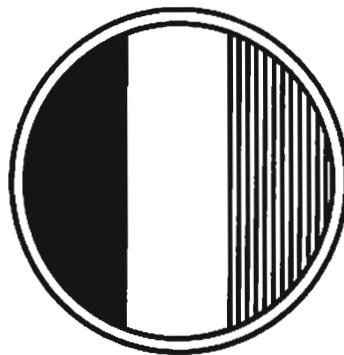


**TRAINING SUPPORT
FOR
RESERVE COMPONENTS**

13 APRIL 1976

TRANSCRIPT OF TV TAPE-7B-777-0430-B



MG PF GORMAN

BG MR THURMAN

BG CJ WRIGHT

FORWARD

This publication is an edited version of the verbatim transcript of TV Tape 7B-777-0430-B, Training Support for Reserve Components. The proponent for the tape and this publication is the Deputy Chief of Staff for Training (DCST), HQ TRADOC. The remarks contained herein are those of MG P. F. Gorman, DCST, BG M. R. Thurman, Deputy Chief of Staff for Resource Management, and BG C. J. Wright, Commander, Army Training Support Center.

Training Support for Reserve Components was prepared to inform Active Army personnel working with the Reserve Components of changes in the training and school systems. These changes, which especially impact on the Active Army/Reserve Component interface with the service schools and the newly established Army Training Support Center, are discussed in detail in the tape and this manuscript.

"TRAINING SUPPORT FOR RESERVE COMPONENTS" - PART I
Remarks by MG P. F. Gorman

Those of you who are concerned with the management of training in the Reserve Components need to know about certain changes which are underway in the US Army's Training and Doctrine Command. Those changes involve the establishment at Fort Eustis, Virginia of the Army Training Support Center, a new agency charged directly with providing support to you in your job. The changes also involve restructuring the schools of the Training and Doctrine Command in a way which will enhance the schools' capability to provide better support to Reserve Components training.

Three elements of the TRADOC have collaborated to tell you about those changes. Participants will be myself, Major General Paul Gorman, Deputy Chief of Staff for Training at Headquarters, TRADOC; Brigadier General Max Thurman, Deputy Chief of Staff for Resource Management, who will tell you about these changes from the management point of view; and Brigadier General Cory Wright, Commander, US Army Training Support Center, who will discuss that Center and its functions. But first, let me tell you about the concepts which underlie these organizational changes.

Let's start with a depiction of the training system of the US Army. That system, of course, is designed to support units of the Army, both Active and Reserve Components.



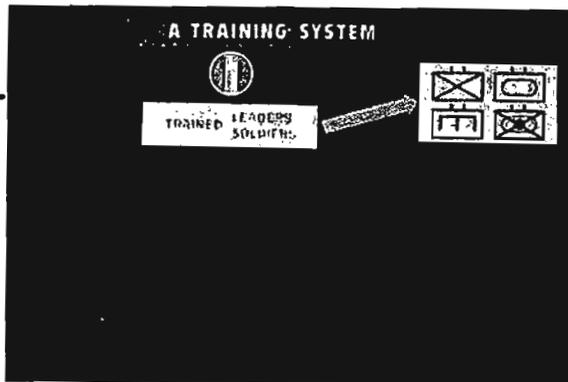
The Army has a training command, TRADOC, which is represented in this illustration with the command patch.



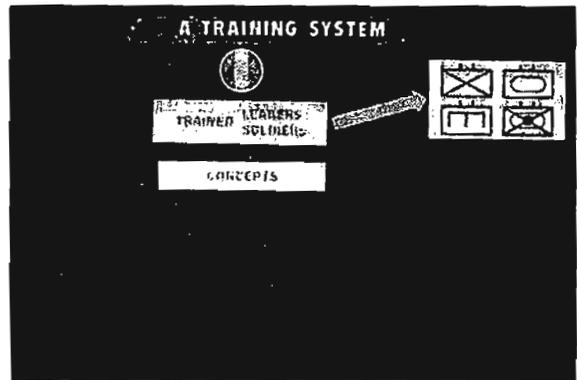
Now we all understand that the first and foremost product of the Training and Doctrine Command are trained leaders and soldiers.



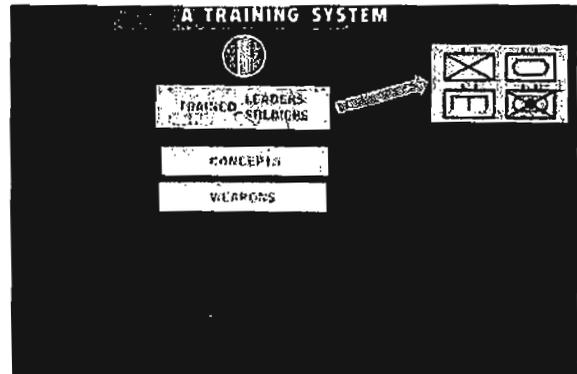
These personnel are sent forth throughout the year to unit level. All of us understand, however that no unit, either Active or Reserve, gets enough of that product every year to meet its needs. Therefore, the Training and Doctrine Command's mission includes going beyond this point to provide support in other areas.



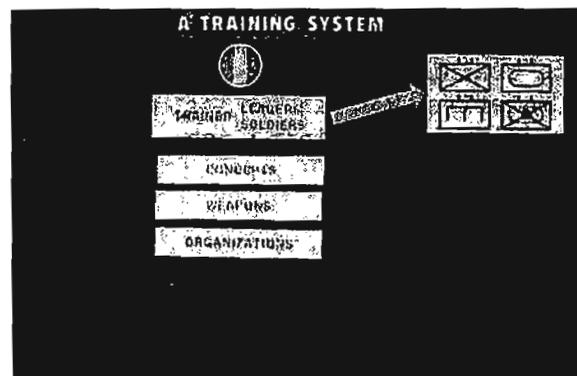
These are notably: Tactical concepts -
how to fight on the battlefield;



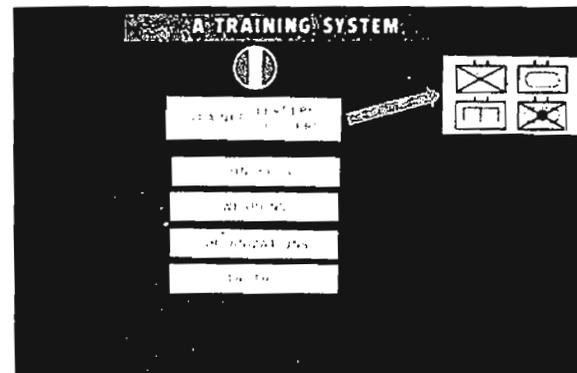
weapon systems - what kinds of weapons
and how many shall we have to do the
job;



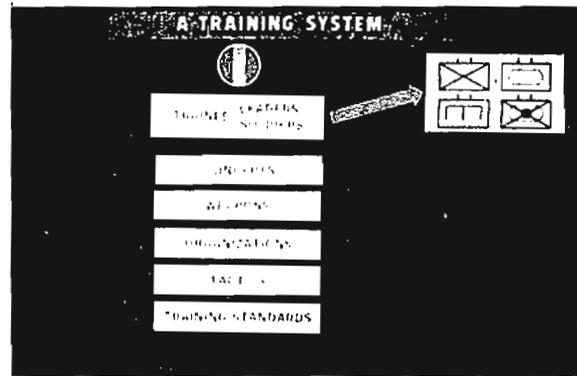
organizations - how shall we organize
to bring the weapon systems effec-
tively to bear on the enemy;



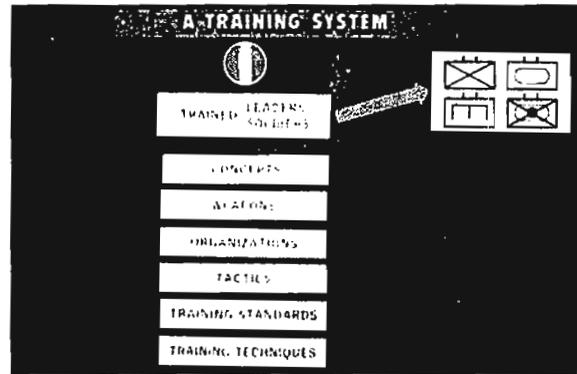
tactics - how do we use the organizations
and the weapons in a battlefield situa-
tion.



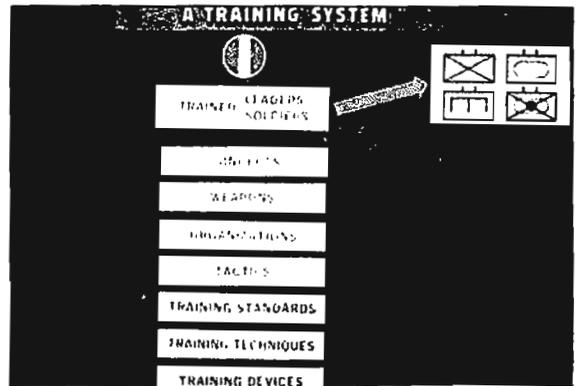
Also, and perhaps as importantly: training standards that we must meet with those weapons systems;



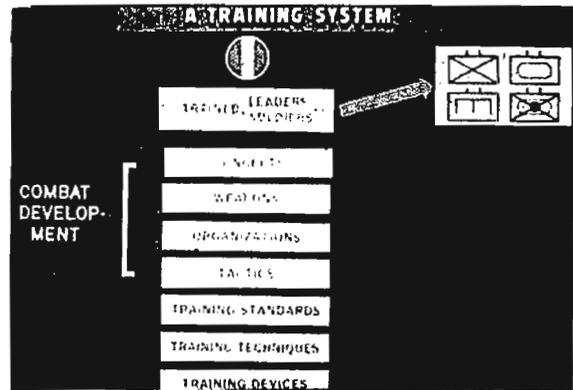
training techniques - ways of teaching the soldier effectively to employ them;



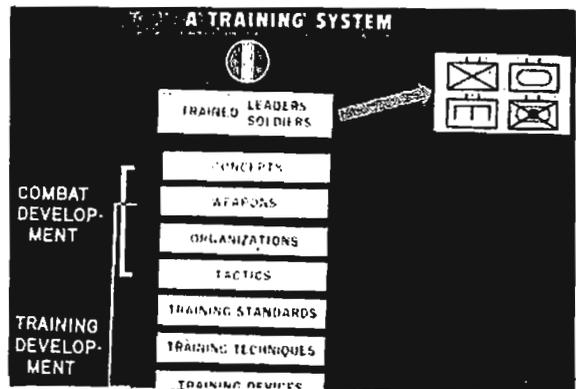
and training devices - communicative and simulative devices to assist the Commander in doing his training job.



The business of putting together concepts, weapons, organizations, and tactics, we refer to within the TRADOC as combat development.

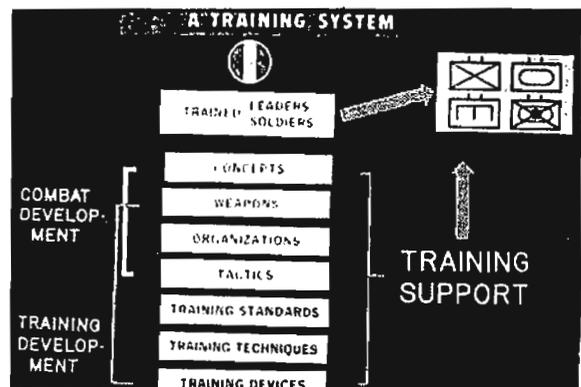


The business of teaching how to employ weapons, organizations, and tactics, and the devising of appropriate training standards, training techniques, and training devices we refer to as training development.



Both these undertakings are important to the organizational changes that will be discussed, but the TRADOC must also organize so that it is able to transmit in real time what we know about these subjects to the units of the Army. This transmission will supplement the flow of ideas on how to fight--which constitutes what we refer to in the Army as doctrine -- and supplement the ideas that reach the units via our trainee output.

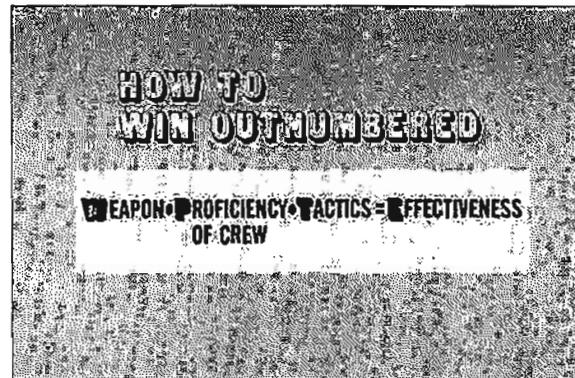
We, therefore, talk about a function in the TRADOC called training support which takes all of the products of combat and training developments, and puts them at the units' disposal.



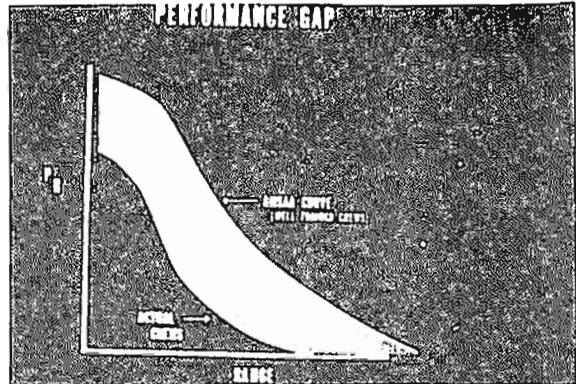
Now in order to explain that further, let me give you one or two specific examples.

We start with the concept in this WPT=E illustration. Here is a basic construct or paradigm that we bring to the training development business. We know that effectiveness in battle is a function of W, the capability of any given weapon; P, the proficiency of the crew that mans that weapon; and T, the tactics or technique with which the weapon is employed on the battlefield by commanders and leaders. Therefore, in order to assess the capabilities of any given weapon system we have to examine not only the capabilities of the materiel, but the capabilities of the men who work with that materiel. Let me give you one example from recent training developments within the Training and Doctrine Command.

We start from the basic notion that there is a numerically expressible capability for any weapon system. The Army Materiel Systems Analysis Agency provides the standard expression of what the weapons ought to be able to do in the hands of well-trained soldiers. When we conduct tests in the field, we often find that what actual crews can do with the weapon is substantially less than what the Army Materiel Systems Analysis Agency tells us the weapon ought to be able to do. The area between the curves created in these two situations represents a gap that has to be closed.

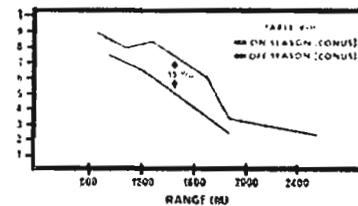


This illustration is an actual example of such a gap. The top curve is firings by tank crews of the Active Army in the continental United States after they had completed their annual gunnery practice, their so called "on-season" capability.



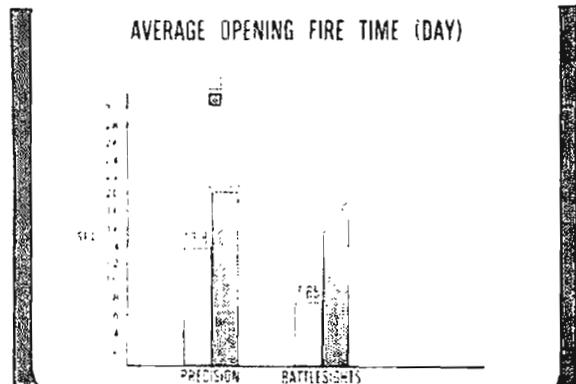
When we went into the same organizations and pulled tanks at random during the off-season (6 to 9 months later) we discovered a gap. The actual accuracy of the crews when they had not had recent tank gunnery training was, on the average, 18% less in the distances of greatest tactical interest than when they had completed tank gunnery. So we've got to close that kind of gap.

DAY (1ST ROUND) HEAT

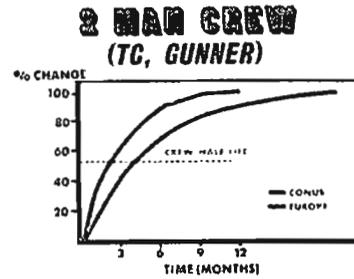


This is an illustration of another sort of performance gap which develops over time. We discovered by actual firings that, using precision fire techniques, the crew, when it has completed its annual gunnery training, can engage in 13.8 seconds. Off seasons (6 to 9 months later) that time of engagement degrades to 20.5 seconds. When using battle sights, the well-trained crew can engage right after gunnery training, in a little more than 7 seconds. Over the months, that opening time degrades to nearly 18 seconds. Again, we had uncovered a training gap that needed work.

AVERAGE OPENING FIRE TIME (DAY)



We also know from these tests that we have a major problem in the Active Army with instability within the crews. This chart deals with changes to either the tank commander, gunner, or both, over time. What it shows is that within 3 months the average tank crew in the United States Army has experienced a change in either that tank commander, gunner, or both. Also the data for the continental United States is not appreciably different from the data for Europe. So we have a problem of instability which the TRADOC must address in training support.

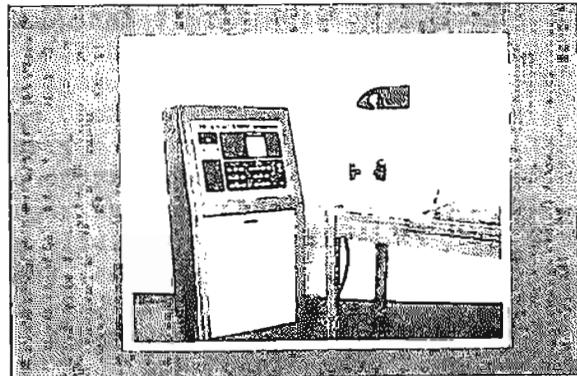


Now what can the TRADOC do about all of this. Well, obviously the figures suggest that we have got to do more gunnery than the once per year gunnery exercise. We believe that we have an approach to solving the problem of supplementing annual gunnery by the year-round use of subcaliber devices and training devices.

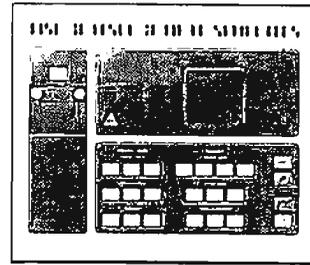
THEREFORE:

- SUPPLEMENT ANNUAL GUNNERY
- USE GUNNERY TRAINER
- EMPLOY TEC

This illustration is of one of the training devices with which we are presently experimenting. Parts of the device represent the interior of the tank, the gunners telescope, the controls with which the gunner elevates or traverses his gun, the firing switches and a mini-computer which keeps track of the gunner/target transactions.

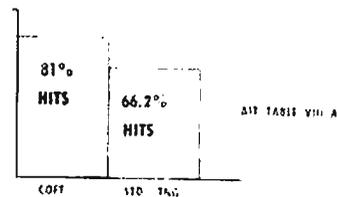


The face of the computer depicts the target and shows where the instructor introduces the problem for the gunner; i.e., the speed of the firing tank, the range and speed of the target, the target aspect, etc. A print button is provided which the instructor can press to get a hard-copy read-out of how the gunner did throughout that transaction.



In testing thus far in AIT at Fort Knox, we have been able to establish that this gunnery trainer produces a significant improvement in hit capability. Note the chart showing that the improvement approximates the 18%, which we noted as being the fall-off in hit proficiency over time for Active Army gunners. We believe we have found a useful device in training support for tankers throughout the Army and a way of supplementing annual gunnery using a trainer.

COFT VS. STANDARD TNG



Obviously, too, we will want to employ Training Extension Courses for support of individual training in tank units. Our tests tell us that the Training Extension Courses do much to assist the unit commander in developing the proficiency he needs in his tankers individually, and in his tank crews as a group.

THEREFORE:

- SUPPLEMENT ANNUAL GUNNERY
- USE GUNNERY TRAINER
- EMPLOY TEC

Now, all of the foregoing has direct application to the problem with the Reserve Components. As you know, there is an enormous problem with individual MOS qualification, expressed in those numbers on this chart and which we believe represents a conservative estimate of what the problem is.

RESERVE COMPONENT	
INDIVIDUAL TRAINING PROBLEM	
<small>ANNUAL</small>	
PRIOR SERVICE ACCESSIONS THAT ENLIST IN DIFFERENT MOS	63,000
MOS CHANGES FROM PROMOTIONS, UNIT REDESIGNATIONS, RESTRUCTURING, etc.	<u>25,000</u>
TOTAL REQUIREMENT FOR ADVANCED INDIVIDUAL TRAINING	88,000

Within the First United States Army, the Commander tells us that he has some 62,700 soldiers who require MOS qualification training. He can train with the resources that he has on hand, some 22,500 leaving a shortfall of 40,251 soldiers that the system cannot train except through some mechanism like the Training Extension Courses. But we believe the TRADOC can go considerably beyond TEC to assist Reserve Components. Let's talk about some of those ways.

FUSA RC MOS TRAINING PROBLEM	
NEED MOS TNG	62,767
TO BE TRAINED	<u>22,516</u>
SHORTFALL	(40,251)

This chart illustrates the mechanisms which First Army has at its disposal to address the problems that we've just cited - unit training, the various academies or schools that are maintained by the state, US Army Reserve schools, and of course, US Army Reserve training divisions. Now, the most useful asset for addressing individual MOS qualification is the US Army Reserve School system.

- UNIT TRAINING
- STATE ACADEMY
- USAR SCHOOL
- TRAINING DIV

US Army Reserve Schools receive about 15.5 million dollars a year to support their operations. There are 90 of them dispersed throughout the continental United States, the offshore states, and we even have USAR schools in Europe. They are teaching in some 900 locations to 25,000 students and 5,000 full-time faculty members.

\$15.5 MILLION/YR
90 USAR SCH
900 LOCATIONS
25,000 ENROLLED
5,000 FACILTY
48 DRILLS
24 PREPARATION
24 TEACHING

Now it's important to recognize that although each of these faculty members are paid for 48 drills, 24 of those drills are involved in preparation for instruction and only 24 in actual teaching. This is because the Army Reserve schools are teaching in the traditional form of totally instructor-centered materials. They use subject schedules or lesson plans from the Training and Doctrine Command, and present the information personally to the students.

The broader availability of Training Extension Course material in the Army Reserve schools will make it easier for those instructors to do the job. It will in effect multiply the capabilities of the faculties. The Training and Doctrine Command is, in fact, persuaded that we can equip the instructors of the Army Reserve schools with self-supporting or self-sustaining teaching materials. These materials will make it possible for each instructor to teach up to 48 drills per annum, with no time, or very few drills, devoted to preparation. However, in order for the TRADOC to provide such materials, it has to go through an analytical process which is accounting for the time that is being required to put these materials into a form that can be used by the Reserve Components.

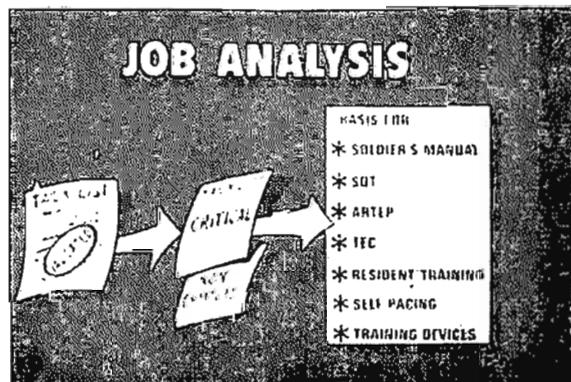
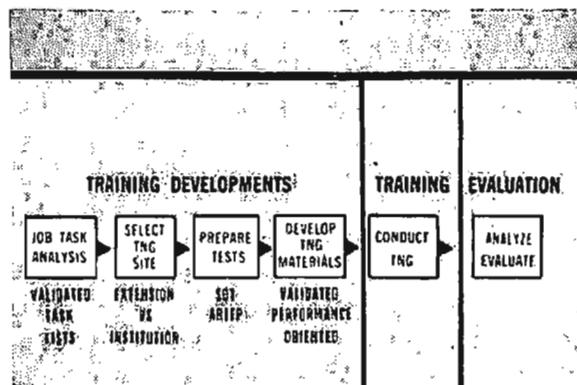
That process is as shown in this illustration. TRADOC tackles training as a system. We examine both training developments (the actual training itself) and what we must do to evaluate the training to determine whether it achieved its intended objectives.

Within training developments the most critical part of the job is to determine exactly what it is that we wish to accomplish in training. That takes the form of a task list. We determine which of those tasks shall be trained in our schools or via extension training. We then prepare the tests which will be used to evaluate the efficiency of the training: the Skill Qualification Tests, and the Army Training Evaluation Programs.

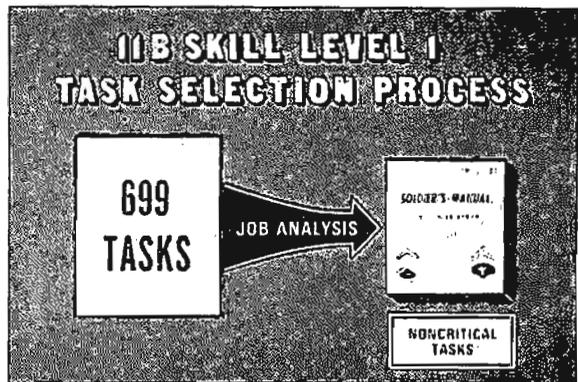
It is important to note here that we will provide these to you for use with the Reserve Components, and we intend to use the same measures of effectiveness within the TRADOC schools, so there'll be consistency in our evaluation mechanisms throughout the system.

Finally, we develop training materials such as the TEC materials in order to assist both individuals and units in preparing to pass these evaluations. These materials permit the Army to get forward with conducting training, and give us a basis for analyzing the efficiency of our training.

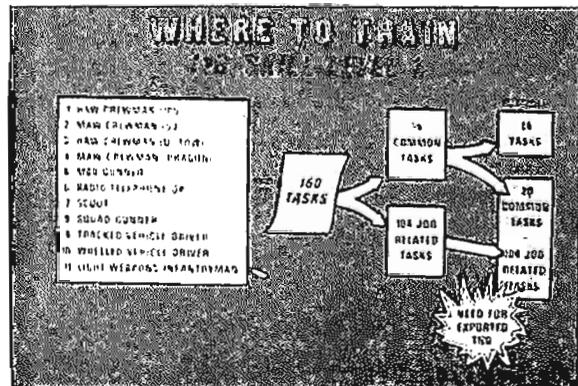
Now "job analysis," which is diagrammed in this illustration, involves finding what is genuinely critical to the performance of the soldier in combat, and distinguishing between those tasks and those which are noncritical. It is the critical tasks that then become the basis for what we put in our Soldiers Manuals, Skill Qualification Tests, Army Training Extension Courses, resident training, or our self-paced advanced individual training programs. It is also the basis for our developing training devices, like the tank gunnery training mentioned previously.



To look at a specific example, this is the list for the infantrymen at the entry skill level (Skill Level 1). We started out identifying some 699 tasks that the infantryman had to perform. We removed the noncritical tasks, and put all of the critical tasks into his Soldiers Manual. Numerically the jobs that an 11B Skill Level 1 could have to perform in the force involve some 160 critical tasks, of which 56 are common to all the jobs, and 104 were job related.



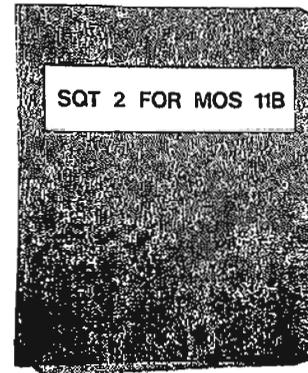
In BCT and AIT the TRADOC will train 11B's in 36 of those tasks. But some 20 of the common tasks, and 104 of the job related tasks will have to be trained in the units. To do this the units will have available to them the Soldiers Manuals which will explain to the soldier and to his commanders what is expected of them.



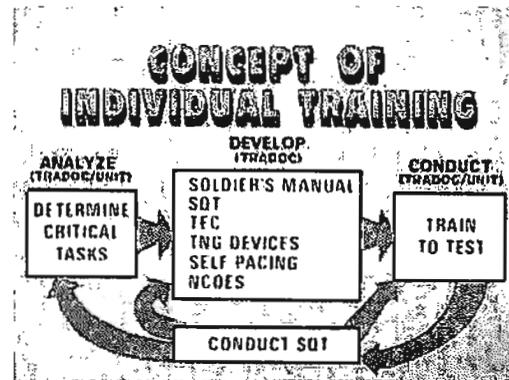
Here is an illustration of a Soldiers Manual for an 11B20, an infantryman at Skill Level 2. The manual explains in detail how the soldier will be evaluated on each task listed. It cites Training Extension Course materials, Field Manuals or Training Circulars that are essential to learning how to do a job. It is, in effect, an index to TRADOC products that will assist the individual or his commander in providing to the soldier the training he needs in order to qualify for the award of Skill Level 2. Obviously, important to the whole process are the tests which the soldier will have to pass and these are also described.



The Skill Qualification Tests which will replace the old MOS tests are also being developed. This is the draft for the Skill Qualification Test for the MOS 11B Skill Level 2. This test will become the basis for Armywide Evaluations of all soldiers in this MOS and skill level.



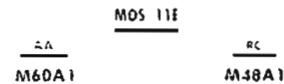
The system shown here with some feedback arrows coming back into the TRADOC telling us whether we are doing the job appropriately, and some arrows to the unit commander telling him whether his training programs are effective, will be the system used to approach all MOS's at all skill levels.



For the Reserve Components we intend to modify both the Soldiers Manuals and the Skill Qualification Tests. The initial, unmodified versions of both will be sent to the field. The Reserve Components will be asked to identify those differences in tasks or equipment which may occur in Reserve Component units. The schools preparing the documents will then modify both the Soldiers Manuals and the Skill Qualification Tests to accommodate those differences.

Thus, for example, in MOS 11E the Active Army will be addressing mainly the M60A1 tank, while the Reserve Components are mainly concerned with the M48A1, A3 or the A5 as appropriate to the unit. The Soldiers Manuals and the Skill Qualification Tests will take these equipment differences into account.

SM & SQT MODIFIED TO MEET RC NEEDS



RC IDENTIFY DIFFERENCES
TRADOC SCHOOLS MODIFY SM & SQT

This chart is the schedule for the publication and implementation of the Skill Qualification Tests. In calendar year 1977 there are none scheduled for the first three months.

In April or June career management field #11, combat arms, infantry, and armor will take the SQT for the first time for record.

In July through September the Military Police related fields, the Air Defense related fields, and drivers' MOS's will be tested. In October through December we'll go on to the other career fields shown in this illustration.

In most cases, there will be a two to three year interval between taking the old MOS test and the Skill Qualification Test.

In October and December of 1976, certain of the MOS's held by reservists will be tested in an Armywide shakedown. These test MOS's are in the areas of Infantry, Air Defense, turret mechanics, automotive mechanics, and military police in the skill levels shown in this illustration. This will be a test only. The results will not go into anyone's file or figure in career management. However, it will assist both us and the Reserve Components in modifying the Soldiers Manuals and the Skill Qualification Tests.

To give you some idea of how this process is going, the curve in this illustration represents the output of Skill Qualification Tests from the 22 TRADOC schools over the next several calendar years. You will notice that calendar year 1977 is going to be a banner year for Skill Qualification Test production. You are going to see a lot of them, and they'll be coming upon you in a significant flurry.

**SQT SCHEDULE FOR
AA AND RC
CY 1977**

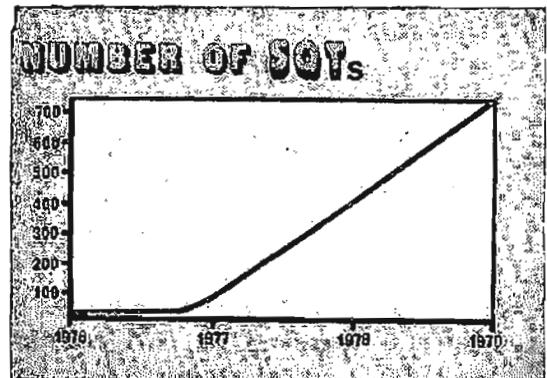
JAN-MAR	APR-JUNE	JUL-SEP	OCT-DEC
None	CMF 11	CMF 95	CMF 63
Scheduled		CMF 16 CMF 64	CMF 74 CMF 76

23 YEAR INTERVAL BETWEEN OLD MOS TEST AND SQT

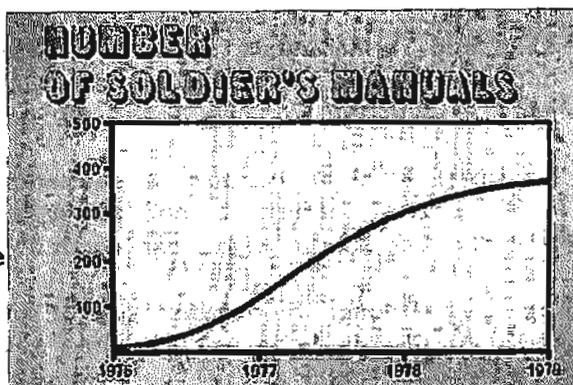
**SQT SCHEDULE FOR RC
OCT - DEC 76
ARMY-WIDE SHAKEDOWN (AA & RC)**

MOS	SQT *
11B	2,3,4,5
16J	2,3
45B	2,3
63H	2,3
95D	2,3,4

* RESULTS NOT FOR PERSONNEL MGT PERFORMANCE

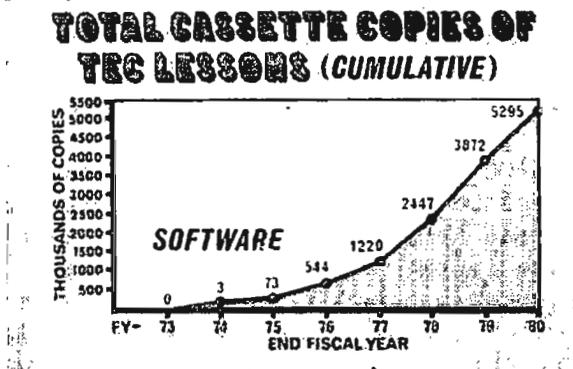


The same thing is true of Soldiers Manuals. You haven't seen many of them to date, but very shortly they will be appearing in quantity. When you get them in hand you will find, as I believe most have who have worked with them to date, that they are indeed an excellent guide for commanders to address the problem of MOS qualification. They will define what we mean by MOS qualification any given skill level.

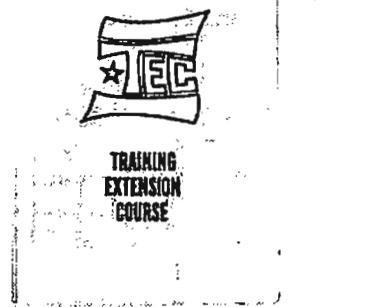


Finally, the Training Extension Course program which we referred to earlier in the Reserve Components is, at the moment, confined to the combat arms. But a process is underway to proliferate the combat support and combat service support units of the Armywide Reserves with TEC.

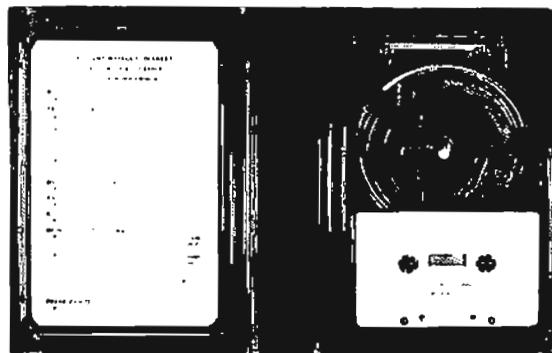
As you can see from this chart, the flow of software at the end of fiscal year reached nearly half a million copies in fiscal 76. By the end of fiscal 77 we will have over 1 million copies of TEC materials in the hands of soldiers throughout the force.



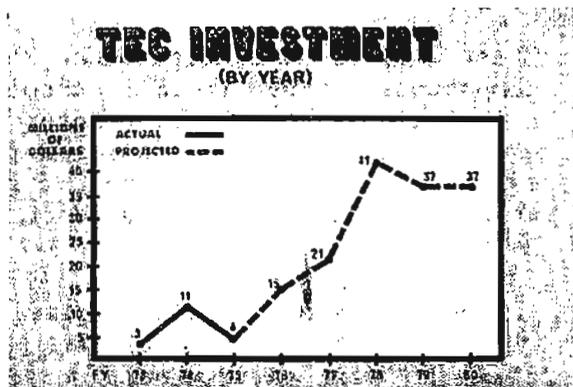
When we say software, we are referring to the usual TEC lesson in the gray box.



This box contains the sound cassette and the film cassette which are used in the Besseler Cue-See machine for individual training.



TEC will become more widely available to the Reserves in the period from the end of this fiscal year through June of next year. To further illustrate the growth and proliferation of the TEC program, note on this chart that this year's program expenditure is around 15 million dollars. It will grow to 20 million dollars next year, and in 1978 it will be up to 41 million dollars. The principle beneficiary from the Training Extension Course Program will be your Reservist.



This chart depicts the Active Army distribution, and compares it to the distribution of TEC assets to the Army Reserve and the Army National Guard in fiscal 1978. The 19.5 million dollars shown for the Training and Doctrine Command embodies the monies that the TRADOC requires for preparation of one copy of each TEC lesson. As you can see there will be a substantial amount of resources going into producing the TEC wherewithal for Reserve Component commanders and their advisors to conduct individual training.

OMA PROGRAM 2		
USAREUR	\$4.0
FORSCOM	2.9
EUSA5
OMAR		
OMARNG	11.0
OMA PROGRAM 8T		
TRADOC	19.5
TOTAL		\$41.3

Here are some other TRADOC training support products which will be available in the same time frame.

First of all we are now engaged in a process of self-pacing our advanced individual training programs within TRADOC schools wherever we possibly can. By self-pacing we mean self-supporting teaching materials which permit the soldier to learn his MOS at whatever pace he can internalize the materials, master the required skills, and demonstrate that he can perform them in a Skill Qualification Test.

At the moment we have some 28 AIT programs which have been put in such a self-paced format. By the end of fiscal 77 we will have 180 of these AIT programs converted to self-pacing.

❶ PRODUCTS END FY 1977

- MOS QUALIFICATION
SELF-PACED AIT 180
- NCO TRAINING
BNCO/CA
- IMPROVED TM FOR MECHANICS
WHEEL VEH 63B
TANK TURRETS 45
TRACK VEH 63C

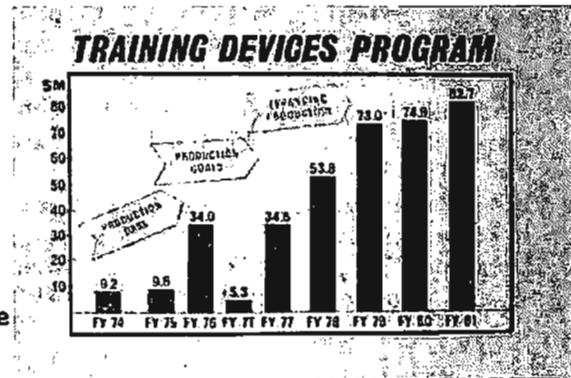
These will be available to the Reserve Components for use in USAR schools, in unit training, or for contractors to use in local community colleges to support the training of the individual soldier in the National Guard or the Reserves.

In noncommissioned officer training we will have produced and validated by this time next year, a new basic noncommissioned officer course for the combat arms. It is a course that was expressly designed for use in state academies or Reserve Components training of other types. It will provide MOS qualification for noncommissioned officers in the combat arms through Skill Level 3.

Finally, we will have a set of improved technical manuals for mechanics. Specifically, by the end of fiscal 77 we will have manuals for the 63B, Wheel Vehicle Mechanics; for the 45, Tank Turret Mechanic; and for the 63C, the Track Vehicle Mechanic.

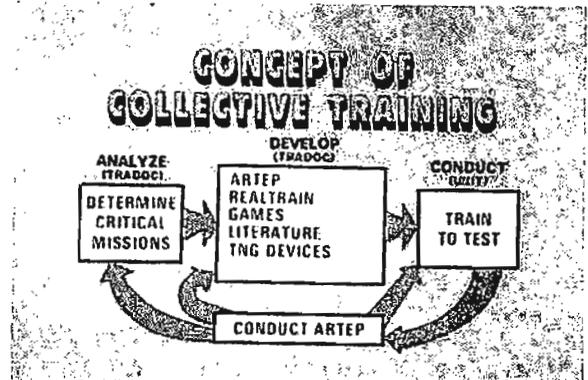
These improved manuals will make it significantly easier for the reservist to learn his job as he performs it. They are specifically designed for on-the-job training and the soldier who uses the manual correctly will improve in proficiency each time he performs a task. All of these products should be available at the end of fiscal year 77.

In the same time frame, you should see an increase in the numbers of training devices in the field. As you can see from this chart, our investments back in the fiscal 74 and 75 time frame, (which were the budgets which existed when TRADOC came into existence) were increased by a factor of 4 in fiscal 76 and 77. By fiscal 78 the program will be up to nearly 54 millions per annum, and by FY 79 it will have

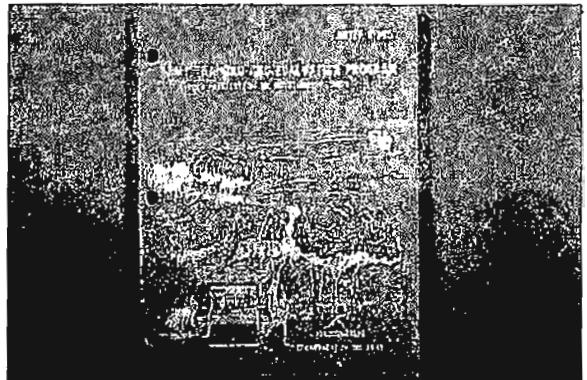


been increased again to 73 millions. The availability of training devices should make it significantly easier to conduct Reserve Components training.

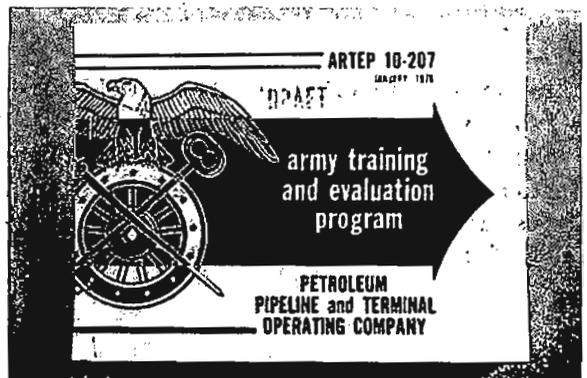
This chart depicts the concept of collective training within the TRADOC. As you can see we bring to it the same analytical approach which we used with individual training. We determine critical missions, develop the Army Training Evaluation Programs, and the various training techniques and training devices one needs to train to meet the standards expressed in the ARTEPs. Then we provide these materials to the unit, and ask them to train to the test. We seek feedback from the Army Training Evaluation Program in order to determine whether we've done the job appropriately.



Most of you are familiar with the ARTEPs for the combat arms. These have been distributed and are actually being used in Reserve Components training today. Forthcoming here in the very near future will be ARTEPs for combat support and combat service support units.



This, for example, is the ARTEP for the Petroleum Pipeline and Terminal Company.

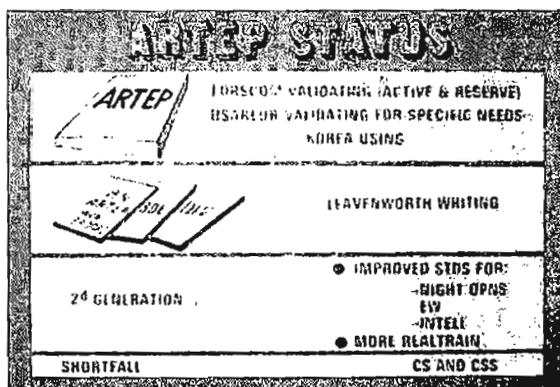


This is the ARTEP for the Supply and Service Company, Direct Support.



This chart depicts the status of the Army Training Evaluation Programs for battalion, brigade and division commanders and their staffs. ARTEPs are designed to be executed without troops, which should be inherently valuable in Reserve Components training.

The schools other than Leavenworth are working on what we refer to as second generation Army Training Evaluation Programs with changes indicated at the bottom of this illustration.

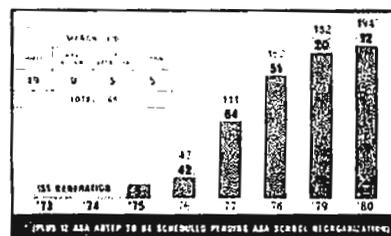


REALTRAIN refers to the training technique employing weapon system simulations, which is generically embodied in the combat arms ARTEPs.

We recognize that we have a shortfall in the combat support and combat service support area, but increasingly over the next two years you will begin to see products in those areas which will ameliorate that condition.

This illustration is the ARTEP production schedule. As you can see, fiscal 76 is the first year of large scale production. Next year it will be even larger, and by fiscal 78 we will have the total resources of the TRADOC behind that program.

ARTEP PRODUCTION SCHEDULE



Here are some of those products which Leavenworth is looking at. This particular one, CPX Longthrust 75, has already been validated in Reserve Component units.

CPX LONG THRUST '75

This illustration depicts the maneuver training command in Denver using the Longthrust CPX apparatus. It is a game board which serves as an analogue computer to keep track of the movements of maneuver forces and the effects of their weaponry. The controllers deal with the players via organic communications and report the outcome of engagements played out on the board.



We also have in existence, and have validated with reservists, the Combined Arms Map Maneuver Simulation, CAMMS, which is a computer assisted command post exercise. At the moment, the game can handle the operations of an armored division and can be played through a computer in Louisville to any location in the continental United States. It's been played successfully at Fort Hood, Fort Dix, and Fort Leavenworth from that location.

TRAIN THE COLONELS
(INSTITUTION)

CAMMS (COMBINED ARMS MAP MANEUVER SIMULATOR)

TASK: EMPLOY ARMOR HEAVY COMBINED ARMS TEAM IN THE
ATTACK / DEFENSE

CONDITIONS:

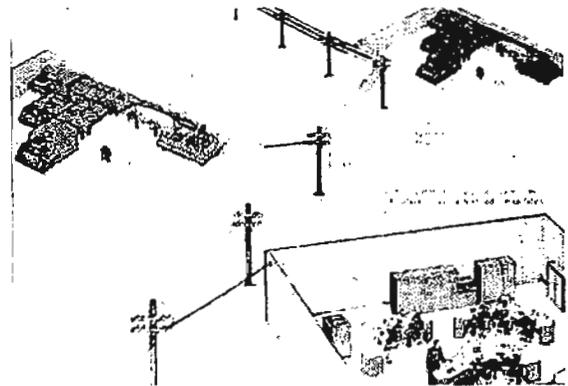
- OPERATE FROM A SIMULATED TACTICAL OPERATIONS CENTER (TOC)
- BN TASK FORCE EMPLOYMENT AGAINST US OR ENEMY CONFIGURATIONS

CONCEPT: COMPUTER ASSISTED / MANUALLY CONTROLLED FREE PLAY EXERCISE

Finally Leavenworth has in its possession CATTs, the Combined Arms Tactical Training Simulator, another computer assisted game.



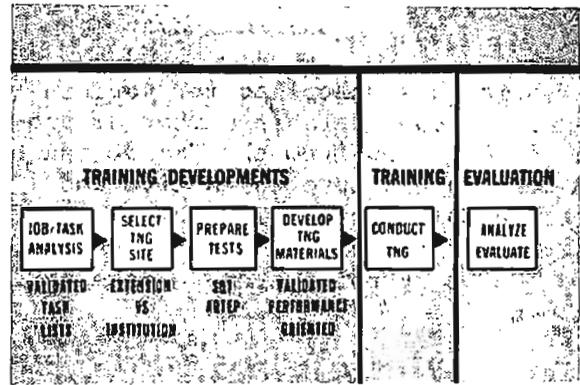
This is a depiction of it. The illustration is of the Leavenworth computers, and the controllers who work with the computers. They are connected by land lines to unit tactical operating centers which could be located anywhere in the United States. This particular portion of the simulator is in existence and we are working on the mechanisms for permitting us to export that simulation from Leavenworth.



This is a picture of controllers working with the computer. As you can see they have a map where they can see the movements of tactical forces. The computer will keep track of weapons effects, and permit us to give a commander a very realistic feel for what would have happened if he had decided to undertake a particular tactical operation.



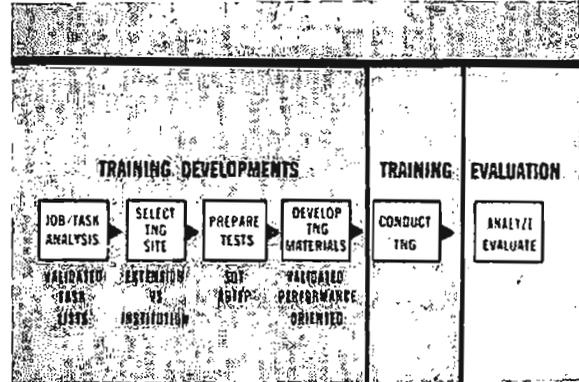
In all of the foregoing we have been exercising the function which we refer to in the TRADOC as training developments, and following the system that I have outlined for you in this illustration. In order to describe to you how we are going to ask General Thurman, Deputy Chief of Staff for Resource Management to show you the organizational forms we have adopted in order to carry forward this systems approach to training



"TRAINING SUPPORT FOR RESERVE COMPONENTS" - PART II

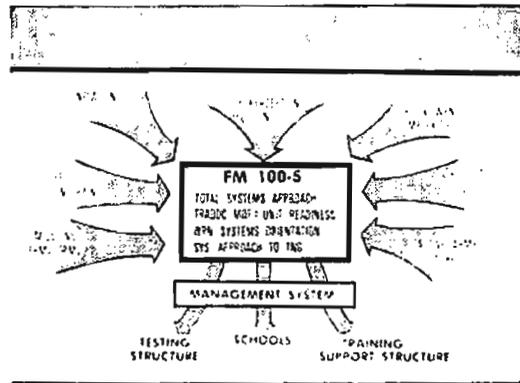
Remarks by BG M. R. Thurman

MG Gorman has described for you, in detail, a considerable number of products that flow from the TRADOC and the TRADOC schools into the Active and Reserve Components. I'd now like to describe for you what's going on inside the TRADOC school system to make this happen.



We perceive our TRADOC school system as being driven by Field Manual 100-5, our capstone Field Manual, which describes the way we will fight in order to win the first battle of the next war.

We also think in terms of a total systems approach, both in the weapon systems acquisition process through our combat developments functions in the schools, and in the training developments process that MG Gorman has described for you.



Our measure of effectiveness is reflected in the state of readiness in the field today, and obviously, we are attempting to improve that state of readiness at all times.

We talked about our weapon systems orientation, and our systems approach to training. These are principles being applied within the TRADOC school system.

Meanwhile, we are responding to a number of outside pressures in the resource management business, which have necessitated a considerable realignment of our school system in an effort to get our products out into the field. MG Gorman discussed the Active Army and Reserve Component support requirements. You also know that new weapon systems like the XM-1, the UTTAS, and the AAH are coming on board. These will generate new requirements for training and training support systems in the field.

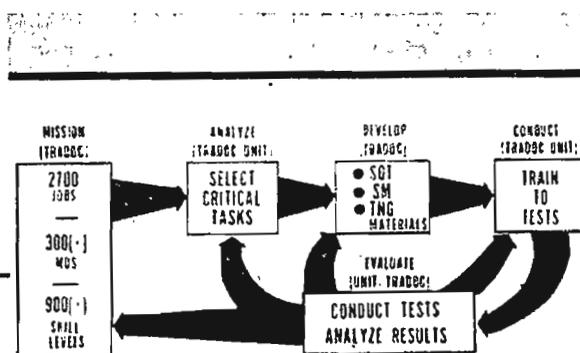
However, the TRADOC is also under considerable external pressures. Many folks, particularly outside the Army, believe that with 100,000 people the TRADOC, and essentially a 100,000 load, we have a one-on-one instructor-student ratio. In fact, our ratio is nearer 1 to 2.7 when properly categorized (we are working on this).

Also, we are all aware of the inflationary spiral in dollar costs which is a major factor affecting the resource constraints that we're experiencing. This is a reality which requires the most intensive type of management.

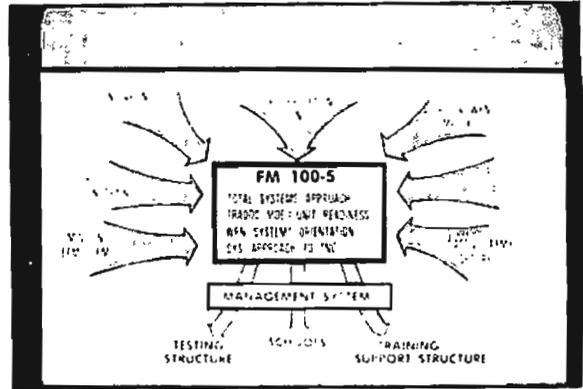
Now, let's consider one of our missions, using this new systems approach to training that MG Gorman has described for you, the Enlisted Personnel Management System (EPMS).

He explained that some 600 (plus) tasks had been discriminated by the Infantry School as critical tasks that need to be taught to initial entry, 11B candidates.

When you consider that the TRADOC is looking at all MOS's, and all skill levels, you can see that we have an enormous number of jobs to pass through our selection of critical task process. A tremendous number of SQTs and Soldiers Manuals and other training materials must be produced. For example, Training Extension Courses, validation processes (both in the TRADOC and in the unit) and evaluation processes (interaction needed either to change or modify any of the materials that the TRADOC is producing) are required for each MOS and skill level.



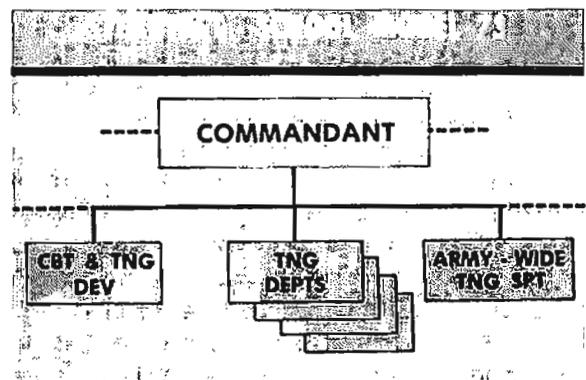
In consideration of all these realities, we then took a close look at our entire management system within the Training and Doctrine Command. We concluded that major adjustments were necessary in our combat developments, testing process, in our schools and the training support structure that will produce the products for the field.



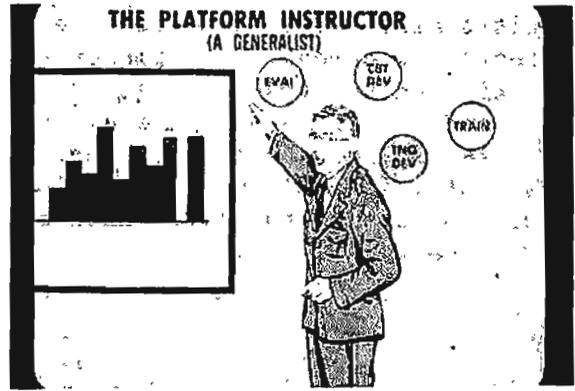
Why do we need to reorganize our schools at all? The six items on this chart should indicate to you that there is considerable front end tasks analysis to be done, for example, on that enormous number of EPMS tasks, and later the OPMS tasks. Further, we're trying to turn our institutions (which are essentially platform instructor driven at this particular time) to deliver products to the field (the Active and the Reserve units in the force). And so, in order to intensively manage our training developments, to take advantage of modern instructional technology and the like, and to properly ascribe our resources to this process, we are, in fact, undergoing a complete change of our school system.

- FRONT END CRITICAL TASK ANALYSIS
- TURN INSTITUTIONS TOWARD UNITS
- INTENSIVELY MANAGE TRAINING DEVELOPMENTS
- HARNESS MODERN INSTRUCTIONAL TECHNOLOGY
- QUALITY CONTROL FOR INTERNAL AND EXTERNAL PRODUCTS
- PROPERLY ACCOUNT FOR RESOURCES

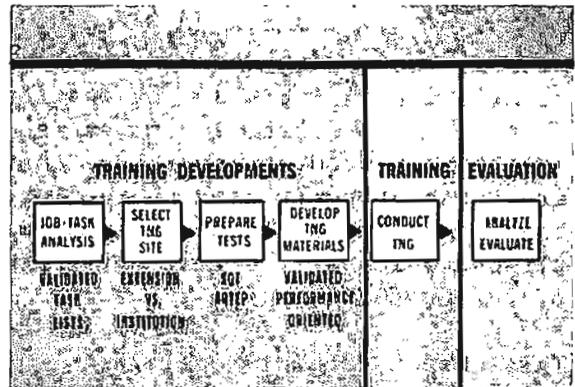
For those of you who have been a part of, or have interacted with our schools under the STEADFAST school model of 1973, you will recall that combat and training developments were under a single leader at the O6 level in our school system. The academic training departments were at the O6 level, and the Armywide training support department was our interacting agency with the Reserve forces and the Army Correspondence Program. That is thought of as our reference point from where we started in 1973.



Essentially our school system operated around the Platform Instructor who is oriented on a platform pitch, done inside the school system, with all the students reporting to the school for that purpose. But, as we have evolved in the last three years we found out that this platform generalist is finding himself doing training developments tasks (for example putting together the critical task list that must be done for each of our skill levels). He's also involved in actual platform training or in Extension Course training and he's being ferreted off of the platform to do combat developments work. Further, this instructor gets involved in the evaluation process since we evaluate our materials before they are actually exported into the force.

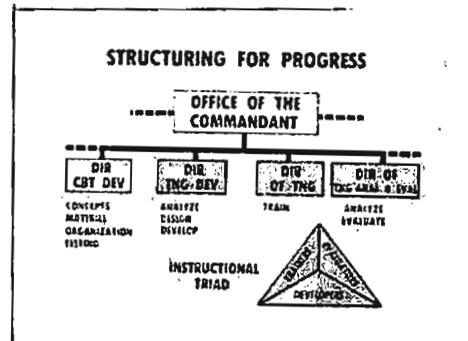


What we are structuring for now is a return to our systems approach to training.



We are separating the training developments function from the training function and from the evaluation function, and codifying each in a new school model.

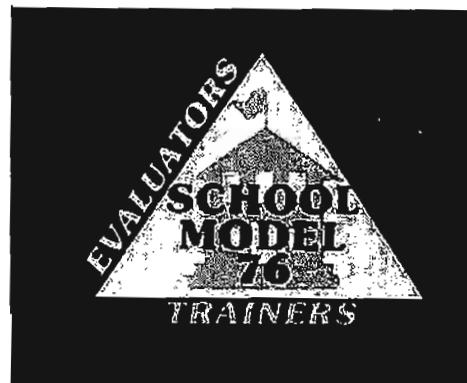
Additionally, we've retained the director of combat developments (who is oriented towards materiel organization and testing and doctrinal concepts). In essence, we have raised the visibility of the training developments function to provide emphasis to the large number of tasks that I have outlined.



We've kept the Director of Training, but we've subordinated the academic departments to that Director of Training; and he is responsible for training not only in the institutional mode but in the extension mode, or in the exported mode to the Active Army and Reserve units.

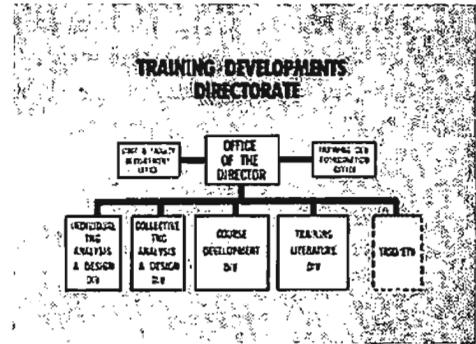
Finally, we've created a small Directorate of Training Analysis and Evaluation. They check on our combat development and training development products to insure that they are being properly used in the force, and that a meaningful feedback loop is established which will permit the improvement of our products.

This then is School Model 76.

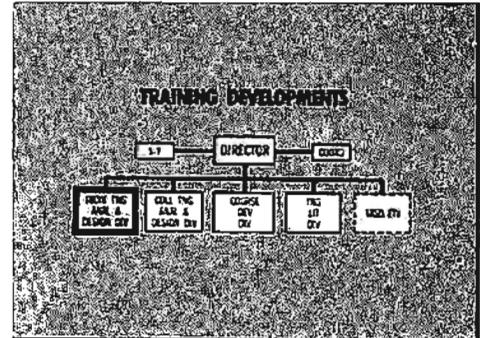


I'd like to take you inside the school model and look at the Training Developments Directorate for a few brief moments.

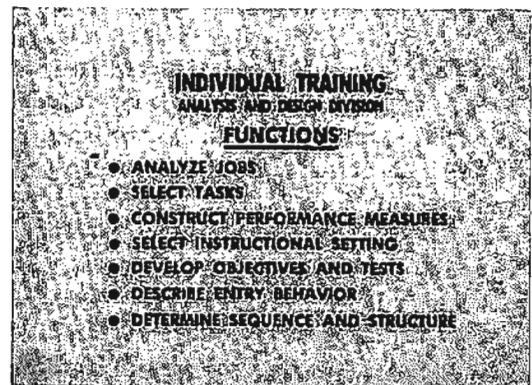
It has two significant divisions - Individual Training Analysis and Design (which concentrates on, for example, tank crew professional skills or helicopter crew professional skills) and Course Development, a new division of this Directorate. We'll discuss that in a little bit of detail later. The other functions are on-going and are maintained with minimum changes.



Let's look for a moment specifically at the Individual Training Analysis and Design Division.

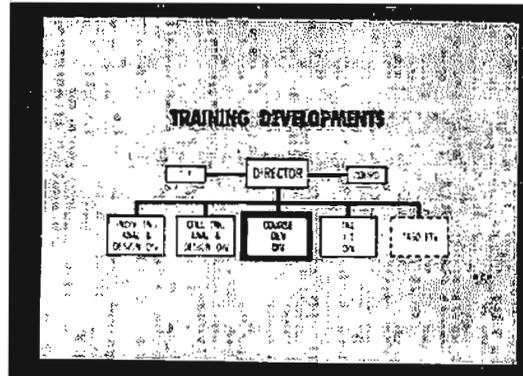


These are the people who are concentrating on the SQT's, the Soldiers Manuals, and all of the ancillary materials that are necessary. I would point out that this group of folks is also selecting the instructional setting (whether or not that particular instruction can best be tailored for platform instruction inside the school/institution, or whether it is best exported to the field in some extension mode).



The same is true for the Collective Training and Analysis & Design Division where crew drills for tank performance, artillery battalion, ARTEPs and the like would be produced.

Now let's look at the Course Development Division.

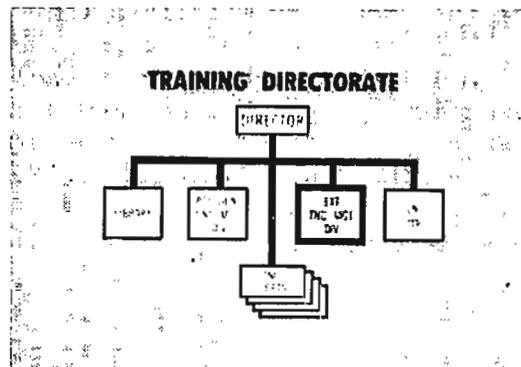


The head of this function is taking advantage of the wide variety of new media that are available to transmit the doctrinal/technical/tactical information that we want to send to the force, either through the institutional mode or in the extension mode. This is a new and vital component of what's going on inside the school system.

**COURSE DEVELOPMENT DIVISION
FUNCTIONS**

- SPECIFY LEARNING EVENTS
- SPECIFY INSTRUCTIONAL MANAGEMENT PLAN AND DELIVERY SYSTEM
- REVIEW / SELECT EXISTING MATERIALS
- DEVELOP INSTRUCTION
- VALIDATE INSTRUCTION

Looking at the Training Directorate, we see that element which is responsible for the overall instructional capacity of the school, either in the institutional mode or in the extension mode. The resident training manager is obviously in the day-to-day business of seeing to the efficient performance of instruction inside the school. The element which interfaces with Reserve Components is the extension training management division. Notice that the training departments have been subordinated to the Director of the Training Directorate.

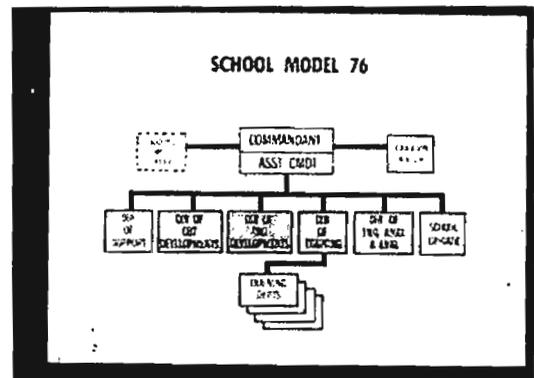
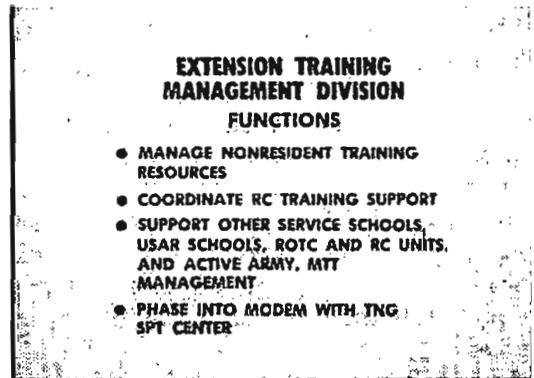


Now let's take a little closer view of the Extension Training Management Division and its functions.

These folks are managing the totality of the nonresident training that would emanate from, let's say, the Artillery School or the Infantry School. They would operate and coordinate any Reserve Components training support. If a USAR or National Guard Artillery Battalion had a specific problem that they wish to address with the Artillery School, they would do so through this element.

However, as the Army Training Support Center (ATSC) comes on scene at Fort Eustis, we will find that if the USAR School system, in its totality had a larger issue that crossed school lines, then the USAR School would phase into the Training Support Center for guidance and direction on how to gain access to the totality of TRADOC merchandise available for the Reserve Components.

This then is the total school model 76. (Again, note the changes depicted across the top include a small Directorate of Training and Evaluation.)



I'd like now to step into the Directorate of Support, which is supporting an entire school.

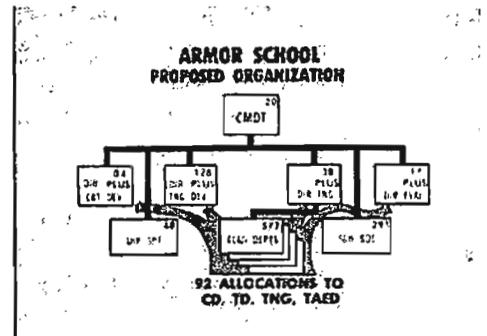
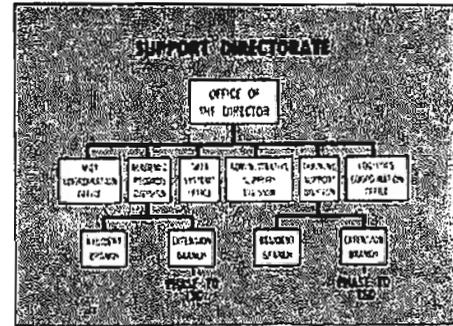
You will find in the academic records section of the Support Directorate an Extension Branch which keeps the Reserve records associated with the Army Correspondence Course Program. Ultimately, as the Training Support Center begins to phase into existence at Fort Eustis, we see this phasing to centralized control.

Similarly, the Extension Branch of the Training Support Division, which actually warehouses materials associated with the Army Correspondence Program, would be phased to the Training Support Center at Fort Eustis.

Now let's just take a look at what has to happen inside a school and I've chosen the Armor School at Fort Knox, KY as an example.

What we show are instructors who were previously in the academic departments (and were loaned out to the other major activities at the school) are now being moved to the Combat Development Directorate, to the Training Developments shop, and a small group are going over to the Directorate of Evaluation.

For example, our initial review of the Armor School shows that by increasing the instructor contact hours per year, some 92 people flow from platform instruction to other Directorates.

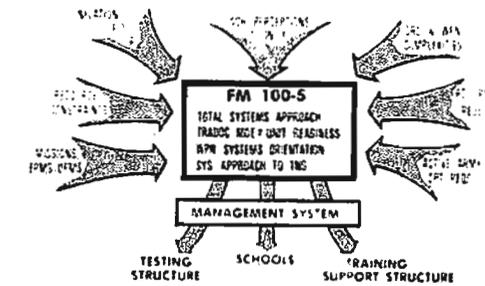


The School Model timetable is as shown on this chart. Gen DePuy discussed this with his Training Center Commanders and School Commandants on 10-11 December 1975, and told them to press on and organize provisionally. The formalization process, as I've outlined it here, will go through September 76.

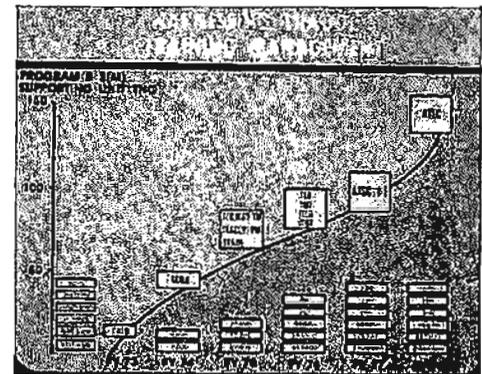
We are now in the process of issuing staffing guides and manpower management and budget guidance to our constituent schools. By October 76 we expect to have the new tables of distribution and allowances for our reorganized school system. We are rapidly pressing ahead in this endeavor.

Now I've talked in some detail about the school system reorganization; I'd now like to turn briefly to the training support structure so necessary to the exportation of the training materials that we've described.

SCHOOL MODEL 76 TIMETABLE	
COMMAND GUIDANCE	DEC 75
PROVISIONAL REORGANIZATION	JAN-SEP 76
DRAFT STAFFING GUIDE	FEB 76
REVISED DRAFT STAFFING GUIDE	APR 76
BUDGET AND MANPOWER GUIDANCE	APR 76
TDA STEADY STATE	MAY 76
TDA EFFECTIVE DATE	OCT 76



On this chart we show program 8 training monies that are ascribed to the TRADOC budget (150 million dollars) plotted against fiscal years FY 73 through FY 78. This sort of signifies that as we go further downstream, increased amounts of money are in fact flowing towards the Active Army and the Reserve Components from program 8.



Let's look at just the TEC lessons for example. As MG Gorman has described to you, in FY 74 there were some 3,000; in FY 75 - 67,000; in FY 76 - 500,000; in FY 77 - 1,000,000 and up to 2,500,000 by FY 78. Now what this chart sort of described for you is how the TRADOC has been

harnessing its management apparatus to better supervise the export of materials to you.

You are all familiar with the Combat Arms Training Board (CATB) which was organized back in 1973 and has been our principle interface with both active and reserve units. That organization has continued in being.

In 1974 we organized the Training Aides Management Agency (TAMA) which harnessed our Training Aides Support Organization (TASO) at the various posts, camps, and stations into a coordinated operation.

TEC became big business in 75, so we put together a TEC management team at Fort Benning, GA.

We became interactive with the DARCOM project manager and organized TRADER for Training Devices in 76. We've seen the growth of the Training Support Activity at Fort Eustis, and the organization of the Training Management Institution (TMI) which is in fact, turning around our school system to take advantage of the large amount of new instructional technology that is available to us.

The Individual Training Evaluation Group (ITEG) is being organized to supervise the exportation and evaluation of the Skill Qualification Tests (SQT) that will be ongoing in the force.

MG Gorman indicated that new technical manuals and documentation were coming, and we're organizing for that.

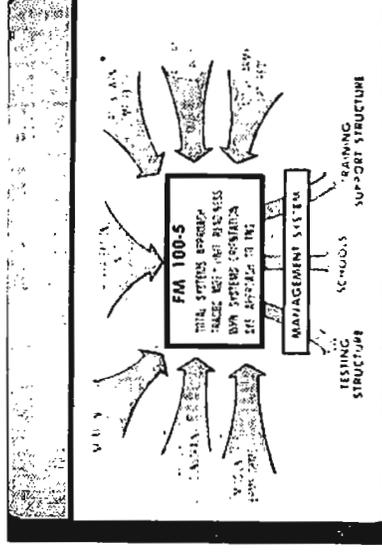
Now, in order to bring all of these actions together we created, in early April 1976, the Army Training Support Center at Fort Eustis. By 1978 we will phase into the Army Training Support Center, the Army Correspondence Program with all of its ramifications. To tell you more about the TRADOC's new agency for exportation, the Army Training Support Center, here is its new commander, BG Cory Wright.

"TRAINING SUPPORT FOR RESERVE COMPONENTS" - PART III

Remarks by BG C. J. Wright

At the outset, MG Gorman established the need for training support when he described TRADOC's total training system.

As BG Thurman discussed TRADOC's harnessing of the management system for training, he clearly identified the need for a training support structure.



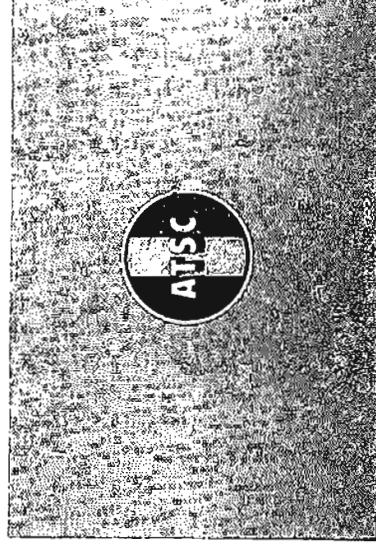
Why then an Army Training Support Center?

Succinctly there are three key points that should be kept in mind. Centralized management provides a control mechanism for integrating a series of diverse activities that now exist throughout the TRADOC. Secondly, the totality of the enlisted personnel management system requires that we have one focal point to bring the associated training demands all together. And lastly, efficiencies will accrue, both in support provided and dollars and manpower.

Let's look then at the Army Training Support Center.

WHY US ARMY TNG SPT CENTER?

- NO STRUCTURE FOR CENTRALIZED MANAGEMENT OF TRADOC TRAINING SUPPORT ACTIVITIES.
- EPWS/SOT DEMANDS ON ACPT/TEC/TNG LITERATURE.
- CENTRALIZED MANAGEMENT PROVIDES RESOURCE SAVINGS.

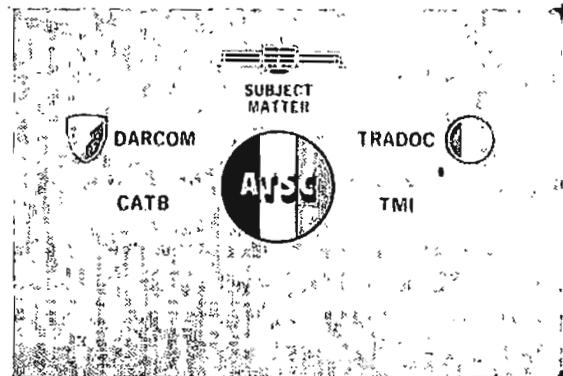


The development of courseware itself in our training products will be retained at our schools and centers because that is where the subject matter experts reside. They will continue to develop the training product for both individual and collective training. The role of the Army Training Support Center is to put this subject matter into the media used for communicating doctrine and learning from the schools to our clients. Our work would include standardizing the format of the media product, producing, in many instances, the product and distributing it in all cases.

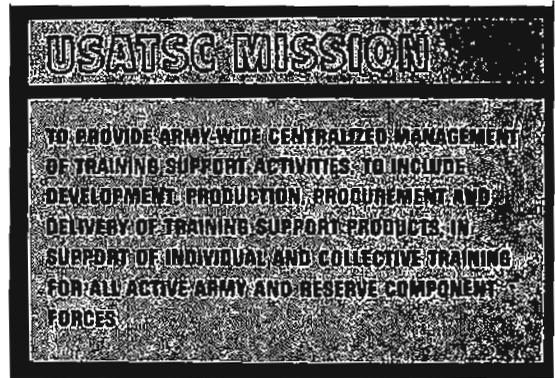
Hardware and software products, as they involve training, such as simulation, training devices, TEC, motion picture, television and the like, require an interface with DARCOM, our schools and the units in the field. For the interface with the schools, the Training Support Center will rely upon TMI as the vehicle and CATB will be our agent with the unit.

We must look at the full spectrum of hardware and software for training, including requirements, design, production or procurement, and distribution.

To this end, all exportable training materiel will now be managed at one centralized location - The Army Training Support Center. Our training support products will have worldwide distribution both for individuals, either Active or Reserve Components, plus, in certain instances, selective foreign military sales cases.

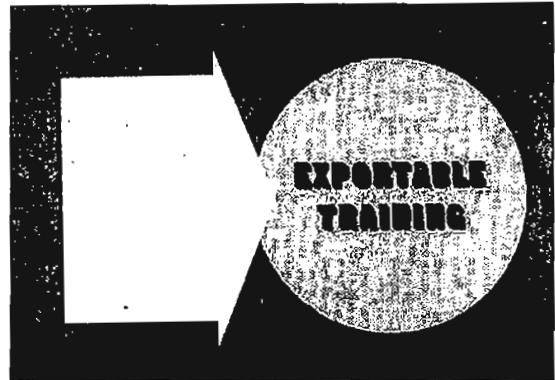


Putting this all together then, the corporate role of the Army Training Support Center is shown on this mission chart.



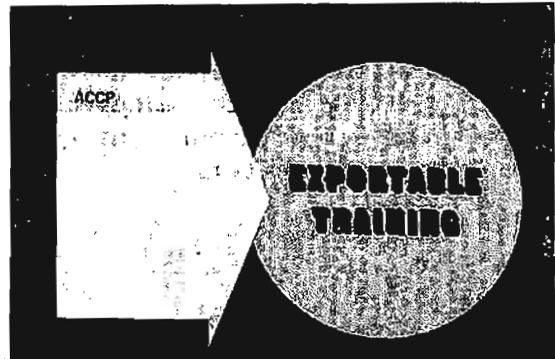
How then will we manage exportable training?

Organizationally, there will be four functional directorates within the Army Training Support Center; each having an operational role. Let's briefly look at them.



First, we'll have a separate directorate to manage the correspondence program. Today we have in existence 17 schools, each running their own correspondence program, which in the aggregate serve some 275,000 enrollments.

Beginning in October we will first phase in the Transportation School courses. By October of the following year we will have brought in, on a phased basis, the remaining schools for a centrally-managed Army correspondence program. With standardization of lesson formats, centralized production of the materials, and one distribution point, modernization and efficiencies can be

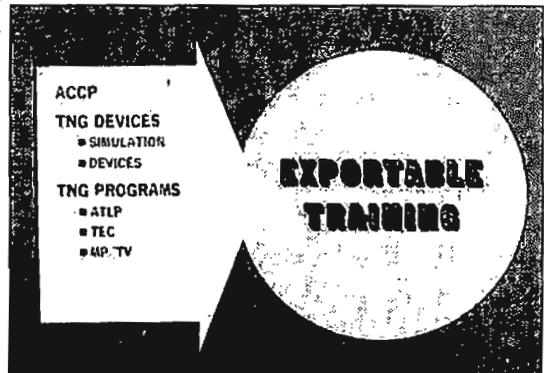
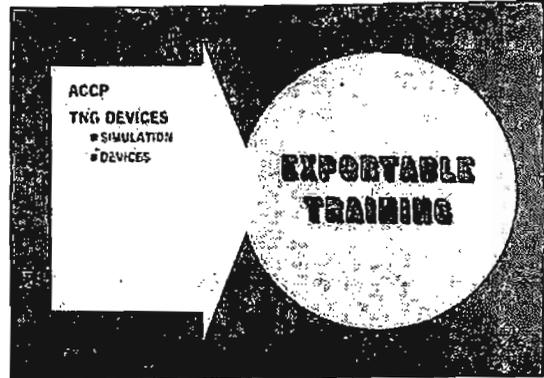


realized. This will provide a better product and more responsive service to the individuals enrolled in this program.

Second, another directorate will manage Training Devices and Simulations. This will include the Armywide technical management of our TASO's. TRADER, which now exists at Fort Benning, will be moved to Fort Eustis early this summer.

Accordingly, we will then have linked up simulation and the TASO's to provide a cross reinforcement of our training device program. This will insure that requirements and demands are all brought together in a total systems application. Again, by an interface with DARCOM and units in the field, greater efficiency and utility of our devices should accrue.

Third, we have certain programs now in existence which communicate our training by various media. These include: the Army Training Literature Program, which is now managed at HQ TRADOC; TEC which is now with CATB, Fort Benning; and the motion picture and television programs presently managed by TSA. These will all be brought together under one directorate during FY 77 for the management of the media now utilized to export our current doctrine and learning matter.

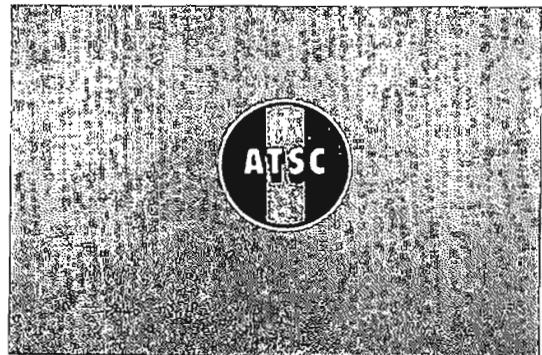
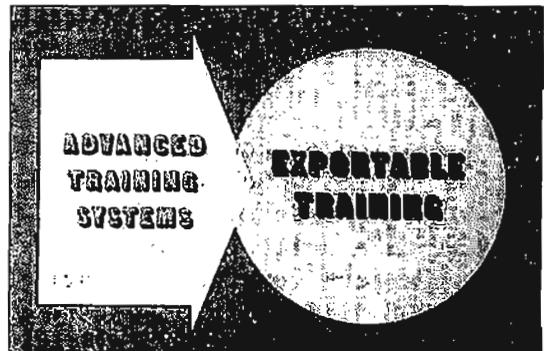
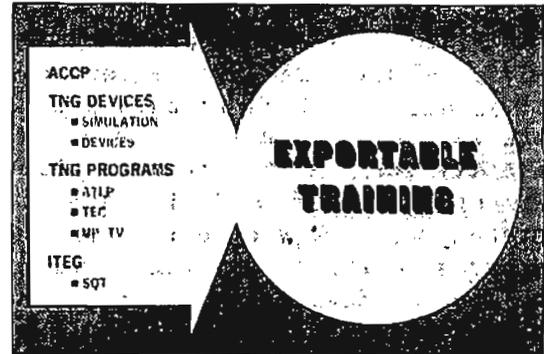


Earlier, MG Gorman described ITEG and the SQT implementation planning. One directorate in the Army Training Support Center will be responsible for the totality of the SQT test design, administration, the scoring of the tests, the input to the personnel system and most importantly, the feedback from both the individuals and the units of the SQT's. This will come under the direction of the Army Training Support Center early in FY 77...a very important undertaking for the Army, the individuals concerned, and the TRADOC.

In addition to the centralized management of ongoing training support activities, we will have a forward looking capability with the establishment of an Advanced Training Systems Office. Here we intend to keep abreast of the state of the art and maintain an interface with DARCOM for new communicative systems and computerization application for training.

In the aggregate then, this is the magnitude of the products which will be managed by the Army Training Support Center. You can readily observe who we will support -- Reserve Components, Active forces, individuals and units.

In conclusion, this is the Army Training Support Center, TRADOC's vehicle for harnessing the management of exportable training worldwide.



TRAINING SUPPORT FOR RESERVE COMPONENTS" - PART IV
Remarks by MG P. F. Gorman

Now we are all realists and you can readily see that the changes which MG Wright described are not going to occur overnight. But the changes which are underway within the schools which BG Thurman described to you are already taking place. The changes to the school model are being translated from concept to reality right now and those of you who do business with our schools are going to find them in the process of reorganization over the next several months.

The formation of the Army Training Support Center which BG Wright described to you in some detail is also underway. It will take a little more time but I want to assure you that by April 1977 the TRADOC will be in a posture to support you in a far more efficient way than has been possible in the past. You will not have to do business with 22 service schools individually. You'll be able to deal with BG Wright and his organization our single point of contact for exportive training materials.

As we move into this posture, as we bring these mechanisms to play, we need to hear from you. We need to get feedback from the field on what is right and what is wrong with the way we are doing business. We'll look forward to hearing from you.