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AFTER ACTION REVIEW GUIDEBOOK I:  
NATIONAL TRAINING CENTER

ARI FIELD UNIT AT PRESIDIO OF MONTEREY, CALIFORNIA

June 1982

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Technical Director

**L. NEALE COSBY**  
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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM	
1. REPORT NUMBER	2. GOVT. ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER	
<b>AD-A139405</b>			
4. TITLE (and Subtitle) NATIONAL TRAINING CENTER AFTER ACTION REVIEW GUIDEBOOK		5. TYPE OF REPORT & PERIOD COVERED	
7. AUTHOR(s) Thomas D. Scott and James L. Fobes		6. PERFORMING ORG. REPORT NUMBER	
9. PERFORMING ORGANIZATION NAME AND ADDRESS Army Research Institute Field Unit P. O. Box 5787 Presidio of Monterey, CA 93940		8. CONTRACT OR GRANT NUMBER(s)	
11. CONTROLLING OFFICE NAME AND ADDRESS U. S. Army Research Institute for the Behavioral and Social Sciences 5001 Eisenhower Ave., Alexandria, VA 22333		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS  2Q162717A790	
14. MONITORING AGENCY NAME & ADDRESS (If different from Controlling Office) U. S. Army Research Institute for the Behavioral and Social Sciences 5001 Eisenhower Ave., Alexandria, VA 22333		12. REPORT DATE June 1982	
		13. NUMBER OF PAGES 72	
		15. SECURITY CLASS. (of this report) Unclassified	
16. DISTRIBUTION STATEMENT (of this Report)		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE	
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)			
18. SUPPLEMENTARY NOTES			
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)			
After Action Review MILES (Multiple Integrated Laser Engagement System) National Training Center Tactical Engagement Simulation Training Evaluation			
20. ABSTRACT (Continue on reverse side if necessary and identify by block number)			
The After Action Review Guidebook contains procedures for preparation and conduct of AARs at platoon, company, and battalion levels at the National Training Center (NTC). Procedures are presented in lesson-plan outline format and take into account: the amount and types of information likely to be available to each echelon's AAR leader; the capabilities, configuration and essential operational characteristics of the NTC; psychological and educational characteristics of learning; and current combined arms tactical doctrine. The central characteristics of the AAR are also discussed, in contrast to those of the traditional			

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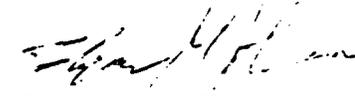
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**FOREWORD**

The Presidio of Monterey Field Unit has a long history of involvement with Army training systems. The Tactical-Team-Performance Team of this unit specializes in research and development of tactical engagement simulation systems.

The National Training Center (NTC) provides the most realistic training available to a modern peacetime Army. Training data collected at the NTC can help commanders objectively evaluate their unit's performance and can assist the Army to improve its overall training. To accomplish these goals, it is necessary to provide a means of performance evaluation and feedback that takes into account the capabilities, configuration and essential operational characteristics of the NTC, psychological and educational characteristics of learning, and current combined arms tactical doctrine. The After Action Review (AAR) is one way of providing such training evaluation and feedback.

The AAR method was originally developed in the early 1970s as part of the SCOPES and REALTRAIN systems. Since that time, AAR techniques have been evaluated in several research projects, undergone considerable refinement, and recently adapted for use with the Multiple Integrated Laser Engagement System (MILES). This AAR Guidebook is the latest extension of AAR methodology and contains procedures for preparation and conduct of AARs at platoon, company, and battalion levels. Each of these sets of AAR procedures is presented in lesson plan outline format and take into account the amount and types of information likely to be available to each specific echelon's AAR leader. The central characteristics of the AAR are also discussed and contrasted with those of the traditional critique. Training diagnosis methodology as well as AAR technique and style are also covered. In addition to the NTC's operations group, this guidance is also relevant to tactical training in CONUS and USAREUR units and will be of value to TRADOC activities concerned with preparation of training materials (USAIS, USAARMS, etc.).



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## EXECUTIVE SUMMARY

### Requirement:

To develop an After Action Review Guidebook for the National Training Center.

### Procedure:

The After Action Review Guidebook represents one major application of ARI's nearly 10 years of research and development, and practical experience with tactical engagement simulation systems. After Action Review (AAR) methods were originally developed in the early 1970s as a part of the SCOPES and REALTRAIN systems. Since that time, AAR methods have been evaluated in several research projects and have undergone considerable refinements. Recently these methods were adapted for use with the Multiple Integrated Laser Engagement System (MILES), and this document is the latest extension of the AAR methodology. In preparing the AAR Guidebook, it was necessary to take into account the capabilities, configuration and essential operational characteristics of the National Training Center, psychological and educational characteristics of learning, and current combined arms tactical doctrine.

### Product:

The AAR Guidebook contains procedures for preparation and conduct of AARs at platoon, company and battalion levels. The first chapter discusses the central characteristics of the AAR and contrasts these with those of the traditional critique. Chapter 1 also covers training diagnosis methodology and AAR technique and style.

The next three chapters provide procedures for preparation and conduct of AARs for platoons, companies and battalions, respectively. These chapters present procedures in lesson plan outline format and each takes into account the amount and types of information that is likely to be available to each specific echelon's AAR leader. For example, platoon AAR leaders will probably not have access to NTC data displays while battalion AAR leaders will have access to data displays and a wide variety of other exercise information. Each chapter is intended to be used independently of the others, so that the battalion AAR leader, for example, need only be directly concerned with Chapter 4, and of course the introduction (Chapter 1).

### Product Utilization:

This guidebook is intended for use primarily by the National Training Center's Operations Group. However, much of the guidance is clearly relevant to the tactical training in JCNUS and USAREUR units, and will be of value to TRADOC activities concerned with preparation of training materials (USAIS, USAARMS, etc.).

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AFTER ACTION REVIEW GUIDEBOOK I: NATIONAL TRAINING CENTER

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## CHAPTER 1

### TRAINING ANALYSIS AND FEEDBACK

- I. The After Action Review (AAR)
- II. Training Diagnosis
- III. AAR Technique and Style

#### I. THE AFTER ACTION REVIEW (AAR)

After a tactical training exercise, feedback should be provided to units in order to increase and reinforce learning. In the past, feedback has been given during a critique in which the senior evaluator presents his analysis of the unit's performance and indicates what the unit did well and what they did poorly. In a good critique, the evaluator also indicates training strategies for correcting the unit's major problems. Before the development of tactical engagement simulation training methods (e.g., MILES), the critique was the principal method for informing units about their levels of proficiency. For conventional (pre-tactical engagement simulation) training, the critique was an adequate solution to the feedback problem because the scarcity of objective performance data made extensive interpretation of tactical events necessary.

Tactical engagement simulation training methods began to be developed during the early 1970s. These methods, characterized by reasonably accurate weapon effects simulations, provided the opportunity to replace the critique with a more effective teaching technique. In order to distinguish it from the traditional lecture-format critique, the new feedback method was called the After Action Review (AAR). The following comparisons explain the nature of the AAR by contrasting it with the familiar critique.

#### Soldier Participation

In a critique, commanders and soldiers are basically an audience; in an AAR, they are participants. This difference dramatically increases teaching effectiveness for three reasons. First, as educational and psychological research has consistently shown, active participation in a learning activity (as opposed to passive observation) greatly increases the amount of information learned and retained. When the same information is presented in a lecture or emerges in a group discussion, the information is better retained after a group discussion. Second, in a discussion, points are often approached from several points-of-view, thus increasing the chance that participants will gain greater insight into the topic at hand. In contrast, only one point-of-view is presented

in a critique--that of the lecturer's--and the chances that a large proportion of the audience will benefit are substantially less. Finally, direct participation increases motivation by providing a sense of involvement in the learning process. Such involvement frequently reduces a soldier's resistance to acknowledging his own mistakes, thereby further increasing learning and retention of tactical skills.

#### Scope

In a critique, the leader is limited by the type and amount of information he and perhaps a few others have gathered. In contrast, because all key players participate in an AAR, each is a source of information. Thus, the AAR inherently provides a much richer "data base" from which teaching points can be drawn. This is especially critical at command levels because much important information is essentially private. For example, the commander's assessment of the situation and the bases for his tactical decisions are available only to him. In a critique, this kind of information is most often not taken into account. In the AAR, however, such information is an important part of the discussion and forms the context for discussing alternative courses of action.

#### Structure

The AAR is structured around sequential exercise events. This helps: (a) examination of chains of events, (b) determination of how and why specific actions were undertaken, (c) active discussion of alternatives, and (d) examination of how certain events determined or influenced subsequent outcomes. The exercise event-oriented AAR structure is based on the recognition that unit leaders and soldiers need to learn that: (a) no matter what the situation may be, alternative courses of action exist, and (b) leaders and soldiers should select from among these alternatives after evaluating what the probable consequences of each would be. This is distinctly different from a critique in which "failures" are often pointed out, but actions that influenced or determined failure are rarely explored in detail. In a critique the actions needed to avoid "failure" are frequently not clear to unit leaders or soldiers. Because the specific topics discussed within the context of a particular scenario are directly determined by a unit's tactical behavior, the AAR is a highly flexible teaching vehicle. A wide variety of tactical actions and training objectives can be explored and evaluated depending upon the unit's individual training needs. The AAR structure provides a sequential, easy to follow framework and helps soldiers to explore important training issues.

#### Accuracy of Interpretation

Points made during a critique will often be based solely on the analysis of the leader conducting it. Even with the data collection capabilities of the NTC, his analysis will often be based on limited information on the local tactical situation, guesses regarding the

unit's intention, and limited knowledge regarding information available to the element or leader at the time of the action or decision. In an AAR, these limitations are overcome through direct player participation. Important players are asked about what they knew at specific points in the exercise, their situation assessments, why certain tactical decisions were made, and so on. These kinds of questions and answers lead to more accurate interpretation of exercise events, better training diagnosis and more fruitful discussions of alternative courses of action. (A detailed example is given in Table 1.2.)

#### Avoiding Negativism

In contrast to the lecture format of a critique, the AAR leader guides the discussion by asking leading questions. Except for making periodic summaries, the AAR leader rarely makes a declarative statement. Key information is brought out by questioning as many of the relevant soldiers and leaders (on both sides) as needed to make a point. Once a critical action (or decision) is identified, further questions explore why the action was taken, its consequences, and what alternatives existed. This questioning technique involves participants in the examination of the problem and avoids difficulties of resentment and resistance usually generated by direct criticism. By asking questions rather than lecturing, the AAR leader sets the tone of the AAR as a group problem solving session among fellow professional soldiers. Even though the AAR leader knows the unit's mistakes, he guides the participants to identify errors themselves and to seek solutions. Because the information comes from within the group, hostility and defensiveness usually directed towards the critique leader are minimized. In the critique, the central theme is "What you did wrong." In the AAR, the key thrust is "How can we do it better?" The latter orientation is by far the most preferable. By involving appropriate commanders, staff, and troops in a professional discussion of "How can we do better?", the cohesiveness of the unit and the chain of command are simultaneously reinforced.

## II. TRAINING DIAGNOSIS

Accurate and meaningful training diagnosis is at the heart of the AAR. Such diagnosis is an art--there are no absolute rules to guide the analyst. Yet, there are some general principles that can help the training analyst structure his enquiry into the "whys" of tactical performance. The analyst is a detective and a large part of his activity is concerned with finding out why important events occurred. The first requirement then is to sort out what is important from what is not. Unfortunately, much of what is important only becomes apparent long after the causal events have occurred. For that reason, the analyst needs to become an expert at tracing chains of events back to their sources. One event will cause another which will in turn cause another and so on. Frequently, several such chains of events come together to influence the outcome at some critical point in the battle. Being able

to trace these kinds of chains of events lies at the center of the art of diagnosis.

In later chapters on preparation and conduct of AARs for specific echelons, the analyst's detective work is broken down into several sequential steps: the analyst first determines what happened, then how it happened, and finally why it happened. Because these steps are so critical to good training diagnosis, a discussion of each step is presented in the following paragraphs.

#### What Happened

The analyst's first job is to select an important event for analysis. Important events in MILES exercises are most often associated in one way or another with casualties; the more casualties a unit inflicts or sustains, the more important that event is likely to be. The importance of casualty-related events depends on the echelon in question. For a platoon, the loss of two APCs is likely to be very important. But, at the battalion level, such a loss is likely to be of lesser importance.

There are three major reasons why casualty events are likely to be good starting points for the analyst's detective work. First, they are often the end of a series of actions that were unusually well or unusually poorly done. Second, casualties inflicted or sustained often have a bearing on mission outcome because they alter the relative firepower available to the two forces. Finally, casualties are clearly understood common denominators of warfare. Every commander wishes to maximize casualties inflicted while minimizing those sustained. This orientation will provide a basis for discussion and understanding during the AAR.

Naturally, other types of events may be selected as important even though they may not result in casualties inflicted or sustained. A unit may, for example, be responsible for a major security breach which goes undetected or is not taken advantage of by the enemy. Another example would be a unit's failure to provide good indirect fire support for its subordinate elements, but, because of an outstanding performance by its smaller units, the unit may achieve an overwhelming victory. There are a great many events that do not result in casualties but are nonetheless important. On the whole, however, the analyst will find that casualty-related events generally provide the best ground for meaningful diagnosis and have the greatest impact on AAR participants.

Having selected an important event, the analyst's next job is to define the event's characteristics. The analyst should seek information on the identities of the element(s) involved and the event should be tagged. Most of this is relatively simple for casualty-related events. Target and firer element(s) identities will be shown as an "alert" message and their locations will be shown on the Tactical Display. For other types of events, displays available on the alpha-numeric terminal

may play a more central role. In any case, the first thing to do is to identify a key event and the second is to find out who was involved.

#### How It Happened

It is during this step that the analyst's true detective work begins. Having determined what happened, the analyst now tries to increase his understanding by gathering facts about actions preceding and following the event. He must develop a relatively complete understanding of both the event in question as well as closely related actions and events. For a casualty event, the analyst would try to find out what the casualties (i.e., target) were doing just prior to being engaged, what adjacent elements were doing, how the targets were acquired, etc. Much of this kind of information will not be directly available on information displays and will have to be obtained from the Field Observer Controllers (FOCs) and from the OPFOR.

The key to this step is the analyst's ability to ask the right questions. At the lower echelons, the right questions are most frequently related to what a given unit did, that is, to execution. But at higher echelons, important questions are more often related to what command elements knew about the situation and what decisions they made. For example, suppose that a lead company is moving forward when it is engaged by the OPFOR who pins down two of the company's platoons. Suppose also that the third platoon was not close enough to the OPFOR to deliver effective fire. At the lower echelon (platoon), the analyst will be primarily interested in questions related to platoon fire and maneuver: How did the engagement begin? What were the platoons' reactions to receipt of fire? Did platoon leaders report the engagement? Was the available cover used effectively? Did platoons return OPFOR fire as effectively as possible? Etc.

At the company level, the analyst would need to ask different types of questions: Did the commander realize that two of his platoons had become heavily engaged? Did he have accurate information on all platoon locations? Did he attempt to get information on OPFOR locations and strength? What decision did he make about moving the third platoon into a position where it could provide support to the two which were pinned down? Did he request indirect fire support? Etc.

Finally, at the battalion level, the analyst will need to be concerned with questions of a somewhat broader character. Although many of these issues seem very similar to those that concern the company analyst, they tend to be more oriented to tactical operations planning, anticipating likely events, and providing support for line companies. Here are a few examples of questions the battalion analyst might ask: Did the battalion commander/S-3 know that his lead company had become heavily engaged? Did the S-3 have accurate information on company locations? Did the engaged company have/receive fire support priority? What were the S-2's estimates of enemy strength, location and intentions? What

steps were taken to acquire additional intelligence on the OPFOR? What orders were given to the other companies and support elements about supporting the company in contact with the OPFOR? What were the reasons for the decision? Etc.

In summary, the how-it-happened step is geared toward gathering as many facts as possible about important tactical exercise events. Exactly what facts should be gathered depends on echelon, mission, scenario, disposition of forces, friendly and enemy situations, and so on. As noted earlier, many of the important facts will not be available on the display terminals; very close coordination with FOCs and OPFOR as well as other Core Instrumentation System (CIS) analysts will be necessary to get the needed information.

#### Why It Happened

This is the final and perhaps most difficult step of the diagnostic process. Here the analyst's job is to organize the facts he has gathered and make inferences about the causes of the events in question. He must bring his tactical expertise, analytic ability, and frequently a considerable amount of intuition to bear on the problem of finding the fundamental causes of events he has chosen to analyze.

Every analyst will have his own style for organizing information and making inferences. The somewhat formal method described here tends to yield a more structured and complete evaluation than do less formal methods. Yet, recognizing the considerable individuality of styles, it is probably good that an analyst develops the method which suits him best.

The analyst first needs to organize the facts related to the event of interest. As shown in Table 1.1, key words and phrases indicating relevant actions and events should be listed in their order of occurrence. It is also useful to indicate the approximate time of the event. Most often, some of these events will be prior to the one of interest while others will occur later. This is the basic "chain of events" mentioned earlier. Next, draw two lines separating "before" and "after" items from the "key event." Those in the "before" section are potential causal items while events in the "after" section are potential consequences. The analyst then examines each item in the "before" section and asks, "How much did this item determine the event in question?" Assign a "1" to those that were major causes, a "2" to those that were minor or only possible causes, and a "3" to those that do not seem causally related to the event. Carry out the same kind of procedure with the items in the "after section," asking "How closely related was the key event to the item?" Assign a 1, 2, or 3 to the items just as in the preceding section. If we look at the result we find an outlined chain of events or items which are causally linked. In addition, we have some notion of the relative importance of various causes and consequences of the key event. This method is intended to help the analyst organize and

Table 1.1  
Sample Chain of Events and Their Relative Importance

EVENT		RANK	SOURCE	NOTES
B E F O R E	1330 OPFOR detects A Company lead elements	2	OPFOR Plt Leader	
	1345 A Company receives fire from OPFOR	2	Tactical Display	
	1345 1st Platoon (overwatch) returns fire	2	Tactical Display	
	1345 Co Commander orders TOW section to advance	3	Voice Rec	Engagement reported to Battalion?
	1350 1st Platoon reports contact	2	Voice Rec	Suppressive fire?
	1355 Co Commander orders 2d & 3d Plt to assault	1	Voice Rec	Coordination of IF and maneuver?
	1405 2d and 3d Platoon begin assault	1	Tactical Display	Report to Battalion?
E K E Y T	1410- BLUEFOR: Tanks 31, 67, 42 killed		Tactical Display/ Alert	Good performance by 3d Platoon.
	1420 OPFOR: Tanks 91, 92 killed		Force Value Losses	Most casualties from 2d Platoon.
A F T E R	1425 Company requests indirect fire	2	IF Controller	Timing of IF and maneuver? Earlier would have been better.
	1427 Company Commander reports to Battalion	1	Voice Rec	Timing of report--late.
	1430 Indirect fire on OPFOR position	2	IF cont. Tactical Display	Were fires shifted in time?
	1430 2d Platoon reports tank not operational (mechanical)	3	Platoon FOC	
	1435 OPFOR begins withdrawal	2	OPFOR Plt Leader	
	1440 2d Platoon reports OPFOR withdrawal	2	Voice Co Command Net	Good timing on report.
	1455 3d Platoon arrives at position	2	Tactical Display	
1455 Company consolidates position with 70% available firepower intact	1	Overall Force Value --Tactical Display		

structure his observations and is in no way a substitute for either tactical expertise or analytic ability.

Those items in the "before" section that are labeled "1" are probably the major causes of the key event and are likely to be suitable for coverage in the AAR. Items in the "after" section labeled "1" are probably the major items emerging from the key event and are useful in two ways. First, most key events should cause some responses by the unit. The high priority "after" items should give the analyst some ideas about whether the unit has recognized the significance of the key event and about how appropriately it has reacted. Secondly, one key event often causes another later in the exercise segment. The "after" items in that case are most useful in identifying later cause and effect relationships.

The analysis is prepared for presentation in the AAR. Some preparation can be done during the exercise segment, and other steps can only be carried out after the exercise segment has been completed. During the exercise, the analyst will need to tag the key event and possibly some of the "before" and "after" items. The longer the interval between the first major "before" item and the final major "after" item, the greater the number of events that will probably need to be tagged. The analyst should also note the data source(s) for each major item. This can be done on the same sheet of paper as the original analysis outline and includes, next to each item, an appropriate abbreviation for the display, voice tape, video tape, FOC, etc. Then, if it is decided to use that chain of events in the AAR, it is a relatively simple matter to arrange the sequence of displays as well as voice and video recordings for presentation. It is often a good idea to make notes on questions the AAR leader intends to ask during the AAR.

In addition, the analyst should try to identify, in so far as possible, some alternative courses of action which might have improved unit performance. These can stimulate discussion during the AAR and shift the focus from discussions of "mistakes" to discussions of how to improve performance. This procedure can also help teach AAR participants to search among alternative courses of action.

Following termination of the exercise segment, final selection is made of materials for inclusion in the AAR. At this point, the analyst will often have quite a few key events from which to choose. In selecting the final materials, the highest priority should be given to those items which bear directly on the training objectives which have been previously established for the exercise segment. (These training objectives should be ones that can be at least partially corrected during training at the NTC. Some training objectives, such as teaching land navigation, are better corrected at home-station.) The remaining time should be devoted to exploring training objectives "of opportunity." Training objectives to be covered should usually be limited to those: (a) in which the unit performed extremely well or extremely poorly, (b) for which the analyst

has a relatively complete, clear understanding of causes and consequences, and (c) for which available materials (displays, tape recordings, etc.) allow the AAR leader to lead a clear, focused discussion. Overall, it is best to choose only a few objectives for the AAR: it is much better to discuss a few issues in depth than to cover many superficially. To the extent that objectives are covered in depth, both learning and retention will be enhanced.

### III. AAR TECHNIQUE AND STYLE

Before discussing the mechanics of the AAR, a few items deserve some additional emphasis.

The point was made earlier that one avoids lecturing in an AAR and instead asks leading questions. The questioning technique avoids the problems of resentment and resistance, fosters positive motivation, and allows in-depth exploration of training-objective-related issues. The AAR leader's questions are most often those to which he already knows the answer. Asking questions is simply a device for drawing those answers from the group. That way, information and comments come directly from participants rather than being criticism from the AAR leader.

In a sequence of questions on a given point, the first few questions are intended to help the group identify an error or problem. The next questions serve to elaborate and clarify the circumstances and causes of the error. Final questions help the group explore alternative courses of action. Clearly, this technique requires considerable skill (not to mention restraint) on the part of the AAR leader.

The following example illustrates the application of the AAR questioning technique. In this example the AAR leader is leading a platoon AAR and has covered key events up to initial contact. Suppose the AAR leader was aware that one of the platoon's squads had tried to engage OPFOR vehicles with VIPERS beyond their maximum effective range. This is how the AAR leader might guide the discussion of the teaching point.

Table 1.2  
Sample of AAR Questioning Technique

<u>Comments</u>	<u>AAR Dialogue</u>
AAR leader starts to identify "what happened."	<p><u>AAR LEADER:</u> WHAT WAS THE FIRST THING YOU SAW?</p> <p><u>1ST SQUAD LEADER:</u> WELL SIR, WE SAW ONE OF THE BMPs COME OUT OF THE WOODLINE. I COULD SEE MY DRAGON GUNNER WAS ABOUT TO FIRE HIM UP WHEN, ALL OF A SUDDEN, A SECOND BMP CAME OUT RIGHT ON THE FIRST ONE'S TAIL.</p>

table continued on next page

Table 1.2 (continued)

<u>Comments</u>	<u>AAR Dialogue</u>
AAR leader asks for more detail.	<u>AAR LEADER:</u> THEN WHAT HAPPENED?
Participant relates his plan.	<u>1ST SQUAD LEADER:</u> WELL, I FIGURED THAT IF WE GOT THE TRAIL BMP FIRST WE'D TRAP THE LEAD BMP BECAUSE HE WOULDN'T HAVE ROOM TO BACK UP. THEY WERE OUT OF RANGE FOR EVERYTHING EXCEPT THE DRAGON AND THE 60.
AAR leader begins to isolate error.	<u>AAR LEADER:</u> GOOD THINKING, BUT WHAT HAPPENED?
Participant has identified a probable error.	<u>1ST SQUAD LEADER:</u> WELL SIR, MY TWO VIPER GUNNERS GOT NERVOUS AND FIGURED THEY COULDN'T PASS UP SUCH A GOOD TARGET.
AAR leader enlarges scope of discussion by involving key participants in the discussion.	<u>AAR LEADER:</u> OK, HOLD ON A MINUTE--VIPER GUNNERS, WHERE ARE YOU?--WHAT HAPPENED?
AAR leader attempts to have participant diagnose the error. This is "Why it happened?"	<u>1ST VIPER GUNNER:</u> WE FIRED BUT DIDN'T GET ANY HITS.
Participant diagnoses error.	<u>AAR LEADER:</u> DO YOU KNOW WHY?
AAR leader tries to get participant to identify another error.	<u>1ST VIPER GUNNER:</u> WELL SIR--THEY WERE OUT OF RANGE. AFTER EVERYTHING WAS ALL OVER, WE LOOKED AT A MAP AND THEY WERE AT LEAST 400 METERS AWAY. I GUESS WE JUST GOT EXCITED SEEING THOSE TRACKS.
AAR leader starts to explore alternatives.	<u>AAR LEADER:</u> WHAT ELSE DID YOU LEARN?
Participant gives one alternative.	<u>2D VIPER GUNNER:</u> WELL SIR, AFTER THE SQUAD LEADER GAVE US A COUNSELLING SESSION WE FOUND OUT WE WEREN'T SUPPOSED TO FIRE 'TILL HE TOLD US TO. HE SURE MADE THAT CLEAR.
	<u>AAR LEADER:</u> SQUAD LEADER, HOW COULD YOU HAVE CONTROLLED THEIR FIRES?
	<u>1ST SQUAD LEADER:</u> HOW 'BOUT HAND OR ARM SIGNALS SIR?

table continued on next page

Table 1.2 (continued)

<u>Comments</u>	<u>AAR Dialogue</u>
AAR leader presses group for another alternative. Fosters group problem solving.	<p><u>AAR LEADER</u>: YEAH, THAT'S ONE WAY, CAN YOU THINK OF ANOTHER?</p> <p><u>1ST SQUAD LEADER</u>: AH--NOT RIGHT NOW SIR.</p>
AAR leader involves more participants.	<p><u>AAR LEADER</u>: ANYBODY ELSE GOT AN IDEAS?</p>
Participant notes another alternative. "How can we do it better?"	<p><u>SOLDIER FROM 2D SQUAD</u>: SIR--HOW ABOUT FIGURING OUT WHERE THE MAX RANGE IS AHEAD OF TIME AND SAYING ANYTHING CLOSER THAN THAT SHOULD BE FIRED UP.</p>
AAR leader summarizes discussion and restates the teaching point.	<p><u>AAR LEADER</u>: RIGHT--ALL YOU LEADERS REMEMBER THAT. YOU'VE GOT MORE EXPERIENCE THAN YOUR TROOPS, SO GIVE THEM A HAND. FIRE DISCIPLINE IS EXTREMELY IMPORTANT AND YOU DON'T WANT TO GIVE AWAY YOUR POSITIONS BECAUSE OF A SIGNATURE IF YOU CAN'T GET A KILL.</p>

The questioning technique in the example is equally applicable at squad, platoon, company and battalion levels. The AAR leader first has participants define the situation, then identify its causes, and finally explore how performance could have been improved. The main differences between AARs at the NTC and those given at home-station lies in the much greater amount of performance information available to training analysts and AAR leaders at the NTC. Video and voice recordings, various displays, and information gathered from other operations group personnel can be used to supplement and clarify the nature of tactical situations and key events. They should not be used to create a lecture format presentation.

The mechanics of preparing and conducting AARs for platoons, companies and battalions are presented in Chapters 2, 3 and 4, respectively. These chapters are in lesson plan outline format and are specific to each echelon. Each chapter is intended to be used independently of the others so that the battalion AAR leader, for example, need only be directly concerned with Chapter 4, and of course the introduction (Chapter 1). Chapters 2 and 3 can be photo-reduced, put into hard covers, and provided to the appropriate field controller personnel as a pocket guide and reference for preparation and conduct of AARs in the field.

CHAPTER 2  
PLATOON AFTER ACTION REVIEW (AAR) GUIDE

- I. INTRODUCTION TO THE AAR
- II. DETERMINING THE NECESSITY OF A PLATOON AAR
- III. THE TWO STAGES IN A PLATOON AAR
- IV. STAGE 1: PREPARING THE AAR
- V. STAGE 2: CONDUCTING THE AAR
- VI. CHARACTERISTICS OF A GOOD AAR

PLATOON AFTER ACTION REVIEWS

- I. INTRODUCTION TO THE AAR
  - A. In Tactical Engagement Simulation exercises with the Multiple Integrated Laser Engagement System (MILES-TES), the AAR replaces the "critique" commonly used after nonengagement simulation training. The AAR is preferred since it provides a sound method for diagnosing unit training needs and is a more effective teaching technique.
  - B. This guide organizes your AAR effort into steps as shown in Figure 2.1.

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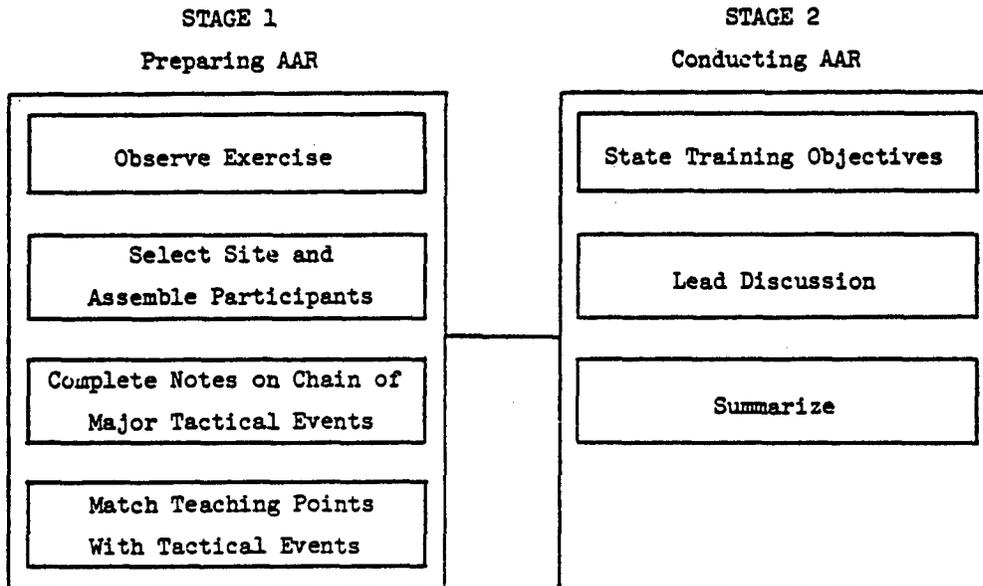


Figure 2.1

Stages and Steps in the Platoon AAR

II. DETERMINING THE NECESSITY OF A PLATOON AAR

- A. Each platoon will not always be given an AAR after each exercise segment. The decision to conduct a platoon AAR results from a discussion between the platoon Field Observer Controller (FOC) and the Company Operations Analyst (COA).

B. The platoon should receive an AAR when both the following conditions are met.

1. Time permits (you will need about an hour to prepare and conduct an AAR).
2. The platoon is involved in significant actions such as those below:
  - a. participated in a major engagement,
  - b. substantially deviated from intended route of advance (e.g., became lost),
  - c. made exceptionally poor use of terrain,
  - d. etc.

### III. THE TWO STAGES IN A PLATOON AAR

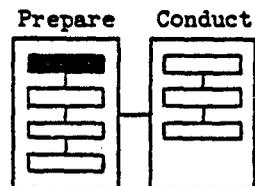
- Stage 1: Prepare AAR
- Stage 2: Conduct AAR

IV. STAGE 1: PREPARING THE AAR

A. Preparation for an AAR requires four steps:

- Step 1: Observe exercise and note its major tactical events.
- Step 2: Select location for AAR and assemble participants.
- Step 3: Complete your notes on the chain of major tactical events.
- Step 4: Match teaching points to be made with tactical events.

Preparing - Step 1: Observe Exercise



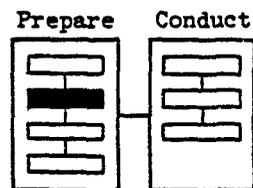
- B. The AAR leader observes as much of the platoon's activities as possible without compromising locations, firing positions, or movement routes of the unit or OPFOR. Observing is an active process. The emphasis is on both: a) those actions which will make the difference between the platoon's success and failure and b) the effect of platoon actions on other

units. In order to observe these, it is necessary to anticipate where major exercise events are likely to occur and to get into a good viewing position early. Some general suggestions on observing follow.

1. Draw upon your tactical expertise.
2. The AAR leader need not remain close to his assigned platoon. More can often be seen from high ground near the platoon's location or along its route of advance. Since the OPORD may identify important activities, checkpoints, etc., the AAR leader should know the OPORD in order to select his movement and locations.
3. The OPFOR's position often determines the location of significant engagements. Therefore, the observer should know OPFOR locations that are most likely to be encountered by his platoon. Coordination with other FOCs or the COA is essential.
4. Lead elements are the most likely to encounter the OPFOR or to become misoriented. These are usually the most critical elements to keep under observation.

5. When a platoon stops for an extended period of time, every effort should be made to find out why they stopped. Their halt may increase the platoon's vulnerability and can result in a significant reduction of the company's firepower. Therefore, the halt may be important for the platoon or company AAR. Keep your company FOC informed.
6. Monitor the platoon net.
7. Monitor the company net.
8. Make notes on major tactical events to include what, when, who, and how.

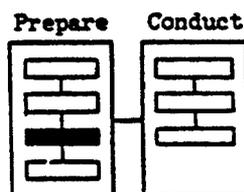
Preparing - Step 2: Select Location and Assemble Participants



- C. After termination of the exercise segment, a site is selected for the AAR. if possible, the AAR should be held where the majority of action occurred, where the most critical event took place (normally where the OPFOR was positioned), or where this terrain can be observed. As many participants as possible are included in the AAR (e.g., platoon members,

OPFOR, FOCs, indirect fire controller, etc.). At the platoon level, some of these elements may have to assemble for other activities and therefore be unavailable for the AAR.

Preparing - Step 3: Complete Notes on Chain of Major Tactical Events



D. The AAR leader must have a complete understanding of what happened in the exercise, from the platoon entering its initial positions through termination of the exercise. Therefore, the third step in AAR preparation is to obtain a detailed description of the exercise's major tactical events in the order in which they occurred (see Table 1.1).

1. The following factors should be considered:
  - a. Important aspects of mission planning and preparation (e.g., whether the OPORD was disseminated and the appropriate amount of ammo issued),
  - b. Initial disposition of forces,
  - c. FRAGOs requiring major changes in plan,

- d. Deviation from planned routes,
- e. Initial detection and reaction to it,
- f. Engagements and their results,
- g. Coordination and communications within the platoon,
- h. Coordination and communications between the platoon and other units.

2. Input from other sources is usually essential since the AAR leader may not be able to personally observe all these factors, particularly with armor platoons. With instrumented players (e.g., tanks, APCs, and TOWs), one source of information is the MILES control console which indicates the type of weapon that effected the kill. Troops and vehicles should not have their MILES detectors reset until after the AAR. This permits the easy identification of "killed" players during the AAR. In addition, information may be obtained from the following.

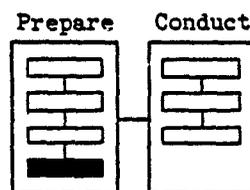
- a. Other FOCs - The AAR leader can get information from adjacent unit FOCs and from his company FOC. Adjacent unit FOCs can supply information on specific inter-

actions between platoons. The company FOC can supply information on C<sup>2</sup> issues (orders, FRAGOs, SITREPS, etc.).

- b. OPFOR Controller, Leader, or Players - The OPFOR are often able to observe the platoon and they can be good sources of information for detection and engagement related events.
  
- c. Individual Platoon Members - If the AAR leader knows that something occurred which he could not observe, he can ask those involved what happened. However, the AAR leader should take into account the bias of participants. Their input should be carefully evaluated as it tends to underestimate the unit's errors.
  
- d. COA - The COA in the Core Instrumentation Subsystem (CIS) has access to much of the information you will need for the AAR. However, he will be occupied preparing the company and battalion AARs. Therefore, if it is necessary to ask the COA for information, be brief, specific, and limit your request to essential information only. Do not request "nice to have" information. The COA has access to the following BLUEFOR and OPFOR information that might be useful in a platoon level AAR:

1. Locations and movement routes,
2. Time-tagged casualty data,
3. Direct and indirect fire events,
4. Recorded communications.

Preparing - Step 4: Match Teaching Points to the Major Tactical Events



E. A Training Objective is an ARTEP task, condition, and standard. Because these are often too broad to assist in focusing the AAR discussion adequately, we refer to Teaching Points. A teaching point is a single, relatively unified topic. A key event is a concrete example used to illustrate a teaching point. For example, suppose we are considering platoon level training. A training objective is "Conduct Fire and Maneuver; support-by-fire element requests and adjusts suppressive and neutralization fires on the OPFOR position and delivers suppressive direct fire. Support-by-fire element squads/carrier teams engage the position IAW Tasks 3-II-7-3, Mechanized Infantry Carrier Team (M113A1)--Provide Overwatch, and 3-III-2-7, Mechanized Infantry Squad (Mounted, or Dismounted with

Carrier)--Conduct Fire and Maneuver. The OPFOR elements on the position are destroyed or suppressed." (ARTEP 71-2; 3-IV-7) This training objective is rather too broad and complex to be of much help in focusing an AAR discussion. However, if one simply considers a teaching point as: "Effective use of direct suppressive fire," a clear topic is evident.

- F. A critical tactical event is often related to a major loss or gain that impairs or enhances a unit's ability to perform. In MILES exercises, critical events are usually associated, one way or another, with casualties inflicted or sustained. After the AAR leader has filled in any gaps in his knowledge of the exercise, he matches teaching points to be made with this sequence of critical tactical events. Tactical events can provide teaching points "of opportunity" and these may be included if important. However, discussions unrelated to important teaching points should be avoided.
- G. At this point, the AAR leader should have a list of key words as reminders of teaching points and their relevant tactical events. This includes the following for each event.

1. Summary of a Critical Event:

- What Happened - description of the critical event,
- How It Happened - key facts surrounding the critical event,
- Why It Happened - inferences about probable causes,
- Alternative Courses of Action.

2. In the following examples of critical event summaries, some of this information might only emerge during the AAR.

Table 2.1  
A Platoon Engagement Event

PLATOON CRITICAL ENGAGEMENT EVENT	EXAMPLES
What Happened	Sagger 29 killed APCs 41 and 43
How It Happened	Sagger 29 acquired two APCs in partial defilade, waited until APCs began movement across open area, and opened fire
Why It Happened	<p>OPFOR sagger detected reflection from APC position</p> <p>APCs had route with cover but chose to cross open area</p> <p>APCs moved out at low rate of speed</p> <p>No platoon element was in overwatch</p> <p>When lead APC was hit, second APC did not return fire nor seek available cover</p> <p>Second APC took ineffective evasive action</p>
Alternative Courses of Action	<p>APC crews could have better camouflaged reflective surfaces while in assembly area</p> <p>A route of advance with terrain cover could have been selected</p> <p>APCs could have moved out at faster rate of speed</p> <p>OPFOR sagger firing signature could have been detected and fire brought to bear immediately upon receipt of fire</p> <p>Indirect fire could have been called</p> <p>Cover could have been sought immediately upon receipt of fire</p> <p>Overwatch element could have been designated</p>

Table 2.2

A Platoon Nonengagement Event

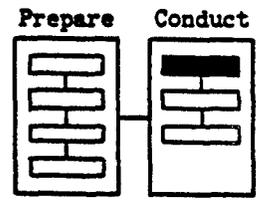
PLATOON CRITICAL NONENGAGEMENT EVENT	EXAMPLES
What Happened	1st Plt caused a major security breach
How It Happened	Tank 41 (PSG) was attempting to coordinate locations with another light section tank (42). During the radio communications exchanged, references were made to a clearly dominant terrain feature and to the relative position of the battalion CP. Transmission were made in the clear.
Why It Happened	Light section leader (tank 41) failed to coordinate control measures. Tank 42 moved out toward a position that was out of visual contact and did not inform Tank 41. Both tanks then failed to observe radio security procedures.
Alternative Courses of Action	<p>PSG could have coordinated checkpoints, routes to positions, etc.</p> <p>PSG could have insured that Tank 41 did not move out prematurely. Tank 41 could have coordinated with PSG prior to movement.</p> <p>Both tanks could have observed communications security procedures.</p>

V. STAGE 2: CONDUCTING THE AAR

A. This activity consists of three steps:

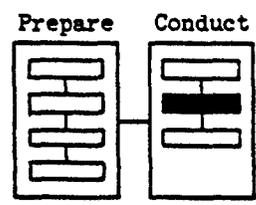
- Step 1: State Training Objectives,
- Step 2: Lead Discussion,
- Step 3: Summarize Key Points.

Conducting - Step 1: State Training Objectives



- B. Even though platoon operations occur within the context of training objectives assigned to its battalion, a platoon can usually be assigned its own training objectives. In general, a platoon can be given those training objectives that are not at odds with their OPORD.
  
- C. The AAR leader makes a brief restatement of the exercise segment's teaching points or training objectives. These are described as specifically as possible; for example, "In this AAR we are going to concentrate on the coordination between fire teams and the use of suppressive fire." The AAR leader should limit these topics to two or three key ones to keep the AAR focused and prevent it from becoming excessively long.

Conducting - Step 2: Lead Discussion



- D. The battalion task force exercise segment may run for several hours or more. Therefore, a platoon's involvement could consist of either a series of related actions or of a number of distinct, unrelated episodes of activity. The AAR scenario

below is applied to the entire chain of events if the platoon's actions were related. When unrelated episodes of activity occurred, the AAR scenario can be repeated for each major episode.

E. The AAR leader leads a discussion of the major tactical events, in their sequence of occurrence, as in the example in Table 1.2. If the important terrain is not visible, a diagram helps players visualize an exercise's development. Start by sketching the assembly area and objective and, as the AAR proceeds, draw routes of advance, locations of engagements, etc.

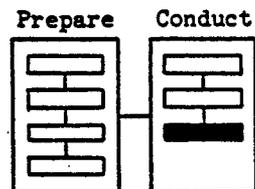
1. The general scenario for a platoon AAR is shown in Table 2.3.

Table 2.3  
General Scenario for a Platoon AAR

<u>Event</u>	<u>Responsibility</u>
1. State Training Objectives or Teaching Points	AAR Leader
2. OPFOR Plan	AAR Leader or OPFOR Leader
3. OPORD and FRAGO(s)	Plt Leader
4. Events Before Detection/Contact	Plt Leader, Tm/Sec Leaders
5. First Detection/Contact	Detector/Firer and Target
6. Report of Detection/Contact	Plt Leader, Tm/Sec Leader, Detector
7. Reaction to Detection/Contact	All Players
8. Events During Engagement	All Players
9. Final Result	All Players
10. Summary	AAR Leader

2. Each major event is used as a vehicle to make teaching points about the platoon's performance. The AAR leader does the following in an effective AAR:
- a. Avoids giving a critique or a lecture,
  - b. Guides the discussion by asking leading questions,
  - c. Has players describe what happened in their own terms,
  - d. Has players discuss not only what happened but how it happened, why it happened, and how it could have been done better,
  - e. Focuses the discussion so that important tactical lessons are made explicit,
  - f. Relates tactical events to subsequent results,
  - g. Avoids detailed examination of events not directly related to major training objectives,
  - h. Cuts off players' excuses for inappropriate tactical actions,

Conducting - Step 3: Summarize AAR



F. The AAR leader briefly summarizes teaching points and training objectives. At the platoon level, teaching points will usually be concerned with the following areas:

1. Communication - Insufficient information passes up and down the chain of command,
2. Land Navigation - Inability to read and/or follow a map,
3. Movement Techniques - Inappropriate exposure of individuals or elements,
4. Suppression - Failure to suppress enemy prior to maneuver,
5. Location of Weapon Systems - Selection of positions where fire on probable enemy locations cannot be effectively delivered,
6. Tactical Decisions - Premature decisions to engage, selection of inappropriate routes of advance, etc.,
7. Detection of Enemy - Failure to detect enemy elements or activities.

- G. After the summary, the AAR leader should have a private conversation with the platoon leader regarding his strengths and weaknesses and what he needs to do to further improve his performance.
  
- H. If possible, an opportunity should be provided for the platoon leader to discuss the points raised in the AAR, as well as his own observations, with the members of his section.

VI. CHARACTERISTICS OF A GOOD AAR

- A. Training objectives are reviewed.
  
- B. AAR leader directs the platoon's discussion to the important events, reasons why these occurred, and how platoon could have done better.
  
- C. AAR leader traces chain of events so that the results of mistakes are understood by the troops. (One mistake is often a partial cause of another.)
  
- D. Leader shows relationships between actions of the platoon and the success/failure of other unit elements.

E. Tactical events are clearly related to teaching points.

F. Attention of the troops is held and they are involved in the discussion.

G. The summary and new training objectives are clear and concise.

## CHAPTER 3

### COMPANY AFTER ACTION REVIEW (AAR) GUIDE

- I. INTRODUCTION TO THE AAR
- II. DETERMINING THE NECESSITY OF A COMPANY AAR
- III. THE THREE STAGES IN A COMPANY AAR
- IV. STAGE 1: THE COA OBSERVES THE EXERCISE
- V. STAGE 2: THE COA PREPARES THE AAR
- VI. STAGE 3: THE FOC CONDUCTS THE AAR
- VII. CHARACTERISTICS OF A GOOD AAR

#### COMPANY AFTER ACTION REVIEWS

##### I. INTRODUCTION TO THE AAR

- A. In Tactical Engagement Simulation exercises with the Multiple Integrated Laser Engagement System (MILES-TES), the AAR replaces the "critique" commonly used after nonengagement simulation training. The AAR is preferred because it provides a sound method for diagnosing unit training needs and is a more effective teaching technique.

B. At the company level, responsibility for the AAR is divided between two types of personnel. The Company Operations Analyst (COA) has the major responsibility for preparing the AAR, while the company Field Observer/Controller (FOC) is responsible for its delivery. This guide organizes their activities into the steps shown in Figure 3.1.

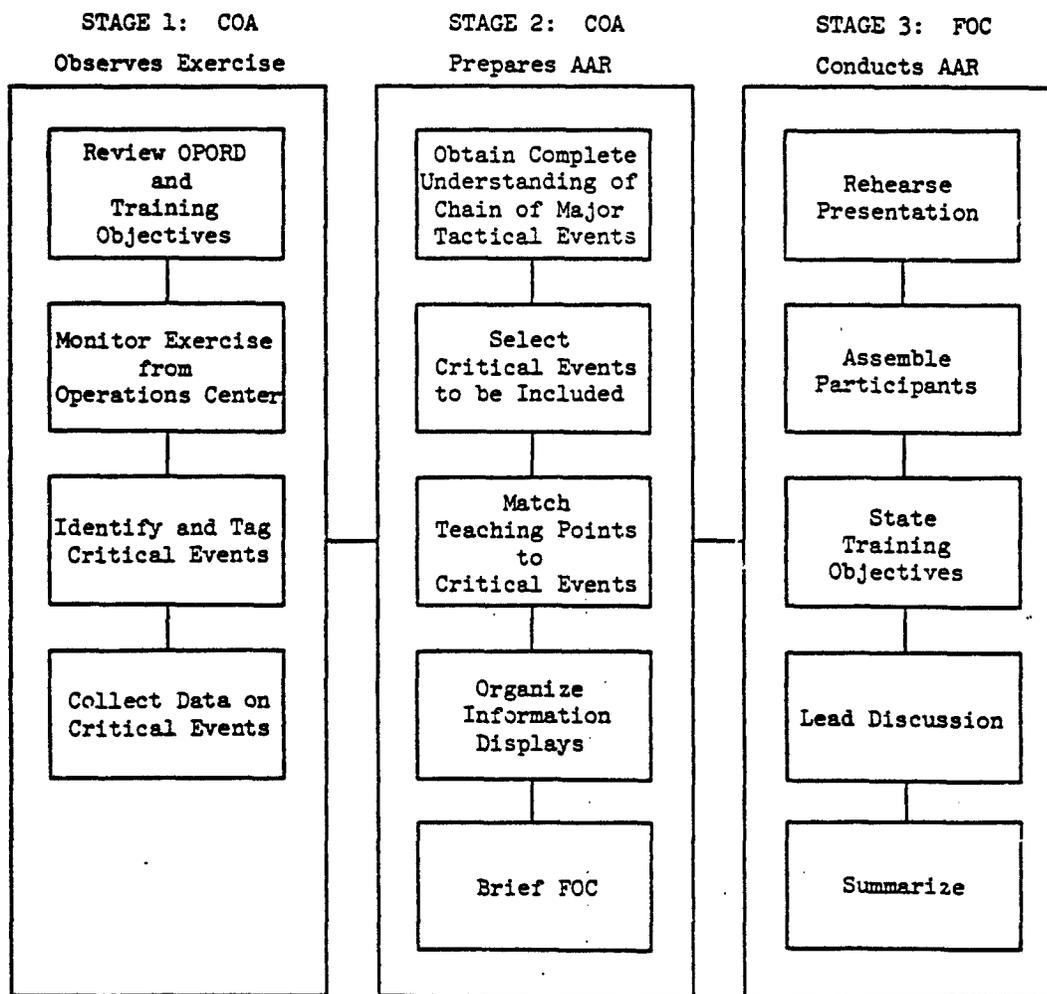


Figure 3.1  
Stages and Steps in the Company AAR

## II. DETERMINING THE NECESSITY OF A COMPANY AAR

The company should receive an AAR when both the following conditions are met.

- A. Time permits: about 1½ hours are needed after the exercise is completed to prepare and conduct an AAR.
  
- B. The company is involved in significant actions such as:
  - 1. Participated in a major engagement,
  - 2. Experienced major command and control problems,
  - 3. Played an important role in determining the battalion's success or failure.
  
- C. The Training Analysis and Feedback Officer (TAFO) has the responsibility for deciding if a company level AAR will be conducted. In practice, that decision will result from discussions between the TAFO, other Core Instrumentation Subsystem (CIS) analysts, and FOCs.

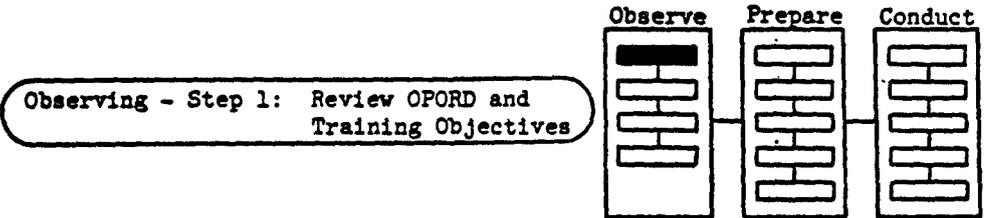
III. THE THREE STAGES IN A COMPANY AAR

- Stage 1: The COA Observes Exercise Segment.
- Stage 2: The COA Prepares AAR.
- Stage 3: The FOC Conducts AAR.

IV. STAGE 1: THE COA OBSERVES EXERCISE SEGMENT

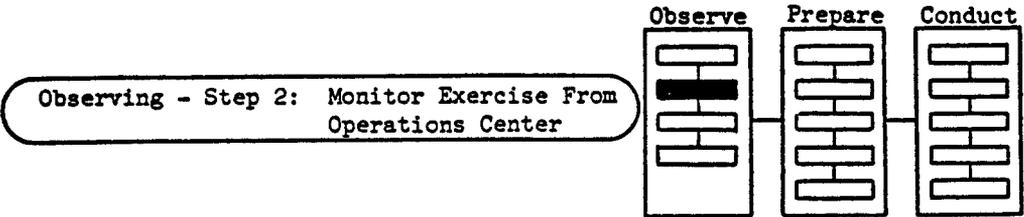
A. Observing the exercise requires the COA to complete four steps:

- Step 1: Review OPORD and Training Objectives Before Exercise Begins,
- Step 2: Monitor Exercise,
- Step 3: Identify and Tag Probable Critical Events,
- Step 4: Collect Information on Critical Events.



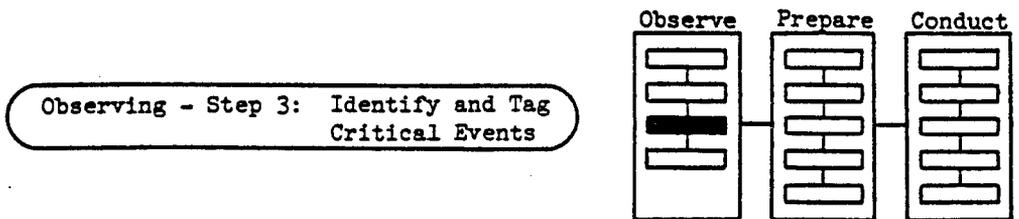
B. Prior to the exercise, the COA reviews the company's OPORD and training objectives.

1. The company FOC listens to the company OPORD and then briefs the COA.
  
2. The Training Analysis and Feedback Officer (TAFO) can supply information on the battalion's training objectives, and the company's training objectives will be consistent with these. At the company level, some important training issues are:
  - a. Communication - Improving the information flow up and down the chain of command,
  
  - b. Coordination - Improving coordination between units (e.g., between firing and maneuvering elements),
  
  - c. Fire Support - Improving the use of fire support assets,
  
  - d. Tactical Decisions - Improving the quality and timing of tactical decisions (e.g., decisions to engage, selection of routes of advance, etc.).



C. Observing is an active process and the emphasis is on noting those actions that make the difference between the company's success or failure. The COA needs to:

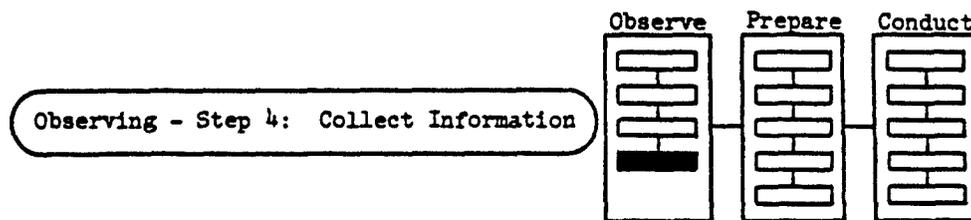
1. Draw upon his tactical expertise,
2. Be sensitive to cues - anticipate events about to occur (e.g., as the BLUEFOR approaches the OPFOR),
3. Watch how the unit maneuvers in relation to adjacent units,
4. Keep in close contact with his primary sources of information, especially the company FCC.



D. All potentially critical events should be noted and tagged. A critical event is often related to a major gain or loss that greatly enhances or impairs a company's ability to perform.

Several examples are listed below:

1. Major loss of weapon systems,
2. Major breach of security,
3. Major command and control failures,
4. Acquisition of important intelligence,
5. Successful deceptive maneuver,
6. Occupation or control of major terrain features,
7. Neutralization and/or destruction of major OPFOR elements or weapons.



E. The COA ultimately needs to know the what, how, and why of each critical event (see Table 1.1).

1. What happened - description of the critical event.

2. How it happened - key facts surrounding the critical event.
3. Why it happened - inferences about probable causes.

F. The following sources of information can contribute to his understanding:

1. CIS tactical graphic displays - relative positions of units, axis of advance, firing events, etc.,
2. Alpha-Numeric displays - direct and indirect fire statistics, movement rates, unit force value (firepower), etc.,
3. Company and other FOCs - interactions between units and C<sup>2</sup> issues; information about unit actions not available on displays or voice and video recordings,
4. OPFOR controller - detection and engagement related events,

5. Tactical radio net monitors - communication content,
6. Other Core Instrumentation Subsystem (CIS) analysts - adjacent unit activities,
7. Field video teams - selected unit actions.

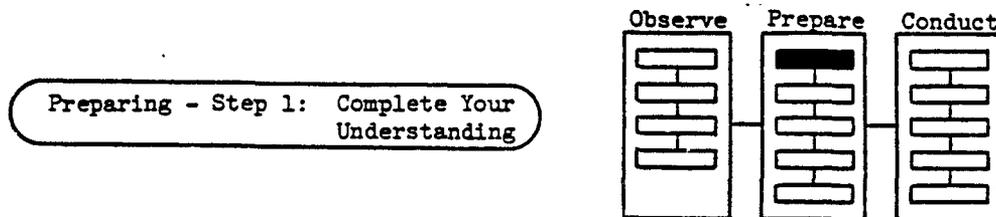
Table 3.1  
A Company Critical Engagement Event

COMPANY CRITICAL ENGAGEMENT EVENT	EXAMPLES
What Happened	6 friendly APCs were killed by friendly Indirect Fire (IF)
How It Happened	<p>1430 hrs Co commander calls FIST, requests IF on key terrain</p> <p>1432 IF splash area entered by 1st and 2d Plt</p> <p>1433 IF splash time</p> <p>Plt FOCs noted little vehicle dispersion at splash location.</p>
Why It Happened	<p>Co commander did not coordinate with Plt leaders</p> <p>Plt leaders did not keep Co commander accurately informed of their locations</p> <p>Plt leaders did not keep vehicles dispersed</p>
Alternative Courses of Action	<p>Co commander could have waited on IF request until determining location of subordinate elements</p> <p>All units could have improved coordination</p> <p>Plt leaders could have minimized loss by insuring adequate dispersion of vehicles</p>

V. STAGE 2: THE COA PREPARES AAR

A. Preparing the AAR requires the COA to complete five steps:

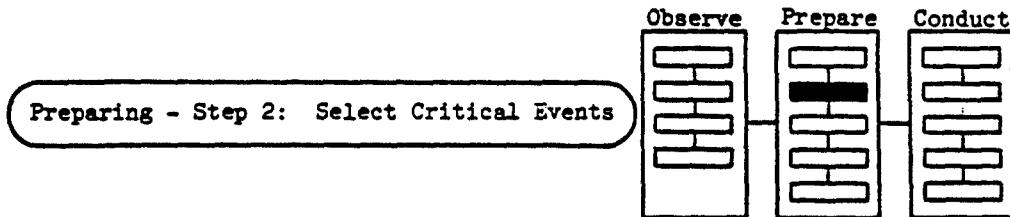
- Step 1: Complete your understanding of the chain of major tactical events,
- Step 2: Select the critical events to be discussed,
- Step 3: Match teaching points with critical events,
- Step 4: Organize the information displays and other recorded materials for presentation,
- Step 5: Brief company FOC.



B. After the exercise, the COA reviews his knowledge about the critical events and determines whether there are any major gaps.

If so, he needs to fill in these gaps as per Stage 1, Step 4 above. The following aspects of the exercise should be considered:

1. Important aspects of mission planning and preparation,
2. Disposition of forces,
3. Deviations from planned routes and/or actions,
4. Major engagements and their results,
5. Coordination and communication.

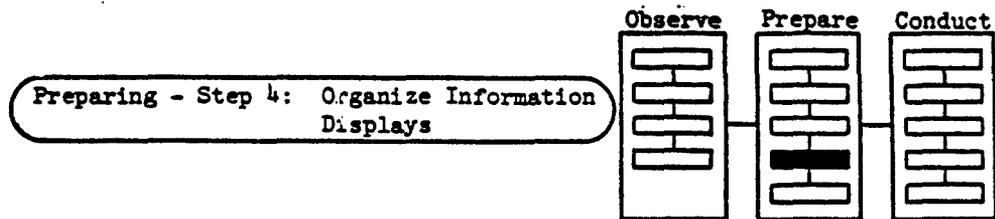


C. After the COA has a sound understanding of what happened during the exercise, he reviews the critical events and ranks them in terms of their relevance to the exercise segment's training objectives and their contribution to the segment's outcome. He then selects as many critical events as can be covered in detail during the time allowed for the AAR and places them in chronological order.



D. A Training Objective is an ARTEP task, condition, and standard. Because these are often too broad to assist in focusing the AAR discussion adequately, we refer to Teaching Points. A teaching point is a single, relatively unified topic. A key event is a concrete example used to illustrate a teaching point. For example, suppose we are considering platoon level training. A training objective is "Conduct Fire and Maneuver; support-by-fire element requests and adjusts suppressive and neutralization fires on the OPFOR position and delivers suppressive direct fire. Support-by-fire element squads/carrier teams engage the position IAW Tasks 3-II-7-3, Mechanized Infantry Carrier Team (M113A1)--Provide Overwatch, and 3-III-2-7, Mechanized Infantry Squad (Mounted, or Dismounted With Carrier)--Conduct Fire and Maneuver. The OPFOR elements on the position are destroyed or suppressed." (ARTEP 71-2; 3-IV-7) This training objective is rather too broad and complex to be of much help in focusing an AAR discussion. However, if one simply considers a teaching point as "Effective use of direct suppressive fire," a clear topic is evident.

E. Formal training objectives should receive priority. Teaching points "of opportunity" should be ranked and included based on their impact on the company's ability to perform.



F. Audiovisual aids are an important aspect of the company AAR. The COA prepares and integrates the information displays to be used including voice and video recordings. The AAR sequence consists of an orderly presentation of the following information:

1. Tactical displays,
2. Supporting graphic and tabular displays,
3. Voice and video recordings.



G. Company AARs are led by the company FOC and are conducted in the field. Accompanying audiovisual displays can be

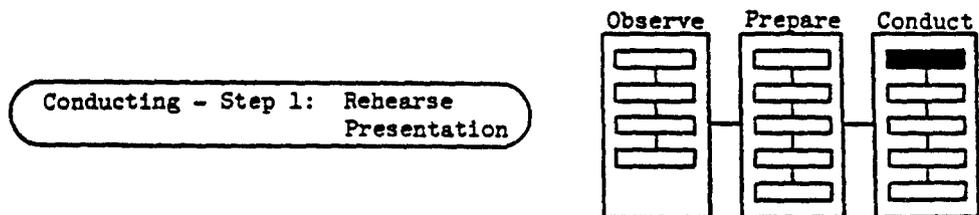
provided by a mobile field unit (location is selected by the TAFO for the battalion AAR). Since the COA does not personally lead the AAR, he carefully briefs the company FOC who conducts the AAR. Although the FOC observed some aspects of the exercise, the COA has the big picture and provides the FOC with the following information.

1. Brief exercise overview oriented towards the company's role.
2. The subset of critical events for the AAR, and their accompanying training objectives, including the following types of information:
  - a. What happened,
  - b. How it happened,
  - c. Why it happened.
3. As each critical event for the AAR is discussed, accompanying information displays can be shown to the FOC in the mobile field unit.

VI. STAGE 3: THE FOC CONDUCTS AAR

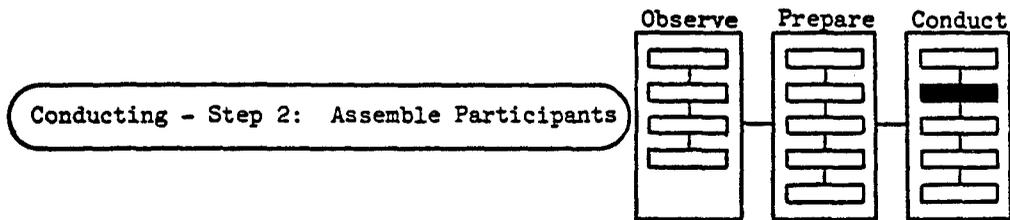
A. Conducting the AAR requires the company FOC to complete five steps:

- Step 1: Rehearse Presentation,
- Step 2: Assemble Participants,
- Step 3: State Training Objectives,
- Step 4: Lead Discussion,
- Step 5: Summarize.



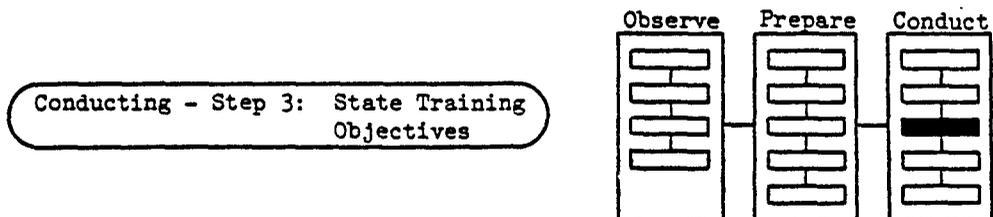
B. The company FOC carefully rehearses his presentation of the AAR. Any remaining ambiguity encountered can be resolved through communication with the COA.

C. The FOC makes a list of key words as reminders of teaching points to be made and the relevant tactical event information that will be displayed in the mobile field unit (if any). This includes the what, how, why and alternative courses of action for each critical event.



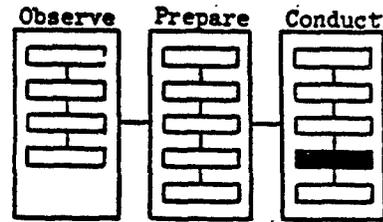
D. The following forward deployed company elements should attend the AAR:

1. Company commander,
2. Platoon leaders and platoon sergeants,
3. Squad leaders/tank commander (if applicable),
4. Relevant support element leaders (e.g., mortar and anti-armor),
5. Relevant OPFOR leader.



E. The FOC makes a brief statement of training objectives that are described as specifically as possible. The number of training objectives should be limited to three or four key ones to keep the AAR focused and prevent it from becoming excessively long.

Conducting - Step 4: Lead Discussion



F. The FOC leads a discussion of the major tactical events, in their order of occurrence, as in the example in Table 1.2.

1. General scenario for an AAR is shown in Table 3.2.

Table 3.2

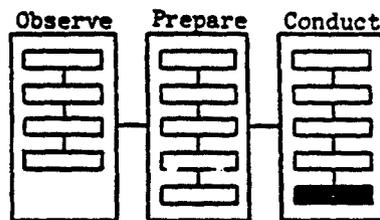
General Scenario for a Company AAR

<u>Event</u>	<u>Responsibility</u>
State Training Objectives or Teaching Points	FOC
OPFOR Plan	FOC or OPFOR Leader
BLUEFOR Plan	Company Commander
Events Before Detection/Contact	Company Commmander/Platoon Leaders
First Detection/Contact	Leader of Units Firing and Target
Report of Detection/Contact	Company Commander/Platoon Leaders
Reaction to Detection/Contact	All Participants
Frag Orders	Company Commander
Events During Engagement	All Participants
Final Results	All Participants
Summary	FOC

2. Each critical event is used as a vehicle to make teaching points about the company's performance during the event. The FOC does the following in an effective AAR.

- a. Avoids giving a critique or a lecture.
- b. Guides the discussion by asking leading questions.
- c. Has players describe what happened in their own terms.
- d. Has players discuss not only what happened but how it happened, why it happened, and how it could have been done better.
- e. Focuses the discussion so that important tactical lessons are made explicit.
- f. Relates tactical events to subsequent results for the company and battalion.
- g. Avoids detailed examination of events not directly related to major training objectives.
- h. Cuts off players' excuses for inappropriate tactical actions.

Conducting - Step 5: Summarize AAR



- G. The FOC briefly summarizes teaching points in terms of the training objectives covered in the AAR. After the summary, the FOC can have a private conversation with the company commander regarding his strengths and weaknesses and what he can do to further improve his performance.
- H. If possible, an opportunity should be provided for the company commander to discuss the points raised in the AAR, as well as his own observations, with the members of his company.

#### VII. CHARACTERISTICS OF A GOOD AAR

- A. Training objectives are reviewed.
- B. The company's discussion is directed to the important events, reasons why these occurred, and how the company could have done better.
- C. The chain of events is traced so that the results of mistakes are understood by participants (one mistake is often a partial cause of another).

- D. Tactical events are clearly related to teaching points.
- E. Attention of the participants is held and they are involved in the discussion.
- F. The summary and new training objectives are clear and concise.

## CHAPTER 4

### BATTALION AFTER ACTION REVIEW (AAR) GUIDE

- I. INTRODUCTION TO THE AAR
- II. THE THREE STAGES IN A BATTALION AAR
- III. STAGE 1: OBSERVE EXERCISE
- IV. STAGE 2: PREPARE AAR
- V. STAGE 3: CONDUCT AAR
- VI. CHARACTERISTICS OF A GOOD AAR

#### BATTALION AFTER ACTION REVIEWS

##### I. INTRODUCTION TO THE AAR

- A. In Tactical Engagement Simulation exercises with the Multiple Integrated Laser Engagement System (MILES-TES), the AAR replaces the "critique" commonly used after nonengagement simulation training. The AAR is preferred because it provides a sound method for diagnosing unit training needs and is a more effective teaching technique.
- B. The Training Analysis and Feedback Officer (TAFO) is the principal actor in preparing and delivering the battalion AAR. This guide organizes his activities into steps as shown in Figure 4.1.

II. THE THREE STAGES IN A BATTALION AAR

- Stage 1: Observe Exercise.
- Stage 2: Prepare AAR.
- Stage 3: Conduct AAR.

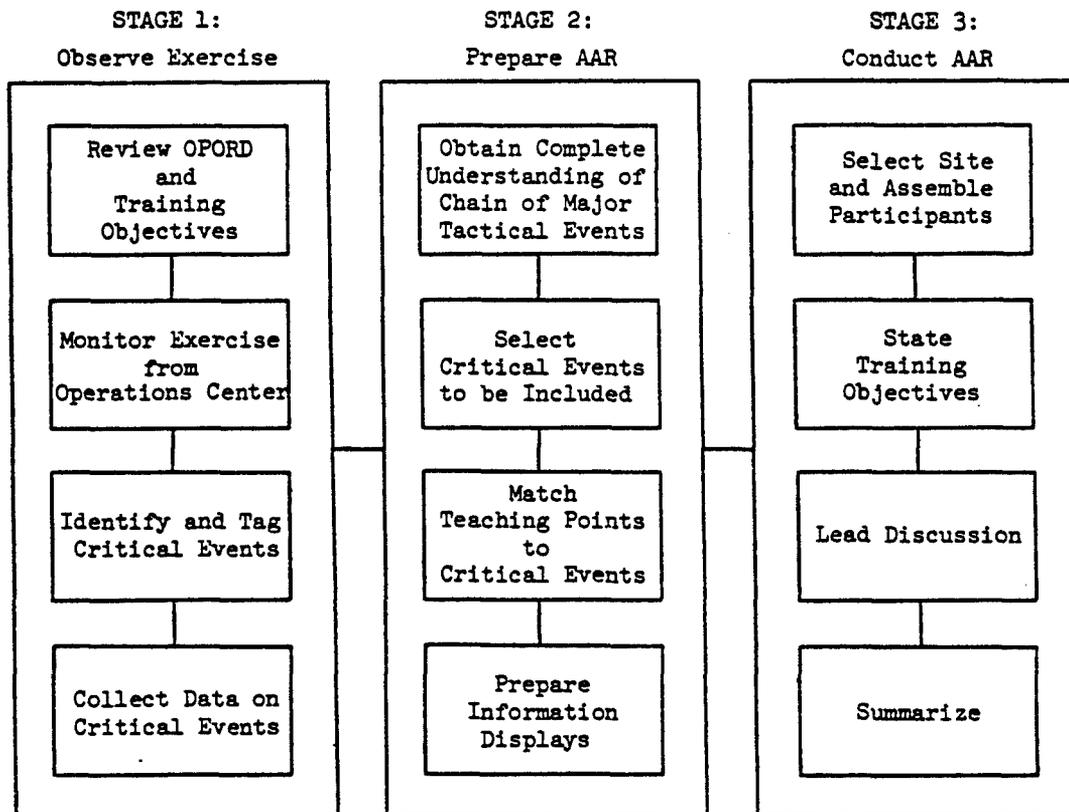
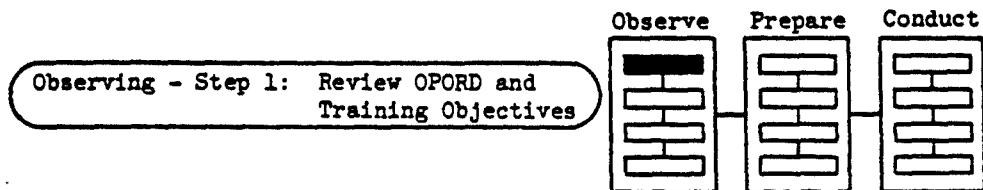


Figure 4.1  
Stages and Steps in the Battalion AAR

### III. STAGE 1: OBSERVE THE EXERCISE

#### A. Observing the exercise consists of four steps:

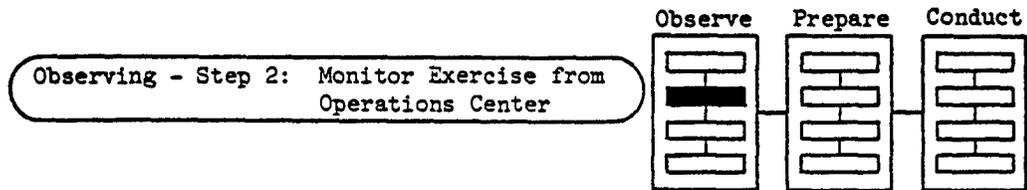
- Step 1: Review OPORD and Training Objectives Before Exercise Begins,
- Step 2: Monitor Exercise from Operations Center,
- Step 3: Identify and Tag Critical Events,
- Step 4: Collect Data on Critical Events.



#### B. Prior to the exercise, the TAFO reviews the battalion's training objectives and OPORD. At the battalion level, training objectives will usually be concerned with:

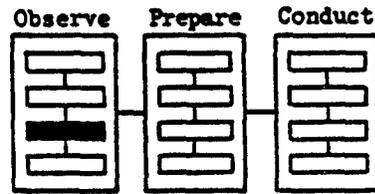
1. Command - Improving teamwork within the command group and between the command group and companies,
2. Communication - Improving the information flow up and down the chain of command,

3. Coordination - Improving coordination between units,
4. Fire Support - Improving the use of fire support assets,
5. Tactical Decisions - Improving the quality and timing of tactical decisions (e.g., to commit forces and maximize the effectiveness of available firepower).



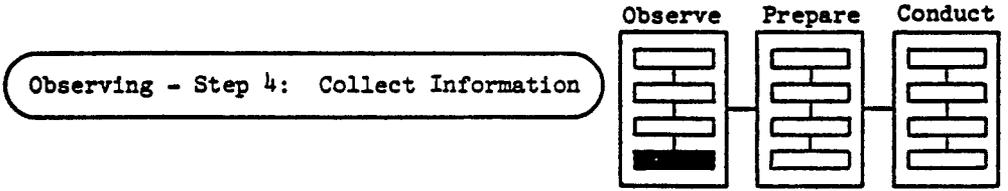
- C. Observing is an active process and the emphasis is on those actions that make the difference between the battalion's success or failure. The TAFO should:
1. Be sensitive to cues - anticipate events about to occur,
  2. Pay particular attention to command tactical decisions and their implications,
  3. Keep in close contact with your primary sources of information, especially the Company Operations Analysts (COAs) and battalion command group Field Observer Controllers (FOCs).

Observing - Step 3: Identify and Tag  
Critical Events



D. All potentially critical events should be noted and tagged. A critical event is often related to a major loss or gain that greatly impairs or enhances the battalion's ability to perform. Several examples are listed below:

1. Whether important intelligence was acquired,
2. Timeliness of decision to commit forces,
3. Appropriateness of resource allocation,
4. Whether firepower was concentrated on OPFOR weaknesses,
5. Major breach of security,
6. Major command and control failures,
7. Successful deceptive maneuver.



E. The TAFO ultimately needs to know the what, how, and why of each critical event (see Table 1.1):

1. What happened - description of event,
2. How it happened - key facts about surrounding events,
3. Why it happened - inferences about probable causes.

F. The following sources of information can contribute to his understanding:

1. CIS tactical graphic displays - relative positions of units, axis of advance, engagements, etc.,
2. Alpha/Numeric displays - direct and indirect fire statistics, movement rates, unit force value (firepower), etc.,

3. COAs - company and platoon activities,
  4. FOCs - speed and appropriateness of unit actions,
  5. OFFOR commander - major engagement related events,
  6. Tactical radio net monitors - communication content,
  7. Field video teams - selected unit actions.
- G. In the following example of an event summary, some of the information might only emerge during the AAR.

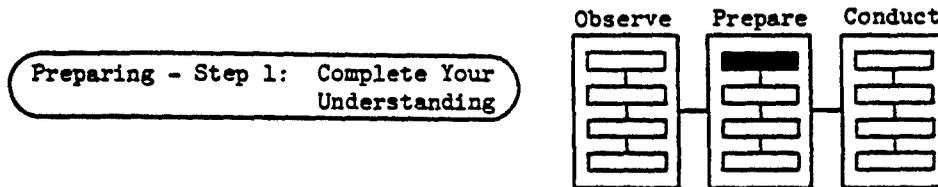
Table 4.1  
A Battalion Engagement Event

BATTALION CRITICAL ENGAGEMENT EVENT	EXAMPLES
What Happened	"B" Co became heavily engaged and lost more than half its available firepower.
How It Happened	<p>"B" Co began to assault designated objective, met unexpected heavy resistance, and was unable to disengage.</p> <p>"A" Co had to change route and backtrack because of impassible terrain, but did not advise S-3.</p> <p>"C" Co was too far in rear to come to assistance in time.</p> <p>Indirect fire support was good but failed to inflict much damage due to heavily armored OPFOR. Moderate winds made smoke missions ineffective.</p> <p>CAS not available.</p>
Why It Happened	<p>Scout Plt report indicating heavy OPFOR concentration in vicinity of OBJ not processed in timely manner. Bde report of OPFOR in vicinity of OBJ not taken into account.</p> <p>S-3 and "B" Co commander failed to coordinate prior to assault.</p> <p>Commander/S-3 approved "B" Co commander's request to assault before insuring that adequate resources would be available should situation deteriorate.</p> <p>S-2/S-3 coordination was poor.</p>
Alternative Courses of Action	<p>Defer approval of assault until all units in position.</p> <p>Improve coordination between S-2 and S-3.</p> <p>Refine S-2 intelligence handling procedures.</p>

IV. STAGE 2: PREPARE THE AAR

A. Preparing the AAR requires four steps:

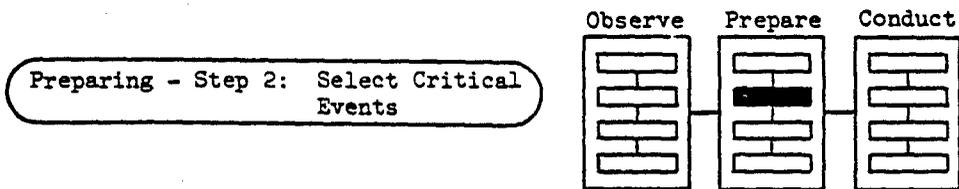
- Step 1: Complete your understanding of the chain of major tactical events,
- Step 2: Select critical events to be discussed,
- Step 3: Match teaching points with critical events,
- Step 4: Prepare information displays.



- B. After the exercise, the TAFO reviews his knowledge about the chain of critical events and determines whether there are any major gaps in his understanding. If so, he needs to fill them in as per Stage 1, Step 4 above. The following factors should be considered:

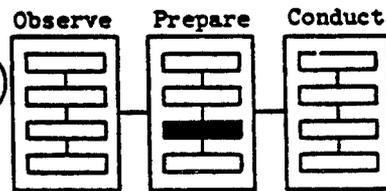
1. Important aspects of mission planning and preparation,

2. Disposition of forces,
3. Allocation of assets,
4. Deviations from planned routes and/or actions,
5. Major engagements and their results,
6. Coordination and communication,
7. Logistics,
8. INTEL.

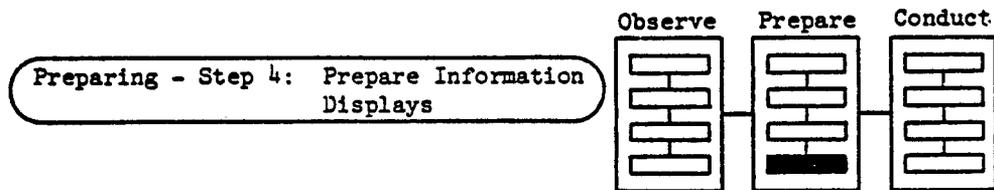


C. After the TAFO has an understanding of what happened during the exercise, he reviews the critical events and prioritizes them in terms of their relevance to training objectives and contribution to exercise outcome. He then selects those critical events important enough to be included in the AAR and places them in chronological order. In addition to those critical events that the TAFO has noted, each COA will have generated a similar list. The TAFO should merge the information as needed to provide a relatively complete description of the events he has chosen.

Preparing - Step 3: Match Teaching Points and Critical Events



- D. Formal training objectives are the most important. Teaching points "of opportunity" should be ranked and included primarily based on their impact on the battalion's ability to perform.
- E. A Training Objective is an ARTEP task, condition, and standard. Because these are often too broad to assist in focusing the AAR discussion adequately, we refer to Teaching Points. A teaching point is a single, relatively unified topic. A key event is a concrete example used to illustrate a teaching point. For example, suppose we are considering platoon level training. A training objective is "Conduct Fire and Maneuver; support-by-fire element requests and adjusts suppressive and neutralization fires on the OPFOR position and delivers suppressive direct fire. Support-by-fire element squads/carrier teams engage the position IAW Tasks 3-II-7-3, Mechanized Infantry Carrier Team (M113A1)--Provide Overwatch, and 3-III-2-7, Mechanized Infantry Squad (Mounted, or Dismounted with Carrier)--Conduct Fire and Maneuver. The OPFOR elements on the position are destroyed or suppressed." (ARTEP 71-2; 3-IV-7) This training objective is rather too broad and complex to be of much help in focusing an AAR discussion. However, if one simply considers a teaching point as: "Effective use of direct suppressive fire," a clear topic is evident.



F. Audiovisual aids are an important aspect of the battalion AAR.

The TAFO prepares and integrates the information displays to be used in the AAR, including voice and video recordings. The AAR sequence includes an orderly presentation of the following audiovisual information:

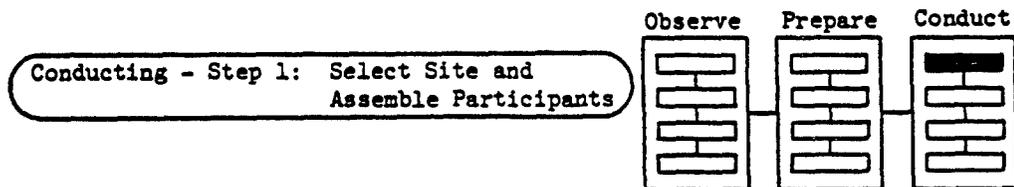
1. Tactical displays,
2. Supporting graphic and tabular displays,
3. Voice and video recordings.

G. The TAFO should choose those aids that best and most simply illustrate the points he wishes to make. Complex displays are often more confusing than enlightening in the AAR context. (Many of the displays were developed to help analysts diagnose problems, not necessarily for presentation in AARs.) It is expected that the TAFO will make use of the Tactical Display and use the A/N display to make specific, focused technical points to the battalion staff.

V. STAGE 3: THE TAFO CONDUCTS THE AAR

A. Conducting the AAR requires four steps:

- Step 1: Select Site and Assemble Participants,
- Step 2: State Training Objectives,
- Step 3: Lead Discussion,
- Step 4: Summarize.



B. Battalion AARs are usually conducted near the area of operations with the audiovisual displays provided in a mobile field unit.

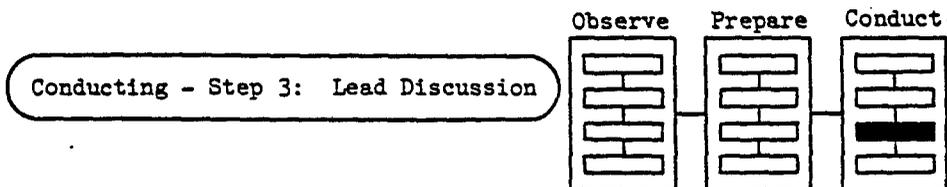
C. The following personnel should attend the battalion AAR.

1. Battalion commander,
2. XO,
3. S-1 through S-4 (including the S-3 Air if appropriate),

4. Battalion and company FOCs,
5. Fire support officer,
6. Company commanders,
7. OPFOR commander,
8. Other key personnel as appropriate.



- D. The TAFO makes a brief statement of training objectives that are described as specifically as possible. The number of training objectives should be limited to no more than three key ones to keep the AAR focused and prevent it from becoming excessively long.



- E. The TAFO leads a discussion of the major tactical events, in their order of occurrence, as in Table 1.2.

1. A general scenario for an AAR is shown in Table 4.2.

Table 4.2

General Scenario for a Battalion AAR

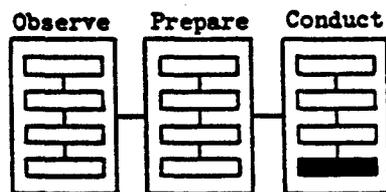
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<u>Event</u>	<u>Responsibility</u>
State Training Objectives	TAFO
Brigade OPORD	TAFO
BLUEFOR Plan	Battalion Commander
OPFOR Plan	TAFO or OPFOR Commander
Events Before Contact	Battalion Commander/Company Commander
First Contact	OPFOR and BLUEFOR Commanders of units engaged
Report, and Reactions to Contact	All Participants
Frag Orders	Battalion Commander/S-3
Events During Engagement	All Participants
Final Results	All Participants
Summary	TAFO

---

2. Each critical event is used as a vehicle to make teaching points about the battalion's performance during the event. The TAFO does the following in an effective AAR:
  - a. Avoids giving a critique or a lecture,
  - b. Guides the discussion by asking leading questions,
  - c. Has players describe what happened in their own terms,
  - d. Has players discuss not only what happened but how it happened, why it happened, and how it could have been done better,
  - e. Focuses the discussion so that important tactical lessons are made explicit,
  - f. Relates tactical events to subsequent results,
  - g. Avoids detailed examination of events not directly related to major training objectives.

Conducting - Step 4: Summarize AAR



- P. The TAFO briefly summarizes teaching points relevant to the training objectives. After the summary, the TAFO can have a private conversation with the battalion commander regarding his strengths and weaknesses and what he can do to further improve his performance.
  
- G. An opportunity should be provided for the battalion commander to continue the AAR with his staff and unit leaders. The TAFO should support this activity by organizing and presenting requested displays.

VI. CHARACTERISTICS OF A GOOD AAR

- A. Training objectives are reviewed.
  
- B. The battalion's discussion is directed to the important events, reasons why these occurred, and how the battalion could have done better.
  
- C. The chain of events is traced so that the results of mistakes are understood by participants (one mistake is often a partial cause of another).

- D. Tactical events are clearly related to teaching points.
- E. Attention of the participants is held and they are involved in the discussion.
- F. The summary and new training objectives are clear and concise.

APPENDIX A

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