TRADOC Historical Study Series

The Army's Training Revolution, 1973–1990

An Overview

by Anne W. Chapman



Office of the Command Historian
United Stated Army Training and Doctrine Command

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THE ARMY'S TRAINING REVOLUTION 1973-1990 AN OVERVIEW

by
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U.S. ARMY TRAINING AND DOCTRINE COMMAND

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TRADOC HISTORICAL STUDY SERIES

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TRADOC Historical Studies are research reports published by the Office of the Command Historian, U.S. Army Training and Doctrine Command. These studies present documented summary accounts of training, doctrinal, and combat developments topics to provide ready reference information to support the Command's mission of preparing the Army for war and charting its future.

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Foreword

The United States faces a new strategic situation. Defense budgets are trending downward, and Washington looks to the Army's training base for economies and efficiencies. Such was the case in the mid 70s when TRADOC was organizing, and such is the case today. Now, as then, there is a need for objective reevaluation of Army training methods and effectiveness. My successor, the present Deputy Chief of Staff for Training at TRADOC, and his successors, will face a wide range of challenges, all entailing opportunity for the Army and for the Nation.

I hope for those officers, for TRADOC, and for the Army, that they enjoy clear command guidance, broad latitude for execution, and strong support for resources, like that afforded me by General William E. DePuy, first commander of TRADOC. DePuy's TRADOC was a place of intellectual ferment where young professionals sought to be assigned, and I was fortunate in having a number of the best working under me. I truly believe that now, as DePuy stressed often to me then, the ultimate service TRADOC can perform for the Army is analysis, for without sound concept, no undertaking was likely to prosper—especially one as daunting as providing the doctrine, force structure, weapon systems, and training technology for the future U.S. Army in a world of uncertain dynamism.

Paul F. Gorman
General, U.S. Army (Ret)

Author's Preface

This study of the Army's training revolution from the mid-1970s through the decade of the 1980s, is based primarily on training chapters prepared by the author and by Mr. Richard P. Weinert for the TRADOC Annual Historical Reviews. It also owes much to informal interviews with participants in the training development process at TRADOC headquarters and to written information supplied to the TRADOC Office of the Command Historian by the headquarters staff of the TRADOC Office of the Deputy Chief of Staff for Training. All source materials cited are located in the Office of the Command Historian. The responsibility for interpreting the training developments treated and for any errors of fact that escaped correction rests with the author. All photographs are official U.S. Army photographs.

The Army's training revolution and this study are greatly indebted to General Paul F. Gorman, U.S. Army (Ret), who served as Deputy Chief of Staff for Training in the Army Training and Doctrine Command, October 1973 to June 1977. His inspired and untiring commitment to gaining support throughout the Army for untried and innovative approaches to improving the relationship between institutional and unit training made possible all subsequent training development efforts.

Anne W. Chapman

Introduction

Men who are familiarized to danger, meet it without shrinking, whereas those who have never seen Service often apprehend danger where no danger is.

George Washington,
Letter to the President of the Congress,
9 February 1776

The United States Army's readiness to carry out its wartime missions is measured in terms of manpower, materiel, and training. Training is especially critical because it is the process by which the Army unites organized manpower and materiel resources within a doctrinal framework to attain levels of performance that can dictate the difference between success and failure in battle. Shortly after the establishment of TRADOC in July 1973, General William E. DePuy, the first TRADOC commander (July 1973 - June 1977), and his Deputy Chief of Staff for Training, Maj Gen. Paul F. Gorman, set out to revamp the Army's training system. Under their successors, the system they had designed was refined, amended, and in some cases fundamentally changed in response to the Army's changing needs. As a new decade began in 1990, the configuration of the Army's training system differed radically from the one that had existed when the command was formed. Indeed, the major fundamental changes that had occurred—and continued to occur—in response to new doctrine, increasingly sophisticated weapons systems, advancing technology, and dramatic changes in the makeup of the training base, constituted a revolution.



General William E. DePuy
Commanding General
United States Army Training and Doctrine Command
1 July 1973 — 30 June 1977

I

The DePuy — Gorman Initiatives

The efforts of the command's initial training team were driven by a number of considerations. First, the turbulence created by the rapid turnover of personnel during the Vietnam War had revealed a significant flaw in the Army Training Program (ATP) which had been in use since World War I. As historian Russell F. Weigley put it: "Officers and men rotated in and out of formations with a rapidity that was deadly to any chance of a combat unit's accumulating insights into the enemy and his country, or to the cohesiveness within companies, platoons and even squads." Under those circumstances, standards could not be maintained in an orderly cycle, and unit readiness suffered. In addition, it had become obvious that the Army had to train to be victorious without the traditional long period of mobilization which had characterized the entry of the United States into the two World Wars. The mobilization model of the ATP had become invalid because it assumed that sufficient time would be available to raise, equip, and train a combat force while the United States remained protected by its ocean barriers. Under that model, a small standing army formed a nucleus for the construction of units from a pool of conscripts. Training began at the individual level and progressed through the company level; those units were then combined to form regiments, brigades, divisions, and corps which conducted their own cycle of training. When that process was completed, units were tested for combat readiness and deployed to combat theaters. The ATP dictated the subjects to be taught and the number of hours a soldier had to be exposed to training. It did not prescribe the meeting of any specific standards or levels of performance. In short, training had been adapted to mass mobilization whereby vast numbers of soldiers received minimum levels of training. The ATP also was based on the availability of soldiers through a Selective Service System, or draft.

After January 1973, no draft existed through which the Army could quickly obtain large pools of conscripts.

The strategic reality—that the United States could no longer rely on superior weight of men and materiel—combined with the increased tempo and lethality of modern battle to convince many in the military establishment that the United States was in a disadvantageous position. By the mid-1970s, there was a consensus within the Army, the executive branch, and Congress that the Warsaw Pact nations possessed technology equal, and in many cases superior, to that of the United States, as well as forces outnumbering those of NATO. All those factors came together to convince many senior trainers in the Army that the perceived deficit might be substantially offset in a future conflict by better training. The Army needed a training system that was capable of maintaining acceptable levels of readiness at all times. It also needed a system by which training could be evaluated to determine the efficiency and effectiveness of individual instruction and unit exercises. In conceiving a new training system, TRADOC's training community was heavily influenced by the evolution that had already taken place in the U.S. Air Force training management programs. Profoundly dissatisfied with its air-to-air combat performance in Southeast Asia and citing studies that showed a high correlation between experience and survivability, the Tactical Air Command (TAC) training developers came to the conclusion that the number of hours spent in training was not an adequate measure of performance. Thus from a training management system built around flying hours, TAC had moved to an event oriented system that set standards for what each fighter squadron was supposed to be able to do and under what conditions.[1]

Against that background, a training system had to be devised to respond to TRADOC's mission to supervise and conduct individual and collective training in institutions and in units. The command had also to address its

1 (1) Russell F. Weigley, *History of the United States Army*, enlarged edition, (Indiana University Press, 1984), quotation on p. 565. (2) Maj Gen Paul F. Gorman, TRADOC Concept Paper, "Toward a Combined Arms Training Center," 9 Nov 76. The information in this section is based heavily on corresponding chapters in the Annual Reports of Major Activities, Annual Historical Reviews, Annual Command Histories, and TRADOC Historical Review, 1983-86 of the U.S. Army's Training and Doctrine Command (TRADOC), 1974-1987. Those chapters were written in part or whole by Mr. Richard P. Weinert, Jr., then Deputy TRADOC Historian at Fort Monroe, Va.

responsibility for producing the training doctrine that would inform Army units worldwide. From 1973 to 1977, Generals DePuy and Gorman provided the leadership for the development of a number of conceptually innovative approaches to training. It was during that period that instructional systems development, self-paced instruction, training extension courses, one-station unit training, a new school model, and several other revolutionary and evolutionary training programs had their origin. Basic to all the changes was the adoption of a training development and implementation process known as the "systems approach to training" (SAT), which was developed by the U.S. Army Combat Arms Training Board. The SAT was designed to insure that all components of the training developments system were examined in detail in order to develop knowledge about them, their interrelationships, and dependencies. Such an examination permitted quantitative measurement of a system's worth and its limitations. Information so gathered formed the basis for decisions as to the cost of the system, how it could be improved, whether it should be replaced, and whether it was operating at its designed capability and efficiency. The justification for all systems had to be stated in terms that allowed those who controlled the allocation of resources to make valid comparisons between systems, whether operational or proposed. Where a system had a training impact, that too had to be measured and explicitly quantified. Until the development of the new system, the analysis of training had not had the benefit of a systematic approach.[2]

In the command's early years, TRADOC also made a number of fundamental organizational changes in training management in support of better training. General DePuy was convinced that the TRADOC service schools had to find a way to perform their responsibilities more efficiently and effectively. As a result, two organizations were established at Fort Eustis to act as consultants to the schools. The Training Management Institute (later renamed the Training Development Institute) was established in July 1975, and acted as a quality control mechanism throughout TRADOC. It conducted workshops for the command's key trainers, and set up pilot projects to demonstrate the importance of job analysis and

2 (1) TRADOC Annual Report of Major Activities, FY 1975, pp. 82-87. (2) TRADOC Annual Historical Review, FY 1982, p. 194.

self-paced instruction to improved training both in the schools and in units. At the same time, the U.S. Army Training Support Center evolved as a result of the need to consolidate training support functions. Its primary function was to provide the training materials developed at TRADOC to worldwide users, ensuring that those materials were in the best form for training individual soldiers and units of the active and reserve components.[3]

An existing organization which had long been involved in training support was, in 1976, tied more closely to the TRADOC training management system. The U.S. Army Combat Arms Training Board (CATB), originally called the Board for Dynamic Training, had been established at Fort Benning in 1971. Missions of the original board had been to reemphasize the need for innovative approaches to training and to forge stronger links between the service schools and the training managers. The Combat Arms Training Board's efforts were from its inception devoted heavily to the development of training extension courses. It was also involved with Soldier's Manuals, informal training literature on training techniques, training device development, and determination of common combat arms skills. With the establishment of the Training Support Center, CATB reorganized and transferred its extension course and training device responsibilities to the center. The board's new mission was to stimulate the development and dissemination to combat arms units of improved techniques, devices, and management practices for training in units. Specifically, the board expedited the development of channels for a two way flow of information between combat arms unit training managers and the combat arms service schools. On 4 February 1977, General DePuy proposed to the Vice Chief of Staff of the Army that the CATB be combined with the Logistics Training Board at Fort Lee to form the Army Training Board, to be co-located with the Training Support Center at Fort Eustis. The new arrangement—which the Vice Chief of Staff approved in

3 TRADOC Annual Historical Review, 1976 (1 July 1975 - 30 September 1976), p. 60. On 1 July 1975, The Training Aids Management Agency was redesignated the U.S. Army Training Support Activity. A year later, that activity was expanded and reorganized as the U.S. Army Training Support Center.

mid-March—served to facilitate close cooperation in the translation of requirements identified by the board into action programs. On 1 October 1977, the Combat Arms Training Board was officially redesignated the U.S. Army Training Board.[4]

Perhaps the most important of the new approaches to training were the Army Training and Evaluation Program, or ARTEP, and the Skill Qualification Test (SQT). The ARTEP was a new performance-oriented program for collective training which required unit elements from squad through battalion and their soldiers and leaders to perform to a standard, not just put in the training hours. It defined specified missions and tasks, conditions, and the standards that were to be met by a unit, while it decentralized training by placing the responsibility for execution of the training program directly on the unit. Based on a train-evaluate-train concept, the program was structured to allow Army troops to train as they would fight, evaluate the results of their training, and use the lessons learned to improve training. The SQT was designed to provide an indicator of soldier proficiency in a military occupational specialty (MOS) and skill level. It consisted initially of a formally administered written test together with hands-on performance criteria made up of selected tasks from the MOS-specific soldier training publication. The hands-on test was later decentralized to the unit level as part of the commander's evaluation.[5]

The need for modernization and greater efficiency in TRADOC school organization led to the adoption of a new school model in 1976. As a result of his awareness of the wide discrepancies that existed between what was known about modern educational technologies and what was practiced at TRADOC schools, General DePuy directed his staff to develop a new school model to replace the one that had been in use since the 1973 STEADFAST reorganization. His aim was, he said, to turn the TRADOC schools into "training factories." School Model 76 was based on the premise that the commandants would be responsible for the interface between combat developments and training developments. The combat developments portion of the school created new weapons

4 TRADOC Annual Historical Reviews, 1 July 1975 - 30 September 1976, p. 60; FY 1977, pp. 64-66.

5 TRADOC Annual Historical Review, FY 1982, p. 194.



Major General Paul F. Gorman
Deputy Chief of Staff for Training
United States Army Training and Doctrine Command
1 October 1973 — 23 June 1977

requirements, tactics, and tactical and support organizations, based on approved doctrine. Training development personnel were responsible for resident training and extension training, simulation devices and simulators, and training literature, to insure the optimum employment of the combat developers' products. General DePuy intended that exported training would serve resident students, the active Army in the field, and the reserve components.[6]

It was also during this period that Maj. Gen. Gorman began to develop a concept for a national training center or centers where heavy armored and mechanized infantry units could train in force-on-force maneuvers and live-fire exercises. As it looked ahead into the 1980s, the Army recognized the inadequacy of its training programs and facilities to support essential combined arms training by battalion and brigade level units at home station, in the face of several pressing problems. Those problems included space limitations, a lack of battlefield realism in task force maneuvers, the lack of an objective means of evaluating unit performance and readiness, and cost considerations. The fielding of new air and ground weapons systems had increased the tempo, lethality, and size of the battle arena. Land area once ample for training divisions of approximately 20,000 soldiers would become inadequate for training brigades of 2,500 or even battalions of 600. Public and private groups concerned for aviation safety, communications regulation, and environmental protection often operated to further restrict the use of Army reservations for realistic training in close air support, electronic warfare, supporting artillery, and live fire. In addition, few units had the resources to portray realistically an

6 (1) TRADOC Annual Historical Reviews, 1 July 1975 - 30 September 1976, pp. 79-85; FY 1977, pp. 52-53. (2) Report, 6 Jan 76, on TRADOC Commanders' Conference, Fort Monroe, Va., 10-11 Dec 75, pp. 1-24 to 1-26. (3) For detailed accounts of the STEADFAST reorganization, see TRADOC Annual Report of Major Activities, FY 1974, pp. 1-19 and Jean R. Moenk, Operation STEADFAST Historical Summary: A History of the Reorganization of the U.S. Continental Army Command (1972-1973), Headquarters, U.S. Army Forces Command, Fort McPherson, Ga. and Headquarters, U.S. Army Training and Doctrine Command, Fort Monroe, Va., 1974. The STEADFAST Papers are located in the TRADOC Historical Research Collection in the Office of the Command Historian, Fort Monroe, Va., hereafter THRC.

opposing force or to provide control of battalion-size exercises. Gorman envisioned training centers that could provide not only realistic training but an instrumented environment that could take advantage of rapidly advancing technology to provide data that could be analyzed to evaluate the effects of training.[7]

7 Maj Gen Paul F. Gorman, TRADOC Concept Papers, "Toward a Combined Arms Training Center," 9 Nov 76, and "Toward National Training Centers for the U.S. Army," 23 May 77, THRC.

II

The Starry Changes to Training

A second phase of the "training revolution" began soon after General Donn A. Starry took command of TRADOC in 1977. While the DePuy-Gorman initiatives on the whole were continued, a number of them had developed problems because of personnel turbulence, resource shortages, and other factors that had not been immediately evident at their conception. For example, the ARTEP left the evaluation of standards to the subjective judgment of chain of command observers. In addition, units training at home station according to the ARTEP could not provide sufficient resources for training large units. As a result, TRADOC undertook several major training studies designed to identify deficiencies and suggest solutions. The most notable of those studies were the Review of Education and Training of Officers (RETO) Study begun in 1977, the Army Training Study of 1977-1978, and the Long Range Training Base Study of 1978.[8]

The RETO study group—popularly called the Harrison Board for its chairman Maj. Gen. Benjamin L. Harrison—convened to study the training of officers from precommissioning through general officer positions and to build a coherent system of officer training. Specifically, the group's mission was to determine officer training and education requirements based on Army missions and individual career development needs. The Army Training Study focused on the determination of the number of individual and collective tasks units had to master and the required resources and frequency of training required to maintain competency. The Jenes Report, as the Long-Range Training Base Study was commonly

8 TRADOC Annual Historical Review, FY 1978, pp. 36-54.



General Donn A. Starry
Commanding General
United States Army Training and Doctrine Command
1 July 1977 — 31 July 1981

known, dealt with the facilities available for training in the light of base closures and realignments.[9]

Based on the findings of the studies, TRADOC instituted a second school model, revised development procedures, modified the instructional systems development process, and took a hard look at self-paced instruction. As a result of the RETO study, Army trainers began development of a set of common standards for commissioning known as Military Qualification Standards (MQS), which were designed as a follow on system to the Soldier's Manual and the Manual of Common Tasks for enlisted soldiers and noncommissioned officers. The purpose of MQS was to standardize criteria for commissioning among the widely varying sources of commissioning. The principal result of the Army Training Study was the proposal for a computer-based Battalion Training Model to assist battalion level commanders in the development of training programs tailored to unit needs. In a parallel development, The U.S. Army Training Board developed a Battalion Training Management System in an effort to standardize unit level training management instruction throughout TRADOC. Through a series of workshops, units were provided instruction on how to better manage their training programs.[10]

Another major initiative of the Starry years (1977 - 1981) was the establishment in the summer of 1978 of a task force to study problems in the initial entry training system, which had been a matter of concern with the command since its formation. Fluctuating levels of resource support, changes in the quantity and quality of new recruits, and changing ideas as to what new soldiers should be expected to learn, all had an impact on how the command conducted initial entry training. The Starry task force built on the work of another group called the "Committee of Six," which General DePuy had instituted in 1974. The Committee of Six had been composed of the training center commanders and chaired by Lt. Gen. Orwin C. Talbott, the TRADOC deputy commander. The Talbott

9 Ibid.

10 (1) For a detailed discussion of the training studies of the late 1970s and of MQS, see TRADOC Annual Historical Review, FY 1978, pp. 36-54. (2) The Battalion Training Model and the Battalion Training Management System are discussed at length in TRADOC Annual Historical Review, FY 1979, pp. 148-50.

study group investigated the transformation of a civilian into a soldier, tactics and basic rifle marksmanship, and testing and physical training. Col. Edward R. Raupp served as chairman of the Starry task force, which began gathering data in August 1979.[11]

The Raupp study found the program was not guided by a central TRADOC policy, and that widespread inconsistencies in philosophy, policy, and procedures existed throughout the system. To deal with those issues as well as with concerns about drill sergeants' training and trainee abuse, Starry had established in 1978 the "Committee of Nine," which was chaired by Maj. Gen Robert C. Hixon, the TRADOC chief of staff, and was made up of the nine training center commanders. After more than a year the Committee made recommendations which resulted in a much revised—and mandatory—program of instruction and extended hours of instruction. In all the Committee of Nine report contained recommendations covering fifty-seven separate issues critical to the improvement of the initial entry training program and environment. Standardized policies were also adopted with regard to how enlistees were to be treated in the reception stations. The Committee of Nine reforms were implemented in the training centers in early FY 1980.[12]

In late June 1981, General Starry established another steering group that became known popularly as the "Gang of Four." That panel, consisting of the commanders of the training centers at Forts Benning, Dix, Jackson, and Leonard Wood, had a charter to serve as a forum for commanders with similar interests, to identify major issues relating to initial entry training, develop and explore alternative solutions to key problems, and prepare recommendations to be presented to the TRADOC commander. After General Starry left to become commander of the United States Readiness Command, the study group presented its recommendations to General Glenn K. Otis, Starry's successor. It also received strong support from General William R. Richardson who succeeded General Otis. Among a number of other issues, the panel's report dealt at length with the widely

11 TRADOC Annual Historical Reviews, FY 1979, pp. 105-06; FY 1982, p. 217.

12 For a detailed discussion of the activities and recommendations of the Committee of Nine, see TRADOC Annual Historical Reviews, FY 1979, pp. 105-18; FY 1980, pp. 168-179.

held perception among officers that duty in the training base was second rate and did not contribute to career enhancement. To insure that the training base got a share of quality officers equal to that of the TOE units, the Gang of Four suggested among other things that TRADOC and the Army promote the career value of training base assignments and place greater emphasis on the rewards and challenges. The panel also suggested that training should be deferred until the training centers could be manned at 100 percent of their required drill sergeants and other critical MOSs.[13]

13 The activities and recommendations of the "Gang of Four" are dealt with at length in TRADOC Annual Historical Reviews, FY 1982, pp. 217-220; FY 1983, 33-40.

III

Major Training Issues of the Otis and Richardson Years

What can be termed "Phase III" of the TRADOC training revolution during the command's first decade began approximately at the time General Glenn K. Otis assumed command in August 1981. At the same time, General Edward C. Meyer, Chief of Staff of the Army, launched a series of initiatives aimed at modernizing the force, improving unit cohesion, and instituting a new regimental system. The development of the Army 86 organizations and AirLand Battle doctrine also were nearing completion. Using the lessons learned during the tenure of his predecessors, Otis determined that the time had come to develop and implement an Army training plan that could guide TRADOC activities to 1990 and beyond. During the summer of 1981, Brig. Gen. Frederic J. Brown, TRADOC Deputy Chief of Staff for Training, began to write a description of where training in the Army should be at the beginning of the next decade. "Army Training 1990" was a combination of fine tuning the programs instituted since 1973 and striking out in several new directions to bring all the aspects of training together into a coherent plan which could serve as a guide for future actions. The Army 1990 concept was divided into three parts: institutional training, in which TRADOC's role as an executive command was defined; unit training, which addressed gaining and maintaining training proficiency in units; and training support, which delineated TRADOC's role in supporting all Army training. For four years, the concept underwent numerous revisions. In the summer of 1984, the Deputy Chief of Staff for Operations and Plans (DCSOPS) Department of the Army, decided not to publish Army Training 1990 as submitted, on grounds that it was too TRADOC specific for general Army use. In addition, many of its features had already been incorporated into



General Glenn K. Otis
Commanding General
United States Army Training and Doctrine Command
1 August 1981 — 10 March 1983

the DCSOPS study entitled Army Training Roles and Responsibilities. In the early fall of 1985, General William R. Richardson, then TRADOC commander, approved publication of the much revised plan—which now included a section on training concepts—as TRADOC Pamphlet 350-4.[14]

There were three elements to the training focus embodied in Army Training 1990: train leaders who were technically and tactically proficient, who were trainers, and who were capable of setting high standards; train units that knew how to fight, knew how to train to fight, and then could fight across the full spectrum of conflict; train soldiers who were motivated and disciplined, proficient in their jobs, and who were physically fit. After publication, TRADOC solicited comments from the field on the program's utility and began work on a draft of Army 1997, discussed below.[15]

Meanwhile, TRADOC continued development of a National Training Center (NTC). After careful site analysis and the determination to establish only one center for the exercising of heavy armored and mechanized infantry task forces, the center was established at Fort Irwin in California's high desert. The first battalions rotated through the NTC in the summer of 1981. At the jointly developed TRADOC-FORSCOM facility, soldiers were trained for war in a setting as close as possible to the reality of combat. Training exercises included highly realistic force-on-force engagements against an opposing force schooled in Warsaw Pact, tactics and doctrine. Full combined arms operations were supported by U.S. Air Force close air support, laser-based engagement simulation, and a core instrumentation subsystem. To TRADOC fell responsibility for the operation and maintenance of the training environment and the instrumentation system, as well as the evaluation of performance and the determination of lessons learned. A TRADOC Operations Group located at Fort Irwin provided after action reviews (AAR) for all units training at the NTC and

14 For a detailed analysis of the development and content of the Army Training 1990 program, see TRADOC Annual Historical Review, FY 1982, pp. 194-213; TRADOC Annual Command History, FY 1983, pp. 1-24; TRADOC Historical Review, 1 Oct 83 - 30 Sep 86, pp. 12-13.

15 TRADOC Historical Review 1 Oct 83 - 30 Sep 86, pp. 12-13.

take home packages (THP) to assist commanders in the planning and execution of training at home station.[16]

As TRADOC personnel responsible for the National Training Center continued to look for ways to improve the NTC experience, senior trainers at Fort Monroe took a hard look at some problems inherent in School Model 76. The most notable feature of School Model 76 was that it completely barred instructors in the academic departments from participation in the training development and combat developments process. Almost immediately after the creation of School Model 76, the schools began to request exceptions to that policy, justified by local conditions. As a result, each school became a separate organization, managed to some extent in its own way with regard to resources, personnel, and horizontal and vertical communication. In August 1982, TRADOC commander General Glenn K. Otis directed Brig. Gen. Donald Morelli, then assigned as Special Assistant to the Commanding General, to study the impact that deviations to School Model 76 had on the ability of the command to function. The working group that Morelli established originally planned to revise School Model 76 to correct existing problems. After a closer look, however, it was decided to approach the subject with a view to integrating the future direction of the Army with the school model. It was expected that abandoning a reactive approach would put TRADOC in a posture to actively participate in designing the way it operated in the future. Morelli's model for fulfilling TRADOC's training mission combined combat developments and training developments into one directorate; training developments thus entered the system acquisition cycle earlier. Thus evaluation could serve to provide information on the successes and failures associated with total system fielding. In addition, General Morelli believed the schools should concentrate on combined operations instruction, while the integrating centers and Headquarters TRADOC focused on joint operations, and Headquarters TRADOC and the Army War College on coalition warfare.[17]

16 For a detailed discussion of the establishment and operation of the NTC, see TRADOC Annual Command History, FY 1983, pp. 171-206; TRADOC Historical Review, 1 Oct 83 - 30 Sep 86, pp. 20-21; TRADOC Annual Historical Reviews, 1987, pp. 35-37; 1988, pp. 152-54.

17 For a full discussion of School Model 83, see TRADOC Annual Command History, FY 1983, pp. 53-62.



General William R. Richardson
Commanding General
United States Army Training and Doctrine Command
11 March 1983 — 29 June 1986

General Otis deferred any decision on the School Model 83 to General William R. Richardson who assumed command of TRADOC in March 1983. Richardson's priorities were training, doctrine, force integration, and mobilization. He wanted to "fix problems now," not some time in the future. More needed to be done, he believed, in the professional development of officers and noncommissioned officers. In a letter to the school commandants and integrating center commanders in late April 1983, he laid out his desire to give back to the schools' Directors of Training and the academic departments much of the responsibility for training developments they had lost in School Model 76. He wrote:

> *In keeping with my philosophy of making training the command's highest priority, I want to expand the responsibilities of the trainers. Thus, I prefer an organization where the directors of the academic departments report directly to the Assistant Commandant, whose principal responsibility will be supervision of the schoolhouse. Furthermore, I expect the writing of doctrine and all training development products to be accomplished by the instructors, who are our subject matter experts.*

As finally adopted, The Directorate of Training and Doctrine retained responsibility for training concept formulation, training direction, planning, and training management. The directorate determined the future of school training, formulated broad strategies, established goals and objectives, and identified the major tasks critical to duty competency. Given those tasks, the training departments would perform the analysis to develop specific teaching tasks and write the objectives, complete with conditions and standards for training. Instructors would select training sites, prepare job aid analysis, describe the target population, determine methods and media, and prepare the training management plan. They would also write doctrine, and write and validate appropriate portions of tests, the ARTEP, soldier's manuals, trainer's guides, programs of instruction, extension training materials, and all other associated training support requirements. Those procedures placed the instructors in a more active and key role in training development and insured continuous infusion of subject matter expertise into training support material production.[18]

18 (1) TRADOC Annual Command History, FY 1983, pp. 56, 62. (2) Quotation is from ltr ATDO, General William R. Richardson to Comdts, TRADOC Service Schools and Cdrs Integrating Centers, 29 Apr 83, subj: Integrating Center and School Model, THRC.

Another major initiative of the Richardson era was the effort to improve unit training by adjustments to the Army Training and Evaluation Program. As the result of perceptions by the Chief of Staff of the Army that training was poorly executed, and by the FORSCOM commander that units in the field lacked basic tactical skills, TRADOC began in late 1982 to study the situation. There were a number of problems with the ARTEP. It did not provide the training foundation for units to attain proficiency for missions. Training objectives were often vague, and methods and procedures tended to differ widely from command to command. No methodology existed for training from individual soldier skills to battalion task force level missions. The lack of adequate sustainment programs often resulted in a unit peaking only for a particular training activity. In short, the ARTEP had become less a program and more an event, a direct contradiction to its original intent. Beginning in late 1983, TRADOC took several measures designed to make the ARTEP more responsive to collective training needs. The ARTEP Mission Training Plan was a concise training strategy designed to achieve unit proficiency for a specific battle mission. It tied the "how to train" with the "what to train" in a single document. The Mission Training Plan described a progressive training program from individual task through battalion level mission. Training developers reviewed small unit collective task concepts including battle drills, content of drill books, and battle drill training conducted at TRADOC schools. In addition, tactical techniques were institutionalized as a new category of collective tasks tailored to combat support and combat service support organizations.[19]

Another major program of the mid 1980s was the Professional Development of Officers Study, or "Bagnal Study." Since the end of World War II, the Army had conducted a number of studies of its officer training system. In February 1984, General John A. Wickham, Jr., the Chief of Staff of the Army, decided that it was time once again to examine officer development to see if the education, training, and development objectives were sound, clearly understood, and being pursued rigorously and resourcefully. It had been almost seven years since the Review of Education

19 (1) TRADOC Historical Review 1 Oct 83 - 30 Sep 86, pp. 36-38. (2) TRADOC Annual Historical Review, 1987, pp. 56-57.

and Training for Officers (RETO) Study, and it was time to assess the effects of its recommendations on the officer corps. Lt. Gen. Charles W. Bagnal, the TRADOC Deputy Commanding General for Training, was named study director. According to its charter, the study group was to evaluate officer and warrant officer professional development in light of the Army's needs from 1985 through the year 2025. The study was to focus on professional military training and education from precommissioning to end of service for both the active and reserve components.[20]

As published in February 1985, the Bagnal study revealed many strengths in the current officer education system; it also revealed a number of weaknesses that would likely magnify over time. The system was not sufficiently reactive to Army needs, and it lacked cohesion from one level to the next. Indeed, it was hardly a system at all but a series of loosely joined training processes. To correct the deficiencies, the group identified the capabilities an officer had to have at each stage of his career and designed a theoretical system to meet those goals and develop officers according to fundamental principles. The study also recommended policies that would allow the current system to evolve into the desired system.The study group believed that the time available for training had to be focused on the things that made a difference, and one of those was an officer's frame of reference, that is the mental perspective from which he made his decisions. Army schools had to focus on providing the expanded frame of reference an officer would need in his next assignment. All schools would adopt a common core of instruction at each level, followed by properly sequenced assignments designed to put knowledge into practice. Courses had also to be designed to address the unique requirements of the reserve officer. Underlying all the issues and suggestions was the assumption of the importance of a mentoring system that emphasized the leader's role in the development of subordinates. The Chief of Staff of the Army approved a number of the Bagnal recommendations, including tightened commissioning standards that would be tied to an assessment program.[21]

20 TRADOC Historical Review, 1 Oct 83 - 30 Sep 86, p. 44.

21 The Professional Development of Officers Study is discussed at length in TRADOC Historical Review, 1 Oct 83 - 30 Sep 86, pp. 44-49.

Meanwhile, the success of the NTC in training heavy mechanized forces led the Army to consider a similar facility for the training of the Army's airborne, air assault, Ranger, special operations and light infantry battalions in low to mid-intensity conflict. In October 1986, General John A. Wickham, Jr., Chief of Staff of the Army, approved the concept for a training facility for light forces. After consideration of all Army installations in the United States, 72,000-acre Fort Chaffee, Ark. was chosen as the site for the Joint Readiness Training Center (JRTC), with headquarters located at Little Rock Air Force Base. Like the NTC, the JRTC featured a TRADOC Operations Group, and an opposing force trained and equipped to support combined arms force-on-force field training exercises. The OPFOR was capable of replicating a range of threats from terrorism through the vehicle array of a reinforced Soviet airborne battalion. Training in the deployment of units into a hostile environment employed strategic and tactical airlift assets of the U.S. Air Force. Unlike the NTC, the JRTC was completely a TRADOC project. [22]

In early October 1987, a noninstrumented pilot rotation with a battalion task force of the 82d Airborne Division took place at Fort Chaffee. During FY 1988, seven battalion task force rotations were completed. Rotations were increased to nine per year for FY 1989 and 1990. Plans for FY 1991 included four single task force rotations and four rotations for two-battalion task forces, plus the training of four brigade headquarters. JRTC developers expected initial operation of a full-scale instrumentation system in 1994. [23]

In addition to the continuing development of the NTC and the implementation of the JRTC concept, the Army began to plan for the establishment of the Combat Maneuver Training Center (CMTC) to be located on a 44,000-acre site at Hohenfels, Federal Republic of Germany. That training area would provide, for European based troops, the same realistic combined arms training exercises as those at the NTC. Fifty-six armor and mechanized battalion task forces and squadrons would train annually against an OPFOR, to fight and win in a mid- to high-intensity environment. Original plans were for an instrumentation system to be

22 TRADOC Annual Historical Review, 1987, p. 37.
23 TRADOC Annual Historical Review, 1988, pp. 154-55.

operational by the end of FY 1990. However, as a result of technical difficulties, initial operation of the system was moved forward to the spring of 1991. [24]

In January 1987, the Chief of Staff of the Army approved the concept of the Battle Command Training Program (BCTP) to train active and reserve division and corps commanders, their staffs, and major subordinate commanders in the warfighting skills necessary to win the AirLand Battle. The program consisted of a five-day war fighting seminar at Fort Leavenworth or home station, followed by a five-day computer driven division command post exercise conducted by mobile training teams at home station or at regional sites. The seminars provided the training audience an opportunity to think about and discuss doctrine and tactics and arrive at insights about modern warfighting. Warfighter exercises provided a realistic battlefield simulation that required the player unit to fight as a team while performing to standards. The goal was for every division and corps commander to receive a BCTP experience at least once during their command tour. [25]

Also in January 1987, the Chief of Staff of the Army approved a master plan that would, in effect, bring the NTC, JRTC, CMTC, and BCTP under a unified training umbrella. Later in the year the collective training programs officially became known as the Combat Training Centers, or CTC. Thus training for leaders and units from squad through corps was consolidated in one program. When all the programs were fully operational, the Army would have the capability to train heavy, light, and special operations forces across the spectrum of conflict. [26]

24 Ibid., pp. 155-56. The Combat Maneuver Training Center was originally called the Combat Maneuver Training Complex.

25 Ibid., pp. 156-57.

26 Ibid., pp. 151-52.

IV

Training in Vuono's Architecture for the Future Army

In June 1986, General Carl E. Vuono replaced General Richardson as TRADOC commander. One of General Vuono's first initiatives was to begin development of a long range plan to guide the command for ten years into the future. In short, the TRADOC Long Range Plan would provide an "architecture for the future." TRADOC published the plan in May 1987, just before its designer departed to become Chief of Staff of the Army. As Vuono had envisioned, the plan was designed to establish goals and operating standards for the command's various areas of responsibility and insure advancement toward those goals in a disciplined and evolutionary manner. It was also intended as an aid in making difficult affordability decisions and in measuring the command's progress in achieving its goals. General Vuono directed that the Long Range Plan be kept relatively brief and be supplemented by more detailed documents prepared by each subelement of the headquarters and each subordinate organization to project activities of its own functional area into the decade ending in 1997. As training plans matured, the Long Range Plan itself underwent revision to bring it in line with the Army Long Range Planning Guidance published in March 1988 and to reflect areas that General Maxwell R. Thurman, Vuono's successor, identified as critical future challenges. Those included anticipation of long-term strategic goals for the United States; application of technological advances; maintenance of a quality force; and marketing TRADOC to the Army, to Congress, and to the American public. [27]

27 (1) TRADOC Annual Historical Review, 1987, p. 2. (2) TRADOC Annual Historical Review, 1988, pp. 110-11. (3) TRADOC Long Range Plan, March 1989, THRC.



General Carl E. Vuono
Commanding General
United States Army Training and Doctrine Command
30 June 1986 — 12 June 1987

In September 1986, to meet the commander's desire for a ten-year training plan in support of the TRADOC Long Range Plan, Maj. Gen. Glynn C. Mallory, Jr., the TRADOC Deputy Chief of Staff for Training, directed that Army Training 1990 be updated and retitled Army Training 1997. Specific guidance included the integration of reserve component training throughout the document under a "One Army" or "Total Army" concept. Additional emphasis was also to be given to developing joint and combined operations and to the distributed training system. The new TRADOC Pamphlet 350-4, Army Training 1997, was published in September 1987. Major changes included in the final version dealt with leader development, future technology strategy, the connection between training development and combat developments within the Concept Based Requirements System (CBRS), combat training centers, embedded training, and small group instruction. The long range strategy provided for a new training system for warrant officers and a strong emphasis on civilian leadership training. The plan also included the results of an important Initial Entry Training Study, undertaken to draft a set of standards to improve training effectiveness and guide the evolution of IET. [28]

Meanwhile, training literature had to keep pace with evolving training plans and doctrine. Combat readiness was based upon successful implementation of the training philosophy contained in a new manual, FM 25-100, *Training the Force*, which required TRADOC to develop a complete training strategy that was battle focused and based on each unit's mission essential task list. The capstone training manual was written to take its place alongside FM 100-5, *Operations*, and FM 22-100, *Military Leadership*, as part of a trilogy of "train, fight, lead" manuals. The final FM 25-100 was released in November 1988. While it applied to all commanders, FM 25-100 specifically focused on brigade and higher commanders and their staffs. It embodied the Army's fundamental training strategy at every echelon, and it emphasized that Army training was, in General Vuono's words, "a disciplined process in which we train as we intend to fight. It focuses on attaining high standards in planning, executing and assessing training at all levels and in all types of units." Subsequent manuals, still under development in 1990 would support battalion

28 (1) TRADOC Annual Historical Reviews, 1987, pp. 11-13; 1988, pp. 110-111.

and company levels. Training developers believed the key to successful implementation of FM 25-100 was the integration of many Armywide programs at battalion level to achieve one cohesive battle focused training program with proper synchronization. [29]

A major portion of Army Training 1997 outlined the unique challenges of training for the reserve components (RC). Since its formation, the Training and Doctrine Command had been concerned about the quality of training provided for the RC, and a number of studies had been conducted to determine what steps needed to be taken to improve the readiness of the reserve forces. Of special importance among these was the TRADOC Reserve Component Training Study directed by General Richardson to examine the command's role in assisting RC training. In August 1984, the Department of the Army had published the ArmyAction Plan for Reserve Component Training which addressed sixteen major issues including noncommissioned officer and warrant officer training, full time manning, MOS qualification, regional training sites, training aids and devices, and U.S. Army Reserve schools. However, as conventional force deterrence capabilities became more closely linked to national defense strategy, as exemplified by the Intermediate Range Nuclear Forces (INF) Treaty, the Army leadership became increasingly concerned about the combat readiness of the RC. The determination of Congress to proceed with a force mix tilted much more heavily toward Guard and Reserve units than had been the case in the past, meant that many RC missions became more critical to deterrence. Furthermore, in the event of total mobilization, the reserve forces would make up nearly 70 percent of the force. Time constraints, dispersion, personnel turbulence, and the complex reserve command and control structure tended naturally to impede optimum combat readiness and rapid deployment. As TRADOC Deputy Chief of Staff for Training, Maj. Gen. Wayne A. Downing put it: "The challenge we're faced with is how to take a Reserve Component unit with 39 training days per year and

29 Msg, HQDA to distribution, 091125Z Jan 89, subj: Implementation of FM 25-100, THRC. Vuono quotation from "Today's U.S. Army, *Army*, October 1989, p. 58; FM 25-100, *Training the Force*, November 1988, Headquarters, Department of the Army.

have them be ready to fight alongside active army units who may get 250 to 300 training days per year." [30]

With all this in mind, in October 1987 General Vuono, by then Chief of Staff of the Army, directed that a task force effort be devoted to examining all previous and ongoing work related to the readiness of the Army National Guard, the U.S. Army Reserve units, and the Individual Ready Reserve. He also directed that a coherent, comprehensive, Department of the Army level training strategy for the future be developed that the total Army could implement by 1990. The TRADOC Deputy Commanding General for Training and the FORSCOM Deputy Commanding General co-chaired the task force established to accomplish this mission. The task force also included representatives from the Army Staff, the Office of the Chief, Army Reserve, the National Guard Bureau, WESTCOM, USAREUR, TRADOC, FORSCOM, and Health Services Command. The United States Army Training Board acted as coordinator and facilitator for the important effort. On 22 February 1988, the Reserve Component Training Strategy was briefed to General Vuono. [31]

The Strategy focused generally on the full range of needed systemic improvements in leader, individual, and collective training and on training management and support for the RC. If fully implemented, the RC Training Strategy would not require RC units and personnel to train to the same number of tasks as their active component counterparts. Rather, they would train to the same standard for each task that was required. The Strategy strongly emphasized that the RC's need for training devices and simulators was greater than the active component's. In addition, the excessive and redundant administrative burdens on leaders and units had to be significantly reduced. The success of the Strategy, its authors insisted, depended on recognition that the nature of the training environment meant that RC training support needs were unique and had to be analyzed separately from those of the active component. In August 1988 Vuono approved, in principle, The Reserve Component Training Strategy and

30 (1) TRADOC Historical Review, 1 Oct 83 - 30 Sep 86, pp. 40-41. (2) TRADOC Annual Historical Review, 1987, pp. 39-40. (3) *Harrison Post* (Fort Benjamin Harrison), 30 Jun 89, quotation. (4) Maj Gen John L. Matthews, Utah National Guard, "Assessing Reserve Component Training," *Military Review*, Nov 89, pp. 28-33.

31 TRADOC Annual Historical Reviews, 1987, pp. 39-40; 1988, pp. 157-60.

declared the RC Training Strategy a major Year of Training (1988) initiative. On 18 May 1989, General Vuono approved the Reserve Component Training Development Action Plan which established, explained, and assigned responsibility for management and execution of the Reserve Component Training Strategy. That strategy contained thirty-eight issues that collectively addressed individual, leader, and collective training as well as training support and management. If all the objectives of the program to modernize training for the reserve forces were met, the Army expected that many changes and improvements would take place in the way RC soldiers and units were trained, managed training, and received training support. However, at the close of 1989, only low cost initiatives were being addressed. All the others awaited a means of meeting significant resource requirements. [32]

32 (1) TRADOC Annual Historical Reviews, 1987, pp. 39-40;1988, pp. 157-64. (2) Booklet, "Strategy for Reserve Component Training," U.S. Army Training Board, 1989. (3) Vision 91 Briefing, appended to General Thurman's Vision 91 Monograph, June 1989, both in THRC.

V

Training and Thurman's Vision of the Army

When work had started on Army Training 1997, the intent had been that as the architecture of the Army of the future evolved, the plan would be updated and revised as Army 2004, to support the concepts of AirLand Battle-Future and Army 21. At the same time, an Army Training 21 concept plan was being developed. Approved by the Deputy Chief of Staff for Training on 21 November 1988, the plan laid down the particulars for developing a long-range umbrella training strategy for the late 1990s and the first twenty years of the twenty-first century. It included such training strategies as distributed training, multiple training strategies based on the technical requirements of each MOS, vocational and technical training to train certain skills in the Army, training with colleges and universities, recruiting by ability as opposed to aptitude, and reconfiguring the current TRADOC school system to be more responsive to training requirements by the year 2020. The concept plan also addressed the CTC Master Plan, integrated training strategy for the decision support system, and reserve component training. [33]

The main thrust of Army Training 21 was to reduce the size, cost, and length of institutional training as it was known in the 1980s. Of special interest were the options developed for the conduct of initial entry training. After basic combat training (BCT), a soldier could go directly to his unit and receive advanced individual training (AIT) there through a distributed training system, or he could attend resident AIT before joining his unit. Other options were to have the soldier attend a civilian vocational school

33 (1) TRADOC Annual Historical Review, 1988, p. 111. (2) Briefing, TRADOC Office of the Deputy Chief of Staff for Training to TRADOC Commander's Conference, Fort Monroe, Va. 7-8 Nov 89, THRC.



General Maxwell R. Thurman
Commanding General
United States Army Training and Doctrine Command
29 June 1987 — 1 August 1989

immediately upon enlistment and before BCT or to train BCT generic tasks during high school before directly reporting to his first unit assignment for his on-the-job training through distributed training. At the end of 1989, the institutional phase of the concept was well-developed. The home station portion was under development. The Office of the Deputy Chief of Staff for Training briefed the concept to the school commandants, and integrating center commanders in October 1989 and to the TRADOC Commanders' Conference in early November. [34]

Meanwhile, as TRADOC reached its fifteenth anniversary, General Maxwell R. Thurman, who had succeeded General Vuono, called for a reassessment of the command's status and took a hard look at the command's priorities for the short term. In the late fall of 1988, he outlined for the TRADOC and Army leadership his "Vision 91" of how TRADOC should fulfill its mission through 1991 in the domains of doctrine, force design, equipment requirements, leader development, training, and mission support. In exhorting the leadership to "make good things happen for our Army," he cautioned that training had to be consistent with doctrine, "embedded" into the development of new equipment, and made an integral part of force modernization. Institutional, unit, and individual training had to focus on the teaching of warfighting skills in a tactical field environment to produce soldiers who understood the specific tasks of their job and could perform them to standard. To meet that goal, training as a total Army (active and reserve components and civilian employees), training on a realistic battlefield, and training in joint operations were essential. The development of technically and tactically competent leaders meant that leadership training had to be historically based, doctrinally sound, sequential, and progressive. Training, according to Vision 91 plans, would make heavy use of technological advancements, especially interactive computer-based teaching and testing. Unit training would focus on wargaming computers capable of simulating force-on-force maneuvers. Training techniques also had to be developed to prepare for operations in space and

34 (1) TRADOC Annual Historical Review, 1988, p. 111. (2) General Officer Notes 12-89, December 1989 and 90-1, January 1990. (3) Semiannual Staff Historical Report, Office of the Deputy Chief of Staff for Training, TRADOC 1 Jul - 31 Dec 1988 p. 52. (4) Briefing, Office of the Deputy Chief of Staff for Training, TRADOC, to TRADOC Commanders' Conference, Fort Monroe, Va., 7-8 Nov 89, all in THRC.

to improve the effectiveness of light force operations. As equipment became more complicated, leader development would become more critical. The leadership abilities of junior noncommissioned officers would be the key to success in independent small unit operations. Increased reliance on the reserve components would drive the exploration of innovative methodologies to meet their special needs. [35]

To help Army training move into the future in a coherent and effective way, Vision 91 included an overall training strategy designed to integrate a number of subordinate strategies and programs, including the Army Training 21 concept described above. Those strategies reflected major actions required to identify requirements, reduce needs, or enhance capabilities, and they provided a framework for the training community's orderly evolution to the high technology training environment of the twenty-first century. First, each proponent school was required to produce a comprehensive strategy that encompassed all branch-related individual and unit training. By the spring of 1989, the schools were to define requirements and identify technologies to meet those requirements. Each individual proponent strategy would tie into the TRADOC integrated strategy. The reports received became a part of the TRADOC Long Range Plan of September 1989. To insure that TRADOC met training support demands, an automated systems approach to training, or ASAT, would be developed to improve the production and standardization of training products through automation. ASAT software would be hosted on the TRADOC decision support system (DDS) at the service schools. [36]

Another strategy known as the "distributed training strategy" would allow the Army to deliver training to soldiers when and where it was needed. That strategy would assess the current status of distributed training, determine future requirements, identify and evaluate existing and emerging technology, and describe a plan for the development and fielding of distributed training programs for the future. The strategy for future training sites would address the firing range and maneuver land area requirements for new weapons systems, which tended to exceed the

35 (1) TRADOC Annual Historical Review, 1988, pp. 112-13. (2) General Maxwell R. Thurman, Vision 91 Monograph with attached Vision 91 Briefing, June 1989, THRC.

36 Vision 91 Briefing appended to General Thurman's Vision 91 Monograph, June 1989, THRC.

amount available to the Army for training. That strategy would not only incorporate the issue of land acquisition, but it would also take a comprehensive look at the possibilities of employing training aids, devices, simulators, and simulations. The integrated training strategy would include the fielding of technologically advanced strategies to train soldiers in close combat (heavy and light), deep attack, and rear battle. For training at the CTCs, General Thurman envisioned the fielding of a system to simulate the effects of mines and indirect fire. Known as SAWE (Simulation of Area Weapons Effects), the system would be integrated with the Multiple Integrated Laser Engagement System (MILES). To insure that training of the total Army was addressed in the future, plans were to field the RC Training Strategy described above by the summer of 1991. TRADOC was the lead agency for fourteen of the RC Strategy's thirty-eight issues. [37]

As General Thurman looked at how the command could best meet its responsibilities down to 1991, TRADOC's training managers were examining School Model 83 for needed changes. School Model 89 eliminated the School Secretary organizations at schools located on TRADOC installations, aligned the threat support office under the assistant commandant, and limited the number of training departments in each school to four. The new model permitted the retention of the school brigade, but urged merger of battalions and training departments to the extent possible. At the April 1989 Commander's Conference, General Thurman directed implementation of School Model 89 as soon as possible, but not later than 1 October 1989. When numerous requests for exemptions were received, that deadline was extended and the Chief of Staff of the Army directed that implementing guidance be disseminated by the end of January 1990. That directive approved specific requests for exemption to the limit on training departments and allowed the Directorate of Training and Doctrine rather than the Directorate of Resource Management to absorb the resource management assets which had previously existed in the School Secretary's Office if savings compared favorably. [38]

37 Ibid.

38 (1) General Officer Notes 05-89, May 1989. (2) Semi annual Staff Historical Report, Office of the Deputy Chief of Staff for Training, 1 Jan-30 Jun 1989, p. 61; 1 Jul-31 Dec 1989, p. 54, both in THRC.

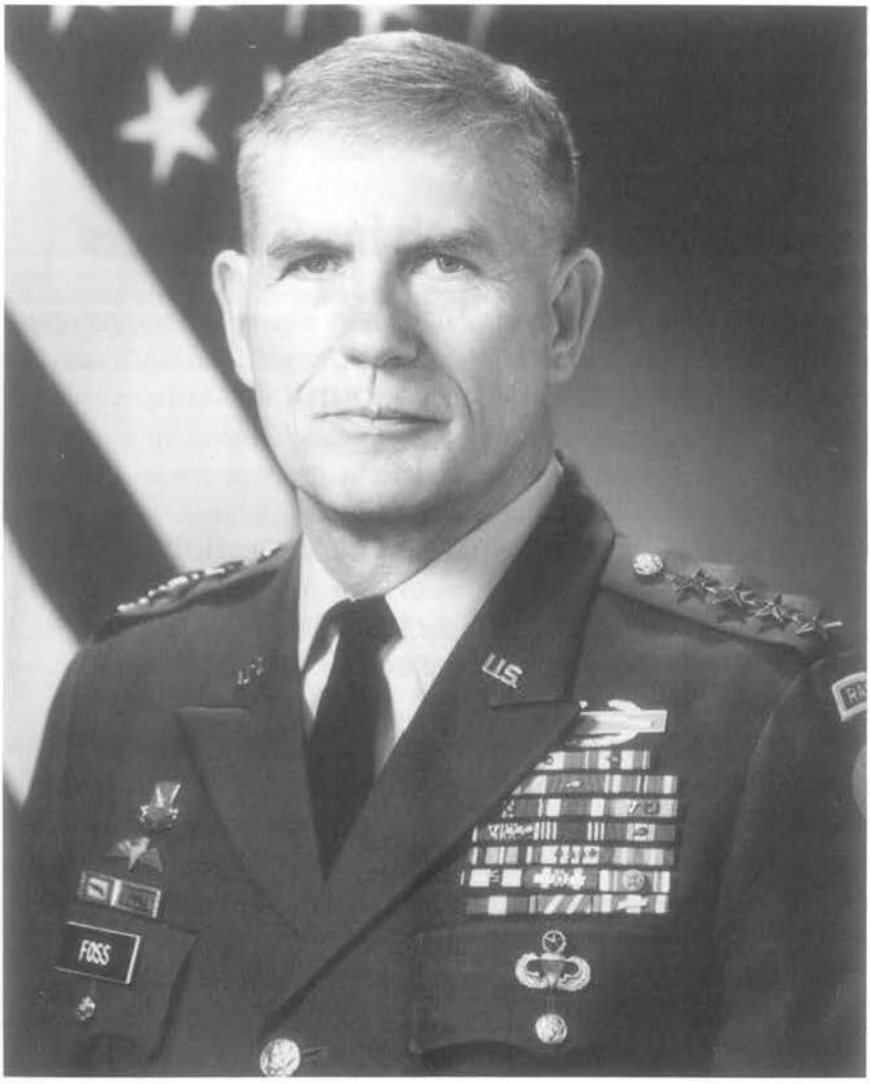
VI

Foss and New Training Challenges

On 2 August 1989, General John W. Foss assumed command of the Army's Training and Doctrine Command as General Thurman departed to command the U.S. Southern Command (SOUTHCOM) and eventually to command Operation JUST CAUSE in Panama. General Foss endorsed Vision 91, in general, as a good guide in focusing future efforts on TRADOC's six functions as defined by General Thurman. In a message to the commanders and commandants of the TRADOC centers and schools, he encouraged each of them to know the philosophy, processes, and products that together made up the Vision 91 concept. In his words, "I intend to use it as the baseline for adjustment due to changing resource constraints and prioritization." [39]

Meanwhile, beginning in August 1988, the TRADOC Deputy Chief of Staff for Training, in cooperation with the Department of the Army, FORSCOM, the National Guard Bureau, CATA, the TRADOC schools, Seventh Army Training Command, the Program Manager for Training Devices (PM TRADE) and other commands and agencies, began building a comprehensive force training strategy. As the Army Chief of Staff, General Vuono, envisioned it, the Combined Arms Training Strategy, usually known as CATS, would be a transition plan to modernize the total force's training system through time by linking near-term with long-term (Army Training 21) strategies for heavy, light, aviation, support, and reserve component elements of the force across the spectrum of the seven battlefield operating systems. In short, it would provide the "how to" for training devices much the same as FM 25-100, *Training the Force,* provided the "how to" for training management. In designing the new strategy, the TRADOC training community also took into consideration

39 Msg, General Foss to distr, 221545Z Sep 89, subj: Vision 91, THRC.



General John W. Foss
Commanding General
United States Army Training and Doctrine Command
2 August 1989 —

the findings of several Department of the Army task forces such as the Armored Family of Vehicles Task Force and the Armor-Antiarmor Special Task Force. Those study groups had determined that traditional training methods and strategies and existing resources would be unable to support the enhanced capabilities of the new systems planned. [40]

The strategy, as it evolved, would specify a concept of training in terms of institution, homestation, and CTC and establish resource requirements over time. CATS would thus be the Army's vehicle for constraining funding for training devices. In each weapon area, the Army would identify the skills that each soldier needed to have and determine what devices were available to train those skills. Next, the candidate devices would be compared as to cost and training effectiveness, and one would be selected. In short, the strategy would lay out the best combination of training devices to be acquired through time that assured an affordable, combat ready force. By the end of 1989, the CATS effort had generated an initial breakdown of the resources that would be required by year and by type of funding to provide the necessary training aids, devices, simulations, simulators, "operating tempo," and training munitions. The coordinating draft entitled "Army Training 2007," staffed within the Office of the Deputy Chief of Staff for Training, the integrating centers, and the schools, reflected the developers' assessment of what would be the best mixture of resources by year down to the year 2007 and indicated funding already available and that still needed. Plans were that CATS would gradually be folded into a larger "capstone" concept and strategy to serve as the training equivalent to the AirLand Battle-Future warfighting concept. [41]

In November 1989, the FORSCOM commander received a briefing on CATS and recommended that more work was needed on the light forces and reserve component elements of the report. The portion of CATS dealing with training aids, devices, simulators, and simulations (TADSS) was briefed to General Vuono on 4 December 1989 as the "device based

40 (1) TRADOC Pamphlet 350-4, Army Training 2007 (Final Draft), 13 April 1990. (2) Briefing (Draft), TRADOC Office of the Duputy Chief of Staff for Training to Chief of Staff of the Army, n.d., both in THRC.

41 (1) TRADOC Annual Command History, 1989, pp. 158-60, THRC. (2) Caleb Baker, "Master Plan for Army Training," *Defense News*, 16 Feb 90.

training strategy." At that time he directed that the CATS effort be expanded with an FY 1994 "versatile force" balance including strategies for heavy, light, heavy/light, special operations forces, and the reserve components. One result of his tasking was a project to produce a Combined Arms Training Strategy-Light which would focus on the development of devices like small arms trainers. Vuono also requested that developers take a look at the TRADOC institutions to insure that service school graduates were familiar with the use of the devices and simulators involved and were confident of their training value once they reached their units. [42]

The final draft of Army 2007 was published on 13 April 1990, at which time CATS was briefed to General Crosbie E. Saint, Commander-in-Chief, U.S. Army Europe and Seventh Army, and General Edwin H. Burba, Jr., Commander-in-Chief, FORSCOM. The two generals suggested a meeting among senior Army leaders to attempt to reach a consensus on the direction, priority, and funding levels of both key systems and nonsystems training devices. That meeting was scheduled for 8 August 1990 at the Pentagon. Meanwhile, on 21 June 1990, the TRADOC Deputy Chief of Staff for Training and his staff briefed the concept to General Gordon R. Sullivan, Vice Chief of Staff of the Army. The following day, TRADOC Headquarters held a video teleconference with representatives of the various centers and schools each of whom would be responsible for developing its own part of the overall training strategy and identifying the resources to support it. Training developers expected that when the Combined Arms Training Strategy was fully implemented, all the pieces would be integrated into a total force training strategy that would provide Department of the Army direction and focus in training and training management while retaining responsiveness to changes in the force training environment. TRADOC informed the centers and schools present at the video teleconference that there were two essential pieces of the strategy that had to be refined quickly. First, each proponent had to complete its training strategy. Second, priority had to be assigned to

42 (1) TRADOC Annual Command History, 1989, p. 159. (2) Semiannual Staff Historical Report, Office of the Deputy Chief of Staff for Training, TRADOC, 1 Jan - 30 Mar 1990, pp. 74-75, both in THRC.

the training aids, devices, simulators, and simulations that would support the various strategies. In short, the Army had to know which training resources would support what training events and to what standard, in order to determine the rationale for acquisition of those resources. The plan was that CATA would review the various strategies and resolve any conflicts that developed. Then, in conjunction with the Army Training Support Center, CATA would develop a single list of TADSS, ranking each in order of importance. In assessing the TADSS, training developers would consider those devices expected to be available in FY 1994. The list from the schools involved were due to CATA by 13 July 1990, along with lists of TADSS each would like to see fielded between FY 1995 and FY 1999. CATA provided the integrated list to TRADOC in late July 1990. TRADOC, in turn, sent the training strategies and the integrated list to the Chief of Staff of the Army and the MACOM commanders in August. When completed the CATS would be published as TRADOC Pamphlet 350-4, Army Training 2007. [43]

On 8 August, the meeting Generals Burba and Saint had requested in April was held at the Pentagon. In attendance, in addition to Burba and Saint, were General Sullivan; General Foss; General Robert W. RisCassi, Commander Eighth U.S. Army; General William G. T. Tuttle, Jr., Commander U.S. Army Materiel Command; Lt. Gen. August M. Cianciolo, military deputy in the Office of the Assistant Secretary of the Army for Research, Development, and Acquisition; and Maj. Gen. Craig A. Hagan, TRADOC Deputy Chief of Staff for Training. Those senior Army officials unanimously supported and agreed with the CATS concept. The following week, TRADOC presented a CATS in-progress review to General Vuono. The Army Chief of Staff pronounced the focus "exactly right," and directed it be implemented. He was also pleased that the plan provided a mixture of institutional training and unit training, both in the present and in the future. By 31 October, TRADOC expected to have completed unit baseline training strategies for combat support and combat service support, as well as combat arms. Also by that date, the command expected to

43 (1) Semiannual Staff Historical Report, Office of the Deputy Chief of Staff for Training, TRADOC, 1 Jan - 30 Mar 1991 p. 75. (2) Msg, Cdr TRADOC to distr, 091100Z Jul 90, subj: Combined Arms Training Strategy (CATS) Proponent Training Strategy Requirement. (3) Briefing Slides, DCST, TRADOC Briefing to the VCSA, 21 Jul 90, all in THRC.

have a unified priority list for both systems and nonsystems TADSS. Meanwhile, on 4 September 1990, Maj. Gen. Hagan assigned CATA (soon to be known as Combined Arms Command—Training, or CAC-T) as the proponent for CATS and thus for implementation of the training strategy. CAC-T planned to make the institutional format of the implementation plan final by the end of January 1991. By 30 July 1991, institutional input for integration into the coordinating draft was due to CAC-T. If all went as planned, the coordinating draft of the Combined Arms Training Strategy for the coming decade would be published in September 1991. [44]

Late in 1990, the Army introduced the long awaited FM 25-101, *Battle Focused Training,* its newest major training doctrine manual, which was intended to guide the training of battalion and company soldiers, leaders, and units. The new manual both complemented and supplemented the capstone training management manual FM 25-100, *Training the Force,* which had first been fielded late in 1988. FM 25-100 established the Army's training doctrine, and FM 25-101 was designed to apply that doctrine and assist leaders in the development and execution of training programs. While FM 25-100 focused primarily on the responsibilities of senior active and reserve commanders, command sergeants major, and staffs at levels above battalion, FM 25-101 served as a "how to" manual for battalions and companies. Training developers at CATA believed the key to successful implementation of FM 25-100 was the integration of many Armywide programs at battalion level to achieve one cohesive battle-focused training program with proper synchronization. FM 25-101

44 (1) Semiannual Staff Historical Report, Office of the Deputy Chief of Staff for Training, 1 Apr - 31 Dec 1990, p. 88. (2) Briefing Slides, TRADOC Deputy Chief of Staff for Training Briefing to Chief of Staff of the Army, 16 Aug 90. (3) Briefing Slides, Deputy Chief of Staff for Training Briefing to TRADOC Commanders Conference, 4 Dec 90, all in THRC. With regard to CATS, the term "resource" referred not only to TADSS but to training ammunition, embedded training, ranges, maneuver areas, distributed training, institutional training, and "OPTEMPO." OPTEMPO, or operating tempo, referred to the level of spare parts, fuel, and lubricants the Army planned to fund each year to support vehicle movement for training. The Combined Arms Center was renamed the Combined Arms Command and the Combined Arms Training Activity (CATA) became the Combined Arms Command—Training (CAC-T) on 1 October 1990.

also reflected the ideology and philosophy behind CATS and other new Army initiatives: the Army could not afford to train in the future as it had in the past. [45]

Throughout the formulation of the new manual, developers received the comments of everyone from the Chief of Staff of the Army and the Sergeant Major of the Army to captains and sergeants from every branch and component of the force. FM 25-101 was organized to serve as a reference manual and a guide to everyday operations in units. Each of its chapters paralleled in title and organization the corresponding chapters in FM 25-100. FM 25-101 provided an overview of Army training doctrine, a discussion of mission essential task lists (METL) development, guidance in the planning, execution, and evaluation of training, and procedures in how to apply the guidelines provided to a fictional unit. Fundamentally, the new FM 25-101 provided a "one stop" source for battalion and company level leaders to develop and maintain effective training programs in their units. [46]

45 (1) Semiannual Staff Historical Report, Office of the Deputy Chief of Staff for Training, 1 Apr - 31 Dec 1989, p. 66. (2) Msg, Cdr CATA to distribution, 091705Z Jan 89, subj: Request for Input to Revision of 25-Series Field Manuals, both in THRC. (3) General Carl E. Vuono, "Training and the Army of the 1990s" *Military Review*, January 1991, p. 6.

46 (1) Lt Col Ed Soriano and Cpt Tim Vuono, "Battle Focused Training: Key to Readiness, "*Army Trainer*, Winter 1990, pp. 2-5. (2) Department of the Army, FM 25-101, *Battle Focused Training*, September 1990.

Retrospect and Prospect

Army trainers who looked back in 1990 to the training world of 1973, recognized that a change of era had taken place. In training as well as doctrine, organization, and equipment, the Army of 1990 reflected the results of a period of intensive modernization and the evolution of a performance oriented training system that accompanied the rapid technological advances that had occurred. In 1990, the political-strategic world, too, was rapidly changing. The United States Army had to assess its past, as well as its future, against the background of the political and economic collapse of communism and the effective demise of the Warsaw Pact as a military unity. If United States and NATO policies of containment and deterrence had been a factor in bringing about those dramatic changes, the U.S. Army's revolutionary training programs had played an important part. Whatever had been the changes in the structure and content of those programs, combat readiness had remained the ultimate goal. TRADOC's steady focus on modernized training, from the post-Vietnam retrenchment through the period of Soviet power moves worldwide to the restoration of American military power in the 1980s, was indeed a key element of the United States Army's contribution to deterrence.

As the Army moved into a new decade and looked forward to a new century, it fell to General Foss to oversee the many changes taking place in Army training, changes driven by severe resource constraints and by radical changes in the threat worldwide. The Army's training system and strategies differed radically in many ways from those that had existed at the end of the Vietnam conflict. If current efforts bore fruit, the training system at the end of the first quarter of the 21st century would bear little resemblance to that which existed in 1990.

Appendix

U.S. ARMY TRAINING AND DOCTRINE COMMAND

Commanding Generals

GEN William E. DePuy ..... 1 Jul 73 - 30 Jun 77
GEN Donn A. Starry ..... 1 Jul 77 - 31 Jul 81
GEN Glenn K. Otis ..... 1 Aug 81 - 10 Mar 83
GEN William R. Richardson ..... 11 Mar 83 - 29 Jun 86
GEN Carl E. Vuono ..... 30 Jun 86 - 12 Jun 87 [1]
GEN Maxwell R. Thurman ..... 29 Jun 87 - 1 Aug 89
GEN John W. Foss ..... 2 Aug 89 -

Deputy Commanding Generals for Training

LTG Julius W. Becton, Jr. [2] ..... 21 Jul 81 - 26 Aug 83
LTG Charles W. Bagnal [2] ..... 31 Aug 83 - 20 Jun 85
LTG Robert H. Forman ..... 21 Jun 85 - 31 Aug 87
LTG John S. Crosby ..... 1 Sep 87 - 31 Aug 89

Deputy Chiefs of Staff for Training

MG Ira A. Hunt, Jr. [3] ..... 1 Jul 73 - 30 Sep 73
MG Paul F. Gorman ..... 1 Oct 73 - 23 Jun 77
MG John W. Seigle ..... 24 Jun 77 - 3 Sep 79
MG Donald E. Rosenblum ..... 4 Sep 79 - 20 Jul 80
MG Howard G. Crowell ..... 21 Jul 80 - 19 Jul 81
MG Frederic J. Brown ..... 3 Aug 81 - 3 Jan 83
MG Maurice O. Edmonds ..... 4 Jan 83 - 21 Jun 85
MG Johnnie H. Corns ..... 22 Jun 85 - 9 Oct 86
MG Glynn O. Mallory, Jr. ..... 10 Oct 86 - 9 Jun 88
MG Wayne A. Downing ..... 15 Aug 88 - 27 Nov 89
MG Craig A. Hagan ..... 14 Dec 89 -

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1 From 13 Jun - 28 Jun 1987, LTG Robert H. Forman served as Acting Commanding General. Gaps in other dates indicate that personnel served in an acting capacity during that period.

2 The first two incumbents were also designated Army Inspector of Training.

3 Prior to October 1973, the position title was Deputy Chief of Staff for Training and Schools.

U.S. ARMY TRAINING AND DOCTRINE COMMAND
Deputy Commanding Generals for Training



LTG Julius W. Becton, Jr.



LTG Charles W. Bagnal



LTG Robert H. Forman



LTG John S. Crosby

U.S. ARMY TRAINING AND DOCTRINE COMMAND
Deputy Chiefs of Staff for Training



MG Ira A. Hunt, Jr.



MG Paul F. Gorman



MG John W. Seigle



MG Donald E. Rosenblum

U.S. ARMY TRAINING AND DOCTRINE COMMAND
Deputy Chiefs of Staff for Training (con't)



MG Howard G. Crowell



MG Frederic J. Brown



MG Maurice O. Edmonds



MG Johnnie H. Corns

U.S. ARMY TRAINING AND DOCTRINE COMMAND
Deputy Chiefs of Staff for Training (con't)



MG Glynn O. Mallory, Jr.



MG Wayne A. Downing



MG Craig A. Hagan

Glossary

AAR	after action review
AIT	advanced individual training
AMC	US Army Materiel Command
ARTEP	Army Training and Evaluation Program
ASAT	Automated Systems Approach to Training
ATP	Army Training Plan
BCT	basic combat training
BCTP	Battle Command Training Program
CAC-T	Combined Arms Command - Training
CATA	Combined Arms Training Activity
CATB	Combat Arms Training Board
CATS	Combined Arms Training Strategy
CBRS	Concept Based Requirements System
CMTC	Combat Maneuver Training Center
CTC	Combat Training Centers
DCSOPS	Deputy Chief of Staff for Operations and Plans (Department of the Army)
FM	field manual
DDS	Decision Support System
FORSCOM	US Army Forces Command
IET	initial entry training
INF	Intermediate Range Nuclear Forces (Treaty)
JRTC	Joint Readiness Training Center

METL	mission essential task list
MILES	Multiple Integrated Laser Engagement System
MOS	military occupational specialty
MQS	military qualification standards
NATO	North Atlantic Treaty Organization
NTC	National Training Center
PM TRADE	Program Manager for Training Devices (AMC)
RC	reserve components
RETO	Review of Education and Training of Officers (Study)
SAT	Systems Approach to Training
SAWE	Simulated Area Weapons Effects
SOUTHCOM	US Southern Command
SQT	skill qualification tests
TADSS	Training aids, devices, simulators, and simulations
THP	take home package
TOE	tables of organization and equipment
USAREUR	US Army, Europe and Seventh Army
WESTCOM	US Army Western Command

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