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AN APPLICATION OF ORGANIZATIONAL AND MANAGERIAL PRINCIPLES AS AN IMPROVEMENT TO THE CURRENT ARMY TRAINING AND EVALUATION PROGRAM FOR THE MECHANIZED INFANTRY

Dewey Peter George

NAVAL POSTGRADUATE SCHOOL
Monterey, California

THESIS

AN APPLICATION OF ORGANIZATIONAL
AND MANAGERIAL PRINCIPLES AS
AN IMPROVEMENT TO THE CURRENT
ARMY TRAINING AND EVALUATION PROGRAM
FOR THE MECHANIZED INFANTRY

by

Dewey Peter George

and

Richard Leo Gerding

December 1978

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This study, through application of organizational and managerial principles, provides practical guidance to training decision makers from division down to company level. It also provides an improved system for the training/evaluation/control of the external exercise.

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An Application of Organizational and Managerial Principles as an Improvement to the Current Army Training and Evaluation Program for the Mechanized Infantry

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ABSTRACT

The United States Army in the past five years has begun a revolutionary change in its concept of training. The Army Training and Evaluation Program (ARTEP) is the realization of this change. The implementation of the ARTEP has not achieved optimal results. Training management decisions at division, brigade, and battalion levels must be identified and their ramifications understood; research has shown certain approaches more beneficial than others. The training/evaluation/control of external exercises using ARTEP has been identified as a universally deficient area.

This study, through application of organizational and managerial principles, provides practical guidance to training decision makers from division down to company level. It also provides an improved system for the training/evaluation/control of the external exercise.

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I. GLOSSARY OF TERMS

Army Training and Evaluation Program (ARTEP). A training program designed to: establish unit training missions with specified tasks, conditions, and standards of performance for combat-critical missions; train and evaluate the ability of the unit to perform specified missions under simulated combat conditions; evaluate the effectiveness of past training of all echelons of the force; and assess future training needs. When supplemented with the appropriate directives, ARTEP serves as the basis for evaluation by which the level of training proficiency can be determined.

Collective Training. Training, either in institutions or units, that prepares a group of individuals (crews, teams, squads, platoons) to accomplish tasks required of the group as an entity.

Controller/Simulator (C/S). A person who implements simulation activities to increase the combat realism of the ARTEP.

Evaluation of Training. That process which, by objective and subjective means, seeks to determine the extent of learning progress of individuals and units. The purpose is to determine if a training objective has been attained and how well the available resources have been used in order to provide the training manager with the information he needs to modify or update the training program, and to provide feedback to trainers and soldiers undergoing training.

External Evaluation. An evaluation of a unit initiated by higher headquarters which will diagnose the state of trainin proficiency of that unit, e.g., an external ARTEP evaluation which will be conducted either with or without advance notice, as needed to maintain training accountability and status.

Historical Information. Within the scope of this paper, training information that has value or potential value for trainers and/or training managers. Examples are performance data on specific missions (target hits, time to completion, etc.) or conditions under which missions were performed (weather, personnel fill, etc.).

Individual Training. Training the individual officer, NCO, or enlisted person receives, either in institutions or units, that prepares the individual to perform specified duties and tasks related to the assigned MOS and duty position.

Information System. Within the scope of this paper, a system that gathers, processes and distributes information to improve training and training management.

Internal Evaluation. An evaluation of a unit initiated by the unit commander in order to ascertain, for his use, the state of training proficiency of that unit. An example would be: the internal ARTEP evaluation which is conducted as often as the commander desires and resources allow.

Mission Related Training. That training which contributes to a unit's ability to successfully accomplish its combat

missions. This training is conducted in the unit and may consist of either collective or individual training and evaluation. An example of mission-related training would be training designed to enhance a battalion's ability to defend against an enemy attack.

Need Additional Training (NAT). Used in place of "Unsatisfactory" as an evaluation rating. Expresses the true meaning of a non-satisfactory accomplishment of a training mission/task.

Off-Line T/E. In constructing the training exercise for the battalion external ARTEP, that training and evaluation of missions which take place outside of a scenario sequence.

On-Line T/E. In constructing the training exercise for the battalion external ARTEP, that training and evaluation of missions which take place within a scenario sequence.

Opposing Force (OPFOR). A unit totally dedicated to opposing another unit. The OPFOR would normally use enemy threat doctrine while opposing a unit that is conducting ARTEP missions.

Prime Time Training. Collective or individual training designed to develop and maintain unit capability to accomplish assigned Table of Organization and Equipment/Modified Table of Organization and Equipment (TOE/MTOE) missions and contingency missions.

Single Battalion Evaluation. An exclusive evaluation of one battalion during a given period of time. The prime focus of all efforts is to achieve the best training/ evaluation of the subject battalion.

Skill Qualification Test (SQT). A test that measures a soldier's individual skill ability based on the tasks shown in the Soldier's Manual.

Soldier's Manual. Describes what is expected of each soldier for his appropriate Military Occupational Specialty (MOS) skill level and duty position. It contains instructions on how to learn new skills and explains the standards which must be met for evaluation.

Standard. An integral part of any training objective. The standard clearly defines the level of performance expected of those undergoing training. Wherever possible standards are expressed in quantifiable or measurable terms in order to determine if the training has been successful. The standards for training should be exactly the same as those used for evaluation.

Subunit Evaluation (SUE). The mission/task evaluation of specific subordinate elements of a unit. For example, the evaluation of a selected company, platoon, and squad mission/ task performance during ARTEP.

Supplemental Missions. Those missions necessitated by conditions common to combat but not necessarily integral to a particular type of operation.

Task. A statement which specified an action to be performed by an individual or team/unit.

Training/Evaluation (T/E). Refers to the collective and/or individual training and the simultaneous evaluation of that training.

Trainer/Evaluator/Controller (T/E/C). An individual who is responsible for the training, evaluation and control of a unit conducting collective training under ARTEP.

Training and Evaluation Outline (T&EO). Essentially a task/conditions/standards outline, as found in the ARTEP on which will be shown the unit, its mission, the general condition under which the mission is to be performed, the primary training and evaluation standards upon which the unit will be evaluated, and the performance oriented objectives which describe the tasks, conditions, and standards for the mission. The T&EO should also include the estimated support requirements (e.g., Threat Forces, maneuver area, etc.) necessary to conduct training or evaluation of the mission.

Training Management. The art of employing limited resources (human, physical, financial and time) in a manner that permits efficient and effective development of individuals and units

so they can successfully accomplish their peace and wartime missions.

Two Battalion Evaluation. A simultaneous evaluation of two battalions during a given period of time. This method of training/evaluation is characterized by reciprocal action, in which the two battalions oppose each other, alternatively using threat doctrine against the evaluated battalion.

II. EXECUTIVE SUMMARY

The Army Training and Evaluation Program (ARTEP) is an on-going, comprehensive program by which units and sub-units attain and maintain combat readiness. This relatively new program requires training managers and trainers at all levels to be especially familiar with the ARTEP philosophy and to understand the implications of the decisions that they make.

The scope of this paper includes guidance and recommendations for implementation for the ARTEP in general, with primary emphasis on the battalion external training/evaluation. This emphasis does not infer primary importance of the external training/evaluation, but indicates the need for improvements in this area.

At Division level, the key decisions to be made regard resource allocation and organizational management of ARTEP. Since all unit training programs are a combination of frequent, internal T/E and the infrequent external T/E exercise, Division must provide for adequate resources to support both phases. The internal phase of ARTEP, by definition, is managed at Battalion level or lower, so Division merely has to allocate and monitor gross resources and the Brigades/Battalions will manage them. However, three vital decisions must be made regarding the external T/E exercises very early in the Division Master Training Program. These decisions concern sponsorship, evaluation approach and organization of

the exercise. Because the Battalion level external T/E exercises consume great amounts of resources, it is imperative that they be managed to achieve the most training value for the evaluated unit. Brigade sponsorship of external T/E exercises is recommended to preserve the diagnostic character of ARTEP and to enhance individual tailoring for each battalion. The single battalion approach of evaluation/control is recommended because of the unwieldiness of the alternative, the two battalion approach, where two battalions are trained/evaluated simultaneously. The concentration afforded the unit in the single battalion approach offers fewer control problems and thus better training/evaluation. The structuring of the external T/E exercise involves a large number of varied missions and sub-tasks. Some require ranges and special situations; others fit easily into an ongoing tactical scenario. The addition of an offline portion could accommodate the former. For these reasons, a combination of offline and online mission evaluations separated by a short interval is recommended as the structure for the external T/E exercise.

Brigade level decisions deal with resource management of assets allocated by Division; also, under brigade sponsorship, the brigade must make the same decisions regarding evaluation approach and structure. The selection of brigade sponsorship is normally a result of conferences between the division commander/G-3 and the brigade commander/S-3. Implicit in this arrangement is an underlying "contract" between the division

and the brigade: for a given amount of training resources division expects a stated level of training proficiency. The guidance given in these two areas is the same for Division or Brigade: single battalion approach and combination of offline and online structure. The brigade commander, based on discussions with battalion commanders, should be allowed to select which battalion should perform its external T/E exercise within a time frame allotted by Division.

At battalion level, resources must be managed to provide for quarterly internal T/E exercises. The battalion training program should provide for integrated individual and collective training to achieve and maintain Soldier's Manual and ARTEP standards. Maximum use should be made of the battalion's own assets for internal T/E. Current training management procedures, specifically organization under decentralized training, can be used to great advantage.

At company level, T/E is conducted. The Company Commander is primarily a trainer, not a resource manager. At company level, resource management is accomplished only to facilitate training.

The use of T/E results should include immediate feedback to the performing unit. This feedback consists of oral T/E comments made directly to the leader concerned, on the terrain where the action occurred. These comments are normally followed by written feedback that provides the basis for historical information that is useful in training analysis

at all levels. An additional feedback loop results from the external T/E wherein the Trainer/Evaluator/Controller (T/E/C) provides not only immediate oral feedback as previously described, but also a written evaluation that ultimately returns to the evaluated unit. Commanders at all levels can check the training status of their units at any time by personal evaluation.

However, an important indicator of the training status of a battalion, available to the Division/Brigade/Battalion Commander, is the external T/E exercise; and the key to obtaining an accurate evaluation is the (T/E/C) system. Specific recommended improvements to the T/E/C guidance given in ARTEP 71-2, should provide a higher quality T/E for the performing unit and more useful evaluative information for the sponsoring headquarters. A fundamental structure of an information system is realized; useful information for training managers and for high level analysis is potentially available.

The improved T/E/C system includes closer involvement by the parent brigade headquarters and more attention to the proper selection and training of T/E/C personnel. The Opposing Forces (OPFOR) element also assumes additional importance and responsibilities.

A well-structured T/E/C system for an external T/E exercise does not necessarily imply commitment of additional resources. It does imply optimal use of resources already committed. The fact that sufficient personnel, time, and

equipment are allocated to the training/evaluation/control of an external T/E effort does not guarantee T/E/C effectiveness. A high level of training management and organizational skill can increase T/E/C effectiveness with no corresponding rise in resource requirements and, in fact, could actually reduce requirements.

III. BACKGROUND

Collective training in the United States Army has been based on an Army Training Test (ATT)/Army Training Program (ATP) mobilization model developed during World War II. That model was designed to train units in a progressive, sequential program for mobilization to deploy to a combat theater at a scheduled date. While effective for its original purpose, this is not suited for today's needs.

The current requirements for immediate deployment with combat ready units, doctrinal changes to accommodate increased weapons lethality, increasingly complex weapons, increasing maintenance requirements, higher costs, and ecological constraints are all changes in the training environment which have caused a conceptual change within the Army Training System. The Army Training and Evaluation Program (ARTEP) is not related at all to the ATT/ATP, rather it is a revolutionary conceptual change which is designed to assist trainers and training managers in the conduct and management of the training needed to prepare a unit to survive and win on the modern battlefield.

ARTEP is a training and evaluation program that provides critical combat training objectives to units. It is a change in training philosophy that integrates both training and evaluation, with a focus on what should be done tomorrow to correct training weaknesses identified today. This is

accomplished by giving the trainer/evaluator training objectives (tasks, conditions, and standards) which include critical combat tasks that a unit must be proficient in, the conditions under which tasks must be performed, and specific standards that should be met. With these objectives and other information found in the ARTEP's training and evaluation outlines (T&EO), the leader at each level can plan, conduct, and evaluate his training continuously. The ARTEP concept was approved in August 1975 by the Department of the Army for Army-wide implementation.

A major field research effort was conducted by the Army Research Institute (ARI), beginning in December 1976, to analyze the methods used by field units in implementing the ARTEP for a Tank/Mechanized Infantry Task Force. This three volume report, completed in January 1978, is titled "Improved ARTEP Methods for Unit Evaluation." The information sources used in the ARI study were: field observations, interviews, consultations and literature. Seven battalions and subordinate units, representing four different divisions — two infantry and two armor — were sampled. All units were in the continental United States. Since the change from ATT/ATP concept to ARTEP concepts is revolutionary, not evolutionary, it is not surprising that the research revealed significant problems and variations of problems in ARTEP implementation. It should be noted and emphasized that although the research analysis was often critical of ARTEP, the ARTEP was unequivocally

judged by users and analysts alike as superior to its predecessor, the ATT/ATP concept. The analysis by ARI is simply a means of refining and improving a program that is still in its infancy.

Although our background research included the work that had been done by ARI, it also encompassed additional research on actual ARTEP after-action reports, and nearly three years of practical experience and field observations. Throughout our research, problems were identified at all levels and in various phases of ARTEP, however, the pervading issues had to do with organizing, tactically structuring, controlling, and supporting the ARTEP training/evaluation exercises. Problems emerged in the decision process in assigning ratings and in the use of results to provide feedback. Local commands dealt with these problems with varying degrees of success. A need for practical management guidance for planners, trainers, training managers, and evaluators has arisen; ARTEP 71-2 and associated Training Circulars have not yet filled that need.

Specifically, then, the problem addressed in our thesis is this: the current management of ARTEP in the field often does not result in achieving maximum training value for the participating unit.

The approach adopted to address this problem is a practical format providing specific guidance to commanders/trainers/training managers at various levels to improve the efficiency of ARTEP implementation. Basic organizational

and managerial principles were applied in formulating these recommended improvements. These principles, modified to fit the context of this problem, include the following:

- The activities of an organization should lead, directly or indirectly, towards the achievement of the organization's stated goals.
- Delegation of responsibility and authority to the lowest functionally efficient level.
- Resource allocation decisions are a management function, not an operations function.
- In an organization whose goals are essentially the refining of collective skills, decentralization of effort is optimal.
- Feedback must somehow be made available to management in order to maintain a dynamic, adaptive organization.

The application of these principles, although not always stated as such, should be apparent in the guidance and recommendations, which are explained in some detail.

IV. CHAPTER 1: DIVISION AND BRIGADE GUIDANCE FOR THE MECHANIZED INFANTRY

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A. INTRODUCTION

Division and brigade decisions involving the ARTEP are directly related to the availability of ARTEP training resources, the level of command sponsorship and the training proficiency of the units. Decisions related to the ARTEP must take into account the original ARTEP purposes which are: to evaluate the ability of a tactical unit to perform specified missions under simulated combat conditions; to provide a guide for training by specifying mission standards of performance for combat-critical missions and tasks; to evaluate the effectiveness of collective training of all echelons from crew/squad through battalion/task force; and to provide an assessment of future training needs. Guidance and recommendations in this area are included in the following chapter.

B. SUMMARY OF GUIDANCE AND RECOMMENDATIONS

Division/Brigade Training Program should provide for:

- *Adequate resources to support continuous internal T/E exercises by each maneuver battalion.*
- *Adequate resources to support planned external T/E exercises.*

For external T/E exercise:

- *Brigade sponsorship.*
- *Single battalion evaluation.*
- *Combination of offline and online mission evaluation.*

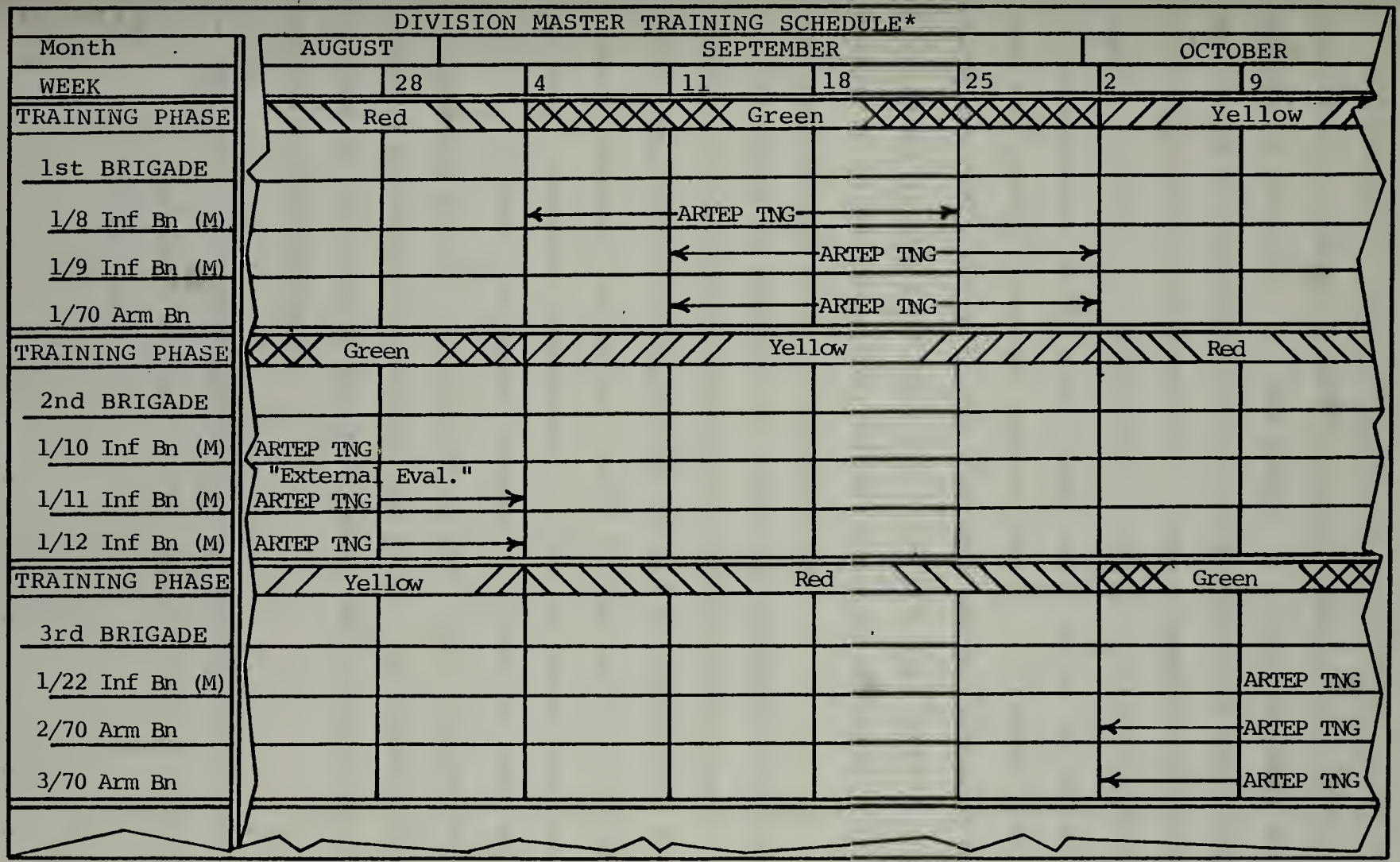
ARTEP recording and reporting systems:

- *Should provide for accurate, detailed data at battalion level.*
- *Should provide for summarized data at brigade and division level.*
- *Can provide basis of quantitative data for training research and analysis.*

C. DISCUSSION OF GUIDANCE AND RECOMMENDATIONS

- *The Division/Brigade Training Program should provide for adequate resources to support continuous internal T/E exercises by each maneuver battalion.*

In order to fulfill the purposes of the ARTEP, sufficient training time is necessary not only to build up the proficiency of the units but to also maintain it. As a guideline, at least one month per quarter of the annual training cycle for maneuver battalions should be devoted to ARTEP proficiency. In providing the units with adequate time most Divisions use a system of prioritizing training time. An example would be a green, yellow, red phasing where green is priority training time (T/E exercises, Gunnery), yellow is lesser priority training time (Non-field training) and red is Mission and Divisional Support time. Figure 1-1 shows this type of system on a portion of a Division Master Training Schedule. Included also in Figure 1-1 is an example of the Battalion ARTEP training time.



*Only Internal and External ARTEP T/E included.

FIGURE 1-1

Management of available terrain in order to allow adequate field maneuver areas is often a major link to the success of the T/E. If the amount of field training area is such that difficulties arise when more than one maneuver battalion trains simultaneously then a possible alternative would be to allocate sufficient terrain to the brigade that in the example, is in green time where it can be managed more efficiently than at division level. Although obviously there are real limits to the flexible use of training areas, repetition of the same missions over the same ground does little to inject surprise, fresh tactical thinking, or troop enthusiasm into the T/E exercise.

The ARTEP is designed so that the commander can stay abreast of his units' collective training proficiency. The units' strengths and weaknesses should be constantly monitored through internal evaluation which is the key to a successful program. Although Commanders' visits to their units conducting T/E are considered internal evaluation, they may not provide enough information on the actual collective training proficiency level of the unit. If needed, additional sources of information are available, one of which is the external T/E exercise.

- *The Division/Brigade Training Program should provide for adequate resources to support planned external T/E exercises.*

The Division Master Training Schedule and the Division Plan for annual training are influenced by so many variables that any set guidance is difficult. ARTEP 71-2 describes the procedure for conducting battalion external T/E exercises, but does not prescribe a minimum frequency. This built-in flexibility offers great advantages to division level planners who have to manage resources to maintain an effective training posture while still satisfying the requirements of less visible activities, such as post support, Reserve/National Guard affiliation programs, etc. A general guideline is to maintain a Division Master Training Schedule that provides adequate resources to support at least one external T/E for each maneuver battalion per twelve to eighteen month period. While this guidance may seem less strenuous than most existing lower level policies, it should be noted that there is no implied reduction of frequency of ARTEP training and/or internal T/E's. Furthermore, the Division/Brigade Commander can tailor the frequency of external T/E's to meet individual battalions' needs. Within this context, the external T/E will require better management of resources, specifically in the trainer/evaluator/controller system. An improved system will be described in detail in Chapter 3.

- *For external T/E exercises, brigade sponsorship is recommended.*

Sponsorship refers to the specific headquarters that plays the predominant role in planning, supporting, and training/evaluating a battalion in its external T/E. Both division and brigade level sponsorship offer several advantages and disadvantages. Under division sponsorship, more staff assets are available for formulating the plan and considerably more resources are available to implement it. On the other hand, division control has psychological as well as physical drawbacks. Division control fosters a "test" atmosphere for the performing unit; its leaders perceive Division as a remote headquarters unfamiliar with the battalion and unsympathetic with its peculiar problems. If not carefully avoided, division control can lead to a "canned" external T/E plan insensitive to a particular battalion's needs. This situation would seriously violate the philosophy of the ARTEP as a diagnostic training tool. The perception at lower levels, whether justified or not, would be reinforced that external T/E performance is the measure of performance for the Battalion Commander and the battalion, and that nothing short of all "Satisfactory" results is acceptable. It is also likely that the competition engendered by the Division approach would produce intensive efforts to "G-2" the problem and train accordingly. Physically, the ready availability and accessibility of Division resources invites over-use and waste.

Brigade sponsorship, however, encourages austerity and innovation. The natural (and desired) tendency is to do as

much as possible with Brigade organic assets. Because non-organic assets will have to be justified, excesses and waste should be reduced. Also, the stigma of external T/E as a test is lessened as Brigade is more in touch with the battalion's needs and capabilities. The external T/E plan can be individually tailored for each battalion. The training rather than the test nature of the external T/E is thereby enhanced.

Weighing the advantages and disadvantages of both approaches, it is recommended that brigade sponsorship be used. Any staff "learning" that takes place in the sponsoring brigade headquarters can be passed to the other brigades through the ARTEP element of Division G-3, which plays a planning advisory role in the brigade sponsorship approach.

- *For external ARTEP exercises, single battalion evaluations are recommended.*

In planning the allocation of resources for external T/E's, Division/Brigade headquarters must decide whether to use the Two Battalion approach or the Single Battalion approach. The Two Battalion approach offers the advantage of simultaneous T/E of two battalions in one exercise. The economy of resources available here is obvious. The disadvantages of this approach, however, are significant. The task of evaluation and control of two battalion size forces at essentially the same time requires a considerable resource

commitment, one that a single brigade could not adequately meet. Sponsorship then falls to Division, a less than desirable approach for reasons already given. Also, the combat realism of the T/E suffers. In the worst case, the battalions oppose each other, each using standard US tactics. The value of this type of exercise is clearly low and in fact is hardly compatible with the ARTEP. In the best case, where the opposing units take turns using Threat doctrine and tactics, a stop-start syndrome develops, degrading the continuity of the exercise for its players, with the subsequent negative effects on combat realism. The training benefit of sustained, realistic operations is thus forfeited.

The Single Battalion approach avoids both of these pitfalls. The resources required for evaluation and control are reduced; Brigade sponsorship is possible. The OPFOR can be a totally dedicated force. Some training in Threat doctrine and tactics would be expected. Training aids and local ingenuity could be employed to enhance the physical appearance of the OPFOR. This approach offers a distinct improvement in the quality of the OPFOR when compared to the previously described alternative. The quality of the OPFOR is one of the key factors in attaining combat realism during the T/E exercise. Another key factor is the control and tactical simulation of combat action. This factor, when viewed as a problem, can never be solved, only improved upon. The evaluation/control system described in Chapter 3 is this type

of improvement. The Two Battalion approach is unworkable under this improved system. If there is a disadvantage to the Single Battalion approach it is in possibly increased resource expenditures.

Proponents of the Two Battalion approach argue for its greater economy of resources. There is a question, however, as to the amount of resource savings, if any. In considering the two alternative approaches the increased training/evaluation/control available under the Single Battalion approach is the dominant factor. Therefore, the Single Battalion approach is recommended.

- *For external T/E exercises, a combination of offline/online mission evaluations is recommended.*

ARTEP 71-2 specifically states the mission requirements for a Battalion Task Force external T/E: at least six of nine primary missions, and seven of the eleven supplemental missions must be performed.[1] Factors that Division/Brigade should consider when making the mission selections include the expected mode of employment in combat, contingency mission responsibilities, recent informal T/E results, and training resources available. The temptation is to try to force too many of both types of missions into a scenario. The result

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[1]Department of the Army, ARTEP 71-2, p. 5-10, 1977.

is often a cluttered, intricate, overly intensive schedule for the performing unit; time for planning and troop leading procedures are often sacrificed in order to adhere to a scenario that squeezes in too many missions.

The recommendation here is to keep things as simple as possible in the online portion by selecting a minimal number of primary and supplemental missions required for a Level 1 evaluation. Since resource availability normally restricts a battalion external T/E to a 3-4 day exercise, judicious planning of time is needed for even these minimum number of missions. The value of executing a simple plan well exceeds that of executing a more ambitious plan poorly.

In constructing the scenario, the ideal is to arrange the selected primary and supplemental missions in a tactical sequence to optimize workability, realism, and tactical soundness. ARTEP 71-2 lays out a series of planning steps to follow. However, there is no simple mechanical formula to use. Each headquarters has its own set of variables and constraints; the scenario should be a result of staff planning in the truest sense. Failure to involve any of the principal staff input early in the formulation stage will amost surely result in compounding problems later on. The end result scenario should resemble an interval of expected combat employment in real time. The sequence of missions should "flow" with credibility for the players.

In planning for this flow of action in the scenario, it must be noted that evaluation of some subunit missions plainly

violate this principle, and therefore are prime candidates for offline evaluation (evaluation that takes place outside of the scenario). Clearcut examples of such candidates are the Mortar Platoon Live Fire and the infantry squad Forced March/Live Fire. Because of the live fire range requirements, it is virtually impossible to credibly incorporate these missions into a tactical scenario. Many missions are tailor-made for evaluation within a scenario, such as squad reconnaissance patrol and platoon defense of a strongpoint. Therefore, it should be advantageous to evaluate some missions at squad, platoon, or even company level offline. This practice has the added benefit of being much more amenable to employing training aids such as SCOPES, REALTRAIN, etc. Some of the subunit missions may be of particular interest to commanders and as such deserving of a closer evaluation than can readily be achieved online. However, should this selective offline approach be used, it is strongly recommended that offline events not run concurrently with the online scenario. An example of a Battalion training schedule of selected missions for offline evaluation is shown in Figure 1-2. A similar example is also shown in Chapter 3, Figure 3-4. Note that the end of the offline segment is separated from the start of the online Battalion scenario by 3-4 days.

- *ARTEP recording and reporting systems should provide for accurate, detailed data at battalion level.*

ARTEP EXTERNAL TRAINING/EVALUATION SCHEDULE

UNIT			MISSION/TIME/DAY/DATE						NOTES
CO	PLT	SQD	Crew Fire	SQD FMLF	SQD Rec Ptrl	PLT MTC/H.A.	PLT Def (B.U)	Co. Atk (Liv F)	
						*	*	**	
A	1	1		0500 Wed.	1800 Wed.		0600 Wed.	1000	Reporting Coordinates
A	1	2		0600 18	1800 18		0600 13	1000	Crew Fire _____
A	1	3		0700 Sept.	1800 Sept.		0600 Sept.	1000	SQD FMLF _____
A	2	1		0800 Tues.		0600 Wed.		1000 Thurs.	SQD Rec Ptrl _____
A	2	2		0900 12		0600 13		1000 14	PLT MTC/H.A. _____
A	2	3		1000 Sept.		0600 Sept.		1000 Sept.	PLT Def (B-U) _____
A	3	1	0500 Tues.	1100		1300 Wed.		1000	Co Atk (Live F.) _____
A	3	2	0500 12	1200		1300 13		1000	Mortar _____
A	3	3	0500 Sept.	1300		1300 Sept.		1000	Sct Plt _____
									Mortar unit report. times
B	1	1		0500		0600 Thurs		1000	
B	1	2		0600		0600 14		1000	Co A (81mm) 1200 M,11 Spt
B	1	3		0700		0600 Sept.		1000	Co B (81mm) 1200 T,12 Spt
B	2	1		0800 Wed.	1800 Mon.		0600 Thurs	1000 Tues.	Co C (81mm) 1200 T,12 Spt
B	2	2		0900 13	1800 11		0600 14	1000 12	CSC (4.2in) 1200 W,13 Spt
B	2	3		1000 Sept.	1800 Sept.		0600 Sept.	1000 Sept.	Cbt Sup Co report. times
B	3	1	0700 Tues.	1100		1300 Thurs		1000	
B	3	2	0700 12	1200		1300 14		1000	Sct PLT (Live F.)
B	3	3	0700 Sept.	1300		1300 Sept.		1000	0900 T,12 Spt
									FTX portion report. times
C	1	1	1500 Tues.	0500		0600 Tues.		1000	
C	1	2	1500 12	0600		0600 12		1000	(See Initial Order over-
C	1	3	1500 Sept.	0700		0600 Sept.		1000	lay for coordinate
C	2	1		0800 Thur.		1300 Tues.		1000 Wed.	locations)
C	2	2		0900 14		1300 12		1000 13	Initial Order
C	2	3		1000 Sept.		1300 Sept.		1000 Sept.	0900 M,18 Spt
C	3	1		1100	1800 Tues.		0600 Tues.	1000	1st Bn Mission
C	3	2		1200	1800 12		0600 12	1000	0800 T,19 Spt
C	3	3		1300	1800 Sept.		0600 Sept.	1000	

*SQD may also be partially evaluated
**PLT may also be partially evaluated

FIGURE 1-2

Accurate record keeping of all ARTEP training is a necessity in maintaining collective training proficiency (as well as developing the training posture) of the unit. Although detailed ARTEP after action reports should not be necessary or required at division level it is a must at battalion and lower levels. Desired information should be obtained from all internal training/evaluations as well as external. Such information as number and type of target hits, duration times, strengths, weaknesses, unit leaders, mission evaluation ratings should all be maintained in some form. The Training and Evaluation Outlines contained in the ARTEP manual are ideal for recording much of the information.

- *ARTEP recording and reporting systems should provide for summarized data at brigade and division level.*

The burden of recording and maintaining detailed and accurate T/E information should lie with the primary user of that information, the battalion. This does not intend to imply that no information should be maintained by brigade and division. The brigade should require summarized reporting, probably on a quarterly basis, from battalions regarding current ARTEP internal training/evaluations. An example of a report format is shown Figure 1-3. The example provides the brigade with a brief analysis of the most recent ARTEP training/ evaluation conducted and the next expected or planned training.

ARMY TRAINING AND EVALUATION PROGRAM (ARTEP) REPORT		
TO:	FROM:	DATE:

LAST ARTEP TRAINING/EVALUATION:

DATE COMPLETED _____

TYPE _____
INTERNAL/EXTERNAL

MISSIONS EVALUATED (ARTEP 71-2)

Chapter	Appendices	Chapter	Appendices

GENERAL UNIT WEAKNESSES

NEXT ARTEP TRAINING/EVALUATION:

TYPE _____ DATE PLANNED _____
INTERNAL/EXTERNAL

NAME, RANK, TITLE:	SIGNATURE:

FIGURE 1-3

General unit weaknesses should be shown to allow for any brigade level training management that may be required. Division level training managers need only that information which influences training resources allocation.

- *ARTEP recording and reporting systems can provide a basis of quantitative data for training research and analysis.*

Future training developments and improvements in current techniques, doctrine and the overall effectiveness of the ARTEP for the units in the field is an ongoing responsibility at all levels. The current Evaluation Feedback Sheets (Chapter 13, ARTEP 71-2) are an effort at concentrating field data to assist in this area. In order to continually update and improve the quality of the ARTEP more detailed data is required. Although the field units should be the primary users of detailed T/E data it can also be used in training research and analysis for overall training improvement. For this reason historical data, that has been maintained by field units, is a valuable data source. The Infantry School and Training and Doctrine Command (TRADOC) maintain an ongoing interest in such improvements and therefore need access to this data.

V. CHAPTER 2: BATTALION AND COMPANY GUIDANCE FOR THE MECHANIZED INFANTRY

V. CHAPTER 2: BATTALION AND COMPANY GUIDANCE FOR THE MECHANIZED INFANTRY

A. INTRODUCTION

The Training Program at battalion level and below is a critical tool for developing and maintaining collective training proficiency. Its structuring and management will be the key to a successful training program. Battalion training managers must control all of the training resources available to them in such a way as to provide the company commanders, the principle trainers, with their required training resources. The Soldier's Manuals and the ARTEP are the basis of the training structure. The learning of the individual skills from the Soldier's Manuals and the collective skills from the ARTEP are an integral process and can only be accomplished effectively under a complete training program. The soldier's development and his understanding of the fact that his individual skills are critical to the development of his unit's collective skills is the foundation for his understanding of Soldier's Manual (SM) and ARTEP integration. Individual training is a basic building block. Collective training introduces new or additional requirements in that individuals must time their responses with each other and they must learn to act as a smoothly functioning unit, organizing their efforts.

Improvement of training weaknesses and retention of training strengths can only be managed through an information

system that provides both immediate feedback to unit leaders and individuals and detailed documentation to the managers. Through this process the soldier and his unit leaders can concentrate their efforts continuously on their known training weaknesses while the training managers can organize battalion T/E with major efforts directed towards correcting overall unit weaknesses.

B. SUMMARY OF GUIDANCE AND RECOMMENDATIONS

Battalion Training Program should provide for:

- *Integrated individual and collective training to achieve and maintain SM and ARTEP standards.*
- *Quarterly T/E exercises using ARTEP.*
- *Organization under decentralized training.*
- *Complete use of own trainers/evaluators for internal T/E exercises.*

Company Training Program should:

- *Be the focal point of all unit activities.*
- *Provide for practical techniques of SM and ARTEP integration.*

The proper use of ARTEP Training/Evaluation results should:

- *Provide the unit being trained/evaluated with immediate feedback.*
- *Provide for the maintaining of accurate, detailed information on selected missions that were conducted.*

C. DISCUSSION OF GUIDANCE AND RECOMMENDATIONS

- *Battalion Training Program should provide for integrated individual and collective training to achieve and maintain SM and ARTEP standards.*

At battalion level, there should be an ongoing program of training that maintains a level of proficiency for the individuals based on the SM and for the units based on ARTEP. Knowledge and skills required by the SM are by no means different than those required by the ARTEP. The distinction is simply that the SM provides individual training objectives while the T/E of ARTEP focuses on collective skills. The interfaces of the individual skills identified in the SM, that support unit skills required for successful performance in an ARTEP mission/task, are in the process of being compiled and presented as a practical tool for training managers.

Faced with the current resource constraints, units can no longer afford to address SM and ARTEP as two separate training goals. The evolution of SM with emphasis on "hands-on" performance-oriented training is a natural extension of ARTEP. SM and ARTEP are closely interdependent, as they should be. Just as a unit's training proficiency is some function of the individual performances of its members and the collective performances of its sub-units, the T/E of a unit to achieve training proficiency is some function of the T/E of SM tasks and the T/E using ARTEP.

The Battalion over-all training program should integrate the T/E of individual and collective skills. The results from T/E using ARTEP provides the Battalion Commander with an assessment of his unit's training strengths and weaknesses. The future training activities should provide, within resource constraints, an improvement in weak areas, and maintenance of proficiency in strong areas. The fundamental structure of any well-trained unit rests on well-trained individuals.

The impact of SQT on the Enlisted Personnel Management System (EPMS) is so great that in many, if not most, cases there is a built-in incentive for the soldier to perform well. Leadership must provide the incentive to excel in collective skills through the development of unit pride and esprit. An optimal training program should satisfy both the needs of the individual and the unit.

Referring back to the green-red-yellow scheme of allocating "prime" training time, a unit conducting T/E using ARTEP is normally afforded green status during the time period immediately preceding its scheduled exercise. As the ARTEP T/E is primarily T/E of collective skills, it is natural to expect the unit's training efforts to be toward that end. The problem for the training manager, however, is how to allocate training when in yellow or red status. It has already been stated that internal T/E's should be performed continuously by the unit to avoid the need for "peaking" prior to an external evaluation. Internal T/E's are the most flexible

of training tools. They can be supplemented by classroom, map, or verbal exercises; they can consist of the more characteristic field exercises; or any combination in between. Unit trainers can develop or modify internal T/E's to reinforce individual soldiers' skills. For example, a platoon leader training/evaluating his platoon in the strongpoint defense can insert on-the-spot requirements for individuals such as putting a LAW into operation, actual range estimation, crew-served weapons assembly/disassembly for non-primary gunners, etc. Although these techniques may seem patently obvious, the tendency in training has been to treat individual and unit T/E separately. The more often that direct association between SM skills and ARTEP missions can be practiced, not merely verbalized, the more the perception of interdependence will be increased.

As a unit approaches a time period when many of its members are scheduled for SQT, the natural tendency is to minimize other activities and "crash" on SQT training. Some degree of this change of direction is expected and tolerable. However, it is possible to retain the structure of internal T/E using ARTEP as the training tool by which SQT is prepared for. SM skills should be presented and trained for not in the context of an event to "pass" on the hands-on portion of SQT, but as an integral part of an ARTEP mission. Learning, that can be associated with realistic or expected events, is retained longer and with more accuracy. The simple analogy

of "cramming" for exams and a few days later having little or no recall emphasizes this point.

Individual training using the SM and collective training using ARTEP should be mutually reinforcing. The interdependencies of individual and collective skills can and should be stresed and practiced under the structure of internal T/E's. The perception of these programs as separate entities, and SQT as solely an EPMS tool, must be eliminated. It is the responsibility of the training managers to insure that the training program allows sufficient planning and resources for individuals to achieve their potential on individual skills while the unit maintains high proficiency on collective skills.

- *Battalion Training Program Should Provide For Quarterly T/E Exercises using ARTEP.*

Internal T/E's using ARTEP in whole or in part, should be incorporated into unit training programs throughout the year. The frequency of internal T/E's will be dependent on each unit's training needs, personnel turbulence, and availability of training resources.[2]

Although the T/E under ARTEP is a continual daily process, consideration should be given to conducting a well-organized and fairly complete internal ARTEP T/E exercise once per

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[2]Department of the Army, FORSCOM Regulation 350-1, p. 3-0, 1977.

quarter. This exercise should be directly responsive to the unit's training needs, concentrating on identified weaknesses. From this concept, the battalion can develop and maintain training proficiency throughout the training cycle rather than "peaking" just prior to the external ARTEP T/E. Maintenance of proficiency at a high level is much preferred over a proficiency that widely fluctuates and then peaks at external T/E time. Figure 2-1 illustrates three types of proficiency flows: preferred, acceptable, and non-preferred. There are a total of three years shown with an external T/E occurring during the third quarter of the first year and the second quarter of the third year. The preferred flow is attainable only under optimal conditions. The acceptable flow is more realistic of a modern day unit that has implemented a quarterly internal T/E program. The non-preferred flow is typical of a unit that trains only for the external T/E exercise. The level of proficiency can only be determined as a result of an internal or external ARTEP training/evaluation. Although, in general, the unit is either considered as satisfactory or as needing additional training, a level of proficiency within that spectrum can be determined subjectively by the commander once he has completed the T/E and analyzed the results.

- *Battalion Training Program Should Provide For Organization Under Decentralized Training.*

TRAINING PROFICIENCY FLOW CHART

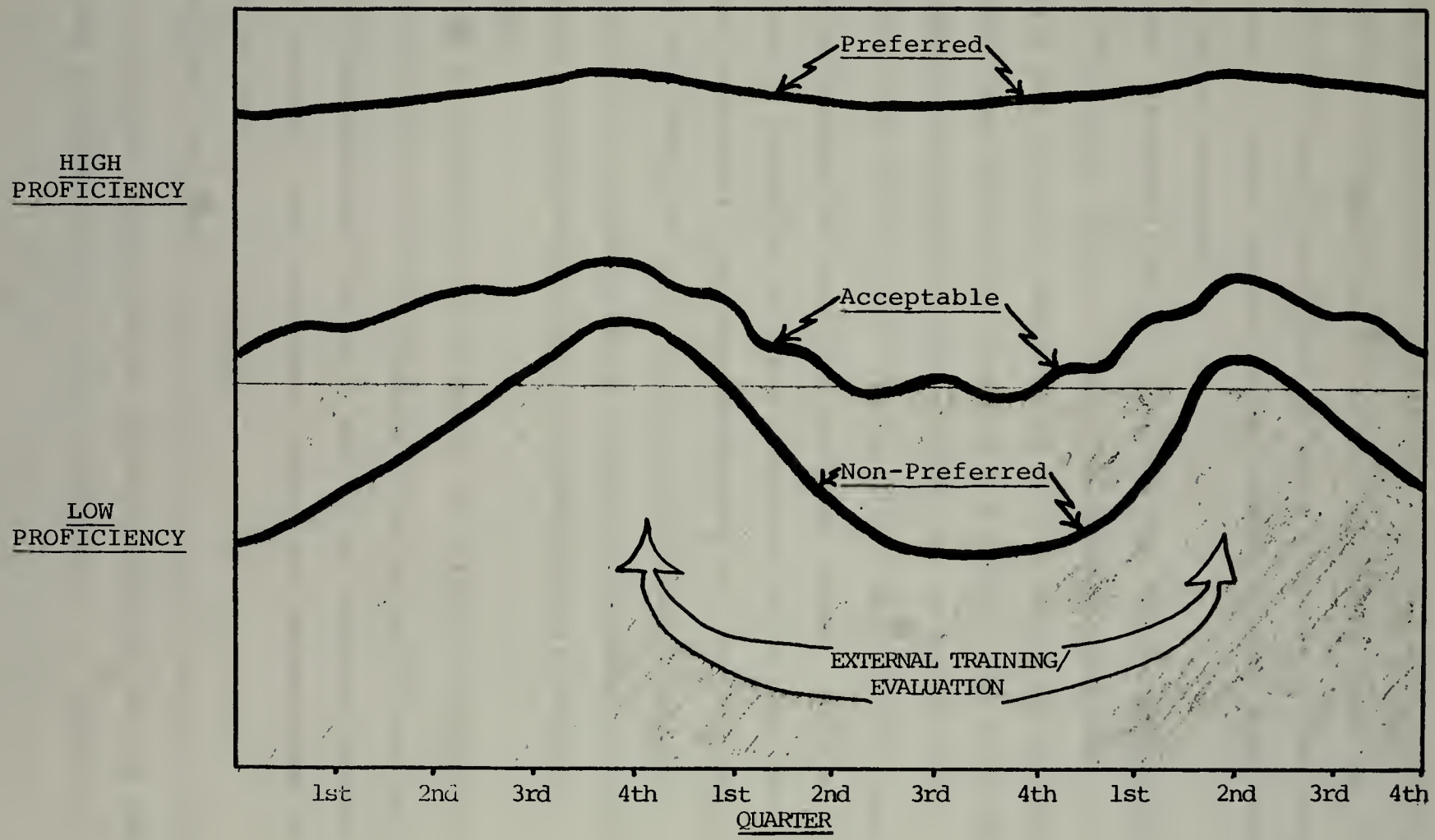

FIGURE 2-1

How to organize and plan for an internal ARTEP training/ evaluation is not a simple process. However, the task becomes much more manageable if basic concepts are adhered to. One of these concepts is the decentralized organization of battalion training.

Under decentralized training several steps of planning and interactions occur. First, the company commander assesses his training needs based on his observations and on input from his platoon leaders and NCO's. The next step is a weekly programming meeting with the battalion S-3 at which time the S-3 and company commanders iron out coordinating details for two or three weeks hence. They may also modify tentative training schedules to reflect the company commanders' current assessments of training needs. Third, the battalion S-3 then reconciles any scheduling conflicts, to include training resource availability, and ultimately publishes a battalion consolidated training schedule.

With this concept the majority of actual training is decentralized at least to company level while the administrative requirements (training schedules, training records, range requests, etc.) are consolidated and accomplished at battalion level.

Properly applied, decentralization breeds better leaders, but at the same time requires better leadership on the part of those responsible for their development. It requires of

the battalion commander and his staff a high degree of professionalism, planning and programming expertise, good management of limited resources, and a complete willingness to accèpt mistakes, set them right and proceed. Of the company commander, decentralized training demands the utmost skill in the details of how to train men. Empathy, perception, initiative, imagination and creativity are his special purview.[3]

Before a discussion of the battalion training schedule the battalion training forecast needs to be addressed. The battalion training forecast should be maintained as part of a planning calendar at battalion level. The training forecase can be broken down to monthly forecasts for ease of distribution to company level, readability, and workability if necessary. An example of a battalion monthly training forecast is shown in Figure 2-2. Note that even though the battalion would not normally forecast training of individual platoons, they are included as separate units under their appropriate company. This is done to provide the company commander not only with a forecast of the battalion's training but to provide the opportunity for him to further forecast his company's training. The basis for the battalion training forecast is the division master training schedule and unit needs. This battalion training forecast example

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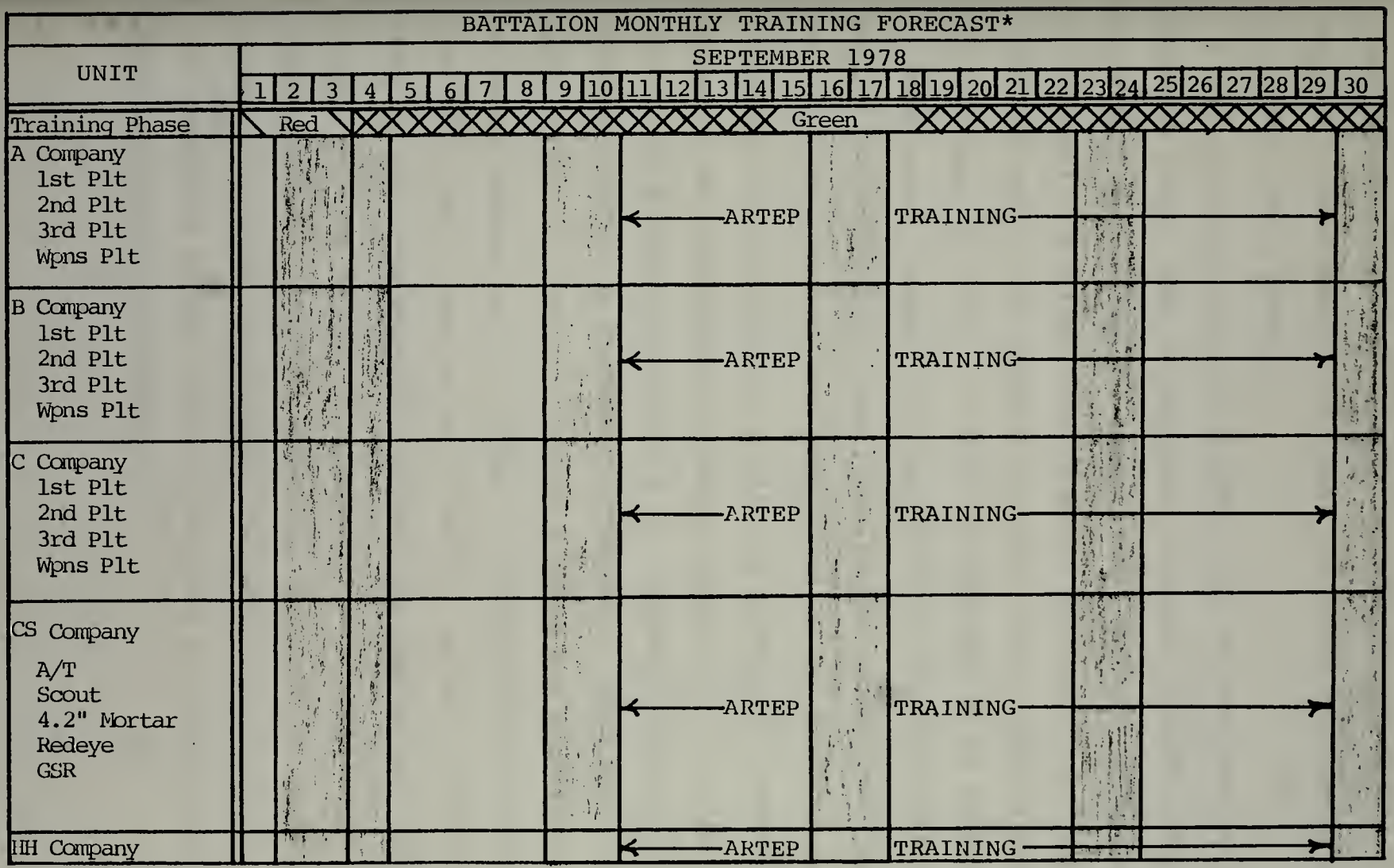
[3]Department of the Army, Training Circular No. 21-5-7, p. 29, 1977.



*Only ARTEP training included

FIGURE 2-2

tracks with the earlier example of the division master training schedule shown in Figure 1-1. The training phases are discussed on page 23.

The battalion training schedule can be published as one schedule rather than as separate schedules for each company. An example of a battalion consolidated training schedule for an internal T/E using ARTEP is shown in Figure 2-3. Note that this particular example includes three complete weeks of training; the amount of time recommended to be devoted to exercising a nearly complete internal training/evaluation. The battalion movement order, operations orders, and SOP are not included, however, the scheduling of the missions trained/evaluated are included along with an example of a scheduling procedure as attachments following Figure 2-3. In the example it should be noted that the T/E is continual from 11 September (Monday) through 28 September (Thursday). This allows the units sufficient time to both be trained and evaluated on all unit missions at all levels. Since most of the scheduled time for a unit's evaluation is only a portion of that unit's training day, the remainder of that day can be used for additional training within the companies, concentrating on training weaknesses. In fact, depending on where the battalion is in its training program and its level of proficiency, the scheduling matrix could be modified to concentrate on known unit training weaknesses.

BATTALION TRAINING SCHEDULE					11 Sep - 1 Oct 78
DATE/TIME	UNIT/ PERSONNEL	MISSION	TRAINER	LOCATION FACILITY	NOTES
11 SEP/0600-2400	Sel Pers	Mission Support	Bn XO		
/0600-1100	Bn (-)	Preparation For Fld Tng	BnCSM & Co 1SGs		
/1100-1245	Bn (-)	Lunch/Cmdrs Time	Co 1SGs/Co Cmdrs		
/1300-1500	Bn (-)	*Bn Mvmt	Bn Cmdr		See Bn Mvmt Order #__
/1500-2400	Bn (-)	Cmdrs Time	Co Cmdrs		Ref: ARTEP 71-2,
/1500-2400	Sel Pers	Final Prep. of ARTEP Mission Areas	Bn S-3		Bn Opns Order #___
12 SEP-/0001-2400	Sel Pers	Mission Support	Bn XO		Ref: ARTEP 71-2 (see attached matrix schedule)
27 SEP /0001-2400	Bn (-)	*ARTEP (Fld Tng & Eval)	Bn Cmdr		
28 SEP/0001-1700	Sel Pers	Mission Support	Bn XO		
/0001-0400	Bn (-)	Cmdrs Time	Co Cmdrs		
/0400-0600	Bn (-)	*Bn Mvmt	Bn Cmdr		See Bn Mvmt Order #__
/0600-0745	Bn (-)	Breakfast/Cmdrs Time	Co 1SGs/Co Cmdrs		
/0800-1100	Bn (-)	Cleaning/Maintenance	Bn CSM & Co 1SGs		
/1100-1245	Bn (-)	Lunch/Cmdrs Time	Co 1SGs/Co Cmdrs		
/1300-1700	Bn (-)	Cleaning/Maintenance/Inspection	Bn CSM & Co 1SGs/Co Cmd.		
29 SEP/0900-0950	Bn	Bn Formation	Bn Cmdr		Bn SOP
/1000-1700	Bn	Cmdrs Time	Co Cmdrs		
30 SEP- 1 OCT/0100-2400	Bn	Non-Tng Days	Duty Off.		

*Tng Highlights

FIGURE 2-3

UNIT	DATE/MISSION/TIME							
	12 SEP	13 SEP	14 SEP	15 SEP	16 SEP	17 SEP	18 SEP	19 SEP
Co A	SQD MTC	Crew Fire	SQD FM/LF	SQD AMB	SQD Rec Ptrl	PLT MTC/H.A.	SQD Def (B-U)	PLT Def (B-U)
1st Plt	0600-1200	0800-1100	0500-1000	0001-0500	1800-2400	0600-1200	0800-1200	0800-1200
2nd Plt	1000-1600	1000-1300	0800-1300	0100-0600	1900-0100	1000-1600	1100-1500	1100-1500
3rd Plt	1400-2000	1200-1500	1100-1600	0200-0700	2000-0200	1400-2000	1400-1800	1400-1800
Wpn Plt	0600	Live Fire	→	2400 PLT Tng	PLT Tng	Spt MTC	Spt Def (B-U)	Spt Def (B-U)
Co B	SQD FM/LF	SQD AMB	SQD Rec Ptrl	Crew Fire	SQD MTC	SQD Def (B-U)	PLT MTC/H.A.	PLT Def (A/A)
1st Plt	0500-1000	0001-0500	1800-2400	0800-1100	0600-1200	0800-1200	0600-1200	1200-1400
2nd Plt	0800-1300	0100-0600	1900-0100	1000-1300	1000-1600	1100-1500	1000-1600	1400-1600
3rd Plt	1100-1600	0200-0700	2000-0200	1200-1500	1400-2000	1400-1800	1400-2000	1600-1800
Wpn Plt	0600	Live Fire	→	2400 PLT Tng	PLT Tng	Spt Def (B-U)	Spt MTC	PLT Tng
Co C	Crew Fire	SQD FM/LF	SQD AMB	SQD Def (B-U)	PLT Def (B-U)	SQD MTC	SQD Rec Ptrl	PLT MTC/H.A.
1st Plt	0800-1100	0500-1000	0001-0500	0800-1200	0800-1200	0600-1200	1800-2400	0600-1200
2nd Plt	1000-1300	0800-1300	0100-0600	1100-1500	1100-1500	1000-1600	1900-0100	1000-1600
3rd Plt	1200-1500	1100-1600	0200-0700	1400-1800	1400-1800	1400-2000	2000-0200	1400-2000
Wpn Plt	0600	Live Fire	→	2400 Spt Def (B-U)	Spt Def (B-U)	PLT Tng	PLT Tng	Spt MTC
CSC			Live Fire					
Scout	Spt SQD MTC	PLT Tng	0800-1500	PLT Tng	Spt SQD MTC	Spt SQD MTC	PLT Tng	PLT Tng
A/T	Plt Tng	Spt SQD AMB	Spt SQD AMB	Spt SQD AMB	PLT Tng	Spt PLT MTC/HA	Spt PLT MTC/HA	Spt PLT MTC/HA
Mortar	0600	Live Fire	→	2400 Spt Def (B-U)	Spt Def (B-U)	Spt Def (B-U)	Spt Def (B-U)	Spt Def (B-U)
Redeye	PLT Tng	PLT Tng	PLT Tng	PLT Tng	PLT Tng	PLT Tng	PLT Tng	Spt PLT Def (A/A)
GSR	PLT Tng	PLT Tng	Spt SQD Rec Ptrl	PLT Tng	Spt SQD Rec Ptrl	PLT Tng	Spt SQD Rec Ptrl	PLT Tng
HHC	Spt SQD FM/LF	Spt SQD FM/LF	Spt SQD FM/LF	Spt Tng	Spt Tng	Spt Tng	Spt Tng	Spt Tng

FIGURE 2-3 (Attachment 1)

DATE/MISSION/TIME								UNIT
20 SEP	21 SEP	22 SEP	23 SEP	24 SEP	25 SEP	26 SEP	27 SEP	
PLT Def(A/A) 0600-0800 0800-1000 1000-1200 PLT Tng	PLT/Co Atk/(LF) & PLT Def(LF) 0600-2000	Co/PLT Def/St.P. & Co Delay 0600-2000	Co MTC/H.A./ Del. Atk 0600-2000	1200 Bn FTX* 2400				Co A 1st Plt 2nd Plt 3rd Plt Wpn Plt
PLT Def(B-U) 0800-1200 1100-1500 1400-1800 Spt Def(B-U)	Co MTC/H.A./Del. Atk 0600-2000	PLT/Co Atk (LF) & PLT Def (LF) 0600-2000	Co/PLT Def/ St.P. & Co Delay 0600-2000	1200 Bn FTX* 2400				Co B 1st Plt 2nd Plt 3rd Plt Wpn Plt
PLT Def(A/A) 1200-1400 1400-1600 1600-1800 PLT Tng	Co/PLT Def/ St.P. & Co Delay 0600-2000	Co MTC/H.A./ Del. Atk 0600-2000	PLT/Co Atk (LF) & PLT Def (LF) 0600-2000	1200 Bn FTX* 2400				Co C 1st Plt 2nd Plt 3rd Plt Wpn Plt
Live Fire 1200-1800 PLT Tng Spt Def(B-U) Spt PLT Def(A/A) PLT Tng	Spt Co B&C	Spt Co A&C	Spt Co A&B	1200 Bn FTX* 2400				CSC Scout A/T Mortar Redeye GSR
Spt Tng	Spt Live Fire	Spt Live Fire	Spt Live Fire	1200 Bn FTX* 2400				HHC

*Bn FTX will include:
- Bn MTC
- Bn Hasty Atk
- Bn Del. Atk
- Bn Exploitation
- Bn Defense
- Bn Delay
- Bn/Co Night Atk
- Bn/Co Disengage (Under Pressure)
- Bn/Co Defense of Built-Up Area
- Hq Co CS & CSS
- Sct Plt: Route Rec, Screen (Night), Area Rec
- 107mm Plt: Ind. Fire Support
- 81mm Mortar: Ind. Fire Support
- Redeye: Air Def. Support
- GSR: GSR Support
- A/T Plt: TOW Fire Support
- Appropriate Supplemental Missions

FIGURE 2-3 (Attachement 2)

MISSION	OIC	REPORTING COORD*	REFERENCE (ARTEP 71-2 CHAP.8) APPENDIX
SQD MTC	Cpt Thomas, Asst S-3		30
SQD FM/LF	Cpt Smith, C Co		32
SQD Antiarmor Amb	Cpt Hayes, S-1		33
SQD Recon Patrol	Cpt Jones, S-2		31
SQD Def(B-U Area)	Cpt Wilson, S-4		34
Crew Fire	Cpt Gill, A Co		35
PLT MTC/H.A.	Cpt Simms, B Co		21,22
PLT Def(B-U Area)	Cpt Wilson, S-4		24
PLT Def (A/A)	1 LT James, Redeye		25
PLT/Co Atk (L.F.)			
& PLT Def (L.F.)	Maj Ames, S-3		13,27,28
Co MTC/H.A./Del Atk	Cpt Hess, CSC		10,11,12
Co/PLT Def/St.P.	Cpt Hess, CSC		15,16,17
& Co Delay			23 & 26
Bn FTX	Maj Guthrie, XO		1-9,14,18,19,20,
			36-38,41-44 & 46

*Also See Overlay to Bn Opns Ord #____

FIGURE 2-3 (Attachment 3)

- *Battalion Training Program should provide for complete use of own trainers/evaluators for internal T/E exercises.*

Internal T/E exercises are the battalion and company commanders' means of examining their decentralized training program. Maximum use should be made of the battlion's own trainers/evaluators and every effort should be made to find the best qualified trainer/evaluator for each particular mission. Attachment 3 to Figure 2-3 provides an example of how the separate missions could be trained/evaluated by trainers from within the battalion. Note that the battalion executive officer could be used as a T/E/C for the battalion field training exercise portion. It would enhance the battalion's training if coordination could be made to provide for an opposing enemy force made up from another unit outside of the battalion in order to allow the battalion to train as a complete unit and still have an opposing force.

The example shown in Figure 2-3, along with its Attachments, is not intended as the exact method to follow but only as an example of a method that could be used if a complete internal T/E is deemed necessary. Complete internal T/E's such as the one depicted can be accomplished only under ideal conditions; due to resource constraints, not all units can manage two continual weeks or more of field training per quarter. The internal program portrayed here can readily be

partitioned and/or modified to fit any unit's needs and capabilities. Note that the battalion "pooling" of T/E/C's shown in Attachment 3, Figure 2-3 is a seeming contradiction of the decentralized concept. However, this approach may be desirable in situations where the battalion, because of the lack of qualified trainers in certain positions, needs to consolidate, and use qualified T/E/C's for each mission/ task.

- *Company Training Program should be the focal point of all unit activities.*

The commander's first concern must be to order all the activities of his unit to meet his primary obligation to the Army, his unit, and his soldiers: produce a unit ready to fight and win now.[4] The activities of the company are put in order through continual training under a complete training program. The company commander is primarily a trainer with most of his resources and training being managed by battalion. The training manager provides guidance and establishes goals for trainers and supports them; the trainer concentrates on making training happen. Training management, a complex, deliberate, and administratively burdensome function is difficult at company level and can be accomplished more effectively at battalion level.

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[4]Department of the Army, FM 100-5, Operations, p. 1-2, 1977.

Under the decentralized training system, discussed earlier in this chapter, the majority of training and resource management for the company is done at battalion level. This does not mean that any of the company commander's authority or leadership and training techniques are being diminished. It does mean, however, that the company commander can do the job that he was originally intended to do and that is to train his company.

The effectiveness of company training is greatly increased by the company commander's presence. The time that the company commander spends with his units during training is inversely related to the time required of him to administer to non-training activities. If a company is training for six hours during a normal duty day, the company commander should be free to spend as much as six full hours with his units while the training is occurring.

To produce a company ready to fight and win, if it were called into action tomorrow, the company commander must mold a fighting unit. This can only be accomplished by his constant attention to the training of his individual soldiers and their collective development as a unit.

- *The Company Training Program should provide for practical techniques of SM and ARTEP integration.*

In accomplishing this training objective the company commander must use a combination of training techniques for

the practical integration of individual training using the Soldiers Manuals and collective training using the ARTEP. To provide an example of how this can be accomplished, it is first necessary to know when and where to concentrate the training effort. In using the green-red-yellow scheme in Chapter 1 for allocating "prime" training time, as much of the red and yellow training time as possible should be devoted to the individual training of soldiers and to the collective training of unit missions where training weaknesses have been identified. As much of the green training time as possible should be devoted to integrated individual and collective training.

The training of individual soldiers for their jobs and MOS can best be accomplished by decentralizing individual training to NCO's. The Soldier's Manual tells NCO's where to find material to support training for each individual task expected at each skill level within each MOS. Individual training in the units has the following characteristics which are taken from TC 21-5-7:

A. It is decentralized to the first line supervisor.

B. It is individualized and tailored for each soldier.

C. It is self-paced, requiring the commitment of each soldier, and full use of Training Extension Courses (TEC), correspondence courses, and General Educational Development (GED).

D. It need not depend on scheduled classes only, but takes place continuously, whenever and wherever a leader can get his men together.

A well-trained soldier is the basis for all combat ready, well-trained units. The soldiers' abilities, which result from an individual training program, are demonstrated in several ways. SQT performance is one; another is the individuals performance of an individual training task, which is included within a mission, in the ARTEP.

It is this approach that ties individual and collective training together. The SM skills obtained by the individual soldier are demonstrated in any T/E using the ARTEP. Collective training should be conducted at company level, using the ARTEP, with a development from crew missions up through platoon and possibly even company missions to assist the soldier in the realization of his skills and to emphasize the fact that they have practical and even critical value to the success of his unit.

As the company's individual training progresses a transition can be made into collective training. This is accomplished through relating individual skills to time and space within the context of a squad or higher mission. Although an earlier example shows much of the battalions green time occupied with battalion and below T/E's, it does not intend to present the picture that only collective T/E is accomplished during a training quarter. At company level, as the unit training is progressing to the collective development stage, the company commander should concentrate his training emphasis at crew and squad level. As this is developed there is

a natural flow to platoon and company level. The collective training at squad level is where the integration of individual and collective skills is most evident to the individual soldier. It is here where the purpose of the SQT and the ARTEP are displayed to the soldier and it is here where the integration of the two must be accomplished.

- *The proper use of ARTEP training/evaluation results should provide the unit being trained/evaluated with immediate feedback.*

As indicated by the feedback loop models in ARTEP 71-2, the information obtained in the evaluation process is used as input into the decision-making process for the design and conduct of future unit training efforts.[5]

There are two features of closed-loop training programs that determine how effective they will be. The first is the structure for obtaining feedback and the second is the willingness of unit leaders to accept and use the feedback. Feedback may take a variety of forms. It may be delivered orally or in writing, either by persons within or outside the unit being trained/evaluated. It may contain evaluative judgments and/or hard, objective facts.

It is recommended that, whenever practicable, the unit (crew, squad, platoon) being trained/evaluated be given

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[5]Department of the Army, ARTEP 71-2, pp. 4-1 and 4-5, 1977.

immediate oral feedback following each mission/task. These critiques can either be scheduled as an integral part of training, or can take place during lulls in training. Also, in some missions/tasks additional written feedback can be provided. An example of a one page consolidation of the accurate, detailed result data of the mechanized infantry squad forced march/live fire mission is shown on the following page (Figure 2-4). A normal field T/E packet used by the trainer/evaluator would include the Training and Evaluation Outline (T&EO), a map of the terrain or range used, a scenario and possibly mission support information. The normal practice, upon completion of a mission, is for the trainer/evaluator to give the results orally and/or provide the unit leader with a completed T&EO from the packet. The results shown on the T&EO allow for either satisfactory or unsatisfactory ratings and do not allow for specifics such as number of target hits, preparation and execution times, and other exact data that could be important to the unit leader. Because of this, it is recommended that a one page consolidated mission data result sheet be used with a copy being provided to the unit leader. This can greatly aid the unit leader in providing him with exact information on his units' strengths and weaknesses. Note that in the example shown of the squad forced march/live fire result sheet, general information such as weather conditions, weapons and equipment status, and number of unit members present are also indicated. This information may be valuable to the unit leader in the

SQUAD FORCED MARCH/LIVE FIRE EXERCISE

General Information.

Squad _____ Leader _____ Members _____ _____
Sqd/Plt/Co Full Name Total # Date

All Weapons and Equipment Present _____ (If No, explain on reverse side)
Yes/No

Gas Masks Worn During Firing _____ Weather _____ _____
Yes/No Wind Cond.(rain,clear,etc) Temp

Tasks and Task Evaluations.

Conduct Forced March: Time _____ _____ _____ ..... _____
Start Finish Total SAT/NAT

Conduct Live Fire:

Prepare to Defend

Time _____ _____ _____ ..... _____
Start Finish Total SAT/NAT

Selection of Positions ..... _____
SAT/NAT

Engagement of Personnel Targets

Zone 1 = $\frac{\text{\# of targets hit}}{\text{\# of targets}} = \frac{\quad}{10} = \quad\%$ ..... _____
SAT/NAT

Zone 2 = $\frac{\text{\# of targets hit}}{\text{\# of targets}} = \frac{\quad}{10} = \quad\%$ ..... _____
SAT/NAT

Zone 3 = $\frac{\text{\# of targets hit}}{\text{\# of targets}} = \frac{\quad}{10} = \quad\%$ ..... _____
SAT/NAT

Engagement of Armor Targets

Near Target = $\frac{\text{\# of target hits}}{\text{\# of LAW rds fired}} = \frac{\quad}{5}$ ..... _____
SAT/NAT

Near Target Distance _____
(75-175 meters)

Far Target = $\frac{\text{\# of target hits}}{\text{\# of 90mm rds fired}} = \frac{\quad}{3}$ ..... _____
SAT/NAT

Far Target Distance _____
(At least 300 meters)

Overall Mission Evaluation.

*Comments:

_____
SAT/NAT

Mission Trainer/Evaluator.

_____ _____ _____ _____ _____
Full Name (Print) Rank Branch Unit Signature

* Comments are required on all areas needing additional training.

Figure 2-4

preparation for future missions and possibly in mission result comparisons.

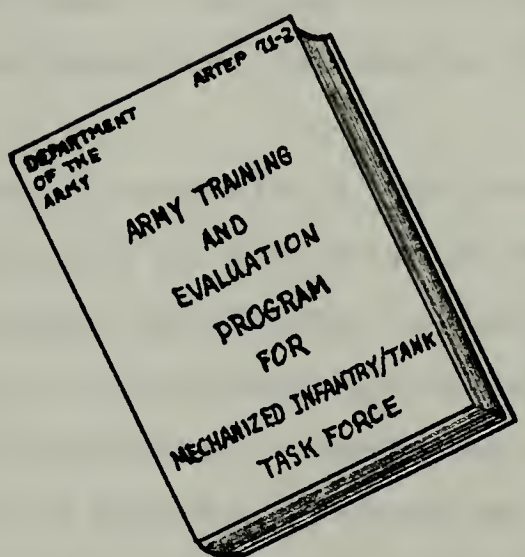
- *The proper use of ARTEP training/evaluation results should provide for the maintaining of accurate, detailed information on selected missions that were conducted.*

There is little information available on the significance of keeping historical mission result data, mainly because there are so many variables involved such as time, weather conditions, and personnel transfers. However, the availability of accurate and detailed mission result data is beneficial for observing overall trends in training strengths and weaknesses. Certain missions, such as the squad forced march/live fire, can provide results that are of extreme importance to battalion unit leaders as they provide nearly complete T/E analysis of the battalion fighting units. If the consolidated mission data result sheets are prepared properly they can also be used as historical information.

The battalion training managers cannot manage effectively without a training information system that includes T/E results obtained during a well-managed training program. The training information system concept will be discussed in Chapter 3. If the results are not there, training resources could be wasted by not following a well-managed plan of concentrating on training weaknesses while maintaining training strengths.

In addition, the trend in the future for Army training is the development of ARTEP T/E models which will allow a commander to select priority missions with his given resource constraints and be provided a realistic estimate of what training he can conduct. These models will be based on a mission priority selection by the commander. The primary source of information for prioritizing missions can only come from accurate, detailed mission result data.

VI. CHAPTER 3: GUIDANCE FOR THE TRAINING/EVALUATION/CONTROL OF THE EXTERNAL TRAINING/EVALUATION EXERCISE



VI. CHAPTER 3: GUIDANCE FOR THE TRAINING/EVALUATION/CONTROL OF THE EXTERNAL TRAINING/EVALUATION EXERCISE

A. INTRODUCTION

Guidelines for the performing unit's conduct of the external T/E are generally well defined and specified. However, the guidance and instruction for the evaluation and control is generalized and often vague. In this chapter, an improved T/E/C system, with specific recommendations, will be presented with the purpose of providing a systematic structure for the preparation and conduct of evaluation and control.

The objectives of conducting a battalion external T/E are to provide training for the battalion and to assist in diagnosing performance deficiencies in order to shape future training efforts to correct these deficiencies. With respect to both of these objectives, no element of the over-all evaluation effort is more critical than the T/E/C group and the way it does its job. Logically, in a performance-oriented atmosphere, it is absolutely essential that performance be evaluated properly and accurately. In this context, evaluation is highly dependent upon control and therefore both elements assume crucial importance.

The rationale for devising the external T/E plan and the evolution of the scenario with missions and supplemental missions have been included in previous chapters. Given that

these planning steps have been accomplished, the T/E/C group is expected to perform the following tasks: act as higher headquarters and conduct the performing unit through the offline and online segments; evaluate the unit's performance; assess casualties and battle results; control OPFOR; provide battlefield realism; give immediate and summary feedback to the unit; make on-the-spot corrections whenever possible; and settle disputes.

The economic facts of life dictate that because of training costs, battalion-size units will undergo an external T/E only infrequently based on unit needs and higher headquarters' guidance. The expenditure of manpower and resources will be considerable; it is reasonable to expect in return a valuable training benefit from this experience. The T/E/C group is the key to realizing this benefit. An efficient, well-trained, well-organized system of evaluation and control is needed. This translates into resource commitments of time, personnel, and equipment, all of which are precious to commanders at all levels. However, the simple fact remains that to reap the full dividends of the ARTEP philosophy, the needs of the T/E/C group must be satisfied. Feedback from the field supports this declaration; the single most often repeated criticism of external T/E's using ARTEP (Tank/Mechanized Infantry Task Force) is the lack of quality and consistency in the evaluation and control.

B. SUMMARY OF GUIDANCE AND RECOMMENDATIONS

The Improved Trainer/Evaluator/Controller system should provide:

- *Higher quality training/evaluation for the performing unit and more useful evaluative information for the sponsoring headquarters.*
- *A fundamental structure of an information system that will supply useful information for training managers and for training analysis.*

The Senior Evaluator should:

- *Provide and be provided quality personnel as trainers/evaluators/controllers.*
- *Insure that evaluator/controller training is accomplished prior to the external T/E.*
- *Provide specific instructions to T/E/C's regarding feedback procedures, integration of ratings, and their interaction with OPFOR.*

An External Training/Evaluation Exercise should:

- *Include the use of a complete and detailed T/E/C structure.*
- *Be scheduled in a way that will allow for a natural mission flow and ease of evaluation and control.*

C. DISCUSSION OF GUIDANCE AND RECOMMENDATIONS

- *The improved T/E/C system should provide higher quality training/evaluation for the performing unit and more useful evaluative information for the sponsoring headquarters.*

ARTEP 71-2 gives specific recommendations as to the size and organization of the T/E/C group for the battalion external T/E. The current T/E/C system has not performed adequately in most cases, usually due to a lack of resource commitment and/or poor training. An improved prototype organizational chart for the T/E/C group is shown in Figures 3-2 and 3-3. The improved T/E/C system is no remedy for inadequate resource commitment. Division and Brigade Commanders will have to make the proper resource allocation decisions.

The improved T/E/C organizational scheme has three important features: the formalization of T/E/C subgroups at Company/Team and Battalion/Task Force echelons; the creation of a separate Control/Simulation (C/S) specialist position; and the sponsoring headquarters plays the dominant role in the T/E/C system. The improved T/E/C group structure has several advantages. First, formalizations of T/E/C subgroups provide the basis for structured observation and control at lower echelons. Prior planning of observational strategies and of cueing requirements is facilitated. For example, in a Company/Team mission, the Company/Team T/E/C could plan well in advance where he wanted each Platoon T/E/C to be, and what specifically to be observed. The Company/Team T/E/C also has decided in advance how he plans to integrate the evaluations and observations from the Platoon T/E/C's to formulate an over-all Company/Team evaluation.

This feature has been incorporated into most T/E/C group structures since ARTEP was introduced.

Second, the creation of a separate (C/S) specialist position devotes resources solely to increase the combat realism of the T/E. The C/S specialist will devote full time to the scenario and the simulation of the technical aspects of combat, such as weapons signatures and weapons effects on personnel and equipment. At the same time, sub-unit T/E/C's are relieved of some of the burden of C/S duties and can concentrate on observation/evaluation. With the infrequency of the external T/E, there is no anticipated problem in providing incentives for the performing unit's members. However, the perception by these members that considerable effort is being made to portray combat realistically should have a favorably reinforcing effect on their attitude toward the exercise and their subsequent participation in it.

Third, the sponsoring headquarters plays a dominant role in the training/evaluation/control of the performing unit. Brigade sponsorship is specifically recommended; the explanation and examples that follow assume that brigade sponsorship is the approach used. Figure 3-2 shows that the bulk of T/E/C personnel at Battalion/Task Force Headquarters comes from Brigade Headquarters. The Senior T/E/C is the Brigade Commander, the person most closely in touch with the needs and capabilities of the battalion, and excepting the performing

unit's members, the person most intensely concerned with the training/evaluation of the unit. As both Senior E/C and Brigade Commander, he can tailor the external T/E to fit whatever schemes of offline-online, primary-supplemental mission combinations that he chooses, taking into consideration the ARTEP requirements, the Battalion Commander's training assessment, and any instructions received from higher headquarters. Also, as Senior T/E/C, the Brigade Commander will be expected to utilize brigade assets as much as possible, and to fully justify any requests for outside assets. This is not to imply complete exhaustion of brigade assets; outside assets are often preferable and in some cases mandatory. Detailed examples at the end of this chapter illustrate this point. However, in the case of the Battalion/Task Force Headquarters, the choice of respective Brigade Headquarters personnel as T/E/C's offers not only the optimal opportunity of first-hand T/E of the performing unit, but also the opportunity to identify and eliminate any operational difficulties between the two headquarters.

- *The improved T/E/C system should provide a fundamental structure of an information system that will supply useful information for training managers and for training analysis.*

Currently, much of the valuable data from a unit's T/E is essentially wasted. Information that is needed for training analysis is either unavailable or available only in

grossly aggregated form, e.g., the listing of Satisfactory/ Unsatisfactory mission results required by ARTEP 71-2 to be sent to Fort Benning. The improved T/E/C system is first and foremost intended to improve the effectiveness of ARTEP. However, a coincidental opportunity is available to gather data at little or no marginal increase of resource use. A singular example is the evaluation sheet recommended for use in the Squad Forced March/Live Fire, Figure 2-4. Besides being a valuable T/E tool, these sheets can be stored as historical information available for future trainers and training analysts. Although the Forced March/Live Fire is a mission exceptionally conducive to quantification, it is expected that more subjective type missions will yield results, once their quantifiable aspects have been identified and analyzed. Initially, at least, this type of information system will be restricted to missions performed in the off-line segment of the external T/E, where situationally structured events are expected and where T/E/C density will be high anyway, in order to support ranges, REALTRAIN, etc.

The feedback loops in the ARTEP (both internal and external) can conceptually form the structure of an information system. See Figure 3-1. During the internal phase of T/E, the information flow is characterized by informal communication between the training managers at battalion level and the trainers at company level. Quantified results are stored at battalion level and available in formulating or refining training plans. The information flows between

ARTEP INFORMATION FLOW

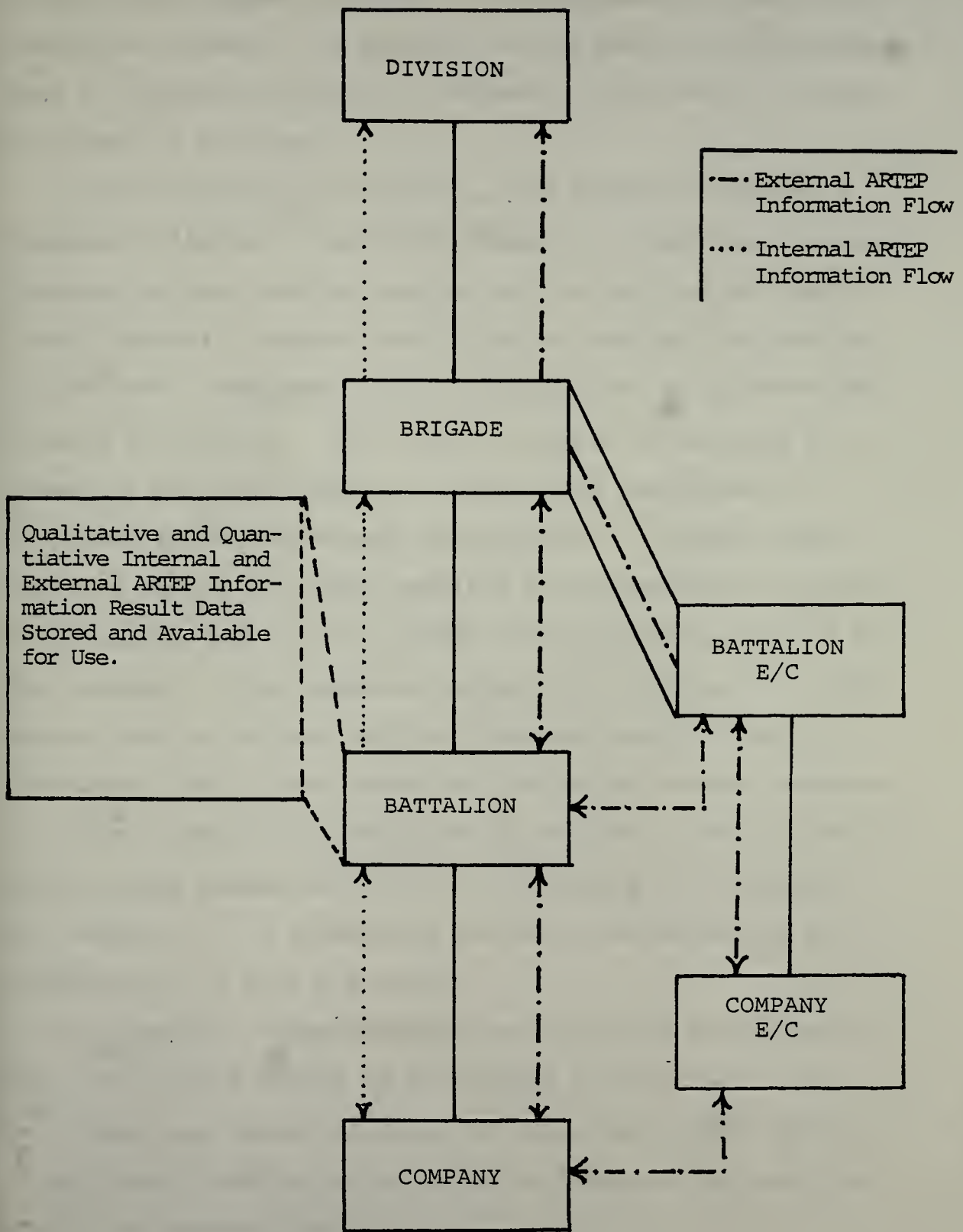


FIGURE 3-1

battalion and brigade and between brigade and division are one-way, from lower to higher. This information consists of summarized internal T/E results, in the case of information sent to brigade, and unit T/E status in the case of information sent to division.

In the external T/E exercise, the information flow is somewhat different. The T/E/C elements at each level receive information from the performing unit in the form of operational results; feedback from T/E/C to the unit is provided in two ways, immediate online critiques and end-of-exercise written evaluations. The end-of-exercise evaluations are passed up the T/E/C chain of command and aggregated at T/E/C headquarters (brigade headquarters). Brigade headquarters passes the final detailed end-of-exercise evaluation to battalion, who in turn passes the appropriate portion to each company. The companies digest this information, formulate a plan to correct deficiencies, and send it back to battalion, who in turn passes a plan of anticipated measures to correct identified weaknesses to brigade. The information that brigade passes to division, concerning the external T/E exercise, is a summarized evaluation which should be a confirmation of unit T/E status.

The residual, quantified information from both internal and external T/E phases is maintained at battalion level. The format and detail in which it should be stored, so as to be readily available for training managers and analysts, should be standardized.

- *The senior evaluator should provide and be provided with quality personnel as trainers/evaluators/controllers.*

The role of the T/E/C has already been discussed in some depth and is also defined in ARTEP 71-2. A major problem is that personnel assigned as T/E/C's perform these duties as additional temporary duties. Units that are tasked to provide T/E/C's tend to fill these positions not on a "most qualified" or "best qualified" basis, but rather on a "qualified and can be spared" basis. The scheme of tasking by Division/Brigade Headquarters is a key to the quality of T/E/C's. The most often used and probably least optimal is the simple tasking of one battalion to provide the entire T/E/C structure for a like battalion, i.e., the Commander of Battalion 1 is the Senior Evaluator, the S-3 of Battalion 1 is the S-3 T/E/C, the Commander of Company A, Battalion 1 is the T/E/C for Team A, etc. Profoundly simple in organization, adaptability, and ease of operation, this scheme is seriously flawed. It is unreasonable and unrealistic to expect any battalion at any given time to have experienced personnel in every position; and this is precisely what is needed to fill the T/E/C function of the external T/E. There are organizational structuring techniques that can be used to improve the probability of getting quality personnel as T/E/C's. First, the Brigade Commander as the Senior Evaluator immediately attracts the attention of potential T/E/C suppliers within the brigade. Second, the requirements are

spread among a number of units. This technique seemingly violates a previous recommendation for the brigade to do as much as possible with its own resources. However, requiring some assets from a number of units exploits the natural tendency to put one's best foot foward in high visibility activities such as an external T/E. A detailed example of such a scheme is presented at the end of this chapter.

- *The Senior Evaluator should insure that trainer/evaluator/controller training is accomplished prior to the external T/E.*

The inadequacies that are apparent in the training of most T/E/C's prior to external T/E's are usually the result of not enough time, effort, and command emphasis being placed on the development of the T/E/C's. This development should normally be accomplished during a two day T/E/C school. However, even this program takes precious resources; two more full days are required for T/E/C's already facing a 3-4 day separation from their primary duties, not including the preparation required for the school itself. There are no easy ways to alleviate this requirement; it is essential that each T/E/C attend all sessions of the school, make the proper coordination, wargame the events, and walk the terrain. Command attention is the only solution, and again with the Brigade Commander as the Senior Evaluator, proper emphasis

is already implied. The Brigade Staff is also the logical organization to plan and implement the school, with advice and assitance from G-3. In initially prescribing the requirements for T/E/C personnel, and in the subsequent taskings, the duration of duty should be explicitly stated; attendance at the school should be a matter of command interest, with the Brigade Commander setting the example as Senior Evaluator.

- *The Senior Evaluator should provide specific instructions to the T/E/C's regarding feedback procedures, integration of ratings, and their interaction with OPFOR.*

The sample program of instruction described in TC 21-5-7 is an outline, and as such deals with topics and not detailed specifics. At least three areas require the special effort of the Senior Evaluator to give specific instructions to individual T/E/C's in order to standardize what are often general guidelines.

The first of these areas involves feedback procedures. ARTEP 71-2 gives general information on how and when to conduct feedback sessions during the external T/E exercise. However, the T/E/C school should refine these generalities, so that each T/E/C knows when to conduct a session, who should attend it, and what key points should be covered. Care must be taken not to damage the effectiveness of the chain of command by presenting critical comments to too general an audience. For example, there is little to gain

and much to lose by critiquing a leader who has performed poorly or made a wrong decision, by airing his deficiencies in the presence of his followers. Normally, in such a situation, the members realize that mistakes have been made and the public dissection of an already humbled leader can cause irreparable damage to his position as a leader. A better approach might be to give the group evaluative comments on its performance as a group, then take the leader aside and give him personal constructive comments on his performance. If the leader's mistakes were serious enough to cause his unit to not meet the standards of the mission or task, it is up to the leader himself to pass that information to the unit. In the case of a company/team or higher level mission, a procedure must be agreed upon in advance that includes some feedback in some form for all elements of the unit. The training responsibility of the T/E/C also mandates that the T/E/C explicitly understands the standards and the conditions; any guidelines on interpretation of subjective events should be standardized by the Senior Evaluator.

The second area that requires specific instructions is the method to be used for integrating ratings. It is intuitive that the performance of a company/team is directly related to the performance of its platoons and ultimately related to the performance of its individual soldiers. The standards and conditions of many of the company level and higher missions significantly rely on the T/E/C's subjective judgment, e.g.,

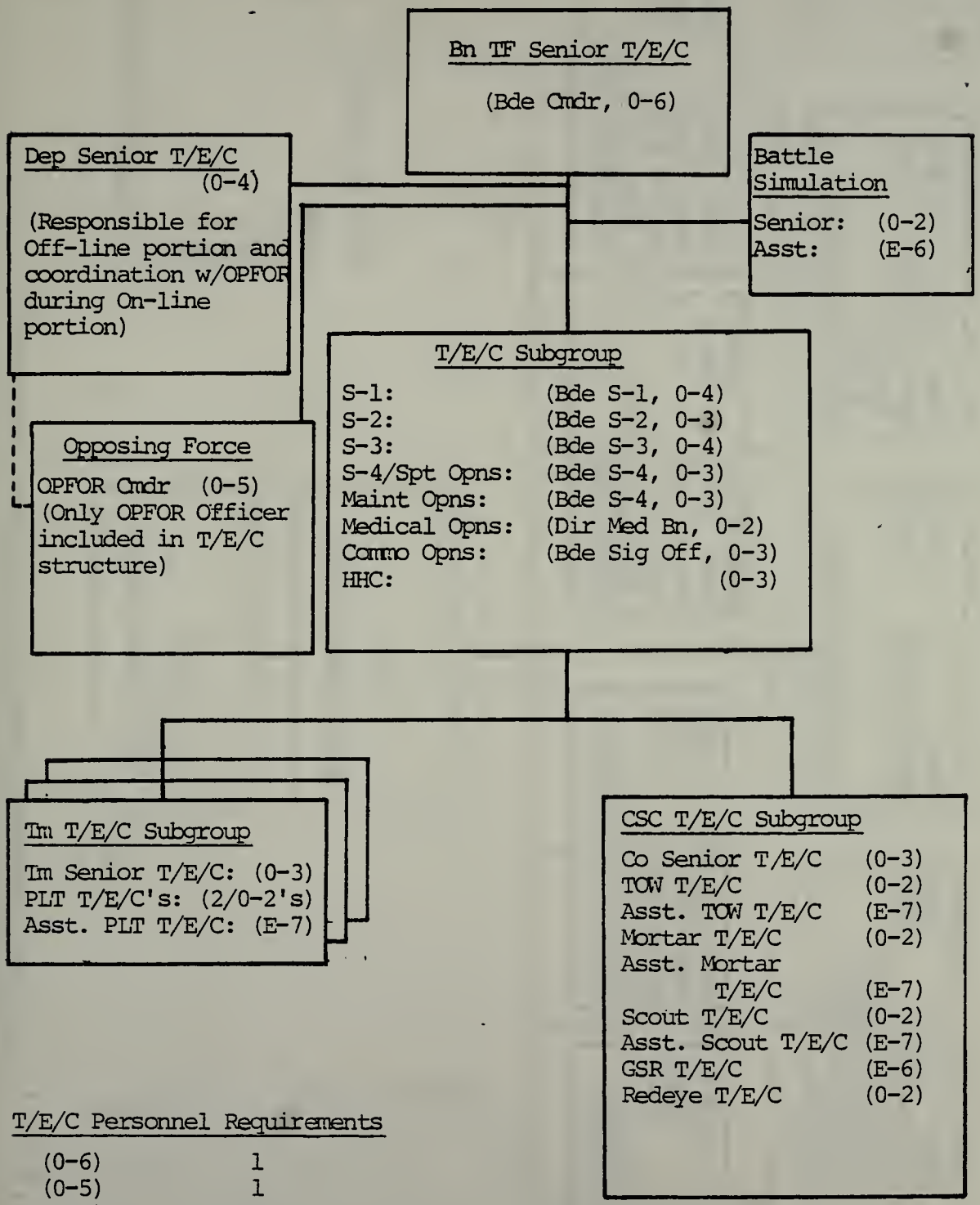
"did the unit secure the objective without sustaining excessive casualites?" It is difficult for a single T/E/C to observe enough events simultaneously to make that judgment; for each mission, it should be agreed upon in advance what key areas should be observed and how the T/E/C's should be disposed to fill that need. Incidental information should be planned for, such as checking with higher headquarters on the accuracy and timeliness of reporting and indirect fire procedures. The T/E/C school is the proper format in which T/E/C's should coordinate and arrange for such plans. Concurrent improvisation during the external T/E exercise is difficult, if not impossible.

An important aid to T/E/C's in fulfilling their responsibilities is the proper use of a well-motivated OPFOR. After-action consultation with the leader of the OPFOR by an T/E/C on a particular mission is a vital link in making an accurate evaluation and in revealing training deficiencies of the unit, such as early detection, improper camouflage, skylining of vehicles, etc. Without prior coordination between the T/E/C's and OPFOR, this link becomes ill-defined, or hastily improvised with significant loss of information. Also, it becomes increasingly obvious that the OPFOR must be well trained and imbued with the proper spirit, i.e., that the exercise is primarily intended to benefit the training status of the performing unit and is not perceived as an opportunity for the OPFOR to exhibit its superiority over a sister unit.

- *An external training/evaluation exercise should include the use of a complete and detailed T/E/C structure.*

Many of the T/E/C structures used for external training/evaluations do not provide for the efficient use of all T/E/C's available. For example, when an external T/E is conducted under brigade control, the brigade has numerous officers and NCO's who are highly qualified who are not normally used as T/E/C's. The practice has often been to use a battalion staff from another battalion to evaluate the staff of the exercised battalion when in fact the brigade staff would be much more appropriate. The same is true for the chief T/E/C. Normally a fellow battalion commander is used as the primary evaluator of the exercised battalion commander. The Brigade Commander of the battalion being evaluated should be the senior T/E/C as well as the primary evaluator of his battalion commander. It is common in the majority of battalion external T/E exercises that the respective brigade staff is required to participate in the exercise as the controlling headquarters anyway. Not using them as key members of the T/E/C structure can only lead to resource waste and inefficiency through mismanagement. Figures 3-2 and 3-3 on the two following pages present examples of possible T/E/C structures for both on-line and off-line

ON-LINE TRAINER/EVALUATOR/CONTROLLER STRUCTURE

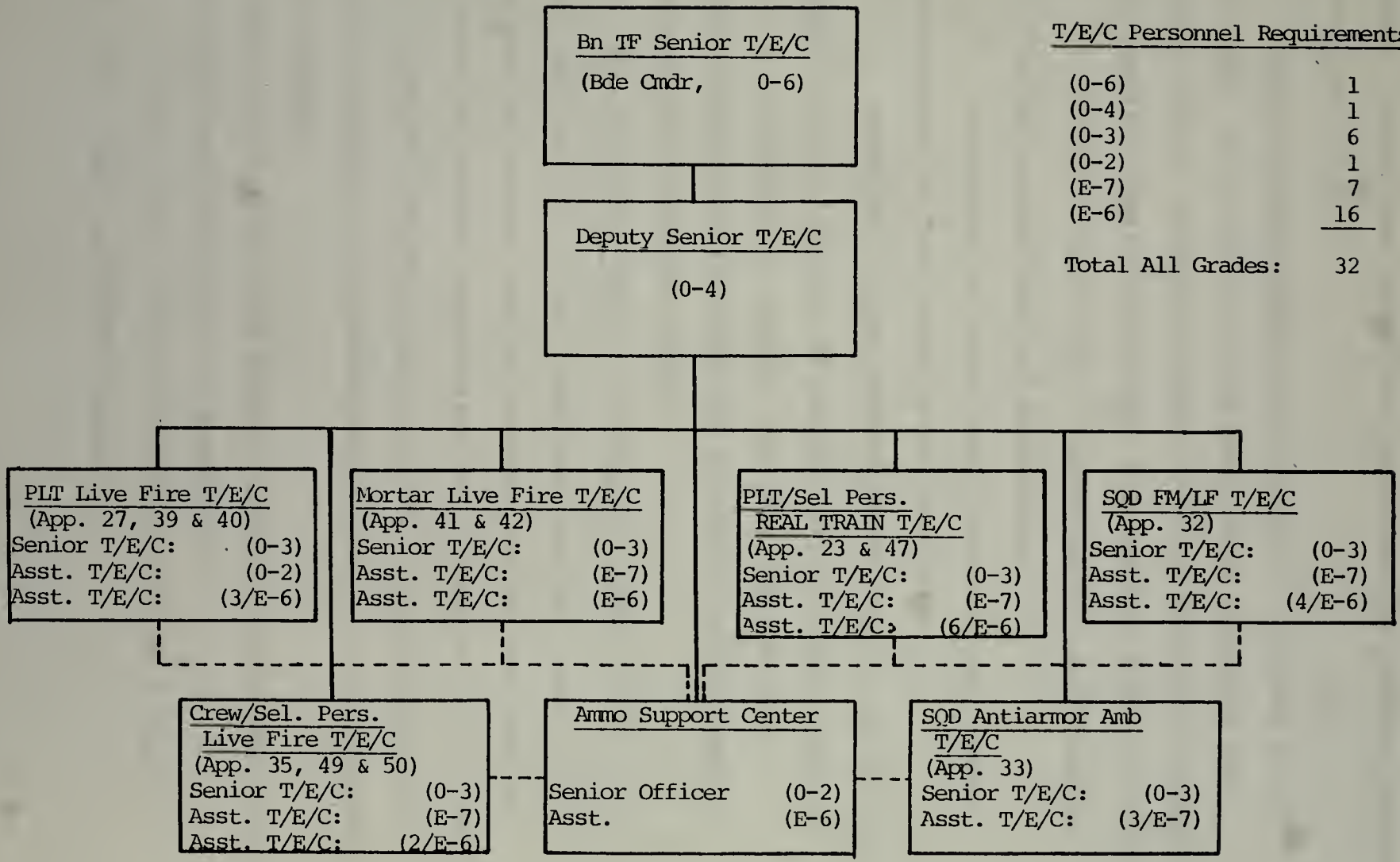


T/E/C Personnel Requirements

(0-6)	1
(0-5)	1
(0-4)	3
(0-3)	9
(0-2)	12
(E-7)	6
(E-6)	2
Total All Grades:	34

FIGURE 3-2

OFF-LINE TRAINER/EVALUATOR/CONTROLLER STRUCTURE



T/E/C Personnel Requirements

(0-6)	1
(0-4)	1
(0-3)	6
(0-2)	1
(E-7)	7
(E-6)	16
Total All Grades:	32

FIGURE 3-3

portions. The duties corresponding to each of the assignments are outlined below.

A. Battalion Task Force Senior T/E/C. The Task Force senior T/E/C is the O-I-C of the evaluation exercise and the T/E/C group. He should normally be the Brigade Commander of the battalion being evaluated. His primary duties include:

1. Overall supervision, direction and coordination of T/E/C group preparation and performance.

2. Evaluation of Task Force Commander performance, and performance of Task Force as an integral unit.

3. Provides Brigade Command/Staff simulation for the evaluated unit by issuance of orders, intelligence, etc.

4. Assisted by Deputy, monitors and resolves exercise control, arbitration and simulation which impact on the overall evaluation effort.

B. Deputy Senior T/E/C. The deputy senior T/E/C is the officer charged with direct responsibility for field control of the on-line portion and the running of the off-line portion under the general supervision of the senior T/E/C. He should be an O-4 and would typically be the brigade S-3 or one of the brigade non-evaluated battalion XO's. His primary duties include:

1. Maintains field control through coordination with OPFOR during on-line portion of exercise.

2. Maintains current situation/location display for all Task Force and OPFOR elements.

3. Directs tactical operations of OPFOR according to scenario schedule of events and senior T/E/C guidance.

4. Responsibility for the control and execution of the off-line portion of the exercise.

C. T/E/C Subgroup Personnel. T/E/C personnel assigned to Task Force elements are allocated as efficiently as possible while maintaining their capability to train/evaluate/control. Their primary duties include:

1. Conduct of evaluations of performance of Task Force elements as assigned.

2. Provide feedback as directed by senior T/E/C.

3. Assist Battle Simulation officer with implementation of simulation at appropriate Task Force level.

D. Battle Simulation Officer. The battle simulation officer is charged with the control of tactical simulation functions under the general supervision of the senior T/E/C. His primary duties include:

1. Coordination of simulation activities by OPFOR and Task Force level T/E/C's.

2. Responsibility of major simulation activities such as bomb simulation, major NBC attacks, major artillery concentrations, etc.

3. Accountability of simulation materials.

E. Opposing Force Commander. The OPFOR Commander's duties include:

1. Tactical command of the OPFOR in accordance with the scenario schedule of events and guidance from the senior T/E/C and/or coordination with the deputy T/E/C.

2. Responsibility for preparation of OPFOR to conduct operations as defined in the evaluation plan, including appropriate threat doctrine.

F. Off-Line subgroup T/E/C. The senior T/E/C's of all of the missions exercised during the off-line portion can be the same officers used for T/E/C's during the on-line portion. Care must be taken to insure that the officers are experts on the particular mission that they are responsible for. Their responsibilities include:

1. The evaluation and control of the particular mission or missions which they have been assigned under the guidance of the deputy senior T/E/C.

2. Setting up of the exercise to include range preparation training and procurement, ammunition requests, etc.

G. Ammo-Support Center Officer. This officer would normally be a support platoon leader from one of the non-evaluated battalions of the brigade. He must be familiar with all of the ammunition requirements, both live and blank, of all the off-line missions. He is responsible, directly to the deputy senior T/E/C, for all control, delivery and pick-up of ammunition. He is further responsible for the secure and safe maintaining of the ammunition throughout the exercise.

- *An external training/evaluation exercise should be scheduled in a way that will allow for a natural mission flow and ease of evaluation and control.*

Many of the officers and NCO's who were used as T/E/C's during the off-line portion can also be used as T/E/C's during the on-line portion of the exercise. Although in the examples in Figures 3-2 and 3-3 the total number of T/E/C personnel is not significantly smaller than is normally used, the overall exercise requires less personnel support. This is accomplished primarily through the use of the brigade staff as T/E/C's as well as higher headquarters. This efficiency improvement will also aid in the ease of evaluation and control in general since the brigade would normally be more familiar with its battalions' operations than would a T/E/C source from outside of the brigade.

The external training/evaluation exercise should be scheduled so that only key missions, and/or missions that would be difficult to evaluate otherwise, are evaluated during the off-line portion. The more subunit evaluations that are conducted during the on-line portion as part of the tactical exercise the more the soldier will see his responsibilities to his unit's overall efforts. However, the more subunit evaluations that are conducted during the on-line portion, the more difficult it becomes to structure an exercise that has a natural mission flow that maintains a realistic tactical scenario. An example of how this could be accomplished on a particular subunit mission would be the evaluation of the squad night reconnaissance patrol as part of an overall night attack mission during the on-line

portion of an external T/E exercise is shown in Figures 3-4 and 3-5. Note that they correspond to the earlier Figures on the T/E/C structure.

Figures 3-4 and 3-5 include all of the minimum required mission evaluations from ARTEP 71-2 as well as a few additional ones. Evaluating all of the squads on the squad FM/LF mission follows an earlier recommendation, although if only 1/3 of the squads were evaluated (the minimum requirement), the off-line portion of the exercise depicted in the example would only last 2 days. The on-line portion can be accomplished in 2 days and 2 nights of continuous exercise and evaluation as shown in Figure 3-5.

The off-line and on-line portion of the exercise should be separated by several days to assist in the ease of evaluation and control. The advantages of conducting an external T/E exercise similar to the one portrayed in the examples are significant. There are fewer personnel required to support the exercise; there is a natural tactical flow to the on-line portion which is not broken by individual subunit T/E's; the structure of the exercise is simple and manageable; the soldier is included as an integral part of the T/E; and the exercise provides for the obtaining of detailed and accurate result data on key missions, which is the only realistic way to provide the evaluated battalion with an honest yet concise evaluation.

OFF-LINE SCHEDULING EXAMPLE

Mission* Rep. Coord.	Day 1		Day 2		Day 3	
	Unit	Rep Time	Unit	Rep Time	Unit	Rep Time
PLT Live Fire (App. 29,39 & 40) EN128694	1/A 2/B	0600 1200	3/C Sct Plt/ CSC	0600	Make-up	Day
Mortar Live Fire (App. 41 & 42) EN206722	81mm/A 81mm/B	0600 1200	81mm/C 4.2 in/ CSC	0600 1200	Make-up	Day
PLT/Sel. Pers. REALTRAIN (App. 23 & 47) EN187552	3/B, Sel. Pers/B 2/A, Sel. Pers/A		1/C, Sel. Pers/C A/T Plt/ CSC	0600 1200	Make-up	Day
SQD FM/LF (App. 32) EN084642	1/1/C 2/1/C 3/1/C 1/2/C 2/2/C 3/2/C 1/3/C 2/3/C 3/3/C	0600 0700 0800 0900 1000 1100 1200 1300 1400	1/1/B 2/1/B 3/1/B 1/2/B 2/2/B 3/2/B 1/3/B 2/3/B 3/3/B	0600 0700 0800 0900 1000 1100 1200 1300 1400	1/1/A 2/1/A 3/1/A 1/2/A 2/2/A 3/2/A 1/3/A 2/3/A 3/3/A	0600 0700 0800 0900 1000 1100 1200 1300 1400
Crew/Sel. Pers. Live Fire (App. 35, 49 & 50) EN086682	3/C 3/A 3/B	0600 1000 1400	Sel Pers/ A Sel Pers/ C Sel Pers/ B	0900 1500 1800	Make-up	Day
SQD Anti-Armor Amb. (App. 33) EN 141666	1/A 3/B	1600 1800	2/C	1600	Make-up	Day
Sel. Pers. Armd Veh Rec (Ch. 9, App 11)					Bn Sel. Pers.	0800 (Day 4)**

* If Tank Plts are eval. 1/3 of unit must be eval. on Ch. 8, App. 29 (Battle Run)

**Mission can be evaluated on 4th Day or before 1st Day as appropriate.

FIGURE 3-4

ON-LINE SCHEDULING EXAMPLE

DAY	TIME	UNIT/PERS	MISSION	ARTEP REFERENCE CHAP	ARTEP REFERENCE APPENDIX	EVALUATOR/ CONTROLLER	NOTES
1	0600-1800	Bn/Co	MTC,H. Atk, Del. Atk	8	1,2,3,10,11,12	Bn/Co	At least 1 Plt from each Co. must be eval.
		Plt	MTC, H. Atk	8	21,22	Co/Plt	
	1800-2400	Sqd	Rec. Patrol	8	31	Co/Plt	At least 1 Sqd from each Plt must be eval.
2	0001-0500	Bn/Co	Nt. Attack	8	5,14	Bn/Co	
	0500-2400	Bn/Co	Defense	8	6,15	Bn/Co	
3	0001-0200	Bn/Co	Disengage (Under Pres)	8	8,18	Bn/Co	
	0900-1200	Bn	Critique			All	
			Additional Missions Required or Recommended to be Evaluated During 3 Day Exercise				
1	0600 (Day 1)	BnCMdGrp/S	Bn Assd Missions	10	1	CmdGp/Staff	See E/C Personnel Structure
		Bn/Co	EW Opns	9	2	Bn/Co/Signal	
Thru	Thru		Passage of Lines	9	3	Bn/Co	Can be done during
			Def. Against A/C	9	4	Bn/Co	Disengagement Mission
3	0200 (Day 3)		NBC Prot. Measures	9	6	Bn/Co	
			POW Processing	9	8	Bn/Co/Staff	
			Mvmt Techniques	9	9	Bn/Co	
			Tactical Mvmt	9	10	Bn/Co	1/3 of M113 Crews and
			OPSEC	9	12	Bn/Co/Staff	Sct Plt must be eval.
			Interact w/attachmts	11	—	Bn/Co/Staff	
		HHC	CS & CSS	8	20	Bn/Co/Staff	HHC eval. all Bn suppl. mis.
		Sct Plt	Rt.Rec.,Scn,Area Rec.	8	36,37,38	Scout	Plt. eval. coord. with staff
		Redeye	Air Def. Support	8	43	Redeye	At least 1/2 of tm's eval.
		GSR	Gnd. Survl. Support	8	44	GSR	At least 1/2 of tm's eval.
		A/T Plt (TOW)	A/T Fire Support	8	46	TOW	At least 1/2 of unit's eval

FIGURE 3-5

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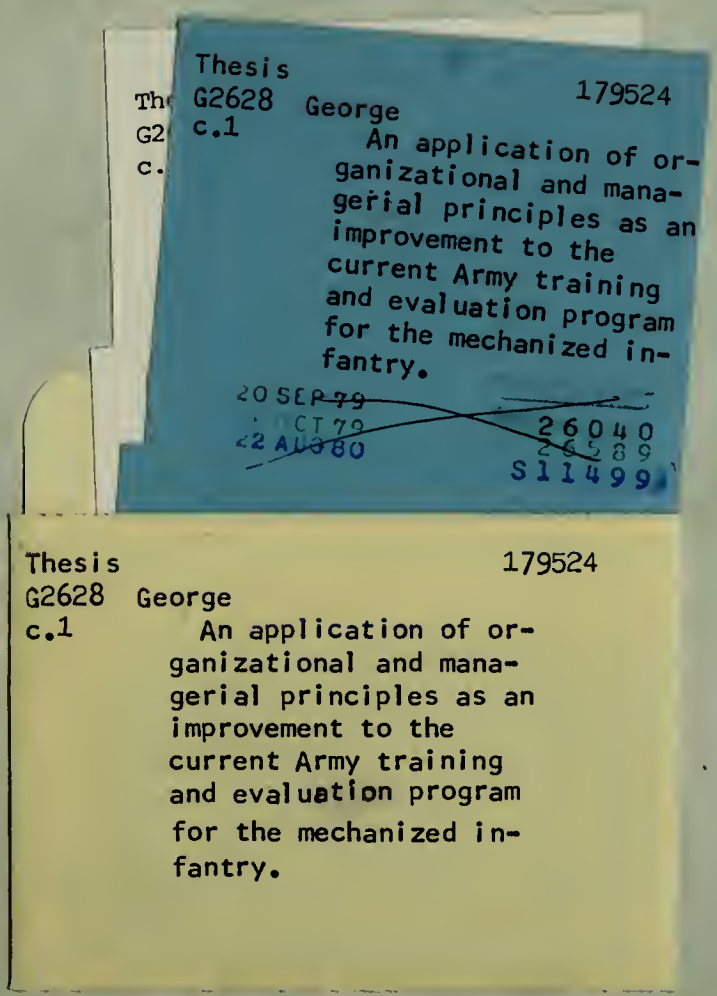
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