is provided at Appendix 2.

(2) Sixty-four percent of all general officers favor implementation of the recommended strategy without compromise. Of the remaining 36 percent:

(a) Twelve percent recommend some minimum number of excepted units, with equal distribution of the remainder across MACOMs and activities.

(b) Nine percent stated that some jobs/assignments are more important to the Army than others but do not take a position on quality distribution.

(c) Three percent nonconcur entirely.

(d) Thirteen percent take positions that can only be categorized as "other" (i.e., suggestions only made by one general officer).

(3) Sixty-four percent of lieutenant generals concur with the recommendation, and eight percent support minimizing excepted units with equal distribution of the remainder.

(4) Of the nine Generals responding, four fully support the recommended strategy; three support the compromise position of minimizing excepted units and distributing the remainder of officers equally by promotion potential across the MACOMs and activities, and one believes that "all should get each type of officer, but the distribution scheme could be weighted as appropriate."

c. Findings.

(1) Two out of three general officers who responded support the strategy to create equal cells of quality across the Army without compromise.

(2) There is three and four star support for this strategy.

(3) Of those general officers who do not support the entire proposal, at least one-third of these would support holding designated units to a minimum, while creating equal cells of quality across the remainder of the Army.

(4) Systemic advantages/disadvantages are discussed at Appendix 1.

3. Recommendations. ODCSPER distribute non-promotion risk officers throughout the Army so as to provide balanced cells of quality.

a. No Army activity will be designated to receive higher percentages of non-promotion risk officers than any other.

b. Eliminate excepted unit distribution.

c. Assign officers based upon their qualifications.

d. Maintain balance by promotion potential from captain through lieutenant colonel across all MACOM's and activities.

4. CSA Remarks. Minimize rather than eliminate excepted units for quality distribution; Army Studies Group provide recommendations—consider the needs of TRADOC.

Appendices

1 A Think Piece on Quality Distribution
2 Creatioin of Balanced Quality Cells
3 Action Plan

Appendix 1 to Annex X

Text of Memorandum Entitled "A Think Piece on Quality Distribution"

1. I have been concerned for some time about the way we distribute officers in the Army. We have what is known as excepted units for quality. What this means is that those units are assigned only to non-risk officers, i.e., officers who, in the opinion of MILPERCEN, will be promoted to the next higher grade. I believe that this policy has an overall detrimental effect upon the Army for many reasons. For example:

a. We do not recognize that all jobs are important to the accomplishment of the Army mission.

b. We do not have balanced cells of quality throughout the Army.

c. We encourage the officer corps to seek out jobs for personal career purposes, rather than sending the message that all jobs are important and that you should do whatever job is assigned to the best of your ability.

d. Each time a promotion or selection list is published we waste thousands of manhours writing cards and letters and making phone calls to MILPERCEN and the DA Staff concerning the results. The result of this is that the hose may be turned on a particular command or activity for a while to improve quality; as a result, other commands and activities suffer, except for excepted units. This has an adverse impact upon continuity and stability.

2. My idea is that we should assign officers, from captain through lieutenant colonel, upon their qualifications and that we should instruct MILPERCEN to maintain the balance by promotion potential across all MACOMs and activities within plus or minus two percent. For example, assuming we promote 70 percent of majors to lieutenant colonel each year, then each MACOM and activity in the Army should expect that 68 to 72 percent of their majors will be promoted and that 28 to 32 percent will not be promoted. MILPERCEN can do this. Obviously, it will take about three years to fully implement this due to normal rotation policies.

3. In my view, the only exception to this policy would be for command selectees.

4. Some will say that this proposal is unreasonable for many reasons:

a. We cannot afford to have but the very best assigned to the Army Staff. For example, programs at this level are too important to have anyone but the very best working on them. I am suggesting that 70 percent of the majors will be promoted and 30 percent will not, across the Army. What people forget is that these majors work for lieutenant colonels, who work for colonels, who work for generals. They also forget that a major who does not get promoted may be very competent and may be more competent in a certain area than his contemporary who does get promoted.

b. Some jobs are tougher than others and we should assign our very best people to these tough jobs. Some even assume and assert that every job on the DA Staff is like this. First, there is still latitude within that 70 percent of promotees to assign the very best to the toughest jobs. Second, I would suggest that there are some tough jobs at MACOM and installation level. What about our schools? When all majors or a significant percent of them do not get promoted due to our assignment policies, these jobs become even tougher.

c. Some will say that we cannot have anyone teaching or leading our cadets at West Point that will not be promoted. I disagree. It may be helpful for the cadets to understand the real world. Also, by assigning by qualification, I do not believe we would have a diminution in instruction.

5. If we don't take this recommended approach, it seems to me that we will not be able to get away from the "ticket punching" syndrome that everyone talks about. We will need to accept this fact and quit worrying about it.

6. If we don't take this recommended approach there are still some things we should do to lessen the impact. First, we should reduce the number of excepted units to the bare minimum. Second, we should insist that officers be distributed equitably by promotion potential throughout the remainder of the Army.

NOTE: "Excepted units for quality" is defined by MILPERCEN to mean "designated units." The intent is to maintain a balance of quality (not necessarily quantity) distribution of officers across the Army.

CHARLES W. BAGNAL
Lieutenant General, USA

Author: MAJ Meriwether
Team Chief: COL Dunn

Appendix 2 to Annex X

Creation of Balanced Quality Cells

205 general officers responded to a proposal to eliminate designated units for quality and distribute officers (03-05) so as to maintain the balance by promotion potential across all MACOMs and activities. Response categories are by grade (BG-GEN) and by type response (complete agreement, minimize excepted units but distribute the remainder to maintain promotion balance, some jobs are more important than others [but with no position taken regarding distribution], nonconcur, and other).

Response	*BG*	*MG*	*LTG*	*GEN*	*TOTAL*
Completely agree	54(61%)	57(69%)	16(64%)	4(50%)	131(64%)
Minimize Designated units*	13(15%)	6(7%)	2(8%)	3(38%)	24(12%)
Some jobs are more important**	6(7%)	8(10%)	4(16%)	0	18(9%)
Nonconcur	5(6%)	0	1(4%)	0	6(3%)
Other**	11(12%)	12(14%)	2(8%)	1(13%)	26(13%)
	89	83	25	8	205

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*But distribute the remainder to maintain promotion balance.

**No position taken on quality distribution

Appendix 3 to ANNEX X
Action Plan

RECOMMENDATION	SUPPORTING ACTION(S)	AGENCIES (P)-PRIMARY RESP.	REQUIRED COMPLETION	NOTES
F91. ODCSPER distribute non-promotion risk officers throughout the Army so as to provide balanced cells of quality. a. No Army activity will be designated to receive higher percentages of non-promotion risk officers than any other. b. Eliminate designated unit distribution. c. Assign officers based upon their qualifications. d. Maintain balance by promotion potential by Captain through Lieutenant Colonel across all MACOM's and activities.		ODCSPER	see note below	(1)

NOTES:
(1) CSA Remarks: Minimize rather than eliminate designated units for quality distribution. Army Studies Group will finalize recommendations.

Author: CPT Coggin
Team Chief: LTC Kempf

Annex Y

PDOS Computer-Based Teleconferencing Network

1. **PURPOSE.** To describe the use of the PDOS Computer-Based Teleconferencing Network (PDOSNET) in support of the Professional Development of Officers Study.

2. **DISCUSSION.**

a. The PDOSNET was established to provide a forum for substantive group discussion, input to decision making and the exchange of messages and information as it relates to the professional development of officers. The study group sought to involve as many participants as were willing to contribute to the analysis of how best to professionally develop Army officers.

b. Teleconferencing System.

(1) A computer-based teleconference provides a means in which group discussion, group decision making and exchange of messages and information is accomplished without having all members physically co-located or working on identical time schedules. This is done using a computer system which acts as the central clearing house for information processing. The computer system maintains both the group discussions and private messages for the participants at all times. An individual participant can enter the conference at any time by using a data terminal connected to the system by a commercial telephone call.

(2) The particular system used by the PDOS group is called CONFER. It was developed by Dr. Robert Parnes and is available through the US Army FORUM under contract with Advertel Communication Systems, Inc. The CONFER system operates on the Michigan Terminal System (MTS) at Wayne State University, Detroit, Michigan. The system is non-secure, and no classified material can be discussed or transmitted for security reasons.

(3) The US Army FORUM is a voluntary group of American soldiers and citizens who contribute useful and innovative insights, perspectives and approaches to complex issues facing our Army. The FORUM operates out of the Office of the Chief of Staff, Army. Currently, the FORUM has six hundred members world-wide operating on nineteen nets at all levels in all major commands (MACOMs).

c. Equipment. To use this system each participant must have access to a computer terminal connected to the central computer by telephone. A majority of participants use portable data terminals to access FORUMNET. The two most common terminals in use are the Silent 700 (Texas Instruments) and the Whisper Writer (3M). A smaller percentage of participants use micro computers or office word processors which are equiped with a communications capability. As a general rule, any equipment that uses ASCII communications protocal and functions at a baud rate of 300 or 1200 will be suitable for use.

d. Operating Protocol.

(1) The PDOSNET sought to be a product producing system. The desired environment was one which stimulated candid discussions of PDOS issues with an attitude of confident expectancy that working together, a quality product will emerge. In so doing, discussion of the issues sought to be focused at all times. Additionally, an effort was made to pursue suggestions to well formed conclusions and recommendations.

(2) In creating and maintaining this desired PDOSNET environment, the following rules of protocol applied:

-PDOSNET traffic was informal, unofficial and candid.

-responsible differing opinions were encouraged.

-participation was recognized as the only mode of contribution.

-a response to every item was requested: comment with concurrence or nonconcurrence.

-public communications were encouraged; messages were suggested for use when information was for only one or two participants.

-the role of the PDOSNET organizer was explained referencing two Advertel Communication Systems, Inc. publications: "The User's Guide to CONFER II" and "The Organizer's Guide to CONFER II."

-participants were to sign on the system to "read their mail" at least three times a week.

-recommendations for new PDOSNET participants were encouraged.

-substance, not form, was recognized as the key aspect of a successful PDOSNET Operation; spelling and grammatical errors would be tolerated.

e. Participants. The Study Director personally selected all general officer net participants. Others requesting net participation were considered on a case-by-case basis. Following a careful examination of their expertise and potential for contribution, access to PDOSNET was granted to selected applicants. Appendix 1 to this annex lists all PDOSNET participants.

f. Training.

(1) The PDOSNET Organizer received preparatory training for one week in two phases: initial indoctrination and self-study. The Army FORUM Organizer presented a detailed briefing on the FORUMNET followed by a discussion of desired PDOSNET characteristics which served as the initial indoctrination. The remainder of the week was devoted to self-study based on two key references: "The User's Guide to CONFER II" and "The Organizer's Guide to CONFERII."

(2) PDOSNET participants in several cases were familiar with the CONFER system thus requiring no further training. New CONFER users were provided the references mentioned above as well as easy to use summary sheets provided by the FORUMNET Organizer which provided cookbook instructions on performing basic-user functions. Participants were encouraged to contact the PDOSNET Organizer with problems and questions. In many cases previous CONFER users were on the installation with new PDOSNET users and provided assistance as required. The ideal training program for new CONFER users is to co-locate all users under the supervision of the net organizer for a two day training exercise focusing on hands-on training using the system. This was not practical for PDOSNET users.

g. Substantive Contributions.

(1) The capabilities of the CONFER system were rigorously employed in support of the study (especially in the early phases) as the following data indicates. The PDOSNET had 47 items on the system with 51 participants involved in discussions and comments during the course of the study. There were 1653 individual uses of the system which lasted 14,326 aggregate minutes. There were 266 messages sent, 2230 items displayed, 292 responses made, 3772 sets of responses seen during a total of 6865 "DO NEXT?" opportunities. Appendix 1 contains a list of PDOSNET participants.

(2) A major PDOSNET contribution to the study was the dialogue conducted on the PDOS Philosophy Statement, which is now called Fundamentals of Officer Professional and Leadership Development. The evaluation, insights and comments made by numerous participants were invaluable during the very difficult initial drafting and subsequent revision process of this document.

(3) The lengthy debate on the content, style and substance of the PDOS Strategic Goals made a significant contribution to the study. This subject received the most attention on the net. The process of operationalizating the guiding principals contained in the philosophy statement was a challenging endeavor which benefited from the thoughtful comments of nearly all net participants.

(4) The dialogue on the quality distribution issue provided, in part, the impetus to an Army-wide survey of all serving general officers by way of written correspondence. The debates on this subject was lively, substantive and highly opinionated.

(5) Much of the study's hard work was in the area of CAS3 and CGSC-level schooling. The items dealing with this subject provided very timely information and comment which assisted the analysis of various mid-level military schooling options.

(6) A key system-wide issue under study was the concept of the "warrior ethos." Some very lucid comments were made on this subject by several PDOSNET contributors as were some excellent suggestions for reference materials. The comments and suggestions made by participants in this area served as a primary source of data for the "warrior spirit" system-wide issue.

3. Recommendations.

a. A 1200 baud data terminal with cathode ray tube (CRT), word processing and full-screen editing capability is recommended for use by the net organizer for any high volume FORUM Sub-Net. The increased speed, efficiency and quality print capabilities drastically reduces the amount of file maintence time required by less capable systems.

b. Participants should be notified as early as possible about the equipment requirements for using the system. A limited number of Texas Instruments Silent 700s or 3M Whisper Writers should be obtained by the net organizer for temporary issue to key net participants who have no terminal capability.

c. Net Organizers should coordinate directly with the Study Director and the FORUMNET Organizer on the system design of their net. Some decision makers may wish to have access to their net limited to only a few selected members: some may wish to have all those expressing an interest in the subject under study on the system. Some may direct a rigid issue cycle for item display with response suspenses; others may wish to have an unrestricted open format for net dialogue.

d. Adequate time must be available to the net organizer and participants to become proficient in their responsibilities, especially the use of the equipment, before quality products can be expected from the system.

e. Documentation on the use and value of the system must be provided to the USA FORUM director to enable the system to justify continued operations and growth. The primary way to "sell" the value of the technology is through documented operational case studies.

4. CSA Remarks. None.

Appendix
1 List of Participants

Author: CPT Coggin
Team Chief: LTC Kempf

Appendix 1 to Annex Y

List of Participants

Jim Baker
Robert Bergquist
Peter Boylan
Jack Bradshaw
Rick Brown
Ed Burba
Tom Carney
John Crosby
Stretch Dunn
Maury Edmonds
Fred Elam
Robert Elton
Sam Endicott
Bob Forman
Lee Gragg
Ralph Hallada
Vald Heiberg
Billy Holland
Johnny Johnston
Sam Kem
Ward LeHardy
Aaron Lilley
Mike Malone
Mike McGee
John Moellering
John Myers
Roger Nye
Dave Palmer
Bob Parnes
Ross Pickus
Don Pihl
Bill Potts
Robert Riscassi
Don Rodgers
Mike Rodier
Vincent Russo
Crosbie Saint
Fred Sanborn
Dick Trefry
Walt Ulmer
Carl Vuono
Huba Wass De Czege
H. Norman Schwarzkopf
Ronald Watts
Steve Whitworth
Jack Woodmansee

Author: LTC Leonard
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Annex Z

OPMS Crosswalk

1. **PURPOSE.** To ensure continuity and preclude conflicts between PDOS and the Officer Personnel Management Study (OPMS).

2. **DISCUSSION.**

a. Background. The OPMS Study Group Final Report contained numerous recommendations within the broad categories of Force Structure, Management, Accessions and Separations, Education and Training, Distribution, Deployment, Professional Development and Selection, Proponency, Women in the Army, Warrant Officers, Special Branches, Army National Guard, Philosophy of Officer Corps, and Ethics.

b. The Education and Training recommendations were forwarded in their entirety to PDOS for consideration. Of the 21 recommendations made in this area, PDOS supported 15 while slightly modifying seven others (Appendix 1).

c. Additionally, PDOS recommended several modifications of OPMS recommendations in other areas. These are incorporated throughout the report and in the recommendations that were provided to the Chief of Staff.

3. **Recommendations.** As per Appendix 1 and incorporated in other areas of the PDOS Final Report.

4. **CSA Remarks.** None.

Appendix
1 PDOS Modifications of OPMS Recommendations

Author: LTC Leonard
Team Chief: COL Dunn

Appendix 1 to Annex Z

PDOS Modification of OPMS Recommended Policies on Officer Education and Training

OPMS	PDOS
1. Complete CAS3 Phase 1 in OAC	1. CAS3 Phase 1 will be OAC follow-on module for OCONUS/Bde staff; "on own" in 18 mos for all others.
2. Delay OAC to 5-6 YOS due to Regimental System.	2. OAC at promotion to CPT.
4. Defer CAS3 until promotion to MAJ.	4. CAS3 during TP 2 (5-8 YOS).
5. CGSC faculty criteria consider qualifications, not promotion risk.	5. Distribute officers so as to provide balanced cells of quality.
8. Adjust CSC window from 11-15 YOS to 12-17 YOS.	8. CSC at TP 3; ASAP after promotion to MAJ.
15. ACS policy should require troop assignment after education, then utilization tour.	15. Utilization tour will follow ACS.

*U S GOVERNMENT PRINTING OFFICE: 198[illegible]