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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) An Analysis of Marine Corps Training		5. TYPE OF REPORT & PERIOD COVERED Final
7. AUTHOR(s) MAJ Paul K. VanRiper, USMC MAJ Michael W. Wydo, USMC MAJ Donald P. Brown, USMC		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS Center for Advanced Research Naval War College Newport, R.I. 02840		8. CONTRACT OR GRANT NUMBER(s)
11. CONTROLLING OFFICE NAME AND ADDRESS Center for Advanced Research Naval War College Newport, R.I. 02840		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
14. MONITORING AGENCY NAME & ADDRESS (If different from Controlling Office)		12. REPORT DATE June 1978
		13. NUMBER OF PAGES 390
		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report)  Approved for public release; distribution unlimited		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)  Approved for public release; distribution unlimited		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
Marine Corps	Costs	Models
Military Training	Crews	Personnel
Marine Corps and Naval Training	Information	Planning Model
Management Training	Resources	Requirements
Efficiency	Schools	Training
20. ABSTRACT (Continue on reverse side if necessary and identify by block number)		
<p>This study analyses Marine Corps training from a total systems approach to determine how it can be made more effective and efficient with the ultimate goal of improved combat readiness. Six major categories or types of training are considered. These are: individual, unit, officer, enlisted, ground, and aviation training. The study develops a symbolic model of the Marine Corps training system. The model, which is basically descriptive and nonquantitative, serves as an outline for the study report and is used to focus the analysis on those elements of the training system where improvements can be made. The</p>		

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20. Abstract (cont.)

study report also includes a historical synopsis of the training of enlisted marines from 1946 to 1977.

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6 AN ANALYSIS OF MARINE CORPS TRAINING,

BY

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11 JUNE 1978

12 487 P.

JUN 28 1978

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## EXECUTIVE SUMMARY

### Introduction

This research report describes and analyzes the structure and functioning of the Marine Corps' training system as it exists today. The report also identifies problems and makes recommendations for solving them. Additionally, a historical synopsis is included explaining how certain types of Marine Corps training evolved during the period 1946 to 1977.

### Background

The Congress, the Government Accounting Office, the Department of Defense, and numerous independent research organizations have focused their attention in recent years on the costs and the effectiveness of military training and education. This concern has caused each of the Services to make reductions in the time and money it spends on training. Clearly, however, a certain minimum amount of training is required to build and maintain individual and unit proficiency. The Marine Corps recognizes this and is working to reduce costs while endeavoring to make training realistic and challenging. Realistic and challenging training is necessary to ensure that individuals and units are prepared for the demands of combat. Marines are devoted to the concept that Marine Corps

training must be the best. The challenge is to ensure it remains the best with the reduced training resources available.

#### Purpose

The purpose of this research report is to analyze Marine Corps training to determine how it can be made more efficient without a loss of effectiveness. To achieve optimum effectiveness and efficiency, decisions concerning management of the training system must be soundly based. A fundamental aid to the process of producing clear, precise information on the consequences of decisions is a model representing that part of the real world being examined. This report is based on the premise that the Marine Corps needs a model of its training system to provide a means of focusing expert judgment when decisions must be made. (An outline of the basic model of the Marine Corps' training and education system is shown in Figure 2-4 on page 31.

#### Scope

The scope of the research conducted for this report was quite broad because of the authors' conviction that a comprehensive look at Marine Corps training was needed, and in fact, overdue. The entire spectrum of Marine Corps training and education was examined in the confidence that construction of even a general descriptive outline would be of value to decision makers and other researchers.

### Conclusions and Recommendations

1. Conclusion. The terminology used to identify the types of training differs among various Marine Corps orders (Figure 3-2) and between the Marine Corps and the Department of Defense (Figures 3-1, 3-2).

Recommendation. That terminology used to identify the types of training be standardized and that the Marine Corps orders identified on page 57 be revised to include the standardized terms.

2. Conclusion. The Marine Corps conducts significantly more on-the-job training than other Services (page 37).

Recommendation. That the cost, to include degradation of operational readiness, of on-the-job training be calculated and compared with the cost of conducting the same training at a formal school to determine which is more cost-effective.

3. Conclusion. The Marine Corps has published no document that accurately explains either the officer or enlisted training and education systems (page 33).

Recommendation. That a document that accurately explains the Marine Corps officer and enlisted training and education system be published for all Marines.

4. Conclusion. The Marine Corps has not identified a Professional Military Education program for noncommissioned

officers and staff noncommissioned officers (pages 41-44).\*

Recommendations:

That command level schools be established to provide professional military education at the lance corporal and corporal/sergeant levels.

That a standardized core curriculum be established by Headquarters, U.S. Marine Corps for the unit level schools.

That graduation from the unit level schools be a prerequisite for promotion.

That staff noncommissioned officer academies continue to provide professional military education to selected staff sergeants.

That successful completion of the staff noncommissioned officer course, resident or non-resident, be a prerequisite for promotion to gunnery sergeant.

That the current First Sergeant Personnel Administration School curriculum be reviewed and expanded to meet the definition of a professional military education course.

That the revised First Sergeant Personnel Administration School curriculum be available in a resident and non-resident form and that successful completion of the course be a prerequisite for promotion to First Sergeant. See Table 3-V for a diagram of the proposed system.

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\* Professional Military Education provides progressive training related more to increasing responsibility associated with career progression to more senior grades than to an individual's current assignment or specialty.

That the Marine Corps Formal School Catalog be reviewed and courses that parallel those shown in Table 3-V be designated as equivalent to Professional Military Education courses.

5. Conclusion. Training requirements which are specified in any way other than as tasks or objectives assist commanders very little in developing their training programs. Those requirements which mandate time often hinder efficient training management since they require the use of resources whether the training is needed or not (pages 62-66).

Recommendations:

That the Training Division not concur with the publication of any directive which levies a training requirement in terms other than tasks or objectives, unless a demonstrable need to specify time can be established.

That the Marine Corps request the Secretary of Defense and the Secretary of the Navy to have all training requirements set by their offices stated in terms of tasks or objectives.

6. Conclusion. Marine Corps Order P1510.23B, Instructional Systems Development does not require Marine Corps formal schools that provide MOS training to use the data provided from the Task Analysis Program in their development of programs of instruction. Conceivably, a school's analysis could identify different tasks than those identified in the Task Analysis Program. If this happened the

school might not train Marines to perform tasks needed on the job, or it might train them to perform tasks that are not needed on the job (pages 67 and 94).

Recommendation. That a change be made to Marine Corps Order P1510.23B requiring Marine Corps formal schools that provide MOS training to utilize data from the Task Analysis Program as the basis for developing programs of instruction.

7. Conclusion. Task analysis data has in the past not been routinely provided by the Training Division to Marine Corps formal schools which conduct MOS training (pages 67 & 78).

Recommendations:

That the Training Division provide the Office of Manpower Utilization with a list of Marine Corps schools that conduct MOS training.

That the Office of Manpower Utilization establish procedures to ensure schools on the list are given data from appropriate task analyses.

8. Conclusion. Other Services' schools that conduct MOS training for Marines are not provided with data from the Task Analysis Program. As a result, instructors for "Marine unique" courses taught at the Naval Technical Training Command and "Marine unique" sub-courses or classes taught at the U.S. Army schools have no detailed information upon which to base the development of instructional material for Marines (pages 78 and 95).

Recommendations:

That the Training Division provide the Office of Manpower Utilization with a list of other Services' schools that provide MOS training to Marines.

That the Office of Manpower Utilization establish procedures to ensure schools on the list are given data from appropriate task analyses.

That the letters of instruction provided Marine Liaison officers at these schools be modified to include a statement similar to the one provided on pages 95 and 96.

9. Conclusion. Though commanders are required to provide MOS training they are not provided with sufficient detail on the performance requirements for each MOS. Moreover, they have no way of determining what requirements they are responsible for and what requirements are met in other settings (pages 79-83).

Recommendations:

That a study be conducted to determine what personnel and financial resources would be needed to staff an agency which would convert task analysis data into a format usable to commanders. This agency would in effect be developing performance objectives using Instructional Systems Development procedures. This agency would also determine what instructional setting had been selected to provide the training for each performance objective. Information on the

objectives and instructional setting would be placed in an automated data bank and printed out by: (1) type command, (2) occupational field, or (3) MOS. A sample of what a page from such a printout might look like is shown on page 98 in Figure 4-7.

That the study further determine the organization to which this agency should be assigned. Ones which should be considered are the Marine Corps Institute, the Office of Manpower Utilization, and the Instructional Management School.

10. Conclusion. When formal schools select an instructional setting other than the "formal school" they are in most cases tasking another command to provide this training. However, no procedure exists to ensure that the command picking up responsibility for the training is made aware of the fact (page 70).

Recommendation. That a change be made to Marine Corps Order P1510.23B, Instructional Systems Design requiring commanders of formal schools to identify the instructional settings they recommend for those performance objectives they have "selected out." Such recommendations would be attached to programs of instruction submitted to Headquarters, U.S. Marine Corps for approval. Upon approval of the recommendations, the Training Division would direct those commands responsible to provide training for the performance objectives "selected out."

11. Conclusion. Recent studies have attempted to validate MOS prerequisites based on school performance rather than job performance. This procedure directs attention to how a Marine does academically rather than to how he or she performs on the job (pages 84-93).

Recommendation. That all future validations for MOS prerequisites be based on job performance vice school performance.\*

12. Conclusion. When the number of flight students exceeds the resources of the Naval Air Training Command, queuing of students occurs. The uneven flow causes large fluctuations in the requirements for resources. These fluctuations are greatest at the end of the flight training pipelines, the Marine training squadrons. Since FMF aviation training squadrons operate with fixed T/Os and aircraft assets, surges in the number of students are difficult to handle efficiently. Efficiency is important since FMF operational aircraft are the most expensive to operate (pages 112-114).

Recommendation. That the recent Marine Corps policy of pooling aviation students prior to assignment to the Naval Air Training Command be continued.

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\*This recommendation was previously made in the Interrelationships of Automated Manpower Systems Supporting the USMC Manpower Management Process Report.

13. Conclusion. There is no formal information system to provide feedback on student performance from Marine training squadrons and operational squadrons to the Naval Air Training Command (page 111).

Recommendations:

That the Marine Corps initiate efforts to improve feedback from the FMF to the Naval Air Training Command.

That a feedback system from Marine operational squadrons to training squadrons be developed.

14. Conclusion. Due to a limited budget enlisted aviation technicians presently spend less time training at formal schools than in the past. However, a system has not been devised to transit to the Training Management Units and Elements (TMUs and TMEs) changes that have been made in formal school training (pages 124-126).

Recommendation. That the "model manager" concept for evaluating enlisted training be adopted with the objective of monitoring formal school programs of instruction and informing TMUs and TMEs of changes as they occur.

15. Conclusion. The enlistment of aviation technicians tends to be seasonal and causes personnel surges which the formal schools are not equipped to handle (pages 115-120).

Recommendation. That an aviation technician's obligated service time not begin until he successfully completes a formal school.

16. Conclusion. Various Marine Corps directives refer to the same types, levels and settings of training by different names (Table 6-1, page 131, Figure 6-1).

Recommendations:

That a common set of terms that identify the types, levels and means of training be adopted for use by all Marine Corps activities.

That the Professional Military Education Subcommittee of the Interservice Training Review Organization be reestablished and assume the task of standardizing training related terminology within the Department of Defense.

17. Conclusion. There is a general lack of understanding among Marine officers about career training and its impact on selection for promotion (Appendix A).

Recommendation. That Marine Corps Order P1040.32, Career Planning and Development Guide Volume II (Marine Officers) be revised to include a detailed explanation of all phases of career training and its impact on selection for promotion.

18. Conclusion. That precepts for the academic year 1978 career, intermediate, and top level school selection boards indicated that officers should be considered for schools regardless of availability. The precepts further suggested that officers who had demonstrated outstanding potential for future service and whose record indicated that they would be used in positions of increasing responsibility should be selected for schools (pages 144-147).

Recommendation. That the selection precepts used for academic year 1978 be used for all future selection of officers for Professional Military Education.

19. Conclusion. That the fragmenting of responsibility for implementing leadership training at Headquarters, U.S. Marine Corps has resulted in misunderstanding of leadership training requirements (Figure 7-1).

Recommendation. That the implementation of all leadership training be placed under the staff cognizance of the Director, Training Division, Operating and Training Department, Headquarters, U.S. Marine Corps.

20. Conclusion. Marines perceive that leadership training has become part of human relations training rather than vice versa (pages 159-160).

Recommendations:

That the important subject of human relations be clearly identified as one of the major components of leadership training.

That paragraph 4b of Marine Corps Order 5390.2A be revised to more specifically explain that human relations training is a part of leadership training.

That the Leadership Instruction Department student advance sheet for lesson plan BLD (LID) 0635, "Program Outlines," that provides the officers at The Basic School an opportunity to discuss the management of the Marine Corps Leadership Program, be revised (page 161).

21. Conclusion. Until recently there has been relatively little research conducted on unit training. The need for a better understanding of the various aspects of unit training has led, however, to an increased emphasis on research on this subject. Several reports published during the last four years contain material of interest to those who manage Marine Corps training (pages 176 and 177).

Recommendation. That officers from the Unit Training Branch, and Readiness Branch, Operations and Training Department review the reports listed on pages 176 and 177.

22. Conclusion. Many Marines lack a comprehensive understanding of how unit training can be and is evaluated. The relationship of each method to a total evaluation program is not made clear in any Marine Corps directive (pages 172 - 175).

Recommendation. That the proposed revision to Marine Corps Order P1510.26 contain a section explaining the evaluation of unit training. Information provided in Chapter VIII could serve as a basis for that explanation.

23. Conclusion. The Marine Corps has no system to insure that comprehensive evaluations are made of the capabilities of individuals and units to perform required tasks and objectives (page 175).

Recommendation. That in lieu of random checking of training records to evaluate training management the Inspector General evaluate individuals and units within a command to determine their capabilities to perform required tasks and objectives.

24. Conclusion. A unit is created and exists to accomplish a mission. The tasks which it has to be able to perform in order to accomplish a mission must be the objectives of training. Thus, there is a need to be able to identify tasks and to translate them into training objectives that are measurable and observable. The Marine Corps Combat Readiness Evaluation System has developed them for units organic to a Marine Amphibious Brigade. However, the tasks have only been identified for units down to the battalion and squadron level. Also, the procedures used have relied on expert judgment more than analysis (page 183).

Recommendations:

That an evaluation be made of the feasibility (in terms of available resources) of developing task lists or lists of training objectives for combat and combat support units down to the squad and team level.

That an examination be made of information concerning task analysis of units to determine if such procedures could be utilized in the Marine Corps Combat Readiness Evaluation System.

25. Conclusion. The Deputy Chief of Staff for Operations and Training has neither the authority nor resources necessary to manage training in the most effective and efficient manner (Figure 10-3).

Recommendations:

That the grade of the Deputy Chief of Staff for Operations and Training be lieutenant general, and that he be "double-hatted" as the Commanding General Marine Corps Training Command.

That the grade of the Commanding General Marine Corps Development and Education Command be major general, and that the command become a field agency under the direct control of the Commanding General Marine Corps Training Command.

That the missions and functions of the branches and sections of the Training Division be reviewed with the intent of retaining only those missions, functions, and personnel at Headquarters required for administration and liaison and transferring all others to the Marine Corps Development and Education Command.

That the Commanding General Marine Corps Development and Education Command be tasked with developing a plan to establish a centralized training command.

26. Conclusion. Insufficient resources are available to the Training Division to accomplish assigned missions and functions (pages 187-193).

Recommendations:

That the missions and functions of the Training Division be revised to reflect achievable goals and current terminology.

That either a separate information section be established to respond to inquiries or that the responsibility be included as a function of the various branches.

27. Conclusion. The responsibility for implementing all training requirements has not been transferred to the Training Division (Figure 10-3).

Recommendation. That the responsibility for implementing related training be transferred to the Training Division.

28. Conclusion. There is a perception "in the field" that the "training managers do not know how to manage" and that "the trainers do not know how to train." (pages 200-203).

Recommendations:

That a training management manual be published to replace the outdated Marine Corps Order 1510.26, Unit Level Training Management and serve as a focal point for all training management.

That the Training Division sponsor a conference to be attended by representatives from the Officer and SNCO Schools at Quantico, Marine Corps Institute, Extension School, and Instructional Management School to develop resident and non-resident programs of instruction on training management for officers and SNCOs.

That two studies conducted by The Human Resources Research Organization for the Army be reviewed prior to preparing programs of instruction on training management. The two studies are identified on page 207.

29. Conclusion. The management of formal individual training by Headquarters, U.S. Marine Corps requires the coordinated action of scores of officers in the Manpower Department, and the Training, Reserve, and Fiscal Divisions (pages 209-221).

Recommendations:

That the Training Division in concert with the Manpower Department develop a document outlining how formal individual training requirements are managed.

That information from volume I of the Training Information System ADS Development Plan, the Training Management System (TRAMS) Concept Study, and Chapter XI of this report be used to provide the basis for such a document.

30. Conclusion. The manpower management process is the foundation for management of formal individual training requirements. Therefore a working knowledge of this process is a necessity for many action officers in the Training Division (pages 209 and 210 and Appendix B).

Recommendations:

That officers, upon assignment to the Training Division, be given a briefing on the manpower management process by representatives of the Manpower Department.

That officers assigned to the Training Division be provided with a copy of a document explaining the manpower management process.

That the guide contained in Appendix B of this report be the nucleus for such a document.

31. Conclusion. The ability of Headquarters, U.S. Marine Corps to manage the requirements for individual training has reached the upper limits using current manual procedures for collecting information (page 223).

Recommendation. That priority continue to be given to the early development of a Training Information System.

32. Conclusion. The measurement of training effectiveness and efficiency concerns the Congress and the Department of Defense. The Army and Navy have begun to design and develop models that will analyze training effectiveness and efficiency (pages 227 and 228).

Recommendation. That the Army and Navy efforts be monitored to determine their utility and applicability to Marine Corps training.

33. Conclusion. Training equipment purchased by the Marine Corps has included a number of expensive training devices. However, few cost-benefit comparisons have been made between such devices and other less expensive ones (pages 232-233).

Recommendation. That cost-benefit comparisons be made of alternative training devices before they are purchased.

34. Conclusion. Instructional technology has tended to be hardware vice concept oriented (page 235).

Recommendation. That Headquarters, U.S. Marine Corps establish formal procedures for the evaluation of training concepts and the procedures needed to control and implement them.

35. Conclusion. In the past, the weapon system acquisition process has discouraged early consideration of training and manpower requirements.

With the implementation of the Hardware versus Manpower project in the Navy, many joint Navy/Marine acquisitions will be evaluated for training impact during concept formulation (pages 240-243).

Recommendation. That training requirements that will result from new weapon systems acquisition be determined during the conceptual phase of the weapon system acquisition process.

36. Conclusion. A documented history of Marine Corps training from 1946 to the present does not exist. The historical synopsis contained in Part V of the report provides only a fraction of the detail which is needed and which is available in Marine Corps archives.

Recommendation. That the Historical Division in conjunction with the Training Division prepare a history of Marine Corps training from 1946 to 1978. The history should include all aspects of training. From the ground side of the Marine Corps it could be a continuation of Marine Corps Ground Training in World War II.

## PREFACE

This research was undertaken because the authors believed that a comprehensive analysis of the Marine Corps' training system was needed to determine how it could be made more efficient without a loss of effectiveness. Our goal was to prepare a document that would describe the entire system, identify problems, and make recommendations for improvements.

An effort of this scope and magnitude necessarily required the support and assistance of many people. It is therefore appropriate that we acknowledge those whose contributions made this report possible.

Our first debt is to the President of the Naval War College who authorized our release from a portion of the curriculum to pursue the study. We are also grateful to the administration and staff of the College's Center for Advanced Research who provided support for the project. We received the guidance requested and had the freedom of action necessary to enable successful completion of this report.

We are particularly appreciative of the sponsorship from Headquarters, U.S. Marine Corps given to us by the Deputy Chief of Staff for Operations and Training, Major General J. H. Miller. The access he granted to the

Operations and Training Department made the collection of information much easier.

We would like to extend our appreciation to Brigadier General R.A. Kuci, Director of the Training Division, and his deputy, Colonel A.J. Castellana for their many thought provoking suggestions and generous help.

Deserving particular mention is Major W.C. Fite III, an action officer in the Training Division, who was assigned as our point of contact at Headquarters, but who worked with us so closely we soon considered him a "member" of the research team. His liaison with other Services and with Marine units made our field trips successful.

We are grateful to Major J.K. Van Riper, a student at the Marine Corps Command and Staff College, who was persuaded to review our work and to make comments on the readability of the final report.

Four ladies contributed time in our behalf. To them we are especially indebted. Mrs. L. Delahanty reviewed hundreds of files at Headquarters, U.S. Marine Corps and supplied information that was needed to prepare the last three chapters of this report. Our three typists: Mrs. D. Tavares, Mrs. C. Anderson, and Mrs. S. Trimpert displayed patience and provided valuable assistance in preparing the manuscript.

Guiding our efforts throughout was a consulting board made up of the following students and faculty of the Naval

War College: Professor R.M. Lloyd, Colonel W.E. McKinstry, Colonel R.L. Dennis, Colonel R.D. King, Colonel F.A. Clark, Colonel W.H. Wiedhahn, Jr., Lieutenant Colonel E.M. Mockler, Lieutenant Colonel J.W. Orr, Major G.J. Keller, Major P.R. Catalogne, Major J.F. Kline, Major J. Clark, Major S.K. Smith. We are indebted to each.

Special appreciation must be given to the many civilian and military men and women identified in Appendix F who participated in interviews with the authors.

To Jean, "L.C.", and Karen who weathered the worst blizzard in 100 years at Newport, Rhode Island while we were on a field trip in the sunny south, and who "lost" their husbands for four months, our appreciation for your tenacity and understanding.

Finally, however, we are solely responsible for the judgments and interpretations made in the report and for any failings it might have.

## TABLE OF CONTENTS

CHAPTER	PAGE
EXECUTIVE SUMMARY . . . . .	ii
PREFACE . . . . .	xxii
LIST OF TABLES. . . . .	.xxvii
LIST OF ILLUSTRATIONS . . . . .	xxviii
PART I - INTRODUCTION	
I FORMULATION OF THE RESEARCH PROBLEM . . . . .	1
II BUILDING A MODEL OF THE MARINE CORPS' TRAINING SYSTEM . . . . .	19
PART II - INDIVIDUAL TRAINING	
III INTRODUCTION TO INDIVIDUAL TRAINING . . . . .	33
IV SPECIFYING THE REQUIREMENTS FOR INDIVIDUAL TRAINING. . . . .	62
V INDIVIDUAL AVIATION TRAINING. . . . .	101
VI OFFICER CAREER TRAINING . . . . .	131
VII LEADERSHIP TRAINING . . . . .	152
PART III - UNIT TRAINING	
VIII INTRODUCTION TO UNIT TRAINING . . . . .	163
IX SPECIFYING THE REQUIREMENTS FOR UNIT TRAINING. . . . .	179
PART IV - TRAINING MANAGEMENT	
X AN OVERVIEW OF TRAINING MANAGEMENT. . . . .	186
XI MANAGEMENT OF FORMAL INDIVIDUAL TRAINING BY HQMC . . . . .	209
XII MEASURING TRAINING EFFECTIVENESS AND EFFICIENCY. . . . .	225
XIII TRAINING TECHNOLOGY . . . . .	232
XIV TRAINING AND WEAPON SYSTEM ACQUISITION. . . . .	238
PART V - MARINE CORPS TRAINING 1946-1977	
XV RECRUIT TRAINING. . . . .	246
XVI SKILL QUALIFICATION TRAINING OF ENLISTED MARINES . . . . .	281

TABLE OF CONTENTS (cont'd)

CHAPTER	PAGE
XVII POST ENTRY-LEVEL TRAINING OF ENLISTED MARINES . . . . .	290
BIBLIOGRAPHY. . . . .	316
APPENDIX A - PROFESSIONAL MILITARY EDUCATION SELECTION PROCESS. . . . .	A-1
B - A GUIDE TO THE MARINE CORPS MANPOWER MANAGEMENT PROCESS . . . . .	B-1
C - MANAGEMENT OF FORMAL INDIVIDUAL TRAIN- ING - FLOW CHART . . . . .	C-1
D - ORGANIZATION CHART - HEADQUARTERS, UNITED STATES MARINE CORPS . . . . .	D-1
E - ORGANIZATION OF THE MANPOWER DEPARTMENT AND THE TRAINING DIVISION. . . . .	E-1
F - COMMANDS VISITED AND PERSONNEL INTERVIEWED. . . . .	F-1

LIST OF TABLES

TABLE		PAGE
3-I	DIRECTED RELATED TRAINING. . . . .	40
3-II	ARMY NONCOMMISSIONED OFFICER EDUCATION SYSTEM . . . . .	45
3-III	ARMY NONCOMMISSIONED OFFICER EDUCATION SYSTEM . . . . .	47
3-IV	USAF NONCOMMISSIONED OFFICER PROFESSIONAL MILITARY EDUCATION . . . . .	50
3-V	CONCEPTUAL PROFESSIONAL MILITARY EDUCATION SYSTEM FOR ENLISTED MARINES. . . . .	60
4-I	INSTRUCTIONAL SETTINGS . . . . .	71
5-I	COURSES OFFERED BY THE AIR WARFARE TRAINING BRANCH CNTECHTRA . . . . .	118
6-I	LEVELS OF PROFESSIONAL MILITARY EDUCATION. . .	132
15-I	FOUR WEEK TRAINING SCHEDULE FOR RECRUIT DEPOT PARRIS ISLAND 1939 . . . . .	249
15-II	SEVEN WEEK TRAINING SCHEDULE FOR RECRUIT DEPOT SAN DIEGO 1940 . . . . .	251
15-III	EIGHT WEEK TRAINING SCHEDULE 1944. . . . .	254
15-IV	12 WEEK MASTER TRAINING SCHEDULE 31 July 1961.	261
15-V	MALE RECRUIT TRAINING EIGHT WEEK COURSE 1965 .	263
15-VI	DRILL INSTRUCTOR SCHOOL SYLLABUS PARRIS ISLAND 1970. . . . .	266
15-VII	MALE RECRUIT TRAINING SUBJECTS 1974. . . . .	270
15-VIII	MALE RECRUIT TRAINING MAIN SUBJECTS 1976 . . .	277

## LIST OF ILLUSTRATIONS

FIGURE		PAGE
2-1	THE MARINE CORPS' TRAINING SYSTEM AND ITS RELATIONSHIP TO HIGHER AND ADJACENT SYSTEMS. . . . .	23
2-2	THE MANPOWER MANAGEMENT PROCESS AND TRAINING .	25
2-3	RELATIONSHIP OF INDIVIDUAL, UNIT, ENLISTED, OFFICER, AIR AND GROUND TRAINING . . . . .	28
2-4	OUTLINE OF THE MODEL . . . . .	31
3-1	ENLISTED AND OFFICER TYPES OF TRAINING . . . .	35
3-2	MARINE CORPS ENLISTED CAREER TRAINING. . . . .	42
4-1	INSTRUCTIONAL SYSTEMS DEVELOPMENT. . . . .	68
4-2	JOB/DUTY/TASK/ELEMENT HIERARCHY. . . . .	69
4-3	TASK ANALYSIS PROCESS. . . . .	76
4-4	DUPLICATION OF TRAINING REQUIREMENTS . . . . .	82
4-5	CLASSIFICATION AND ASSIGNMENT TO SCHOOLS . . .	85
4-6	RELATIONSHIPS BETWEEN TASK ANALYSIS, INSTRU- CTIONAL SYSTEMS DEVELOPMENT, MOS CLASSIFICA- TION AND SCHOOL ASSIGNMENT . . . . .	91
4-7	COMMANDER'S MOS MANUAL (SAMPLE PAGE) . . . . .	98
5-1	PILOT TRAINING U.S. NAVAL AIR TRAINING COMMAND. . . . .	104
5-2	NAVAL FLIGHT OFFICER TRAINING. . . . .	105
5-3	FOLLOW-ON NAVAL AVIATOR/NAVAL FLIGHT OFFICER TRAINING PLAN. . . . .	107
5-4	MARINE CORPS AVIATION SKILL QUALIFICATION TRAINING . . . . .	119
6-1	OFFICER CAREER TRAINING. . . . .	135

LIST OF ILLUSTRATIONS (cont'd)

FIGURE		PAGE
6-2	PROFESSIONAL MILITARY EDUCATION SCHOOLS. . . . .	148
7-1	SCOPE AND CONTROL OF LEADERSHIP TRAINING . . .	153
7-2	SCOPE OF LEADERSHIP INSTRUCTION DEPARTMENT INSTRUCTION. . . . .	158
8-1	MARINE CORPS UNIT TRAINING . . . . .	166
10-1	TRAINING DIVISION, OPERATIONS AND TRAINING DEPARTMENT ORGANIZATIONAL CHART. . . . .	188
10-2	OVERVIEW OF TRAINING PROGRAM DEVELOPMENT . . .	195
10-3	MAJOR COMMANDS RESPONSIBLE FOR CONDUCTING TRAINING . . . . .	199
11-1	MANPOWER MANAGEMENT PROCESS. . . . .	211
12-1	INPUT - OUTPUT SYSTEM. . . . .	226
15-1	BASIC MARINE VICE BASIC MARINE RIFLEMAN. . . .	271
16-1	HISTORY OF ENTRY-LEVEL "TRAINING TRACKS" . . .	284
17-1	POST ENTRY-LEVEL TRAINING DIRECTIVES FOR MEN 1939-1977. . . . .	291 & 292
17-2	POST ENTRY-LEVEL TRAINING DIRECTIVES FOR WOMEN 1949-1977. . . . .	308

64

PART I  
INTRODUCTION

# AN ANALYSIS OF MARINE CORPS TRAINING

## CHAPTER I

### FORMULATION OF THE RESEARCH PROBLEM

#### Background

The Congress, the Government Accounting Office, the Department of Defense, and numerous independent research organizations have focused their attention in recent years on the costs and the effectiveness of military training and education. This increased interest has been evidenced in new legislation, major budget decisions, and scores of research reports. The following paragraphs briefly describe some examples of this heightened concern over Service training.

In 1974, the Congress passed Public Law 93-155 requiring the Secretary of Defense to submit a written report (Military Manpower Training Report) each year recommending and justifying average student loads for each Service.<sup>1</sup> This report has changed the role of Congress from one of passive observer of training programs into an active one in which the Services must now ask this legislative body for authority to conduct training.<sup>2</sup> Also in 1974, the Congress created the Defense Manpower Commission "...to conduct a comprehensive study and investigation of the overall

manpower requirements of the Department of Defense on both a short-term and long-term basis...."<sup>3</sup> The Commission's report to the President and Congress in April, 1976 noted that many improvements were needed for the training and education of military personnel.<sup>4</sup> In another study of manpower, the Congressional Budget Office detailed a proposal for saving \$1.4 billion over a five-year period, mainly by shortening the length of recruit training.<sup>5</sup>

The General Accounting Office has conducted a variety of studies of military training since 1975, showing a particular interest in recruit training and officer education.<sup>6</sup> The General Accounting Office has also examined occupational skill training, and in its latest report details ways in which the Services "waste" money in this type of training program.<sup>7</sup>

The Secretary of Defense established a Committee on Excellence in Education in 1974, chaired by the Deputy Secretary of Defense, William P. Clements. This Committee published memoranda in 1975 and 1976 outlining initiatives for improving the Service Academies, intermediate level staff colleges, and the senior service colleges.<sup>8</sup> During preparation of the budget for Fiscal Year 1979, the Secretary of Defense exhibited special interest in training, most notably in Program Objective Memorandum (POM) Issue Paper Number 17, where significant reductions in training support

were proposed, and again in Decision Package Set 040, where reductions in training support were directed.<sup>9</sup>

The Rand Corporation, The Brookings Institution, the National Academy of Public Administration and a host of other research organizations have undertaken studies over the past several years questioning either the cost or the quality of military training and education. Of particular note is a 1977 Rand report which made recommendations on how to save \$1 billion in training costs.<sup>10</sup>

The intense interest in military training and education is not surprising considering the associated costs. In Fiscal Year 1978, it is estimated that over \$6 billion and approximately 150,000 military and 55,000 civilian personnel will be required to support formal individual training (training conducted in schools, training centers, etc.).<sup>11</sup> The Department of Defense devotes about 17% (10% student and 7% instructor) of the military man years of effort available to the training of 1.7 million individuals each year.<sup>12</sup> Little data are available on the cost of individual training conducted on-the-job, or of crew/unit training (whether recognized as training or combined with operations), though some estimates suggest it at least equals the cost of formal individual training.<sup>13</sup>

The accelerating costs and complexity of training have, of course, been recognized by the Services, and cooperative

efforts have been initiated to improve training efficiency. One such effort was the establishment of the Interservice Training Review Organization, which has the goal of eliminating duplicate courses, reducing costs, and standardizing instruction.<sup>14</sup> In addition, each Service has increased efforts to make its own training more efficient.<sup>15</sup>

Costs notwithstanding, training is required to build and develop individual and unit proficiency. The Marine Corps recognizes this and strives to make training realistic and challenging to ensure that individuals and units are prepared for the demands of combat. Marines are devoted to the concept that Marine Corps training must be the best. Yet, many are dissatisfied with the state of training today. This was especially apparent during the field trips conducted in connection with this research effort. Nearly every interview was filled with lively, and often emotional, discussion of the need to improve training. We were sought out in the evenings, or telephoned later, by many of those to whom we had talked who wanted to continue the dialogue or to add thoughts. Some measure of the interest level is demonstrated by the five unsolicited "studies" of training problems that were provided to us. These documents had recently been prepared by officers of battalions and squadrons in an attempt to highlight difficulties their units were having with training and to offer possible solutions

to higher headquarters. There appears to be a widespread and strong conviction that the Marine Corps must initiate actions to improve training.

#### Purpose of the Research

The purpose of this research project is to analyze Marine Corps training to determine how it can be made more efficient, with the ultimate goal of improved combat readiness. To achieve optimum effectiveness and efficiency, decisions concerning management of the training system must be sound. This requires that accurate information on the impact of actions be visible so that costs and benefits can be compared and trade-offs considered. A fundamental aid to the process of producing clear, precise information on the consequence of decisions is a model representing that part of the real world being examined. Although the Marine Corps' training system is large and complex, no explicit model exists which can be used to determine what to expect when changes are made to some part of the system. This project is based on the premise that the Marine Corps needs a model of its training system to provide a means of focusing expert judgment on decisions regarding the allocation of limited resources.

#### Research Methodology

A four phase analytical process was used to conduct the research for this project. These phases were: formulation,

search, evaluation, and interpretation. In the formulation phase the system under study was defined, the research problem identified, and the context within which it had to be solved isolated.

During the search phase, Marine Corps training directives were reviewed in detail and a thorough search was made for studies conducted on military training during the past ten years. The major sources canvassed were The Central Files at Headquarters, U.S. Marine Corps, the Defense Documentation Center, the National Technical Information Service, and the Educational Resources Information Center. In addition, interviews were conducted with personnel at Headquarters, U.S. Marine Corps knowledgeable in training matters. Also, during this phase, visits were made to selected field commands to observe the functioning of the training system and to gather information from commanders and staffs. Visits were made as well to the headquarters and training commands of the other Services to examine their training programs. Particular care was taken to note innovative techniques or approaches which could be incorporated into the Marine Corps' training system.

In the evaluation phase, a series of papers were prepared from the data collected in the previous phase. These papers verbally and graphically described our view of the Marine Corps' training system. Each paper was circulated

to appropriate Headquarters, U.S. Marine Corps Staff Officers for review and comment. Personnel of other Marine Corps organizations considered expert in training were also asked for comments. Recommendations were incorporated and corrections made as the papers were revised to "model" the existing training system. This model was then "exercised" to analyze the relationships among various training elements and to identify dysfunctional aspects. Alternatives for overcoming identified problems were developed and evaluated. Conclusions were drawn and recommendations made in the interpretation phase, the final phase.

The advantage of this four phase analytical approach is that it is open to critical review and can be retraced by those who might wish to expand or continue the research.

As an adjunct to the primary research, files and documents were reviewed to trace the evolution of Marine Corps training from 1946 to 1977. Based on information secured during these reviews, a historical synopsis of selected portions of Marine Corps training for this period was prepared. The purpose of this work was to create an "institutional memory" which would prevent this and future research efforts, as well as officers at Headquarters, U.S. Marine Corps, from cyclically "reinventing the wheel."

#### Scope of the Research

From the outset, we were aware of the magnitude of the research effort. Though appreciative of the recommendations

made by those with an interest in the project, "to limit its scope to something more manageable" we were quite reluctant to do so because of our conviction that a comprehensive look at Marine Corps training was needed, in fact overdue. To examine one aspect, we believed, would be to piecemeal any future improvements and very likely compound existing problems. Our intention, then, was to cover the entire spectrum of Marine Corps training in the certainty that constructing even a broad descriptive outline of the present system would be of value to decision makers and future researchers. We are convinced that the project has succeeded. A model has been built and it has enabled us to determine what elements of training are most in need of improvement. Furthermore, elements of this model have already been used by some of the staff officers at Headquarters Marine Corps who manage training on a daily basis. Constraints of time have, nevertheless, caused us to fall short in three areas. We were unable to examine two elements of training in any detail--reserve training and the training of aviation support personnel (air control, air support, and anti-air warfare). Also, in our historical synopsis of Marine Corps training from 1946 to 1977 we found it possible to prepare only an outline of enlisted training. In regard to this last item, we were limited more than anything else by the lack of time to sift through and read

the great volume of historical material in the Marine Corps' archives and Headquarters, U.S. Marine Corps' Central Files.

#### Assumptions

The assumptions upon which this research project is based are listed below.

(1) There will be no change in the Marine Corps' mission.

(2) The Marine Corps' force structure will remain essentially unchanged.

(3) There will be continued pressure to reduce training costs from the Congress, the Department of Defense, and non-government agencies.

(4) Introduction of more sophisticated weapons and equipment throughout the Marine Corps, and reductions in personnel strengths without commensurate reductions in missions and requirements will continue to increase the qualifications needed by graduates of most training programs.

(5) Technological advances will continue to impact on training methods with the increased use of simulators, instructional television, multimedia materials, and performance-oriented and self-paced instructional techniques.

(6) The trend at Headquarters, U.S. Marine Corps to consolidate and centralize the responsibility for training under the Director of the Training Division will continue.

(7) The present Marine Corps training system can be made more effective and more efficient.

#### Measuring Effectiveness and Efficiency

Determining an adequate way to measure the effectiveness and efficiency of military training and education, particularly on the aggregate level, has proven to be a difficult problem for the Department of Defense and independent research agencies. This issue has significant implications because meaningful analysis is virtually impossible without an adequate way to measure training effectiveness. There must be a means to determine if the objectives of the system under study have been achieved.\* Likewise, it is impossible to compare and rank alternatives without a clear notion of the meaning and the "costs" used to measure efficiency.

The complexity of the problem has caused some researchers to use surrogate measures of effectiveness or spurious measures of efficiency. The result has most often been proposals

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\* The objective of the Marine Corps training system is to produce trained individuals and trained units. Individuals are considered trained when they have achieved stated levels of skill, knowledge and attitude. Units are considered trained when they are capable of accomplishing assigned missions. The Marine Corps Manual states that "The purpose of all Marine Corps training is the development of skilled forces-in-readiness prepared at all times to carry out any mission assigned."<sup>16</sup>

to employ simplistic solutions, such as student-instructor ratios, to measure the effectiveness and efficiency of military training. (See Mr. I.M. Greenberg's statement before the House Subcommittee on Military Personnel for the Department of Defense's response to these proposals.)<sup>17</sup>

The difficulty of measuring training effectiveness and efficiency has frustrated the Congress in its annual attempt to interpret data in the Military Manpower Training Report. As a result, the Senate Armed Services Committee in its report on the Defense Appropriation Authorization Bill for Fiscal Year 1977 requested "...that the Secretary of Defense study the criteria used to evaluate the total size, cost and adequacy of training programs and develop new criteria."<sup>18</sup> The Military Manpower Training Report for Fiscal Year 1978 contains a section prepared in response to this request.

The Army and the Navy are attempting to solve the problem and have undertaken efforts to develop guidelines and procedures for conducting training cost-effectiveness analyses. Approaches in both Services are based on measures of effectiveness that relate to the tasks the individual or unit is being trained to perform. The Army system, which uses manual procedures, skirts the issue of costs, but the Navy's automated model deals with it in a sophisticated manner.

The importance of the effectiveness and efficiency topic is such that Chapter XV of this report is devoted to examining it in detail. The following general definitions will serve, however, as the fundamental basis for discussions throughout the remainder of the report.

(1) Measure of Effectiveness (MOE). The effectiveness of training is measured by successful performance of stated tasks relating to job or billet requirements in the case of an individual and to mission in the case of a unit.

(2) Measure of Cost (MOC). The cost of training is measured in terms of resources (personnel, materials, time and money) expended to achieve a level of training which enables individuals or units to perform stated tasks. Though these resources appear to be incommensurable, the first three can be translated into the common denominator (money) relatively easily.

(3) Criterion. The analytical criterion to be used in measuring effectiveness in alternative analyses will be the least cost in dollars expended to achieve the training necessary to produce individuals and units qualified to perform required tasks. In other words, the "criterion rule" will be to meet a stated level of training effectiveness at a minimum cost. We recognize that limited resources may in some cases necessitate costs to be fixed and effectiveness (performance) to be varied.

### Definition of Terms

Training and Education. There is a common understanding within the Department of Defense that the term training has a more limited meaning than the term education, but the difference between the two is not so clear that all instruction can be categorized as either training or education. Some cases are obvious while others are borderline. Training and education may be considered the extremes of a continuum, with various programs lying somewhere between. These two extremes may be defined as:

(1) Training. Instruction which provides the learner with knowledge and skills required for immediate application in the accomplishment of a specific task or combination of tasks.

(2) Education. Instruction which provides the learner with the general knowledge required to cope with tasks which may occur but are not specific or well-defined. The Department of Defense generally uses the term training to refer to instruction in military subjects either at the basic level or in a military specialty and the term education to refer to study either in more advanced subjects or in military subjects which have application to an entire Service or the whole field of national security.<sup>19</sup> The term education is normally associated with individuals, but the term training can be applied to both individuals and units.

In this report, the Department of Defense's definition will be followed, though, the term training may occasionally be used to refer to training and education as an entity.

Individual Training. Individual training includes all forms of training designed to provide a Marine with the skills, knowledge, and attitudes required to perform individual duties and meet individual responsibilities. Individual training is conducted in formal schools or specified training commands under the control of Headquarters Marine Corps or in units under the control and direction of their commanders.

Unit Training. Unit training refers to training which prepares Marines to perform those unit tasks required for accomplishment of a unit's mission. The Term "unit" is used in a collective sense to include teams, crews, squads, sections, platoons, companies, squadrons, etc.

Ground and Air Training. Air training includes the training of naval aviators (pilots), naval flight officers, aircraft and electronic maintenance personnel, avionics technicians, and the training of those personnel associated with aviation support functions such as ordnance, weather service, operations, air control, and antiair warfare. Ground training comprises "all other" training.

## Organization of the Report

This report is divided into an executive summary, preface, five parts with a total of 17 chapters, bibliography and appendices.

The Executive Summary highlights the findings of the study and presents a resume of recommendations.

The Preface outlines the reasons the authors embarked on the research and acknowledges special assistance.

Part I, Introduction, defines the research problem, states the purpose of the research effort, describes the methodology and scope of the research, lists assumptions upon which the research is based, discusses difficulties associated with identifying appropriate measures of effectiveness and efficiency for training, and defines certain terms. This part also provides an overview of the use of models, describes how the model used in this research effort was built, and examines the manner in which the manpower management process translates the Marine Corps' mission into training programs.

Part II, Individual Training, describes, then examines and evaluates in detail all aspects of the Marine Corps' individual training program. Separate chapters are devoted to aviation, officer career and leadership training.

Part III, Unit Training, describes, then examines and evaluates in detail all aspects of the Marine Corps' unit training program.

Part IV, Training Management, discusses how training is managed by Headquarters Marine Corps and field commands, describes how Marines interviewed perceive training can be improved, looks at the impact of training technology, and examines how training is considered during weapons and systems acquisition.

Part V, Marine Corps Training: 1946-1977, contains a brief history of training during the period identified, emphasizing recurrent trends, significant changes and the rationale for these changes.

The Appendices contain material relevant to, but not appropriate for inclusion in the basic report. Of significant value to many readers is Appendix B, A Guide to the Marine Corps Manpower Management Process.

## NOTES

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17. I.M. Greenberg, "Statements and Discussion" (on Military Training), U.S. Congress, House Committee on Armed Services, Subcommittee on Military Personnel, p. 989-1009.

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## CHAPTER II

### BUILDING A MODEL OF THE MARINE CORPS' TRAINING SYSTEM

#### Models - An Overview

In Chapter I we stated that this research project is based on the premise that the Marine Corps needs a model of its training system. This statement gives rise to a series of questions. What is a model? Why is one needed of the Marine Corps' Training system? Assuming a model is needed, how do we build it? And finally, if one is built, how do we use it? The following paragraphs answer each of these questions.

What is a model? A model is a representation of some aspect of the real world. Though generally less complex than the structure, process, or idea it characterizes, a model is sufficiently complete to correspond to those elements of reality which are being studied. A model can also be viewed as "... a device for assembling the information and hypotheses scattered throughout the 'community'...in such a way, that all components are put into proper relationship."<sup>1</sup> Models can vary in form from a simple sketch on a scrap of paper to a complex computer program. Models are classified by type: verbal (symbolic), mathematical or analog.<sup>2</sup> They can be further classified as: physical versus abstract, descriptive versus functional, causal versus

correlative, or quantitative versus qualitative (nonquantitative).<sup>3</sup> The model of the Marine Corps' training system to be delineated later in this report is symbolic. Its features reflect a moderate level of abstraction, and it is basically descriptive and nonquantitative.

The use of models is not new. They have always been required to note or pattern man's concepts of reality. In fact, because of the nature of our thought process, organized discussion is not possible without a model.<sup>4</sup> What is new is the emphasis the term has received over the past 20 years, causing us to concentrate on its relevance.<sup>5</sup>

Why is a model of the Marine Corps' training system needed? A model is needed to provide Marine Corps decision makers\* an explicit means, or instrument, to better:

- (1) Identify functional and cause-and-effect relationships among elements of the system.
- (2) Communicate concepts and ideas about training.
- (3) Predict the occurrence of future events.
- (4) Come to conclusions, develop solutions, make decisions and translate them into implementable plans.
- (5) Clarify the associations between decisions and subsequent events.

---

\* The Deputy Chief of Staff for Operations and Training, the Director of the Training Division, and branch and section heads of the Training Division.

A qualitative model is also needed as a foundation for the later development of quantitative models of elements of the training system.

How is a model built? Building models is an iterative process with each iteration producing a more refined and usable model. Normally a model is constructed in a sequence of distinct steps.\*

First, the system being modeled is delimited and its relationship to higher and adjacent systems is defined.

Second, the purpose or objective of the system is established. The objective is, in effect, the product or output of the system.

Third, outside activities which have significant impact on the system are identified. These activities provide input to the system.

Fourth, elements of the system which can be placed together by virtue of strong structural or functional connections are assembled in a framework. In a sense, this is a process of classification.

As new understanding is gained, the above process is repeated and the model evolved into a more accurate representation of reality. Model building is a creative effort based on inductive reasoning.<sup>7</sup>

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\* Adapted from Moshe F. Rubenstein's modeling process described in Patterns of Problem Solving.<sup>6</sup>

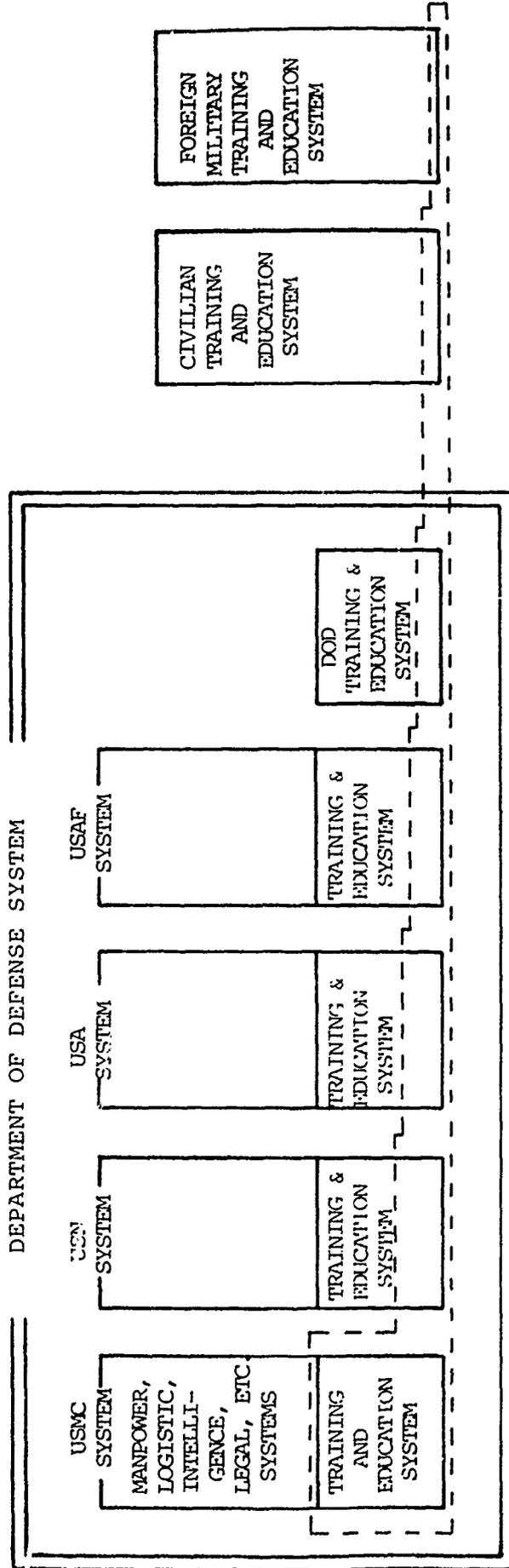
How is a model used? A model can be used or "exercised" in a variety of ways. Its structure provides decision makers a basis for discussion and compels them "...to develop their ideas and to exercise their judgment and intuition in a well defined context...."<sup>8</sup> The model serves as an extremely effective means of communication. Ideally, when there are proposals to institute change, it makes explicit the impact on the rest of the system. The costs and benefits of alternatives can be considered before decisions are made. Models are the heart of analytical thought, from hypothesis to observation to implementation of change.

#### A Basic Model of the Marine Corps' Training System

The previous section of this Chapter outlines a four step process for building models and states that the process is iterative. In this section we will follow these four steps in constructing an outline for a basic model of the Marine Corps' training and education system. This was the process actually used in our initial research. The product results from first iteration and is the foundation for the remainder of the report.

Step One. The system we are concerned with encompasses all activities associated with the training and education of Marines. The training and education system is part of the Marine Corps "system" which in turn is part of the Department of Defense "system" (Figure 2-1 provides

FIGURE 2-1  
 THE MARINE CORPS' TRAINING  
 SYSTEM AND ITS RELATIONSHIP  
 TO HIGHER AND ADJACENT SYSTEMS



The dashed line (-----) encloses those elements which represent the Marine Corps' "complete" training system. Parts of the Department of Defense's, Other Services', Civilian, and Foreign Military Training and Education Systems are included because Marines attend some of their schools.

a conceptual picture of these relationships). The training and education systems of the Department of Defense, the other Services, and foreign military and civilian training and education systems are considered to be adjacent systems. Since Marines attend some schools in these adjacent systems, a portion of each is included in the "complete" Marine Corps training and education system.

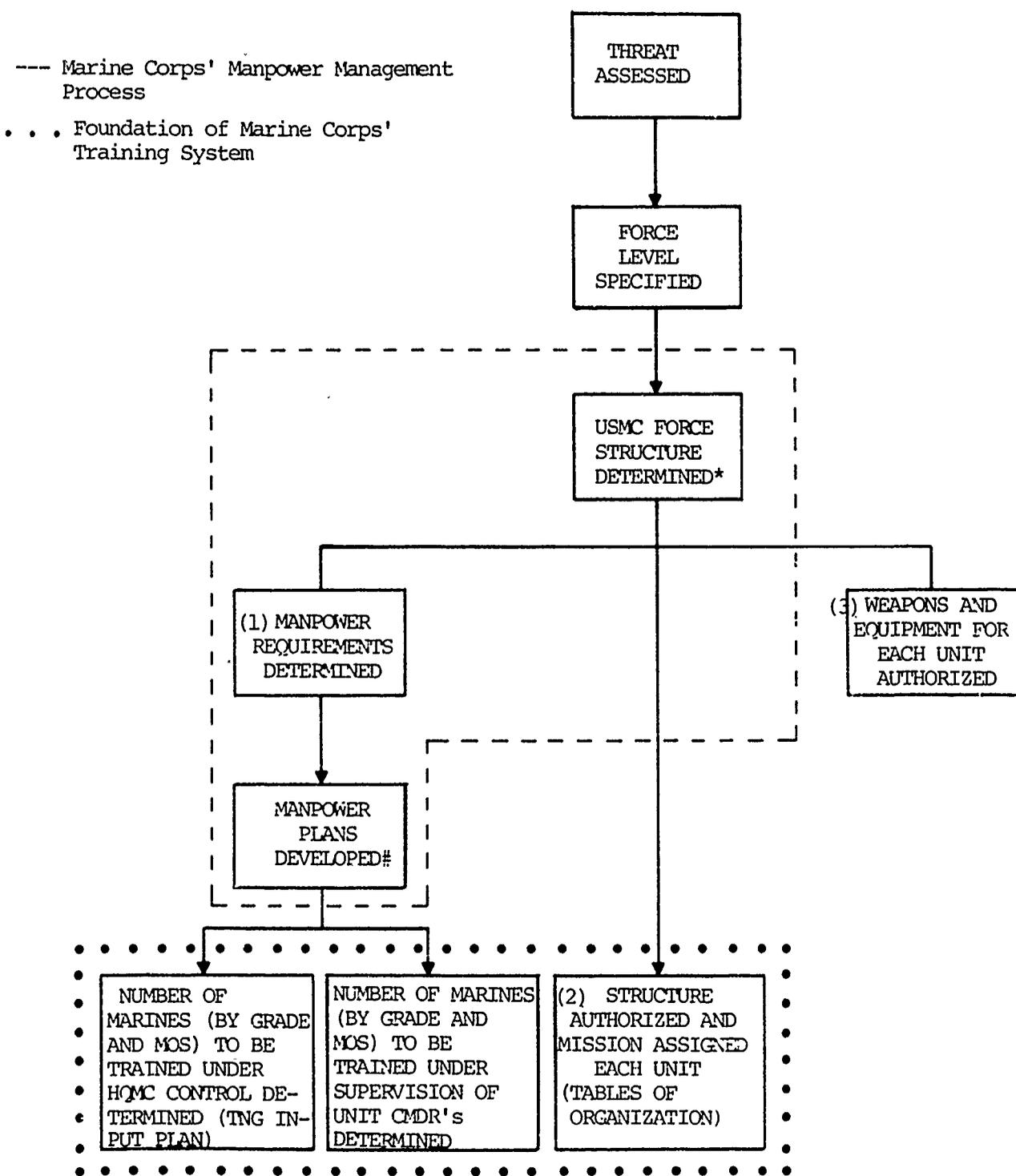
Step Two. The objective of the Marine Corps' training and education system, as explained previously in Chapter I, is to produce trained individuals and units. Individuals are considered trained when they have achieved stated levels of skill, knowledge, and attitude. Units are considered trained when they are capable of accomplishing assigned missions.

Step Three. (The text can more easily be followed from this point if reference is made to Figure 2-2.) The training and education system is most influenced by processes which occur in the Department of Defense and Marine Corps manpower management systems. Similarly, these systems are affected by other outside activities. To illustrate:

Defense manpower management does not exist alone; it is part of a larger decision process, and must compete for resources with other activities. Viewed simply, manpower management can be looked upon as part of the national security process.... The estimate of a potential enemy's

FIGURE 2-2

THE MANPOWER MANAGEMENT PROCESS AND TRAINING



\* Must comply with composition, functions, and missions as established by National Security Act of 1947 and Public Law 416.

# Other manpower plans developed in this process are: procurement, classification and assignment, promotion, retention, lateral transfer, and separation and retirement.

capabilities and intentions serves as the basis for a threat perception, which in turn is translated into force levels required to deal with that threat.<sup>9</sup>

The force level set for the Marine Corps is converted into a force structure.\* Force structure is defined in terms of (1) total manpower requirements, (2) the structure authorized and the mission assigned each unit, and (3) the weapons and equipment authorized each unit.

To meet total manpower requirements, plans for sustaining each occupational field are developed. Two of these plans are the genesis for individual training programs. The first, known as the Training Input Plan, details the number of Marines, by grade and military occupational specialty, who must complete designated formal courses each year. Training of these Marines is controlled and monitored directly by Headquarters, U.S. Marine Corps. Since only a fraction of the total individual training requirement is met through training controlled by Headquarters, U.S. Marine Corps, there is an implicit requirement for unit commanders to provide the remainder. The "plan" to do this is inherent in assignment, promotion, and lateral transfer plans. Thus,

---

\* Marine Corps force structure must comply with composition, function, and mission requirements established by the National Security Act of 1947, as amended in 1952 by Public Law 416.

the second "plan" is not a single document, but is represented in parts of other plans. Though commanders do not have access to these plans, they react to them. That is, they train the Marines assigned to their units to meet assignment, promotion, and lateral transfer requirements. Commanders are charged to provide this training by various orders which direct them to ensure every Marine has the skill and knowledge necessary to discharge his or her duties.

The structure authorized and the mission assigned each unit are contained in Tables of Organization (T/Os). These documents are the origin for unit training programs.

Step Four. The numerous elements of the Marine Corps' training and education system have been placed into a framework based on a series of questions we posed for ourselves early in the analysis.

The initial question was, "Who must be trained?" We determined there were two major categories: individuals and units. We later added the subcategories of enlisted, officer, air and ground. Figure 2-3 provides a matrix showing the separation, as well as the correlations among these six elements.

The second question was, "What are the requirements for training based on?" Examination of the manpower management process in step three above provided this answer. For individuals the requirements stem from the need for Headquarters, U.S. Marine Corps and unit commanders to annually train

FIGURE 2-3

RELATIONSHIP OF INDIVIDUAL, UNIT, ENLISTED,  
OFFICER, AIR AND GROUND TRAINING

		INDIVIDUAL TRAINING		UNIT TRAINING
		ENLISTED TRAINING	OFFICER TRAINING	
AIR TRAINING	1	2	3	
GROUND TRAINING	4	5	6	

sufficient numbers of Marines, in the appropriate grades and military occupational specialties, to sustain the force structure. For units the requirements are based on the need to train to a level where the mission assigned in the table of organization can be accomplished. Figure 2-2 shows these requirements as the product of the manpower management process and notes that they are the origin for the training and education system.

The third question was, "How are these requirements specified?" We concluded that training requirements can be specified in four ways: (1) by subjects or topics to be taught, (2) by the time (hours, days, weeks, etc.) to be devoted to training, (3) by general goals or purposes, and (4) in terms of tasks (objectives) which individuals or units must be capable of performing upon completion of training. "Tasks" were determined to be the most meaningful way to specify training requirements.

It was apparent that the many training requirements did not stand in isolation. The next question, then, was how are training requirements classified or typed? To the extent practicable, we utilized existing definitions in arriving at seven types of individual training. All unit training was typed as mission-oriented.

The fourth question was also one of classification, that is, what instructional settings (means) are available to

conduct training?\*

Five settings were identified for individual training and two for unit training.

What methods are employed to conduct training was the fifth question. Fourteen methods were identified for individual training and two for unit training.

How is training evaluated was the sixth question. Four evaluation functions for individual training and three for unit training were recognized.

The last question was, how is training managed? Three aspects were considered: (1) management of formal training by Headquarters, U.S. Marine Corps, (2) management of training within schools, and (3) management of training within units.

Answers to the questions discussed above are depicted as an outline for our basic model of the Marine Corps' training and education system in Figure 2-4. This outline serves as the structure for the report. The model, obviously, becomes much more complex when we analyze its elements in the remaining chapters.

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\* The term "means" is believed by the authors to be more accurate, however, MCO P1510.23B, Instructional Systems Design uses the term "instructional setting."

FIGURE 2-4  
OUTLINE OF THE MODEL

	INDIVIDUALS						UNITS			
	Number of Marines by grade and MOS, trained who need to be under HQMC control. Training Input Plan.	Number of Marines, by grade and MOS, who need to be trained by unit, commanders.	Subjects/Topics	Time	Goals	Tasks/ Objectives	Subjects/ Topics	Time	Goals	Tasks/ Objectives
Who must be trained ?	Unit Mission and Authorized Structure. Contained in tables of organization (T/OS)									
What are the requirements for training based on.	Officer Acquisition Training	Recruit/ Officer Basic Training	Skill Qualification Training	Mission Oriented Training	Mission Oriented Training					
How are requirements specified ?	(MOS) Career Training Leadership	Essential Subject Training	Related Training							
What are the types of training ?	Formal Schools	Command Schools	OJT MOJT FST	Self-Teaching Exportable Packages	Job Performance Aids	Drills				
What settings are available to conduct training ?	Lecture	Dramatization	Symposium	Sequential						
What methods are employed to conduct training ?	Demonstration	Role - Playing	Field Trip	Concurrent (Multi-echelon)						
	Performance	Panel	Tutoring							
	Conference/Seminar	Guided Discussion	Programmed Instruction							
	Case - Situation	Illustrative Problem	Simulation							
How is training evaluated ?	Testing	Evaluation of Instruction	Content Validation	Commander's Observation	Commander's Observation	Inspec-tions	Data entered into or produced by FORSTAT and FREDS			
How is training managed ?	HQMC	Schools	Unit Commander	HQMC	Unit Commander					

## NOTES

1. Edward S. Quade, Analysis for Public Decisions (New York: American Elsevier, 1975), p. 159.
2. Moshe F. Rubenstein, Patterns of Problem Solving (Englewood Cliffs, NJ: Prentice-Hall, 1975), p. 204-208.
3. Ibid., p. 208-210
4. David W. Miller and Martin K. Starr, Executive Decisions and Operations Research, 2nd ed. (Englewood Cliffs, NJ: Prentice-Hall, 1969), p. 147.
5. Ibid., p. 145-146.
6. Rubenstein, p. 197.
7. Ibid., p. 200.
8. Quade, p. 148.
9. Defense Manpower Commission, Defense Manpower: The Keystone of National Security, Report to the President and the Congress (Washington: U.S. Govt. Print. Off., April 1976), p. 76-79.

PART II  
INDIVIDUAL TRAINING

## CHAPTER III

### INTRODUCTION TO INDIVIDUAL TRAINING

#### Background

The purpose of this chapter is to describe the individual training programs for officers and enlisted Marines. It begins with a description of the various types of training. One of the types, enlisted career training is given special attention with an explanation of Marine Corps, Army, and Air Force noncommissioned officer career training. Officer career training, aviation training, and the Marine Corps leadership program, which would logically be covered at this point, are reserved for later chapters because of their complexity. The chapter continues with an explanation of the settings in which training is conducted and the methods of training. The next section of the chapter deals with the evaluation of individual training. The final section contains conclusions and recommendations.

Since there exists no single source document that describes individual training in the Marine Corps, the terms and definitions used in this chapter are extracted from a number of Marine Corps directives. When conflicting terminology is encountered, the terms found in Marine Corps Order 1510.2H, Individual Training of Enlisted Marines, are used.

### Types of Training

Individual training can be divided into seven types: officer acquisition, recruit and officer basic, skill qualification, mission oriented, career, essential subjects, and related. Officer acquisition and basic training obviously are conducted only for officers. Only enlisted Marines receive recruit and essential subjects training. The other types apply to all Marines. See Figure 3-1 for a breakdown of the types of officer and enlisted individual training.

Officer acquisition training consists of programs that lead to a commission and fulfill the Marine Corps' need for career and non-career junior officers of the active force and the reserve components.\* After acquisition training, comes officer basic training conducted at The Basic School, Marine Corps Development and Education Command, Quantico, Virginia. Its purpose is:

...to educate newly commissioned officers in the high standards of professional knowledge, esprit de corps, and leadership traditional in the Marine Corps in order to prepare them for the duties of a company grade officer in the Fleet Marine Force with particular emphasis on the problem-solving and decision-making duties and responsibilities of a rifle platoon commander in helicopter high mobility and mobile seabased environments.<sup>1</sup>

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\* These programs include: Service Academies, Naval Reserve Officers Training Corps, Officer Candidate Course, Platoon Leaders Class, Marine Enlisted Commissioning Education Program, Organized Marine Corps Reserve Direct Commissioning Program, and Interservice Transfers.



The enlisted equivalent to officer acquisition and basic training is recruit training which introduces the enlistee to military life. It provides an orderly transition from civilian to military life, motivation to become a dedicated and productive member of the Marine Corps, and instruction in the basic skills that all Marines are required to achieve. Male Recruit Training and Women Recruit Training are conducted separately.

Male recruits are taught those subjects required to produce a basic Marine able to sustain himself on the battlefield, function effectively in garrison and practice those personal and professional traits that distinguish him as a Marine. The length of training is ten weeks and is conducted at the recruit depots in San Diego, California and Parris Island, South Carolina.\* A common program of instruction for the two depots is provided by Headquarters, U.S. Marine Corps.

The scope of Women Recruit Training is the same as for the men except that women are not instructed on how to sustain themselves on the battlefield. The course is eight weeks long and is conducted at Parris Island, South Carolina only.

Following officer basic or enlisted recruit training, Marines receive instruction that provides the necessary

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\* A decision to reduce male recruit training from ten to nine weeks was made in December 1977. A revised program of instruction (POI) that reduced the total academic hours from 375.5 to 329 is being tested. Implementation of the new POI is scheduled for 1 October 1978.

skills, technical proficiency and professional depth in a specific field needed to qualify them in a military occupational specialty (MOS). This is referred to as entry level skill qualification training and is conducted by a formal school or a designated command.\* When it is conducted by a designated command, it is done through one of three programs; field skill training (FST), managed on-the-job training (MOJT), or on-the-job training (OJT). These alternatives to formal schooling were developed when the authorized force structure was reduced to a peacetime level in an effort to decrease the number of personnel involved in providing and receiving training, to reduce the costs associated with formal schools training, and to shorten the time required for graduate recruits to reach their first permanent units.

Although all officers receive their entry level skill qualification training at a formal school, it was anticipated that 30% of enlisted Marines would receive this training on-the-job in FY 1978. This compares with 3% for the Army, 8% for the Air Force, and none for the Navy. The Department of Defense Military Manpower Training Report for FY 1978 indicated that the high percentage of on-the-job training conducted by the Marine Corps was offset by the fact

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\* In budget matters and when preparing the Military Manpower Training Report, entry level skill qualification training is called Initial Skill Training and on-the-job training.

that the Marine Corps has the longest recruit training course.<sup>2</sup> Since that report was published, the Marine Corps has considered reducing recruit training by two weeks, but some Headquarters, U.S. Marine Corps officials estimate that on-the-job training will rise to 35% in FY 1979.

The use of on-the-job training programs in lieu of formal school training has not been without its cost. The cost can be measured in terms of personnel required to provide the instruction and operational weapons and equipment needed to support the training. This program burdens the Marine Divisions within the continental United States with a number of unqualified Marines who cannot be deployed until they have received a minimum of 12 weeks of training.\* It would be necessary to provide for the administration and disposition of these trainees upon deployment or mobilization. On the other hand, the benefits of the program are that Marines reach their permanent unit sooner, unit affiliation occurs during the Marine's initial skill training and some reduction in the size and cost of training support establishments is possible.

The types of training described above are referred to collectively as entry-level. The remaining types are called post entry level and include essential subjects, career, mission-oriented, and related training.

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\* Title 10, U.S. Code requires that the military service provide 12 weeks of training to each man prior to overseas assignment. This 12 weeks includes recruit training.<sup>3</sup>

Essential subjects training ensures continued proficiency in those basic military skills learned in recruit training which are considered to be common to all enlisted Marines regardless of grade or MOS. All enlisted Marines must achieve and maintain proficiency in these ten essential subjects.\* Recruit training is designed to insure that proficiency is achieved. Subsequent to recruit training, commanders are responsible for evaluating their Marines to determine if proficiency is being maintained. Commanders use a "test then train" approach to insure that Marines receive only the remedial training necessary to maintain the specified level of proficiency.

The type of training that augments, supports and adds to other individual training is related training. It may be directive or nondirective and includes troop information, drug and alcohol abuse control and safety training. Related training is directive if the training is required and nondirective if the commander has the option of conducting or not conducting the training. See Table 3-I for a list of directed related training.

It is the responsibility of the commander to determine the training needed by Marines assigned to his unit so that the unit is able to carry out its mission. Mission.

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\* The ten essential subjects are: code of conduct and military law/UCMJ; customs and courtesies; close order drill; interior guard; first aid and field sanitation; uniform clothing and equipment; physical fitness; NBC defense; service rifle and marksmanship; and individual tactical measures.

TABLE 3-1

DIRECTED RELATED TRAINING			
<u>SUBJECT</u>	<u>REQUIRED BY</u>		
	<u>IMPLEMENTED BY</u>		
	<u>REQUIREMENT</u>		
Code of Conduct	Executive Order No. 10631	MCO P1070.12C	Explain code within six days of initial entry, after six months active service, upon re-enlistment, and 60 days prior to deployment.
UCMJ	Executive Order (Manual for Courts Martial)	MCO P5800.8A	Explain certain articles within six days of initial entry, after six months active service upon reenlistment.
Food Service Management	DOD Dir 1338.10M	MCO 10110.34B	Establish Patron Education program; provide supervised technical training as part of OJT for food service management personnel.
Traffic Safety	Public Law 89-564	MCO 5100.19B	Ten hours classroom instruction to Marines under age 25. Initial instruction will be given within first six months of duty at first permanent station or activity.
Troop In-formation	DOD Inst. 5120.32	MCO 1510.25A	Establish program to fulfill needs of command and satisfy requirements referenced in the order.
Leadership	DOD Dir. 1322.11	MCO 5390.2A	Teach learning objectives in course materials .. estimated 16-24 hours required annually.
Drug Abuse	Public Law 92-129	MCO 6710.1B	Appoint officer; establish councils, contact teams. Hours not specified.
Alcohol Abuse	Public Law 92-129	MCO 5370.6	Establish various programs to educate, etc. Hours not specified.

Source: Interview with Major W.C. Fite III, General Training Section, Individual Training Branch, Training Division, Operations and Training Department, Headquarters, U.S. Marine Corps, Washington, D.C.: 7 February 1978.

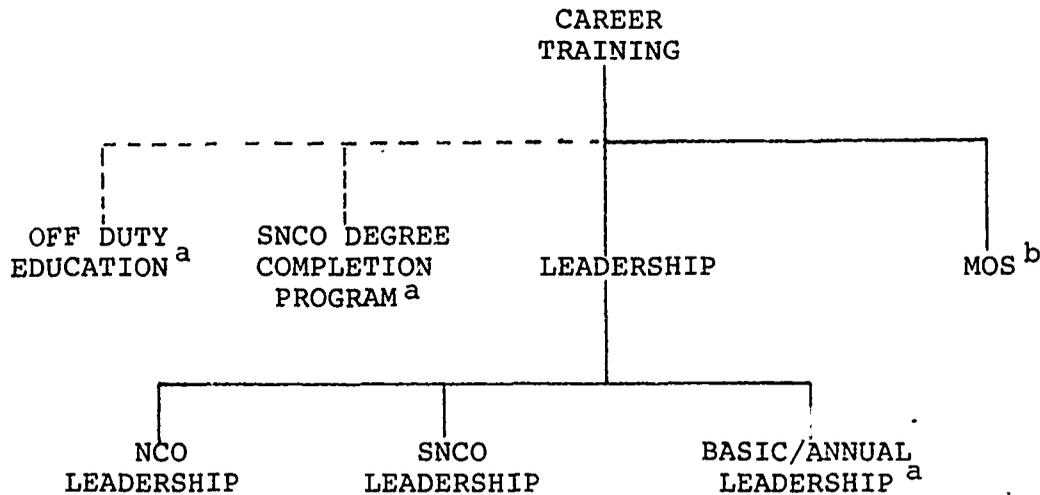
oriented training provides a Marine with the skills, knowledge, and attitudes required to support the unit mission.

Marine Corps Enlisted Career Training for Noncommissioned Officers. The final type of individual training is career training. It builds on the foundation of skill qualification training and consists principally of military occupational specialty and leadership training. Figure 3-2 shows a breakdown of enlisted career training. Officer career training will be discussed in the next chapter. For ease of reference, noncommissioned officer career training has been divided into off-duty education, staff noncommissioned officer degree completion program, leadership, and military occupational specialty training.

The importance of education to a Marine and to the Marine Corps has been recognized for many years. A good education is an asset to the individual, enables him to be more proficient in his military duties, and increases his chances of being selected for promotion. In addition to offering full-time education programs which lead to a commission, the Marine Corps offers a part-time study program that is completed by Marines during off-duty hours. These include the Marine Corps Tuition Assistance Program, Servicemen's Opportunity College, Defense Activity for Non-traditional Education Support and the Veterans Administration Educational Assistance Program.<sup>4</sup>

FIGURE 3-2

MARINE CORPS ENLISTED CAREER TRAINING



<sup>a</sup> Although Marine Corps directives do not specifically categorize off duty education, SNCO Degree Completion Program and Basic/Annual leadership as career training, they clearly belong in this category.

<sup>b</sup> MOS training is divided into Functional and Skill Progression Training in the DOD Military Manpower Training Report. These terms are not found in Marine Corps directives.

Source: U.S. Marine Corps, Individual Training of Enlisted Marines, MCO 1510.2H (Washington: 16 July 1974), p. 2.

A full-time educational program available to staff non-commissioned officers who have sufficient college credit to be able to obtain a baccalaureate degree within 18 months is the degree completion program.

Leadership training is an important part of career training. Noncommissioned officer leadership training is conducted under the direction of the unit commander. Noncommissioned officers leadership schools are conducted by many units to supplement previous training and meet the requirements of the unit commander. Such schools are encouraged and may be conducted at any level. They are of limited duration and are for a limited number of selected personnel. Headquarters, U.S. Marine Corps does not regulate these schools.

Staff noncommissioned officer leadership training provides selected senior enlisted Marines with the skill and knowledge to assume the responsibilities of the highest noncommissioned officer grades. The Marine Corps operates three staff noncommissioned officer academies located in El Toro, California; Camp Lejeune, North Carolina; and Quantico, Virginia. Six selected senior SNCOs attend the U.S. Army Sergeants Major Academy each year. The Marine Corps Leadership Program requires annual training for all Marines. This program will be discussed in a later chapter.

The final component of enlisted career training is MOS training. This type of training is received by enlisted

personnel subsequent to skill qualification training. Through this training, the student gains the knowledge to perform at a more skilled level or in a supervisory position. It is most frequently given after the Marine has gained experience through actual work in his specialty. In some cases, however, when an individual is training in a relatively narrow subject area, this training is given as an immediate follow-on to skill qualification training.\* The training is designed to provide Marines with the latest available technical information and managerial techniques related to a military occupational specialty.

#### Other Service Noncommissioned Officer Career Training

The Army and Air Force have a progressive noncommissioned officer career training system that provides training at each rank from corporal through sergeant major. The Air Force system is referred to as Noncommissioned Officer Professional Military Education. The Army equivalent to Marine Corps career training is called the Noncommissioned Officer Education System (NCOES).

Army Career Training for Noncommissioned Officers. This education system is the process by which soldiers train to maximum proficiency in their military occupational specialty. They are provided training to prepare them for the skill level required for the next higher grade. The intent of the

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\* This is most often the case in aviation technical skills. A Marine frequently attends several schools in succession before he is assigned to a unit.

Army's Noncommissioned Officer Education System is to provide the necessary training at the proper time in the soldier's career, to insure it is progressive and associated directly with the appropriate skill level. There are five levels of training each of which is associated with a pay grade as shown in Table 3-II. In order to pass from one skill level to the next higher level a skill qualification test must be passed.

TABLE 3-II

ARMY NONCOMMISSIONED OFFICER EDUCATION SYSTEM

<u>LEVEL</u>	<u>GRADE</u>
Senior Level	E8/E9
Advance Level	E7
Basic Level	E6
Primary Level	E5
Entry Level*	E1/E4

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\* Entry level training would more closely equate to Marine Corps recruit training and skill qualification training which is not usually associated with noncommissioned officer training.

Source: Interview with Lieutenant Colonel N.T. Nance, Noncommissioned Officer Education System Branch, Enlisted Personnel Management System Office, Deputy Chief of Staff for Training, Headquarters, U.S. Army Training and Doctrine Command, Fort Monroe, Virginia: 14 December 1977.

Combat service and combat service support personnel follow a slightly different course in their career training than those in the nine combat arms. See Table 3-III for a description of the system.

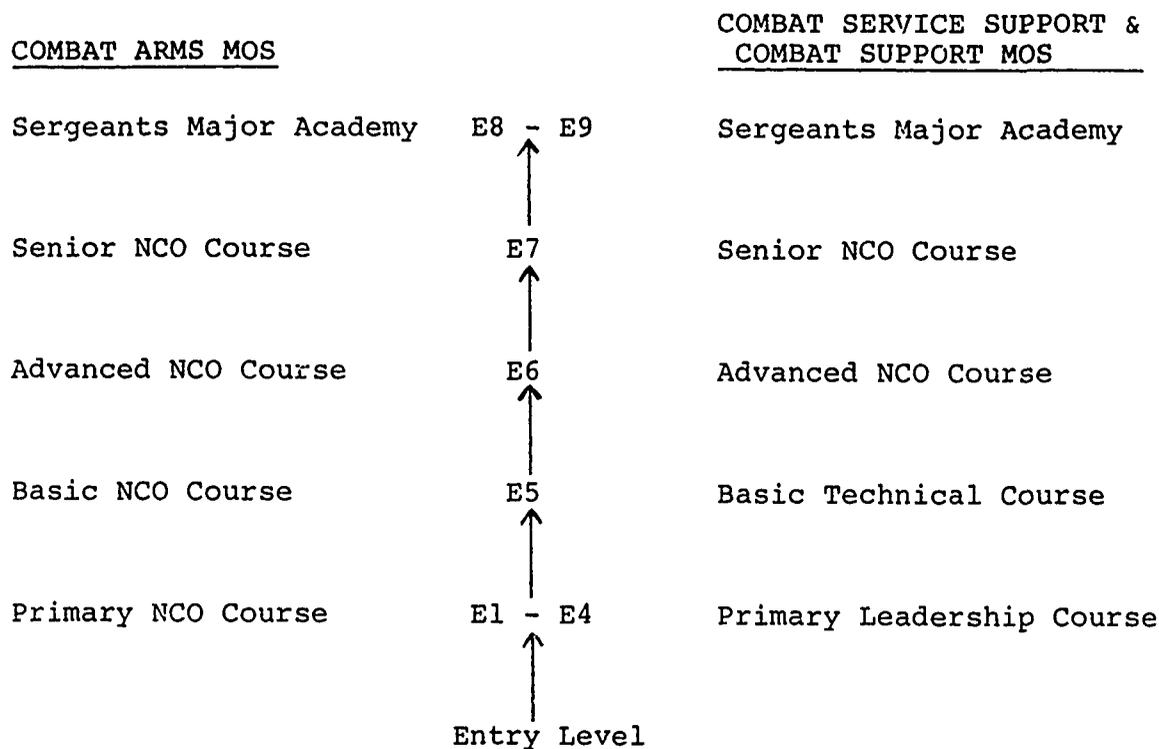
The entry level of training consists of basic combat training for males, basic training for females and advanced individual training for all. In the case of a high density MOS, basic combat training and advanced individual training are combined at one location and referred to as one station unit training. Upon successful completion of entry level training, the individual is awarded skill level 1.

The next level of training, primary level, prepares the E4 to assume duty as an E5. For the nine combat arms MOSs, a course of instruction develops leadership skills for those soldiers who have been selected by their commander because of career potential. The course is four weeks long and is conducted at division-level noncommissioned officer academies. Attendance is mandatory for promotion to E5. For E4 personnel in combat support and combat service support MOSs, a three week primary leadership course aimed at providing supervisory and managerial skills is available in the resident and nonresident mode. A primary technical course is also available to soldiers in some combat support and combat service support MOSs.

The basic level of training prepares E5s to perform at E6 skill level. The basic noncommissioned officers course

TABLE 3-III

ARMY NONCOMMISSIONED OFFICER EDUCATION SYSTEM




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Source: Interview with Lieutenant Colonel N.T. Nance, Noncommissioned Officer Education System Branch, Enlisted Personnel Management System Office, Deputy Chief of Staff for Training, Headquarters, U.S. Army Training and Doctrine Command, Fort Monroe, Virginia: 14 December 1977.

for the combat arms is taught at noncommissioned officer academies. Specific MOS training for each of the nine combat arms is provided in this four week course which is divided into three phases. Phase I consists of pretesting and performance-oriented training. Phase II covers critical skill training in specific MOSs. In Phase III combined arms tactical exercises are conducted. Some combat support and combat service support MOSs have basic technical courses available in the resident and extension mode. Each proponent school has the flexibility to determine if this training is required for the MOS which it sponsors.

The advanced noncommissioned officer course prepares an E6 to perform the duties of an E7. Training focuses on broadening the skills and knowledge required at this skill level. Both resident and nonresident instruction is provided. Two courses are currently under development for E7s, the first sergeants course and the operations and intelligence course.

The U.S. Army Sergeants Major Academy is the capstone course for NCO training in the Army. It is 22 weeks long and is available to selected individuals in the grades of E8 and E9.

Air Force Career Training for Noncommissioned Officers.

Air Force Noncommissioned Officer Professional Military Education is a five phase program designed to prepare NCOs

for positions of responsibility by broadening their leadership and management skills and by expanding their perspective of the military profession. See Table 3-IV for a breakdown of the system by pay grade.

Phase I is a 19.5 hour course designed to familiarize newly promoted E4/Senior Airmen with the duties and responsibilities of NCOs. The Noncommissioned Officer Orientation Course is a prerequisite for appointment to NCO status.

A 52-hour course designed to prepare noncommissioned officers and civilians to perform effectively in their first supervisory positions makes up Phase II and is referred to as The Supervisors Course.

The Certified Command Leadership School (Phase III) is a three week, 40-hour course designed to broaden the leadership and management skills of selected junior NCOs.

The fourth phase, Certified Command Noncommissioned Officer Academy is a five week, 230-hour course that prepares selected NCOs to perform mid-level supervision and management responsibilities.

The final phase is the Noncommissioned Officer Academy. It is a 360-hour course of nine weeks duration conducted by the Air University. It is designed to prepare selected senior noncommissioned officers to better fulfill their leadership and management responsibilities.

Headquarters, U.S. Air Force sets the standard minimum curricula for these courses which are designed to meet individuals' needs at particular stages in their career development. Subjects which are unique to the mission or operation of a major command may be added to the minimum curricula.

TABLE 3-IV

USAF NONCOMMISSIONED OFFICER PROFESSIONAL  
MILITARY EDUCATION\*

<u>SCHOOL</u>	<u>GRADE</u>
Senior NCO Academy	E8/E9
NCO Academy	E6/E7
NCO Leadership School	E4/E5
Supervisors Course	E4/E5
NCO Orientation Course	E3/E4

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\* All courses are broad in scope. Military Occupational Specialty Training is not included in this type of training.

Source: Interview with Lieutenant Colonel D.E. McHenry, Professional Education Programs Division, Director of Personnel Programs, Deputy Chief of Staff Personnel, Department of the Air Force: 6 February 1978.

The NCO Orientation Course and Supervisor's Courses are mandatory for all eligible enlisted members. Selecting NCOs to attend Leadership Schools, academies and the Senior NCO Academy is a prerogative of the major commands. Consideration is given to the growth potential, supervisory duties and retainability of the individual. Planned use after graduation is also a consideration.

### Instructional Setting for Individual Training

The instructional setting is the vehicle used to present the instruction. The optimal setting is the one that provides the most effective and efficient training. The five instructional settings are formal schools, command schools, on-the-job training, self-teaching exportable packages, and job performance aids. Formal schools are conducted by Marine Corps commands, other services, and civilian institutions based on programs approved by the Commandant of the Marine Corps. The formal schools are listed in Marine Corps Order P1500.12, Marine Corps Formal Schools Catalog. Command schools are organized and operated to meet local training needs not requiring training in formal schools. On-the-job training takes place within the unit as part of daily operational and maintenance functions. Self-teaching exportable packages, also referred to as correspondence courses, provide an alternative method of training when other means are not available or are not as efficient. Job performance aids consist of such things as checklists and plastic cards that outline the five paragraph order.

On-the-job training is accomplished through one of three means: on-the-job, managed on-the-job, or field skills training. The three means of accomplishing on-the-job training are discussed below.

On-the-job training is practical application in an actual job environment. The Marine learns by doing what he or she is supposed to do in a particular specialty. Limited formal instruction is also employed, but most of the instruction is presented by the supervisor. Personnel being trained are assigned for duty and are chargeable to the command conducting the training.

Managed on-the-job training is conducted by designated commands, governed by Commandant of the Marine Corps approved programs of instruction. Its purpose is to qualify Marines for assignment of an MOS within a specified time. Formalized instruction and practical application in an actual job situation are used and Marines are assigned to the training by Headquarters, U.S. Marine Corps. All Marines trained under this technique, except 6-month reservist trainees, are joined by a reporting unit of the command conducting the training.

The third program, field skill training, is conducted by designated Fleet Marine Force commands subject to the Commandant of the Marine Corps approved performance objectives and training time restrictions. Its purpose is to qualify Marines in a primary MOS. Each Marine being trained under this program is a chargeable asset. Personnel input is directed and controlled by the Commandant of the Marine Corps.

Within the Marine Corps, correspondence courses are available through the Marine Corps Institute and the Extension School. The Marine Corps Institute prepares and administers over 100 correspondence courses designed to increase the general military and technical proficiency of Marines. The Extension School provides professional education opportunities. It offers four courses which parallel those provided by the Education Center, Marine Corps Development and Education Command at the Staff Noncommissioned Officer Academy, The Basic School, Amphibious Warfare School, and Command and Staff College. The Extension School is located in Quantico, VA and the Marine Corps Institute in Washington, D.C. Both are under the operational control of the Commanding General, Marine Corps Development and Education Command.

#### Methods of Instruction

Regardless of the type of training or the setting used to train, one or more methods of instruction must be employed to insure that the objectives of a given period of instruction are met. Methods of instruction are numerous and include lecture, demonstration, and guided discussion.\*

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\* Other methods of instruction include: performance, conference/seminar, dramatization, case-situation, role-playing, illustrative problem, panel, symposium, field trip, tutoring, and programmed instruction.

### Evaluation of Individual Training

The evaluation of individual training involves the evaluation of the student, the instructor and the validity of the instruction. The student is evaluated by testing and by his commander who observes his performance. The instruction is evaluated by students, instructors and commanders. The course content is evaluated through feedback information.

Testing. Criterion measures are tests designed to evaluate the performance stated in learning objectives. They are derived directly from learning objectives and not from lesson plans or other directives. They measure, in absolute terms, the individual's skill qualifications. In the case of Skill Qualification Training, they represent a method of measuring the qualification of the student to perform prior to arrival at his first permanent duty station after recruit training. The purposes of testing are to: pretest students, evaluate, graduate or eliminate students from a program; diagnose learning difficulties; maintain quality control; and measure the adequacy of the instructional system, identifying the weaknesses and forming a basis for modification. There are four types of tests: performance, written, oral and ratings. Of the four, performance tests are considered the most desirable since they require the student to demonstrate a learned behavior.<sup>5</sup>

Evaluation of Instruction. As part of the supervision of any instructional program, effectiveness can be enhanced by frequent evaluation of instruction as it is being presented. This serves not as a measurement of the effectiveness of the instruction, but rather as a means to insure the efficiency and quality of the instructional technique.\* The true measure of the effectiveness of the instruction is whether or not the learning objectives have been achieved. Equally important is course content validation.

Course Content Validation. The principal purpose of validation is to assure that the course of instruction is effective and that it produces the desired results. In formal schools, the most used means of course validation is feedback information received from graduates and their supervisors in the form of replies to questionnaires. The questionnaires are designed to provide information to the school director of the effectiveness and appropriateness of the instruction presented. Cognizant commanders are required to ensure that each Marine Corps formal school course is evaluated and that feedback systems are used.<sup>7</sup>

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\* There are four means of evaluating instruction: personnel from the faculty or staff evaluate classes, instructor survey made to determine discrepancies, students evaluate blocks of instruction, private interviews conducted with students and instructors.

Commanders' Observation. The final method of evaluating individual training is commanders' observations. This is accomplished through observation of on-the-job performance. The commander determines the individual's ability to perform duties in support of the unit's mission. These observations are then recorded as proficiency marks and fitness reports.

The evaluations described above are conducted at the unit level. There is no system at HQMC level that provides a means of managing the qualitative aspects of formal courses of instruction to insure that the instruction is effective and that it supports valid field requirements.

#### Conclusions and Recommendations

1. Conclusion. That the terminology used to identify the types of training differs among various Marine Corps orders and between the Marine Corps and the Department of Defense.

Recommendation. That the terminology used to identify the types of training conducted in the Marine Corps be standardized and be in agreement with those used in the Department of Defense Military Manpower Training Report.

That the following Marine Corps Orders be revised to reflect the standardization of terms:

1. The Marine Corps Manual

2. Individual Training of Enlisted Marines, Marine Corps Order 1510.2H
3. Marine Corps Entry Level Skill Qualification Training, Ground, Marine Corps Order P1500.32A
4. Career Planning and Development Guide, Vol. I, II, III, Marine Corps Order P1040.32
5. Unit Level Training, Marine Corps Order P1510.25
6. Marine Corps Formal School Catalog, Marine Corps Order 1500.12J
7. Training Management Manual, Marine Corps Order P1500.26A (Draft)

2. Conclusion. That the Marine Corps conducts significantly more on-the-job training than other services to qualify graduate recruits in a military occupational specialty.

Recommendation. That the cost, to include degradation of operational readiness, of on-the-job training be determined and compared with the cost of conducting the same training at a formal school to determine which is more cost effective.

3. Conclusion. That the Marine Corps has published no document that accurately explains either the officer or enlisted training and education program.

Recommendation. That a document that explains the Marine Corps' officer and enlisted training and education system be published.

4. Conclusion. That the Marine Corps has not identified a Professional Military Education program for noncommissioned officers and staff noncommissioned officers.\*

Recommendation. That unit level schools be established to provide professional military education at the lance corporal and corporal/sergeant levels.

That a standardized core curriculum be established by Headquarters, U.S. Marine Corps for the unit level schools.

That graduation from the unit level schools be a prerequisite for promotion.

That staff noncommissioned officer academies continue to provide professional military education to selected staff sergeants.

That successful completion of the staff noncommissioned officer course, resident or non-resident, be a prerequisite for promotion to gunnery sergeant.

That the current First Sergeant Personnel Administration School curriculum be reviewed and expanded to meet the definition of a professional military education course.

That the revised course be available in the resident and nonresident modes and that successful completion of the course be a prerequisite for promotion to First Sergeant. See Table 3-V for a conceptual diagram of the proposed system.

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\* Professional Military Education provides progressive training related more to increasing responsibility associated with career progression to more senior grades than to an individual's current assignment or specialty.

That the Marine Corps Formal School Catalog be reviewed and courses that parallel those conceptualized in Table 3-V be designated as equivalent to Professional Military Education courses.

TABLE 3-V  
CONCEPTUAL PROFESSIONAL MILITARY EDUCATION SYSTEM FOR ENLISTED MARINES

RANK OF STUDENT	COURSE NAME	RESPONSIBILITY FOR COURSE CONTENT	REMARKS
Lance Corporal	NCO Orientation	Unit - HQMC provides core curriculum	Prerequisite for promotion to Corporal
Corporal/ Sergeant	Advanced NCO School	Unit - HQMC provides core curriculum	Prerequisite for promotion to Staff Sergeant
Staff Sergeant	Staff NCO Academy	HQMC	Prerequisite for promotion to Gunnery Sergeant
Gunnery Sergeant	First Sergeants School	HQMC	Prerequisite for promotion to First Sergeant

Source: Authors' Conception (Newport: March 1978)

NOTES

1. U.S. Marine Corps, Education Center, Marine Corps Development and Education Command, Basic Course, Program of Instruction (Quantico, VA: 16 October 1976), p. 1-1.

2. Office of the Assistant Secretary of Defense (Manpower and Reserve Affairs), Military Manpower Training Report for FY 1978 (Washington: March 1977), p. II-5.

3. U.S. Laws, Statutes, etc., "Department of Defense Appropriation Authorization Act, 1976," United States Statutes at Large, Public Law 94-106, 1st sess. (Washington: U.S. Govt. Print. Off., 1977), v. 89, p. 537.

4. U.S. Marine Corps, Marine Corps Educational Opportunities, NAVMC 2630 (Washington: 25 November 1977), pp. I-19 - I-23.

5. U.S. Marine Corps, Instructional Systems Development, Marine Corps Order P1510.23B (Washington: 30 January 1978), p. 3-4.

6. Ibid., p. 6-3.

7. U.S. Marine Corps, Marine Corps Formal School Catalog, Marine Corps Order P1500.12J (Washington: 6 May 1977), p. 1-5.

## CHAPTER IV

### SPECIFYING REQUIREMENTS FOR INDIVIDUAL TRAINING

#### Background

Commanders must have some means to specify what training they want subordinates to accomplish. During the research for this report various directives, programs of instruction, and lesson plans were reviewed to see how training requirements for individuals are specified. It was determined that there are four methods. The first is to simply list subjects to be taught during a certain course. The second is to direct the amount of time to be spent on training. The third way is to provide general goals or purposes for the training to be conducted. The last method is to establish tasks or objectives which are measurable and observable. Such objectives explicitly describe the performance students are expected to be capable of as a result of instruction.

The vagueness inherent in the first three methods makes them less useful than objectives. For example, the subject "First Aid" doesn't establish whether the student is to be able to treat simple cuts and scratches or whether he is to possess more sophisticated medical skills. The requirement to conduct a specified amount of training, such as "two hours of defensive tactics," does not tell very much either.

The only way to determine if the training specified by subject or time has been accomplished is to actually observe the training or to check schedules. General goals or purposes, which are of two types, have significant shortcomings, also. The first type describes the procedure the instructor is to use. Examples are, "examine the principles of war," "discuss the techniques of fire support coordination," and "introduce the life saving steps." The only way to gauge the accomplishment of these goals is to observe classes to see if the instructor does, in fact, "examine the principles of war," "discuss the techniques of fire support coordination," etc. The second type of goal tells what the student is to be able to do, but lacks clarity. The following are examples, "be familiar with the M-16 Rifle," "know how to camouflage," and "understand communications." "Familiar," "know," "understand," and like words are open to a wide range of interpretations. How familiar is the student to be with the M-16 Rifle? Familiar to the extent he can disassemble and assemble it? Familiar enough to fire it? Or, so familiar he is able to make major repairs to the weapon? Using such goals to gauge training is very subjective since the degree of skill and knowledge required is unknown.

Tasks and objectives differ from the previously discussed methods of specifying training because they focus on action verbs which portray behavior that is measurable and

observable. The following is an illustration: "Given a 1:50,000 map and a protractor, locate a point on a map within 20 meters." This objective tells what the student is to be able to do upon the completion of training.

The concepts underlying the use of tasks and objectives are not new. Educators have been advocating their adoption for some 30 years.<sup>1</sup> The appearance of Robert L. Mager's classic book Preparing Instructional Objectives in 1962, made the value of the concepts evident to a wide audience.<sup>2</sup> As a result, the 1960s saw the development of many new instructional techniques based on definitive tasks and objectives. Programmed instruction, "teaching" machines, and self-paced texts are examples. Tasks and objectives are the heart of the "systems approach" to training.

#### Specifying Training in the Marine Corps

The Marine Corps employs the four methods described above to specify training requirements for individuals. The following are examples of each.

Subjects or Topics. Marine Corps Order 1510.25A, Marine Corps Troop Information Program requires instruction to be provided in "Character and Moral Education," "Citizenship," and "Personal Conduct." No information beyond one short descriptive sentence is provided in the Order for any of these topics. Marine Corps Order P3000.1D, Standard Policy

for Movements of Marine Corps Units and Transients Overseas (SPMO) lists in paragraph 2000.1.i these subjects for training: "Code of Conduct," "Security of Classified Material," "Orientation on the Particular Country to Which Transferred," "Personal Conduct," and "Organization of the Government of the United States and the Role and Mission of the Marine Corps."

Time. Ten hours of classroom instruction in safe driving are required to be given to Marines under the age of 25 within six months of assignment to their first permanent station or activity. The directive specifying this is Marine Corps Order 5100.19B, Marine Corps Traffic Safety Program for Off-Duty Military Personnel. Each Marine must receive two hours of training on food conservation annually in accordance with Marine Corps Order P10110.34B, Food Service and Subsistence Management Manual.

Goals. Instruction to improve mutual understanding among all Marines and to ensure that each Marine understands that the Marine Corps guarantees him or her equal rights, equal opportunity and equal protection without regard to race or sex is required to be provided by Marine Corps Order 1510.25A, Marine Corps Troop Information Program. This same Order also requires instruction designed to assist the individual Marine in the arrangement of his or her personal affairs.

Tasks and Objectives. Marine Corps Order 1510.2H, Individual Training of Enlisted Marines, contains objectives for ten essential subjects in which all Marines are required to maintain proficiency. Objectives for leadership are contained in Marine Corps Order 5390.2A, Leadership Program.

Though all four methods of specifying training are used in the Marine Corps, the trend in recent years has been towards increased reliance on tasks and objectives.\* This greater reliance on tasks and objectives results from the increasing awareness of their value in fixing and then evaluating training. Use of objectives is specified for formal schools by Marine Corps Order P1510.23B, Instructional Systems Development, and for individual training within units by Marine Corps Order 1510.26, Unit Level Training Management. The following paragraphs discuss these directives and their impact on training.

MCO P1510.23B, Instructional Systems Development. Instructional Systems Development (ISD) is the application of the systems approach to training in formal schools. ISD is based on the principles employed in systems analysis and

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\*An important exception to this trend is where "time" has demonstrable effects on the capabilities of the Marine to perform required skills. As examples, flight hours and the requirement to participate in three hours of physical fitness training per week. The original requirement in these cases is spelled out by objectives, but a minimum time for practice of the skill is added.

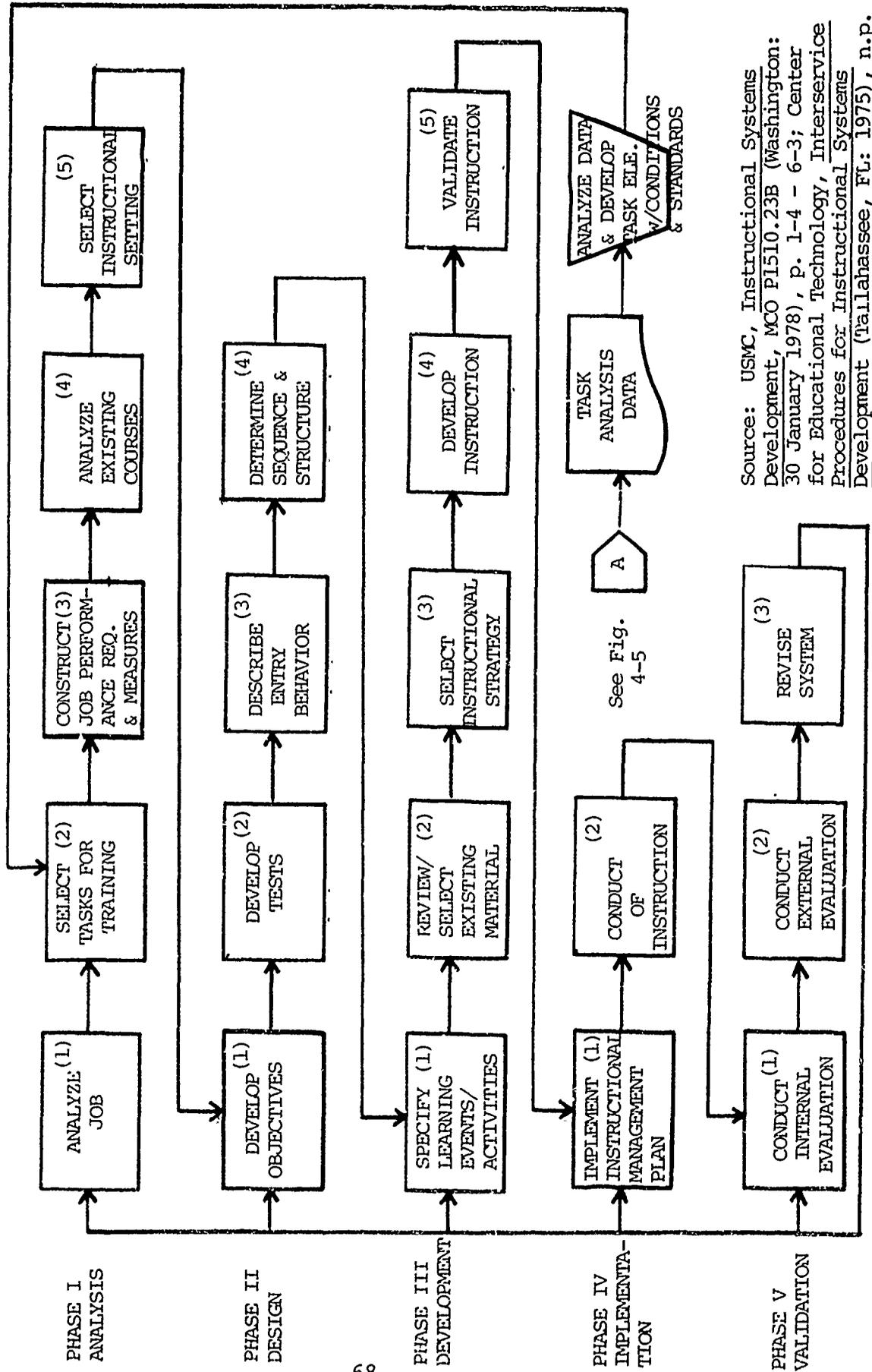
engineering. ISD was formally introduced to the Marine Corps in 1969 with the publication of Marine Corps Order 1510.23, Design of Courses of Instruction, which directed the systems approach be employed in the development of enlisted technical courses. In 1972, the concept was extended by Marine Corps Order P1510.23A to all formal schools and other formal courses controlled by a major training or field command. An expanded model for ISD was developed by Florida State University in 1975 under the sponsorship of the Interservice Training Review Organization (ITRO). This model, to be used by all Services, was incorporated into a revised order (MCO P1510.23B) which was promulgated on 30 January 1978.

There are five phases comprising 19 separate steps in the design or development of instruction (See Figure 4-1).

In step one of the first phase an analysis is made of the job an individual performs. This job, or task analysis reduces the job to its component parts. A hierarchical structure of a job is shown in Figure 4-2. If a formal task analysis has been completed by the Office of Manpower Utilization (MPU), Manpower Plans and Policy Division, Manpower Department the data from it can be refined and used, thus reducing much of the effort called for in this first step. Unfortunately, many schools in the past have not been provided, or have not availed themselves of the Office

FIGURE 4-1

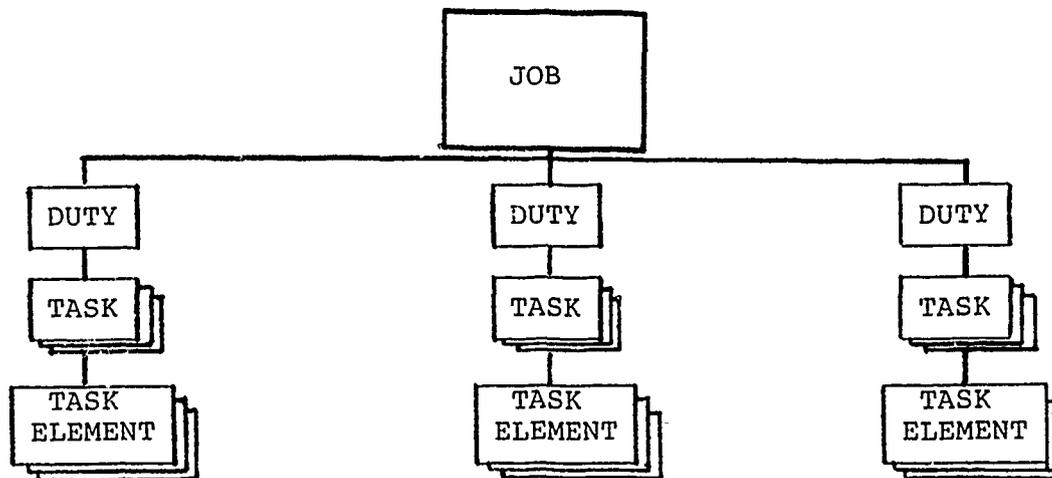
INSTRUCTIONAL SYSTEMS DEVELOPMENT



Source: USMC, Instructional Systems Development, MCO PI510.23B (Washington: 30 January 1978), p. 1-4 - 6-3; Center for Educational Technology, Interservice Procedures for Instructional Systems Development (Tallahassee, FL: 1975), n.p.

FIGURE 4-2

JOB/DUTY/TASK/ELEMENT HIERARCHY



JOB: The duties, tasks and task elements performed by one individual constitute his job. Jobs are identified by MOSs and form the basis for determining individual qualifications. Marines are selected, classified, trained and assigned for jobs represented by billets.

DUTY: A duty consists of one or more tasks performed in one functional area. A duty is the major subdivision of the work performed by one individual. The requirement to perform a duty occurs frequently and involves work requiring closely related skills and knoweldge. A duty is generally performed in a prescribed manner to a set standard.

TASK: A task constitutes a logical and necessary step in the performance of a duty. A task is the smallest unit of meaningful work performed or done for its own sake in the eyes of the job incumbent.

TASK ELEMENT: A task element is the basic work unit performed by an individual accomplishing a task. These are the smallest steps into which it is practical to subdivide any work operation. (This is the level upon which the ISD process focuses.)

Source: U.S. Marine Corps, Instructional Systems Development, Marine Corps Order P1510.23B (Washington: 30 January 1978), p. 2-4, 2-5; and Telephone Conversation with Major W.R. Masciangelo, Office of Manpower Utilization, Quantico, Virginia, 17 March 1978.

of Manpower Utilization task analysis results.\*

In the second step of the first phase, tasks are selected for which formal training will be provided. Some tasks do not require formal training, for example, sweeping with a broom. The third step is the construction of job performance measures (JPMs), or tests that will be used to evaluate the proficiency of a Marine holding the job. The fourth step of this phase is the analysis of existing courses to determine if another course or materials from that course might be used to accomplish the required training.

The fifth step of the first phase is an extremely important one because it has wide ranging implications. In this step, an instructional setting is selected for each task. Table 4-I shows the five possible settings. The selection of a setting of other than a formal school means that responsibility for teaching the task will rest with another command. MCO P1510.23B (and preceding orders in the series) leave unanswered a critical question in this step--How is knowledge of the requirement to provide training for tasks "selected out" passed to the responsible command?

The first step in phase two, Design, converts the tasks and task elements identified in the previous phase to

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\*Paragraph 220.1 of MCO P1510.23A charged the Training Division with the responsibility of providing task analysis results to formal schools. MCO P1510.23B, which superseded MCO P1510.23A, in paragraph 210.4.b places this responsibility on the Office of Manpower Utilization.

TABLE 4-I  
INSTRUCTIONAL SETTINGS

<u>SETTING</u>	<u>EXAMPLE</u>
Formal Schools	Schools as outlined in MCO P1500.12, such as Command and Staff College, Engineer School, Instructional Management School, etc.
Command Schools	Schools established by division, wing/district and other Marine Corps commands to meet a local requirement such as a noncommissioned officer leadership school.
On-the-Job Training	Self-explanatory.
Self-teaching Exportable Packages	MCI course, Extension Course, Training Extension Courses (TEC), etc.
Job Performance Aids	Decal with operating instructions placed on Light Antitank Assault Weapon (LAW), plastic card outlining five paragraph order, checklists, etc.

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Source: U.S. Marine Corps, Instructional Systems Development, Marine Corps Order P1510.23B (Washington, DC: 30 January 1978), p. 2-10.

objectives. Each objective must contain a behavior (action verb), condition, and proficiency element. Objectives provide the transition from the job environment to the training environment. Tests are developed from the objectives in step two, entry behavior is specified, and the course is sequenced and structured.

During Development, Phase Three, objectives are classified in the first step by learning activities and events. In the second step, materials are reviewed to determine those suitable to support the planned instruction and an instructional strategy (method of instruction combined with media such as films, sound-on-slide devices, etc.) is selected in the third step. In the final two steps lesson plans, supporting media and all associated materials are developed and validated.

In Phase Four, Implementation, all administrative and logistical details necessary for the course to be taught are checked and the instruction is coordinated.

Phase Five, Validation, is where all the data needed to conduct internal and external evaluations of the instruction are collected. After careful consideration the revisions are made to eliminate any errors or upgrade weak areas.

ISD by all evidence is an accepted procedure in formal schools throughout the Marine Corps today. The establishment in 1977 of the Instructional Management School at

Marine Corps Development and Education Center as a formal school provided an institutional base of "expert knowledge" of ISD for the Marine Corps. This base will enable ISD procedures to be standardized throughout the Marine Corps training activities. This standardization will be further assisted by the placement of two regional instructor schools under the academic supervision of the Instructional Management School as of 23 February 1978.\* The major difficulty with implementing ISD in the Marine Corps is the limited numbers of personnel at each school available to conduct the analysis required in the first phase of the procedure.

MCO P1510.26, Unit Level Training Management. This directive was promulgated in May 1971 to provide guidance to unit commanders on the use of the systems approach to training. The principles and procedures contained in MCO 1510.23, Design of Courses of Instruction (the first in the series of ISD orders) were translated and presented in sufficient detail in an effort to permit their application to development of a command training program. Commanders are required by this order to examine Marine Corps Order P1200.7, the Military Occupational Specialty (MOS) Manual and other higher Headquarters' directives to determine requirements for individual performance. After "...taking into

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\* These schools are located at the Service Support Schools, Marine Corps Base, Camp Lejeune and the Landing Force Training Command, Pacific. Both are formal schools.

consideration such guidance as may be provided..." in these directives "...the commander himself determines the individual performance requirement objectives necessary by virtue of his command mission."<sup>3</sup>

The Unit Level Training Management Order is still in effect, but discussions with commanders and training officers indicate it is seldom used. This is probably because it is difficult for those not familiar with the ISD process to follow. Also, unit commanders face the same problem as school commanders do, limited personnel qualified to conduct analyses and to develop objectives. Most officers believe it is unreasonable to expect battalions and squadrons to even attempt such a major undertaking and that it would be a duplication of effort Marine Corps wide.

#### The Marine Corps Task Analysis Program

Knowledge of how training requirements are specified is not complete without an understanding of the impact of the Marine Corps Task Analysis Program. The Task Analysis Program was initiated in late 1969 for the purpose of improving manpower utilization through the systematic identification, collection and analysis of data concerning tasks performed by Marines. The program is conducted by the Office of Manpower Utilization (MPU), a branch of the Manpower Plans and Policy Division, Manpower Department. Though a Headquarters,

U.S. Marine Corps, agency, the Office of Manpower Utilization is physically located at Marine Corps Base, Quantico, Virginia.

A task analysis is conducted in seven steps (see Figure 4-3).<sup>4</sup> The steps are briefly described in the following paragraphs.

(1) Research. In this step, an intensive study is made of the occupational field being analyzed. Technical manuals, programs of instruction, and assignment and classification criteria are reviewed. Marines who are "experts" in the field, such as military occupational specialty sponsors at Headquarters, U.S. Marine Corps and instructors at formal schools are interviewed to secure information.

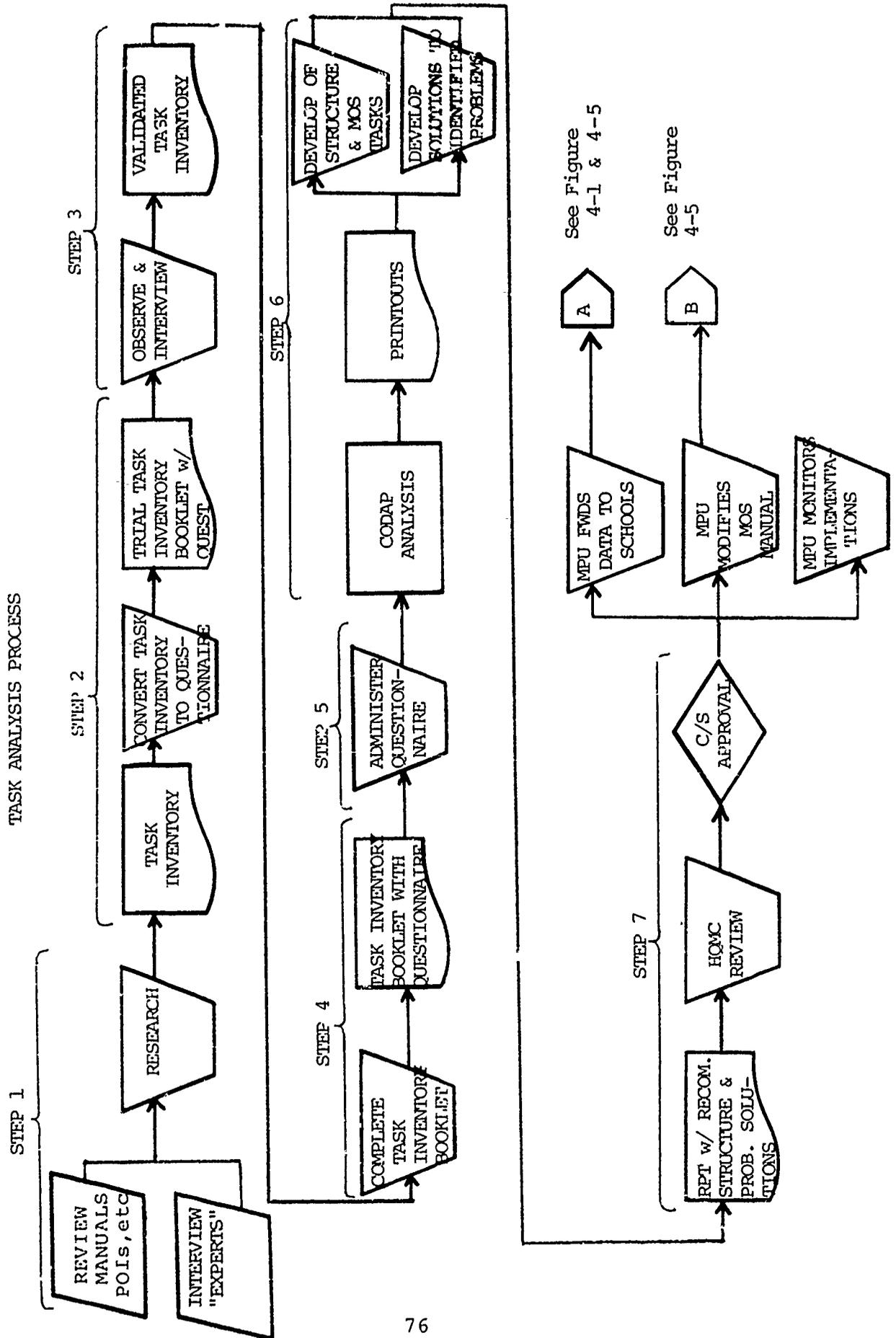
(2) Development of Trial Task Inventory Booklet. In step two, the data gathered during the first step are used to construct a task inventory which is then restructured into a questionnaire.

(3) Observation and Interview. During this step Marines who are filling billets in the occupational field are interviewed and observed in the performance of their jobs.

(4) Completion of Task Inventory Booklet. Information derived from the observations and interviews is used to validate the task inventory. This inventory is incorporated into a questionnaire covering tasks as well as the experience and training of billet holders.

FIGURE 4-3

TASK ANALYSIS PROCESS



(5) Administration of Questionnaire. The questionnaire developed in the previous step is administered to a representative sample of Marines filling billets in the occupational field being studied. The completed questionnaires reflect the work activities of each Marine and the time spent on tasks listed.

(6) Analysis. In step six, the responses to the questionnaire are processed through a series of computer programs called Comprehensive Occupational Data Analysis Programs (CODAP). The programs use clustering techniques to identify jobs within an occupational field and to determine relationships. The results produced through CODAP are analyzed to determine what changes or variations might enable improvements in occupational field classification, assignment, training, grade and military occupational specialty structure, job requirements and job validation.

(7) Report. Finally, in step seven, a report containing recommended changes is prepared for review by various Headquarters, U.S. Marine Corps agencies, and approval by the Chief of Staff. The Manpower Control Branch of the Manpower Plans and Policy Division is responsible for monitoring implementation of approved recommendations. The Office of Manpower Utilization uses the information derived from the analysis to update the Military Occupational Specialty (MOS) Manual as required, and forwards appropriate portions of the analysis to Marine Corps formal schools. As noted

previously, the responsibility to provide task analysis results to formal schools resided with the Training Division prior to publication of MCO P1510.23B on 30 January 1978. During visits to formal schools it was indicated they did not always receive these data in the past. Significantly, other Services' schools which train large numbers of Marines are not provided the data, either. Instructors in some "Marine unique" courses taught in the Naval Technical Training Command have not used task analysis data to develop instruction. In a few cases they have used information from the Navy Occupational Task Analysis Program (NOTAP).

The Office of Manpower Utilization has completed studies of 31 enlisted and seven officer occupational fields. In addition, analyses have been conducted of one officer military occupational specialty, all officer Special Education Program billets, and two enlisted "B" billets (recruiter-8411 and drill instructor-8511). A "training task analysis" has been done for the SNCO Academy. A recent independent study of the Marine Corps Task Analysis Program concluded that the program, "...in spite of its austere budget and limited staff, has produced a high return on the investment the Marine Corps has made...."<sup>5</sup>

Task analyses done by a number of agencies external to the Marine Corps are of interest to Marines and have been used to varying degrees in developing courses Marines attend. The Undergraduate Pilot Training Task Analysis done by the

Chief of Naval Air Training is one example. Three other examples done by the Human Resources Research Organization are: (1) Combat Job Requirements for Principal Staff Personnel: Division, Brigade, and Battalion; (2) Knowledge, Skills, and Thought Processing of the Battalion Commander and Principal Staff Officers; and (3) Systems Engineering of Training for Eight Combat Arms MOS. Of particular concern to Marines involved in aviation training are the results from the Navy Occupational Task Analysis Program (NOTAP). The Naval Technical Training Command develops many of its programs of instruction based on NOTAPs data.\*

#### Communicating the Requirements for Individual Training

Requirements for individual training which have been specified must be communicated to subordinate commanders. Orders and bulletins are normally used to do this. An examination of the 44 Marine Corps directives which contain training requirements reveals that:

- (1) Sufficient details are not provided for Career MOS Training.

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\*There is a consensus among many officers of the Naval Technical Training Command that NOTAP fails to directly relate tasks to specific aircraft equipment and is, therefore, not as valuable in the ISD process as it could be.<sup>6</sup> To correct this, the Chief of Naval Education Support, a separate functioning command under the Chief of Naval Education and Training, is conducting a training and related equipment task analysis for the Naval Technical Training Command.

(2) Responsibility for some skill qualification training requirements is not fixed.

(3) Several requirements are duplicated in different directives.

(4) Some requirements are not coordinated with other similar requirements.

The following paragraphs describe examples of the problems noted above.

Marine Corps Order 1510.2H, Individual Training of Enlisted Marines states that "It is the responsibility of each commander to ensure that every Marine has the opportunity to improve his or her MOS skill and knowledge based on the requirements outlined in..." the MOS Manual.<sup>7</sup> Approximately 20 or 30 general statements of the requirements for each MOS are contained in the Manual. Most of these statements have been distilled from the detailed task inventories produced by the Marine Corps Task Analysis Program.\* Commanders and training officers interviewed during the course of the research for this report were of the opinion that these statements are not sufficiently detailed, and thus, can not be used to develop the performance objectives for an MOS training program. If the guidance contained in Marine Corps Order P1510.26, Unit Level Training Management was followed the commander would have to do a detailed analysis for each

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\* MOS requirements for those occupational fields which have not been task analyzed are prepared by MOS specialists at Headquarters, U.S. Marine Corps.

MOS in his unit, repeating the analyses from which the general statements of requirements in the MOS Manual were derived. The solution would appear to be to provide to unit commanders copies of the task inventories prepared during formal task analyses. A review of several of these inventories, however, indicates that the tasks would need to be converted to performance objectives before they could be used.

In the discussion of the Instructional Systems Development (ISD) process in the previous section of this chapter, it was pointed out that during the fifth step of the process the responsibility for teaching some tasks can be placed in a setting other than a formal school. This means that Headquarters, U.S. Marine Corps could assign a school the mission of training Marines in a certain MOS and the school could pass a portion of this responsibility elsewhere. Significantly, the fact that certain tasks have been "selected out" is not required to be transmitted to higher headquarters or to other commands made responsible to provide training for the tasks.

Though the number of requirements which are duplicated is not great they do cause some confusion. Figure 4-4 shows those requirements contained in more than one directive.

The plurality of requirements for individual training in the infantry occupational field provides a striking example of a lack of coordination. To illustrate, a conscientious commander who followed the procedure outlined in the Training

FIGURE 4-4

DUPLICATION OF TRAINING REQUIREMENTS

<u>SUBJECTS</u>	<u>DIRECTIVES</u>
Code of Conduct	MCO 1510.2H (Enclosure (3) para 1.a) MCO P3000.1D (para 2000.1.i(1)) MCO P5800.8A (para 1003)
Uniform Code of Military Justice	MCO 1510.2H (Enclosure (3) para 1.b and c) MCO 1510.25A (para 5.e)* MCO P1070.12C (para 3010.2m and 4012.3m)
Personal Conduct	MCO 1510.25A (para 5h)* MCO 3000.1D (para 2000.1.i(4))
Leadership	MCO 1510.2H (para 5.c and Enclosure (1)) MCO 5390.2A

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\*Compliance with the training requirement contained in any other directive constitutes compliance with the requirement contained in MCO 1510.25A.

Management Manual (MCO 1510.26) and analyzed the documents which were potential sources for infantry training requirements would necessarily consider first the MOS Manual. Continuing his search he would find requirements in FMFM 1-2, Troop Leader's Guide and in the Mission Performance Standards (MPSs) and supporting tests of the Marine Corps Combat Readiness Evaluation System (MCCRES). If he looked to see what documents detailed the requirements for initial MOS training he would find that infantrymen in the 2d Marine Division are trained in accordance with MCO P1500.32B, Entry-Level Skill Qualification Training (Ground) while those who attend the Infantry Training School (ITS) are trained in accordance with that School's Program of Instruction. Performance objectives in these two documents are different. If the commander were aware of actions at Headquarters, U.S. Marine Corps he would know of the considerable interest in developing a Marines' Handbook\* containing individual performance standards.<sup>8</sup> The six sources of infantry training requirements are for the most part expressed as objectives which make them relatively easy to compare. There is no evidence, however, that these objectives have ever been examined by one agency in an attempt to validate and standardize the total requirement.

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\* This Handbook would be similar to the Soldier's Handbook developed by the U.S. Army.

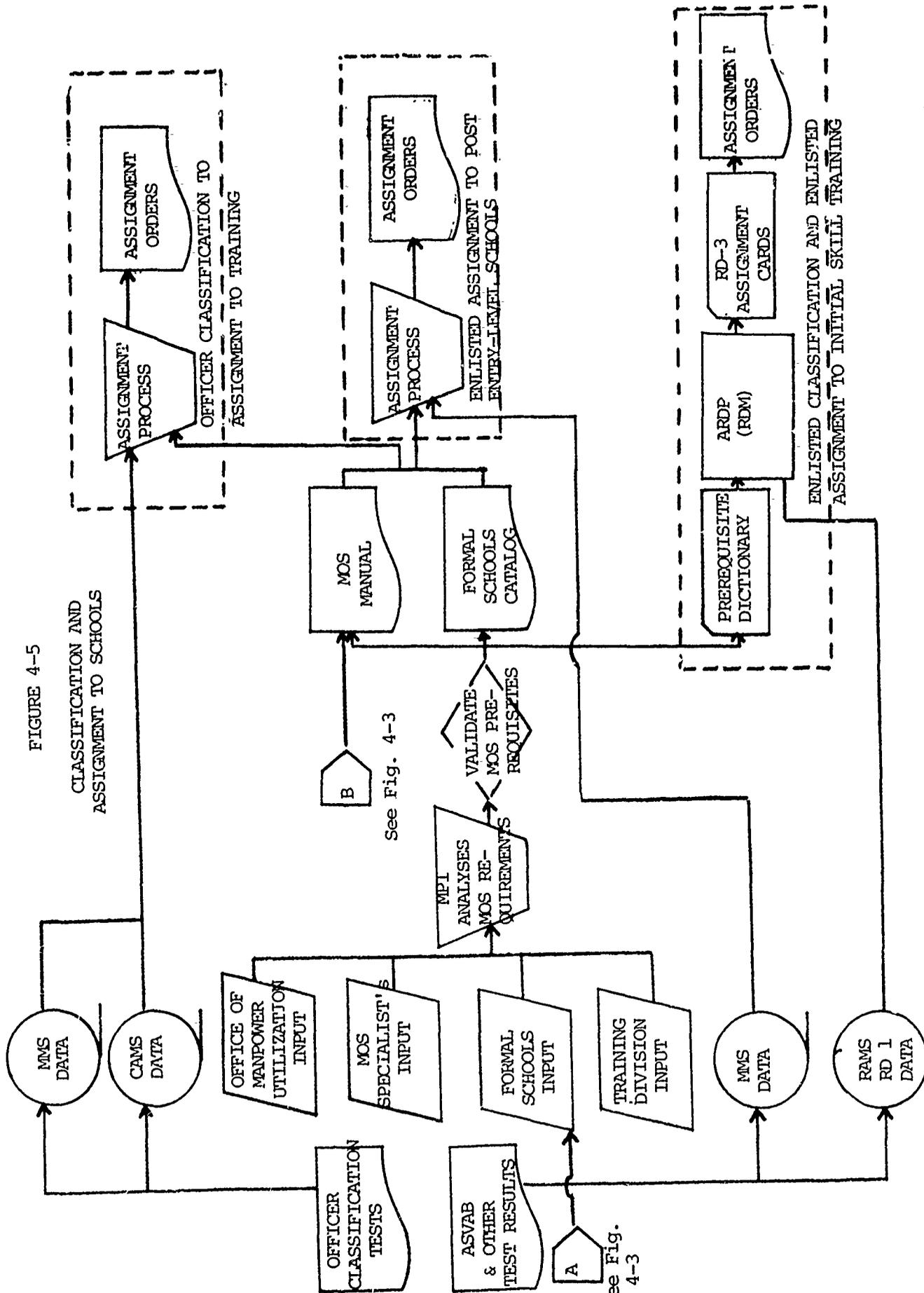
### Classification of Military Qualifications

Closely associated with the process of specifying training requirements for entry-level skill qualification training is the classification of military qualifications. This section explains the relationships.

Classification of military qualifications consists of assigning, changing, voiding and converting military-occupational specialties (MOS) in order to accurately identify each Marine's current qualifications. The Military Occupational Specialties Manual (MOS Manual) outlines the essential duties and tasks required for each MOS and is the primary reference used for classification. Interviews, classification tests, and special tests are employed to obtain information needed for the classification of Marines. The discussion can be more easily followed from this point if reference is made to Figure 4-5.

Enlisted Classification. Enlisted Marines are classified by the Enlisted Assignment Branch (MMEA), Personnel Management Division, Manpower Department. Marines are initially classified shortly before graduation from recruit training with the assistance of the Automated Recruit Distribution Process (ARDP). The ARDP utilizes the Recruit Distribution Model (RDM) to optimize the match between MOS prerequisites and individual characteristics and aptitudes as reflected in classification test scores, scores on special tests for electronics, and reports on the level of civilian education

FIGURE 4-5  
CLASSIFICATION AND  
ASSIGNMENT TO SCHOOLS



achieved. MOS prerequisites are validated by the Manpower Management Information Systems Branch (MPI) of the Manpower Plans and Policy Division. Original MOS prerequisites were developed based on an analysis of Army MOS requirements, coupled with input from MOS specialists and formal schools.\* Validation of these requirements does not occur on a routine basis.\*\* Many course prerequisites for entry-level skill

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\* In 1963 the Marine Corps commissioned a study of MOS prerequisites. This study, conducted by H.A. Edgerton, set standards based on a classification test battery made up of 11 tests obtained from the Army. Since differences were found between Army and Marine Corps jobs the tests were evaluated in terms of Marine Corps experience. These tests, known as Army Classification Battery-61 (ACB-61) were used at the recruit depots from 1961 until 1976 when they were replaced by the Armed Forces Vocational Aptitude Battery (ASVAB) Forms 6 and 7. ASVAB 6 and 7 have a high correlation with ACB-61. ASVAB 6 and 7 are also used to screen applicants for enlistment of the Armed Forces Examining and Entrance Stations (AFEES). If ASVAB 6 is used to screen an individual at an AFEES, an ASVAB 7 will be used to classify him at a recruit depot or vice versa. Since enlistment guarantees are made based on the ASVAB given at the AFEES this test becomes a vehicle for partially determining classification of Marines enlisting under a guarantee, presently about 60 percent of total enlistees. The Marine Corps has been reluctant to use tests administered at AFEES for classification because of the unreliability caused by compromises. Obviously, guarantees must be honored, so some Marines are assigned MOSs who are later found not to meet prerequisites based on the tests given at the recruit depots. The Recruit Distribution Process is constrained to honor these guarantees.

\*\* The Marine Corps Operations Analysis Group, Center for Naval Analyses completed a study on MOS prerequisites in 1977 and is presently conducting another.<sup>9</sup> The Naval Personnel Research Center (NPRDC) is also conducting a study. Unfortunately, research efforts validating MOS prerequisites have, to date, been based on final class standing rather than actual job performance.<sup>10</sup>

qualification training (thus, inherently MOS prerequisites) are listed in Marine Corps Order P1500.12H, Marine Corps Formal Schools Catalog and others are contained in the Recruit Distribution Model's Dictionary of Job Prerequisites. MOS prerequisites are also contained in the MOS Manual. All three sources need to be consulted to gain a complete picture of MOS prerequisites. Some enlisted Marines are reclassified during their careers through lateral movement between MOSs. A small percentage have MOSs voided as a result of demonstrated deficiencies in performance of requirements.

Officer Classification. A manual process is used by officer monitors of the Officer Assignment Branch (MMOA), Personnel Management Division to classify officers. The classification process takes into account individual characteristics and abilities as reflected in a classification test scores. Some officers are guaranteed specific training upon entry into the Marine Corps (flight and naval justice programs). These officers are, in effect, classified upon commissioning and are assigned a basic MOS. Initial classification is done by the Officer Assignment Branch in coordination with The Basic School. Some officers are reclassified during their careers through lateral movement between MOSs. Others receive additional MOSs as a result of training or experience.

Assignment to Formal Schools. Assignment of Marines to entry-level skill qualification training is a function

performed simultaneously with classification to an MOS. School prerequisites in this case are in effect MOS prerequisites and vice versa. Thus, the problems noted above concerning the ambiguities between the results of tests given at the AFEES and the recruit depots affects the assignment of Marines to schools for entry-level skill qualification training as well as the awarding of MOSs. Some who do not meet school entrance requirements (based on the ASVAB test administered at recruit depots) will nevertheless receive orders to school because of enlistment guarantees (guarantees provided to enlistees based on results of the ASVAB test administered at the AFEES). This problem does not occur after entry-level training because school or course prerequisites for all post entry-level training are based on test results from the ASVAB administered at the recruit depots.

A recent report which analyzes the policies and methods used to assign Marines to entry-level schools concluded that:<sup>11</sup>

(1) Published requirements for school eligibility were not always enforced since ineligible students were attending some courses.\*

(2) Criteria for entrance to schools often failed to differentiate between those who were qualified and unqualified.\*\* In fact, in some courses, those who were "unqualified" performed better than those who were "qualified."

\* Ineligible is a failure to meet mandatory entrance requirements.

\*\* Unqualified implies a high probability of failint or performing poorly in a course.

(3) Significant numbers of recruits were ineligible for assignment to some schools because they were unable to meet two distinct prerequisites, though each prerequisite predicted success equally well. Relying on one prerequisite would have increased the available population by 30 percent in some cases.

(4) The General Classification Test (CGT) was found to be a better predictor of school performance than General Technical (GT) scores. Only the GT score is used presently. The GCT score is the average verbal, arithmetic reasoning, and pattern analysis subtest scores.

(5) A high school diploma was equivalent to about ten points on the best predictor score in each school. Interestingly, granting ten points to high school graduates would make more minority recruits eligible for assignment to technical schools.

Relationships. The diagram at Figure 4-6 has been constructed to help explain the relationships between the Marine Corps Task Analysis Program, the Instructional Systems Development (ISD) process, the classification of Marines by MOS, and the policies used to assign Marines to formal schools.

(1) Enlistment Criteria. Applicants for enlistment in the Marine Corps must meet certain physical, mental, and moral criteria. These standards have been established to ensure all individuals who are accepted into the Corps have the potential to fill a billet and perform successfully.

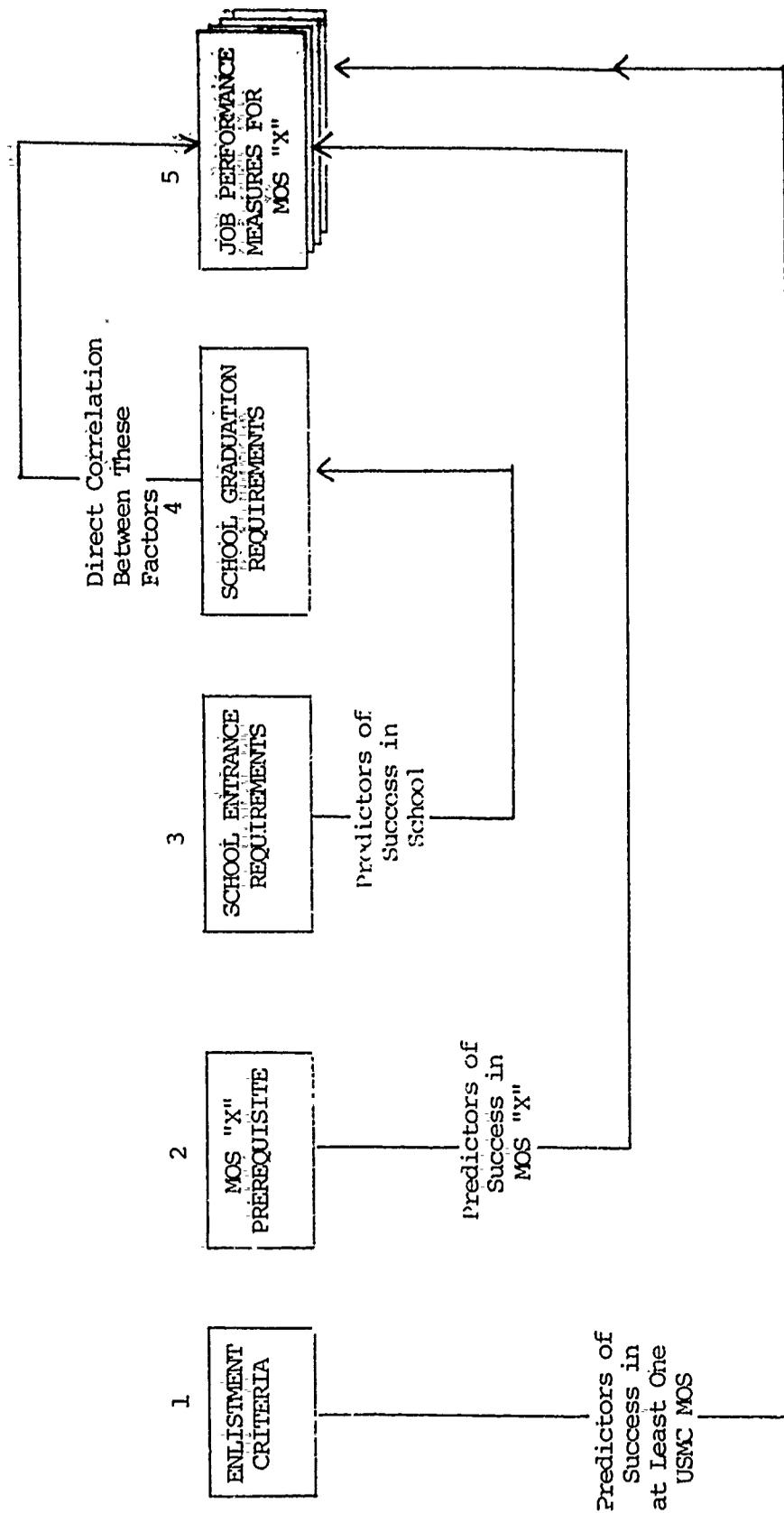
Enlistment criteria are, in effect, predictors of success in the Marine Corps. Ideally, the total mix of recruits for any given period of time will match or exceed minimum requirements at a specified future date, and there will be no "unassignables." It is possible for all enlistees during a given period to meet minimum enlistment standards, yet, in the aggregate not match Marine Corps requirements because there are too few with high enough aptitudes to fill skilled technical fields. For this reason, a proper "mix" must be enlisted during each recruiting cycle.

(2) MOS Prerequisites. There are certain prerequisites required for each MOS in the Marine Corps. These prerequisites are contained in the MOS Manual. These MOS prerequisites are inherently a part of the prerequisites for entry-level skill qualification training courses and are reflected in the Formal Schools Catalog and the Recruit Distribution Model's Prerequisite Dictionary Control Deck. MOS prerequisites are predictors of success in the MOS to which they apply.

(3) School Entrance Requirements. Each school or training course which Marines attend has entrance requirements. These requirements or prerequisites are intended to differentiate between those Marines who are likely to fail the school and those who have a high probability of success. Again, the prerequisites are predictors; in this case of the ability to complete a school or course.

FIGURE 4-6

RELATIONSHIPS BETWEEN TASK ANALYSIS, INSTRUCTIONAL SYSTEMS DEVELOPMENT, MOS CLASSIFICATION AND SCHOOL ASSIGNMENT



(4) School Graduation Requirements. Graduation requirements are established to ensure students are able to perform to the required standards before they are sent to fill a billet. Therefore, these requirements should correlate directly with the performance requirements of the job. Graduation should be evidence of the ability to perform successfully in an MOS.

(5) Job Performance Measure. Job performance measures are clear statements of what performance is expected in a job. They are derived directly from the tasks identified in a task analysis or during Instructional Systems Development.

From the foregoing descriptions of the purposes of the various criteria, prerequisites, requirements, and job performance measures, it becomes apparent that they must necessarily interrelate. Job performance measures are, however, the focus of the process. During the Instructional Systems Development (Phase Two, Step Two, Development of Tests) graduation requirements must be correlated directly to job performance measures. These job performance measures are derived from the tasks identified by the Marine Corps Task Analysis Program or by the school's "table top" analysis. If the graduation requirements and job performance measures are not correlated there is no way to assure that graduates will be properly trained for the billets they are to fill. Likewise, school entrance requirements must accurately predict success (measured by graduation) or some individuals will be

assigned to courses which they are not capable of completing. The reverse might also occur, Marines may be denied entry into schools for which they are fully qualified. Verna's study, Analysis of Marine Corps School Assignment and Performance clearly shows that mis-matched entry and graduate requirements have existed in the past. Problems similar to those just described will also develop if MOS prerequisites are not correctly formulated to accurately predict success in a job. There is an obvious tie-in between MOS prerequisites and entrance requirements for a school whose program of instruction is intended to prepare a Marine for that MOS. Ultimately, enlistment criteria must predict success in at least one Marine Corps MOS. As noted above, there needs to be a hierarchy of test items to differentiate between those individuals who are qualified within the range of least to most highly skilled MOSs. Accession and classification plans must ensure a "fit" between the numbers recruited at each level of qualification and the number needed in each MOS.

#### Conclusions and Recommendations

1. Conclusion. Training requirements which are specified in any way other than as tasks or objectives guide commanders very little in developing their training programs. Those requirements which mandate time often hinder efficient training management since they require the use of resources whether the training is needed or not.

Recommendation. That in the future the Training Division not concur with the publication of any directive which levies a training requirement in terms other than tasks or objectives, unless a demonstrable need to specify time can be established. That the Marine Corps request the Secretary of Defense and the Secretary of the Navy to have all training requirements set by their offices stated as tasks or objectives.

2. Conclusion. Marine Corps Order P1510.23B, Instructional Systems Development does not require Marine Corps formal schools that provide MOS training to use the data provided from the Task Analysis Program in their development of programs of instruction. Conceivably, a school's analysis could identify different tasks than those identified in the Task Analysis Program. If this happened the school might not train Marines to perform tasks needed on the job, or it might train them to perform tasks which are not needed on the job.

Recommendation. That a change be made to Marine Corps Order P1510.23B requiring Marine Corps formal schools that provide MOS training to utilize data from the Task Analysis Program as the basis for developing programs of instruction.

3. Conclusion. Task analysis data have in the past not been routinely provided by the Training Division to Marine Corps formal schools which provide MOS training.

Recommendation. That the Training Division provide the Office of Manpower Utilization with a list of Marine Corps schools that conduct MOS training. That the Office of Manpower Utilization establish procedures to ensure schools on the list are given data from appropriate task analyses as available.

4. Conclusion. Other Service schools that conduct MOS training for Marines are not provided with, nor does any directive require them to be provided with, data from the Task Analysis Program. As a result, instructors for "Marine unique" courses taught at the Naval Technical Training Command and "Marine unique" sub-courses or classes taught at U.S. Army schools have no detailed information upon which to base the development of instructional material for Marines.

Recommendation. That the Training Division provide the Office of Manpower Utilization with a list of other Services' schools that provide MOS training to Marines. That the Office of Manpower Utilization establish procedures to ensure schools on the list are given data from appropriate task analyses, as available. That the letters of introduction provided to Marine liaison officers at these schools be modified to include a statement similar to the following:

The Marine Corps Task Analysis Program has as its main purpose the improvement of manpower utilization through the acquisition and analysis of job related data. The detailed job description and task lists that result from task analysis can provide valuable data for instructional systems development.

The Office of Manpower Utilization will routinely forward these data to you upon completion of a task analysis of any occupational field for which the school you are assigned to provides instruction. These data are to be made available to the appropriate course content review board. You are directed to review programs of instruction as they are developed to ensure "Marine unique" skills are included in courses Marines attend. Marine Corps Order P1510.23B, Instructional Systems Design will aid you in this effort.

5. Conclusion. Though commanders are required to provide MOS training they are not provided with sufficient detail on the performance requirements for each MOS. Moreover, they have no way of determining what requirements they are responsible for and what requirements are met in other settings. (This latter problem is discussed further in the next conclusion.) Task lists or inventories are not in a form commanders would find easy to use.

Recommendation. That a study be conducted to determine what personnel and financial resources would need to be made available to staff an agency which would convert task analysis data into a format usable to commanders. This agency would in effect be developing performance objectives using Instructional Systems Development (ISD) procedures. Also, this agency would determine what instructional setting had been selected to provide the training for each performance objective. Information on the objectives and instructional setting would be placed in automated data bank and printed out by: (1) type command, (2) occupational field, or (3)

MOS. A sample of what a page from such a printout might look like is shown in Figure 4-7. Printouts by type command would enable each commander to have an "MOS Manual" listing the detailed performance requirements for every MOS in his unit. In addition, it would inform him if training to meet the requirement was to be provided by formal school, command school, on-the-job training, self-teaching exportable packages, or job performance aids. Marine Barracks, ships detachments and other commands assigned Marines who have a variety of MOSs would need to request printouts on an individual "as required" basis. Printouts by occupational field would provide similar information to such personnel as division or wing communication officers, supply officers, intelligence officers, etc. Individual MOS printouts could be reproduced and provided to Marines in the form of a handbook allowing them to see what skills they should be able to perform for each grade.

That the study further determine the organization to which this agency should be assigned. Ones which should be considered are the Marine Corps Institute, the Office of Manpower Utilization, and the Instructional Management School.

6. Conclusion. When formal schools select an instructional setting other than the "formal school" they are in most cases tasking another command to provide this training. However, no procedure exists to ensure that the command picking up responsibility for the training is made aware of the fact.

FIGURE 4-7  
 COMMANDER'S MOS MANUAL (SAMPLE PAGE)

INSTRUCTIONAL  
 SETTING

TASK NUMBER	TASK	CONDITION	STANDARD	REFERENCE	F C I R I	M O S	E F P A
0331-10	MAKE RANGE DETERMINATIONS OF TARGETS PLACED AT RANGES FROM 100 TO 1,100 METERS.	WITHOUT REFERENCE TO MAPS OR PHOTOS, OR MOVEMENT OVER THE TERRAIN.	TO AN ACCURACY OF 10 METERS FOR EACH 100 METERS OF ACTUAL RANGE (E.G., AT 700 METERS ACCURATE TO 70 METERS).	FMFM 6-4A	I	R	I
0331-11	FIELD ZERO A BIPOD AND TRIPOD-MOUNTED MACHINEGUN.	PROVIDED WITH SUFFICIENT AMMUNITION AND NECESSARY JOB PERFORMANCE AIDS.	IN ACCORDANCE WITH PROCEDURES IN FMFM 6-4A, CH. 3, SEC. 1, PARA. 3105.	FMFM 6-4A	I	R	I
0331-12	ISSUE OR RESPOND TO FIRE COMMANDS.	WITHOUT REFERENCE TO WRITTEN MATERIAL.	IN ACCORDANCE WITH PROCEDURES OUTLINED IN FMFM 6-4A, CH. 3, SEC. 1, PARA. 3107.	FMFM 6-4A	I	R	I
0331-13	ENGAGE A POINT TARGET WITH FIXED FIRE.	WITH A TRIPOD-MOUNTED M60 WHICH HAS BEEN ACCURATELY FIELD ZEROED.	EFFECTIVELY, AT RANGE OF 1,100 METERS.	FMFM 6-4A	I	R	I
0331-14	ENGAGE A WIDE TARGET WITH TRAVERSING FIRE.	WITH A TRIPOD-MOUNTED M60 WHICH HAS BEEN ACCURATELY FIELD ZEROED.	EFFECTIVELY, AT RANGES OF 1,100 METERS	FMFM 6-4A	I	R	I
0331-15	ENGAGE A DEEP TARGET WITH SEARCHING FIRE.	WITH A TRIPOD-MOUNTED M60 WHICH HAS BEEN ACCURATELY FIELD ZEROED.	EFFECTIVELY, AT RANGES OF 1,100 METERS.	FMFM 6-4A	I	R	I

\* ONLY 1ST AND 2ND MARINE DIVISIONS \*\* ABBREVIATIONS USED  
 CS-FORMAL SCHOOL  
 CS-COMMAND SCHOOL  
 QJT-ON-THE-JOB TRAINING  
 MJT-MANAGED ON-THE-JOB TRAINING

FST-FIELD SKILL TRAINING  
 JPA-JOB PERFORMANCE AID  
 I-INITIAL TRAINING  
 R-REFRESHER TRAINING

Recommendation. That a change be made to Marine Corps Order P1510.23B, Instructional Systems Design, requiring commanders of formal schools to identify the instructional settings they recommend for those performance objectives they have "selected out." Such recommendations would be attached to programs of instruction submitted to Headquarters, U.S. Marine Corps, for approval. Upon approval of the recommendations, the Training Division would direct those commands responsible to provide training for the performance objectives "selected out." If the agency described in the previous recommendation were in existence, it would update its data bank and provide revised printouts to those concerned.

7. Conclusion. Recent studies have attempted to validate MOS prerequisites based on school performance rather than job performance. This procedure places the focus of attention on how a Marine does academically rather than how he or she performs on the job. Figure 4-6 depicts the relationships which must exist: job performance measures to MOS prerequisites; job performance measures to school graduation requirements (Instructional Systems Development should develop this relationship); and school graduation requirements to school entrance requirements. Theoretically, school entrance requirements should predict success on the job as accurately as MOS prerequisites, and MOS prerequisites should predict success in school as accurately as school entrance requirements.

Recommendation. That all future validations of MOS prerequisites be based on job performance vice school performance.<sup>13</sup>

## NOTES

1. Phillippe C. Duchastel and Paul F. Merrill, The Effects of Behavioral Objectives on Learning: A Review of Emperical Studies (Tallahassee, Florida: Florida State University, 27 April 1972), p. 1.

2. Ibid., p. 1.

3. U.S. Marine Corps, Unit Level Training Management, Marine Corps Order P1510.26 (Washington: 4 May 1971), p. 3-1.

4. Harold C. Stone, Evlauation of the Marine Corps Task Analysis Program (Los Angeles, CA: California State University, June 1967), p. 3-4; and interview with Major W.R. Masiangelo of the Office of Manpower Utilization, Quantico, Virginia: February 1978.

5. Stone, p. 38.

6. Interview with Captain James Scott, USN, Staff Chief of Naval Technical Training, Memphis, Tennessee, 13 December 1977.

7. U.S. Marine Corps, Individual Training of Enlisted Marines, Marine Corps Order 1510.2H (Washington: 16 July 1974), p. 4.

8. U.S. Marine Corps, Marine Corps Institute, Memorandum CP:PCD:MAS, Subject: "Individual Performance Standards; Forwarding of Suggested Formal and Production Requirements," (Washington: 28 December 1978), p. 1.

9. Steve Verna and Thomas L. Miffelin, An Analysis of Marine Corps School Assignment and Performance (Arlington, VA: Marine Corps Operations Analysis Group, Center for Naval Analyses, January 1977).

10. J.D. Lanigan, et al., Interrelationships for Automated Manpower Systems Supporting the USMC Manpower Management Process (McLean, VA: Potomac Central Research Group, December 1976), p. 83, 100.

11. Verna, p. XI-XIII.

12. Lanigan, pp. 82, 83, 100.

13. This recommendation was previously made in the Interrelationships of Automated Manpower Systems Supporting the USMC Management Process.

## CHAPTER V

### INDIVIDUAL AVIATION TRAINING

#### Background

The main purpose of this chapter is to examine training of aviation officers and enlisted Marines. The first area covered will be the training provided for officers in aircrew flight status. Specialized follow-on training provided by Navy and Marine Corps training squadrons and career MOS training will be briefly covered. The second area will cover enlisted aviation training accomplished by the Chief of Naval Technical Training, the Naval Aviation Maintenance Training Group and Detachments (NAMTRADETs), Marine Corps Training Management Units/Elements (TMUs, TMEs) and individual Marine aircraft squadrons. This chapter will not specifically address Marine Corps aviation air control or air traffic control training, but will focus on aircraft related training.

Both officer and enlisted aviation training programs will be discussed in terms of the model developed in Chapter II, Figure 2-4. Since no single source document describes aviation officer or enlisted skill qualification training in the Marine Corps, terms and definitions are extracted from the following documents: Department of Defense Military Manpower Training Report for FY 1978; Marine Corps Order P3500.8, Aviation Training and Readiness Manual;

Marine Corps Order 1510.2H, Individual Training of Enlisted Marines; Marine Corps Order 1500.12J, Formal Schools Catalog; and, Naval Education and Training Bulletin 10500, Catalog of Navy Training Courses (CANTRAC).

#### Officer Flight Training

Officer Flight Training is divided into four categories: flight familiarization training, undergraduate pilot training, undergraduate navigator training, and "other flight training." Flight familiarization training supports the officer acquisition effort. It is used as an incentive to attract potential pilots and as a screening tool to eliminate those not qualified. The training is carried out through the Naval Reserve Officer Candidate and Platoon Leaders (Aviation) programs.<sup>1</sup>

Three organizations contribute to training flight officers: the Naval Air Training Command, Marine Corps Combat Crew Readiness Squadrons/Elements, and Fleet Marine Force tactical squadrons. The instruction provided to candidate Naval Aviators by the Naval Air Training Command is referred to as undergraduate flight training. Its purpose is to qualify officers in basic flight skills in a general class of aircraft (jet, propeller, or helicopter).<sup>2</sup> Undergraduate flight training includes aviation indoctrination and primary instruction for all students. This is followed by intermediate strike and advance strike training for jet

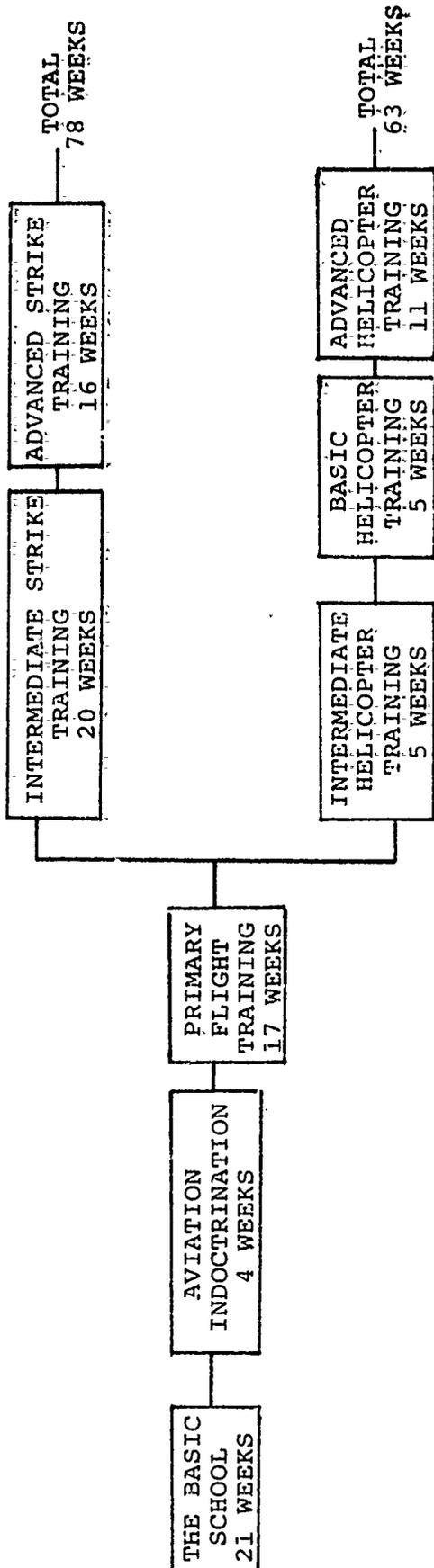
pilots and intermediate, basic, and advanced helicopter training for helicopter pilots. Figure 5-1 shows how training progresses from officer basic training through advanced strike or advanced helicopter undergraduate flight training.

Undergraduate Naval Flight Officer (NFO) officer indoctrination is the same as that received by pilots. This is followed by a systems fundamentals and practical flying course conducted in the Basic Naval Flight Officer phase. The NFO then receives training in one of two advanced phases: radar intercept, or tactical navigation training. See Figure 5-2 for an illustration of the system.

There are 10 Marine Corps Training Squadrons. Their purpose is to provide newly designated Naval Aviators and Naval Flight Officers with training in operational FMF aircraft. This results in the assignment of a specific hard skill MOS. Training elements are a part of tactical squadrons. Additional aircraft and personnel are attached to an operational squadron for the purpose of accomplishing individual aviation training. To date, eight elements have been established for four types of aircraft: OV-10 (Bronco), AH-1J (Cobra), UH-1N (Huey), and C-130 (Hercules). The training conducted by the training squadrons/elements and tactical squadrons is governed by the Aviation and Training Readiness Manual, Marine Corps Order P3500.8D. In addition to flight training, the manual sets forth requirements for training in

FIGURE 5-1

PILOT TRAINING U.S. NAVAL AIR TRAINING COMMAND

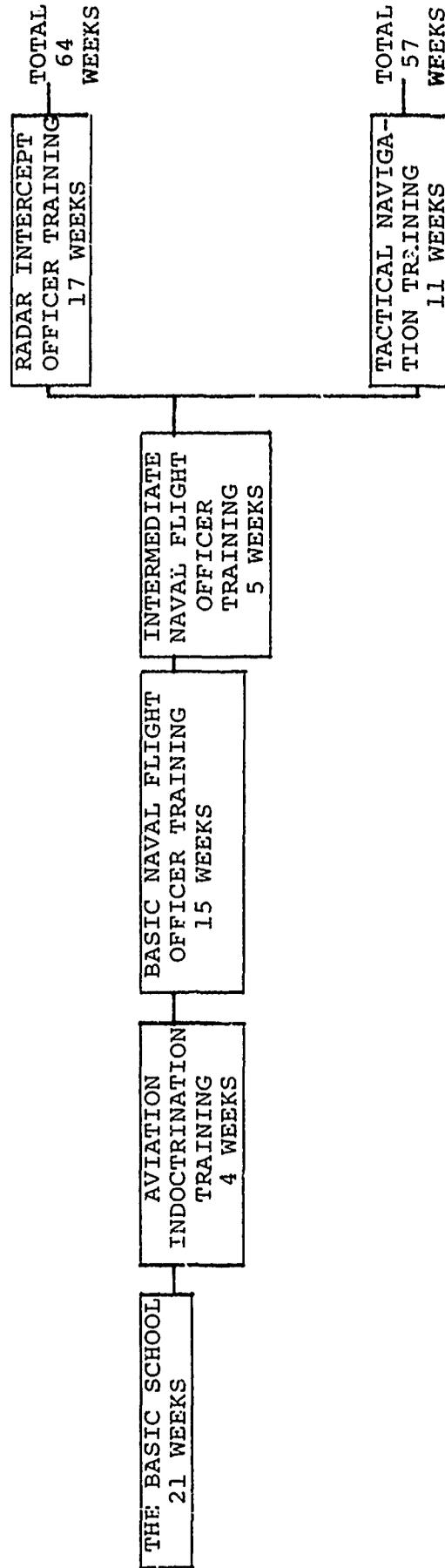


NOTE: Time in weeks does not account for travel, weacher, or aircraft grounding.

Source: U.S. Naval Air Training Command, Command Information Brief (Corpus Christi, Texas: 1977), Chart 3.

FIGURE 5-2

NAVAL FLIGHT OFFICER TRAINING



NOTE: Time in weeks does not account for travel, weather, or aircraft groundings.

Source: U.S. Naval Air Training Command, Command Information Brief (Corpus Christi, Texas: 1977), Chart 2

ejection seats, flight physiology, flight simulators and flight safety.<sup>3</sup>

"Other Flight Training" referred to in the Military Manpower Training Report consists of postgraduate flight training for flight instructors which is termed career training in the Marine Corps. Supplemental training identified in the same report is referred to as follow-on training in the Marine Corps, and is the training discussed above that is conducted by the operational Fleet Marine Force by training squadrons. Marine Corps follow-on training is depicted in Figure 5-3.

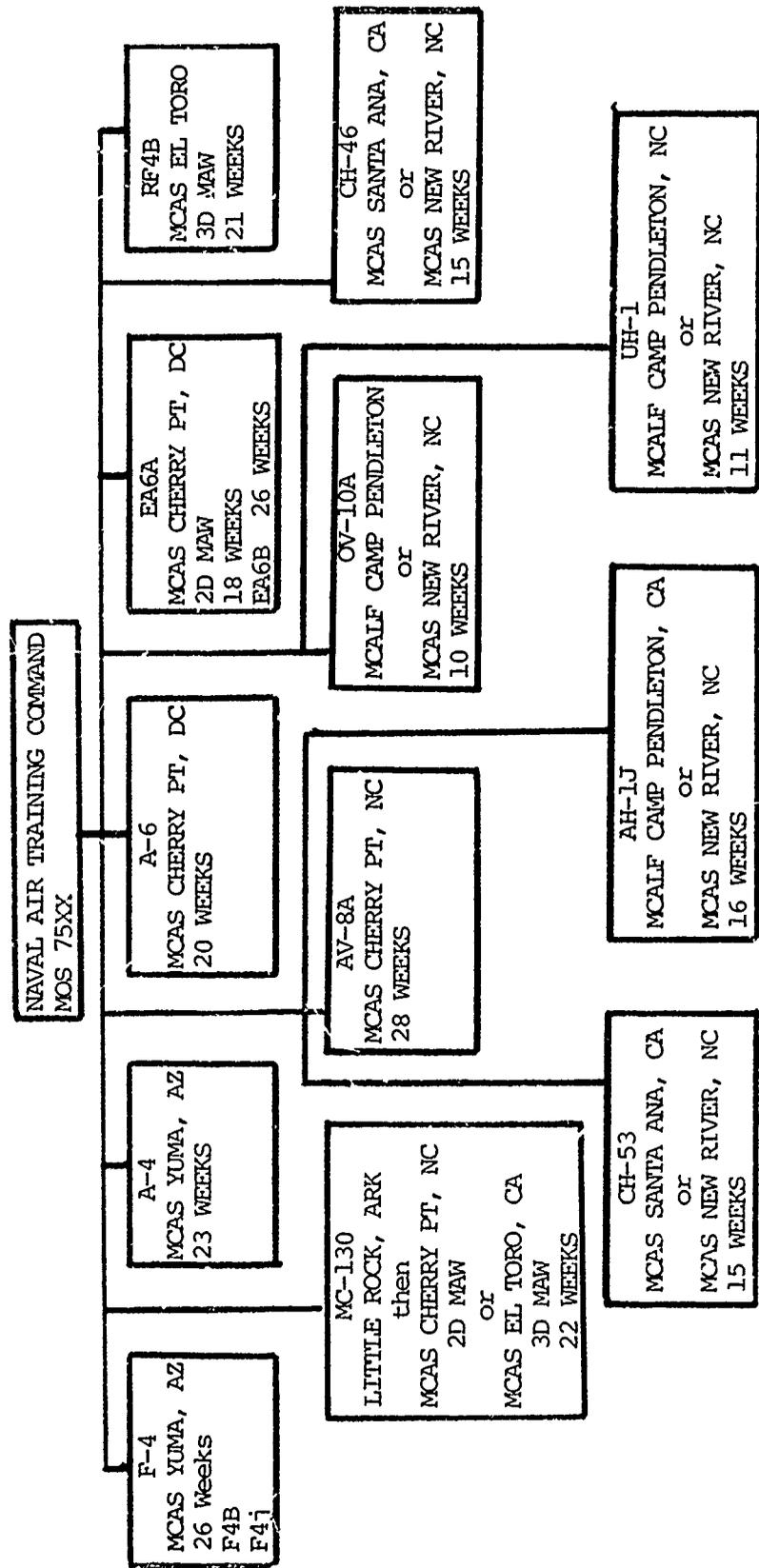
#### Determination of Requirements for Naval Aviators and Naval Flight Officers

Undergraduate flight and NFO training require an average of a year to a year and a half at training establishments and a minimum of six months additional instruction in Fleet Marine Force operational training squadrons. Aviation officer requirements are based upon the force structure and additional personnel needed to sustain flight operations after mobilization until increased output from the Naval Air Training Command can be provided.

The total number of Naval Aviators and Naval Flight Officers on hand is compared to force structure requirements. After accounting for attrition, EAS and retirement, undergraduate aircrew training rates and accession requirements for aviation are derived.<sup>4</sup>

FIGURE 5-3

FOLLOW-ON NAVAL AVIATOR NAVAL/NAVAL FLIGHT OFFICER TRAINING PLAN



Source: Headquarters Marine Corps Aviation Training Branch (CODE OTIF), Training Division, Operations and Training Department, 20 December 1977.

### MOS Training

For experienced aircrews\* additional postgraduate flight training is available based on individual qualifications and the needs of the various aviation units. This training is categorized as career MOS training within the Marine Corps. An example of a school that provides this training is the Navy Fighter Weapons School. Marine Corps graduates of this school receive additional MOSs as tactics instructors in fighter aircraft squadrons. Additional training in this category is also provided to attack helicopter pilots and to special weapons delivery aircrews. Career training in a non-flying category is also provided for Aviation Safety Officers, Landing Signal Officers for carrier operations, and Forward Air Controllers. Upon completion of training in these specialties, additional MOSs are assigned. Individuals who receive this training fill specific billets within aviation unit Tables of Organization. These billets and the training required are also specified in Marine Corps Order P3500.8D, Aviation Training and Readiness Manual.<sup>5</sup>

The Marine Corps provides career aviation training at Marine Air Weapons Training Units (MAWTUs). Until recently the Second and Third Marine Aircraft Wings each possessed a MAWTU which provided a series of courses for aircrew and aviation enlisted ordnancemen. With the recent implementation

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\* Aircrew is a collective term that refers to an individual or a group of individuals that operate aircraft in flight.

of Aviation Readiness Project-19, Aviation Weapons and Tactics Training program, the two MAWTUs will be consolidated at MCAS Yuma, Arizona. Under the consolidated program the new Marine "Aviation Weapons and Tactics Unit" will provide career ground and flight training for selected aircrews to be designated Weapons Tactics Instructors (WTIs).<sup>6</sup> This program involves all tactical aircraft types in the Marine Corps and will produce Weapons Tactics Instructors for each type aircraft. The Weapons Tactics Instructor program will provide a training base within each squadron for the purpose of providing weapons and tactics instruction to squadron aircrews. The Readiness project integrates all Marine Corps tactical aviation, air control and air defense (HAWK missile battalions) into one training program.

#### Methods Used to Train

Methods used to conduct flight training are grouped under four headings: academic, flight support, simulation, and flight tutorial.<sup>7</sup> In the academic and flight support training, lecture, self-paced instruction, demonstration, and discussion are methods employed. In addition, procedure trainers and mock-ups are used to enable the student to demonstrate and perform on the ground, the skills required in the air.

The Navy and Marine Corps have, for the last several years, been emphasizing the increased use of flight simulators. The Naval Air Training Command is considered a leader

in the aviation training field in the integration of realistic simulators into the flight training program.<sup>8</sup>

Audiovisual media also play an important role in aviation training. A wide range of films, slide, and tape media are available for training presentations. Recently a major effort has been undertaken to provide an integrated multi-media training package for specific aircraft to Fleet Marine Force squadrons. The Naval Air Training Command is also beginning to acquire integrated multi-media training packages to supplement flight academics and support presentations.

The flight tutorial involves demonstrating flight techniques using equipment on the ground and in the air and then allowing students to perform the same techniques.

#### Training Evaluation

Aviation training evaluation is accomplished through testing aircrews and evaluating instruction.

OPNAVINST 3710.7H, Naval Aviation Training Operating Procedures Standardization (NATOPS) General Flight and Operating Instructions requires annual instrument flight certification which includes written examinations and a flight performance check for all aviators and naval flight officers in an operational flight status. Annual aircrew tactical evaluations are also required by this instruction. NATOPS manuals that are prepared for specific type aircraft are used as the source for examination questions.

The quality of instruction is validated through tests and flight checks of individual instructors. Lecture and support presentations are annually reviewed for validity by designated experts. Additionally, internal feedback is received from students.

Provisions exist for feedback from the Fleet and Fleet Marine Force to the Naval Air Training Command but the system is not active.<sup>9</sup> There does not appear to be a formal requirement in the Marine Corps Aviation Training and Readiness Manual to provide a feedback system from regular FMF squadrons to the individual training squadron. Some training squadrons have devised systems for feedback by sending questionnaires to operating squadrons after individual aircrews have completed the specified syllabus.

#### Training Management

The prerequisites for individuals to qualify for specific aircraft training pipelines is established by the Naval Air Training Command. These criteria are based on performance in flight tutorial, academic, and flight support training. Individuals who meet the established criteria are placed in the jet, helicopter, radar intercept officer, or navigator training tracks based on their performance and guidance from planned Marine Corps needs contained in the Marines Corps combat crew training plan discussed in Chapter XXII.

Upon reaching the Fleet Marine Force as designated Basic Naval Aviators and Basic Naval Flight Officers the respective aircraft wings assign the aircrews to a specific aircraft training track based on guidance received from Headquarters Marine Corps in the combat crew training plan.

Training Resources  
(Officer Aviation Training)

Dynamic application of the individual training model outlined in Chapter II, Figure 2-4 involves the use of resources. Resources have been defined in this study as personnel, materials, money, and time. The aviation officer training system which consists of the Naval Air Training Command, Fleet Marine Force training squadrons/elements and operational combat squadrons, utilize these resources to produce an output: qualified aircrewmen.

Naval Air Training Command Planning Factors. The Naval Air Training Command uses a Planning Factor methodology for determining the resources needed.\* From a required output of trained naval aviators and naval flight officers the planning factors are used to derive the resources needed to sustain Fleet and Fleet Marine Force aircrew force structure. The methodology generates a sliding scale of required flight instructors, aircraft flight hours, and academic support

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\*The Planning Factor methodology has been developed by Mr. Ramsey Stewart, Deputy ACOS for Flight Training (Code N-4A), Staff, Chief of Naval Education and Training, Pensacola, Florida.

to complete the qualified number of aircrews in a given fiscal year. When distortions occur, the approved curriculum is held constant with the flight instructor, aircraft, and academic resources available. Student production is then controlled to match the available resources within certain limited expansion capabilities. This often results in reduced production of qualified students from the various syllabi and pooling\* of students at various transition points in the training pipelines.\*\* A recent undermanning of flight instructors has existed in Naval Air Training Command squadrons which has resulted in reduced student output. The Commandant and Chief of Naval Operations are aware of this situation and corrective action is being taken. The time required for this corrective action to take effect is such that reduced output to the Fleet Marine Force will be felt before the system will return to balance.<sup>10</sup>

A traditional distortion of the level input requirement, upon which the Planning Factor Methodology is based, has been seasonal increases in flight students. This seasonal input tracks with the officer accession cycle following summer graduation. Headquarters, U.S. Marine Corps, Department of Operations and Training and the Manpower Department

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\*Pooling is a term used to identify flight students who are held prior to commencing a training phase due to a backlog of other students in advanced portions of the flight syllabus.

\*\*Pipeline is a term used in conjunction with the various curricula available in the Naval Air Training Command, e.g., Jet, Helicopter, Radar Intercept Officer, Jet Navigator.

have recently established a policy of "pooling" prospective aviation designated officers prior to assignment to the Naval Air Training Command. This procedure should have positive long term effects on the aviation training system.<sup>11</sup> By maintaining a level input that matches training resources in the aviation training system, large fluctuations in students to train versus available resources should be dampened.

Fleet Marine Force Training Resources. Fleet Marine Force training squadrons and elements are structured by Tables of Organization (T/O) and Unit Equipment lists (U/E).<sup>\*</sup> Changes in resources to accommodate dramatic increases or decreases in replacement aircrew training requirements are compensated for by changes in training squadron Tables of Organization and Unit Equipment lists.<sup>12</sup> Generally cyclic changes in training requirements occur too rapidly to be handled by a T/O or U/E change which is a lengthy process. The training squadrons must, therefore, absorb these fluctuations.

The Fleet Marine Force training squadrons that possess aircraft having pilot and naval flight officer positions must also integrate students arriving from different training command pipelines, e.g., pilot and navigator training tracks.

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<sup>\*</sup>Unit Equipment (U/E) list is an aviation term which specifies the number of aircraft per squadron. Once the number of aircraft is determined, aircrew seat ratios and enlisted maintenance operating factors are used to determine the number of aircrews and enlisted maintenance support required.

Since training command completion times vary, the training squadrons must pool aviators and naval flight officers to achieve an optimum training aircrew mix for more efficient use of training resources. This situation is less than desirable. Being at the end of the aviation officer training system, this is unavoidable and is recognized.<sup>13</sup> The policy of level input at the beginning of the aviation training system should also assist in solving many of the resource versus training output problems in Marine training squadrons.

#### Enlisted Aviation Training Requirements

The increased complexity of aircraft and related systems has required a rapid expansion of aviation equipment-related occupational specialties within the Marine Corps. Until 1969 aviation specialties were identified by 39 general military occupational specialties (MOSs).<sup>14</sup> Today approximately 124 MOSs are identified relating to aircraft and related support equipment.<sup>15</sup> Certain occupational specialties remain general in nature and are sometimes referred to as "ambiguous" MOSs. Personnel trained in these areas are trained on specific aircraft equipment but may be assigned to work on any aircraft requiring their particular skills.<sup>16</sup> An example is the aircraft metalsmith occupational field. One MOS is identified for all Marine Corps aircraft. Individuals trained on specific aircraft are often assigned to different equipment or aircraft due to a lack of visibility in equipment skill in this general occupational field.

The management of aviation enlisted training requires precise control due to the multitude of skills and generally small size of squadron units. Aircraft squadrons, considered equivalent to battalions from a command viewpoint, usually require the equivalent of an infantry company in total personnel, approximately 150-200 men. Personnel with different aircraft equipment-related skills are often divided into 10 to 15 separate work centers. The authorized strength for these individual work centers, generally varies from 10 to 25 enlisted technicians. Small deviations in the recruitment, training, and timing of assignment for aviation enlisted skills may create large fluctuations of specific skills in small aircraft squadron work centers. This often becomes a major squadron maintenance problem.

#### Training Requirement Classification

Within the context of the individual training model presented in Chapter II, Figure 2-4, training of aviation enlisted men provided by the NTTC to achieve an initial occupational specialty is considered Skill Qualification Training. Training conducted by aircraft squadrons after skill qualification is defined as Mission Oriented or functional training. Career Marines who are provided Navy "skill progression training for Advanced Pay Grades" are classified as being trained under Career MOS Training within this study.

### Instructional Setting

Aviation enlisted training utilizes all five means or instructional settings defined in the outline of the individual training model depicted in Chapter II. These settings are: formal and command schools, on-the-job training, self-teaching exportable packages (correspondence courses), and job performance aids.

Formal Schools. All Marine aviation enlisted skill qualification training begins with formal schooling. The numerous courses of instruction are controlled by the Air Warfare Training Branch, Chief of Naval Technical Training (CNTECHTRA), headquartered at Naval Air Station, Memphis, Tennessee. The locations, number of courses, and general subject areas are shown in Table 5-I. Organizationally, training is conducted at Naval Air Technical Training Centers (NATTCs).

A simplified illustration of Marine aviation skill qualification training pipeline is shown in Figure 5-4. The sequence for aviation enlisted training is referred to by the Navy as a class "A1" training pipeline. This training curriculum moves the student from basic aviation fundamentals schools to an enlisted initial skill training school conducted at the various NATTCs.<sup>17</sup> After "A" school the aviation enlisted student is channeled to a Marine

TABLE 5-I

COURSES OFFERED BY THE AIR WARFARE  
TRAINING BRANCH CNTECHTRA

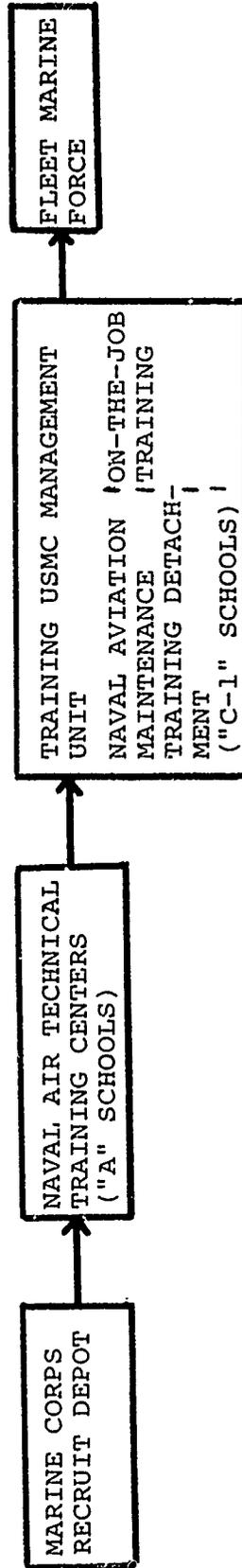
<u>ACTIVITY</u>	<u>#COURSES</u>	<u>SUBJECT AREA (GENERAL)</u>
NATTC Lakehurst, NJ	29	Aircrew Survival Equipment Launch & Recovery
NAVTECHTRACEN Meridian, MI	5	Aviation Supply/ Administration/ Operations
NATTC Memphis, TN	35	Aviation Mechanical
NATTC Memphis, TN	20	Aviation Avionics
NATTC Memphis, TN	12	Aviation Ordnance
Naval Aviation Maintenance Training Group/Detachments	800-840	All Areas

Source: Chief of Naval Technical Training, Air Warfare Branch, Present Navy/Marine Corps Aviation Training, TABG Point Paper (Memphis, TN: 4 April 1977).

FIGURE 5-4

MARINE CORPS AVIATION SKILL QUALIFICATION TRAINING

(U.S. NAVY CLASS "A1" TRAINING PIPELINE)



9 WEEKS

5-28 WEEKS

6-18 WEEKS

Note: Training time varies with type equipment or squadron assigned.

Source: Chief of Naval Technical Training, Air Warfare Branch, Navy and Marine Corps Aviation Enlisted Technical Training, Point Paper, (Memphis, TN: 4 April 1977), Tab H.

Aircraft Wing Training Management Unit/Element (TMU/TME).\*

This organization administratively schedules the enlisted student into a combination of formal schooling and on-the-job training which directs him towards a specific aircraft or systems occupational skill. The formal schooling (referred to as "C1" schools by the Navy) provided in this area is accomplished through Naval Aviation Maintenance Training Detachments (NAMTRADETs) located at various Navy and Marine Corps Air Stations. This schooling is also termed skill progression training by the Navy. Upon completion of training within the Training Management Unit (TMU/TME) the individual is assigned to the FMF.

On-the-Job Training (OJT). This training is accomplished in Fleet Marine Force squadrons. While individuals remain under control of the Training Management Units it is referred to as "Laboratory Training."<sup>18</sup>

Self-Teaching Exportable Packages. Correspondence courses (self-teaching packages) are available from the Navy Correspondence Program which provide self-study media. These courses are available to individuals through the Navy Correspondence Course Catalog, NAVEDTRA-10061.

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\*These organizations are defined in MCO 1500.31C Avia. Encl. Trainee Management Unit (TMU) Training. Formal school and OJT is specified for aviation MOSs in this order.

The personnel Qualification Standard (PQS) publications are available to individuals training on specific aircraft weapons systems. These publications contain knowledge and skill requirements which individuals ought to know within their MOS. PQS has not been formally adopted by Marine aircraft squadrons for individual use. Current budgetary limitations within the Navy could possibly terminate this program.<sup>19</sup>

Job Performance Aids. The most important job performance aids available to aviation enlisted technicians are the maintenance handbooks associated with specific aircraft. Recognizing this, the Chief of Naval Material and Chief of Naval Education and Training are sponsoring the Naval Technical Information Presentation Program (NTIPP) to improve technical manuals as "job performance aids."<sup>20</sup> Other unit job performance aids utilizing a multi-media presentation are under consideration by Headquarters, U.S. Marine Corps for squadron use in accomplishing individual training at the aircraft squadron and maintenance squadron level.<sup>21</sup>

#### Methods Employed in Conducting Training

Within the naval aviation enlisted training system, lecture and programmed instruction methods are heavily relied

upon during initial schooling of "A" schools. Subsequent training in skill progression courses provided by Naval Aviation Maintenance Detachments (NAMTRADETs) use programmed instruction, lectures, and also rely on demonstration and performance methods using training mock-ups.\* Operational squadrons use lecture and demonstration methods when conducting mission-oriented training. This is commonly called "technical training," a Navy term used in the OPNAVINST 4790.2A, Naval Aviation Maintenance Program, which directs Naval Aviation units to conduct this training weekly.

#### Training Evaluation

Training in formal schools is evaluated by testing and internal evaluation of instruction. External evaluation or feedback is primarily accomplished by informal feedback and conferences. The Chief of Naval Operations recently established the requirement for a viable feedback and information system between the Fleet, Fleet Marine Force and the Naval Education and Training Command.<sup>22</sup> Content validation is accomplished through internal review with course content revisions sent to Fleet Marine Force aviation units for comment.

Training evaluation of individuals within Marine aviation units is based on the commander's observation. A recent

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\* Mock-ups are training devices that function similarly to related aircraft equipment or systems that individuals are being trained to maintain.

study of unit aviation enlisted training surveyed enlisted Marines in aviation units on individual training and evaluation at the squadron level. The majority of Marines surveyed desired a combination of subjective evaluation, formal testing and some MOS-related job performance aid such as the Navy Personnel Qualification Standard (PQS) system to assist on-the-job training.<sup>23</sup> The study, Analysis of Organizational Aviation Maintenance Training Within the United States Marine Corps, by Major Coleman Kuhn, USMC, gives a clear, statistical based picture of present individual aviation training conducted at the squadron level.

#### Training Management

Formal schooling of aviation enlisted training is managed by HQMC. This process is fully described in Chapter XI of this study. Training in the Navy Technical Training Centers is managed by the Navy Integrated Training Resources and Administrative System (NITRAS). HQMC interfaces with NITRAS for Marine aviation requirements as described in Chapter XI..

The Training Management Unit/Element is being reorganized to improve management of aviation skill qualification training. A single TMU will be established at Memphis, Tennessee, to control all subordinate Training Management Elements (TMEs) located in Marine Air Wings. The Aviation Training Branch, Training Division is considering a "model manager" concept for each specific occupational specialty

training track in conjunction with the single TMU. The objective of this concept is to monitor revisions in formal skill qualification schools. This would provide a structure to accommodate changes in formal school performance objectives with the TMU/TME on-the-job training phase, or squadron technical training phase of aviation enlisted skill qualification.

To assist in the management of aviation skill qualification, the Marine Corps is acquiring the Versatile Training System (VTS). This will provide computer managed instruction (CMI) and computer assisted instruction (CAI) capability to Marine Corps aviation training activities.

#### Training Resources

The cost to the Marine Corps for aviation skill qualification training from Navy schools is instructors. Training equipment is provided by individual aircraft weapons system managers, and other required resources are provided by the Naval Technical Training Command. Squadron training resources are the aircraft assigned, technical manuals and locally developed lesson plans.

Problems in the training resource area involve the traditional areas of personnel, equipment, funds, and time. Recent actions in recruiting of aviation assignment guarantees appear to acknowledge the seasonal fluctuations in the recruiting "market." However, this creates a disconnect with the Navy "school system" which is based on level

input with seats negotiated by the Marine Corps with OP-99, using the NITRAS system, on a three year projection basis. Annual or "periodic pooling" of aviation enlisted recruits will result unless a formal plan is developed to accommodate seasonal recruiting fluctuations. Assigning aviation recruits to TMU/TME and squadrons has been tried previously on a make-shift basis. A formalized procedure in this area could accommodate seasonal recruiting markets and level input school requirements.

In recent years pressures on the training pipeline have resulted in a shift from training in the formal school setting to on-the-job training. A portion of the decreased schooling in "A" schools has been absorbed in NAMTRADET courses. Increased pressures to further reduce formal schooling will force increased individual training requirements on operational squadrons. The squadrons at present are not manned for substantial on-the-job initial skill training. Other than aircraft and technical manuals, these squadrons possess few resources to conduct such training. Continuation of the trend will increase the present conflict of priorities among squadron unit training, readiness, and individual aviation MOS training. This will result in a difficult set of decisions by the unit commander. Readiness and flight hours versus individual training and the training required by individual Marine enlisted to produce required readiness and flight hours appear to be in growing conflict. Subtle

changes in training responsibility from formal schools to operational units holding unit readiness constant will force local prioritization at the unit level. Some guidance is suggested as being appropriate to assist commanders in balancing unit resources with individual and unit requirements.

#### Fleet Marine Force Perceptions

In interviews conducted on field trips during this study, operational units voiced concern over the present skill qualification system in certain areas. First, there is concern about the knowledge and proficiency acquired in the Navy "A" schools. Several inputs regarding the heavy use of programmed instruction and the lack of performance methods of instruction were voiced. There is a concern that programmed instruction is not reinforcing the required concepts. Second, several organizations felt the need for a "real-time" communication system of training tasks, objectives, and responsibilities between the formal school system, the TMU/TME, and operational squadrons. In effect, the FMF squadrons want to know who is responsible for teaching what to the enlisted student. This concern could be alleviated with the model manager concept for individual skill qualification tracks being considered by the Aviation Training Branch at HQMC.

An additional concern voiced was the lack of balance between unit training and individual training in aviation squadrons. The emphasis on tactical exercises, readiness

reporting, and unit readiness militates against effective individual training. Emphasis is given essential subjects, rifle range and the Physical Fitness Test (PFT), but little time is left for individual aviation maintenance training.

The final area of concern was the ambiguous MOS area of certain aviation MOSs. Certain general aviation skills, specifically, metalsmiths, hydraulics, flight equipment, ejection seats, and ordnance are trained on specific aircraft; however, in the present MOS structure this is not identified. This lack of equipment identity also breaks down between the operational aircraft squadron and the maintenance squadrons. The quotations and percentages noted on misassignment in these MOSs have not been quantified. Additional study in the area of training costs on specific equipment and having personnel management flexibility in these general MOSs should be closely examined and the results explained to the aviation maintenance community.

#### Conclusions and Recommendations

1. Conclusion. When the number of flight students exceeds the resources of the Naval Air Training Command, queuing of students occurs. The uneven flow causes large fluctuations in the requirements for resources. These fluctuations are greatest at the end of the flight training pipelines, the Marine training squadrons. Since FMF aviation training squadrons operate with fixed T/Os and aircraft assets,

surges in the number of students are difficult to handle efficiently. Efficiency is important since FMF operational aircraft are the most expensive to operate.

Recommendation. That the recent Marine Corps policy of pooling aviation students prior to assignment to the Naval Air Training Command be continued.

2. Conclusion. There is no formal information system to provide feedback on student performance from Marine training squadrons and operational squadrons to the Naval Air Training Command.

Recommendations:

That the Marine Corps initiate efforts to improve feedback from the FMF to the Naval Air Training Command.

That a feedback system from Marine operational squadrons to training squadrons be developed.

3. Conclusion. Due to a limited budget enlisted aviation technicians presently spend less time training at formal schools than in the past. However, a system has not been devised to transmit to the Trainee Management Units and Elements (TMUs and TMEs) changes that have been made in formal school training.

Recommendation. That the "model manager" concept for evaluating enlisted training be adopted with the objective of monitoring formal school programs of instruction and informing TMUs and TMEs of changes as they occur.

## NOTES

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4. Interview with LCOL C. A. Dixon, USMC, Aviation Training Section, Aviation Training Branch, Training Division, Operations and Training Department, Headquarters Marine Corps, Washington, DC, 5 December 1977.
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6. U.S. Marine Corps, Implementation of Aviation Readiness Project 19-Aviation Weapons and Tactics Training, Marine Corps Bulletin 3500 (Washington: 8 July 1976), p. 1.
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8. Interview with LCOL John Yandell, USAF, Training Support, Operations Division, Chief of Naval Air Training, Corpus Christi, Texas, 10 February 1978.
9. Telephone conversation with LCDR D. Kinsey, Student Control, Operations and Training Division, Chief of Naval Air Training, Corpus Christi, Texas, 24 February 1978.
10. Interview with COL C.C. Chisholm, USMC, Marine Corps Representative (Code 018) to the Chief of Naval Education and Training, Pensacola, Florida, 8 February 1978.
11. Interview with LCOL C. A. Dixon, USMC, 5 December 1977.
12. Interview with MAJ J. A. Davis, USMC, Aviation Support Analysis Branch, Department of Aviation, Headquarters Marine Corps, Washington, DC: 6 December 1977.
13. Interview with LCOL C. A. Dixon, USMC, 6 December 1977.

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15. U.S. Marine Corps, Numerical Index of Military Occupational Specialties, NAVMC 1008-A (Washington: August 1977).
16. Decision Systems Incorporated, Toward Optimization for Uniform Readiness (Rockville, Maryland: 1977), p. 29.
17. U.S. Naval Technical Training Command, Air Warfare Branch, Navy and Marine Corps Enlisted Technical Training, Point Paper (Memphis, Tennessee: 4 April 1977), p. L.
18. U.S. Marine Corps, Aviation Enlisted Training Management Unit (TMU) Training, Marine Corps Order 1500.31C (Washington: 22 February 1973), Enclosure 5, p. 1.
19. Telephone conversation with Major A.C. Blades, USMC, Plans Section, Plans and Budget Branch, Training Division, Operations and Training Department, Headquarters Marine Corps, Washington: 8 March 1978.
20. Richard Bailey, Training Requirements for the Naval Technical Information Presentation Program: A Needs Assessment (Training Analysis Evaluation Group, Orlando, Florida: April 1977), p. 3.
21. Interview with Major J. Mitchell, USMC, Aviation Support Branch, Department of Aviation, Headquarters, U.S. Marine Corps, 6 February 1978.
22. Interview with Dr. I. Shever, Information Analysis and Synthesis (Code 005), Advisor to the Chief of Naval Education and Training, 8 February 1978.
23. Coleman D. Kulm, Analysis of Organizational Maintenance Training Within the United States Marine Corps, Thesis, U.S. Naval Postgraduate School, Monterey, California: December 1977, p. 84.

CHAPTER VI  
OFFICER CAREER TRAINING

General

A discussion of officer career training must begin with an explanation of terms. This is necessary since various documents refer to the same types, levels, or means of training by different names. The problem exists because there is no single staff agency or source document that identifies the officer career training system. Contributing to the problem are a number of outdated directives. These directives will be identified later in the chapter. Revision of directives, however, will not resolve the confusion unless a common set of terms and definitions is adopted. Table VI-I is an example of the problem. The three levels of Professional Military Education are described in the sources shown. Marine Corps Bulletin 1552, General Training Information, of 30 June 1977 appears to be an attempt to change the terms used to describe the three levels to agree with Department of Defense terminology. The attempt was only partially successful since it failed to change the names used to identify the levels of schools attended by captains and lieutenant colonels to agree with those used in the Department of Defense Military Manpower Training Report.

TABLE 6-I  
LEVELS OF PROFESSIONAL MILITARY EDUCATION

<u>GRADE OF STUDENT</u>	<u>MARINE CORPS MANUAL</u>	<u>MARINE CORPS BULLETIN 1522</u>	<u>MILITARY MANPOWER TRAINING REPORT</u>
LTCOL	Top Level Schools	Top Level Schools	Senior Service Colleges
MAJ	High Level Schools	Intermediate Level Schools	Intermediate Service Schools
CAPT	Intermediate Level Schools	Career Level Schools	Basic Officers Professional Schools

Sources: U.S. Marine Corps, Marine Corps Manual (Washington: 4 February 1961), par. 1520; U.S. Marine Corps, General Training Information, MCBUL 1552 (Washington: 30 June 1977), p. 1; Department of Defense, Office of the Assistant Secretary of Defense (Reserve Affairs), Military Manpower Training Report for FY 1978 (Washington: March 1977), pp. VII-3, VII-4, VII-6.

It should be noted that the terms used in the report are also used by Headquarters, U.S. Marine Corps officials when testifying about training matters before the Congress.

A second problem, voiced by officers in the field and recognized by cognizant staff officers, is a lack of understanding of officer career training and its impact on selection for promotion.

#### Purpose

The purpose of this chapter is to explain officer career training. This will be accomplished by building a conceptual model using information obtained from existing Marine Corps documents. When conflicts in terminology are encountered, they will be identified.

#### Career Training

According to the Marine Corps Manual, officer career training is accomplished primarily by formal school training and practical experience gained through controlled duty assignments.<sup>1</sup> The manual also states that, "Formal School Training consists of all training conducted at schools or courses for which quotas are established by the Commandant of the Marine Corps."<sup>2</sup> "Career schooling is defined as that training and education conducted for officers beyond entry and basic level...." by the Career Planning and Development Guide.<sup>3</sup> The guide includes professional

schooling, technical training, education leading to advanced skills, and programs that result in baccalaureate and advanced degrees as part of "career schooling."

Career training is divided into three parts: leadership training, professional development education, and military occupational specialty training. Leadership training will be covered in Chapter VII. Professional development education is a term not found in Marine Corps directives. However, it is used by the Department of Defense and it encompasses advanced education in military schools and civilian educational institutions. See Figure 6-1 for a conceptual diagram of officer career training.

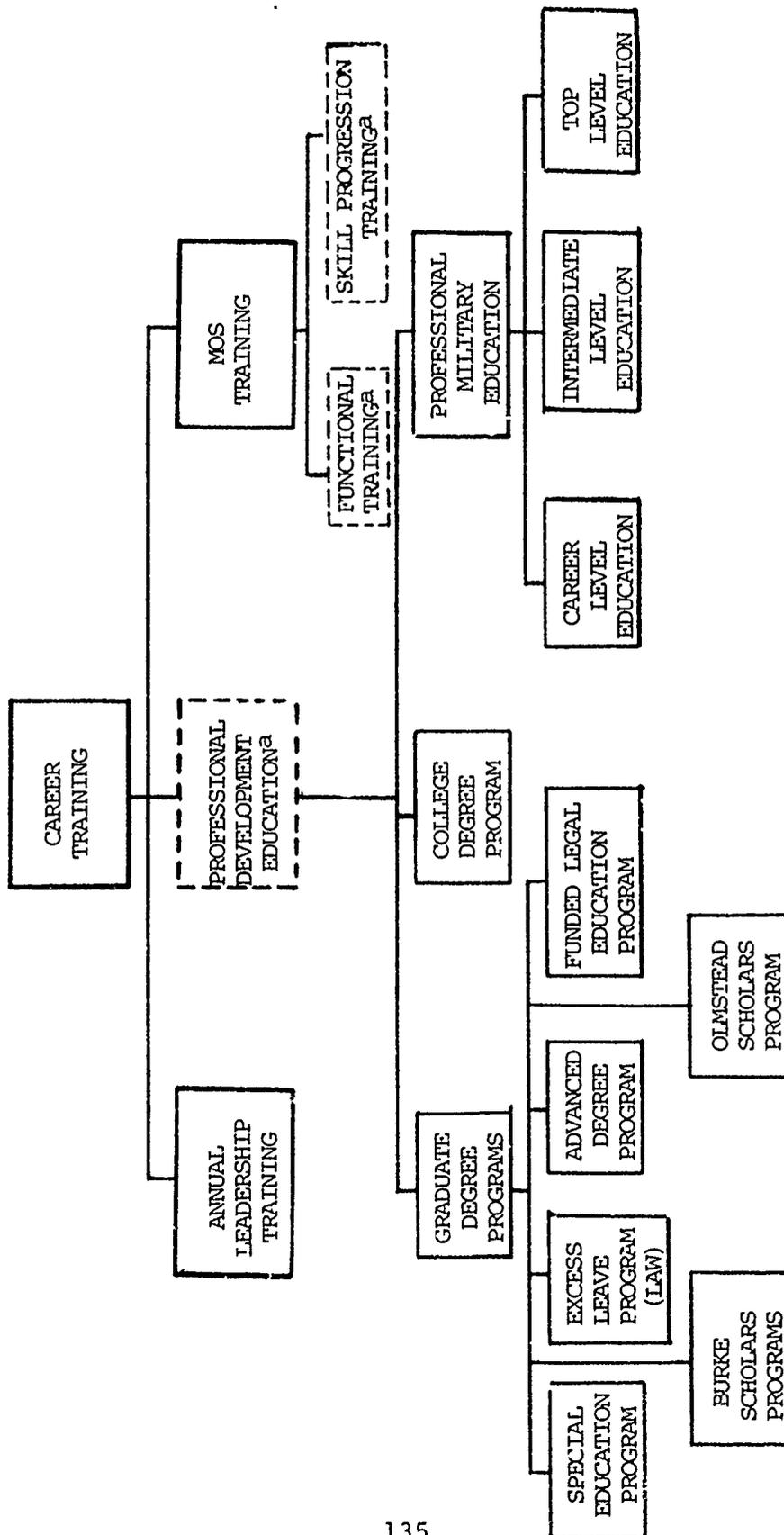
#### Military Occupational Specialty Training

How the assignment of a military occupational specialty occurs is best explained by briefly reviewing parts of three Marine Corps directives: Marine Corps Order P1200.7C, Military Occupational Specialties Manual; Marine Corps Order P1000.6, Assignment, Classification and Travel Systems Manual; and Marine Corps Order P1500.12J, Formal Schools Catalog.

The Military Occupational Specialties Manual is the cornerstone of the personnel system in the Marine Corps. It groups similar skills into functional areas known as

FIGURE 6-1

OFFICER CAREER TRAINING



<sup>3</sup>These terms are not used in Marine Corps directives but can be found in the DOD Military Manpower Training Report.

Source: This is a conceptual diagram prepared by the authors from various Marine Corps directives and interviews with officers at HQMC.

occupational fields. Each military occupational specialty is identified by a four digit number. The first two digits represent an occupational field. The last two digits are referred to as the skill designator and represent the skill level that the individual has achieved.<sup>4</sup>

Officers are assigned a primary MOS which represents their primary field of expertise and may be assigned one or more additional MOSs if they acquire additional skills. This concept is further explained in the Assignment, Classification and Travel Systems Manual which states that classification of military qualifications consists of assigning, changing, voiding or converting military occupational specialties in order to identify each individual's current qualifications. The primary MOS assigned an individual identifies his most significant qualifications. Additional MOSs may be assigned to identify other significant qualifications different from those identified by the primary MOS.<sup>5</sup>

Officers receive an MOS based on successful completion of requirements that include attendance at a formal school.

The Formal Schools Catalog is the official source of guidance and information for courses of instruction offered to support the Marine Corps Formal Schools program. Courses listed and described in the catalog are conducted by the Marine Corps, other military Services and civilian agencies. The course description includes information about the school and the MOS for which the school trains the individual.<sup>6</sup>

DOD guidance for budget preparation and for preparation of the Military Manpower Training Report requires that MOS training be grouped under the title "Specialized Skill Training." This type of training is further divided into initial skill training, skill progression training, and functional training.<sup>7</sup> The latter two will be explained below. The term initial skill training is not widely used in the Marine Corps. It encompasses two types of training conducted by the Marine Corps, officer basic training and skill qualification training. To put it another way, initial skill training for officers equates to training at The Basic School and at the first formal school an officer attends where a military occupational specialty is awarded.

Although initial skill training is obviously associated with an officer's career, in this paper only skill progression and functional training are included in the definition of career training.

Skill Progression Training. Skill progression training is conducted for officers with several years of practical experience and offers an opportunity to acquire the knowledge needed to assume more advanced responsibilities. Its purpose is to provide intermediate and advanced training above the initial skill training level in the latest technical and managerial techniques. Marine Corps officers

attend 77 courses with an average length of 89 days in a variety of specialized subjects.<sup>8</sup>

Functional Training. This training is in subject areas which cut across the scope of military occupational specialties and provides additional required skills without changing the students primary specialty or skill level. Scuba training is an example.

#### Professional Development Education

The purpose of professional development education is to provide training and education to career military personnel and to prepare them to perform increasingly complex tasks which become their responsibility as they progress in their military careers. Whereas MOS training is directed toward specific job skills, professional development education is concerned with broader professional development goals in subject areas such as military science, engineering, and management. It is conducted at both military and civilian institutions. Some enlisted personnel participate in courses included in this category. The Staff Noncommissioned Officers Academy is an example. However, most of the programs are for the professional development of officers.<sup>9</sup>

As indicated in Figure 6-1, professional development education can be divided into the College Degree Program, Graduate Degree Programs and Professional Military Education.

College Degree Program. This program permits qualified officers to attend regionally accredited colleges and universities on a full-time basis to fulfill resident requirements for a baccalaureate degree. Officers must have accumulated sufficient college credits to permit them to obtain degrees within a maximum period of 18 months. Officers receive full pay and allowances but must bear all expenses.<sup>10</sup>

Although the management of graduate education programs was retained under the cognizance of the Deputy Chief of Staff for Manpower when the Operations and Training Department was established in 1976, the College Degree Program was not. The rationale for this decision is explained in the following recommendation which was approved by the Commandant of the Marine Corps.

It is recommended that management of graduate education programs remain under the cognizance of the Deputy Chief of Staff for Manpower and that this function be transferred to the Personnel Management Division. In the proposed reorganization, the College Degree Program is retained within the Education Section combining it with similar full-time enlisted education programs. Separation of the officer educational programs in this manner will serve to consolidate all Marine Corps education programs below graduate level within the Training Division while maintaining, under Manpower, the centralized management of graduate education. The Honorable William P. Clements, Jr., Deputy Secretary of Defense and Chairman of the DOD Committee on Excellence in Education has directed that graduate education be centrally managed. In complying with the letter and the spirit of DOD guidance, it is considered appropriate that the responsibility for soliciting,

selecting, and managing officers in graduate education be closely aligned with the management and assignment of graduate-trained assets currently accomplished by the SEP Monitor within the Officer Assignment Branch of the Personnel Management Division.<sup>11</sup>

Graduate Degree Programs. There are six of these programs. One is the Special Education Program. Its objective is to provide qualified officers for specific staff billets requiring advanced education and to maintain an inventory of officers trained in numerous specialized and management areas to meet the requirements within the Marine Corps. The training provided is the minimum requisite education necessary to meet billet requirements. Civilian educational institutions, the Naval Postgraduate School, and the Air Force Institute of Technology are utilized by the Marine Corps to provide this education.<sup>12</sup>

Another program is the Excess Leave Program (LAW). It was established to promote the opportunity for a small number of career-oriented commissioned officers to complete law school and then to be designated as judge advocate officers. Officers selected for this program do not receive pay and allowances while they are in excess leave status and attending school. They also do not receive any government funding for tuition, books, fees, or other expenses.<sup>13</sup>

The Advanced Degree Program augments the Special Education Program in providing an additional source of trained

officers for specific billets, by providing career motivated officers an opportunity to receive advanced degrees, and by providing a career incentive for the procurement and retention of officers. Graduate study is limited to those disciplines in which the Marine Corps has validated requirements. All tuition, fees, books, and other educational costs must be borne by the officer but he may utilize in-service VA benefits if he rates them. He does, however, receive regular pay and allowances.<sup>14</sup>

A fourth program is the Funded Legal Education Program. It was established so that a small number of career-oriented commissioned officers could attend accredited law schools and subsequently be designated as judge advocate officers. Officers selected for this program receive tuition, full pay and allowances, and a maximum of \$150 annually for books and fees determined to be necessary.<sup>15</sup>

The final two programs affect only a few Marines each year. They are awarded to especially capable officers on a competitive basis. They are included in this discussion so that all graduate programs are identified. The names of these two programs are the Burke Scholars and the Olmstead Scholars.\*

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\*Burke Scholars Program is the Marine Corps equivalent to the Rhodes Scholar Program. Participants are identified while at the Naval Academy and reselected after a tour with a Marine Corps Unit.

Three Marines a year are selected as Olmstead Scholars. Officers with from 3 to 6 years active duty time are eligible for the program.

Professional Military Education (PME). Professional Military Education is a term that through common usage has come to identify the top three levels of professional military schools. It is not completely defined in any publication or document but a reasonable definition can be constructed from its general use in the Military Manpower Training Report for FY 1978, the Chairman, Committee on Excellence in Education memorandum on Intermediate Level Staff Colleges of 1 December 1976 and the Interservice Training Review Organization Procedures Manual. These documents refer to PME schools as those having a curriculum that is service-wide and mission-oriented in scope rather than oriented to skills within a specific part of the service. They also indicate that this type of school has a curriculum which deals with the development of management skills necessary for increased command and staff responsibility common to most or all branches of the U.S. Military Services. The courses are taught by the Military and do not result in the awarding of a degree. Professional Military Education provides progressive training related more to an increasing responsibility associated with career progression than to an individual's current assignment or specialty. As indicated in the beginning of this chapter and illustrated in Table 6-1, the name given to the three levels of Professional Military Education

differs depending on the document consulted. Although the Interservice Training Review Organization established a Professional Military Education Subcommittee to investigate the commonalities of professional military institutions, the subcommittee is disestablished.\* The organization's Procedures Manual explains the reason for disestablishment as follows:

Initiatives in the professional military education area have been preempted by self-initiated efforts of the Service schools and by such high level interest as the DOD Committee on Excellence in Education. The self analysis caused by such activities has resulted in a general evaluation of PME from the standpoint of value, uniqueness, commonality, quality and cost. The PME subcommittee at its inception chose to monitor these evaluations rather than duplicate efforts underway. The approach has avoided costs in both travel and time.<sup>16</sup>

In the text that follows, the terms currently used by the Marine Corps; career, intermediate, and top; will identify the three levels of Professional Military Education.

A new method for selecting officers to attend PME schools was approved in 1977.\*\* The method, designed to insure equitable selection opportunity of the highest quality unrestricted career officer regardless of time

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\* The Interservice Training Review Organization was established as an informal agency within DOD to review all service training and education with the goal of eliminating duplication, reducing costs, standardizing instruction and in general increasing training efficiency consistent with readiness.

\*\* See Appendix I for a detailed explanation of the selection process.

on station considerations, began with the selection of students who matriculate in academic year 1978/1979. Selection procedures common to all three levels include a formal selection board. An explanation of the criteria for selection to each level of school is included in the following paragraphs.<sup>17</sup> See Figure 6-2 for a breakdown of schools by level. The lowest level of PME school is the career level. The Amphibious Warfare School is the only school that Marine officers attend that falls into this category.

Career Level School. The school is service-wide in scope. It prepares captains with some experience in operational units for duties through the grade of lieutenant colonel with emphasis on command duties at battalion and squadron level and staff duties at battalion, squadron, regiment, group, and amphibious brigade levels. The Marine Corps Amphibious Warfare School Extension Course (MCAWSCEC) is a non-resident course available for personnel not able to attend the resident course.

The precept for the 1978 academic year board indicated that officers would be considered for school regardless of availability and that officers who had demonstrated outstanding potential for future service and whose records indicated that they would be utilized in positions of increasing responsibility should be selected. Officers who had attended a Career Level School previously were not eligible. A primary and alternate quota distribution was

established for air and ground MOSs. A further primary and alternate quota distribution among ground MOSs was also established. Command Generals, District Directors and Commanding Officers of separate commands were allowed to recommend waivers, in exceptional cases, for officers above the promotion year group eligibility zone. In addition to Amphibious Warfare School the following schools were considered to be career level: Infantry Officer Advanced Course, Field Artillery Officer Advanced Course, Engineer Officer Advanced Course, Army Officer Advanced Course, and Signal Officer Advanced Course.<sup>18</sup> Since the Amphibious Warfare School is the only one currently recognized by the Department of Defense as a Career-Level School, it is uncertain how quotas to the other schools will be filled in the future. Cognizant staff officers at HQMC are working on this problem.

Intermediate Level Schools. The second of the three levels of schools is the intermediate. These schools are attended by majors. The education received prepares officers to handle operational problems of a joint and combined nature and to understand the rationale for the existence and deployment of forces. The Marine Corps Command and Staff College falls under this category and is mission oriented. Figure 6-2 identifies the Intermediate Level Service Schools. The criteria for selection to this level of school for academic year 1978 were the same as for the Career Level. Officers were considered regardless of

availability. Demonstrated outstanding potential for future service as well as future utilization in positions of increasing responsibility were requirements for selection. Officers who had previously attended an intermediate level school were not eligible.<sup>19</sup>

Top Level Schools. The highest level of Professional Military Education is the Top Level School. These schools prepare officers for senior command and staff positions at the highest levels in the national security establishment and the allied command structure. The Marine Corps sponsors no resident top level school but shares the Naval War College with the Navy. Marine Corps officers also attend other U.S. and foreign nation senior service colleges.

Two boards met in 1977 to select officers to attend top level schools. One board considered colonels and senior lieutenant colonels.<sup>20</sup> The other considered only lieutenant colonels promoted in the years 1974-1978. The criteria for selection were similar to those used by the career and intermediate level school boards except that additional criteria were established for selection of students to attend the National War College and the Industrial College of the Armed Forces. It was desired that National War College selectees be in the grade of colonel/lieutenant colonel, have 15-25 years of service, possess a baccalaureate degree

and be a graduate of the Armed Forces Staff College or a Service Command and Staff Course. It was desirable that Industrial College of the Armed Forces selectees be graduates of the Armed Forces Staff College, a Service Command and Staff Course, or have completed the Industrial College of the Armed Forces Correspondence Course, "The Economics of National Security."<sup>21</sup> See Figure 6-2 for a list of top level schools.

#### Conclusions and Recommendations

1. Conclusion. That various Marine Corps directives refer to the same types, levels and means of training by different names.

Recommendation. That a common set of terms that identify the types, levels and means of training be adopted for use by all Marine Corps activities.

That the Professional Military Education Subcommittee of the Interservice Training Review Organization be re-established and assume the task of standardizing training related terminology within the Department of Defense.

2. Conclusion. That there is a general lack of understanding among Marine officers about career training and its impact on selection for promotion.

Recommendation. That Marine Corps Order P1040.32, Career Planning and Development Guide Volume II (Marine Officers) be revised to include a detailed explanation of all phases of career training and its impact on selection for promotion.

FIGURE 6-2

PROFESSIONAL MILITARY EDUCATION SCHOOLS

CAREER LEVEL SCHOOLS	INTERMEDIATE LEVEL SCHOOLS	TOP LEVEL SCHOOLS
<u>Professional Military Education</u>	<u>Professional Military Education</u>	<u>Professional Milit. Education</u>
Amphibious Warfare School	USMC Command & Staff College College of Naval Command & Staff Armed Forces Staff College Air Command & Staff College Army Command & General Staff College Defense Systems Management College <sup>a</sup> National Senior Intelligence Course Staff & Command College of the Federal German Armed Forces Canadian Forces Command & Staff College Spanish Naval War College	National Defense University Naval War College Air War College Army War College Inter-American Defense College Foreign Service Institute Royal College of Defense Studies Australian Joint Service Staff College NATO Defense College Senior Seminar in Foreign Policy National Defense College of Canada Norwegian Defense College

<sup>a</sup>Included in advanced draft guidance from Assistant Secretary of Defense Manpower Reserve Affairs and Logistics for Military Manpower Training Report FY 1979.

Source: Interview and telephone conversation with LtCol R.C. Prouty, Schools Section, Individual Training Branch, Training Division, HQMC Washington, D.C.: 8 December 1977 and 3 March 1978.

3. Conclusion. That the precepts for the academic year 1978 career, intermediate, and top level school selection boards indicated that officers should be considered for schools regardless of availability. The precepts further suggested that officers who had demonstrated outstanding potential for future service and whose records indicated that they would be used in positions of increasing responsibility should be selected for schools.

Recommendation. That the selection precepts used in academic year 1978 be used for all future selection of officers for Professional Military Education.

#### NOTES

1. U.S. Marine Corps, Marine Corps Manual, (Washington: 4 February 1961), par. 1520.2A.
2. Ibid., par. 1500.2A.
3. U.S. Marine Corps, Career Planning and Development Guide, Volume II (Marine Officers), Marine Corps Order P 1040.32 (Washington: 19 May 1972), p. 2-6.
4. U.S. Marine Corps, Military Occupational Specialties Manual, Marine Corps Order P 1200.7C (Washington: 22 December 1975), p. I-3, I-4.
5. U.S. Marine Corps, Assignment, Classification and Travel Systems Manual, Marine Corps Order P1000.6 (Washington: 8 August 1975), p. 1-3.
6. U.S. Marine Corps, Marine Corps Formal Schools Catalog, Marine Corps Order P1500.12J (Washington: 6 May 1977), p. 1-1.
7. Office of the Assistant Secretary of Defense (Manpower and Reserve Affairs), Military Manpower Training Report for FY 1978 (Washington: March 1978), pp. V-8, V-10, V-11.
8. Ibid., p. VI1.
9. Ibid., p. VII-1.
10. U.S. Marine Corps, College Degree Program, Marine Corps Order 1560.7F (Washington: 27 March 1977), par. 5.
11. "Plan for the Consolidation of Operations and Training Functions of Headquarters Marine Corps (Proposed)," unpublished report, (Washington: revised 11 March 1976 approved 19 March 1976), unnumbered page.
12. U.S. Marine Corps, Special Education Program, Marine Corps Order 1520.9C (Washington: 13 December 1971), p. 1, 2.
13. U.S. Marine Corps, Excess Leave Program (Law), Marine Corps Order 1050.14B (Washington: 29 December 1972), par. 102.
14. U.S. Marine Corps, Advanced Degree Program, Marine Corps Order 1560.19B (Washington: 15 February 1973), par. 4.

15. U.S. Navy, Funded Legal Education Program, Secretary of the Navy Instruction 1520.7A (Washington: 10 May 1976), pp. 1, 2.

16. Interservice Training Review Organization, Procedures Manual, October 1977 (Washington: October 1977), p. 25.

17. U.S. Marine Corps, Revised Student Selection Method for Professional Military Education Schools, Marine Corps Bulletin 1500 of 15 July, ALMAR 107/77 (Washington: 15 July 1977), p. 1.

18. Commandant of the Marine Corps Letter, "Precept, Career Level School Selection Board, Academic Year 1978," n.d., pp. 1-1, 1-2, 1-3.

19. Commandant of the Marine Corps, "Precept, Intermediate Level School Selection Board, Academic Year 1978," 5 August 1978, p. 1-1.

20. Commandant of the Marine Corps Letter, "Precept, Top Level School Board, Academic Year 1978-79," 1 August 1977, p. 1.

21. Commandant of the Marine Corps, "Precept, Top Level School Board, Academic Year 1978-79," 1 August 1977, pp. 1-1, 1-2.

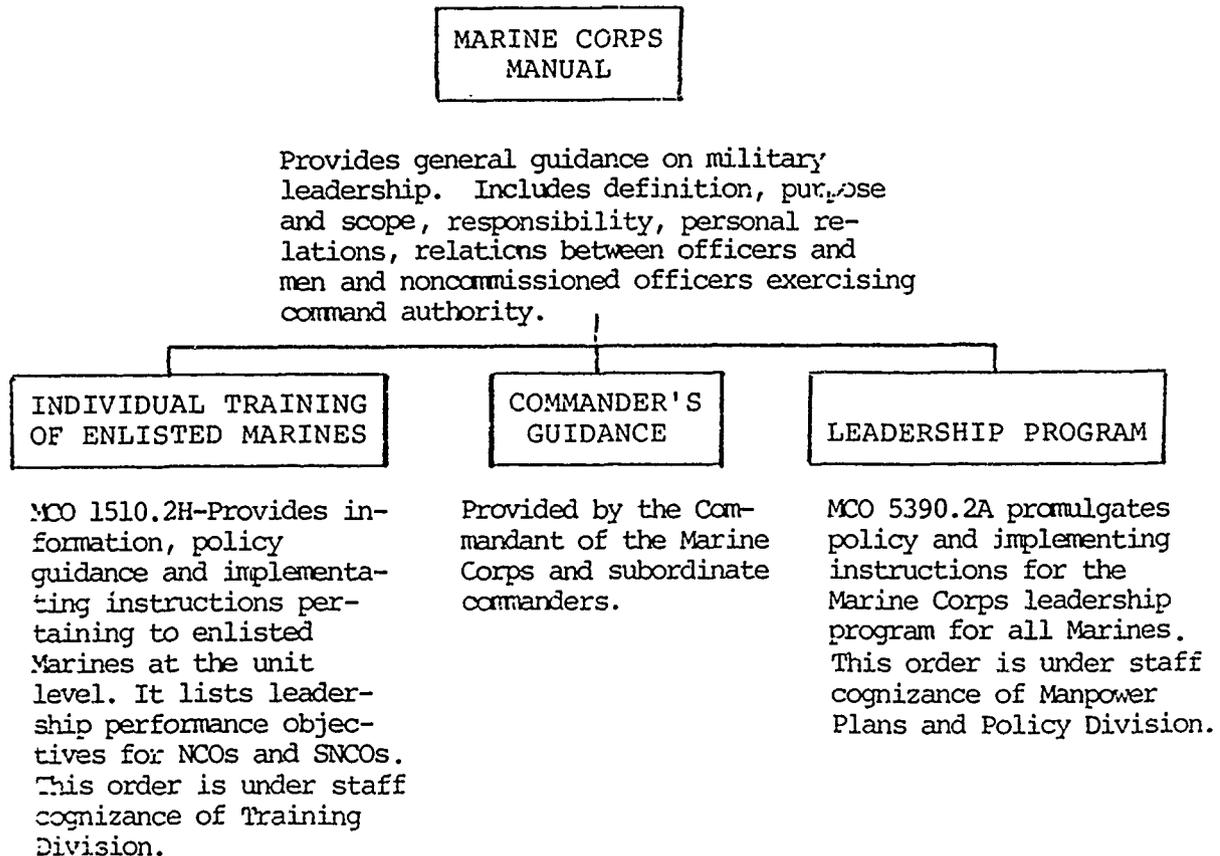
CHAPTER VII  
LEADERSHIP TRAINING

Background

Leadership training requirements emanate from commanders and three Marine Corps directives; the Marine Corps Manual; Marine Corps Order, 1510.2H, Individual Training of Enlisted Marines; and Marine Corps Order 5390.2A, Leadership Program. Although the latter two directives have a common foundation in the Marine Corps Manual, they differ in scope and source of control as shown in Figure 7-1. The Individual Training of Enlisted Marines order provides general leadership training guidance and requires commanders to evaluate noncommissioned and staff noncommissioned officers' proficiency and leadership ability in accordance with designated performance objectives. The Training Division, Operations and Training Department, Headquarters, U.S. Marine Corps has staff responsibility for the directive. The order on the Leadership Program, on the other hand, directs all Marines to participate in annual leadership training instruction. Training support in the form of educational materials is provided.<sup>1</sup> The Human Resources Branch, Manpower Plans and Policy Division, Headquarters, U.S. Marine Corps has staff cognizance for this program. However, in the reorganization study that resulted in the establishment of the Operations and Training Department, the Commandant approved the following recommendation on 20 March 1976:

FIGURE 7-1

SCOPE AND CONTROL OF LEADERSHIP TRAINING



Source: Authors' Conception

That the implementation functions of the human relations (leadership), ground safety, and drug and alcohol abuse programs be transferred to the Training Division (paragraph III.B.8); such transfer to be deferred until a future date based upon the recommendations of the staff activities involved.<sup>2</sup>

Marines in the field and at Headquarters, U.S. Marine Corps have voiced concern about the confusion resulting from the two unrelated directives as well as the amount of time required to accomplish the requirements of the Leadership Program, 16-24 hours. The remainder of this chapter will explain the leadership aspects of the directives mentioned above.

#### Marine Corps Manual

Paragraph 5390 of the Marine Corps Manual defines military leadership as, "The sum of those qualities of intellect, human understanding, and moral character that enables a person to inspire and control a group of people successfully."<sup>3</sup>

The manual also provides specific leadership guidance under the headings of purpose and scope, responsibility, personnel relations, relations between officers and men, and noncommissioned officers.

#### Individual Training of Enlisted Marines

This directive contains information, policy guidance and implementing instructions that pertain to the individual training of enlisted Marines. It classifies leadership training and military occupational specialty training under

the heading of "career training." The order describes leadership training as the responsibility of each commander and establishes leadership performance objectives for non-commissioned and staff noncommissioned officers. The order explains that permitting potential leaders to apply their leadership skills and training them in leadership principles and techniques are means to develop leadership ability.

#### Leadership Program

This program evolved from the former "Human Relations Training" which was initiated in response to the racial violence experienced in the late 1960s. An initial cadre of Marines was trained to use educational materials and action programs that were developed by a civilian research firm (IRI, now IIR).<sup>\*</sup> The Leadership Program directive explains the transition from the Human Relations Training Program to the Leadership Program:

The program's basic objective was, through education and action, to insure more constructive relationships among Marines and between Marines and individuals outside the Marine Corps. Initial emphasis was placed on resolving racial problems. Subsequently, the Marine Corps moved to provide a more comprehensive leadership approach that would eliminate the need for a separate human relations training program.<sup>4</sup>

The Commandant of the Marine Corps set the tone for Leadership/Human Relations training in a White Letter published in 1975:

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<sup>\*</sup> IRI - International Research Institute, American Institute for Research; IIR - Institute for International Research

...A review of our program clearly reveals that it is soundly conceived and is based on standards that have withstood the test of time. The most recent evolution in our program has been the placing of human relations training under the leadership umbrella. Specifically, a significant block of instruction is now being given in the resident officer and staff noncommissioned officer schools at Quantico. This is to help prepare our officers and staff noncommissioned officers to provide this education and training throughout the Corps. The placing of human relations training in the hands of our leaders is a procedure that has been well received throughout the Corps. It augers well for the future.<sup>5</sup>

The current Leadership Program directive is dated 19 May 1976 and explains the organization and management of the program. The program is carried out by a Leadership Instruction Department and by commanders in the field.

Leadership Instruction Department. This department is a field agency of Headquarters, U.S. Marine Corps under the staff cognizance of the Human Relations Branch, Manpower Plans and Policy Division, Manpower Department. It is located at Quantico, Virginia. The department's mission is to train Marine leaders in the principles and techniques of sound leadership, with heavy emphasis on the Marine Corps leadership program and the leader's role therein. Instructors from the Leadership Instruction Department teach at the Command and Staff College, Amphibious Warfare Course, Advanced Communication Officers Course, and The Basic School located at Quantico. Instructors from the three Marine Corps Staff Noncommissioned

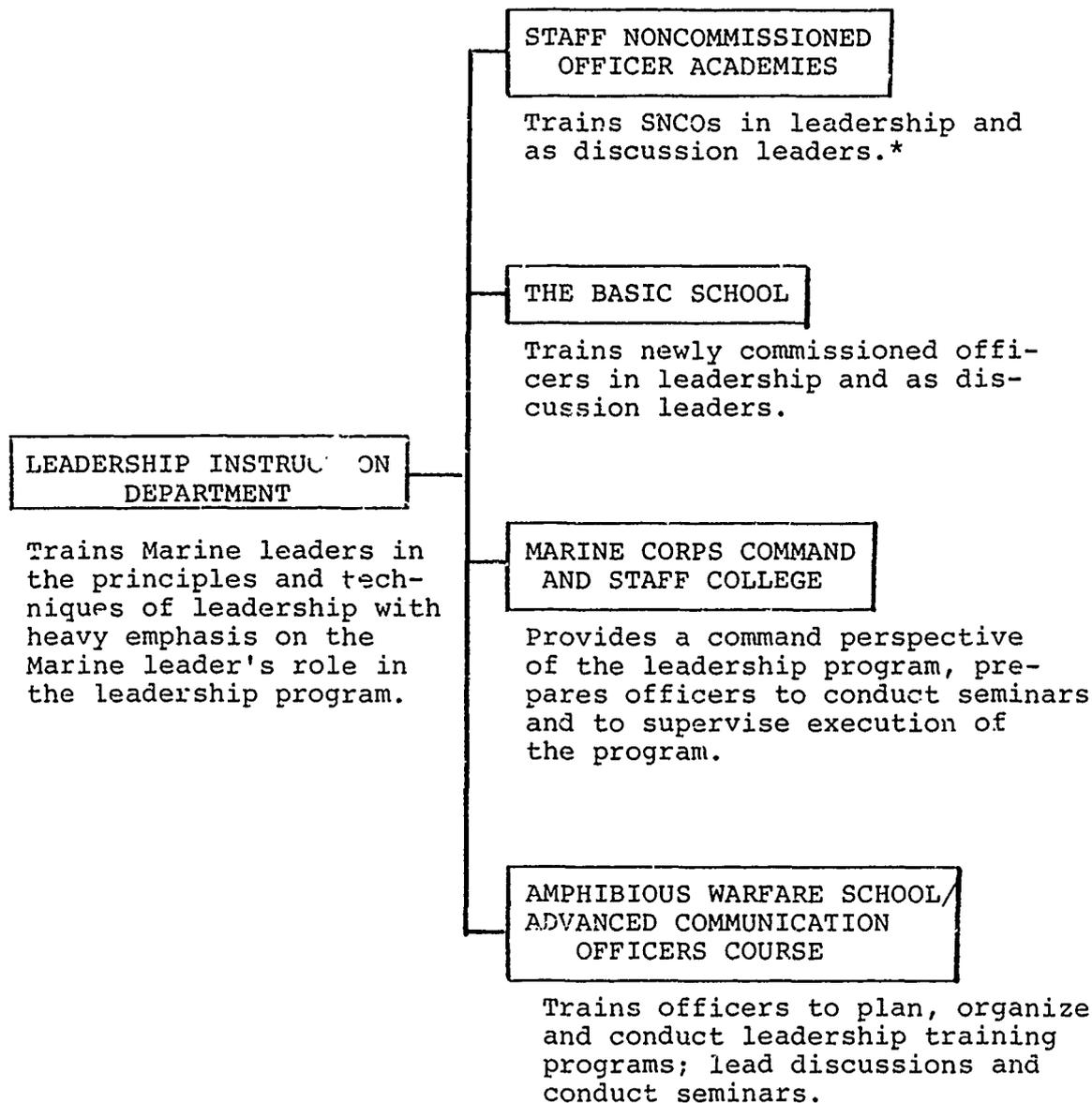
Officer Academies receive instruction on the leadership program and in turn present the instruction to the Marines who attend the academies. See Figure 7-2 for an overview of the scope of instruction presented at each school. The department also has a mobile training team. The team provides training in discussion leading skills at field commands where trained Marine Corps Amphibious Warfare Course/ Advance Communication Officer Course graduates are not available and where voids in trained discussion leaders exist. In addition, as part of an effort to continually improve leadership, mobile training teams will, when directed by CMC, conduct research, test materials, gather data and provide staff assistance to commands.

Basic and Annual Leadership Requirements. At the unit level, commanders are required to conduct the leadership program in two phases.

Basic leadership training is provided to enlisted Marines upon arrival at their first permanent duty station. This initial instruction provides a common foundation in leadership for all Marines that will be used in future problem solving discussions during annual training. Normally, 7-20 Marines, representative of the unit being trained, are assigned to each discussion group. Newly commissioned officers receive this training at The Basic School.

FIGURE 7-2

SCOPE OF LEADERSHIP INSTRUCTION DEPARTMENT INSTRUCTION



\* Only the instructors at the academies receive classes from the Leadership Instruction Department. They in turn train the students.

Source: U.S. Marine Corps, Leadership Program, Marine Corps Order 5390.2A (Washington: 19 May 1976), p. 1-1.

Marines who have completed basic leadership training participate in annual leadership training. This is accomplished through seminars for officers and staff noncommissioned officers. Action and study materials are provided for use by all Marines. Commanders are given flexibility to select or develop topics appropriate to their particular commands.

#### Commander's Guidance

The commander's guidance based on his perception of the needs of the command also impacts on leadership training. The commander exercises his prerogative and directs that leadership training be conducted, normally at unit schools. In a more formal vein, cognizant commanders of Marine Corps Formal Schools determine what, if any, leadership training is to be conducted.\*

#### Perception of the Leadership Training Program

Early in the research effort a paper that explained leadership training was distributed to 35 officers for review. The responses received were highly emotional and indicated general dissatisfaction with Marine Corps Order 5390.2A, Leadership Program. The two reasons for the dissatisfaction most frequently voiced were: that the time required to accomplish the objectives of the program was excessive and that the program was really human relations training and not "leadership" training.

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\* Formal School commanders are required to submit Programs of Instruction to Headquarters, U.S. Marine Corps. However, except in rare cases, the leadership training to be conducted is determined by the cognizant commander.

One officer, who was formerly associated with the Leadership Instruction Department, provided the results of a survey he conducted at the officer schools located at Quantico, Virginia in 1976. The majority of the officers contacted disagreed with all or part of the programs.

Comments typical of those received in response to the paper written by the authors were: "I have a lot of heartburn over the way leadership programs and formal training are conducted today. Most of what is written and taught would make Chesty Puller, Lou Diamond and 'Old Gimlet Eyes' roll over in their graves." "Leadership training is human relations training by another name. The time and effort expended on the program is a crying shame."

#### Conclusions and Recommendations

1. Conclusion. That the fragmenting of responsibility for implementing leadership training at Headquarters, U.S. Marine Corps has resulted in misunderstanding of leadership training requirements.

Recommendation. That the implementation of all leadership training be placed under the staff cognizance of the Director, Training Division, Operations and Training Department, Headquarters, U.S. Marine Corps.

2. Conclusion. That Marines perceive leadership training has become a part of human relations training rather than vice versa.

Recommendation. That the important subject of human relations be clearly identified as one of the major components of leadership training.

That paragraph 4b of Marine Corps Order 5390.2A be revised to more specifically explain that human relations training is a part of leadership training.<sup>6</sup>

That the Leadership Instruction Department student advance sheet for lesson plan BLD (LID) 0635, "Program Outlines," that provides the officers at The Basic School an opportunity to discuss the management of the Marine Corps Leadership Program be revised in the following two places. In the first sentence of annex A, "The Marine Corps Leadership Program was initiated in response to racial violence in the late 1960's," change the words "Marine Corps Leadership Program" to "Human Relations Program."<sup>7</sup> In the first sentence of annex C, "as compared to earlier human relations training, which was generally conducted by individuals outside the trainees' chain of command, the Leadership Program is intended to be implemented by unit leaders," eliminate the inference that human relations training and leadership training are synonymous.<sup>8</sup>

NOTES

1. "Plan for the Consolidation of Operations and Training Functions of Headquarters Marine Corps (Proposed)," Unpublished report; Washington: revised 11 March 1976, approved 19 March 1976. n.p.
2. U.S. Marine Corps, Leadership Program, Marine Corps Order 5390.2A (Washington: 19 May 1976), p. 4-2.
3. U.S. Marine Corps, Marine Corps Manual (Washington: 4 February 1961), par. 5390.
4. Leadership Program, p. 2.
5. White Letter from General Louis H. Wilson, Commandant of the Marine Corps to All General Officers, All Commanding Officers and All Officers-in-Charge, 4 November 1975.

PART III

UNIT TRAINING

## CHAPTER VIII

### INTRODUCTION TO UNIT TRAINING

#### Background

This chapter opens with a brief discussion of the need for more research on unit training. An examination of the problem of definitions follows. The remainder of the chapter describes Marine Corps unit training within the context of the model outlined in Chapter II. The description of how unit training requirements are specified is reserved for Chapter IX, however, because of the complexity of the subject.

Although unit training is more involved, and probably more costly, than is individual training, little study has been given to it in the past.<sup>1</sup> Basic questions, such as, what is achieved as a result of unit training, and when is unit training preferable to individual training have yet to be answered satisfactorily.<sup>2</sup> Because numerous unresolved issues hinder the development of improved training methods, unit training needs to be examined closely. The model developed in this study provides a framework for such an examination.

#### Definitions

A number of researchers have observed a need to define the terms "unit" and "unit training."<sup>3</sup> Specifically, what constitutes a unit and what makes unit training unique? Is

a unit "...simply a collection of individuals performing separate [tasks]...in a group context, or [are there] unique trainable team skills that exist over and above individual functions?"<sup>4</sup> General agreement has been reached that units (as distinguished from other groupings of individuals such as promotion boards, ad hoc committees, or members of a courts martial) are characterized by the following criteria:<sup>5</sup>

- (1) Being goal or mission oriented.
- (2) A formal structure.
- (3) Members who have assigned roles which are well defined.
- (4) Required interaction between members.

Based on these criteria there is a growing consensus that trainable unit tasks can be identified.<sup>6</sup> These tasks are, for the most part, in the areas of communication, coordination, and decision making.

An additional problem of definition stems from the use of the term "unit training" to describe the location of training vice the training of units. In this context the responsibility for training individuals is placed on the unit as contrasted to formal schools. The U.S. Army has attempted to resolve this problem by referring to the training of units as "collective training." This term is gaining some usage among Marines since it is referred to in the new Army Field Manuals, How to Prepare and Conduct Training (FM 21-6), and Operations (FM 100-5).\*

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\* See particularly Chapters 4, 5, and 6 of FM 21-6 and page 1-4 of FM 100-5.

The diversity of terms used to denote a "unit" also causes confusion. The Defense Science Board was recently perplexed by the terms crew, group, team, and unit and eventually resorted to the acronym CGTU.<sup>7</sup> The Department of Defense Dictionary of Military and Associated Terms (JCS Pub 1) defines "unit" and "group" as follows:

- (1) Unit. 1. Any military element whose structure is prescribed by competent authority, such as a table of organization and equipment; specifically, part of an organization.<sup>8</sup>
- (2) Group. 1. A flexible administrative and tactical unit composed of either two or more battalions or two or more squadrons. The term also applies to combat support and service support units.<sup>9</sup>

The terms "team" and "crew" are not defined in JCS Pub 1.

In this report the term "unit" is used in a general or broad sense to refer to teams, crews, squads, sections, platoons, companies, battalions, squadrons, etc. The term "unit training" will refer only to the training of units.

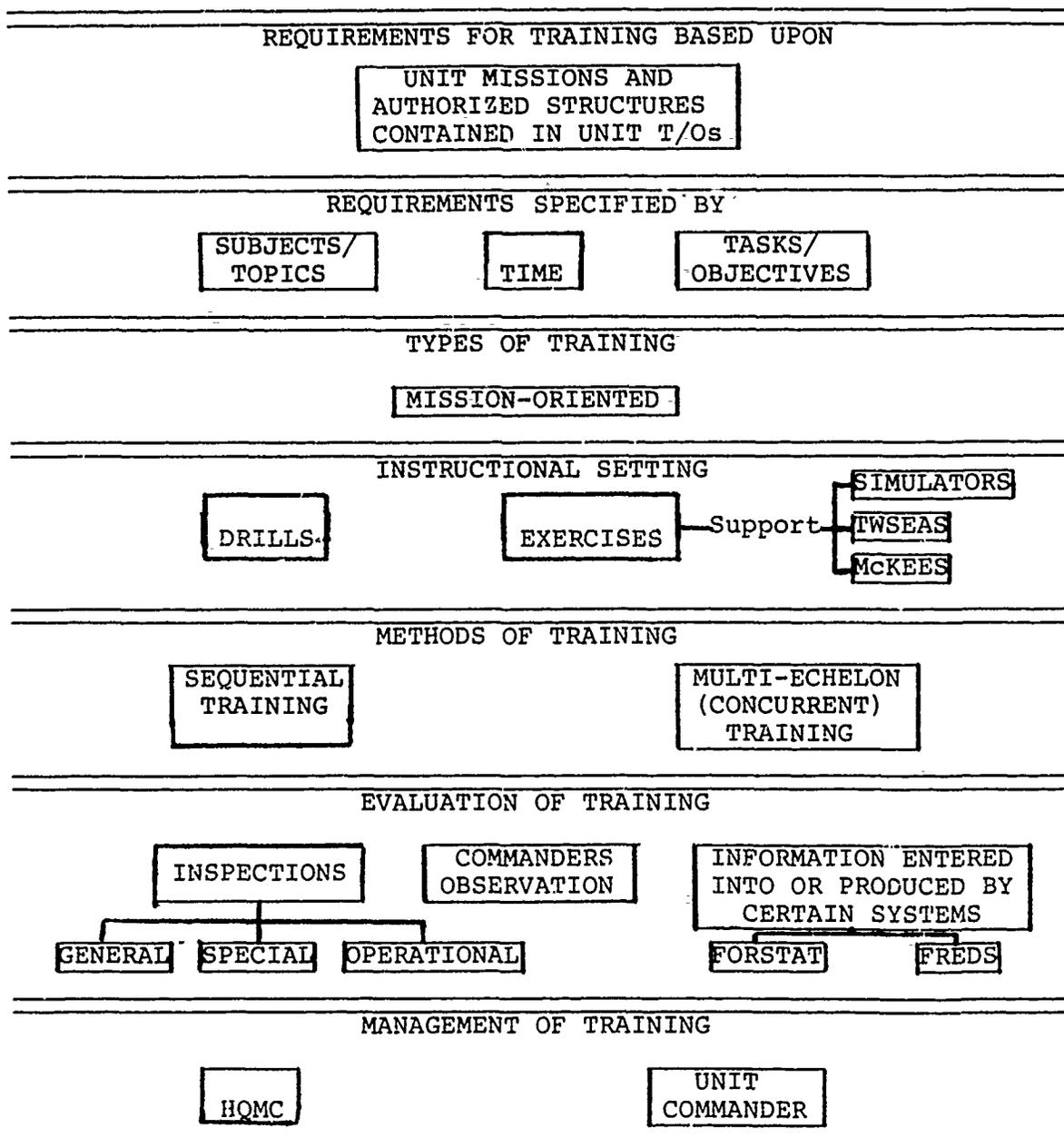
#### A Model of Marine Corps Unit Training\*

Unlike individual training which is separated into seven categories or types, all unit training is classified as being mission-oriented. This is because unit training is

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\*Reference to Figure 2-4 and Figure 8-1 will enable the reader to follow the discussion somewhat more easily. As previously indicated, the specification of unit training requirements will be covered in Chapter IX.

FIGURE 8-1  
MARINE CORPS UNIT TRAINING



intended only to prepare a unit, as a unit, to perform those tasks required for accomplishment of the assigned mission.

The two instructional settings for conducting unit training are drills and exercises. The exercise setting, however, has many variations, such as, firing exercises, command post exercises (CPXs), map exercises, etc. Selection of the setting or the variation of it is based upon the nature of the requirement and the resources available to conduct training. Some sources are obviously less costly while others produce more effective results.\*

Drills are a form of small unit training in which fundamentals are stressed by progressive repetition. Tasks are conducted "by-the-numbers." In each drill, the leader states the problem to the members of the unit, explains the solution, and provides the reason for adopting that particular solution. The leader then guides the unit through the problem step-by-step according to the stated solution. On-the-spot corrections are made of individual actions. The drill is repeated until the leader is satisfied with the unit's proficiency.

There are numerous kinds of training exercises. The most common are described in the following paragraphs.

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\* An excellent discussion on the use and value of field exercises is contained in Dr. R.E. Sawyer's study titled, Training Exercises: Cost, Benefits, Problems, and Planning.

(1) Field Exercise. A field exercise is a tactical exercise conducted under simulated combat conditions. The personnel and equipment of the friendly side actually participate in whole or in part, while the personnel and equipment of the opposing side may be represented or simulated.

Various tactical engagement simulation systems are employed to improve the effectiveness of training exercises. Among those used for ground training are the Squad Combat Operations Exercise Simulation (SCOPES) and REALTRAIN systems. With SCOPES, numbers are placed on the helmets of each Marine and telescopes are mounted on all weapons. If a Marine can identify the number on the helmet of an individual from the opposing force he calls the number of a controller and gets credit for a "kill." The telescopes are specifically gauged to correspond with the probability of a hit at various ranges. REALTRAIN expands the concepts of SCOPES to armor and anti-armor crews. A more sophisticated simulation technique known as the Multiple Integrated Laser Engagement System (MILES) is being developed for future use.

Aviation units have Aerial Combat Maneuvering Ranges (ACMRs) available at the Marine Corps Air Station, Yuma, Arizona and the Naval Air Station, Oceana, Virginia to support tactical engagement simulation. Equipment used on these ranges enable instructors on the ground to monitor aircraft flight maneuvers and to immediately correct errors or provide instruction. The results of engagements are preserved by computers for later study by participating aircrews.

Field exercises are often classified according to their purpose, for example, amphibious exercise (PHIBEX), cold weather exercise (COLDFEX), desert exercise (DESEX), etc.

Field exercises may be used as operational readiness inspections (ORIs), operational evaluations (OPEVALs) or tactical tests (TAC TESTs) to evaluate the performance and combat readiness of a unit.

(2) Firing Exercise . A firing exercise involves the live firing of weapons and munitions on field ranges. Targets may be stationary or moving. Weapons may be fixed or moving. Emphasis during firing exercises is normally on developing speed and precision in identifying and engaging targets. A number of automated targets and simulators are available and can be used to increase the realism of unit training. Among these are the Small Arms Remoted Target System (SARTS), several varieties of small arms flash/noise simulators, and a boobytrap simulator. The SARTS can be particularly valuable since it enables a small arms range to be centrally operated, scored, and controlled.

(3) Command Post Exercise. A command post exercise (CPX) is an exercise for commanders, and staff, headquarters, and communications personnel. Units are represented by controllers. CPXs can be conducted in the field or in facilities such as classrooms where phones are used in place of radios. This type of exercise permits commanders and staff

personnel to apply their knowledge of correct procedure to a wide variety of tactical situations.

(4) Terrain Exercise. In a terrain exercise commanders and staff officers or small-unit leaders observe or traverse a particular piece of ground and discuss the disposition and employment of simulated units and weapons.

(5) Map or Terrain Model Exercise. In this exercise a map, sandtable or some other type of terrain model is substituted for the actual ground. Commanders and staff officers or small unit leaders use the map or model to discuss the disposition and employment of simulated units and weapons.

Most of the exercises described above can be supported by a Tactical Warfare Simulation, Evaluation, and Analysis System (TWSEAS), a computer-assisted control center which has capabilities for the design, control, evaluation, and analysis of exercises. The computer processes, and displays tactical events as they occur and provides a calculated outcome for those requiring assessment. TWSEAS enables controllers "...to maintain a current and continuous...awareness of the progress of the exercise action and its degree of attainment of training objectives."<sup>10</sup> Plans call for locating TWSEAS at each Fleet Marine Force and the Marine Corps Development and Education Command. Eventually TWSEAS will be the basis for a communication network among the commands and will be used to identify, and to develop and transmit solutions to unit training problems.<sup>11</sup>

Reports from the results of formal exercises are submitted by participating units to the Marine Corps Development and Education Command. The "lessons learned" from these reports are analyzed by the Development and Education Command, appropriate actions are taken, and the unit which submitted the report is informed of the results. The original "lesson learned" and the response from the Development and Education Command are then entered into the Marine Corps Key Experiences Evaluation System (McKEES), an automated system. McKEES has the capability of recalling this information in a variety of categories, for example, by named exercise, participating command, geographical area, or type function. Printouts can be provided to field commanders upon request. Information from these printouts can aid commanders in improving future training exercises. Also, trend analysis by officers from the Education Center can enable training deficiencies to be discovered early.

There are two methods of conducting unit training. They are sequential training and multi-echelon (concurrent) training.

Sequential training of units begins with the training of the smallest unit and progresses to the training of the largest unit. It integrates the smaller units into larger, coordinated units. Sequential training is most effective when it is known that members of a unit will be stabilized

for a fixed period and that the unit will not be committed to a contingency or operational requirement until completion of training.

Multi-echelon training of units is designed to train simultaneously all elements of the unit. For example, while fire teams are conducting tactical drills under the direction of their squad leaders, the platoon commanders and company commanders are conducting a terrain exercise. Multi-echelon training requires more care and prior planning than the sequential approach, but when utilized properly provides a relatively high degree of combat readiness for sustained periods, even with normal personnel turnover.

Unit training can be evaluated by a commander's observations, by inspections, and by analyzing information which is entered into or produced by certain systems.\* Evaluations determine if a unit can perform the tasks required for mission accomplishment.

Since many tasks a unit is required to be able to perform can be directly observed during routine exercises and drills, observation is the most common form of evaluation. This type of evaluation is subjective; therefore, it is normally

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\* This description of how unit training is evaluated is based on the authors' conception of various Headquarters, U.S. Marine Corps programs. No directive explains the relationship of the various methods. Discussion with officers in the field indicates there is confusion concerning the entire subject.

only performed by commanders senior to the commander of the unit being observed or by recognized experts.

The Marine Corps Manual requires commanders to "...make or cause to be made such inspections as are necessary to evaluate all functional areas of their commands..." and to enable them "...to determine the capability of the command to accomplish its assigned mission."<sup>12</sup> Inspections can be classified into three types; general, special, or operational readiness.

(1) General Inspections. A general inspection is the most comprehensive of inspections. All aspects of administration, intelligence, training, and logistics of a unit, and every individual and subordinate unit are subject to inspection. Inspections by the Inspector General of the Marine Corps are of this type.

(2) Special Inspections. A special inspection is an inspection limited to a specific function. Each special inspection has its own distinctive title, for example, supply inspection, postal inspection, etc. A special inspection is special because it is singular in purpose. The same inspection done in conjunction with inspections of all other functions becomes part of a general inspection. Examples of special inspections are those conducted by the Field Supply and Maintenance Analysis Office (FSMAO), the Food Management Team, and the Marine Corps Disbursing On Site Examination Team (MCDOSSET).

(3) Operational Inspections. An operational inspection is designed to assess the capability of a unit to perform its mission. Operational inspections take the form of operational readiness inspections (ORIs), tactical tests (TACTESTS), operational evaluations (OPEVALs), training readiness exercises (TRES), no notice alert and response drills, and evaluated field exercises. The Marine Corps Combat Readiness Evaluation System (MCCRES) provides an evaluation system to support operational inspections. The results of a MCCRES evaluation show the success, or lack of success, of a unit training program. MCCRES evaluations are formal (those requiring a report to the Commandant of the Marine Corps) and informal (no report required to the Commandant).

Evaluations of unit training are inherent in the training data required to be entered into the Force Status and Identity Report (FORSTAT) and in the information produced by the Flight Readiness Evaluation Data System (FREDS).

"Insufficient/sufficient crews combat ready," "unsatisfactory/satisfactory readiness tests," and "training incomplete/complete" are examples of FORSTAT reporting entries which, in effect, evaluate the state of unit training.

As set forth in JCS Pub. 6, vol. II, part 2, chapter 1, the FORSTAT training readiness rating of aircraft squadrons is equivalent to the percentage of authorized aircrews that are mission-ready. For ground units, the training readiness rating is a function of the additional training time that would be required for the unit to be fully trained to accomplish its T/O mission.<sup>12</sup>

Two reports produced by FREDS contain information which can be used to evaluate training. The first, the Daily Flight Transaction Report accounts for aircrew training that was accomplished and that which was cancelled. The second, the Monthly Aircraft Utilization Report provides a record of the aircraft scheduled and utilized for flight training.

Headquarters, U.S. Marine Corps manages certain aspects of unit training such as the scheduling of major exercises and the monitoring of the Air-Ground Combat Training Program. For the most part, however, unit training is managed by field commanders guided by Marine Corps Order P1510.26, Unit Level Training Management.

During the course of this research effort many Marines expressed their dissatisfaction with the current method of evaluating or inspecting training management. The most frequent complaint was that training management inspections are limited to an examination of unit records. The consensus of those officers interviewed was that the ability of individuals and units to perform is the important thing, not paper work showing what training was or was not accomplished. In effect, they believe that the wrong things are being inspected. Of course, evaluating the abilities of the Marines of a unit, and the ability of the unit itself to perform required tasks would be an immense and probably overwhelming job. If such a method were utilized some statistically valid sampling technique (of individuals/units and tasks) would, therefore, have to be employed.

### Conclusions and Recommendations

1. Conclusion. Until recently there has been relatively little research conducted on unit training. The need for a better understanding of the various aspects of unit training has led, however, to an increased emphasis on research on this subject. Several reports published during the last four years contain material of interest to Marine Corps trainers.

Recommendation. That officers from the Unit Training Branch, Training Division and the Readiness Evaluation Section, Readiness Branch, Operations Division review the following reports:

(1) Team Training and Evaluation Strategies: State-of-the-Art, Human Resources Research Organization, Technical Report 77-1, February 1977. (AD A038 505)

(2) Computerized Collective Training for Teams, Army Research Institute Technical Report TR-77-A4, February 1977. (AD A038 748)

(3) Combat-Ready Crew Performance Measurement System: Final Report, Air Force Human Resources Laboratory Technical Report TR-74-108(I), December 1974. (AD B005 517)

(4) Survey of Unit Performance Effectiveness Measures, Navy Personnel Research and Development Center Technical Report 74-11, January 1974. (AD 774 919)

(5) Development of Unit Performance Effectiveness Measures Using Delphi Techniques, Navy Personnel Research and Development Center Technical Report 76-12, September 1975.

(6) An Assessment of U.S. Navy Tactical Team Training: Focus on the Trained Man, Training Analysis and Evaluation Group Report No. 18, March 1975. (AD A011 452)

(7) Training Exercises: Costs, Benefits, Problems and Planning, Marine Corps Operations Analysis Group, n.d.

2. Conclusion. Many Marines lack a comprehensive understanding of how unit training can be and is evaluated. The relationship of each method to a total evaluation program is not made clear in any Marine Corps directive.

Recommendation. That the proposed revision to Marine Corps Order P1510.26 contain a section explaining the evaluation of unit training. Information provided in this chapter could serve as a basis for that explanation.

3. Conclusion. The Marine Corps has no system to insure that comprehensive evaluations are made of the capabilities of individuals and units to perform required tasks and objectives.

Recommendation. That in lieu of random checking of training records the Inspector General evaluate individuals and units within a command to determine their capabilities to perform required tasks and objectives.

## NOTES

1. Harold Wagner, et. al., Team Training and Evaluation Strategies: State-of-the-Art (Alexandria, VA: Human Resources Research Organization, February 1976), p. 3.
2. Eugene R. Hall and William A. Rizzo, An Assessment of United States Navy Tactical Team Training: Focus on the Trained Man, TAEG Report No. 18 (Orlando, FL: Training Analysis and Evaluation Group, Naval Training Equipment Center, March 1975), p. 5.
3. Wagner, p. 4-6, and Hall and Rizzo, p. 9-12.
4. H. Dewey Kribs, et. al., Computerized Collective Training for Teams, ARI Technical Report TR-77-A4 (San Diego, CA: Sensors, Data, Decision, Inc., November 1976), p. 4.
5. Ibid., p. 5.
6. Wagner, p. 16.
7. U.S. Department of Defense, Defense Science Board, Report of the Task Force on Training Technology (Washington: May 1975).
8. U.S. Department of Defense, Dictionary of Military and Associated Terms, JCS Pub. 1 (Washington: 3 September 1974), p. 346.
9. Ibid., p. 153
10. U.S. Marine Corps, Marine Corps Development and Education Command, Tactical Warfare Simulation, Evaluation and Analysis System(s) (TWSEAS), DB 7-76 (Quantico, VA: July 1976), p. 47.
11. Ibid., p. 6.
12. U.S. Marine Corps, Marine Corps Manual (Washington: 4 February 1961), p. 5-3.
13. U.S. Marine Corps FMF (Unit) Training, Marine Corps Order P1500.17D (Washington: 6 July 1976), p. 7-1.

## CHAPTER IX

### SPECIFYING THE REQUIREMENTS FOR UNIT TRAINING\*

#### Background

In Chapter IV it was noted that commanders must have some means to specify training requirements for individuals in order to communicate to subordinates exactly what they want accomplished. For the same reason, commanders must be able to specify training requirements for units. During the research for this project, it was determined that the Marine Corps employs the same four methods to specify training requirements for units as it does for individuals. These methods are:

- (1) To list the subject or topics which must be covered.
- (2) To direct the amount of time to be spent on training.
- (3) To set general goals or purposes.
- (4) To establish tasks or objectives which explicitly describe what units are expected to be capable of doing as a result of training.

The following paragraphs contain examples of each method.

Subjects or Topics. Marine Corps Order P1500.17D, FMF (Unit) Training states that the topic "Operation Security"

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\* To ensure a clear understanding of this chapter the reader should review the first section, "Background," of Chapter IV.

and "Cover and Deception" should be integrated into all phases of operational training.<sup>1</sup> Marine Corps Order P3500.8D, Aviation Training and Readiness Manual requires the following subjects to be covered as part of Ground School Training: "Instrument Flight and Navigation," "Flight Safety," "Intelligence," and "Air Control."<sup>2</sup>

Time. One third of all unit training must be conducted at night to comply with Marine Corps Order P1500.7D, FMF (Unit) Training.<sup>3</sup> The Aviation Training and Readiness Manual requires three hours of tactical formation flying for CH-53 Helicopter aircrews as part of their "Combat Ready Training" syllabus.<sup>4</sup>

Goals. The general goal for unit training contained in Marine Corps Order 3400.3C, Nuclear, Biological and Chemical (NBC) Defense Readiness and Training Requirements is, "To develop and maintain a capability for performing tasks required to accomplish the unit mission while under NBC attack."<sup>5</sup> The Aviation Training and Readiness Manual states that the purpose of advanced tactics training for CH-46 Helicopter aircrews is, "To develop proficiency to conduct tactical flights with four or more aircraft."<sup>6</sup>

Tasks or Objectives. Many of the unit training requirements contained in the Aviation Training and Readiness Manual are stated in measurable and observable terms. For example, in the fighter weapons syllabus for F-4's, aircrews are "to

perform a section takeoff; conduct rig and weapons checks during vectors to operating area; establish combat spread and conduct visual identification to a short engagement (two minutes maximum); achieve best shot position; and attack adversary from abeam and astern."<sup>7</sup> Marine Corps Order P1500.17D, FMF (Unit) Training also has some acceptably stated objectives. An example is the objective for communications units "to be capable of providing continuous command and control communications for a supported unit."<sup>8</sup>

Stating general goals appears to be the most common way of specifying unit training requirements. Even the "training objectives" usually listed in letters of instruction for major exercises are in actuality only broad goals. The vagueness in this method as well as those of "subjects" and "time" make them far less useful than "tasks" or "objectives" which are measurable and observable.

Though not a training directive, Marine Corps Order 3501.1, Marine Corps Combat Readiness Evaluation System (MCCRES) (Volumes II through VII) does contain tasks which are measurable and observable. These tasks are incorporated into mission performance standards (MPSs) which have been developed (down to battalion and squadron level) for units integral to a Marine Amphibious Unit (MAU). Efforts are underway to develop mission performance standards for units integral to a Marine Amphibious Brigade (MAB). As explained in Chapter VIII, the MCCRES is an evaluation system. However,

the tasks contained in the mission performance standards can be of exceptional value to a commander developing a unit training program because they spell out in precise terms what the unit should be capable of doing.

The Technical Interface Concept for Marine Tactical Systems lists tasks for all command and control agencies within every organization from division/wing level to battalion level.<sup>9</sup> This document is not a training directive, either, however, the tasks which it lists meet the criteria of being measurable and observable and can be of value to those responsible for developing and evaluating training programs.

#### State-of-the-Art

There are no formal procedures for determining unit tasks which can equate to the sophisticated task analysis process or instructional system development (ISD) techniques used for determining tasks for individuals. The need for such procedures has been recognized by several researchers:

The more widespread application of the systems approach to tactical team training should be encouraged. Better identification (than currently exists) of the tasks requiring performance by men within teams is needed. This should include all of the interactions, communications, coordination, decision making, and compensatory activities required in the performance of specific missions. These

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\* The procedures used in the Marine Corps Combat Readiness Evaluation System to develop tasks appear to rely more on expert judgment than the rigorous methodologies of task analysis or ISD.

data, which can be derived by appropriate job study techniques, should include acceptable standards of performance. Given these objective data, meaningful training objectives can be developed and appropriate programs of instruction written for their achievement.<sup>10</sup>

A major premise of this report is that the path to developing a systematic approach to team training ISD is through team task analysis. It is believed that team-task dimensions will also delineate other major components of a team training ISD approach. For example, just as training objectives are derived from task analysis in individual instruction so must they be for team training. The same elements for an individual training objective must be present in a team training objective: observable outcomes must be defined, task conditions must be specified, and performance criteria must be set.<sup>11</sup>

Marines in the field have exhibited a strong interest in having unit training requirements in measurable and observable terms. A recent article by a Marine officer identifies such objectives as the foundation of training programs which lead to combat readiness.<sup>12</sup> The First Marine Brigade believed that the need was so great that it devoted considerable effort to developing task lists for units down to the squad and team level.

#### Conclusions and Recommendations

Conclusion. A unit is created and exists to accomplish a mission. The tasks which it has to be able to perform in order to accomplish a mission must be the objectives of training. Thus, there is a need to be able to identify tasks and to translate them into training objectives that are measurable and observable. The Marine Corps Combat Readiness

Evaluation System has done this for units organic to a Marine Amphibious Unit and will soon do it for units organic to a Marine Amphibious Brigade. However, the tasks have only been identified for units down to the battalion/squadron level. Also, the procedures used have relied on expert judgment more than analysis.

Recommendation. That an evaluation be made of the feasibility (in terms of available resources) of developing task lists or lists of training objectives for combat and combat support units down to the squad and team level.

That an examination be made of information concerning task analysis of units to determine if such procedures could be utilized in the Marine Corps Combat Readiness Evaluation System. The literature cited in this chapter would be an excellent starting point for this examination.

## NOTES

1. U.S. Marine Corps, FMF (Unit) Training, Marine Corps Order P1500.17D, (Washington: 6 July 1976), p. 1-3.
2. U.S. Marine Corps, Aviation Training and Readiness Manual, Marine Corps Order P3500.8D (Washington: 21 August 1974), p. 3-3.
3. FMF (Unit) Training, p. 1-2
4. Aviation Training and Readiness Manual, p. 19-21
5. U.S. Marine Corps, Nuclear, Biological and Chemical (NBC) Defense Readiness and Training Requirements, Marine Corps Order 3400.3C (Washington: 15 November 1974), p.2.
6. Aviation Training and Readiness Manual, p. 17-14
7. Ibid., p. 4-24.
8. FMF (Unit) Training, p. 2-4
9. U.S. Marine Corps, Technical Interface Concept for Marine Tactical Systems (Washington: 14 May 1976), p. 2-3 through 2-57 and Appendix C.
10. Eugene R. Hall and William A. Rizzo, An Assessment of U.S. Navy Tactical Team Training: Focus on the Trained Man, TAEG Report No. 18 (Orlando, Florida: Training Analysis and Evaluation Group, March 1975), p. 44.
11. H. Dewey Kribs, et al., Computerized Collective Training for Team, ARI Technical Report TR-77-A4 (Arlington, Virginia: U.S. Army Research Institute for the Behavioral and Social Sciences: February 1977), p. 42.
12. Roy L. Carter, "A Need to Evaluate Combat Readiness," Marine Corps Gazette, September 1977, p. 20-21.

PART IV

TRAINING MANAGEMENT

## CHAPTER X

### AN OVERVIEW OF TRAINING MANAGEMENT

#### GENERAL

The Department of Defense Dictionary of Military and Associated Terms (JCS Pub 1) explains that management is a process consisting of those continuing actions of planning, organizing, directing, coordinating, and evaluating the use of men, money, materials, and facilities to accomplish missions and tasks.<sup>1</sup> Training management is a specialized part of overall management, and requires the systematic accomplishment of many tasks. Training management can also be described as the discipline of using limited resources (human, physical, financial, and time) in a way that will insure that training is accomplished effectively and efficiently.

This chapter will explain the management of training from the following perspectives.

1. Training management at Headquarters Marine Corps level.
2. The management of Marine Corps formal schools.
3. The management of individual and unit training by the commander.
4. The interrelationship of training management between Headquarters Marine Corps and subordinate units.
5. Perception of training management.

How the numbers and ranks of individuals selected to attend formal schools is determined, and the interaction among the various departments at Headquarters that is required to arrive at these decisions will be discussed in the next chapter.

#### HQMC LEVEL TRAINING MANAGEMENT

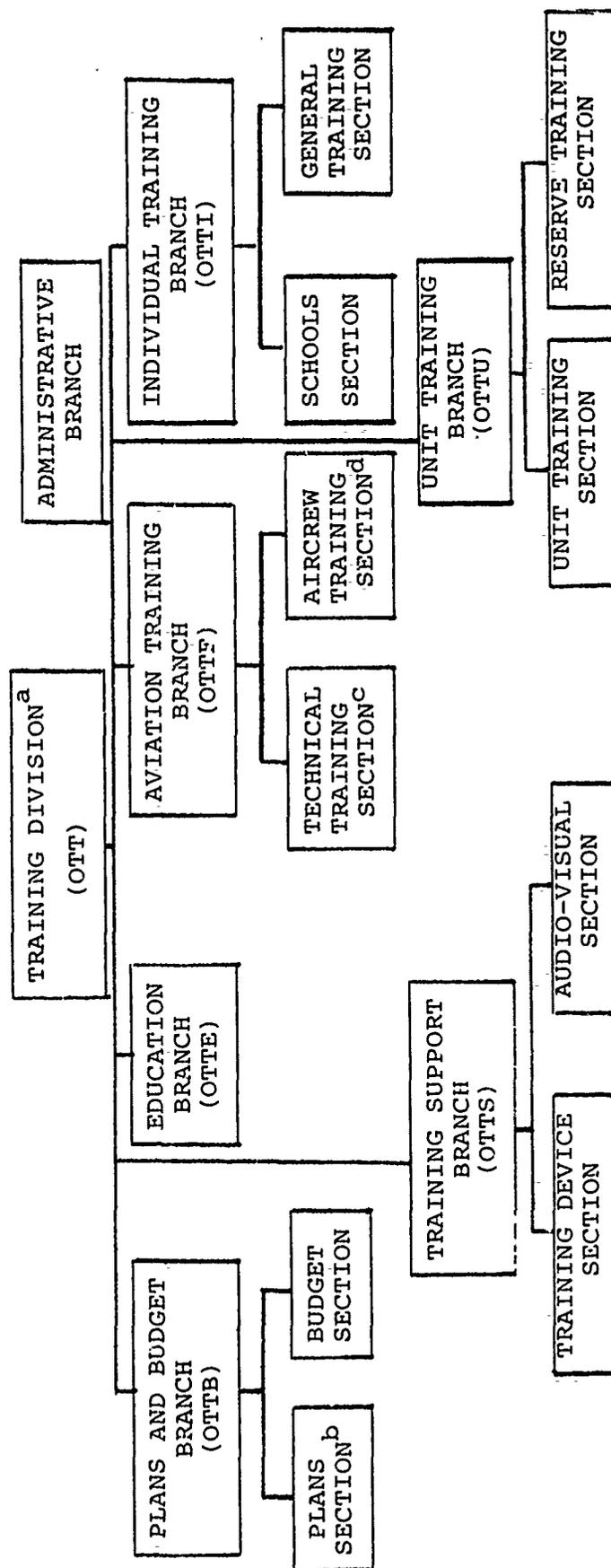
The Commandant of the Marine Corps retains training control over all Marines. Since there is no separate training command in the Marine Corps, he delegates primary cognizance in all aspects of individual and unit training and operational readiness to the Deputy Chief of Staff for Operations and Training. The Operations and Training Department is organized into an Operations Division and Training Division. Each division is led by a brigadier general. An explanation of the Training Division's training management responsibility is contained in its mission statement.

To formulate, develop, and manage military training and education policies, plans and programs that will provide officers and enlisted Marines with the initial skill qualifications and subsequent career development necessary to meet the Marine Corps requirements; to exercise overall responsibility for unit training of Regular and Reserve Marine Corps Units; and to initiate, coordinate, and review development of tactical doctrine and procedures.<sup>2</sup>

The Training Division is made up of six branches. See Figure 10-1 for an organization chart of the division. Each branch is responsible for the management of some part of the

FIGURE IO-1

TRAINING DIVISION, OPERATIONS AND TRAINING DEPARTMENT  
ORGANIZATIONAL CHART



<sup>a</sup> All branches in the Division have Administrative Sections.

<sup>b</sup> Page 10-21 of the source listed below refers to this as the Plans/Program Section.

<sup>c</sup> Page 10-24 of the source listed below refers to this as the Enlisted Training Section.

<sup>d</sup> Page 10-24 of the source listed below refers to this as the Officer Training Section.

Source: U.S. Marine Corps, Headquarters, Marine Corps Organization Manual, Headquarters Order P5400.18 (Washington: 25 April 1974), Change 4, p. 10-18, 10-34.

training system. The following discussion of the branches' missions was extracted from the Headquarters Marine Corps Organizational Manual, HQO P5400.18.

Plans and Budget Branch. Marines in this branch formulate and recommend policy and plans to satisfy the requirements of training and its management. They coordinate the development of Marine Corps long range training objectives and incorporate these objectives into the Marine Corps' long and mid-range training plans. In addition, officers in the branch coordinate budget preparation and provide budgetary support for the Training Division. The branch is made up of the Plans Section and the Budget Section.

Education Branch. The Education Branch's mission includes providing and managing non-military education programs for Marines and their dependents. Some of the branch's functions are listed below.

1. Manages educational selection boards for enlisted Marines.
2. Plans, implements, and supervises the formalized training course accreditation process.
3. Manages full time academic programs (Marine Enlisted Commissioning Education Program, College Degree Program,\* SNCO Degree Completion Program and the Broadened

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\*The College Degree Program is the only officer exclusive education program controlled by the Training Division. Other officer programs are under the staff cognizance of the Officer Assignment Branch, Personnel Management Division, Manpower Department.

Opportunity for Officers Selection and Training), and the voluntary education programs for Marines.

4. Collects and provides the Office of Educational Credit (OEC) of the American Council on Education copies of all Marine Corps formal school programs of instruction for evaluation in terms of academic credit at civilian educational institutions.

5. Manages developmental reading programs.

Aviation Training Branch. This unit is responsible for formulation and recommendation of aviation-related training policies. It implements, coordinates, and monitors plans to satisfy the training requirements of the Marine Corps for naval aviators, naval flight officers and aviation technicians. The branch also provides representation to OPNAV in matters involving aviation training. It is made up of a Technical Training Section and an Aircrew Training Section.

Individual Training Branch. Marines assigned to this organization formulate policies for correspondence training, recruit training, individual training, and foreign military training. They also prepare programs and manage the implementation and execution of all individual ground training (that training necessary to initially qualify all personnel in a military occupational specialty, and subsequent career development training appropriately phased to meet advanced skill and professional requirements.) The branch is made up of the Schools Section and General Training Section.

Unit Training Branch. This branch's mission is to formulate and recommend policies, develop and prepare unit training plans and programs, and manage unit training of Regular and Reserve Marine Corps units. Its mission includes managing the Marine Corps Junior Reserve Officer Training Corps program. The branch is divided into the Unit Training Section and Reserve Training Section.

Training Support Branch. Marines in the Training Support Branch coordinate and supervise requirements for training support material and audio-visual equipment. They determine programs and plans for future utilization of this type material and equipment and budgeting for necessary procurements. They also deal with DOD, other Service agencies, and civilian industry on matters that involve training material and audio-visual activities. The Branch consists of the Training Devices Section and Audio-Visual Section.

A review of the missions of the branches and functions of the sections of the Training Division revealed several facts. These facts were confirmed through the authors' observations over a four month period and through interviews with Marines assigned to the Training Division.

One fact that was immediately apparent was the disparity among the time required to properly manage a function, the number of individuals assigned to accomplish the function, and the tools available to assist in carrying out the function.

For example, the Schools Section is responsible for the "management of all formal schools (less Aviation), review of curricula and program of instruction and sponsorship of T/O's for formal schools (less Aviation)," and is required "to provide continuous evaluation of the quality of formal schools (less Aviation)."<sup>3</sup> These are only two of the 13 functions assigned to the section. To carry out the 13 functions, during December 1977, there were four field grade officers, two SNCO's, two civilian employees, two NCO's, and one enlisted Marine assigned to the section. A quick review of the Marine Corps Formal Schools Catalog, MCO P1500.12J, which lists the formal schools, indicates that it would be a full time job for members of the section to carry out the two functions mentioned above. Compounding the problem are additional requirements assigned to the various sections that are not listed in the functions. One of the most time consuming is the preparation of replies to inquiries made by government officials and the public. A second fact is that, in several places, the terminology used to describe functions of the section disagrees with that found in current directives. "Enlisted Field Qualification Entry Level Training" and "Initial Accession Training" are two examples. In addition, names used to identify some of the sections in the Headquarters Marine Corps Organizational Manual do not agree with those commonly used by the section, i.e., Plans/Programs Section vice Plans Section, Enlisted

Training Section vice Technical Training Section, and Officer Training Section vice Aircrew Training Section.

Although the Training Division is responsible for the overall management of individual and unit training, some training is managed by other divisions at Headquarters. Most of the training managed outside of the Training Division is referred to as related training.\* One of the related training subjects, leadership, is sometimes considered career training. It was covered in detail in Chapter VII.

Another group of individuals involved in training management at HQMC is the occupational field and military occupational specialty sponsors. Selected Marines at Headquarters are assigned this responsibility because of their knowledge of the skill involved and with the performance of Marines assigned that particular MOS.

#### MANAGEMENT OF INDIVIDUAL AND UNIT TRAINING BY THE COMMANDER

The Marine Corps Manual explains the commander's role in training.

The responsibility for both individual and unit training is vested in the commander. He shall insure that all training is responsive, practical, and challenging to the individual and unit concerned. Training will be accomplished primarily by the employment of resources organic to the unit. Emphasis will be placed on the indoctrination of junior leaders in proper methods of training and instruction.<sup>4</sup>

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\* See Chapter III for an explanation of related training.

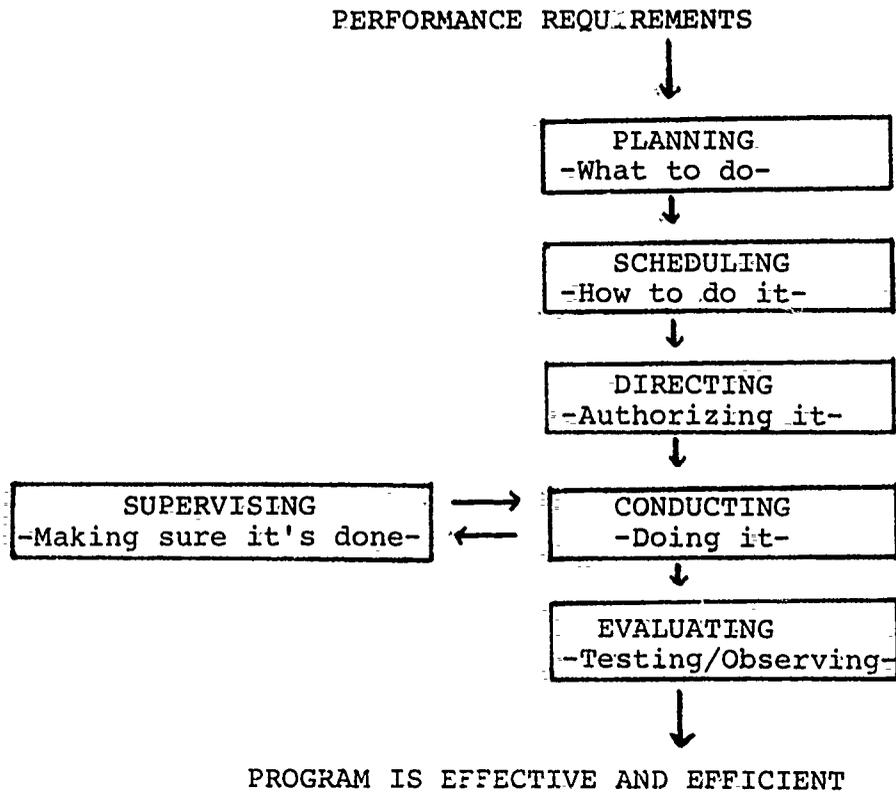
Marine Corps Order P1510.26, Unit Level Training Management, provides a guide for training management at the unit level. This directive was published in 1971. Although the order has not kept pace with changes in terminology that have been made over the past seven years, the concepts explained are considered valid. A second source of guidance for the management of training is Marine Corps Order 1510.25H, Individual Training of Enlisted Marines. The information provided, however, is broad in scope. The source that best describes training management, in the authors' opinion, is the draft Training Management Manual, Marine Corps Order 1510.26A that is being prepared by the Individual Training Branch. The following explanation of the commander's training management responsibilities was obtained from Section II of that draft manual.

The development, conduct, and management of training depends upon the systematic accomplishment of six tasks. How well the commander accomplishes these tasks will determine the effectiveness of his training program. The tasks are: planning, scheduling, directing, conducting, supervising, and evaluating. Figure 10-2 shows how the accomplishment of the tasks results in the development of a training program that is effective and efficient.

Planning determines what the training program should be. It begins with analyzing documents which define the performance expected of a unit and the individuals in it,

FIGURE 10.-2

OVERVIEW OF TRAINING PROGRAM DEVELOPMENT



Source: U.S. Marine Corps, Training Management Manual (Draft), Marine Corps Order 1510.26A, (Headquarters: 1978), p. 2-2.

identifies training requirements, and results in learning objectives that are designed to accomplish the requirements.

The planning process determines what the training program should do. Scheduling shows how to do it. Together they result in a detailed plan for achieving the learning objective.

Directing consists of actions taken by the commanding officer to authorize the publication of the training directives and schedules developed during the scheduling process.

The key process in the training program is the conducting process. It consists of actions taken to carry out the instructional program. This process includes preparation of lessons and exercises, the actual instructing, and testing. All other tasks have the objective of supporting the conducting process.

The commander supervises the training program through inspections and by guiding and controlling the training to insure that the learning objectives are accomplished.

Evaluation of training is important to the instructor and commander. To the instructor, evaluation provides immediate feedback and enables him to identify deficiencies in student performance. For the commander, evaluation assists in determining the effectiveness and efficiency of the training program by revealing whether or not the learning objectives have been accomplished.

#### MANAGEMENT OF FORMAL SCHOOLS

The chain of command for individual training conducted at formal schools goes from the Commandant through the base or depot commander to the director of the school. Guidance on the operation of the school is promulgated through two directives. Marine Corps Order P1510.23B, Instructional

Systems Design explains the system's approach to course design and applies to all formal schools. This order was discussed in Chapter IV. The second directive is titled Marine Corps Formal School Catalog, Marine Corps Order P1500.12J. The catalog contains an explanation of the course purpose and objectives and provides a synopsis of the instruction for each course.<sup>5</sup>

The cognizant school commander is responsible for the program of instruction (POI). The program of instruction, sometimes referred to as a syllabus, is in a standardized form. Its purpose is to give a detailed listing of subjects contained in a course and to list the learning objectives for each subject. Commanders who prepare new POIs or make major changes to existing ones are required to forward copies to Headquarters Marine Corps for approval.

As indicated above, one of the 13 functions of the Schools Section of the Training Division is to review programs of instruction and provide continuous evaluation of the quality of all formal schools. Since it is difficult for the section to effectively carry out this function, for all practical purposes, schools are controlled by local commanders. However, assigning of Marines to attend formal schools is controlled by Headquarters Marine Corps, and is explained in the next chapter.

## CONTROL OF THE MARINE CORPS TRAINING PROGRAM

The Marine Corps study group that looked into consolidation of operations and training functions at Headquarters had as one of its major objectives the consolidation and centralization of all training functions within Headquarters Marine Corps.\* When the study recommendations were approved and the Operations and Training Department was formed, its mission was:

To assist the Chief of Staff in planning and coordinating Headquarters staff activities related to operational, amphibious and training matters; to exercise primary cognizance in all aspects of individual and unit training and the operational readiness for all commands and activities of the Marine Corps; and to act as acquisition sponsors for selected systems and equipment.<sup>6</sup>

However, not all training was placed under the primary cognizance of the department. Officer graduate education and related training (leadership, safety, drug and alcohol, etc. remained under the staff control of other departments.

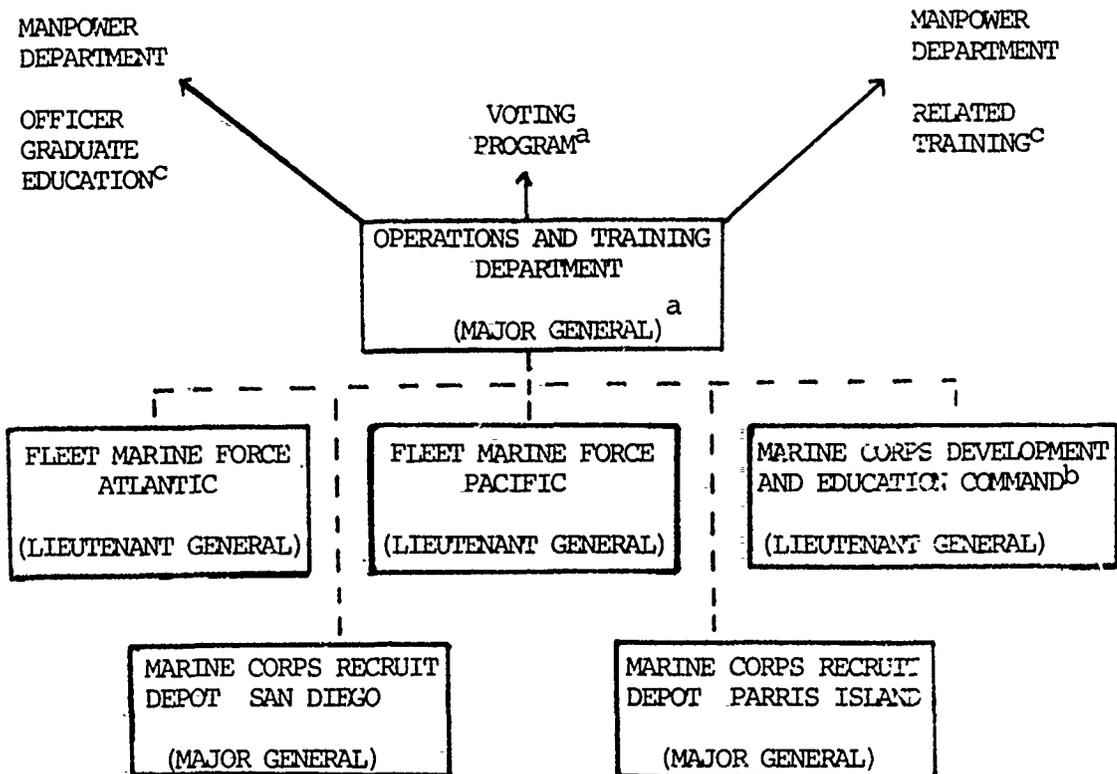
The grade of the Deputy Chief of Staff for Operations and Training is major general. The grade of the commanders responsible for conducting most training, other than Formal School training, is equal to or higher than major general (see Figure 10-3 for an illustration of the training functions not controlled by the Operations and Training Department

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\* The plan for consolidation of operations and training functions of Headquarters Marine Corps resulted from this study effort.

FIGURE 10-3

MAJOR COMMANDS RESPONSIBLE FOR CONDUCTING TRAINING



-----Staff Cognizance for Operations and Training

- a A major general is junior in rank to a lieutenant general.
- b Marine Corps Development and Education Command educates and trains officers at the basic, career, and intermediate levels.
- c Not under the staff cognizance of the Operations and Training Department.

Source: Authors' conception.

and the grade of commanders in charge of organizations that train). Although it is recognized that staff officers are not in the chain of command and that the Commandant directs that training be accomplished, it is difficult for an officer junior in rank to those conducting training to enforce training requirements.

#### PERCEPTION OF TRAINING MANAGEMENT

The perceptions of Marines participating in and managing training were obtained from officers at the Marine Corps Development and Education Command, 2nd Marine Division, 2nd Marine Aircraft Wing, Headquarters Fleet Marine Force Atlantic, and Landing Force Training Command Atlantic during December 1977 and February 1978. Officers at the division/wing, regiment/group, and battalion/squadron levels were interviewed. There was an eagerness shown by all to discuss training and in most cases, particularly at the lower levels, a strong sense of frustration shown over the state of training. Some were so adamant about the subject that they voluntarily provided local studies and sought out the authors after scheduled interviews to further discuss the topic. The grade of officers interviewed ranged from lieutenant general to captain.

As training requirements filter down the chain of command from Headquarters Marine Corps to the individual Marine, there is a tendency for them to increase. What seems to be a modest number of training requirements

at Headquarters, frequently grows to an unmanageable burden at the working level as each echelon of command adds to the number of requirements.

During the field trips, the authors were provided with five studies prepared independently at the battalion/squadron level. The studies demonstrated that sufficient resources (time, money, personnel, facilities) were not available to accomplish the training required. This led to a perception that all required training couldn't be accomplished and resulted in what several officers voiced as "selective disobedience of orders."

The reasons most often given for the problems associated with training management were:

1. Tempo of operations.
2. Personnel turbulence.
3. Requirement to train Marines in basic military occupational specialties.
4. Unskilled training managers.
5. Training to hourly requirements rather than to achieve objectives.

It became apparent to the authors during the interviews that the tempo of operations rather than specific training requirements was the root problem in the operational units. Preparation for contingency operations and deployments dictate the type of training a commander must accomplish. Restricted by operational requirements, he becomes painfully

aware of his inability to conduct other mandatory training and at the same time properly prepare for his assigned mission.

Personnel turbulence and the requirement to train newly arriving Marines that are recent graduates of recruit training in a military occupational specialty are related problems. An uneven flow of Marines into units results in individuals being at various stages of proficiency. Since training at the unit level is normally progressive (begins with individual and progresses through fire teams, squad, platoon, etc.) commanders must provide instruction on several levels at the same time. The requirement to train in an MOS on-the-job was discussed in Chapter III. About 30% of all enlisted Marines arrive at their first permanent duty station without a skill, and become the responsibility of the unit to train with organic resources.

The training officers interviewed from the battalion, regiment, and division were unanimous in their concern about the inability of junior officers to manage training. They indicated a need to "teach the trainers how to train." A review of the programs of instruction for Marine officers who attend the Basic School, Infantry Officers Course, Amphibious Warfare School, and Command and Staff College located at Quantico was conducted to determine the time allotted to training management instruction. The search revealed no training management being taught to lieutenants at The Basic

School. The Infantry Officers Course, however, did require two hours of this type instruction. The purpose of the instruction is explained below.

To provide the student with the knowledge of how to plan, prepare and support platoon level field training in the Fleet Marine Forces and to expose him to the various types of training information that is available to support this training.<sup>7</sup>

The Amphibious Warfare Course allows six hours of instruction for training management, "to enable the student to apply the systems approach to the development and management of a unit level training program."<sup>8</sup> The Advanced Communication Officer Course Program of Instruction for Academic Year 1978, contained no reference to training management. However, the Basic Communication Officer School conducts five hours of training management instruction. The Command and Staff College lists a two-hours requirement for Marine Corps training management instruction. The learning objectives require the student to be able to list and describe the four categories of post-entry level training, list and describe the six management processes in the Marine Corps' systems approach to training, identify the three key positions in the training management team, and define the terms training objective, performance objective, and learning objective.<sup>9</sup>

A requirement to train in a subject for a designated number of hours rather than train for the amount of time required to achieve the training objective was pointed out by many officers interviewed as an inefficient and oftentimes ineffective way to train.

## CONCLUSIONS AND RECOMMENDATIONS

1. Conclusion That the main purpose for creating an Operations and Training Department was to consolidate and centralize management of operations and training functions at Headquarters Marine Corps. Understanding that training management requires coordination within the Headquarters as well as with many external agencies and other Services, control of training was maintained at Headquarters. Although, ultimately, the Commandant makes all training decisions, daily management of training is the responsibility of the Deputy Chief of Staff for Operations and Training, a major general. Staff officers obviously do not command. Fleet Marine Forces, the Marine Corps Development and Education Command, and recruit depots do have commanders who are responsible for conducting training. These commanders receive instructions from the Commandant and are the same grade or senior to the Deputy Chief of Staff for Operations and Training. In addition, the Marine Corps is the only Service without a centralized command that controls training. Although training functions have been consolidated, the staff officer responsible has been given neither the resources nor the authority to effectively manage it.

Recommendation. That the grade of the Deputy Chief of Staff for Operations and Training be lieutenant general, and that he be "double-hatted" as the Commanding General Marine Corps Training Command.

That the grade of the Commanding General Marine Corps Development and Education Command be major general, and that the command become a field agency under the direct control of the Commanding General Marine Corps Training Command.

That the missions and functions of the branches and sections of the Training Division be reviewed with the intent of retaining only those missions, functions, and personnel at Headquarters required for administration and liaison and transferring all others to the Marine Corps Development and Education Command.

That the Commanding General Marine Corps Development and Education Command be tasked with developing a plan to establish a centralized training command.

2. Conclusion. That insufficient resources are available to the Training Division to accomplish assigned missions and functions. A contributing factor to the inability is the existence of daily requirements which are not reflected in the missions and functions. Handling the current "crisis" and responding to inquiries from the Congress and the public has priority over the management of training. In addition, terminology used to describe some functions and to identify several sections is not consistent with current directives and current use.

Recommendation. That the missions and functions of the Training Division be revised to reflect achievable goals and current terminology.

That either a separate information section be established to respond to inquiries or that the responsibility be included as a function of the various branches.

3. Conclusion. That the responsibility for implementing all training requirements has not been transferred to the Training Division.

Recommendation. That the responsibility for implementing related training be transferred to the Training Division.

4. Conclusion. That there is a perception "in the field" that the "training managers do not know how to manage" and that "the trainers do not know how to train." This has resulted because of the lack of unit level training management guidance from Headquarters and the lack of formal instruction provided to field and company grade officers in training management.

Recommendation. That a training management manual be published to replace the outdated Marine Corps Order 1510.26, Unit Level Training Management and serve as a focal point for all training management.

That the Training Division sponsor a conference to be attended by representatives from the Officer and SNCO Schools at Quantico, Marine Corps Institute, Extension School,

and Instructional Management School to develop a resident and non-resident block of instruction for officers and SNCO's.

That learning objectives be developed and detailed lesson outlines be prepared for training management instruction to be taught at the SNCO academies and the officer schools located at Quantico.

That two studies conducted by The Human Resources Research Organization for the Army be reviewed prior to preparing courses of instruction on training management. The two studies are Army Research Institute for the Behavioral and Social Sciences Technical Report 77-A12, Development and Trial Evaluation of Alternative Programs for Unit Training Managers and Trainer, published September 1977 and U.S. Army, Training and Doctrine Command Research Report 1189, Development of New Training Concepts and Procedures for Unit Trainer, published March 1976.

## NOTES

1. U.S. Department of Defense, Dictionary of Military and Associated Terms, JCS, Pub. 1 (Washington: 3 September 1974), p. 201.
2. U.S. Marine Corps, Headquarters Marine Corps Organization Manual, Headquarters Order P5400.18 (Washington: 25 April 1974), Change 4, p. 10-19.
3. Ibid., p. 10-26.
4. U.S. Marine Corps, Marine Corps Manual (Washington: 4 February 1961), par. 1500 1 b.
5. U.S. Marine Corps, Marine Corps Formal School Catalog, Marine Corps Order 1500.12J (Washington: 6 May 1977). p. 1-4.
6. Headquarters Marine Corps Organization Manual, p. 10-3.
7. U.S. Marine Corps, The Basic School, Education Center, Marine Corps Development and Education Command, Program of Instruction (POI) Infantry Officer Course, effective FY 1977 (Quantico: n.d.), p. 4B-13.
8. U.S. Marine Corps, Education Center, Amphibious Warfare School, Marine Corps Development and Education Command, Program of Instruction Amphibious Warfare Course (Quantico: 12 August 1977), p. IV-C-21, IV-C-22.
9. U.S. Marine Corps Education Center, Marine Corps Development and Education Command, Program of Instruction Marine Corps Command and Staff College (Quantico: 4 August 1977), p. IV-A-7.

## CHAPTER XI

### MANAGEMENT OF FORMAL INDIVIDUAL TRAINING BY HEADQUARTERS, U.S. MARINE CORPS

#### Background

The purpose of this chapter is to describe how Headquarters, U.S. Marine Corps:

- (1) Determines the requirements for formal individual training,
- (2) Develops plans to meet the requirements, and
- (3) Monitors implementation of the plans.

These three functions are extremely complex and are understood completely by only a few Marines. No single document explains them entirely.\*

The first function is the responsibility of the Manpower Department and the second function is the responsibility of the Training Division. Responsibility for the third function is shared by the Manpower Department and the Training Division.

Since the Manpower Department is responsible for the first function and a portion of the third, knowledge of the

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\*The most complete explanation is found in Volume I of the Training Information System ADS Development Plan prepared by the Potomac General Research Group. This document, however, does not explain how the Training Input Plan is developed, and because of recent changes some of the information in it is no longer accurate. The Training Management System (TRAMS) Concept Study prepared by Informatix, Inc., does provide useful, though, again, somewhat dated information.<sup>1</sup>

manpower management process is a prerequisite to a full comprehension of the management of formal individual training. The three major steps in the process were briefly discussed in Chapter II and illustrated in Figure 2-2. They are shown again in Figure 11-1, however, because of their importance. Appendix B contains "A Guide to the Marine Corps Manpower Management Process" which will aid those readers who desire more information on the subject.

#### Determining the Requirements for Formal Individual Training

The narrative can be followed more easily from this point if reference is made to the flow chart contained in Appendix C. Diagrams have been provided in Appendices D and E for those readers unfamiliar with the organization of Headquarters, U.S. Marine Corps.

Entry-Level Training. Entry-level training includes recruit, and skill qualification training for enlisted Marines; and officer acquisition, officer basic, and skill qualifications training for officers. All entry-level training is considered "formal," that is, the assignment to courses is controlled by Headquarters, U.S. Marine Corps.

Enlisted Marines. (See blocks 1 and 2 of chart in Appendix C.) Planners from the Manpower Planning, Programming, and Budgeting Branch (MPP), Manpower Plans and Policy Division, Manpower Department determine entry-level training requirements for enlisted Marines with the aid of the Enlisted

FIGURE 11-1

MANPOWER MANAGEMENT PROCESS

FORCE LEVEL  
SPECIFIED

The manpower management process starts with force planning, a function in which the force level specified for the Marine Corps is converted into a force structure.

USMC FORCE STRUCTURE  
DETERMINED

Once the force structure is established a determination is made as to how many Marines it will take to support that structure.

MANPOWER REQUIRE-  
MENTS DETERMINED

In the final step, the plans needed to sustain each occupational field are developed.

MANPOWER PLANS  
DEVELOPED

One of the products from this step is the Training Input Plan, the genesis of formal individual training.

TRAINING INPUT PLAN  
NUMBER OF MARINES BY GRADE AND  
MOS, TO BE TRAINED UNDER HQMC  
CONTROL.

--- --- --- Encompasses the three major steps in the Manpower Management Process.

Force Management System (EFMS) model. The model computes the total number of enlisted Marines who must complete entry-level training in order to sustain each occupational field. To arrive at this total, the model uses information on the desired composition of the Marine Corps from the Grade Adjusted Recapitulation (GAR) and data on the existing composition from the Manpower Management System (MMS).

Marine Officers. (See blocks 1 and 2 of chart in Appendix C.) Planners from the Manpower Planning, Programming, and Budgeting Branch manually determine entry-level training requirements for officers based on input from the Grade Adjusted Recapitulation and Manpower Management System reports as well as information provided by military occupational specialty (MOS) sponsors and the Officer Assignment Branch (MMOA).

Training Output Plans. Details on the number of officers and enlisted Marines, by military occupational specialty, who must complete designated skill qualification training courses are incorporated into "training output plans" which are provided to the Plans and Budget Branch (OTTB) of the Training Division.

Marine Reservists. (See block 4 of chart in Appendix C.) Planners from the Individual Training Section (RESP), Personnel Branch, Reserve Division determine entry-level training based on current and projected billet openings versus

table of organization requirements as reported by the 4th Marine Division and 4th Marine Aircraft Wing. This report indicates the personnel needs of units. A Marine reservist's contract is normally for six years. This would indicate that accessions, and consequently the need for entry-level training, would be approximately one sixth of the enlisted force population each year. The attrition factor plus the enlistment of approximately 23% of each year's accessions into the regular establishment, however, makes the actual accession requirement closer to one fourth of the enlisted population. Information on the number of reservists who need to be trained is provided to the Plans and Budget Branch of the Training Division during staffing of the draft "training input plan."

Post Entry-Level Training. Post entry-level training includes all individual training conducted subsequent to entry-level training. It is considered "formal" when assignment of Marines to courses is controlled by Headquarters, U.S. Marine Corps. The individual training done under supervision of the unit commander, or in schools for which he has requested quotas, is considered "informal."

Officer and Enlisted Marines. (See block 3 of chart in Appendix C.) Military occupational specialty sponsors in consonance with monitors from the Enlisted and Officer Assignment Branches (MMA and MMEA) determine the post

entry-level training requirements for officers and enlisted Marines. Again, the Grade Adjusted Recapitulation and Manpower Management System reports are the principal documents used in calculating the requirements. Unlike entry-level training, however, post entry-level training requirements are not provided the Plans and Budget Branch of the Training Division until that Branch staffs its "training input plan."

Marine Reservists. (See block 4 of chart in Appendix C.) Planners from the Individual Training Section, Personnel Branch, Reserve Division determine the post entry-level training requirements for reservists based on requests from the 4th Marine Division and 4th Marine Aircraft Wing. These requests are adjusted by the Reserve Division based on the estimate of the number of Marines able to be enlisted who will meet the school prerequisites. Additional School quotas sometimes become available because the regular establishment is unable to fill the quotas requested. There are also a number of two week formal schools Marine reservists are sent to during their Annual Training Duty (ATD). Coordination for quotas to these schools is made between the Reserve Division and the Reserve Training Section, Unit Training Branch, Training Division.

Developing Plans to Meet Formal Individual Training Requirements

The Training Input Plan. (See blocks 5 and 7 of chart in Appendix C.) When the Plans and Budget Branch of the

Training Division receives the "training output plans" comparisons are made with historical data on attrition rates to determine how many students must enter each course in order to meet output requirements. The resulting figures are used to prepare a draft "training input plan" which is staffed to various Headquarters, U.S. Marine Corps agencies for review and approval. It is during this staffing that the Reserve Division adds its requirements for entry-level training and military occupational specialty sponsors add their requirements for post entry-level training. Upon completion of staffing, approved changes are incorporated and the final "training input plan" is prepared. Copies of this plan are provided to the Manpower Planning, Programming, and Budgeting Branch, for use in developing enlistment option programs. The Plans and Budget Branch of the Training Division prepares training budget guidance (number of Marines to be trained in each military occupational specialty by Marine Corps training activities) for inclusion in the Installations and Logistics Department's next fiscal year's Field Budget Guidance. The Individual Training Branch (OTTI) of the Training Division submits requests for quotas to the other Services and civilian agencies based on requirements contained in the "training input plan."

Field Budget Guidance. (See blocks 7, 8, and 10 of chart in Appendix C.) Field Budget Guidance is used by

Marine Corps training activities to prepare their budgets and course schedules. Formal schools are required to submit course schedules showing convening dates and class capacities to the Training Division. Commands conducting on-the-job training (OJT), managed on-the-job training (MOJT), or field skill training (FST) are not required to provide this information since they are expected to absorb Marines needing this training into their organizations and hence are not constrained by class size or scheduling problems. Marines sent to commands for "OJT-type" training will normally remain in the unit which provides the training or will fill Quota Serial Number (QSN) orders.

Controlling Training Quotas. (See blocks 5 and 9 of chart in Appendix C.) The Individual Training Branch is responsible for the control of training quotas. Information on course schedules and the availability of "seats" in other Service and civilian courses is updated regularly via telephone calls and messages. Training Quota Memorandums (TQMs) are used to transmit information needed to prepare orders to the Enlisted and Officer Assignment Branches. The Assignment Branches issue Quota Serial Number orders or by-name orders to assign Marines to training courses. Assignment of Marines graduating from recruit training to skill qualification training is accomplished through the Automated Recruit Distribution Process (ARDP). The Recruit Distribution Model (RDM) makes the optimum match between requirements

listed in Training Quota Memorandums and individual characteristics and aptitudes as reflected in classification test scores, scores on special tests for electronics, and reports of civilian education achieved. The Recruit Distribution Model produces by-name assignments to particular skill qualification training courses. Approximately 70% of the courses are conducted in formal schools and 30% in on-the-job training, managed on-the-job training, or field skill training courses. Formal school spaces or "seats" are normally filled before Marines are assigned to "OJT-type" training. This assignment information is transmitted to the recruit depots where the actual orders are written.

#### Monitoring Implementation of Plans for Formal Individual Training

Before discussing how the implementation of plans is monitored, it is necessary to briefly review the different manner in which skill qualification training is conducted for Marine Officers and enlisted Marines, and for air and ground military occupational specialties (MOSSs).

Enlisted Marines with ground MOSSs receive their skill qualification training in Marine Corps or other Services formal schools or through on-the-job, managed on-the-job, or field skill training conducted at major Marine Corps commands.

Officers with ground MOSSs receive their skill qualification training in Marine Corps or other Services formal schools.

Enlisted Marines with aviation MOSSs commence their skill qualification training at formal schools or in courses conducted by the Chief of Naval Technical Training (CNTECTRA). Upon completion of formal schools or courses Marines report to a Marine Aircraft Wing where their assignment to additional skill qualification training is controlled by Trainee Management Units (TMUs). This additional training is in courses conducted by Navy and Marine Training Detachments (NAMTRADETs) or is on-the-job training. The latter is referred to as "Laboratory Time."

Officers with aviation MOSSs commence their skill qualification training in courses conducted by Chief of Naval Air Training (CNATRA). Upon qualification as a naval aviator or naval flight officer these officers are directed to either the 2D or 3D Marine Aircraft Wings (MAWs) where they receive additional skill qualification training in training squadrons.

Training Reports. While Marines are undergoing training and upon graduation, reports are submitted by the various training activities to the Training Division and the Assignment Branches. These reports are used to modify future Training Quota Memorandums, compute attrition rates, issue transfer orders, determine costs, etc. It is mainly through these reports that Headquarters, U.S. Marine Corps is able to monitor how well plans to meet the requirements for individual training are being met. The reports used to

monitor training can be separated into two categories: those sent to the Training Division and those sent to the Officer and Enlisted Assignment Branches.

Reports Submitted to the Training Division. (See blocks 10 through 14 of Appendix C.) The primary report provided to the Training Division is the Quarterly Training Situation Report. This report is utilized to compare training accomplishments with the Training Input Plan and to make corrections as necessary. Information from this report is also used to compute attrition factors and data on course durations. Quarterly Training Situation Reports are submitted by Marine Corps formal schools and Trainee Management Units. Weekly Quota Summary Reports from the Chief of Naval Technical Training and weekly messages and Pilot Training Monthly Reports from the Chief of Naval Air Training serve the same purpose as the Quarterly Training Situation Reports.

Four other reports are submitted to the Training Division. They are:

- (1) Monthly messages from the Trainee Management Units reporting the number of Marines completing training in each hard-skill MOS, indicating the Monitored Command Codes (MCCs) they were assigned to.

- (2) The Chief of Naval Technical Training provides student and course data via the Navy Integrated Training

Resources Administration System (NITRAS) in the form of a Course Student Summary Report.

(3) The 2D and 3D Marine Aircraft Wings submit monthly Combat Crew Readiness Training Management Reports with data on the training of pilots and NFOs.

(4) Marine Corps formal schools submit Register "77" and "88" cards to the Fiscal Division for processing in the Course Level Costing Program. Reports from this program are provided to the Training Division.

Reports Submitted to the Assignment Branches. (See blocks 10 through 14 of Appendix C.) The primary report submitted to the Officer and Enlisted Assignment Branches is the Student in Training Roster. This report contains the information necessary to make decisions on assignments after completion of a course and provides data for preparing Quota Serial Numbers or by-name orders. Students in Training Rosters are submitted by Marine Corps formal schools and the Chief of Naval Air Training. Semi-Monthly Estimate of Graduates Reports from the Trainee Management Units, Request for Transfer Messages from the Chief of Naval Technical Training, and Request for Replacement Aircrew Orders from the 2D and 3D Marine Aircraft Wings serve the same purposes as the Students in Training Rosters. The Trainee Management Units and the Chief of Naval Technical Training also submit Requests for Modifications of Quota Serial Numbers and the Chief of Naval Air Training submits Requests

for Transfers of Disqualified students. Reports of Separation from Training are provided to the Assignment Branches by Marine Corps and other Services formal school, and the Chief of Naval Air Training.

#### Conclusions and Recommendations

1. Conclusion. The management of formal individual training by Headquarters, U.S. Marine Corps requires the coordinated action of scores of officers in the Manpower Department, and the Training, Reserve, and Fiscal Divisions. The intricacies of the process and the fact that information concerning it has not been thoroughly documented have precluded all but a few officers from understanding it completely. It takes most section, branch, and division heads months of experience in their billets to fully grasp the scope of their particular responsibility for the process. It is not inconceivable that the unexpected loss of one or two key staff officers could cause the process to falter for an extended period of time.

Recommendation. That the Training Division in concert with the Manpower Department develop a document outlining how formal individual training requirements are managed. Portions of this document could serve as "desk top procedures" or job performance aids for action officers. In its entirety, this document could assist action officers and decision makers in grasping the complexities of the complete process and to put their responsibilities in context.

Information from Volume I of the Training Information System ADS Development Plan, the Training Management System (TRAMS) Concept Study, and this chapter could provide the basis for such a document.

2. Conclusion. The manpower management process is the foundation for management of formal individual training requirements. Therefore, a working knowledge of this process is a necessity for many action officers in the Training Division. A general understanding of the process would aid most of the remaining officers of the Division in the performance of their duties. Yet, the details of the manpower management process are imperfectly understood by the majority of these officers. The reason is that they lack a source document explaining the process in non-technical terms. Their education to the process is normally limited to the information they pick up while working with officers from the Manpower Department.

Recommendation. That officers, upon assignment to the Training Division, be given a briefing on the manpower management process by representatives of the Manpower Department. In addition, officers assigned to the Training Division should be provided with a copy of a document explaining the process. The guide contained in Appendix B could provide the nucleus for such a document. (This guide with the inclusion of sections on retention, promotion,

and termination of service might also be of value to other divisions.)

3. Conclusion. The ability of HQMC to manage the requirements for individual training has reached the upper limits using current manual procedures for collecting information. For this reason the Potomac General Research Group of McLean, Virginia, was contracted to prepare an Automated Data System Development Plan for a Marine Corps Training Information System (TIS). Such a system would assist in the collection (and analysis) of student, course, and fiscal information, enabling the Training Division to effect major economies in the management of individual training. An automated Training Information System has been determined to be feasible and the contractor is presently preparing a report on data requirements and equipment specifications.

Recommendation. That priority continue to be given to the early development of a Training Information System.

## NOTES

1. J.D. Lanigan and J.M. Stoy, Training Information System ADS Development Plan, Volume I: Alternative Systems Definition, Other Service Systems Overview and Feasibility Study Report (McLean, Virginia: Potomac General Research Group, March 1977), p. A-1 - A-19; Informatics, Inc., Training Management System (TRAMS) Concept Study (Rockville, Maryland: 14 February 1973), p. 2-1 - 2-8..

## CHAPTER XII

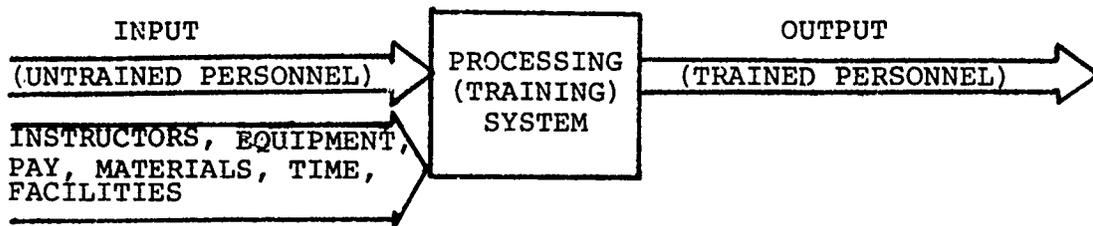
### MEASURING TRAINING EFFECTIVENESS AND EFFICIENCY

#### Background

Those agencies which have demonstrated the most interest in military training and education in recent years have also been the ones most frustrated by their inability to evaluate the effectiveness and efficiency of ongoing and proposed training programs.

To understand the complexity of the problem it is necessary to examine the four elements needed to conduct an analysis of any system. These are an objective, a measure of effectiveness (MOE), a measure of cost (MOC), and a criterion. An objective describes what the system under study is to produce or achieve. A measure of effectiveness is an index or scale used to determine the level of production or output. A measure of cost is an index or scale used to compute what needs to be expended to operate the system. The criterion is a rule or standard which relates the effectiveness of the system to the cost of operating it. The criterion also provides a rule for ranking alternatives. The objective and the criterion are fixed. However, between the measure of effectiveness and the measure of cost only one can be fixed at a time. These elements can be viewed more easily in an analysis of a simple input-output system as depicted in Figure 12-1.

FIGURE 12-1  
INPUT-OUTPUT SYSTEM



The objective of this system is to provide trained personnel. A required level of effectiveness is used to determine if the system has produced trained personnel. Here is the first problem, determining when a student has been sufficiently trained.

A second problem is to measure the costs of operating the system. Many costs are expended to make a training system function; for example, instructors and their pay, students and their pay, facilities (including pro-rated construction and maintenance costs), materials, and time. The problem is how to determine which costs are relevant. Though the costs expended to operate a training system are not commensurate, they can be converted to dollars, in most cases.

The final problem comes in trying to establish a criterion rule. First is the question of what should be fixed--the effectiveness or the costs? The commander to whom the students are to be assigned will normally opt for fixing effectiveness while the budgeteer will desire costs to be fixed.

### Current Status

The Department of Defense after considerable study of the management tools available to evaluate the cost and effectiveness of military training has determined that:<sup>1</sup>

(1) At lower levels of aggregation, dollars per student and dollars per man-year are the most useful way to measure cost.

(2) At lower levels of aggregation, the achievement of relevant performance standards is the most useful way to measure effectiveness.

(3) Because of the size and complexity of the military training establishment as a whole, it can only be roughly evaluated in terms of cost and effectiveness.

The Army views the evaluation of the effectiveness and efficiency of training as an evolving discipline and has developed a series of documents to provide guidance and assistance to training managers to aid them in conceptualizing, planning, and conducting cost and training effectiveness analyses.<sup>2</sup> Effectiveness is based on performance criteria derived from the job personnel are being trained to fill. The cost methodology focuses on making commensurate and quantifying the total inputs (men, money, and material) needed to provide the capability being evaluated.

The Navy has developed an extensive set of manual procedures (which it is now automating) to evaluate training

costs and effectiveness.<sup>3</sup> The costs of training are measured in terms of the dollars invested. These costs are calculated over a planning period extending a number of years into the future. Effectiveness is indexed according to formal descriptions applied to the full range of tasks required of students.

#### An Alternate Concept

The capability to quantify and thus measure the output of training makes it possible to examine the remainder of the system to determine its relative impact on the product. The following paragraph outlines a concept for making such an examination.

The ability of a training system to produce individuals capable of meeting performance requirements is a function of four variables.

(1) Capabilities (mental and physical) of students entering the system.

(2) Quality and quantity of resources (personnel, facilities, equipment, material, money, and time) available to operate the system.

(3) Requirements imposed on the system which do not contribute to producing trained individuals, that is, programs identified as "training" but which in reality are intended only to present information. Many troop information training programs are of this type.

(4) Operating efficiency of the system, that is, how well are resources utilized and how effective are the instructional strategies employed. (An instructional strategy is a blending of methods of instruction, and training equipment in a manner to most effectively present instruction.) A change in any one of these variables will affect (positively or negatively) the qualifications of individuals coming out of the system. This can be expressed as: qualification (Q) of output is a function of the capabilities (C) of the input, the resources (R) available to conduct training, imposed (I) requirements not contributing to qualifications required of the output, and efficiency (E) of the system, or

$$Q = f(CRIE)$$

#### Conclusion and Recommendation

1. Conclusion. The measurement of training cost and effectiveness has been an issue of concern to the Congress and the Department of Defense for several years. The Army and the Navy have undertaken efforts to design and develop models which can be used to conduct analyses of training costs and effectiveness. Though the usefulness of these models has yet to be conclusively demonstrated, they do appear to offer means of ordering data to permit better decisions to be made regarding training.

Recommendation. That the Army and Navy efforts be formally monitored to determine their utility and applicability to Marine Corps training.

## NOTES

1. U.S. Department of Defense, "Effectiveness and Efficiency of Military Training," Military Manpower Training Report for FY 1978 (Washington: March 1977), p. 1.
2. U.S. Army Training and Doctrine Command, Analyzing Training Effectiveness, TRADOC Pamphlet 71-8 (Ft. Monroe, Virginia, n.d.); and U.S. Army Training and Doctrine Command, Cost & Training Effectiveness Analysis, TRADOC Pamphlet 71-10 (Draft) (Ft. Monroe, Virginia, 1 November 1976).
3. Eugene Hall, et al., Training Effectiveness Assessment: Problems, Concepts and Evaluation Alternatives, TAEG Report No. 39 (Orlando, Florida: Training Analysis and Evaluation Group, December 1976).

## CHAPTER XIII

### TRAINING TECHNOLOGY

#### Background

The Marine Corps must continually train large numbers of students who possess a wide diversity in aptitude and educational background. This training must be done in programs whose length is normally fixed. Manpower limitations preclude significant increases of instructors for any of these programs. Thus, improvements in training and education must, for the most part, come from new and innovative equipment and techniques. In other words, improvements in training technology. For this discussion training equipment refers to hardware, such as, instructional television, slide projectors, and mock-ups. Techniques cover approaches like programmed instruction, individualized instruction, and performance-oriented training.

#### Training Equipment

Military instructors have traditionally led the way in the use of new training equipment, particularly over the past 35 years. As an example, it has been estimated that the number of training aids produced and used by the Services between 1940 and 1945 was "...six times the quantity of such material created for use in all civilian education up to that point in time."<sup>1</sup> An inspection of any of the Marine Corps'

major bases or formal schools would reveal that the pace of development, though perhaps somewhat slowed, still continues. Simulators, movie-projectors, sound-on-slide devices, operator trainers, cut-away models, and graphic aids are a few of the many items to be seen. Literally millions of dollars have been spent on the purchase and maintenance of this equipment.

What has been the result? It is difficult to determine what benefits have been derived from the use of training equipment because existing methods of analysis are inadequate.<sup>2</sup> Basically, the required means for measuring the effectiveness of an item of training does not exist.<sup>3</sup> A review of some of the literature which addresses the question does seem to indicate, however, that improvements in student learning have been marginal at best. One study concluded that the most which could be said was that the learning process had not been hindered.<sup>4</sup>

Ongoing efforts of the Army and Navy may improve the ability of training managers to assess the value of different training equipment. The Army's procedures, called a Training Development Study (TDS), is part of a Cost and Training Effectiveness Analysis (CTEA) method designed to determine the benefits of alternative training systems. The analysis is done manually. The entire Cost and Training Effectiveness concept is being evaluated by the Army's Training and Doctrine Command at Fort Monroe, Virginia. The

Navy's procedure is part of its Educational Technology Assessment Model (ETAM) which is designed to assist in making rational assessments of the benefits and costs of introducing changes in a training program. The relative effectiveness of various training equipment is one of the many variables this elaborate model can consider. The final report on design and development of the Educational Technology Assessment Model was published in May 1977 and is now being reviewed by the Chief of Naval Education and Training.

#### Training Techniques

Development of new and innovative techniques or approaches to training has generally lagged behind the advances in training equipment. The introduction of programmed instruction in the late 1950s and early 1960s marked the first real changes in training techniques in decades. Programmed instruction, however, was followed in increasingly rapid order by self-paced instruction, individualized instruction, "hands-on" (performance-oriented) training, and peer instruction. Though the value of all these techniques have not been fully assessed they have generally fared better than equipment innovations. For example:

Comparison tests of matched samples of trainees comparing this approach with the previous lecture-demonstration-practice approach employing a 70% normative criterion have shown marked superiority,

across all mental categories for personnel instructed by the performance-based method.<sup>5</sup>

### Instructional Technology in the Marine Corps

The Marine Corps has placed greater emphasis on the instruction and use of relatively expensive training equipment than on less costly techniques. This is evidenced by the introduction of a computer-aided-instruction system at the Communication-Electronics School, the installation of instructional television at all major posts and stations, and the purchase of large numbers of audio-visual systems to support the Training Extension Course program, as contrasted to the total absence of any support Marine Corps-wide for some of the more promising new training techniques.

### Conclusions and Recommendations

1. Conclusion. Training equipment purchased by the Marine Corps in recent years has consisted in large part of expensive training devices. These devices have proven effective in teaching certain skills. However, few cost-benefit comparisons have been made between such devices and other less expensive ones or between devices and new training techniques. For example, how do the life cycle costs of a computer assisted instruction system and a set of job performance aids compare? Are there significant differences in their effectiveness? That is, are different skill levels achieved?

Recommendation. That cost-benefit comparisons be made of alternative training devices before they are purchased. These comparisons should consider such factors as the size of the audience each device is able to reach, deployability of the device, and maintenance and support requirements.

2. Conclusion. Instructional technology has tended to be hardware vice concept oriented. Greater emphasis has been given to the introduction of items like instructional television, operator trainers, and multi-media devices than to new methods such as "hands-on" training, individualized self-paced instruction and job performance aids.

Recommendation. That Headquarters, U.S. Marine Corps develop and employ formal procedures to introduce and evaluate new and innovative training techniques.

#### NOTES

1. Wallace W. Prophet, The U.S. Army in the 1970s: Development in Training and Manpower Technologies (Pensacola, Florida: Seville Research Corporation, February 1977), p. 11.

2. Ronald W. Spangenberg, et al., The State of Knowledge Pertaining to Selection of Cost-Effective Training Methods and Media, Hunn RRO TR-73-13 (Alexandria, Virginia: Human Resources Research Organization, June 1973), p. v.

3. Gene T. Sherron, An Examination of the Manpower and Personnel Implications Emerging from the Use of Computers by the Military Services in the 1980s (Washington: Industrial College of the Armed Forces, March 1976), p. 44.

4. Herbert J. Kiesling, "On the Economic Analysis of Educational Technology," in To Improve Learning, ed. Sidney G. Tickton (New York: R.R. Bowker Co., 1971), p. 992-994.

5. Prophet, p. 5.

## CHAPTER XIV

### TRAINING AND WEAPON SYSTEM ACQUISITION

#### General Information

The Weapon System Acquisition Process has been studied, analyzed and reviewed by numerous agencies, panels and committees. The process is formalized in detail by numerous directives and instructions.

It is not the intent of this chapter to review a well documented and studied system. The purpose of this chapter is to take a brief look at the role training plays in the acquisition process. Recent concern by Congress, the Department of Defense and other government agencies about training has resulted in increased attention on training considerations in the acquisition process. The role of training and manpower managers has been traditionally defined as passive and responsive in nature until just prior to operational introduction of weapon systems and associated hardware.

Recent developments within the Navy concerning training in the acquisition process will possibly have an effect on joint Navy/Marine Corps weapon system acquisition. With the publication by the Chief of Naval Operations of the Military Manpower Versus Hardware Procurement (HARDMAN)

Report, training and manpower consideration in the acquisition process has been highlighted. The establishment of a "HARDMAN" project office under the Deputy Chief of Naval Operations for Manpower (OP-122) indicates acceptance by the Navy of major portions of the study.<sup>1</sup>

#### Weapons System Acquisition Process

There are four phases or "Milestones" in the weapon system acquisition process, these phases are defined in DOD Instruction 5000.2, Major System Acquisition Process as Concept Formulation (Program Initiation), Design (Validation), Full Scale Development, and Production. These phases are applied to four acquisition categories (ACATs) which apply to cost or research, development, test, evaluation (RDT&E) and procurement for individual projects. The acquisition categories define what level of approval is required for each of the acquisition milestones. Simply stated, any project which will cost more than \$50 million for RDT&E or \$200 million for procurement, requires DOD review and approval. Programs of lesser value require review within the Department of the Navy, and approval by the Defense System Acquisition Review Council (DSARC). The Marine Corps has established a similar review system of councils and milestones for acquisition programs that require Department of the Navy and DOD approval. For projects of less than

\$5 million RDT&E and \$20 million in procurement, internal review by only the Marine Corps acquisition system is required.<sup>2</sup>

Present Training Input to the WSAP. Training requirements are considered in the Department of Defense Weapons System Acquisition Process (WSAP) at milestone three--full scale production. Training input for Navy/Marine Corps acquisition joint projects is required by OPNAVINST 1500.8H, Preparation and Implementation of Navy Training Plans (NTPs) in Support of Hardware and Non-Hardware Oriented Developments. This order specifies that training plans be in effect for acquisitions "no later than three years prior to planned fleet introduction date."<sup>3</sup> This may or may not coincide with the full scale production milestone.

Training and the WSAP. The recent concern surrounding training and manpower considerations in systems acquisition involves the phase or time when it is considered in the process. With DOD Instructions requiring training considerations at Milestone III - "Full Scale Development" and the OPNAVINST 1500.8H requiring a "Navy Training Plan" three years prior to fleet operational introduction, manpower and training decision maker are often placed in a responsive or reactive mode.<sup>4</sup>

Interest in training and manpower costs are driving various acquisition organizations in the direction of

considering training and manpower requirements at Milestone "Zero," the Concept Formulation stage. Some organizations within the Marine Corps are moving in this direction with reevaluation of Required Operational Capability (ROC) statements occurring and individual projects being reevaluated.<sup>5</sup>

The thrust of this movement is: to consider training and manpower at the system initiation stage; to create analytical tools to assist in developing trade-offs between hardware, manpower and training; and to consider the life cycle costs of manpower and training prior to major commitments for design or full scale production of hardware. This change to the Weapon System Acquisition Process should avoid the introduction of weapons systems to operational forces without proper training and manpower requirements being considered.

Previous consideration of training and manpower at Milestone III, Full Scale Development, resulted in equipment designs validated and frozen for production before manpower and training skills were considered. This generally has resulted in higher technical skill requirements, increases in planned training costs, and longer training times for equipment not designed with manpower or training needs in mind.

In areas of joint Navy/Marine acquisition the "three years prior to fleet introduction" requirement for Navy

Training Plans (NTPs) often resulted in reactive management from manpower planners as manning requirements for FMF introduction became more focused. The training establishment is often placed in a reactive position to provide facilities, courses of instruction and instructors as new systems support requirements were finalized. Fluctuations in planned budgets, reduced funding or end strength cuts seriously impacted on training and manpower plans that support acquisition programs. This has often resulted in weapon system introduction with little or no training support to sustain new weapons or systems.

A factor which compounds late training and manpower requirements for new system acquisitions is the continued training support of older systems during transition. The dual support requirements increase training, manpower and support costs when attempts are made to hold operational readiness of units constant during new weapon system introduction.

The Landing Force Organizational Systems Study, prepared annually by the Marine Corps Development and Education Center, provides a useful insight into portions of the Marine Corps acquisition effort. The report displays all Marine Corps Development and Education Center (MCDEC) required operational capability (ROC) documents and work directives under the cognizance of the Development Center.

Headquarters Marine Corps and classified projects have been excluded from the report.<sup>6</sup>

Within the three five-year increments displayed for the Marine Divisions, Wings and Force Troops, the total number of projects discussed is quite large. Within the Marine Air Wing alone approximately 50 projects will reach Fleet Marine Force (FMF) introduction within the next five years.

This report also warns that the transition period while existing equipment is maintained and new equipment is introduced should be well planned or decreased operational readiness could result.<sup>7</sup>

#### Conclusions and Recommendations

Conclusion. The number of weapon system introductions planned for the Fleet Marine Force in the near future appears considerable. The presently structured weapon system acquisition process has discouraged early consideration of training and manpower requirements in the past and could create readiness problems during FMF introduction in future years.

With the implementation of the Hardware versus Manpower project in the Navy, many joint Navy/Marine acquisitions will be evaluated for training impact during concept formulation in the future.

Recommendation. That the Marine Corps consider a study or project similar in concept to the HARDMAN Report to evaluate Marine Corps training needs in future acquisition

projects. Organization and automated data processing systems advocated by the Navy study may not be appropriate to Marine Corps needs. The Training Division and the Manpower Planning Division should consider studying information requirements to assist in acquisition program decisions. The structure, organization and directives of the present Marine Corps acquisition process should be evaluated with manpower and training involved during initial concept stages.

NOTES

1. "Hardman System Helps Navy Staff Its Equipment," Navy Times, 6 February 1978, p. 32.
2. James K. Ruland, et. a., Military Manpower versus Hardware Procurement Study (HARDMAN) (Washington: System Automation Corporation, 1977), p. II-3.
3. U.S. Office Naval Operations, Preparation and Implementation of Navy Training Plans (NTPs) in Support of Hardware and Non-Hardware Oriented Developments, OPNAVINST 1500.8H (Washington: 3 July 1975), p. II-2.
4. Ruland, HARDMAN, p. II-8.
5. Telephone conversation with MAJ A.C. Blades, Training Plans Section, Plans and Budget Branch, Training Division, Operations and Training Department, 16 March 1978.
6. Marine Corps Development and Education Command, Landing Force Organizational Systems Study (LFOSS) (Quantico, VA: 21 January 1977), p. 1-1.
7. Ibid., p. 19-9.



PART V

MARINE CORPS TRAINING 1946-1977



## CHAPTER XV

### HISTORY OF RECRUIT TRAINING 1939-1977

#### Sources of Information

Although an abundance of recruit training information is available, no single document provides a comprehensive, chronological sequence of changes in the training. This chapter partially corrects the problem by tracing recruit training changes from 1939 to 1977.

The information presented below was obtained from four primary sources. One of the sources, Marine Corps Ground Training in World War II, is a study prepared in 1956 by the Historical Branch, G-3 Division, Headquarters, U.S. Marine Corps. It contains a synopsis of recruit training changes from 1939 to 1945 and is paraphrased in this chapter. Another source, Brief History of Recruit Training Regiment, Marine Corps Recruit Depot, Parris Island, South Carolina, was published as Regimental Order 5750.2 in July 1969. It covers the period 1956 to 1969. Command chronologies from the recruit depots at Parris Island, South Carolina and San Diego, California for the period 1965 to 1977, were a third source. They were provided by the Historical Branch, History and Museum Division, Headquarters, U.S. Marine Corps. The final source was the personal papers of one of the authors who served two tours of duty at Parris Island from April 1965 to March 1966 and from December 1972 to June 1977.

One of these papers, a detailed lesson outline prepared while the author was Director of Drill Instructor School, is titled Introduction to the Recruit Training Approach. Paragraph 3 of the outline explains changes in recruit training from 1956 to 1977.

Because of time constraints, the period 1945 to 1955 was not thoroughly researched.

#### WORLD WAR II ERA 1939-1946

Prior to 1911, Marine recruits were sent to the nearest Marine barracks for recruit training. The Commandant, in 1911, realizing that this system frequently resulted in inadequate instruction, established the central recruit depot system. Veteran officers and noncommissioned officers were assigned to the two recruit depots at Parris Island, and San Diego and devoted all of their energies to turning civilians into Marines. The new system was well entrenched by 1939. It consisted of eight weeks of rigorous training as the recruit was introduced to the fundamentals of military life:

He learned discipline, military courtesy, close order drill and interior guard duty. He was given thorough physical conditioning to prepare him for the rigors of combat. He became intimately familiar with his rifle, mastering its mechanical functioning and firing it for record on the range. And he received elementary instruction in infantry combat subjects, including the digging of foxholes, bayonet, grenades, chemical warfare, map reading and basic squad combat principles.<sup>1</sup>

On the eve of World War II, in order to accommodate a large influx of personnel, recruit training was reduced to four and, on 1 June 1939, to three weeks. The three week schedule called for two weeks of indoctrination and basic instruction followed by a week of weapons training. After receiving complaints about the shortened training time, the Commandant reviewed the emergency three week schedule and on 5 September 1939 directed that new four week schedules be prepared. The Commandant's guidance was: "Set aside Sunday for rest and recreation; increase the period of range instruction to nine days; add a fourth week, scheduled after the firing on the range."<sup>2</sup> Table 15-1 is a breakdown by major subjects included in the four week schedule for Parris Island.

The reduction in training time resulted in a drastic decline in the quality of the graduating recruit. A decrease of as much as 25% in rifle range qualifications occurred within one month after the four week schedule was put into effect. The Commandant wrote to the Commanding Generals at the two recruit depots and indicated that he expected a higher percentage of qualification. The four week schedule, however, was not changed until February 1940 when the pressure of expansion was removed and a six week schedule implemented.

In March 1940, the Commandant became concerned with the number of hours of actual training as contrasted with the

TABLE 15-1

FOUR-WEEK TRAINING SCHEDULE FOR RECRUIT DEPOT  
PARRIS ISLAND 1939

<u>MAJOR SUBJECTS</u>	<u>HOURS*</u>
INDOCTRINATION AND MILITARY COURTESY	7
BAYONET TRAINING	5
DRILL	31
INTERIOR GUARD	6
FIELD TRAINING Including: First Aid, Hygiene Combat Exercises, Tenting, Scouting and Patrolling, etc.	34
MARCHES	16
RIFLE RANGE PERIOD	70

\* This sample doesn't account for total hours; administration, clothes issue, physical training, etc., are not included.

Source: Historical Branch, G-3, Headquarters, U.S. Marine Corps, Marine Corps Ground Training in World War II (Washington: 1956), p. 14.

total number of hours provided on the training schedule. He directed that recruits not augment the messmen's force or perform other labor except in emergencies. He also noted the differences in the two depots' systems of range scheduling. San Diego scheduled the last week of recruit training as a range week. Parris Island conducted range week during the

fifth training week and used the last training week to review training accomplished previously. A study of the problems conducted at Headquarters showed that a minimum of three weeks basic training was required prior to the range, three weeks were needed on the rifle range and another week, preferably two, was needed to review instruction. In addition, the six week schedule did not provide adequate time to complete instruction in the basic subjects. As a result of the study, training was increased to seven weeks with the first three weeks used for basic instruction, weeks four through seven spent at the rifle range and the final week used for additional instruction. Table 15-2 gives a major subject breakdown of San Diego's seven week schedule.

On 11 August 1940, the base at Parris Island was severely damaged by a hurricane. A temporary recruit depot was organized at Quantico, Virginia on 14 August, and was designated as the Recruit Depot, 5th Marines, 1st Marine Brigade, FMF. By the middle of September 1940, Parris Island had recovered from the hurricane damage and returned to normal operations.

A survey of recruit rifle scores in the spring of 1941 showed that Parris Island continued to have lower scores than San Diego. The problem was identified as a range scheduling problem but in spite of Headquarter's efforts to regulate it, there was a continued disparity in the operation of the two depots.

TABLE 15-2

SEVEN WEEK TRAINING SCHEDULE FOR RECRUIT DEPOT

SAN DIEGO 1940

<u>MAJOR SUBJECT BREAKDOWN</u>	<u>TRAINING HOURS*</u>
PHYSICAL TRAINING	10 1/2
DRILL	44
INTERIOR GUARD	9
GUARD	2
MILITARY COURTESY	3
BAYONET INSTRUCTION	8
MUSKETRY	2
RIFLE INSTRUCTION*	3
FIELD TRAINING	72
Including: Patrolling, Scouting, Hikes, Marches, Signals, First Aid, Chemical Warfare, Cover and Con- cealment, Combat Principles	

\* The schedule does not include a breakdown of range instruction hours.

Source: Historical Branch, G-3, Headquarters, U.S. Marine Corps, Marine Corps Ground Training in World War II (Washington: 1956), p. 22.

Two points were demonstrated in the period of expansion between 1939 and 1941.

...First, there were definite limits below which training time could not be reduced without creating serious inadequacies in the military skills of recruit depot graduates.

Second, variations in the training schedules had to be accepted as long as each depot did its own scheduling with no more than general guidances from Headquarters. And as long as this was the case, there was not likely to be a uniformly high level of recruit training.<sup>3</sup>

As a result of war declared by the Congress on 8 December 1941, four times the number of recruits previously trained began arriving at the depots. To meet the surge, the recruit training cycle was cut from seven to six and finally to five weeks. Two of the five weeks were spent at the rifle range. By 1 March 1942, the number of recruits to be trained had dropped enough to return to a seven week schedule. At both depots, the rifle range became a bottleneck. To alleviate the problem, recruits were sent to other training centers after four weeks at the depots to learn to fire the rifle. This practice was discontinued after depot rifle ranges were enlarged.

The seven week schedule was still in effect at the end of 1943. Most subjects remained the same but physical training was increased.

By May 1943 the physical training program at Parris Island included 30 minutes of accelerated calisthenics and body contact exercises and 30 minutes of massed barehanded boxing daily. In addition, there were 30 minute periods each week devoted to hand-to-hand fighting and unarmed combat, and daily half-hour periods of swimming instruction for recruits who could not meet the minimum qualifications.<sup>4</sup>

President Roosevelt issued an executive order on 5 December 1942 stopping voluntary enlistment and henceforth, Marine recruits were to be furnished through selective service. The change from volunteer to draftee resulted in a lowering of physical and intellectual standards of recruits. To handle this problem a special screening team made up of psychologists, psychiatrists, social workers, and specially trained Marines interviewed all recruits during the first week of training to cull out those not able to complete the normal training cycle. Some were discharged. Others received special treatment. An "A" platoon for slow learners and a "B" platoon for men with physical defects were established.

Because of shortcomings in recruit training, its length was increased to 12 weeks in December 1944. This included a four week period of field training. The training was reduced to eight weeks in March of the next year, when it was decided to conduct field training at other training centers.

Disparity between the eight week schedules recommended by the two depots led to the issuance of a master training schedule by Marine Corps Headquarters. The schedule called for three weeks on the rifle range and a total of 421 hours of instruction. See Table 15-3 for a breakdown by subject. Thirty-six additional hours of weapons instruction was added in July 1944 without an increase in training time.

TABLE 15-3

EIGHT WEEK TRAINING SCHEDULE 1944

<u>SUBJECT</u>	<u>HOURS</u>	<u>% OF TOTAL</u>
Weapons	195	46%
Physical	39	9%
Garrison	89	22%
Field	98	23%
Total	421	

Source: Historical Branch, G-3, Headquarters, U.S. Marine Corps, Marine Corps Ground Training in World War II (Washington: 1956), p. 172.

During this period, in an effort to improve the quality of instruction, the Drill Instructors School was organized at Parris Island.

The study group investigating Marine Corps Ground Training in World War II made several conclusions about training. Their conclusions about recruit training during the period 1939 to 1945 were:

(1) Eight weeks proved to be the minimum length to which recruit training could be cut without sacrificing quality.

(2) There was an ever increasing emphasis on training in weapons, physical conditioning, and other combat subjects and a corresponding decrease in training in close order drill, military courtesy, interior guard duty, parades and ceremonies, and similar garrison type subjects.

(3) Special drill instructor courses were necessary to insure the required numbers of qualified drill instructors were available to train recruits.

(4) The numbers of recruits received from Selective Service with educational and psychiatric deficiencies necessitated careful screening and the establishment of special courses for illiterates and slow learners.<sup>5</sup>

#### POST WORLD WAR II 1946-1955.

In 1940 it was decided to organize battalions from the separate companies that had controlled recruit training. At Parris Island during World War II, battalions were activated. The eventual cutback started in 1944 and towards the end of 1945 only four battalions were active. After World War II, the depot was staggered by one of history's most rapid demobilizations. At one time, prior to the outbreak in Korea, only two recruit battalions were in operation.<sup>6</sup> Until 1946, Parris Island had been referred to as Marine Barracks, Parris Island. On 1 December 1946, it became The Marine Corps Recruit Depot, Parris Island.<sup>7</sup> San Diego followed and was designated a Marine Corps Recruit Depot on 1 January 1948.

In February 1949, a battalion was activated at Parris Island with the sole purpose of training Woman Marine Recruits. It remains the only one of its kind in the Marine Corps.<sup>8</sup>

In 1950, with the advent of the Korean War, the depots were again faced with a large influx of recruits. (Information

on the organization of training during the Korean War was not obtained by the authors.)

A copy of a speech made by the Commanding General, Marine Corps Recruit Depot, Parris Island to graduating students of the 22nd class of the Drill Instructors School on 18 June 1954 gives an idea of the training being conducted at that time. The general indicated that he was glad to see that all graduates were noncommissioned officers. He explained that a short time before nearly 1/2 of the Drill Instructors were recruits fresh out of recruit training and the average age of the drill instructor was 19. He indicated that the young drill instructor did not possess the maturity nor age required to be effective. The length of recruit training in 1954 was 10 weeks and most recruits were again volunteers. The general commented on the favorable picture that the public had of the Marine Corps as a result of its performance in the Korean War, and how their confidence resulted in passage of Public Law 416. This law gave the Marine Corps a legal authorized strength for the first time. The general concluded his speech with the following remark. "A professional Marine, a teacher, a parent, all wrapped up into one equals a Parris Island Drill Instructor."<sup>9</sup>

#### POST KOREAN WAR 1955-1965

Prior to May 1956, the G-3 of the depot at Parris Island prepared detailed lesson plans and master training

schedules. The battalions then prepared weekly training schedules for each platoon. Drill Instructors taught the general subjects but some special subjects were taught at the battalion level. Each platoon progressed through the 10 weeks as an individual entity under the supervision of two drill instructors. Officers were assigned as company commanders.

A dramatic change in recruit training occurred in 1956 as the result of a much publicized incident.

...on April 8, 1956. At 2000 that night, while his platoon was at the rifle range, SSgt M. C. McKeon, under the influence of alcohol to an unknown degree, marched the platoon into Ribbon Creek behind the "C" Range butts. This night march was punishment for infractions of discipline committed by members of Platoon 71. As a result of the march 6 recruits drowned.<sup>10</sup>

It was determined by the Commandant that the crux of the problem, aside from the poor judgment of one new assistant drill instructor, lay in the tacit divorcement of the commissioned officer from the supervision over the conduct of training of the recruit. As a result of the tragedy and subsequent Court of Inquiry and General Courts Martial, the following changes occurred:

- (1) A separate Recruit Training Command was established at Parris Island and San Diego commanded by a Brigadier General who reported directly to the Commandant on training matters.

(2) An Inspector General for recruit training was established.

(3) The Recruit Training Command established an Instruction and Inspection Section consisting of a lieutenant colonel, 10 captains, and several special subjects instructors to conduct inspections and eliminate problem areas.

(4) A physical conditioning unit of one officer and 10 instructors was established to improve the physical condition of the recruits.

(5) In an effort to improve the drill instructors working environment, new benefits in the form of free laundry service and a bachelor drill instructors quarters were established. In an effort to enhance the prestige of the drill instructor, the campaign hat became the standard headgear and subsequently the symbol of the "DI."

(6) Greater emphasis was placed on public relations.

(7) The training cycle was extended from 10 to 12 weeks. No new subjects were included. The additional time was used for free time for both drill instructors and their recruits.

(8) The number of drill instructors per platoon was increased from two to four and later reduced to three.

(9) The Special Training Branch was established to provide remedial training for recruits with specific problems. A conditioning platoon, designed to handle those overweight, provided special diet and proper exercise to help its members

lose up to 30 pounds within three weeks. A motivation platoon for the recalcitrants and a proficiency platoon for the slow learners were established. A strength platoon provided for those requiring special exercises to build up flabby muscles, and a hospital platoon took care of those requiring medical attention.

(10) A standardized physical training program was developed. Taught by physical training instructors, it included calisthenics, running, log drills, rifle physical training, and obstacle course. Previously, physical training had been a "catch as catch can" operation conducted by the platoon drill instructor. The close combat instruction was revised to include pugil stick bouts that simulated the principles of bayonet fighting.

(11) Streamers affixed to the newly introduced platoon guidon were designed to recognize platoon excellence in certain phases of training. The awarding of streamers was publicized and was introduced as a motivator for recruits.

(12) Recruit leave was delayed until after the completion of training at The Infantry Training Regiment.\*

(13) The silver helmet liner, or "chrome dome," was adopted for use by recruits during the period of hot weather. It was estimated that the use of these helmets would keep a recruit's head 15° cooler.<sup>11</sup>

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\*After graduation from recruit training, all recruits received individual combat training at Infantry Training Regiments.

By 1 November 1957 both depots had adopted the series system. Each series consisted of from one to four platoons led by an officer. The responsibility for conducting the training remained with the drill instructors but the officer was to insure that the training was conducted properly.

In April 1958, the extraordinary control measures instituted after Ribbon Creek were no longer considered necessary, and the chain of command of recruit training reverted to normal control. There no longer was the billet of Inspector General at Headquarters, Marine Corps for recruit training. The Recruit Training Command lost its separate and unique status of having a Commanding General and became the Recruit Training Regiment (RTR) under the command of a colonel and under the operational and administrative control of the Recruit Depot. The Recruit Training Regiment became an administrative as well as an operational unit. At Parris Island, a newly established Headquarters Company, both Recruit Training Battalions, and Weapons Training Battalion belonged to the Recruit Training Regiment. Woman Marines' Training Battalion, Training Aids Library and Drill Instructors' School reverted to Depot Control.\* In June 1958, RTR took on a configuration very similar to its present one when the 3rd Battalion was reactivated. The number of battalions has remained constant since that time.<sup>12</sup>

Prior to 1961, the subjects taught at the depots were not standardized. In 1961, the Commandant of the Marine Corps published a syllabus to be followed by both depots. It specified subjects to be taught and the minimum time to be allotted for each subject. See Table 15-4 for a breakdown

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\*The structure of The Recruit Training Regiment at San Diego was not obtained by the authors.

TABLE 15-4

## 12 WEEK MASTER TRAINING SCHEDULE 31 JULY 1961

<u>COURSE</u>	<u>TOTAL HOURS</u>
HISTORY	5
CUSTOMS AND COURTESIES	4
INTERIOR GUARD	5
DISCIPLINE AND JUSTICE	3
SANITATION AND HYGIENE	4
FIRST AID	3
HAND-TO-HAND COMBAT	14
PACK	7
CLOTHING AND EQUIPMENT	8
SHELTER TENTS	1
BROWNING AUTOMATIC RIFLE MECHANICAL TRAINING	6
BROWNING AUTOMATIC RIFLE MARKSMANSHIP	6
PISTOL MECHANICAL	3
PISTOL MARKSMANSHIP	4
DRILL	72 1/2
CONDITIONING MARCH	4 1/2
PHYSICAL TRAINING	79
M1 RIFLE MECHANICAL TRAINING	11
M1 RIFLE MARKSMANSHIP	118
INFORMATION PROGRAM	16
SWIMMING	10
TRAINING INSPECTION	25
CEREMONIES	16
TRAINING EXAM	3
COMMANDER'S TIME	18 1/2
MESS AND POLICE	46 1/2
TOTAL	499

Source: U.S. Marine Corps, Recruit Training Regiment, Marine Corps Recruit Depot Parris Island, Regimental History: Distribution of, Regimental Order 5750.2 (Parris Island: 1 July 1969), Appendix B.

by course. All training and processing had to be completed within 90 days. The training was conducted in five phases:

Phase I - Forming, all administration processing completed prior to beginning training.

Phase II - Basic Training, four weeks of basic subjects.

Phase III - Marksmanship, three weeks at the rifle range.

Phase IV - Mess and Maintenance, one week of basic police duty provided the labor to maintain the depot.

Phase V - Advanced Training, four weeks.

In September 1961, training was reduced from 90 to 80 days and one week was eliminated from Phase II making training 11 weeks long.

In 1964, the Commandant assumed greater control over the training at the two depots and issued a training schedule that listed the basic military subjects to be taught as well as administrative subjects, and stipulated the time to be allowed to cover each subject. A total of 579 hours, 383 for basic military subjects and 196 for administrative subjects were required to be taught in 11 weeks.

#### VIETNAM WAR ERA

1965 was a year of change. Recruit Training was reduced from 11 to eight weeks. See Table 15-5 for a list of subjects. A total of 443 hours; 309 for academic subjects, 41 for administrative time, and 93 for commander's time were included in the eight weeks. At Parris Island a Language Orientation Unit was established to assist recruits of Spanish origin

TABLE 15-5

## MALE RECRUIT TRAINING EIGHT WEEK COURSE 1965

<u>SUBJECT</u>	<u>HOURS</u>
CODE OF CONDUCT	2
UNIFORM CODE OF MILITARY JUSTICE	2
MORAL LEADERSHIP	5
INFORMATION LECTURES	8
MISSION, HISTORY AND TRADITIONS	
CUSTOMS AND COURTESIES OF THE U.S. MARINE CORPS	7
INTERIOR GUARD	4
PERSONAL HYGIENE AND MILITARY SANITATION	4
FIRST AID	3
CLOTHING AND EQUIPMENT	12
CLOSE ORDER DRILL	53
PARADES AND CEREMONIES	9
INSPECTIONS AND TESTING	17
PHYSICAL CONDITIONING	54
MARINE CORPS WATER SURVIVAL*	8
BAYONET TRAINING	8
HAND-TO-HAND COMBAT	8
WEAPONS MECHANICAL TRAINING	
U.S. RIFLE, 7.62MM M-14	10
U.S. PISTOL, CALIBER .45M 1911A1	3
WEAPONS MARKSMANSHIP TRAINING	
U.S. RIFLE, 7.62MM M-14	89
U.S. PISTOL, CALIBER .45M 1911A1	3
	<hr/>
SUBTOTAL	309
ADMINISTRATIVE TIME	41
COMMANDER'S TIME	93
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TOTAL	443

\*Only six hours were taught at San Diego because of a lack of facilities.

Source: U.S. Marine Corps, Recruit Training Regiment, Marine Corps Recruit Depot, Parris Island, Regimental History, Distribution of, Regimental Order 5750.2 (Parris Island: 1 July 1969), Appendix E.

not proficient in the English language. On 8 November 1965, the Drill Instructor School at Parris Island was placed under the operational and administrative control of the Recruit Training Regiment. The Recruit Training Officers Orientation Course was established in October to provide newly arriving officers indoctrination in recruit training procedures. On 20 August, the Drill Instructor School reduced training from eight to five weeks. The school returned to an eight week course in March of 1966.

Until 1966, all recruits at Parris Island were given a three to five minute neuropsychiatric interview as part of the initial physical examination. Three weeks later selected recruits were again interviewed and nine out of 10 were cleared for training. After a thorough study, initial psychiatric screening of recruits was discontinued and the screening was done only when a recruit was referred to the psychiatrist by a drill instructor or commanding officer.<sup>13</sup>

On 20 May 1967, Marine Corps Order 1510.13, Male Recruit Training, was published. It standardized recruit training by providing implementing instructions and basic policy guidance. The order contained three enclosures; a program of instruction, recruit evaluation procedures, and the mission and organization of the Special Training Branch. The number of phases of training was reduced to three. The cycle of training was:

Receiving and Processing	-	1-4 days
Phase I	-	3 weeks, basic training
Phase II	-	2 weeks, Marksmanship
Phase III	-	2 weeks, advanced training
Mess and Maintenance	-	1 week

Any requested changes to the order had to be routed via the other recruit depot. Also in 1967, complete physical examinations of incoming recruits was replaced with a screening type exam.<sup>14</sup>

During 1968, a new eight week syllabus was directed for Women Marine recruits. The new syllabus placed emphasis on image development. In this year, male recruits received an athletic bag of 13 items as an Organizational and Maintenance fund issue.

The length of recruit training was increased to nine weeks in 1970. Parris Island initially used the additional week as the third week of rifle training, but subsequently moved it to Phase III. San Diego added the week to Phase I, but moved it to Phase III in 1971. During 1970 San Diego changed to a seven week schedule for Drill Instructor School. Parris Island also had a seven week course that covered the syllabus shown in Table 15-6

A pilot 11 week recruit training program was conducted at San Diego in 1971. A Headquarters Marine Corps study and field survey had

TABLE 15-6

## DRILL INSTRUCTOR SCHOOL SYLLABUS PARRIS ISLAND 1970

<u>SUBJECT</u>	<u>HOURS</u>
Close Order Drill	96
Weapons	15
Technique of Military Instruction	23 1/2
Training, Organization and Management	40 1/2
Physical Training	39
Leadership and Discipline	12
General Military Subjects	19
Inspections, Reviews, and Examinations	21
Marksmanship	40
Information Program	10
Administrative Time	<u>29</u>
<u>TOTAL</u>	345

Source: Gunnery Sergeant Ed Evans, "DI School," Leather-neck, January 1976, p. 47.

...validated the Marine Corps training philosophy that all Marines are basic riflemen. Further, the report of the study provided a number of recommendations regarding instructional improvement and manpower savings that could be gained from revising the Marine Corps Basic Sequential Training Program.\* One such area was the combining of Recruit and Individual Combat Training into a single 11 week syllabus.<sup>15</sup>

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\*Basic sequential training consisted of recruit training, individual combat training, and military occupational specialty qualifying training.

The training objectives of the 11 week program were to develop within the recruit:

- (1) A state of discipline which insures respect for authority and instant, willing obedience to orders;
- (2) Individual proficiency in military skills to include those individual actions designed to reduce the enemies effectiveness;
- (3) A skill in rifle marksmanship;
- (4) Physical fitness and endurance; and
- (5) Self-confidence, pride, initiative, aggressiveness, determination, moral integrity, loyalty, and a sense of duty and responsibility as well as love of Corps and country.

By March of 1972 both depots had adopted the new 11 week syllabus. The following year on 13 August, the 244 series became the first series at Parris Island to begin Individual Combat Training on the depot.<sup>16</sup>

At Parris Island during 1973, an Academic Proficiency Platoon was established at the Special Training Branch and the Rapid Reading Accelerated Achievement Program was begun, with teachers from the Beaufort County Schools Adult Education Section as instructors. The purpose of the program was to improve the quality of recruits who graduated from recruit training by helping those with basic reading deficiencies. The program was evaluated and dropped in 1975. In December, installation of instructional television was completed at Parris Island.

A Marine Captain from the recruit depot at San Diego captures recruit training at this time in an article published by the Marine Corps Gazette in March 1973.

Recruit training has changed a great deal over the past few years. MCRD San Diego has implemented and deleted sections to and from the training schedule and the recruit training SOP. Two weeks of infantry training under the guidance of drill instructors was added to the training cycle extending the length of boot camp from 65 to 80 training days.

...The physical training has been jacked up several notches. The average time for a 280 man series on the 3-mile run is 21:00 minutes flat. It is not unusual for entire platoons to pass both academic exams and the practical proficiency exam. When less than 90% of the platoon qualifies with the M-14 (rifle) it is disappointing...final drill (exam) is a delight to behold.<sup>18</sup>

In 1974, Parris Island began a six-month evaluation of performance-oriented training. Two blocks of instruction (First Aid and NBC Defense) were enthusiastically received from Headquarters Marine Corps. On May 1 the Field Training Unit, responsible for the supervision of individual combat training of male recruits, was established. In April, training began on the dry net tower and helicopter mock-ups. Recruits began throwing live grenades on 7 May. Improvements in the individual combat training facilities continued with full utilization of an infiltration course in July, and installation of the Small Arms Remote Target Systems in December.

After evaluating the 11 week syllabus that resulted from combining recruit training and individual combat training,

a new Marine Corps order on male recruit training was published on 30 April 1974. In preparing the program of instruction included in the new directive, the "systems approach" required by MCO P1510.23A, Design of Courses of Instruction, was used. Performance oriented learning objectives were designed for each subject and the number of hours to be allotted for academic subjects, commander's time, and administrative time was specified. See Table 15-7 for a breakdown of major subject areas. The scope of training was spelled out in an effort to capture the dual objectives of recruit training and individual combat training that the depots were to accomplish.

Recruit training encompasses training in those subjects required to produce a basic Marine rifleman who is able to sustain himself on the battlefield, function effectively in garrison, and practice those personal and professional traits that distinguish him as a Marine.<sup>19</sup>

Prior to assigning the depots the responsibility of conducting individual combat training, this task had been accomplished, after graduation from recruit training, at Infantry Training Regiments located at Camp Pendleton, California and Camp Geiger, North Carolina. The graduate of boot camp was considered to be a "Basic Marine." After he completed training at the Infantry Training Regiment, he became a "Basic Marine Rifleman." After 1973, a recruit training graduate was qualified as a "Basic Marine Rifleman" as shown in Table 15-I.

TABLE 15-7

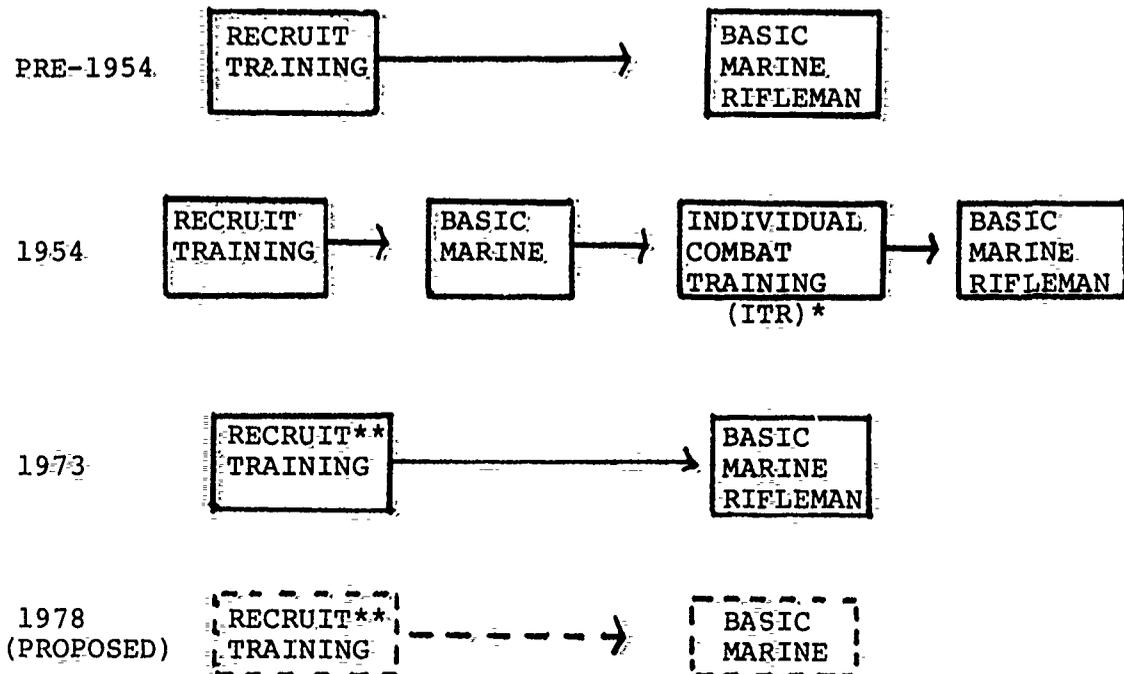
## MALE RECRUIT TRAINING SUBJECTS 1974

<u>SUBJECT</u>	<u>HOURS</u>
Code of Conduct	2
Military Law/Uniform Code of Military Justice	6
Moral Leadership	2
Orientation Lectures	7
Mission, Organization, History & Tradition	
Customs and Courtesies of U.S. Marine Corps	9
Uniform Clothing and Equipment	15
Interior Guard	10
Personel Health & Hygiene, Garrison & Field Sanitation	5
Field Living	30
First Aid	8
Land Navigation	15
Swimming	16
Close Order Drill	60
Close Combat	18
Camouflage, Cover & Concealment	2
Observing & Reporting	2
Individual Movement (Day)	4
Individual Movement (Night)	2
Amphibious & Helicopterborne Operations	4
Field Fortifications	2
NBC Defense	4
Offensive Combat	13
Defensive Combat	16
Marksmanship Training, U.S. Rifle 5.56MM M16A1	89
Mechanical Training, U.S. Rifle 5.56MM M16A1	10
Field Firing Techniques, U.S. Rifle 5.56MM M16A1	10
Mechanical Training, U.S. Pistol, Caliber .45 M1911A1	4
Marksmanship Training, U.S. Pistol, Caliber .45 M1911A1	4
Grenades & Pyrotechnic Signals	5
Mines & Boobytraps	5
Infantry Weapons/Supporting Arms	2
Physical Conditioning	80
Parades & Ceremonies	9
	<hr/>
SUBTOTAL	460
Administrative Time	162 1/2
Commander's Time	242
	<hr/>
TOTAL	864 1/2

Source: U.S. Marine Corps, Male Recruit Training, Marine Corps Order 1510.13A, (Washington: 30 April 1974), p. 3, 4.

FIGURE 15-I

BASIC MARINE VICE BASIC MARINE RIFLEMAN.



\* Infantry Training Regiment

\*\* Includes individual combat training previously taught at the Infantry Training Regiment.

Source: Interview with Maj. P.K. Van Riper, Individual Training Branch, General Training Section, Training Division, Operations and Training Department from 1972 to 1974, Newport, R.I.: 12 March 1978.

1974 proved to be a low point in recruit training history. Brigadier General Trainor, Assistant Depot Commander at Parris Island, described the situation in an article published in the Marine Corps Gazette in January 1978.

...By 1974 we hit our low point. The Fleet Marine Force was complaining about the product (graduate recruit) given them by the recruit depots. Drill Instructors were complaining about the poor quality of recruits they were receiving and recruiters were complaining about quotas and the quality of the recruit market.<sup>20</sup>

Brigadier General Trainor traced the difficulty to three basic errors made in the post-Vietnam recruiting situation. First, the Marine Corps had been filling its ranks with a large number of high school drop outs. The second was an assumption that because the Marine Corps was a volunteer organization, the end of the draft would not impact greatly on the recruiting effort. The final error was an assumption that drill instructors were miracle workers and could make a Marine out of anyone. These recruiting errors, in Brigadier General Trainor's view, aggravated the situation at the recruit depots where drill instructors were overworked as the result of lengthening training schedules and platoons of recruits that had grown to unmanageable size.<sup>21</sup>

At Parris Island in 1975, changes occurred in the Special Training Branch. The One Day Motivation Program designed to build confidence in recruits who were falling behind in the regular training was modified to preclude heat casualties and divided into two sections in an effort to provide different programs for recruits with different problems. In the latter part of 1975, motivation training was further modified to make the one day program more available to the drill instructor. The Motivation Platoon program was changed

so that recruits could return to their original platoons after completing the training. The Marksmanship Training Platoon was established on 20 September to provide poor shooters with additional instruction. At San Diego, log drill exercises were started. To provide more challenge for the recruit, special pugil stick matches were conducted and a confidence course was being constructed. In November 1975, a Series Commanders School for company grade officers was established. Although Parris Island had discontinued its Academic Proficiency Platoon, San Diego continued with the program on a pilot basis. In order to more closely simulate conditions in the Fleet Marine Force, San Diego instituted the billet of Fire Team Leader in the recruit platoons. This concept was later adopted at Parris Island.

On 8 July 1975, the Commandant announced his decision to reorganize the enlisted recruiting effort in the U.S. Marine Corps, gave the Commanding Generals of the two recruit depots control over the entire process of recruiting and recruit training, and issued implementing instructions on 24 December 1975. The change began in June 1976.

The period between 1974 and 1975 was one of considerable change at Parris Island. In an effort to eliminate the threat of recruit abuse and to improve the quality of the recruit that graduated, the following occurred:

- (1) Inspections of recruits by Series Commanders and Series Gunnery Sergeants were instituted.

(2) All Drill Instructor School students received psychiatric evaluations.

(3) The evaluation of recruits was more thorough.

(4) The title of the officer in charge of a series was changed to "Series Commander."

(5) Company grade officers with demonstrated ability were selected for duty at the depots.

(6) Free time was granted to recruits daily.

(7) The Drill Instructors Pledge was administered to drill instructors as each series was formed. This ceremony took place in front of the new recruits.

(8) The recruit discharge system was streamlined.

(9) Recruit supervisors who were found guilty of committing offenses against recruits were dealt with firmly.

As the Marine Corps was correcting its problems in recruiting and recruit training, recruit maltreatment cases resulted in national publicity and Congressional Hearings. The Commandant of the Marine Corps made a statement before the Military Personnel Subcommittee of the House Armed Services Committee on Recruiting and Recruit Training on 26 May 1976 that explains the situation.

...At the outset let me say that I share your deep concern over the recruit maltreatment cases which led to these hearings. I wish I could tell you that the McClure and Hiscock cases were aberrations in an otherwise perfect system. Unfortunately, I cannot. Shortly after assuming office, I had targeted recruiting and recruit training as areas in need of intensive review. I was not satisfied with the quality of our new recruits and I believed

then, as I do now, that changes in recruit training are needed....We now have a clear picture of the problem areas in recruit training and are taking all possible action, rapidly, to minimize maltreatment cases in the future. Meanwhile, recruit training will remain challenging and tough....<sup>22</sup>

A training conference held at Parris Island in March of 1976 was attended by the Commanding Generals of the two depots and the Deputy Chief of Staff for Manpower, HQMC. As a result of the decisions made at the conference, the following additional changes occurred.

(1) Sixty-four hours of training were eliminated from training.

(2) A second officer was added to the series team which controlled the four platoons in a series.

(3) An officer was added to the company level as the executive officer to free the company commander to take a more active role.

(4) Establishment of a 0700 to 1700 normal daily routine.

(5) Modification and subsequently elimination of the Motivation Platoon.

(6) Restriction on the wearing of the drill instructor campaign cover.

(7) Review and standardization of the two depots standing operating procedures and programs of instruction for Male Recruit Training, Drill Instructor School, and the Recruit Training Officer Orientation Course.\*

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\*Standing operating procedures and programs of instruction could not be exactly duplicated because of geographic, climatological, and facility differences.

(8) Psychiatric evaluation of company grade officers involved in recruit training.

On 1 December 1976, a new concept in recruit training was implemented. It is called Transition Training. The essence of Transition Training is reduced Drill Instructor supervision and increased leadership responsibility for recruits during Phase III of training (the last three weeks). Its purpose is to assist the recruit in transitioning from the regimentation of recruit training to the contemporary environment of today's Marine Corps.<sup>23</sup>

On 30 December 1976 a revised program of instruction for male recruit training reflecting the changes that had been made was published. Table 15-8 shows a breakdown of the program of instruction by subject.

In February 1977 the Commanding Generals of the recruit depots initiated a joint Parris Island-San Diego Task Force to conduct a detailed analysis of the entire spectrum of all recruit training issues. The Task Force subsequently briefed their results to the General Officers' Symposium in July 1977. In December 1977, representatives from the depots met at Headquarters to discuss preparation and implementation of a new program of instruction for male recruit training based on the findings of the task force. A pilot program is being tested with full implementation planned for 1 October 1978. The program calls for reduction in the length of recruit training to nine weeks. The Marine Corps had been directed to eliminate mess and maintenance week from recruit training, which caused a drop in training from 11 to 10 weeks. The

TABLE 15-8

## MALE RECRUIT TRAINING MAIN SUBJECTS 1976

A. ACADEMIC SUBJECTS	HOURS
Code of Conduct	2
Military Law/UCMJ	4
Leadership	2
Orientation Lectures	9 1/2
History, Customs & Courtesies of the U.S. Marine Corps	6 1/2
Mission and Organization of the U.S. Marine Corps	1
Uniform Clothing and Equipment	15
Interior Guard	8
Personal Health & Hygiene, Garrison Sanitation	3
Field Living	4
First Aid	4 1/2
Swimming	16
Close Order Drill	45
Close Combat	9
Observing and Reporting	2
Individual Movement (Day)	3
Camouflage, Cover & Concealment	1
Individual Movement (Night)	2
Helicopterborne Operations	1
Field Fortifications	1
NBC Defense	4
Offensive Combat	10
Defensive Combat	15
Mechanical Training, U.S. Rifle, 5.56MM, M16A1	10
Marksmanship Training, U.S. Rifle, 5.56MM, M16A1	89
Field Firing Techniques, U.S. Rifle, 5.56MM M16A1	7
Marksmanship Training, U.S. Patrol, Caliber .45, M1911A1	3
Grenades and Pyrotechnic Signals	5
Mines and Boobytraps	4
Physical Conditioning	80
Parades and Ceremonies	9
<b>SUBTOTALS</b>	<b>375 1/2</b>
<b>B. NONACADEMIC SUBJECTS</b>	
Administrative Time	1175 1/2
Commander's Time	255
Recruit Performance Evaluations	42
<b>SUBTOTAL</b>	<b>1472 1/2</b>
<b>GRAND TOTAL</b>	<b>1848</b>

Source: U.S. Marine Corps, Male Recruit Training, Marine Corps Order 1510.13B, (Washington: 30 December 1976), p. 3.

proposed nine week schedule includes additions and deletions to the existing program of instruction. Changes in terminology were also recommended. One of these, a change of the term "Basic Marine Rifleman," used to refer to a graduate recruit to the term "Basic Marine," was recommended in order to avoid confusion between the present term and a rifleman (Military Occupational Specialty 0311).\* A second change in terminology would replace the term "sustain himself on the battlefield" with "performs in a combat field environment" to more clearly reflect what a recruit is taught in recruit training. Some recommended changes in training time reduces close order drill from 93.5 to 45 hours and marksmanship from 89 to 59 hours.<sup>24</sup>

Some other changes made were intended to better prepare the recruit to make the transition to his first duty station after recruit training. Subjects added included military pay, classification procedures, promotion policies, leave and liberty, and financial responsibilities. Instruction on leadership was expanded and new classes on the machine gun and rappelling were added.

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\*See Figure 18-I for a chronology of change in the terms used to identify a graduate recruit.

## NOTES

1. Kenneth W. Condit, et al., Marine Corps Ground Training in World War II (Washington: Historical Branch, G-3, Headquarters, U.S. Marine Corps, 1956), p. 9.
2. Historical Branch, G-3, Headquarters, U.S. Marine Corps, Marine Corps Ground Training in World War II (Washington: 1956), p. 9.
3. Ibid., p. 13.
4. Ibid., p. 30.
5. Ibid., p. 165.
6. Ibid., p. 340-341.
7. Albert Love Enterprises, Platoon 357, Third Battalion, Marine Corps Recruit Depot, Parris Island, South Carolina, Platoon Book (Atlanta: 1956), p.7.
8. The Leatherneck Association, Inc., Today's Marine (Washington: 1972), p. 20.
9. Ibid.
10. Major General Merwin H. Silverthorn, Commanding General, Marine Corps Recruit Depot, Parris Island, South Carolina, Speech, Drill Instructor School, Parris Island, South Carolina: 18 June 1954.
11. U.S. Marine Corps, Drill Instructor School, Recruit Training Regiment, Marine Corps Recruit Depot, Parris Island, South Carolina, Introduction to the Recruit Training Approach, Detailed Lesson Outline (Parris Island: 10 September 1976), p. 7.
12. Ibid., p. 9.
13. Ibid., p. 10.
14. U.S. Marine Corps, Marine Corps Recruit Depot, Parris Island, Command Chronology for the Period 1 January 1966 to 30 June 1966, (Parris Island: 1966), p. 12-1.
15. U.S. Marine Corps, Marine Corps Recruit Depot, Parris Island, Command Chronology for the Period 1 January to 30 June 1967, (Parris Island: 1967), p. 12-3.

16. Commandant of the Marine Corps, "Letter of Instruction for the 11-Week Male Recruit Training Program," Letter A03C22-log, 14 September 1971, p. 1.

17. U.S. Marine Corps, Marine Corps Recruit Depot, Parris Island, Command Chronology for the Period 1 July to 31 December 1973 (Parris Island: 1974), p. VI-3.

18. U.S. Marine Corps, HQMC Study and Field Survey to Develop the Optimum Post-RVN Basic Sequential Training Program, (Washington: November-December 1970), p. I-3.

19. Captain W. A. Carter, "The Recruiter and Boot Camp," Marine Corps Gazette, March 1973, p. 50.

20. U.S. Marine Corps, Male Recruit Training, Marine Corps Order 1510.13A, (Washington: 30 April 1974), p.2.

21. Bernard E. Trainor, "The Personnel Campaign Issue is no Longer in Doubt," Marine Corps Gazette, January 1978, p. 25.

22. General Louis H. Wilson, "Statement, U.S. Congress, House, Military Personnel Subcommittee of the House Armed Services Committee on Recruiting and Recruit Training, Hearings." (Washington: U.S. Govt. Print. Off., 1976), p. 123-124.

23. U.S. Marine Corps, Marine Corps Recruit Depot, Parris Island, Command Chronology for the Period 1 July to 31 December 1976, (Parris Island: 1977), p. XII-1.

24. Interview with Major W. C. Fife III, General Training Section, Individual Training Branch, Training Division, Operations and Training Department, Headquarters, U.S. Marine Corps, Washington, DC, 7 February 1978.

## CHAPTER XVI

### SKILL QUALIFICATION TRAINING FOR ENLISTED MARINES

#### Background

The purpose of this chapter is to describe the evolution of enlisted skill qualification training from 1946 to 1977. Enlisted skill qualification training is defined as that individual training which qualifies a Marine, at an entry-level, for his or her first primary military occupational specialty (MOS). MOS training provided subsequent to awarding of a Marine's first primary MOS is considered career training.

Prior to World War II skill qualification training was conducted for the most part within operating units since attendance at formal schools was kept to a minimum.<sup>1</sup> With the outbreak of the War and the rapid expansion of the Marine Corps this system was no longer adequate. There was an increasing demand to provide MOS qualified Marines to units, particularly those that were deployed to the Pacific. As a consequence, Marine Corps schools were enlarged and greater reliance was placed on Army and Navy schools and civilian institutions.<sup>2</sup> By 1943 over 40% of the Marines who graduated from recruit training went on to a formal school.<sup>3</sup> Most of these schools were conducted at Training Centers established at New River, North Carolina, and San Diego (Camp Elliot), California. Those Marines not sent to formal

schools were assigned to "ground duty" and went through infantry replacement training at the two Training Centers mentioned above, or at a Training Center located in Somoa.<sup>4</sup> The length of formal schools varied in 1942 from two to 36 weeks with a median of 10 weeks.<sup>5</sup> By 1945 the median length had decreased to eight weeks while the longest course was not only 27 weeks and the shortest three.<sup>6</sup> Infantry replacement training fluctuated during the War from four to 12 weeks.<sup>7</sup>

#### 1946-1953

Between 1946 and 1950, the Marine Corps' strength dropped from its World War II peak of over 485,000 to just a little under 75,000.<sup>8</sup> The Training Centers were disbanded though some schools remained as part of base or support commands. Many Marines were again going directly from recruit training to their units, where initial MOS training was provided on the job. The depleted size of the Corps did not allow for the "luxury" of large separate organizations designed to provide formal skill qualification training.

Shortly after the outbreak of hostilities in Korea in June 1950 the Marine Corps again started to increase in size. The press to fill out the 1st Provisional Marine Brigade and later the 1st Marine Division and 1st Marine Aircraft Wing precluded any return to the large training structure of World War II. However, two Infantry Training Regiments were established in 1953 to provide individual combat training (ICT) to enlisted Marines. One regiment was located

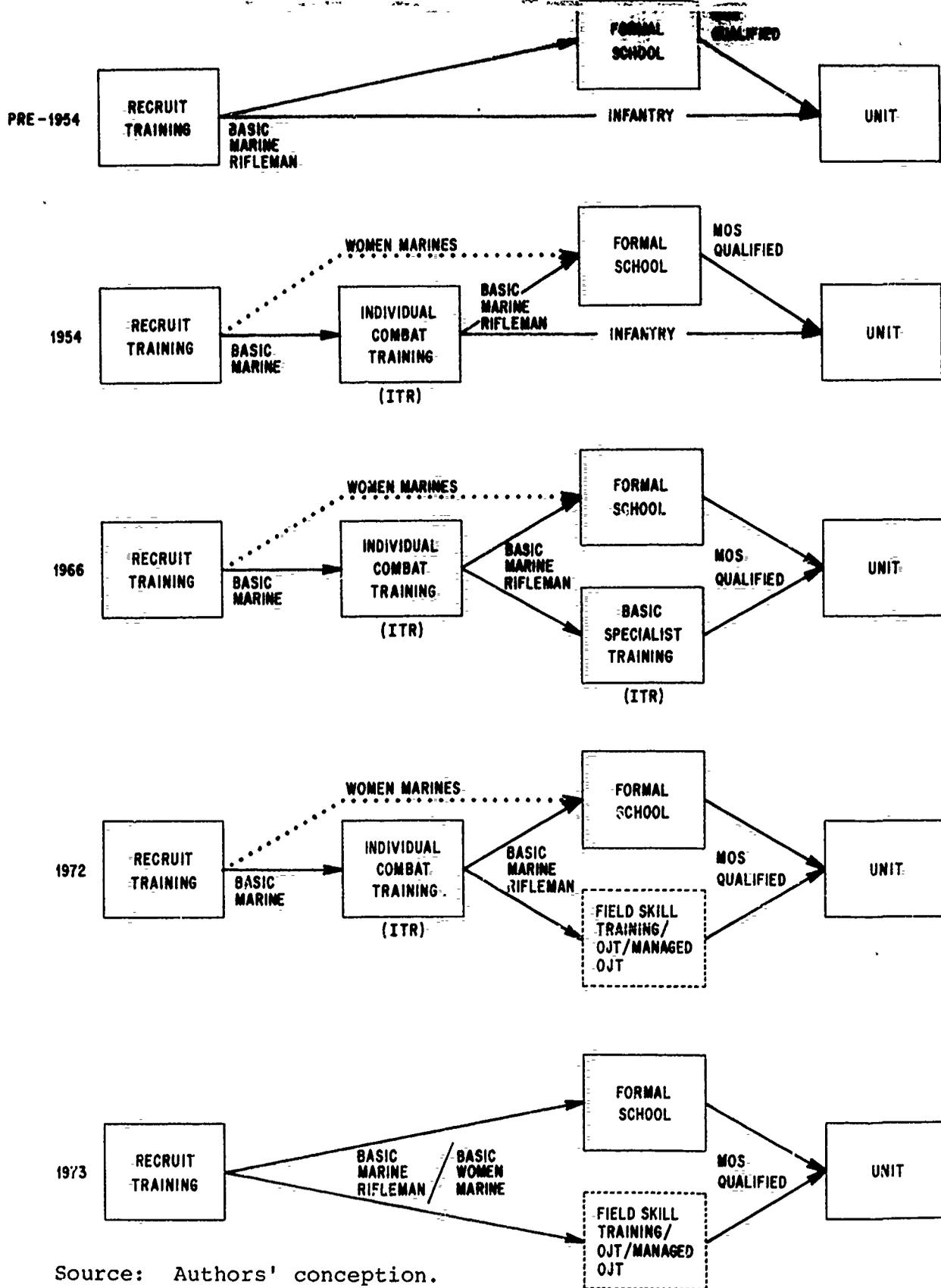
at Camp Geiger, North Carolina, and the other at Camp Pendleton, California. The purpose of individual combat training was "...to ensure that all Marines possessed the individual combat skills necessary to survive on the battlefield."<sup>9</sup> Experience during the early days of the Korean War had demonstrated that all Marines needed at least the rudiments of infantry training.

#### 1953-1965

The Korean War made clear the necessity of maintaining a ready Marine Corps. The Congress, therefore, revised the National Security Act of 1947 with the enactment of Public Law 416 which provided that: "The United States Marine Corps...shall be so organized to include not less than three combat divisions and three air wings, and such other land combat, aviation and other services as may be organic therein."<sup>10</sup> Thus, the Marine Corps for the first time in its history could look to the future with an assurance of relative stability.

Training in this period continued much as it had during the Korean War, with every enlisted male Marine going through recruit training followed by individual combat training, and then to either a formal or on-the-job training to qualify in an MOS. (A history of entry-level "training tracks" is shown in Figure 16-1.) The length of recruit training was changed several times from 1953 to 1965, but its average duration was about 11 weeks. Individual combat training was

FIGURE 16-1  
HISTORY OF ENTRY-LEVEL "TRAINING TRACKS"



Source: Authors' conception.

initially four and later five weeks long. A Marine receiving on-the-job training was required to have a minimum of 90 days experience before he or she was considered qualified and assigned an MOS. The largest percentage of Marines to receive on-the-job training were infantrymen. Formal schools varied in length from several weeks to nearly a year.

#### 1966-1971

The requirement for operating forces to provide on-the-job training meant that units had to divert personnel and equipment from regularly assigned tasks and mission-oriented training to that of training Marines for qualification in an MOS.<sup>11</sup> Additionally, the presence of unqualified [in their MOS] Marines in the operating forces impacted adversely on the efficiency and combat effectiveness of the Fleet Marine Forces."<sup>12</sup> As a result of the deployment of major forces to Vietnam in 1965 and 1966 an urgent need developed to find a substitute for on-the-job training. To meet this need the Marine Corps initiated the basic specialist training (BST) program.\* This program replaced on-the-job training with a four week intensive training course, the content of which was controlled by Headquarters, U.S. Marine Corps. With the institution of basic specialist training all Marines reported to their first unit qualified in their respective MOSs. Eventually some formal school training was supplemented by basic specialist training in order to speed up the flow of trained personnel to units in Vietnam.

By 1970 approximately 60% of all recruits received their skill qualification training through basic specialist training.<sup>13</sup>

Basic specialist training for infantrymen was provided by the Infantry Training Regiments. Much of the rest of this training was conducted at Schools Battalion, Camp Pendleton.

Collectively, recruit training, individual combat training, and skill qualification training (whether conducted in formal schools or basic specialist training courses) were known as basic sequential training.\*

#### 1972-1977

With the withdrawal of Marine Corps units from Vietnam in 1970 and 1971, and subsequent reductions in authorized strength, the Corps found it was unable to support the lengthy basic sequential training program. The traditional 60/40 percent split between operating and supporting forces was in danger of being inverted. To overcome this "tooth to tail" problem it was decided, after a long and detailed study, to eliminate the basic specialist training program. To avoid returning to the pre-1966 unstructured on-the-job training program, two substitute programs were introduced. These programs are still in existence. The first is field skill training (FST), a program where designated operational commands, subject to Headquarters, U.S. Marine Corps approved

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\*As might be expected, this proliferation of terms caused some confusion. For example, BST could mean either basic specialist training or basic sequential training.

performance objectives and training time restrictions, conduct skill qualification training. Field skill training provides some standardization and guidance, though it still requires operational assets and places Marines into units before they are MOS qualified. The second program is managed on-the-job training (MOJT). This program is conducted by designated supporting commands, in accordance with Headquarters, U.S. Marine Corps programs of instruction or syllabi. Formal instruction and practical application in an actual job situation are combined.

In 1973, recruit training and individual combat training were united into a single course of instruction under the control of the recruit depots. The Infantry Training Regiment on the East Coast was disestablished. The Regiment on the West Coast was redesignated the Infantry Training School (ITS) and assigned the mission of providing skill qualification training to infantrymen who are not trained in the field skill training program.\* Prior to the combining of these two programs, recruit training was 9 weeks and

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\*Only the 1st and 2d Marine Divisions were designated to conduct field skill training. Marines assigned to the 3d Marine Division in Okinawa or the 1st Marine Brigade in Hawaii had to receive their training in the continental U.S. to comply with existing Federal legislation. The 1st Marine Brigade did conduct FST for a short period in 1974 and 1975 when the legislation was modified, but reverted to the original arrangement because of the difficulties of conducting a separate program. All infantrymen assigned to shipboard detachments, barracks, and posts and stations from recruit training go through the Infantry Training School. The 1st Marine Division has occasionally made arrangements with the Infantry Training School to provide instructors and train Division Marines there. However, this has always been a local arrangement and the students and instructors were chargeable to the 1st division.

individual combat training was four weeks. Through elimination of dual administrative "check in" and "check out" time and deletion of several hours of duplicative instruction, one week was saved, making the combined course 11 weeks.

Approximately 30% of the Marine graduating from recruit training in 1977 were MOS qualified through the field skill and managed on-the-job training programs. Another 2% of Marines received their initial MOS training via on-the-job (OJT) training. These were from small population MOSs where formal instruction would not be cost-effective. Only 2% of new Marines had civilian acquired skills which were adaptable or directly applicable to a specific MOS without further training. In such cases an MOS was awarded immediately following recruit training. The remainder of Marines received their skill qualification training in formal schools.

NOTES

1. Kenneth W. Condit, et al., Marine Corps Ground Training in World War II (Washington: Historical Branch, G-3, Headquarters, U.S. Marine Corps, 1956), p. 32.
2. Ibid., p. 33.
3. Ibid., p. 207.
4. Ibid., p. 177, 181, and 182.
5. Ibid., p. 205.
6. Ibid., p. 206
7. Ibid., p. 176-195.
8. U.S. Marine Corps Marine Corps School, Marine Corps History (Quantico, Virginia: March 1966), p. 62 and 64.
9. U.S. Marine Corps, HQMC Study and Field Survey to Develop the Optimum Post-RVN Basic Sequential Training Program (Washington: December 1970), p. I-3.
10. U.S. Laws, Statutes, etc., "Navy-Marine Corps," U.S. Code, Title 10--Armed Forces, 1970 ed. (Washington: U.S. Govt. Print. Off., 1971), sec. 5013.
11. U.S. Marine Corps, "Basic Specialist Training," working paper A03C1-cha, 12 May 1969, p. 1.
12. Ibid.
13. HQMC Study and Field Survey to Develop the Optimum Post-RVN Basic Sequential Training Program, p. I-3.

## CHAPTER XVII

### POST ENTRY-LEVEL TRAINING OF ENLISTED MARINES

1946-1977

#### Background

The purpose of this chapter is to describe the evolution of enlisted entry-level training in the Marine Corps from 1946 to 1977. Enlisted post entry-level training is defined as that individual training provided to a Marine subsequent to completion of:

(1) Recruit Training

(2) Training required for the awarding of the Marine's first primary military occupational specialty (MOS).

Separate directives were used until 1974 to prescribe the post entry-level training required for enlisted men and enlisted women. For this reason, different sections will be used in this chapter to describe the post entry-level training programs for men and women

#### Post Entry-Level Training of Enlisted Men\*

In 1946, Marine Corps Order Number 146, Basic Training for Enlisted Men was in effect. This order, published on 17 March 1939, made commanders responsible for the proficiency, specified by grade and subject, of all men who had been members of their

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\* Table 17-1 contains a listing of post entry-level training directives for men covering the period 1939-1977.

TABLE 17-1

POST ENTRY-LEVEL TRAINING DIRECTIVES  
FOR MEN 1939-1977

NUMBER	TITLE	DATE
Marine Corps Order No. 146	Basic Training for Enlisted Men	17 March 1939
Letter of Instruction No. 1445	Basic Training of Enlisted Men	15 April 1941
Letter of Instruction No. 1544	Training of Enlisted Men	13 February 1948
Marine Corps General Order No. 10	Individual Training of Enlisted Men	1 February 1949
Marine Corps General Order No. 83	Individual Training of Enlisted Men	24 January 1951
Marine Corps General Order No. 154	Individual Training of Enlisted Men	13 May 1954
Marine Corps General Order No. 186	Individual Training of Enlisted Men	2 June 1955
Marine Corps Order 1510.2	Individual Training of Enlisted Men	*
Marine Corps Order 1510.2A	Individual Training of Enlisted Men	11 June 1957
Marine Corps Order 1510.2B	General Military Training of Enlisted Men	22 July 1959
Marine Corps Order 1510.2C	General Military Training of Enlisted Men	30 January 1962
Marine Corps Order 1510.2D	General Military Training of Enlisted Men	22 June 1964

\*The Marine Corps adopted a new directive system in 1956. Marine Corps General Order No. 186 was redesignated Marine Corps Order 1510.2. The contents of the order did not change.

TABLE 17-1 (cont.)

POST ENTRY-LEVEL TRAINING DIRECTIVES  
FOR MEN 1939-1977

NUMBER	TITLE	DATE
Marine Corps Order 1510.2E	General Military Training for Enlisted Men	27 May 1968
Marine Corps Order 1510.2F	Individual Training of Enlisted Men	14 May 1970
Marine Corps Order 1510.2G	Individual Training of Enlisted Men	17 June 1972
Marine Corps Order 1510.2H	Individual Training of Enlisted Marines*	16 July 1974

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\*Marine Corps Order 1510.2H is applicable to both enlisted men and enlisted women.

commands for six months or longer. Privates, privates first class, and field musics were to be knowledgeable in twenty subjects, most of which related to infantry weapons and tactics. Corporals were expected to possess a familiarity with an additional six subjects. Staff sergeants, platoon sergeants, technical sergeants, gunnery sergeants and first sergeants were to have knowledge of eleven subjects beyond the basic twenty. Marines in certain types of units were exempted from selected subjects. For example, Marines in signal, artillery, antiaircraft, and chemical units were not expected to be provided training in scouting and patrolling, the hand grenade, or squad tactics. However, except where conditions made it impracticable, all commanders were to ensure their men were capable of marching 12 miles with full equipment. Marine shipboard detachments were expected to carry out the training requirements to the extent permitted by their ships' routines. The provisions of Marine Corps Order Number 146 did not apply to Marines once they had qualified in the subjects if they were performing recruiting duty, duty in staff offices, supply depots or other base support activities and if such training interfered with their regular duties.

Grades were to be kept on a "Training Record Card" and then entered into service record books.

The impact of Marine Corps Order Number 146 was greatest on non-Fleet Marine Force organizations prior to World War II because of the control and uniformity it achieved.<sup>1</sup> The Fleet

Marine Force was busily engaged in unit training before and during the War and as a consequence the Order did not have the same effect. Non-Fleet Marine Force commanders became deeply involved in supporting the war effort after 1942 and it is unlikely many units were able to fully comply with the Order.\*

Marine Corps Order Number 146 was superceded on 15 April 1947 by Letter of Instruction Number 1445, Basic Training of Enlisted Men. This new directive contained most of the basic provisions of its predecessor, though a five hour time limit was placed on the 12 mile march and a requirement for physical conditioning training was added. The subject of leadership was also added for Marines in the grade of corporal and above. Personnel at posts and stations, and security detachments at aviation establishments were to receive training sufficient to ensure they were able to fire machineguns, rocket launchers, and 60 mm and 81 mm mortars. A stock of such weapons had been provided to these organizations. Interestingly, no live fire was authorized.

The Letter of Instruction stated that the aim of all the required training was ". . . the establishment and maintenance of a high level of discipline, smartness, physical fitness, self-confidence, initiative, leadership, and pride in the Marine Corps."<sup>2</sup> The directive went on to say that every Marine

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\*This the authors' conclusion based on the fact Marine Corps Order Number 146 is noted as being a significant directive for non-FMF units in the pre-war period, but no mention is made of it in discussions of training from 1942-1945 in Marine Corps Ground Training in World War II.

should be prepared ". . .for actual combat to the extent that none shall lack the knowledge of how to protect himself against hostile action and how to employ individual weapons effectively against the enemy."<sup>3</sup> This is the first expression of the purpose and objectives of post entry-level training since Marine Corps Order Number 146 contained no similar statements.

Evidence of concern for the state of training in 1946 is expressed in Letter of Instruction Number 1445 by the following:

. . .reports of the Inspector General indicate that many commanding officers are not making full use of the time that could be utilized for training by devoting an unwarranted amount of time to police work, organized athletics, standing by for inspections, or in care and cleaning of individual equipment. It is considered that except for actual instruction, the latter activity is a responsibility of the individual to be performed outside of training hours. It is further considered that periodically the normal routine might justifiably be altered for short periods to provide intensive training. During such periods any resulting reduction in liberty will not be detrimental to moral provided instruction is well prepared and presented in an interesting manner. Extra liberty as a reward for achievement of above-average proficiency might well be used as an incentive to such a program.<sup>4</sup>

Training record cards were still to be used. A requirement was added, however, to keep them on file for one year. Commanding officers were admonished to give examinations and not to indiscriminately give markings of "satisfactory" based merely on observations.

On 13 February 1948, Letter of Instruction Number 1544, Training of Enlisted Men was promulgated. The subjects required to be taught by this directive were similar to those

of Letter of Instruction 1445. Four hours of practice daily with the trumpet or drum, however, was now prescribed for field musics. Also, it was noted that, "Because of the necessary stress laid upon their primary mission, certain organizations . . . would be required to conduct training only on a limited number of subjects."<sup>5</sup> Organizations were classified into ten types for training purposes. These were:

- (1) The Fleet Marine Forces
- (2) Ships' Detachments
- (3) The Recruiting Establishment
- (4) Reserve Activities
- (5) Recruit Depots
- (6) Service Schools
- (7) Staff Headquarters
- (8) Supply Establishments
- (9) Aviation Units and Stations
- (10) All Other Activities

The importance of periodic inspections was pointed out and all commanding officers were charged to maintain a 5 1/2 day work week with Saturday mornings devoted primarily to inspections.

Letter of Instruction 1544 expanded somewhat the objective of individual training, stating that it was ". . . to have every officer and man qualified to perform duty in the Fleet Marine Force in the field."<sup>6</sup> The full meaning of this objective was outlined by the following:

. . . every Marine shall be trained to employ the individual protective measures necessary to nullify or reduce the effectiveness of enemy action and shall have a familiarity with the effective employment of infantry weapons against the enemy in accordance with elementary combat principles.<sup>7</sup>

The requirement to keep training record cards was retained, though, now oral, practical or written examinations were permitted to be used to determine grades.

Significant changes were made to post entry-level training with the promulgation of Marine Corps General Order Number 10 on 1 February 1949. Subjects were classified as "basic," "technical" or "tactical." Organizations were separated into the following categories:

Category A. Marine detachments afloat, security forces in Naval Shore Activities, and other Marine barracks.

Category B. Recruit depots (exclusive of recruits), service schools (exclusive of students), and troop training units.

Category C. Headquarters Battalion, Headquarters, U.S. Marine Corps; Headquarters, Department of the Pacific; Marine Corps Depots of Supply at Philadelphia, San Francisco, Norfolk and Barstow; separate area disbursing offices; and Marine Corps air stations.

Category D. Recruiting establishments, Marine aviation detachments at Naval Stations, regular personnel on duty with reserve activities, and all regular establishment activities not covered elsewhere.

Category E. The Fleet Marine Forces, recruits in training, reserve activities, and students.

Training was directed in this General Order based on a Marine's grade and the organization he was assigned to. For example, the eleven "basic" subjects were only taught to privates first class who were assigned to Category A, B and C organizations.

The objectives of post entry-level training remained the same in this General Order as in the directive it replaced, though, for the first time recruit training was identified as the foundation of the standards of general military proficiency.

The most far reaching change incorporated into General Order Number 10 was the inclusion of "General Subjects" into promotion examinations. Commanders were directed to provide Marines with every opportunity to qualify for promotion, and Marines were advised to utilize the Guidebook for Marines in a self study program to prepare for examinations.

Marine Corps General Order Number 83 was published on 24 January 1951 and contained only minor changes to its predecessor. Among these were the addition of an enclosure detailing the maintenance, custody, disposition and marking instructions for the individual training record. Several units were placed in different training categories and a few subjects were modified. The classification of "technical" subjects was deleted leaving "basic" and "tactical" subjects. Basic

subjects increased from 11 to 16.\* General Military Subjects Tests (GMSTs) were only to cover the "basic" subjects Marines in the "theater of operations" (Korea) were to be exempted from testing by separate directive. Recognition was made of the nature of the war in Korea by the addition of the requirement that all Marines "...be thoroughly indoctrinated in the principles of individual operation and survival in snow and extreme cold."<sup>8</sup>

On 13 May 1954 Marine Corps General Order Number 154 was issued. Changes, again, were minor. The "M-1 Carbine" was deleted from the list of "basic" subjects while "History and Tradition of the U.S. Marine Corps" and "Atomic Defense" were added. This made for a total of 17 subjects. A requirement for motor vehicle accident prevention instruction, night training, civil affairs/military government indoctrination, a food sanitation training program, and an information program were added under a paragraph titled "Special Instructions." This paragraph had been used for the most part in previous directives to remind commanders of training requirements, such as swimming and marksmanship, covered by separate orders.

In 1956 the Marine Corps adopted a new directives system. As a result, Marine Corps General Order Number 154 was redesignated as Marine Corps Order 1510.2 There was

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\*This is the first in a series of increases in the "basic" or general military subjects which were to continue almost unbroken for nearly 20 years.

no change to the contents of the Order.

Marine Corps Order 1510.2A, Individual Training of Enlisted Men, published on 11 June 1957, appears to have been revised based on the concept that Marines could and should do more training. The system which categorized organizations in accordance with their supposed capability to conduct training was deleted. The order required every Marine, no matter where he was assigned or what his occupational field, to maintain proficiency in all general military subjects, which were increased in number from 17 to 21. Noncommissioned officers were required to be proficient in an additional six subjects. Training on machine guns, rocket launchers, and mortars was no longer required, however, for all Marines.

For the first time in this series of orders, Marines were encouraged to consider correspondence courses when other means of training were not available.

"Fire Fighting" and "Rescue Operations" were added to the training requirements listed in the "Special Instructions" paragraph. Many of the previously separate requirements in this paragraph were grouped into an "Information Program." This Program included the new subject "Code of Conduct."

All instructions regarding training records were removed from this order and placed in a personnel directive.

On 22 July, Marine Corps Order 1510.2B was issued with a new title, General Military Training of Enlisted Men. Revisions were minor. Two more subjects were added to the

ever increasing number of General Military Subjects and one subject was added to those required of noncommissioned officers. The Order also stated that all Marines were qualified for duty in infantry units as a result of their basic training. Swimming qualification standards were now included in the Order as an enclosure.

The reference to all Marines being qualified infantrymen was removed from Marine Corps Order 1510.2C, General Military Training of Enlisted Men published on 30 January 1962. However, the need for a Marine to be able to defend himself on the battlefield was spelled out as follows:

The purpose of training is to place on any battlefield a combat ready Marine, imbued with the will and ability to fight, and a firm determination to win. Historically the key to Marine success has been the competency of all Marines to be "Marines first," to know the fundamentals of their profession as well as their specialty. The thorough training of each Marine grows increasingly more important with the possibility of independent action on widely separated fronts and with advances in the nuclear age. With the very real possibility of separation of forces and independent actions, the aviation specialist, the supply man, the clerk, or the technician, must be able to defend himself, his installation, or his unit, and to counter-attack if necessary.

The Order directed commanders to excuse from training those Marines known to be proficient in the subject being taught. An additional General Military Subject was added, the total now being 24. One subject was added for those required of noncommissioned officers and four for staff noncommissioned officers.

On 22 Jule 1964, Marine Corps Order 1510.2D, General Military Training of Enlisted Men was published. It included the following modifications from the previous order. A suggested training syllabus for non-swimmers was added as an enclosure. A physical readiness test was included in the order, though no mandatory testing requirement was indicated. The directive prohibited use of students in any dangerous or degrading aspects of POW compound training. General Military Subjects were reduced to 16, the first reduction in nearly 13 years.

While Marine Corps Order 1510.2D was in final staffing at Headquarters, U.S. Marine Corps, a detailed study on the general military training of enlisted men was received from the Commanding Officer of Marine Corps Supply School, Camp Lejeune, North Carolina.<sup>10</sup> This study concluded that previous directives were lacking guidance insofar as indicating the purpose of training, the degree of knowledge desired, and the scope of the subject matter. The study also concluded that the standardized tests available did not accurately evaluate the material taught. The Headquarters position was that the study had merit in regards to testing, but that many of the other problems identified had been solved in the new order about to be promulgated.\*

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\* A review of Marine Corps Order 1510.2D failed to substantiate this position.

Marine Corps Order 1510.2E, General Military Training of Enlisted Men was issued on 27 May 1968. The number of subjects required for all Marines made a dramatic increase from 16 to 24, though 12 subjects were made non-applicable to Marines with hard skill aviation military occupational specialties.

The influence of the war in Vietnam on training was reflected in the requirement to emphasize the following subjects in order to develop a Marine Corps-wide knowledge of operations in Southeast Asia:

- (1) Theater orientation
- (2) Nature of the enemy
- (3) Revolutionary Development
- (4) Standards of personal conduct
- (5) Enemy mine and boobytrap techniques.

Downproofing training was introduced as an adjunct to swimming training.

A major revision was made to post entry-level training with the publication of Marine Corps Order 1510.2F, Individual Training of Enlisted Men of 14 May 1970.

The reason for the changes was pointed out in a Headquarters, U.S. Marine Corps memorandum which stated that:

The requirement to revise and update MCO 1510.2E evolved from a recognition of the declining effectiveness of our programs for the individual training of enlisted men at the unit level. Reports by the IG, training inspections, and other sources

revealed that the current general military subjects training program has, over the years, become a repository for an amount and variety of training which overwhelms the capacity of most units to accomplish. The 59% failure rate suffered by major commands during FY69 IG training management inspections is a direct result of an imposition of too many training requirements which are unrelated to unit requirements. Commanders do not have the training time available to devote to improving individual proficiency in a large number of subjects for which there is no requirement in the unit mission.<sup>11</sup>

The new order shifted the emphasis in individual training "...from a variety of subjects of general application to specific subjects of purposeful application."<sup>12\*</sup> This more definitive approach identified skill and knowledge requirements in 11 essential subjects. These requirements were expressed as objectives. Essential subjects were defined as those needed "...to enable a Marine to survive on the battlefield, function effectively in garrison, and instinctively practice those personal and professional traits that distinguish him as a Marine."<sup>13</sup> In addition to essential subjects there were three other categories or types of training. These were mission-oriented, career, and related training. Career training was further separated into military occupational specialty and leadership training.

Commanders were directed to test their Marines' proficiency in essential subjects annually; to exempt them from

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\*A count of all categories of training in the previous order revealed that enlisted Marines were to be versed in 41 subject areas, noncommissioned officers in 50, and staff non-commissioned officers in 58.

training in subjects in which they demonstrated proficiency; and to reevaluate them at least quarterly in those subjects which they failed. The results of these and all other evaluations were to be entered in an Individual Training Record, which was to accompany a Marine's service record book upon transfer.

Two years of experience with the revised training program revealed a need for certain modifications. Marine Corps Order 1510.2G, published on 17 June 1972 incorporated these modifications the most significant of which were the inclusion of physical fitness training as the 12th essential subject; the provision for the Marine Corps Institute to provide standardized essential subjects tests; alignment of the Order to support a new recruit training syllabus; and establishing the Guidebook for Marines as one of the prime references for the essential subjects. The definition of essential subjects was changed with the substitution of "sustain himself on the battlefield" vice "survive on the battlefield."\* The new definition was intended to better reflect the idea that all Marines were expected to be able to participate in defensive operations and limited offensive operations.

On 21 May 1971 a change was published to Marine Corps Order 1510.2G. The change's most important feature was to

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\*The term "survive" was thought to be too limited. Yet, it was recognized that the "every Marine a rifleman" concept was not intended to infer that every Marine must possess the full range of skills required of a Marine with an infantry military occupational specialty.

allow senior noncommissioned officers (master sergeants, and sergeants major) to be evaluated in essential subjects and leadership subjects by no means other than observation.

Marine Corps Order 1510.2H, Individual Training of Enlisted Marines was published on 16 July 1974. This new directive provided policy guidance and implementing instructions for the post entry-level training of both enlisted men and enlisted women. The order reduced the essential subjects from 12 to 10 for men and increased them for women from 5 to 8. Performance objectives for all these essential subjects were derived from objectives contained in the programs of instruction (POI's) for recruit training. This was to ensure that initial proficiency in the essential subjects was developed in recruit training. Required annual testing in essential subjects was eliminated, except as required by separate directives for physical fitness and marksmanship. Though the frequency of evaluations was no longer prescribed, commanders were still charged with the responsibility to ensure their Marines remained proficient in essential subjects.

The new order also deleted the requirement to keep specific training records. Commanders were to keep only those they deemed necessary. Instructions for conducting water survival and swimming training were deleted from the order, also.

Mission-oriented, career, essential subjects and related training were placed in a priority listing. This listing was

not meant to imply the accomplishment of some training requirements to the exclusion of others as a matter of routine, but was intended to accommodate conditions wherein efforts, time, and assets had to be diverted from less immediate training requirements to more pressing demands.

The changes made in Marine Corps Order 1510.2H resulted from a Headquarters, U.S. Marine Corps study of training priorities and from proposals made by representatives of the Fleet Marine Forces during a conference held at Headquarters early in December 1973. Recommendations made by attendees at the Fifth Annual Marine Corps Training Conference, held during the last week of February 1974, were also incorporated.

#### Post Entry-Level Training of Enlisted Women\*

The earliest directive addressing the post entry-level training of enlisted women that could be located by the Central Files Section, Headquarters, U.S. Marine Corps was published on 21 July 1949. This directive was Marine Corps Memorandum 80-49, Individual Training of Enlisted Women. Since Memorandum 80-49 does not indicate it cancels or supercedes any directive there is a strong possibility that it is the first directive to provide guidance on the post entry-level training of enlisted women.

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\*Table 17-2 contains a listing of post entry-level training directives for women covering the period 1949-1977.

TABLE 17-2

## POST ENTRY-LEVEL TRAINING DIRECTIVES FOR WOMEN 1949-1977

NUMBER	TITLE	DATE
Marine Corps Memorandum 80-49	Individual Training of Enlisted Women	21 July 1949
Marine Corps General Order No. 90	Individual Training of Enlisted Women	8 May 1951
Marine Corps General Order No. 155	Individual Training of Enlisted Women	28 May 1954
Marine Corps Order 1510.1	Individual Training of Enlisted Women	*
Marine Corps Order 1510.1A	Individual Training of Enlisted Women	8 April 1957
Marine Corps Order 1510.1B	General Military Training of Enlisted Women	12 September 1960
Marine Corps Order 1510.1C	General Military Training of Enlisted Women	21 February 1962
Marine Corps Order 1510.1D	General Military Training of Enlisted Women	2 February 1965
Marine Corps Order 1510.1E	Individual Training of Enlisted Women	11 January 1972
Marine Corps Order 1510.2H	Individual Training of Enlisted Marines**	16 July 1974

\* The Marine Corps adopted a new directive system in 1956. Marine Corps General Order No. 155 was then redesignated Marine Corps Order 1510.1. The contents of the order did not change.

\*\* Marine Corps Order 1510.2H is applicable to both enlisted men and enlisted women.

Memorandum 80-49 stated that the objective of all training women received was

...to develop pride and self-confidence, discipline, physical fitness, initiative, leadership, teamwork, and proficiency in the individual and in the unit. The basic aim of individual training is to qualify every enlisted woman to perform duties in support of Marine Corps activities.<sup>14</sup>

The Memorandum also stated that recruit training provided the foundation of these standards of proficiency and that follow-on training, practical experience, and self study were the means of their ultimate attainment.

Commanders were directed to qualify women in their commands annually in certain general military subjects. For privates and privates first class there were eight subjects, and for noncommissioned officers an additional four. This requirement could be reduced or waived entirely for women whose primary duty did not permit attendance of scheduled training. The promotion testing program for women included a General Military Subjects test.

A training record card was to be maintained on page 7 of each woman's service record book.

All activities were to conduct monthly classes on world affairs.

Marine Corps Memorandum 80-49 was replaced on 8 May 1951 by Marine Corps General Order Number 90, Individual Training of Enlisted Women. The changes instituted by this new Order were minor. The most significant was the increase

of general military subjects from eight to 10. General Order Number 90 was modified on 21 January 1952 with the requirement to conduct at least two discussion periods per month on current world affairs, and United States and Marine Corps policies. The Order was modified again on 5 September 1952 with the addition of the requirement to provide all women with at least two hours of indoctrination each year in atomic defense.

On 28 May 1954, Marine Corps General Order Number 155, Individual Training of Enlisted Women was issued. This new Order raised the number of general military subjects from 10 to 12. A "Special Instructions" paragraph was incorporated which listed the following additional five training requirements: (1) information program, (2) motor vehicle accident prevention program, (3) security indoctrination program, (4) supply economy indoctrination, and (5) food sanitation training program.

General Order Number 155 also slightly revised the objectives of individual training for women.

The objective of training for women Marines is to develop and maintain individual and unit pride, self-confidence, discipline, physical fitness, initiative, leadership, teamwork, and proficiency in the individual and in the unit. The basic aim of individual training is to orient every enlisted woman in her overall role as a Marine to ensure a firm understanding of the principles of the military system and the proper application of these principles.<sup>15</sup>

In 1956 the Marine Corps adopted a new directive system. As a result, Marine Corps General Order Number 155 was redesignated Marine Corps Order 1510.1. There were no changes to the contents of the Order.

On 8 April 1957, Marine Corps Order 1510.1A, Individual Training of Enlisted Women was published. This Order gave commanders the authority to waiver training in basic subjects for all women Marines who successfully passed training proficiency tests. Commanders were also authorized to require participation in correspondence courses when the number of women was too small to justify a complete training program. Marine Corps Order 1510.1A eliminated the "information type" subjects which had been included in the previous directive.

Marine Corps Order 1510.1B, General Military Training of Enlisted Women published on 12 September 1960 revised the objectives of individual training for women Marines.

Upon initial entry into the Marine Corps, every woman Marine receives Basic Military Training in two phases. The first phase, Recruit Training, develops discipline, physical fitness, good grooming habits, personal pride, and love of Corps and Country. The second phase, General Office Procedure Training, provides the women Marine with a general knowledge of military office procedures, since the majority of her duty assignments will require some knowledge of these matters.

Upon the foundation of Basic Military Training described above, further general military training is conducted by commanding officers. This further training is conducted to ensure the

retention and improvement of those attitudes, habits, and skills acquired during Basic Military Training. This order is designed primarily to assist commanding officers in the planning and execution of general military training programs.<sup>16</sup>

The number of general military subjects was increased to 13 and swimming qualification standards were added. Five "special subjects" were also included under a paragraph of that title.

The tone of the information and guidance contained in Marine Corps Order 1510.1B leans toward femininity. For example, two of the new general military subjects were "Grooming and Wearing of Civilian Clothing" and "Decorum and Dignity." A reference for the first subject was How to be Attractive by Joan Bennett, and one for the latter subject was Vogue's Book of Etiquette. Though women were reminded of the need for physical fitness the Order noted that "Certain goals of physical training for men, such as strengthening muscle groups to withstand the demands of service in the field, are not appropriate for women Marines and will not be pursued."<sup>17</sup> Women Marines did not need to worry about field training, however, because the Order said they could participate as "spectators" only. Commanders were encouraged to establish programs to expand the educational background, vocational skills, and cultural interests of women Marines.

Marine Corps Order 1510.1C, General Military Training of Enlisted Women published on 21 February 1962 made only

very minor changes to the previous directive. The general military subjects were increased to 15 and the format of the order was modified slightly.

On 2 February 1965 Marine Corps Order 1510.1D, General Military Training of Enlisted Women was promulgated. The number of general military subjects was reduced to five. An additional three were required for noncommissioned officers.

The more definitive approach to training which had been instituted for enlisted men in 1970 was adopted for the training of enlisted women with the promulgation of Marine Corps Order 1510.1E, Individual Training of Enlisted Women on 11 January 1972. This new directive paralleled the order for enlisted men except that the five essential subjects for women were different.

Marine Corps Order 1510.2H, Individual Training of Enlisted Marine published on 16 July 1974 was applicable to both enlisted men and women, with recognition of the differences in essential subjects. Marine Corps Order 1510.1H was described in the previous section of this chapter.

NOTES

1. Kenneth W. Condit, et al., Marine Corps Ground Training in World War II (Washington: Historical Branch, G-3, Headquarters, U.S. Marine Corps, 1956), p. 101.
2. U.S. Marine Corps, Basic Training of Enlisted Men, Letter of Instruction Number 1445 (Washington: 15 April 1947), p. 1197.
3. Ibid.
4. Ibid.
5. U.S. Marine Corps, Training of Enlisted Men, Letter of Instruction Number 1554 (Washington: 13 February 1948), p. 1660.
6. Ibid.
7. Ibid.
8. U.S. Marine Corps, Individual Training of Enlisted Men, Marine Corps General Order Number 83 (Washington: 24 January 1951), p. 8.
9. U.S. Marine Corps, General Military Training of Enlisted Men, Marine Corps Order 1510.2C (Washington: 20 January 1962), p. 1.
10. U.S. Marine Corps, Commanding Officer, Marine Corps Supply School letter 6:RHM:ghm/1500, "General Military Training," (Camp Lejeune, North Carolina: 12 March 1964).
11. U.S. Marine Corps, Assistant Chief of Staff, G-3, Headquarters, U.S. Marine Corps Memorandum A03C20-awz, "Individual Training of Enlisted Men," (Washington: 16 April 1970), p. 1.
12. Ibid.
13. U.S. Marine Corps, Individual Training of Enlisted Men, Marine Corps Order 1510.2F (Washington: 14 May 1970), p. 2.
14. U.S. Marine Corps, Individual Training of Enlisted Women, Marine Corps Memorandum 80-49 (Washington: 21 July 1949), p. 1.

15. U.S. Marine Corps, Individual Training of Enlisted Women, Marine Corps General Order Number 155 (Washington: 28 May 1954), p. 1.

16. U.S. Marine Corps, General Military Training of Enlisted Women, Marine Corps Order 1510.1B (Washington: 12 September 1960), p. 1.

17. Ibid., p. 2.

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APPENDIX A

PROFESSIONAL MILITARY EDUCATION (PME) SELECTION

## APPENDIX A

### PROFESSIONAL MILITARY EDUCATION (PME) SELECTION

Subsequent to the issuance of ALMAR 107 (CMC 151300 2 Jul 77) and the publication of the results of the three professional military education selection boards, many questions have arisen regarding the new process used, and the criteria applied. Representatives of HQMC who have visited the field have returned carrying with them the impression that many misconceptions exist in the officer population about professional military education. Some officers have equated selection as tantamount to pre-selection for promotion. Some have taken non-selection as a signal to "seek other employment". These conceptions are erroneous. Let's take a look at the selection process as it exists today.

To begin with, it is agreed that the basis for any selection should focus on demonstrated performance, anticipated potential and the individual's career development. These factors were considered in the old school selection process; however, they were not always given their proper weight. Also a board chaired by the Deputy Secretary of Defense which examined the standards of excellence in professional military schools indicated that we were selecting officers too late in their careers, and in some cases too late in their grade levels. The Marine Corps did not benefit sufficiently from the expertise gained in the former instance and the individual had little opportunity to apply his skills while in the appropriate grade in the latter instance. In addition, one of the usual criteria for selection was that an officer be "eligible for transfer" which in effect tended to limit those eligible for selection to the "mover" population. That is to say, the officer was eligible and available coincident with the convening date of the school. Within this moving period also came demands for superior officers to fill positions on joint staffs and other key billets. As a result, often the officer who was best fitted for school was placed in the key billet slot, and another "mover" who was somewhat less qualified went to the school.

The problem we faced was to insure that all officers were afforded an opportunity for selection and that those best meeting the selection criteria were selected. The problem was also compounded by Congressional and OSD constraints imposing time-on-station requirements which limited our assignment flexibility.

Although the mechanics of the selection process will not be addressed in detail, some aspects are worthy of note. After this transition year the officers considered will be advanced into the eligibility zone by promotion year groups and remain so until all have had an opportunity for selection and have moved out of the eligibility zone. Time-on-station will not be a selection consideration since, after selection, officers will attend schools as available during the next three years. Assignment to schools will take precedence over all other assignments. Requests for deferral will not normally be approved. In addition to the primary selectee list there will be an "alternate" list selected. The names of the officers on this list will not be published to the field.

For this year's board and with next year's, if it is determined that the primary selectees are not able to attend school for time-on-station or other reasons, they are moved to a "deferred" list and replaced as a primary attendee by the number one alternate in their category (Ground, Naval Aviator/Naval Flight Officer/Supply/Data Systems/Judge Advocates, in the case of Top Level Schools and Ground, Naval Aviator/Naval Flight Officer, Aviation control in the case of Intermediate and Career Level Schools). During this transitional year in an effort to ensure equity and to recognize outstanding officers, commanding generals, district directors, and commanding officers of separate commands were authorized to recommend waivers for PME consideration, in exceptional cases, for those officers above the respective Intermediate and Career Level School eligibility zones.

Reserve officers must have sufficient obligated service following completion of the school for which selected. Reserve officers whose EAS was less than required to be considered by the PME Board were required to request an EAS extension if they desired to be considered by the appropriate level PME Board.

If an alternate, designated to become a primary, is unavailable to attend this year, the alternate will be moved to the deferred list since the officer below on the alternate list will be offered the school seat the primary had been unable to fill. Alternates not assigned as a primary or deferred because of their position on the alternate list will be sent a congratulatory letter with a copy to their Promotion Board Case File. If eligible, such officers will be considered for selection with promotion year groups next year.

The deferred list will be provided to the next year's selection board to ensure that the quality of performance has been maintained. If the performance quality remains unchanged, the officer will be designated as a primary selectee without further consideration. The board will then select officers to fill the remaining quotas.

In summary, all officers are being afforded an opportunity to be selected for professional military education. The system, which has been developed to ensure that the best fitted are selected, and even when not able to attend, that those best fitted will be recognized. The fact that the system provides for deferment allows us to avoid the time-on-station constraints. Above all, the new process recognizes demonstrated performance, anticipated potential, career development and weighs them accordingly.<sup>1</sup>

NOTES

1. Handout from Career Planning Branch, HQMC to Students at Marine Corps Command and Staff College in February 1978, undated.

APPENDIX B

A GUIDE TO THE MARINE CORPS  
MANPOWER MANAGEMENT PROCESS

NOTE: Information in this Appendix has been extracted for the most part from the Interrelationships of Automated Manpower Systems Supporting the USMC Manpower Management Process, a report prepared for the Marine Corps in 1976 by the Potomac General Research Group.

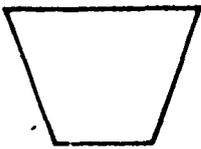
TABLE OF CONTENTS

SECTION	I - DETERMINING MARINE CORPS FORCE STRUCTURE
	II - DETERMINING MANPOWER REQUIREMENTS
	III - MANAGEMENT OF OFFICER AND ENLISTED FORCES
III.A	- ACCESSIONS
III.B	- CLASSIFICATION
III.C	- ASSIGNMENTS

KEY TO SYMBOLS



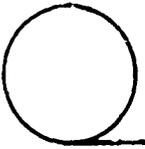
AUTOMATED OPERATION OR PROCESS



MANUAL OPERATION OR PROCESS



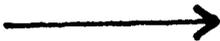
DOCUMENT OR REPORT



MAGNETIC TAPE



PUNCHED CARD OR CARD FILE

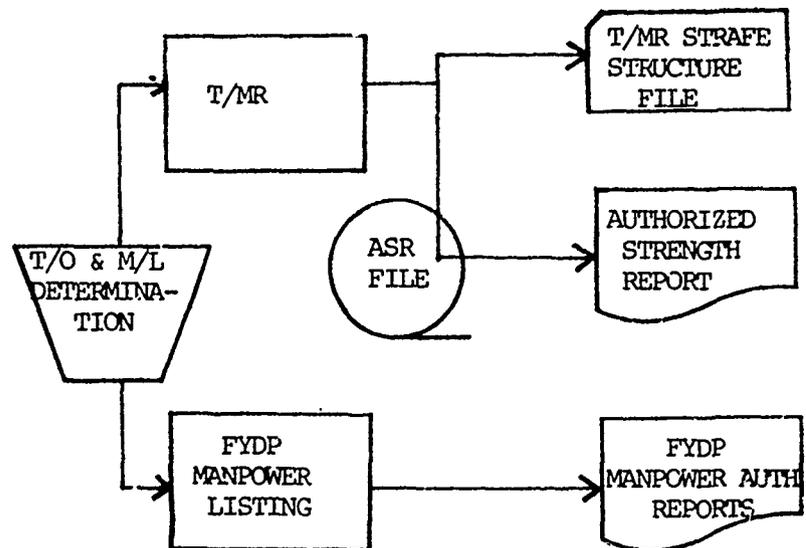
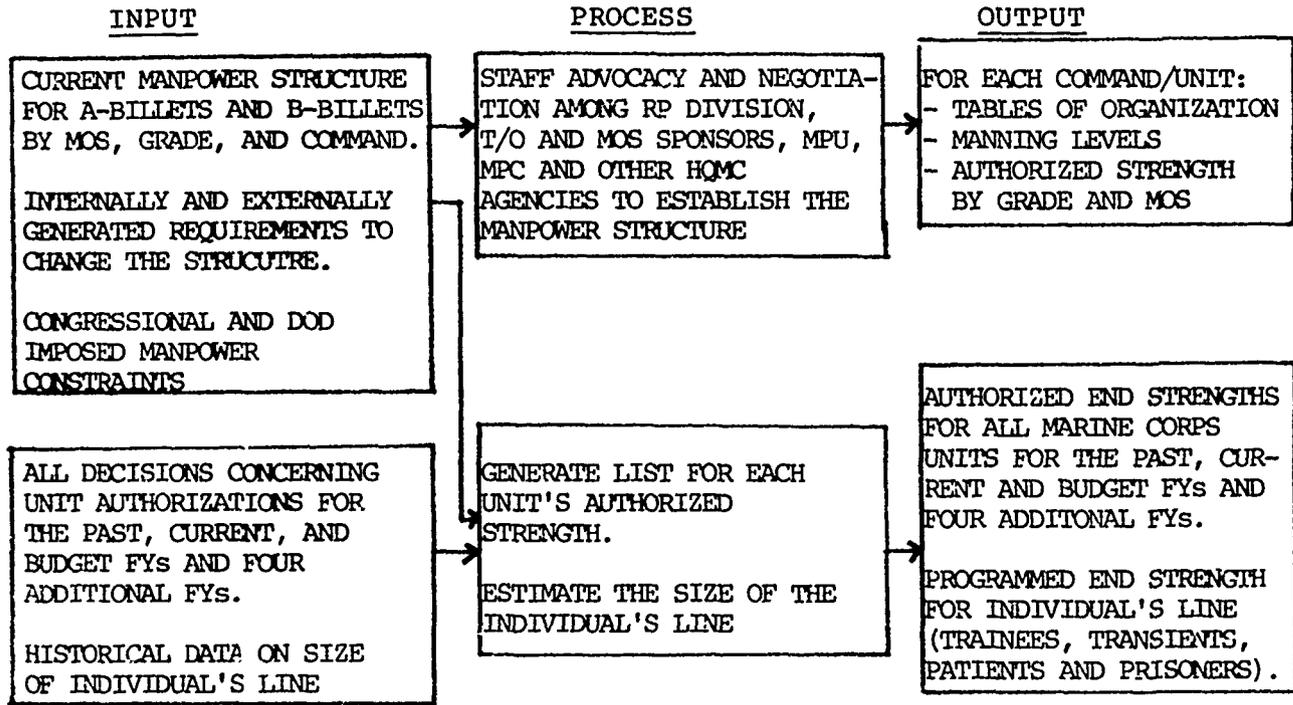


OPERATIONS SEQUENCE OR DATA FLOW

SECTION I  
DETERMINING MARINE CORPS  
FORCE STRUCTURE

Determination of force structure translates the force level authorized the Marine Corps into unit Tables or Organization (T/Os). The Marine Corps' ability to staff these Tables of Organization is influenced by end strength and budgeting limitations. Staff levels within these constraints are expressed as Unit Manning Levels (M/Ls). In non-Fleet Marine Force (FMF) commands, Manning Levels are the same as the Tables of Organization. In Fleet Marine Force Commands the Manning Levels are percentages of the Tables of Organization. The product of the combination of the FMF and non-FMF Manning Levels is the Authorized Strength Report (ASR). The Authorized Strength Report provides a detailed listing of the manpower authorized (in terms of grades and military occupational specialties) by Monitored Command Code (MCC). The Authorized Strength Report reflects Congressional and Office of the Secretary of Defense program constraints as outlined in the Five Year Defense Plan (FYDP) Listing. The Listing provides program budget detail regarding unit as well as individual's line (trainees, transients, patients, and prisoners) authorizations for the past year and current year, and a projection for an additional five years into the future. Data in the Listing provides program budgeting limitations when the Marine Corps' force structure is being determined.

SECTION I  
DETERMINING MARINE CORPS  
FORCE STRUCTURE

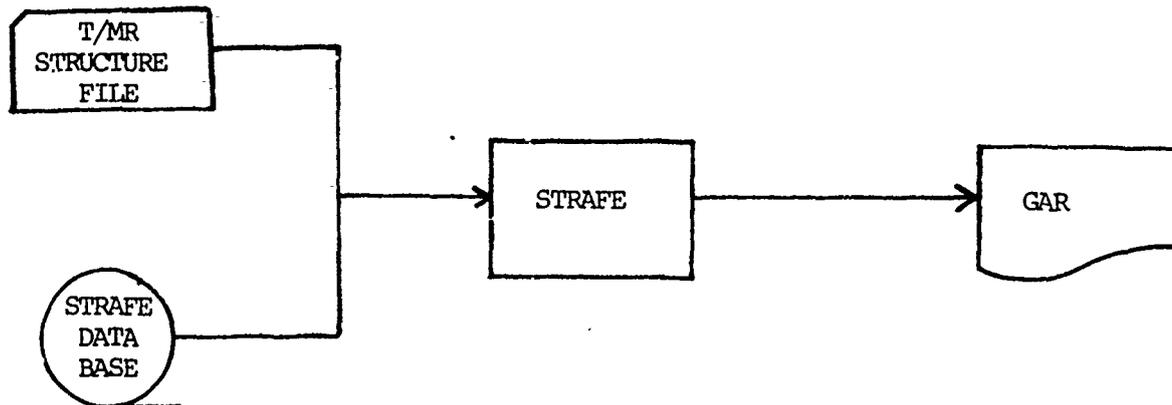
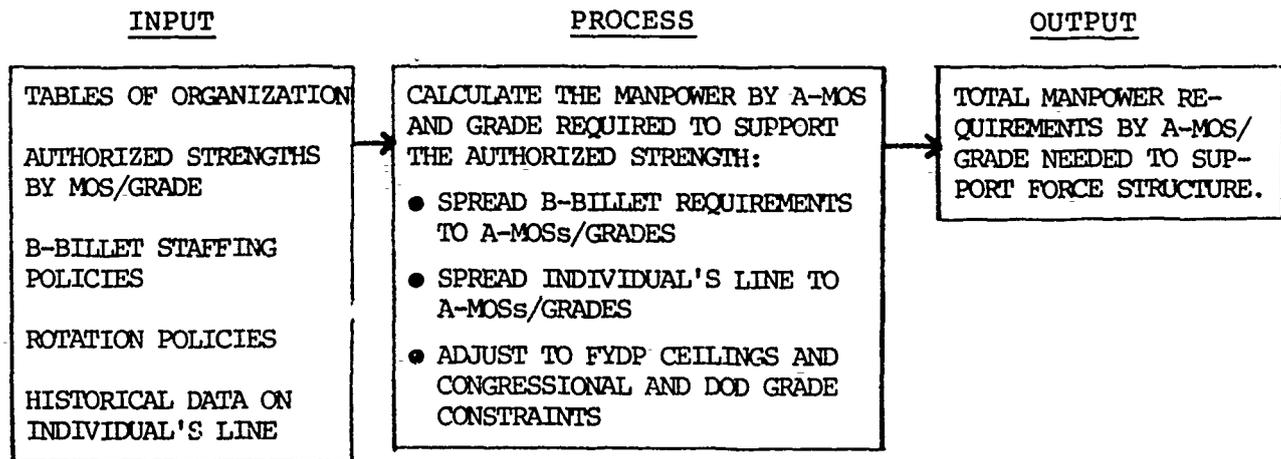


SECTION II  
DETERMINING MANPOWER REQUIREMENT

After the Marine Corps force structure has been established for a specified future fiscal year, the manpower requirements needed to support that structure must be determined. An automated model, the Simulator for Total Requirements Authorization Forecast and Evaluation (STRAFE), is employed to forecast for a projected period the desired grade and military occupational specialty (MOS) mix. This forecast is stated in terms of primary (A) military occupational specialties for enlisted Marines and billet military occupational specialties for officers. The forecast includes the overhead of the individual's line (trainees, transients, patients, and prisoners), needed to support all authorized billets. The STRAFE model is able to spread B-billets and the individual's line to primary military occupational specialties as well as to make the best allocation within Five Year Defense Plan (FYDP) constraints. The document which STRAFE produces is called the Grade Adjusted Recapitulation (GAR). It is important to note that the Grade Adjusted Recapitulation represents the desired composition of the Marine Corps regardless of the actual personnel inventory.

SECTION II

DETERMINING MANPOWER REQUIREMENT



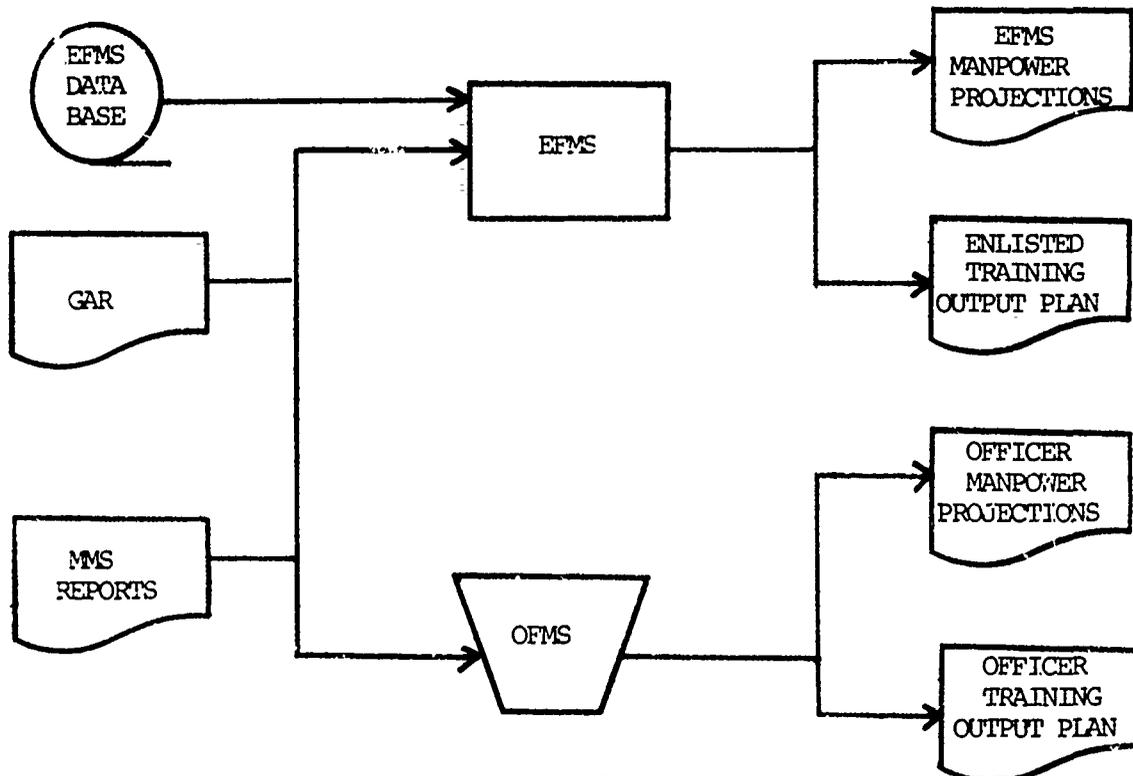
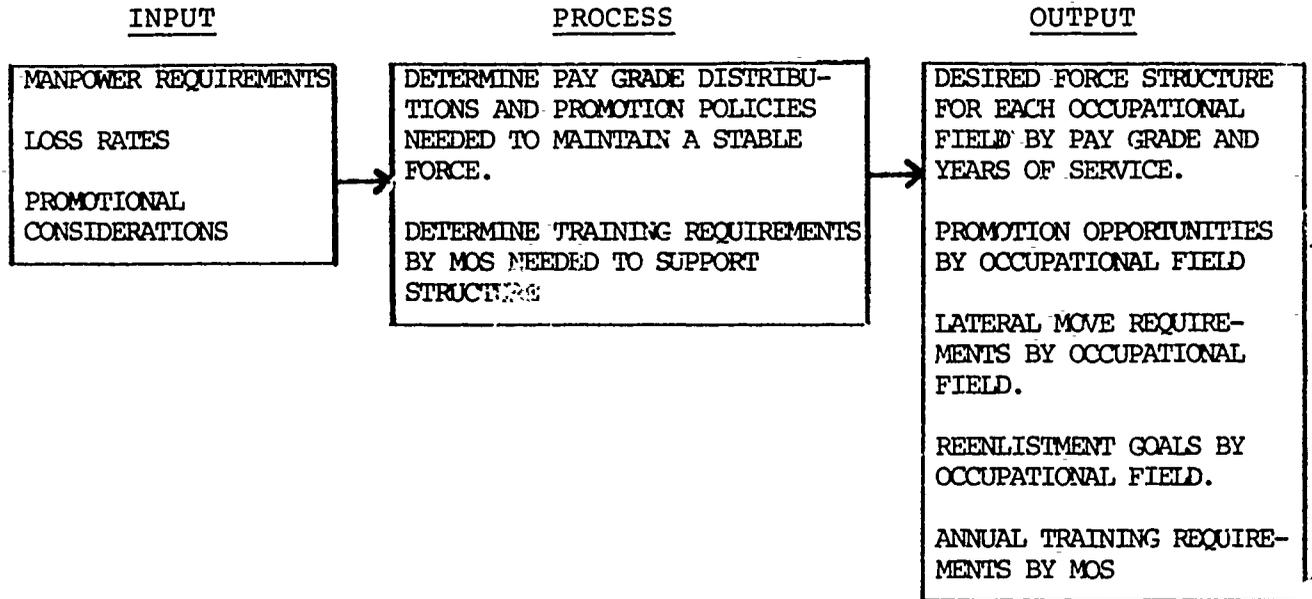
### SECTION III

#### MANAGEMENT OF OFFICER AND ENLISTED FORCES

Management of the officer and enlisted forces involves the development of accession, assignment and classification, training and education, lateral move, retention, promotion, and termination of service plans for each occupational field. These plans are based on grade structure and a years of service distribution. The goal is to meet Marine Corps manpower needs while equalizing promotion opportunities among occupational fields. The principal documents used in developing these plans are the Grade Adjustment Recapitulation (GAR) and Manpower Management System (MMS) reports. For the enlisted force an automated model, the Enlisted Force Management System (EFMS), is used to compute data necessary for the plans. This task is done manually for the officer force. Projections include the number of Marines who should be in each occupational field by grade and years of service; the number to be promoted to each pay grade within an occupational field by the years of service required for promotion; the lateral moves required by pay grades needed to maintain a proper force mix; and the training requirements by military occupational specialty (MOS) necessary to support the Marine Corps' force structure.

SECTION III

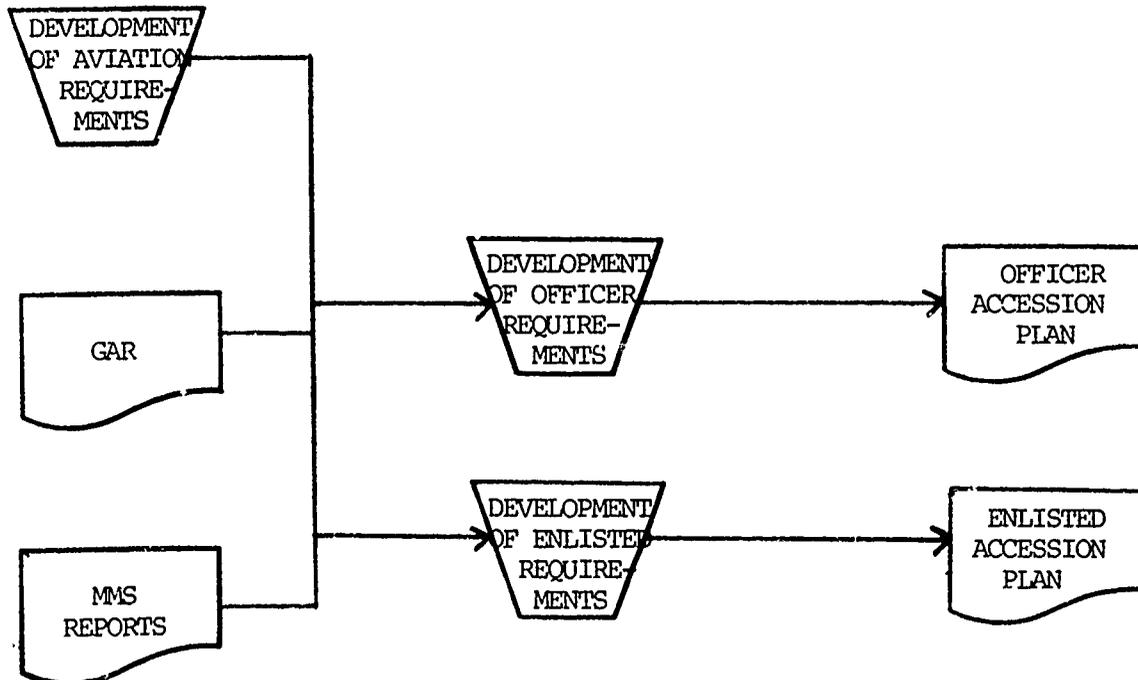
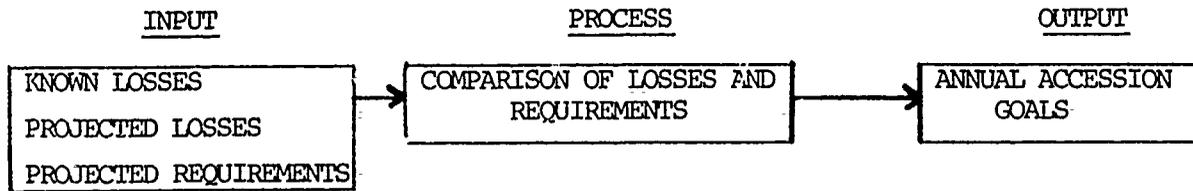
MANAGEMENT OF OFFICER AND ENLISTED FORCES



SECTION III.A

ACCESSIONS

Accession plans are prepared based on Grade Adjusted Recapitulation (GAR) requirements, and known and projected losses derived from Manpower Management System (MMS) statistics. The impact of other planned future events is also considered. The actual computations comparing losses and requirements is done manually.



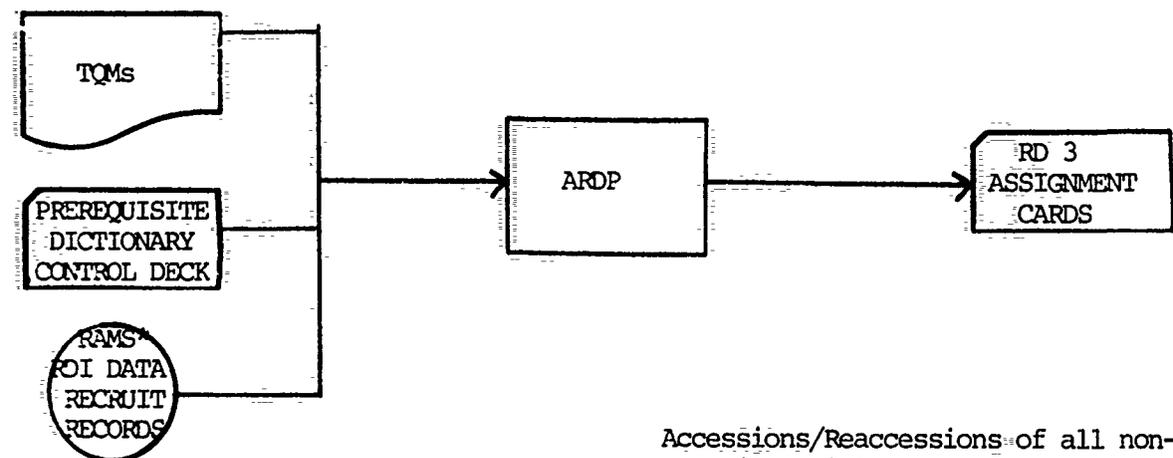
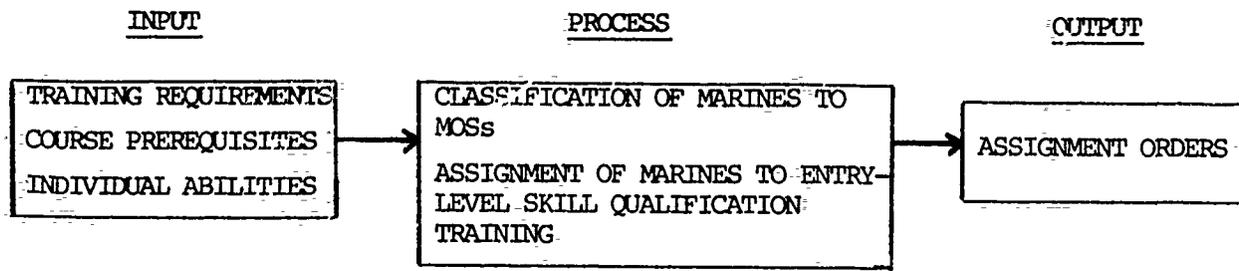
SECTION III.B  
CLASSIFICATION

Enlisted Marines are classified shortly before graduation from recruit training in a procedure known as the Automated Recruit Distribution Process (ARDP). This process, with the assistance of the Recruit Distribution Model (RDM), obtains the best match between military occupational specialty (MOS) prerequisites and individual characteristics and aptitudes as reflected in classification test scores, scores on special tests for electronics, and reports of civilian education achieved. Information on graduating recruits is obtained from the Recruit Accession Management Subsystem (RAMS). Prerequisites (including requirements for entry-level training courses) are obtained from military occupational specialty sponsors and the Training Division. This data is maintained in the Prerequisite Dictionary Control Deck. Quotas to entry-level training courses are inputted from Training Quota Memorandums (TQMs). The Automated Recruit Distribution Process produces RD3 Assignment Cards which are sent to the recruit depots where orders are prepared in an automated process. Some enlisted Marines are later reclassified through lateral movement between military occupational specialties.

A manual process is used by monitors to classify officers. This process is based upon the Numerically Adjusted

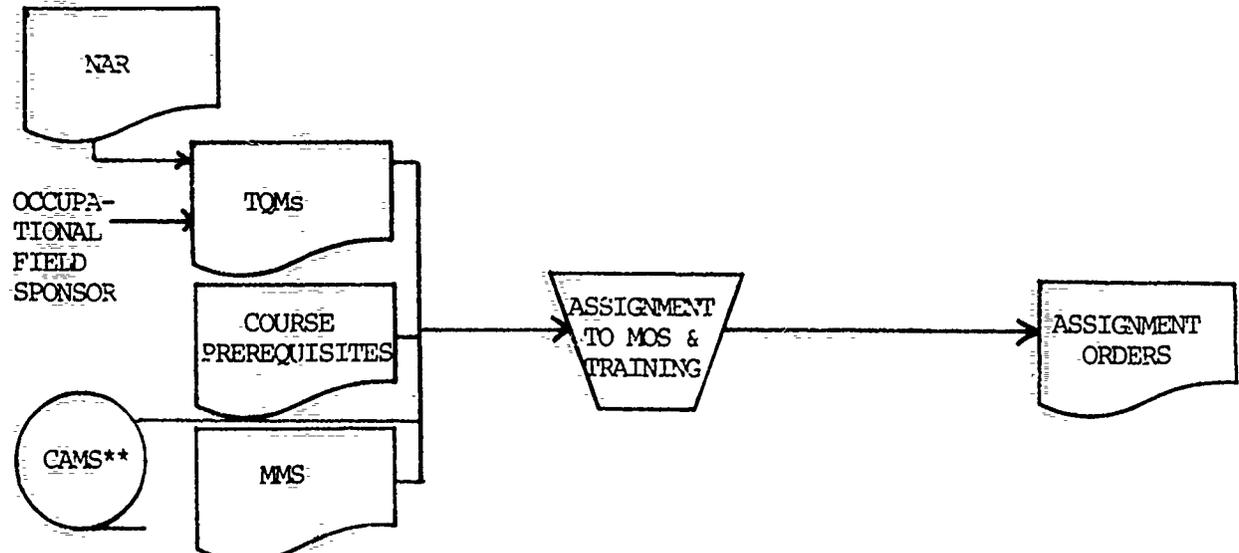
Recapitulation (NAR) requirements which are reflected in Training Quota Memorandums. (The Numerically Adjusted Recapitulation provides a summation of the individual's line and the fair-sharing of the numerical difference between structure billets and authorized billets.) The classification process takes into account individual characteristics and abilities as reflected in classification test scores. This information is available to monitors from the Manpower Management System (MMS) and the Commissioning Accession Management Subsystem (CAMS). Course prerequisites are also considered.

SECTION III.B



\* Recruit Accession Management Subsystem

Accessions/Reaccessions of all non-recruit enlisted records is accomplished through the Headquarters Management Subsystem.



\*\* Commissioning Accession Management Subsystem

## SECTION III.C

### ASSIGNMENTS

The assignment process, and inherently the classification process, translate manpower requirements, based on force structure, to the actual inventory of Marines in order to fill those requirements as closely as possible.

Necessary to the assignment process is the establishment of staffing goals. The Authorized Strength Report (ASR) and the Staffing Priorities Bulletin provide the basis for the setting of staffing goals, though both of these documents deal with force structure requirements, not the actual inventory of Marines.\* Staffing goals distribute the inventory of Marines to each Monitored Command Code (MMC) by grade and military occupational specialty (MOS) to provide equitable staffing in accordance with staffing priorities, authorized strengths, and estimated size of the individual's line. The calculations of set goals for officers is performed manually by the Officer Assignment Branch. The Enlisted Assignment Branch is assisted by the Staffing Goal Model.

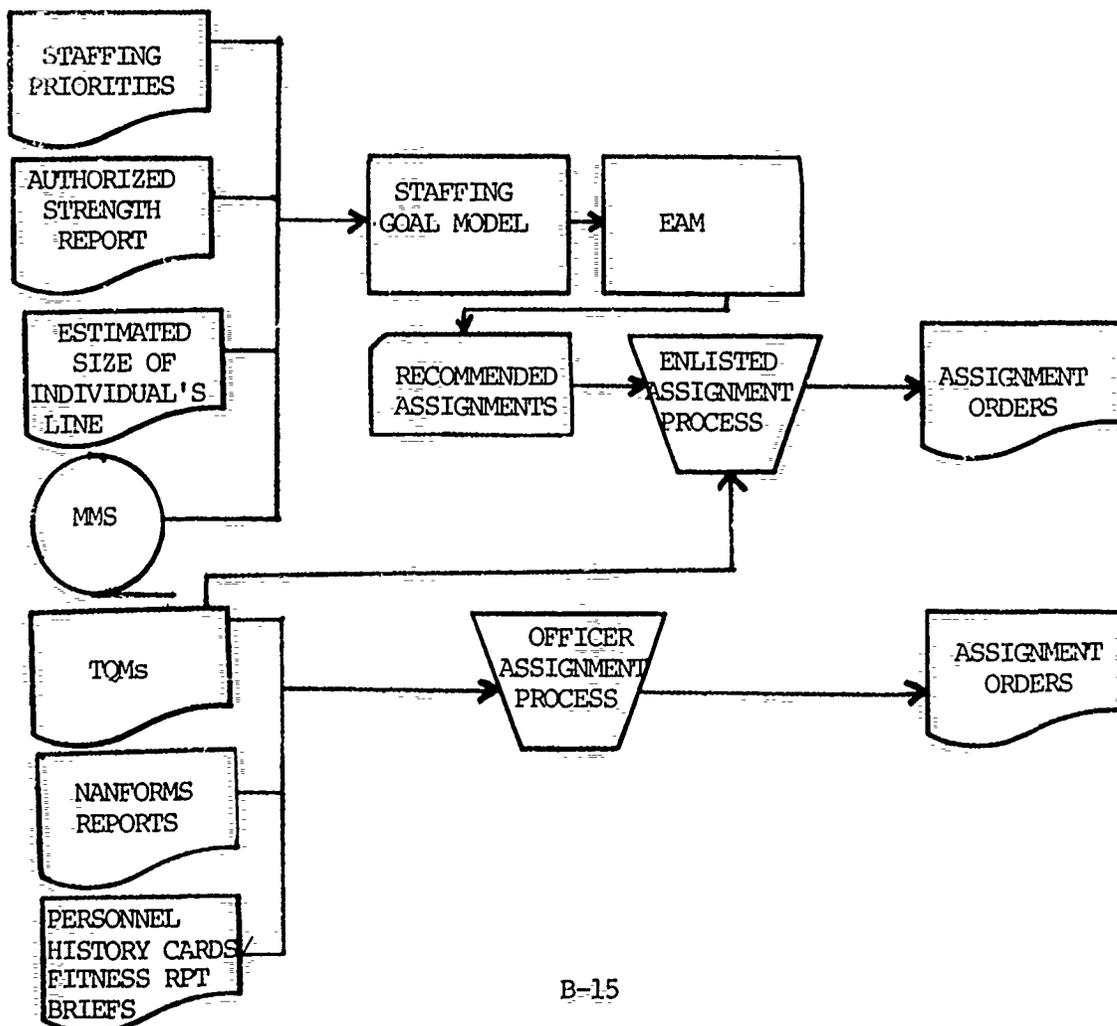
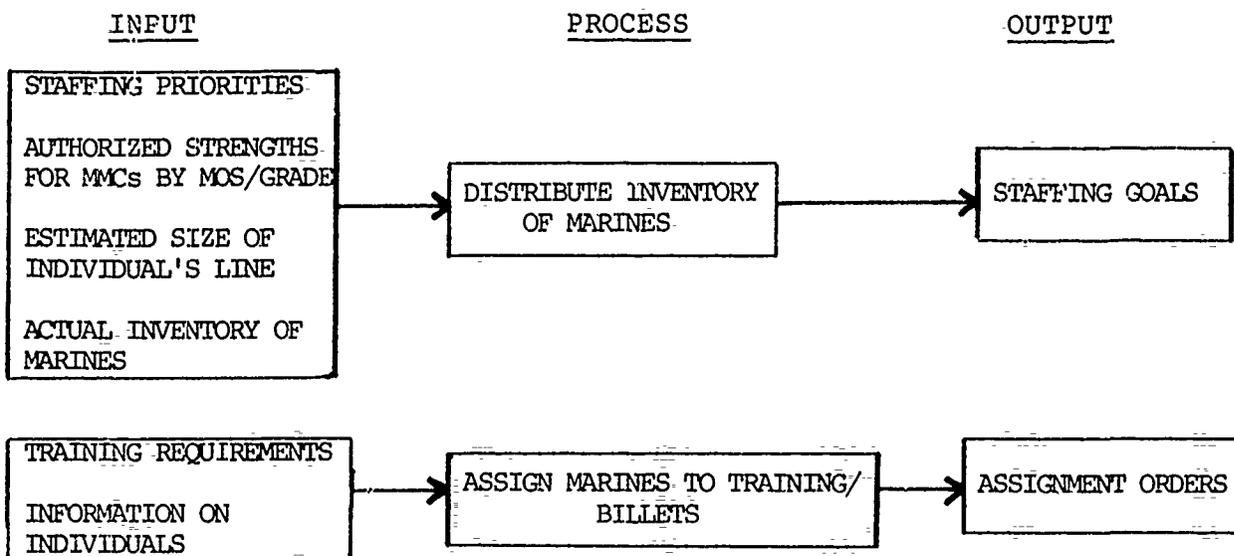
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\* There are three staffing priority categories:

1. Excepted commands - staffed at 100 percent of authorized strength in all grades and MOSs.
2. Priority commands - staffed at 100 percent of authorized strength in gross numbers. When the command is authorized skills and grades in which the Marine Corps is short, the command will receive its proportionate share of those short assets and the deficiency will be compensated for by a staffing average in related grades and skills which are in the Marine Corps. If there are no related skills, the requirements will not be staffed.
3. Proportionate share commands - staffed with proportionate share of personnel remaining after staffing of first two categories.

The assignment process itself involves filling the requirements reflected in the staffing goals. Other inputs to the process are provided by the Manpower Management System (MMS) and training requirements reflected in Training Quota Memorandums (TQMs). For officers additional information is derived from personal history cards, fitness report briefs, and for Naval Aviators and Naval Flight Officers from the Naval Aviators Naval Flight Officer Management System (NANFORMS). Assignment of officers is done manually. Enlisted assignment monitors are assisted by the Enlisted Assignment Model (EAM).

SECTION III.C

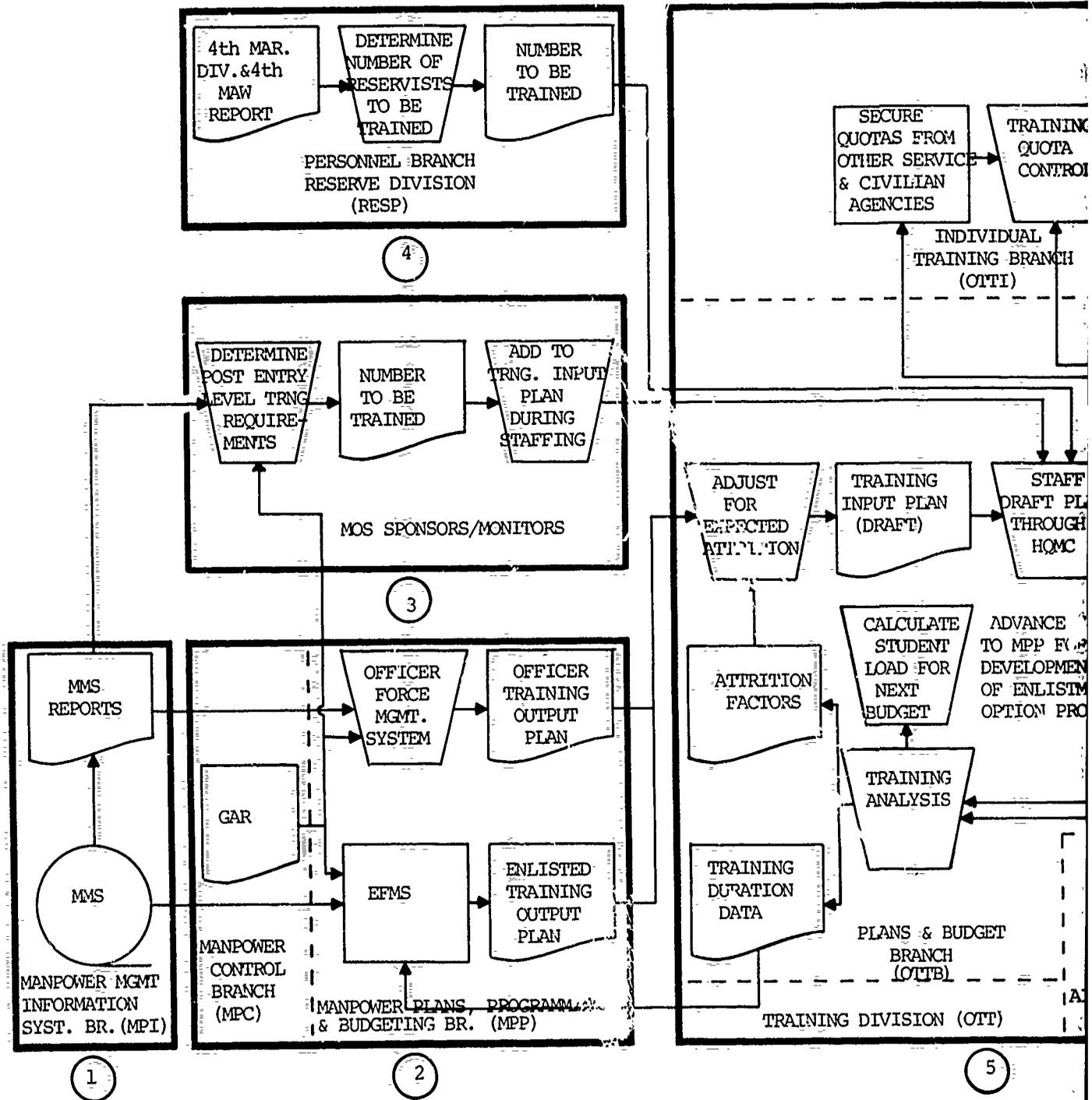


APPENDIX C

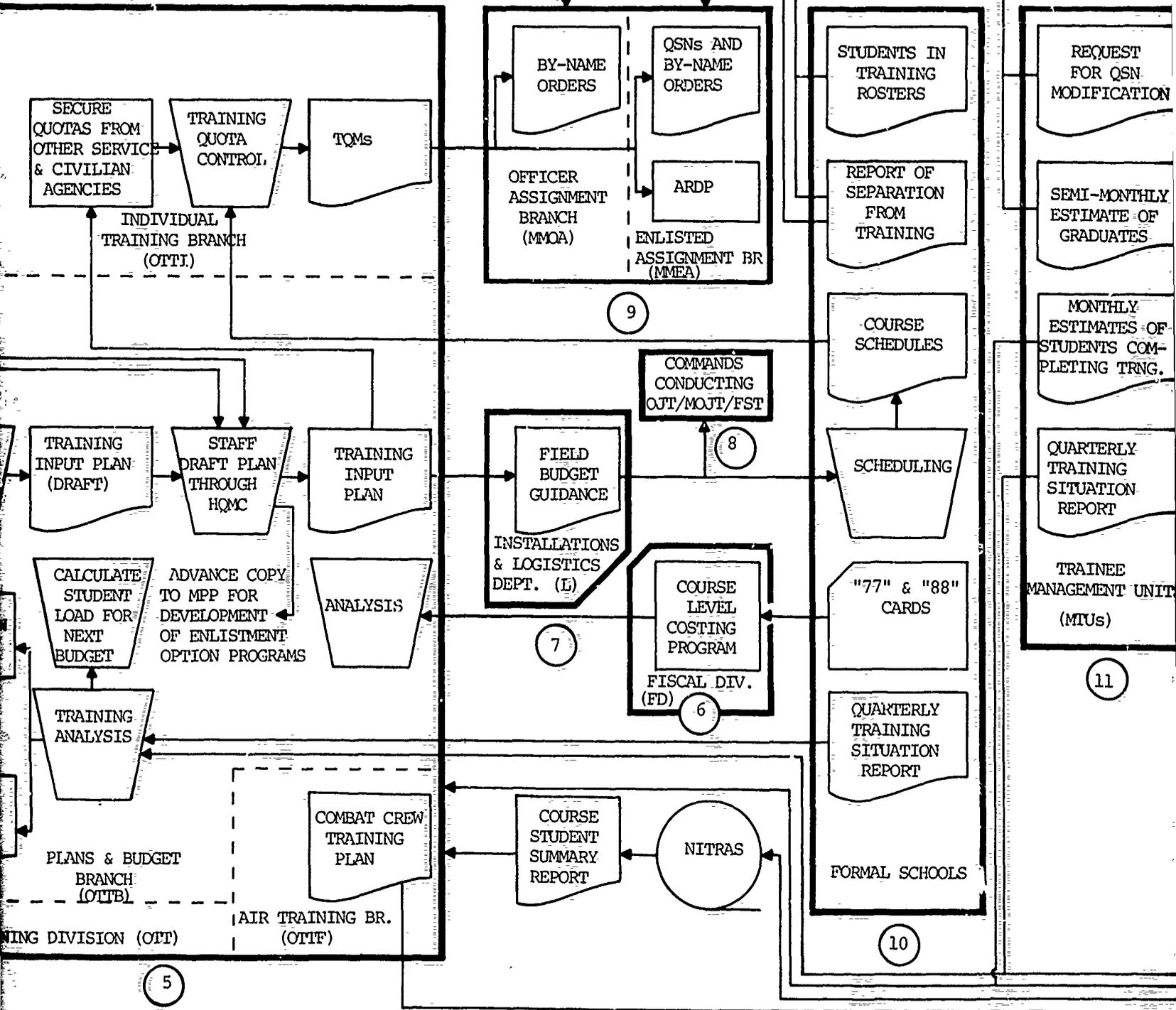
MANAGEMENT OF FORMAL INDIVIDUAL TRAINING

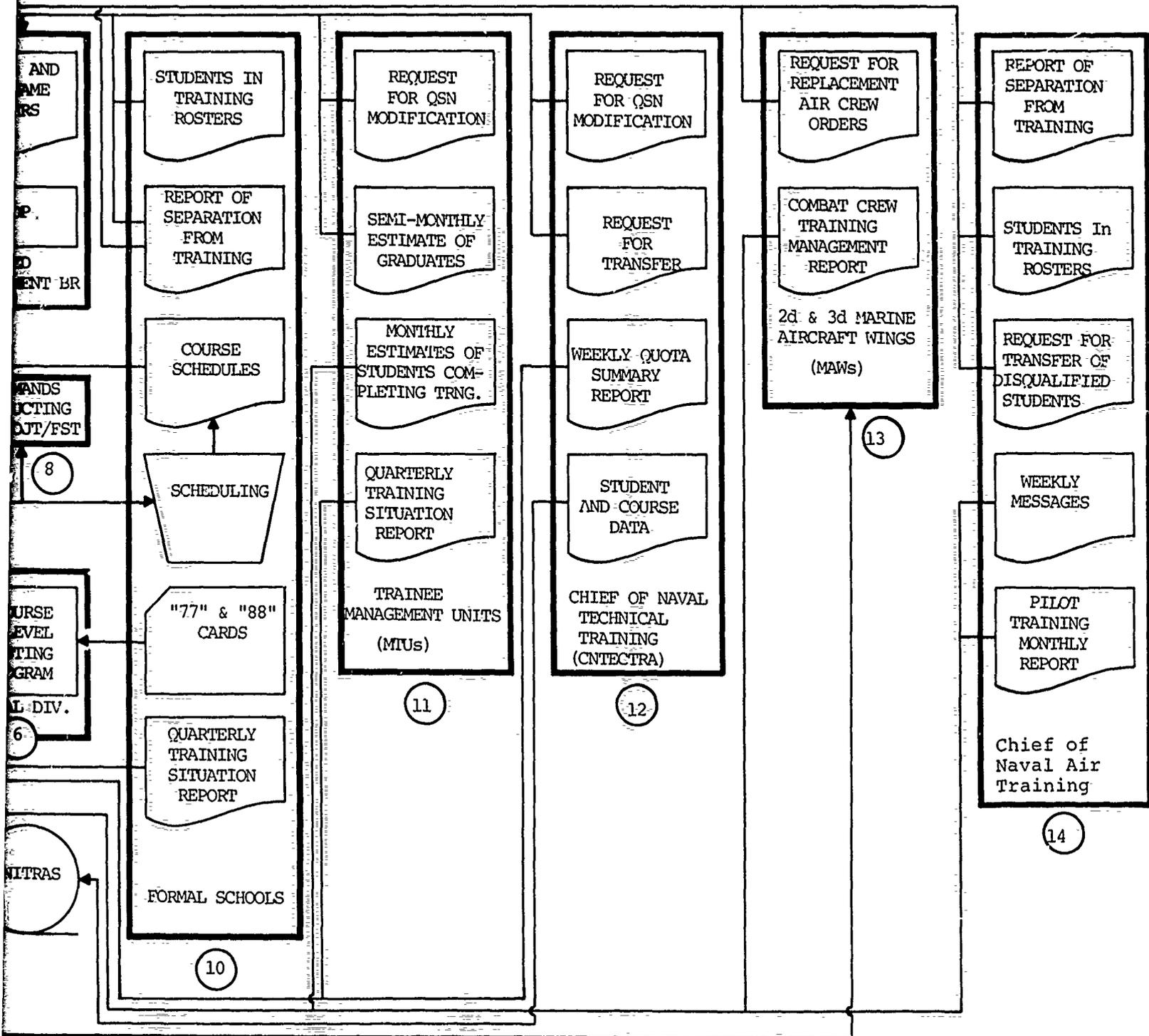
FLOW CHART

APPENDIX C - MANAGEMENT OF FORMAL INDIVIDUAL TRAINING-FI



INDIVIDUAL TRAINING-FLOW CHART



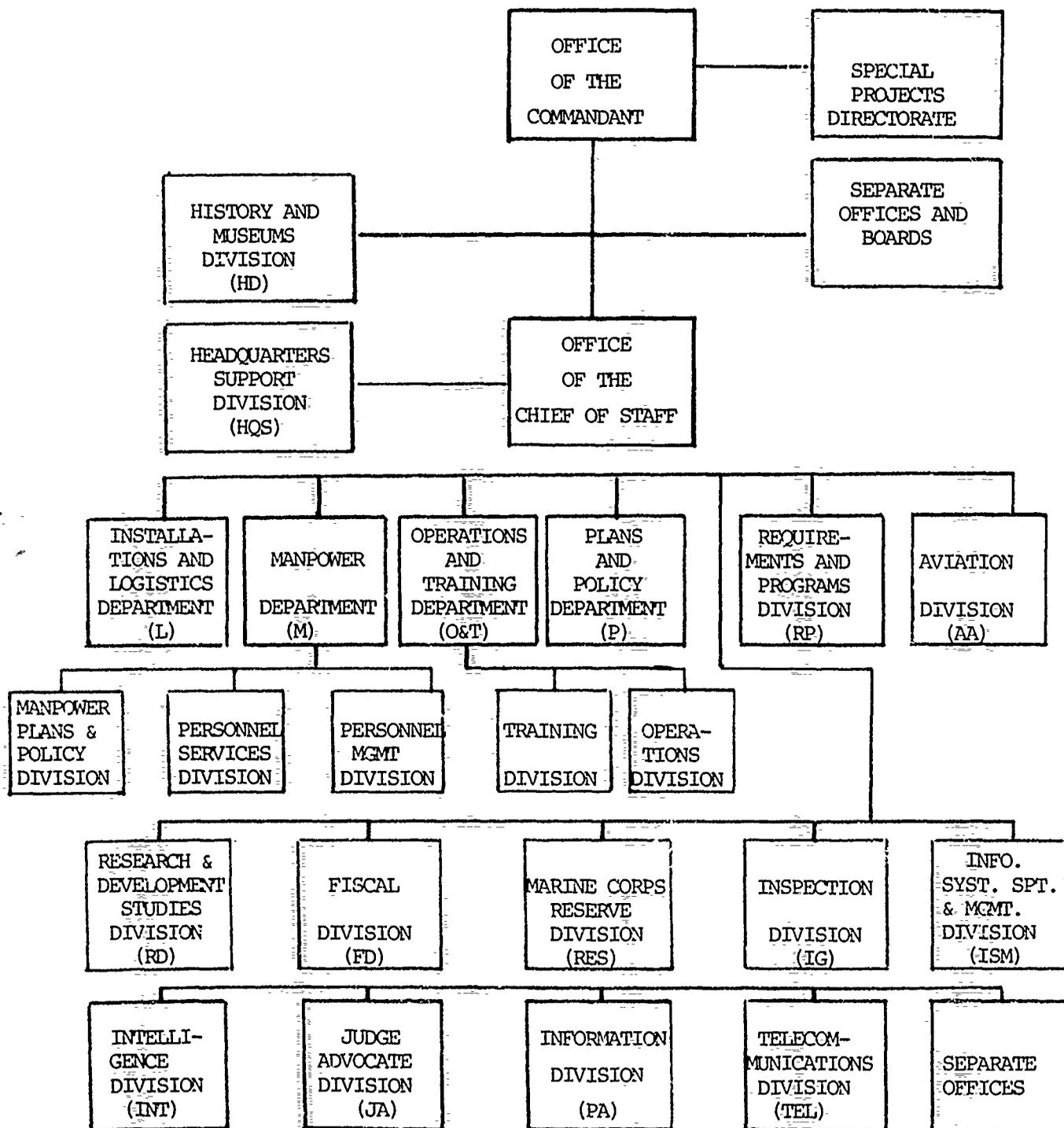


APPENDIX D

ORGANIZATION CHART

HEADQUARTERS, UNITED STATES MARINE CORPS

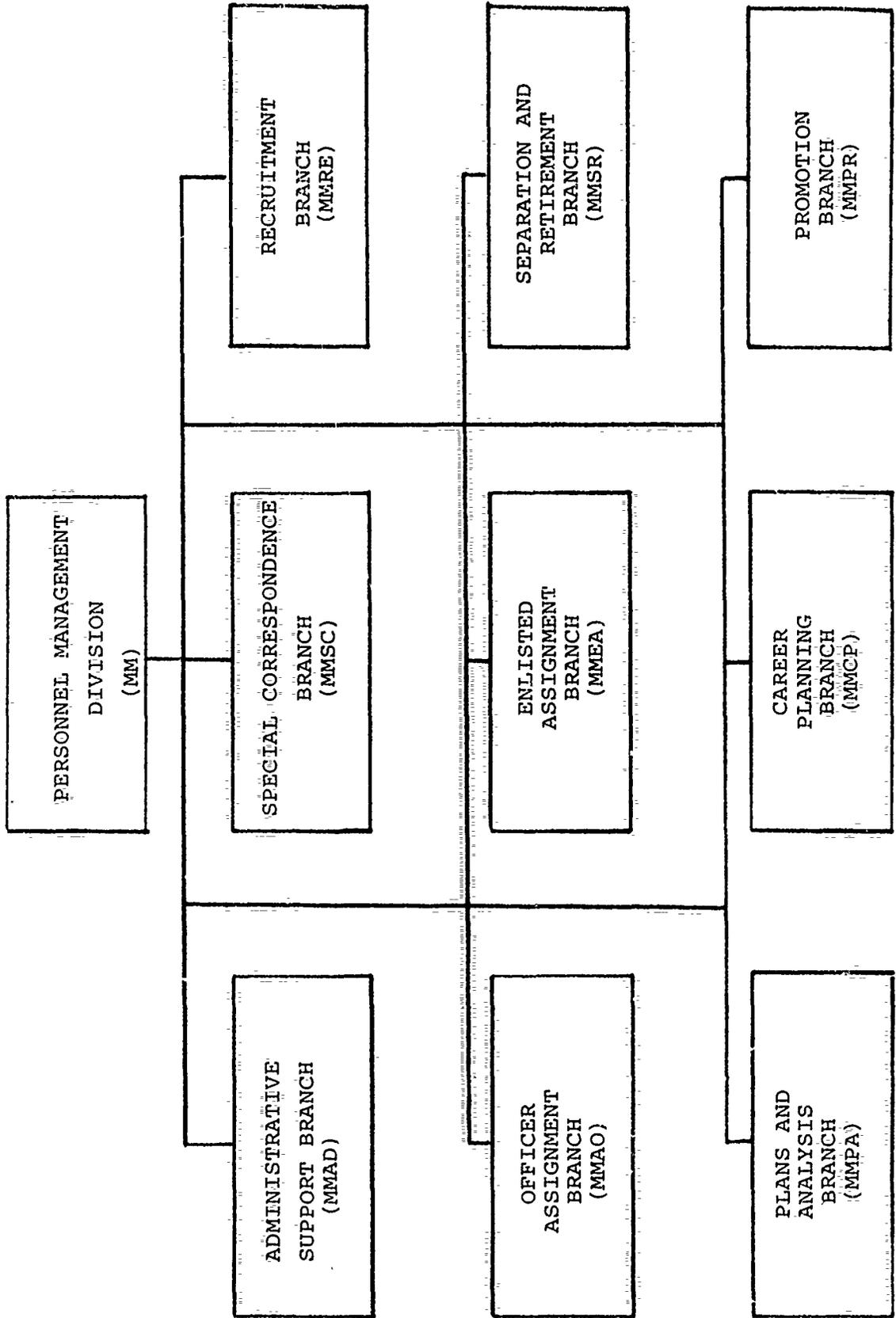
ORGANIZATION CHART  
HEADQUARTERS, UNITED STATES MARINE CORPS



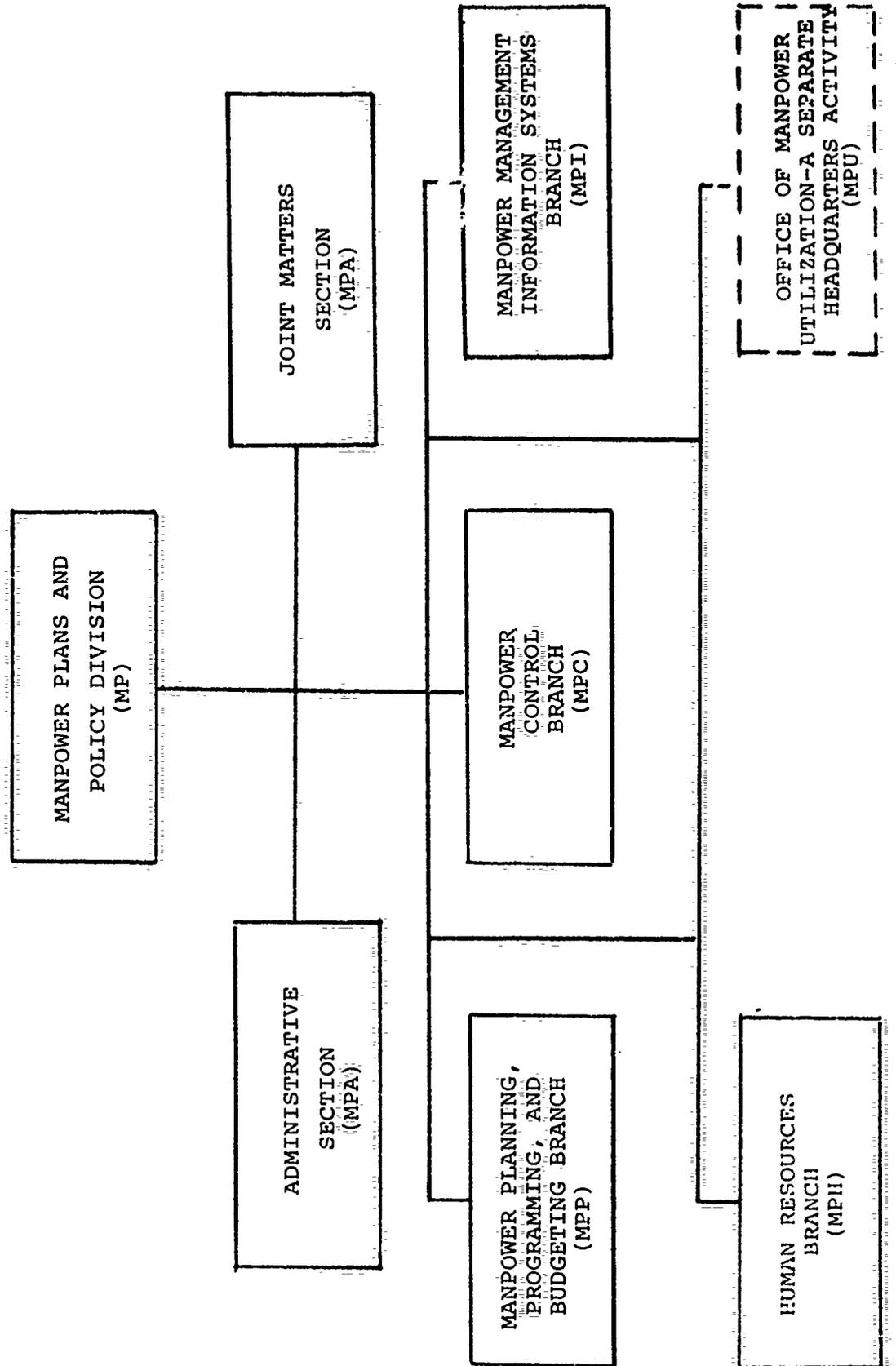
APPENDIX E

ORGANIZATION OF THE MANPOWER DEPARTMENT  
and  
THE TRAINING DIVISION

PERSONNEL MANAGEMENT DIVISION (MM)



MANPOWER PLANS AND POLICY DIVISION (MP)



APPENDIX F

ORGANIZATIONS VISITED AND PERSONNEL  
INTERVIEWED DURING FIELD TRIPS

Organizations Visited and Personnel  
Interviewed During Field Trips

Distinguished Retired Officer

LGEN W.K. Jones, USMC (Ret.)

Training Division, Operations and Training Department,  
Headquarters, United States Marine Corps, Washington, DC

BGEN R.A. Kuci - Director  
COL A.J. Castellana - Deputy Director  
MAJ A.C. Blades - Plans Section, Plans & Budget Branch  
MAJ R.M. Mallard - Plans Section, Plans & Budget Branch  
MAJ H.W. Slacum - Budget Section, Plans & Budget Branch  
LCOL J.M. Keenan - Head, Education Branch  
MAJ C.R. Dunning - Education Branch  
MAJ J.E. Edwards, Jr. - Education Branch  
COL P.G. Boozman - Head, Aviation Training Branch  
LCOL C.A. Dixon - Head, Aircrew (Aviation Officer) Training Section, Aviation Training Branch  
LCOL W.F. Tremper - Head, Technical (Aviation Enlisted) Training Section, Aviation Training Branch  
MAJ J. Miller - Technical (Aviation Enlisted) Training Section, Aviation Training Branch  
COL J.C. Page - Head, Individual Training Branch  
LCOL E.G. Rivers - Head, General Training Section, Individual Training Branch  
MAJ W.C. Fite III - General Training Section, Individual Training Branch  
MAJ J.E. Wallace - General Training Section, Individual Training Branch  
LCOL E.A. Grimm - Head, Schools Section, Individual Training Branch  
LCOL R.C. Prouty - Schools Section, Individual Training Branch  
MAJ J.P. Aymond, Jr. - Schools Section, Individual Training Branch  
LCOL J.A. Chancey - Head, Unit Training Section, Unit Training Branch  
LCOL A.K. Dixon II - Head, Training Support Branch  
LCOL R.G. Fronhen - Head, Reserve Training Section, Unit Training Branch  
MAJ M.H. Vidos - Reserve Training Section, Unit Training Branch

Operations Division, Operations and Training Department,  
Headquarters, United States Marine Corps, Washington, DC

COL C.L. Battistone - Head, Readiness Branch  
COL C.H. Knowles - Head, Readiness Evaluation Section, Readiness Branch

COL R.J. Johnson - Readiness Evaluation Section,  
Readiness Branch  
LCOL A. Lee - Readiness Evaluation Section, Readiness  
Branch  
\*LCOL M.P. Sullivan - Readiness Evaluation Section,  
Readiness Branch  
MAJ W.W. Jackson - Aviation Readiness Officer, Readiness  
Analysis and FORSTAT Section, Readiness Branch

Manpower Plans and Policy Division, Manpower Department,  
Headquarters, United States Marine Corps, Washington, DC

MAJ R.B. Johnston - Systems Unit, Manpower Planning,  
Programming and Budgeting Branch  
MAJ B.C. Walker - Systems Unit, Manpower Planning,  
Programming and Budgeting Branch  
\*MAJ D.R. Nay - Plans Unit, Manpower Planning, Programming  
and Budgeting Section  
LCOL W.H. Osgood - Head, Manpower Management Research  
Section, Manpower Management Information Systems Branch  
LCOL J.N. Daniel - Manpower Management System Procedures  
Section, Manpower Management Information Systems Branch  
MAJ C.S. Bentley - Allocations Section, Manpower Control  
Branch  
MR A. Yamashiro - Allocations Section, Manpower Control  
Branch  
LCOL M.G. Morris - Head, Leadership Section, Human  
Resources Branch  
MAJ W.R. Hart - Leadership Section, Human Resources Branch  
COL C.D. Dean - Head, Leadership Instruction Department  
MAJ C.R. Bledsoe - Assistant Head, Leadership Instruction  
Department  
LCOL R.P. Capatosto - Director, Office of Manpower Utilization  
LCOL W.W. McIver - Office of Manpower Utilization  
MAJ W.R. Masciangelo - Office of Manpower Utilization  
MAJ T.E. Davis - Office of Manpower Utilization  
MAJ H.J. Trautwein, Jr. - Office of Manpower Utilization  
MR D.W. Sutter - Office of Manpower Utilization

Personnel Management Division, Manpower Department, Headquarters,  
United States Marine Corps, Washington, DC

LCOL R.G. Leidich - Special Programs Section, Officer  
Assignment Branch  
MAJ J.J. Sheehan - Ground Officer Assignment Section,  
Officer Assignment Branch  
MAJ L.C. Reifsnider - Distribution Section, Enlisted  
Assignment Branch  
COL R.J. Woekener - Head, Career Planning Branch  
LCOL N.E. Pridgen, Jr. - Assistant Head, Career Planning  
Branch  
MAJ G.W. McDowell - Enlisted Section, Career Planning Branch

Aviation Division, Headquarters, United States Marine Corps,  
Washington, DC

LCOL G.E. Walsh - Aviation Analysis Branch  
LCOL H.M. Whitfield - Aviation Analysis Branch  
MAJ J.A. Davis - Aviation Analysis Branch  
MAJ J.R. Mitchell - Aviation Support Branch

Reserve Division, Headquarters, United States Marine Corps,  
Washington, DC

MAJ R.C. Madonna - Individual Training Section,  
Personnel Branch

Research, Development and Studies Division, Headquarters,  
United States Marine Corps, Washington, DC

COL N.F. Schnippel, Jr. - Head, Studies Branch  
MAJ J.V. Hoekstra - Studies Analysis Review Officer,  
Studies Branch  
CAPT C.A. Millard - Marine Corps Representative, Marine  
Corps Operations Analysis Group (Center for Naval  
Analyses)  
DR R.E. Sawyer - Senior Analyst, Marine Corps Operations  
Analysis Group (Center for Naval Analyses)  
DR W.H. Sims - Manpower Analyst, Marine Corps Operations  
Analysis Group (Center for Naval Analyses)

History and Museums Divisions, Headquarters, United States  
Marine Corps, Washington, DC

COL J.E. Greenwood - Deputy Director, Historical Branch

Marine Corps Institute, Marine Barracks, Washington, DC

LCOL B.W. Gardner - Deputy Director  
MAJ J.L. Brennan - Marine Corps Institute, Marine Barracks  
Washington, DC  
MR L. Hughs - Director of Education  
MR P. Duffy - Education Specialist

Marine Corps Development and Education Command, Quantico, VA

LGEN J.C. Fegan, Jr. - Commanding General  
COL A.L. Stewart, Jr. - Chief of Staff  
MGEN P.X. Kelley - Director, Education Center  
LCOL D.J. Myers - S-3, Command and Staff College, Education  
Center  
LCOL R.K. Young - Amphibious Warfare School, Education Center  
LCOL P.L. Hogaboom - S-3, The Basic School, Education Center  
MAJ E.N. Buesing, Jr. - Communication Officers School,  
Education Center  
MAJ J.L. Neyman - Communication Officers School, Educa-  
tion Center

COL W.P. Morgenthaler - Director, Instructional Management School, Education Center  
MAJ G.H. Kelly - Instructional Management School, Education Center  
LCOL R.L. Patenaude - Marine Corps Key Experience Evaluation System Coordinator, Requirements Branch, Concepts, Doctrine and Studies Activity, Development Center  
LCOL T.C. Dolson - Landing Force Organization System Study Coordinator, Requirements Branch, Concepts, Doctrine and Studies Activity, Development Center

Marine Corps Service Support Schools, Marine Corps Base, Camp Lejeune, North Carolina

MAJ J.C. James - S-3/Director of Instruction  
1stLT T.J. Nielsen - S-3/Training Officer  
MAJ W.F. Johnson - Director, Instructor Management School  
MAJ J.J. Ainsworth - Commanding Officer, Motor Transport School  
MAJ L.E. Rhodes - OIC, Course Content Review Board, Motor Transport School  
CAPT R.I. Leonard - Course Content Review Board, Motor Transport School  
CAPT C.C. Kinsey - Course Content Review Board, Motor Transport School

Headquarters, Fleet Marine Force, Atlantic, Norfolk, Virginia

COL C.F. Pitchford - Force Readiness Officer, Readiness Section  
LCOL R.T. MacPherson - Force Inspector, Readiness Section  
LCOL J.T. Schulster - Assistant Operations Officer, Operations Unit, G-3 Section  
MAJ T.A. Schieb - Assistant Operations Officer, Operations Unit, G-3 Section  
MAJ J.J. Gutter - Assistant Training Officer, Training Unit, G-3 Section  
MAJ J.B. McNally - Assistant Training Officer, Training Unit, G-3 Section

Second Marine Division (Reinforced), Fleet Marine Force, Atlantic, Camp Lejeune, North Carolina

MGEN K. McLennan - Commanding General  
COL W.H. Rice - Chief of Staff  
LCOL G.L. Ellis - Division Air Officer  
MAJ L.R. Ogle - Training Officer, G-3 Section, Headquarters  
MAJ R.H. Sutton - Assistant Training Officer, G-3 Section, Headquarters  
MAJ R.H. Sutton - Assistant Training Officer, G-3 Section, Headquarters

MAJ T.E. Campbell - Operations Officer, Second Marine Regiment  
CAPT E.F. Wells - Assistant Operations Officer, Second Marine Regiment  
MAJ F.H. Matthys, Jr. - Operations Officer, Eighth Marine Regiment  
1stLT R.A. Burciaga - Training Officer, Eighth Marine Regiment  
MAJ H.M. Steigelman, Jr. - Operations Officer, Second Tank Battalion  
MAJ D.B. James - Operational Analysis Officer, Division Information Systems Management Office, Headquarters

Second Marine Aircraft Wing, Fleet Marine Force, Atlantic,  
Cherry Point, North Carolina

COL H.D. Bradshaw - Assistant Chief of Staff G-3  
LCOL J.H. Mead - Operations Officer, G-3 Section, Headquarters  
MAJ S.S. Glaize - Training Officer, G-3 Section, Headquarters  
LCOL K.D. Holland - Operations Officer, Marine Air Group 14  
MAJ G.F. Burgess - Assistant Operations Officer, Marine Air Group 14  
LCOL A.P. Loring, Jr. - Commanding Officer, VMAT (AW) 202  
MAJ J.E. Henshaw - Operations Officer, VMAT (AW) 202  
CAPT T.H. Lyons - Training Officer, VMAT (AW) 202  
\*LCOL J.B. Wuertz - Operations Officer, Marine Air Group 31  
\* MAJ G.R. Vangysel - Assistant Operations Officer, Marine Air Group 31  
\*CAPT P.M. Young, Jr. - Assistant Group Aircraft Maintenance Officer, Marine Air Group 31

Landing Force Training Command, Atlantic, Naval Surface Force,  
U.S. Atlantic Fleet, Naval Amphibious Base, Little Creek,  
Norfolk, Virginia

COL R.L. Christian, Jr. - Chief of Staff  
COL M.V. Statzer - Director, Training Division  
LCOL J.J.W. Hilgers - Head, Tactical Training Branch, Training Division  
MAJ M.D. Carey - Instructor, Tactical Training Branch, Training Division  
MAJ A.T. Todd, USA - Plans Officer

Marine Corps Students at Intermediate and Top Level Schools

COL F.V. White, Jr. - Student, Inter-American Defense College, Washington, DC  
\*COL C.A. Barstow - Student, National War College, Washington, DC  
COL R.C. Baughman, Student, College of Naval Warfare, Naval War College, Newport, RI

LCOL E.P. Carroll - Student, College of Naval Warfare,  
Naval War College, Newport, RI  
MAJ D.I. Habermacher, Jr. - Student, College of Naval  
Command and Staff, Naval War College, Newport, RI  
MAJ H.G. Lyles - Student, College of Naval Command and  
Staff, Naval War College, Newport, RI  
MAJ J.K. Van Riper - Student, Marine Corps Command and  
Staff College, Quantico, VA

Chief of Naval Education and Training, Pensacola, Florida

COL C.C. Chisholm, Jr. - Marine Corps Representative  
DR I. Shever - Information Analysis and Synthesis Office  
CAPT W.J. Thearle, USN - Professional Development Educa-  
tion Programs, Naval Educational Development  
CDR D.K. Rogers, USN - Service Colleges/DOD Schools,  
Naval Educational Development  
CAPT R.L. Bauchspies, Jr., USN - Combat Systems/New Ship  
Training, Training Operations  
CDR R.J. Schwartz, USN - Combat Systems/New Ship, Air/  
Subsurface Training, Training Operations  
MR J.D. Carroll - Assistant Subsurface/Air NTPS and  
Requirements, Plans and Programs  
MR W.T. Brown - Special Projects and Long Range Plans,  
Plans and Programs  
MR R.M. Stewart - Deputy Assistant Chief of Staff for  
Flight Training  
CAPT R.S. Jackson, USN - Deputy Assistant Chief of Staff  
for Research and Program Development  
MR J.W. Singletary - Nonsystems Specific Training,  
Research and Programs Development  
MR R.H. Watkins - Deputy for Budget, Resources Management

Chief of Naval Air Training, Chief of Naval Education and  
Training, Corpus Christi, Texas

LCOL J.E. Hayes - Marine Liaison Officer  
MAJ G.H. Robinson - Operations Section  
LCOL J. Yandell, USAF - Training Support Section  
DR F. Schufletowski - Head, Instructional Systems Design  
Section  
\*LCDR D. Kinsey - Aviation Student Personnel and Admin-  
istrative Section  
DR J. Young - Assistant Director, Automated Systems  
Support Section

Chief of Naval Technical Training, Chief of Naval Education  
and Training, Memphis, Tennessee

CAPT J. Young, USN - Staff  
CDR E.J. Rice - Head, Air Warfare Training Branch  
LCDR O.D. Brown - Training Program Coordinator, Naval  
Aviation Training Group

LCOL T.E. Lewis - Marine Liaison Officer  
COL G.F. Gallagher - Commanding Officer, Marine Air  
Training Support Group-90, Naval Air Technical  
Training Center  
MAJ W.H. Rath - S-3, Marine Air Training Support Group-90,  
Naval Air Technical Training Center  
MAJ A.P. Padios, Jr. - S-1/Enlisted Personnel Officer,  
Marine Air Training Support Group-90, Naval Air  
Technical Training Center  
MAJ J.R. Bryan - Marine Liaison Officer, Naval Aviation  
Maintenance Training Group

Naval Aviation Logistic Command, Naval Air Station, Patuxent  
River, Maryland

MR R. Kuzmick - Reliability/Maintainability Branch

Headquarters, Commander Naval Air Forces Atlantic Fleet,  
Naval Base, Norfolk, Virginia

\*MAJ W.A. Forney - Air Material Section, Assistant Chief  
of Staff for Material

\*MAJ R.G. Hilton - Aviation Supply Section, Assistant  
Chief of Staff for Supply

Deputy Chief of Staff for Training, Headquarters, United  
States Army Training and Doctrine Command, Fort Monroe, VA

COL E.S. Diez, USA - Training Development Division  
LCOL T.C. Ring, USA - Officer Education System Task Group  
MAJ D.J. Lising, USA - Combat Support/Combat Service  
Support Branch, Training Division  
LCOL F.L. Tyler, USA - Programming/Scheduling Branch,  
Training Accessions Management Division  
COL A.W. Cipriano, USA - Training Accessions Management  
Division  
MAJ L.H. Powell, USA - Organizational Effectiveness Office  
LCOL H.F. Stout, USA - Training Accessions Branch, Train-  
ing Accessions Management Division  
LCOL N.T. Nance, USA - Noncommissioned Officer Education  
System Branch, Enlisted Personnel Management System  
Office

United States Army Training Support Center, United States Army  
Training Doctrine Command, Fort Eustis, VA

CAPT Ciccolella, USA - U.S. Army Training Support Center,  
U.S. Army Training and Doctrine Command

Review of Education and Training Officers Group, Office of  
the Chief of Staff, Headquarters, Department of the Army,  
Washington, DC

- MGEN B.L. Harrison, USA - Chairman, Review of Education and Training of Officers Task Force, U.S. Army, Fort McNair, Washington, DC
- COL C. Debelius, USA - Chief, Methodology Team, Review of Education and Training of Officers Task Force, U.S. Army, Fort McNair, Washington, DC
- LCOL J. Fowler, USA - Chief, Team C, Review of Education and Training of Officers, U.S. Army, Fort McNair, Washington, DC

Director of Personnel Programs, Deputy Chief of Staff for  
Personnel, Headquarters, Department of the Air Force,  
Washington, DC

- COL A.D. Herring, USAF - Head, Training Programs Division
- LCOL D.E. McHenry, USAG - Head, Professional Education Programs, Director of Personnel Programs
- LCOL W.P. Babione, USAF - Systems/Special Training Branch, Training Programs Division
- CAPT C.T. West, USAF - Systems/Special Training Branch, Training Programs Division

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\* Telephone conversation only.