MISSION TRAINING PLAN FOR THE AIR AND MISSILE DEFENSE (AMD) BATTERY IN THE ARMORED CAVALRY REGIMENT AND THE ARMORED AND MECHANIZED INFANTRY BRIGADE

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IN THE ARMORED CAVALRY REGIMENT
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Preface

1. The purpose of this MTP is to provide you, the battery commander, with a descriptive, mission-oriented training program to assist leaders in training their units. Standards for training may be made more difficult but may not be lowered. This MTP is in accordance with United States Army training and tactical doctrine. The MTP contains those tasks which support the unit mission outlined in doctrinal manuals. Unit leaders must use their higher headquarters METL and training guidance to identify which tasks in the MTP must be emphasized. Task standards in the MTP are the Army standards for executing those tasks.

2. The intended audience for this MTP includes the leaders, trainers, and observer controllers for the ADA battery organized under TOEs 44117, 44137, 44147, 44148, 44177, and 44437 series and similar TOEs in Reserve Component organizations.

3. The proponent for this publication is Headquarters, TRADOC. Submit changes for improving this publication on DA Form 2028 to Commandant, US Army Air Defense Artillery School, ATTN: ATSA-DT-WF, Fort Bliss, TX 79916-3802.

4. Unless this publication states otherwise, masculine nouns and pronouns do not refer exclusively to men.

CHAPTER 1

Unit Training

1-1. <u>General</u>. This MTP provides you with a training and evaluation program. It provides guidance on how to train, as well as the key missions to train. Chapter 2 of FM 7-0 contains the specific details to "battle focus" a training program. The specific details of your training program depend on many factors, including—

    a. Training directives and guidance established by your chain of command.

    b. Training directives of your unit.

    c. Training resources and areas available.

    d. Your unit METL.

1-2. <u>Supporting Material</u>. This MTP describes a critical wartime mission-oriented training program, which is part of the next higher echelon's training program. This unit's training program consists of—

    a. ARTEPs 44-115-MTP, 44-175-MTP, and 44-435-MTP. These ARTEPs indicate the relationship of the battery training program to the battalion's training program.

    b. ARTEPs 44-177-15-MTP, 44-117-22-MTP, and 44-117-11-MTP. These MTPs are used by platoon leaders to plan and conduct training.

    c. ARTEPs 44-177-14-DRILL, 44-117-21-DRILL, and 44-117-11-DRILL. Trainers use drills to train those collective tasks which fit drill criteria. Drills must be sustained by the unit.

    d. Nondrill collective tasks.

    e. Soldier Training Publications. Soldier's manual tasks for the appropriate MOS tasks and skill levels.

Note: Figure 1-1 shows battery MTP echelon relationships.
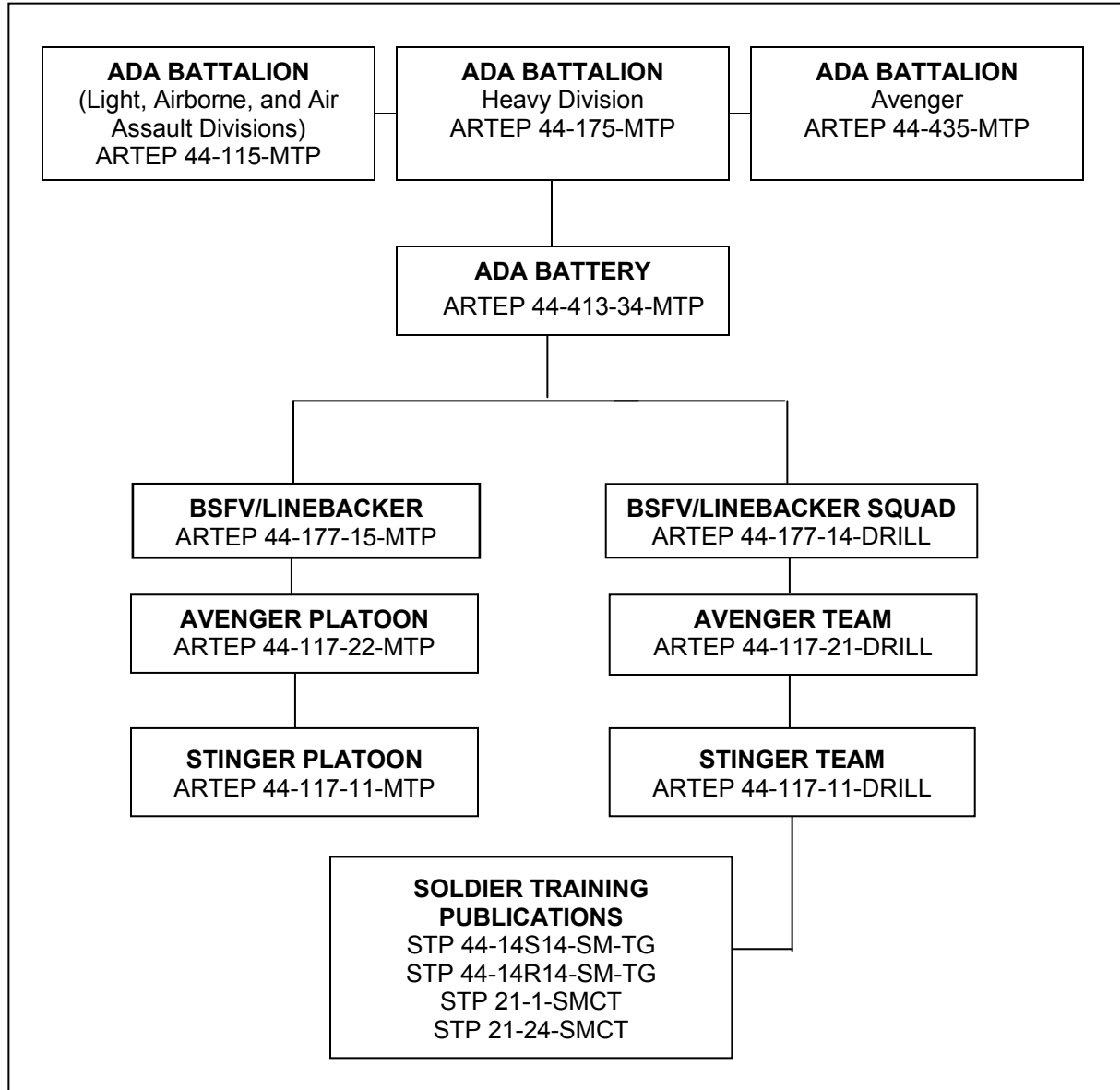
Figure 1-1. Battery MTP Echelon Relationships.

1-3. <u>Digital Access to Training Materials</u>.

a. The Army is fielding a fully integrated training system through the use of CD-ROM and the Internet. Standard Army Training Systems (SATS) is a unit-level training development tool that ties into the U.S. Army Training and Doctrine Command (TRADOC) training. Through SATS, units are able to download current tasks and drills from the data repository database http://texmis.atsc.eustis.army.mil/dr/ for their use in training and training development. The General Dennis J. Reimer Training and Doctrine Digital Library (RDL) (http://155.217.58.58/atdls.htm), the official Department of the Army (DA) website for doctrinal and training literature, provides access to Army FMs, training circulars, ARTEP MTPs, STPs, and Combined Arms Training Strategy (CATS) materials. These training products are "built" from the data repository database. The entire MTP may be downloaded from the site.

b. Information on how to obtain SATS software and a user's guide for the database is available through the project manager at the Army Training Support Center (ATSC).

1-4. Contents. This MTP contains six chapters and seven appendixes.

a. Chapter 1, Unit Training. This chapter provides a foundation for the other chapters and explains their use.

b. Chapter 2, Training Matrix. This chapter shows the relationship between missions and collective tasks.

c. Chapter 3, Mission Outlines. This chapter provides the mission orientation for training. The mission outlines present a graphic portrayal of the relationship between critical wartime missions and subordinate tasks inherent to those missions.

d. Chapter 4, Training Exercises. This chapter consists of three STXs, one CPX, and one FTX. These exercises provide training information and a scenario to give you a flexible, pre-constructed vehicle for training and for sustaining proficiency of key missions. They may also serve as part of an internal or external evaluation designed to have the battery execute the mission in a tactical setting using all training simulators available. These exercises may be modified to suit the training needs of your battery.

e. Chapter 5. Training and Evaluation Outlines. This chapter provides the training criteria for all of the collective tasks that the battery must master to perform its critical wartime missions. These training criteria orient on the levels of collective training executed by the battery. Each T&EO constitutes a part of one or more critical missions and, in various combinations, makes up larger training vehicles such as the STXs and FTX in Chapter 4.

f. Chapter 6, External Evaluation. This chapter provides instructions for the development of an external evaluation of your battery and includes suggested rating forms.

g. Appendix A. Linebacker Gunnery Tables. This appendix provides a gunnery program to develop and test the proficiency of the individual, squad, and platoon in Linebacker gunnery techniques.

h. Appendix B. Bradley Stinger Fighting Vehicle (BSFV) Gunnery Tables. This appendix provides a gunnery program to develop and test the proficiency of the individual, squad, and platoon in BSFV gunnery techniques.

i. Appendix C. Stinger Gunnery Tables. This appendix provides a gunnery program to develop and test the proficiency of the individual, team, section, and platoon in Stinger gunnery techniques.

h. Appendix D. Avenger Gunnery Tables. This appendix provides a gunnery program to develop and test the proficiency of the individual, team, section, and platoon in Avenger gunnery techniques.

j. Appendix E. Combat Readiness or Deployability Certification Criteria. This appendix provides guidance to certify the AMD battery, both AC and RC unit.

k. Appendix F. Threat to the AMD Battery. This appendix provides the air threat encountered by the AMD battery during combat operations.

l. Appendix G. Tactical Internet. This appendix provides the AMD battery commander with a basic understanding of the tactical Internet, capabilities, and limitations.

Note: Table 1-1 shows which activities are related to each part of the MTP.

Table 1-1. Relationship of Activities to Parts of an MTP.

LETTER	ACTIVITY TITLE
A	Planning for Training
B	Execution of Training
C	Evaluation of Training
D	Explanatory Data
E	Forwarding Pertinent Comments

PARTS OF AN MTP	ACTIVITY				
	A	B	C	D	E
Preface				X	X
Chapter 1, Unit Training				X	
Chapter 2, Training Matrix	X		X		
Chapter 3, Mission Outline	X				
Chapter 4, Training Exercises	X	X			
Chapter 5, Training and Evaluation Outlines		X	X		
Chapter 6, External Evaluation				X	
Appendix A, Linebacker Gunnery Tables	X	X	X		
Appendix B, BSFV Gunnery Tables	X	X	X		
Appendix C, Stinger Gunnery Tables			X	X	
Appendix D, Avenger Gunnery Tables			X	X	
Appendix E, Combat Readiness or Deployability Certification Criteria			X		X
Appendix F, Threat to the AMD Battery			X		
Appendix G, Tactical Internet				X	
MTP User Feedback Questionnaire					X

1-5. Missions and Tasks. These missions are composed of major activities that the unit and you, their leader and trainer, must do to accomplish that mission. These missions also include the things that squads, teams, and individual soldiers must do. These unit's critical wartime missions are—

    a. 44-M-0002, Provide Short-Range Air and Missile Defense Protection for Maneuver Forces and Their Critical Assets, and 44-M-0005, Plan, Coordinate, and Integrate Air and Missile Defense in Support of Military Operations.

    b. These missions require training. Battery METL supporting these missions may be trained individually (one at a time) or jointly (with others). In either case, orient them on the training criteria in the T&EOs and drills. STXs contain several collective tasks as shown in Chapter 2. External evaluations designed by your higher headquarters use the FTX in Chapter 4 to evaluate your battery's ability to perform missions under stress in a realistic environment.

    c. Squad and team tasks are trained in much the same way as described above. However, the squad or team leader must also train the drills provided in the drill book. (Detailed information on drill training is in ARTEPs 44-117-11-Drill, 44-117-21-Drill, and 44-177-14-Drill).

    d. Leader tasks that support the battery missions are trained through officers training, battle simulations, and execution of this battery's missions.

e. Soldiers master individual tasks through training to the standards outlined in soldier's manuals. Listed at the end of each T&EO in Chapter 5 are the soldier's manual tasks that support collective task training. You must determine those key individual tasks that all members of your unit must master and conduct sustainment training to maintain their proficiency level.

1-6. <u>Training Principles</u>. This MTP supports the concept of "Training the Force" as detailed in FM 7-0, Chapter 2.

1-7. <u>Training Strategy</u>. The training program developed and executed by a unit to train to standards in its critical wartime missions is a component of CATS. The purpose of CATS is to provide direction and guidance on how the Army will train and identify the resources required to support that training.

a. CATS provides the tools that enable the Army to focus and manage training in an integrated manner. Central to CATS is a series of proponent-generated unit and institutional strategies that describe the training and training resources required to train to standard.

b. The unit's training strategies central to CATS provide the commander with a descriptive "menu" for training, reflecting that while there is an optimal way to train to standard, it is unlikely that all units in the Army will have the exact mix of resources required to execute an optimal training strategy. For detailed information on CATS, go to the ADA school web site, click on DTAC and Air Defense CATS.

1-8. <u>Conducting Training</u>. This MTP eases the planning, preparation, and conduct of unit training as explained in FMs 7-0 and 7-1.

a. You, the battery commander, assign the missions and supporting tasks for which you intend to develop training. Your decision is based on the battalion commander's training guidance. You must plan and execute battery and platoon training in support of this guidance.

b. Review the training plan in Chapter 3 to determine whether the FTX and STXs provided will support or can be modified to support your commander's guidance. If they do not support the guidance or need to be modified, refer to the matrix in Chapter 2. This matrix provides a listing of all critical collective tasks, which your battery must master to perform its missions.

c. Prioritize the tasks that need training. You will never have time to train everything. You must orient on the greatest challenges and most difficult sustainment skills.

d. Integrate training tasks into the training schedule. Use the following procedures to do this:

(1) List the tasks in the priority and frequency they need to be trained.

(2) Determine the amount of time required and how you can use multiechelon training for best results.

(3) Determine where the training can take place.

(4) Determine who will be responsible for what. The leader of the element being trained must always be involved.

(5) Organize your needs into blocks of time and training vehicles.

e. The commander must approve the list of tasks to be trained and schedule them on the unit training schedule.

f. The commander must determine the equipment and supplies needed to conduct the training.

g. The commander must keep subordinate leaders informed and oversee their training. The standards must be rigidly enforced.

1-9. Force Protection (Safety).

a. Safety is a component of force protection. Commanders, leaders, and soldiers use risk assessment and management to ensure that unnecessary risks are eliminated and that realistic training can be performed. Risk management assigns responsibility, institutionalizes commander's review of operational safety, and leads to decision making at a level of command appropriate to the risk. The objective of safety is to help units protect combat power through accident prevention that enables units to win fast and decisively, with minimum losses. Safety is an integral part of all combat operations and stability and support operations. Safety begins with readiness that determines a unit's ability to perform its METL to standard. Readiness standards addressed during METL assessment are—

(1) Soldiers with the self-discipline to consistently perform tasks to standard.

(2) Leaders who are ready, willing, and able to enforce standards.

(3) Training that provides skills needed for performance to standard.

(4) Standards and procedures for task preferences that are clear and practical.

(5) Support for task preference, including equipment, personnel, maintenance, facilities, and services.

b. Proper fluid replacement (hydration) is one of the most essential elements in heat injury prevention. Of particular note is the fact that the revised maximum hourly fluid intake should NOT exceed 1.5 quarts and the revised maximum daily fluid intake should **not** exceed 12 quarts. The newly revised fluid replacement chart (Table 1-2) describes the amounts of fluid replacement and work/rest cycles for acclimatized soldiers undergoing training.

Table 1-2. Fluid Replacement Chart for Warm Weather Training.
(Applies to Average Acclimated Soldier Wearing BDU, Hot Weather)

Heat Category	WBGT Index, °F	Easy Work		Moderate Work		Hard Work	
		Work/Rest	Water Intake, Qt/hr	Work/Rest	Water Intake, Qt/hr	Work/Rest	Water Intake, Qt/hr
1	78-81.9	NL	½	NL	¾	40/20 min	¾
2 (Green)	82-84.9	NL	½	50/10 min	¾	30/30 min	1
3 (Yellow)	85-87.9	NL	¾	40/20 min	¾	30/30 min	1
4 (Red)	88-89.9	NL	¾	30/30 min	¾	20/40 min	1
5 (Black)	> 90	50/10 min	1	20/40 min	1	10/50 min	1

Notes:
- The work/rest times and fluid replacement volumes will sustain performance and hydration for at least 4 hours of work in the specified heat category. Individual water needs will vary ¼ qt/hour.
- NL = no limit to work time per hour.
- Rest means minimal physical activity (sitting or standing), accomplished in shade if possible.
- **CAUTION: Hourly fluid intake should not exceed 1½ quarts.**
- **Daily fluid intake should not exceed 12 quarts.**
- Wearing body armor add 5° F to WBGT Index.
- Wearing MOPP overgarment add 10° F to WBGT Index.

Easy Work	Moderate Work	Hard Work
• Walking Hard Surface at 2.5 mph, ≤ 30 lb Load • Weapon Maintenance • Manual of Arms • Marksmanship Training • Drill and Ceremony	• Walking Hard Surface at 3.5 mph, < 40 lb Load • Walking Loose Sand at 2.5 mph, no Load • Calisthenics • Patrolling • Individual Movement Techniques; i.e., low crawl, high crawl • Defensive Position Construction • Field Assaults	• Walking Hard Surface at 3.5 mph, ≥ 40 lb Load • Walking Loose Sand at 2.5 mph with Load

c. Safety demands total chain of command involvement in planning, preparing, executing, and evaluating training. The chain of command responsibilities include—

(1) Commanders.

(a) Seek optimum, not adequate, performance.
(b) Specify the risk they will accept to accomplish the mission.
(c) Select risk reductions provided by staff.
(d) Accept or reject residual risk, based on the benefit to be derived.
(e) Train and motivate leaders at all levels to effectively use risk management concepts.

(2) Staff.

(a) Assists the commander in assessing risk and develops risk reduction options for training.
(b) Integrates risk controls in plans, orders, METL standards, and performance measures.
(c) Eliminates unnecessary safety restrictions that diminish training effectiveness.
(d) Assesses safety performance during training.
(e) Evaluates safety performance during AARs.

(3) Subordinate Leaders.

(a) Apply consistently effective risk management concepts and methods to operations they lead.

(b) Report risk issues beyond their control or authority to their superiors.

(4) Individual Soldiers.

(a) Report unsafe conditions and acts and correct the situation when possible.
(b) Establish a buddy system to keep a safety watch on one another.
(c) Take responsibility for personal safety.
(d) Work as a team member.
(e)   Modify their own risk behavior.

d. Risk management is a process that assists decision makers in reducing or offsetting risk (by systematically identifying, assessing, and controlling risk arising from operational factors) and making decisions that weigh risks against mission benefits. Risk is an expression of a possible loss or negative mission impact stated in terms of probability and severity. The risk management process (see Figure 1-2) provides leaders and individuals a method to assist in identifying the optimum course of action (COA). Detailed steps are outlined in FM 100-14, Chapter 2.
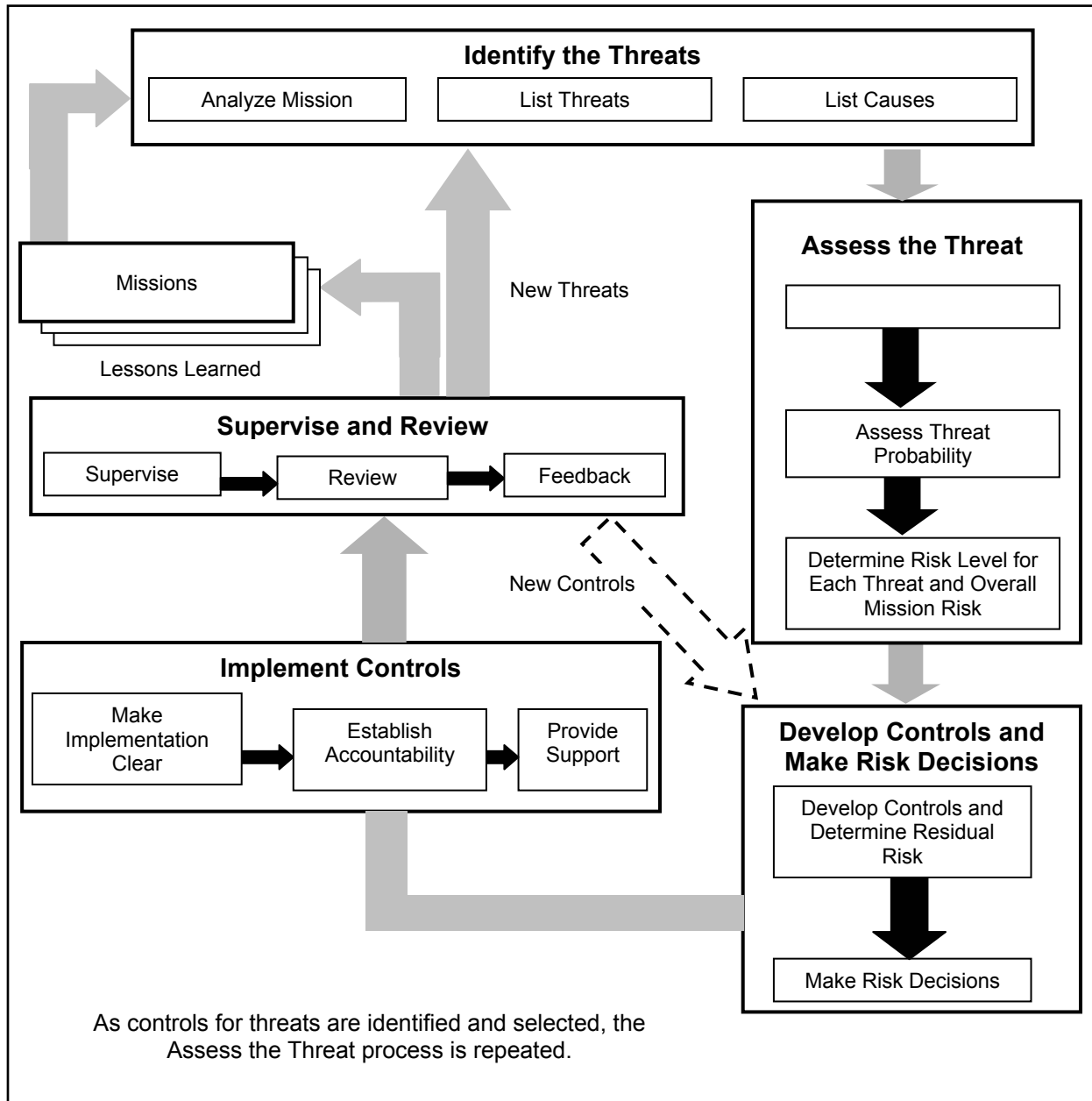
Figure 1-2. Risk Management Process.

e. Risk management must be fully integrated into planning, preparation, and execution. Commanders are responsible for the application of risk management in all military operations. Risk management facilitates the mitigation of the risks of threats to the force. For the purposes of this document, threat is defined as a source of danger—any opposing force, condition, source, or circumstance with the potential to negatively impact mission accomplishment and/or degrade mission capability. Leaders must analyze each hazard to determine the probability of its causing an accident and the probable effect of the accident. Identify control options to eliminate or reduce the hazard. The Army Standard Risk Assessment Matrix (Figure 1-3) is a tool for assessing hazards. Table 1-3 outlines risk severity categories and definitions. Table 1-4 outlines probability categories for the risk assessment matrix in detail.

Risk Assessment Matrix

Severity		Probability				
		Frequent A	Likely B	Occasional C	Seldom D	Unlikely E
Catastrophic	I	E	E	H	H	M
Critical	II	E	H	H	M	L
Marginal	III	H	M	M	L	L
Negligible	IV	M	L	L	L	L

Legend:

Risk Definitions

E - Extremely High Risk: Loss of ability to accomplish the mission if threats occur during mission. A frequent or likely probability of catastrophic loss (IA or IB) or frequent probability of critical loss (IIA) exists.

H – High Risk: Significant degradation of mission capabilities in terms of the required mission standard, inability to accomplish all parts of the mission, or inability to complete the mission to standard if threats occur during the mission. Occasional to seldom probability of catastrophic loss (IC or ID) exists. A likely to occasional probability exists of a critical loss (IIB or IIC) occurring. Frequent probability of marginal losses (IIIA) exists.

M – Moderate Risk: Expected degraded mission capabilities in terms of the required mission standard will have a reduced mission capability if threats occur during mission. An unlikely probability of catastrophic loss (IE) exists. The probability of a critical loss is seldom (IID). Marginal losses occur with a likely or occasional probability (IIIB or IIIC). A frequent probability of negligible (IVA) losses exists.

L – Low Risk: Expected losses have little or no impact on accomplishing the mission. The probability of critical loss is unlikely (IIE), while that of marginal loss is seldom (IIID) or unlikely (IIIE). The probability of a negligible loss is likely or less (IVB through (IVE).

Figure 1-3. Risk Assessment Matrix.

Table 1-3. Risk Severity Categories.

CATEGORY	DEFINITION
CATASTROPHIC (I)	Loss of ability to accomplish the mission or mission failure. Death or permanent disability. Loss of major or mission-critical system or equipment. Major property (facility) damage. Severe environmental damage. Mission-critical security failure. Unacceptable collateral damage.
CRITICAL (II)	Significantly degraded mission capability, unit readiness, or personal disability. Extensive damage to equipment or systems. Significant damage to property or the environment. Security failure. Significant collateral damage.
MARGINAL (III)	Degraded mission capability or unit readiness. Minor damage to equipment or systems, property, or the environment. Injury or illness of personnel.
NEGLIGIBLE (IV)	Little or no adverse impact on mission capability. First aid or minor medical treatment. Slight equipment or system damage, but fully functional and serviceable. Little or no property or environmental damage.

Table 1-4. Probability Definitions.

ELEMENT EXPOSED	DEFINITION
FREQUENT (A) Occurs very often, continuously experienced	
Single item	Occurs very often in service life. Expected to occur several times over duration of a specific mission or operation.
Fleet or inventory of items	Occurs continuously during a specific mission or operation, or over a service life.
Individual	Occurs very often. Expected to occur several times during mission or operation.
All personnel exposed	Occurs continuously during a specific mission or operation.
LIKELY (B) Occurs several times	
Single item	Occurs several times in service life. Expected to occur during a specific mission or operation.
Fleet or inventory of items	Occurs at a high rate, but experienced intermittently (regular intervals, generally often).
Individual	Occurs several times. Expected to occur during a specific mission or operation.
All personnel exposed	Occurs at a high rate, but experienced intermittently.
OCCASIONAL (C) Occurs sporadically	
Single item	Occurs some time in service life. May occur about as often as not during a specific mission or operation.
Fleet or inventory of items	Occurs several times in service life.
Individual	Occurs over a period of time. May occur during a specific mission or operation, but not often.
All personnel exposed	Occurs sporadically (irregularly, sparsely, or sometimes).
SELDOM (D) Remotely possible; could occur at some time	
Single item	Occurs in service life, but only remotely possible. Not expected to occur during a specific mission or operation.
Fleet or inventory of items	Occurs as isolated incidents. Possible to occur some time in service life, but rarely. Usually does not occur.
Individual	Occurs as isolated incident. Remotely possible, but not expected to occur during a specific mission or operation.
All personnel exposed	Occurs rarely within exposed population as isolated incidents.
UNLIKELY (E) Can assume will not occur, but not impossible	
Single item	Occurrence not impossible, but can assume will almost never occur in service life. Can assume will not occur during a specific mission or operation.
Fleet or inventory of items	Occurs very rarely (almost never or improbable). Incidents may occur over service life.
Individual	Occurrence not impossible, but may assume will not occur during a specific mission or operation.
All personnel exposed	Occurs very rarely, but not impossible.

   f. Fratricide is a component of force protection and is closely related to safety. Fratricide is the employment of weapons, with the intent to kill the enemy or destroy his equipment that results in unforeseen and unintentional death, injury, or damage to friendly personnel or equipment. Fratricide is by

definition an accident. Risk assessment and management is the mechanism with which incidence of fratricide can be controlled.

g. The primary causes of fratricide are—

(1) Direct fire control plan failures. These occur when units fail to develop defensive and, particularly, offensive fire control plans.

(2) Land navigation failures. These result when units stray out of sector, report wrong locations, and become disoriented.

(3) Combat identification failures. These failures include gunners or pilots being unable to distinguish thermal and/or optical signatures near the maximum range of their sighting systems and units in proximity mistaking each other for the enemy under limited visibility conditions. IFF validation between the aviation units and the AMD units is a problem due to lack of IFF training proficiency and maintenance of equipment by operators.

(4) Inadequate control measures. Units fail to disseminate the minimum maneuver and fire support control measures necessary to tie control measures to recognizable terrain or events.

(5) Reporting communication failures. Units at all levels face problems in generating timely, accurate, and complete reports as locations and tactical situations change.

(6) Weapons error. Lapses in individual discipline lead to charge errors, accidental discharges, mistakes with explosives and hand grenades, and similar incidents.

(7) Battlefield hazards. Unexploded ordnance, unmarked or unrecorded minefields, FASCAM, and booby traps litter the battlefield. Failure to mark, remove, record, or anticipate these hazards increases the risk of friendly casualties.

h. Fratricide results in unacceptable losses and increases the risk of mission failure. Fratricide undermines the unit's ability to survive and function. Units experiencing fratricide observe these consequences—

(1) Loss of confidence in the unit leadership.

(2) Increasing self-doubt among leaders.

(3) Hesitation to use supporting combat systems.

(4) Over supervision of units.

(5) Hesitation to conduct night operations.

(6) Loss of aggressiveness during fire and maneuver.

(7) Loss of initiative.

(8) Disrupted operations.

(9) General degradation of cohesiveness, morale, and combat power.

1-10. Environmental Protection. Protection of natural resources has continued to become an ever-increasing concern to the Army. It is the responsibility of all unit leaders to decrease, and if possible, eliminate, damage to the environment when conducting training. Environmental risk management

parallels safety risk management, and is based on the same philosophy as safety risk management. Environmental risk management consists of the following steps:

a. Identify hazards. Identify potential sources for environmental degradation during analysis of METT-TC factors. This requires identification of environmental hazards. An environmental hazard is a condition with the potential for polluting air, soil, or water and/or destroying cultural and historical artifacts.

b. Assess the hazard. Analyze potential severity of environmental degradation using the environmental risk assessment matrix (Figure 1-4). Severity of environmental degradation is considered when determining the potential effect an operation will have on the environment. The risk impact value is defined as an indicator of the severity of environmental degradation. Quantify the risk to the environment resulting from the operation as extremely high, medium, or low, using the environmental risk assessment matrix.

ENVIRONMENTAL AREA			RATING:				
UNIT OPERATIONS			**RISK IMPACT**				
Movement of heavy vehicles/systems	5	4	3	2	1	0
Movement of personnel and light vehicles/systems	5	4	3	2	1	0
Assembly area activities	5	4	3	2	1	0
Field maintenance of equipment	5	4	3	2	1	0
Garrison maintenance of equipment	5	4	3	2	1	0

Environmental Risk Assessment Worksheet

	Movement of heavy Vehicles/ systems	Movement of Personnel and light/systems	Assembly areas activities	Field maintenance of equipment	Garrison maintenance of equipment	Risk rating
Air pollution						
Archeological and historical sites						
Hazardous materiel/waste						
Noise pollution						
Threatened/ endangered species						
Water pollution						
Wetland protection						
Overall rating						

Overall Environmental Risk Assessment Form

CATEGORY	RANGE	ENVIRONMENTAL DAMAGE	DECISION MAKER
Low	0-58	Little or none	Appropriate level
Medium	59-117	Minor	Appropriate level
High	118-149	Significant	Division Commander
Extremely high	150-175	Severe	MACOM Commander

Risk Categories

Figure 1-4. Environmental Risk Assessment Matrix.

c. Make environmental risk decisions. Make decisions and develop measures to reduce high environmental risks.

d. Brief chain of command. Brief chain of command (to include installation environmental office, if applicable) on proposed plans and pertinent high-risk environmental matrixes. Risk decisions are made at a level of command that corresponds to the degree of risk.

e. Implement controls. Implement environmental protection measures by integrating them into plans, orders, SOPs, training performance standards, and rehearsals.

f. Supervise. Supervise and enforce environmental protection standards.

1-11. NBC. Realistic training requires organizations to train the way they will fight or support on the battlefield. This includes combat and combat support under all NBC conditions. On a task-by-task basis, your unit must attain proficiency in each collective task at the highest MOPP possible. As your unit becomes more proficient on each collective task, you as a trainer must inject and insist on dedicated training at the highest MOPP.

1-12. Evaluation. The T&EOs in Chapter 5 describe standards that must be met for each task.

a. Evaluations can be internal or external. Internal evaluations are conducted at all levels, and they must be inherent in all training. External evaluations are usually more formal and are normally conducted by a headquarters two levels above the unit being evaluated. (See Chapter 6, External Evaluation.)

b. A critical weakness in training is the failure to evaluate each task every time it is executed. The ARTEP concept is based on simultaneous training and evaluation. Too often, leaders do not practice continuous evaluation. Often, soldiers or small units are trained to perform a task to standard, then later, when they execute that task as part of a training exercise, they execute it poorly or incorrectly, and are not corrected. For this program to work, trainers and leaders must continually evaluate training as it is being executed.

c. Leaders should emphasize direct, on-the-spot evaluations. Correcting poor performance during individual or small group training is easy to do. In higher-level exercises, it is not feasible to do this with outside O/Cs, but should not be eliminated. Plan AARs at frequent logical intervals during the exercises (usually after the completion of a major subordinate task). This is a proven technique which will allow you to correct performance shortcomings while they are still fresh in everyone's mind, and prevents reinforcement of bad habits.

d. FM 7-1 provides detailed instructions for conducting an AAR and detailed guidance on coaching and critiquing during training.

1-13. Feedback. Recommendations for improvement of this MTP are requested. Feedback will help to ensure that this MTP answers the training needs of units in the field. DA Form 7507, *ARTEP Mission Training Plan User Feedback*, is available to provide recommendations and comments. In case of a need for an immediate change, use the ADAS, DOTD homepage, http://airdefense.bliss.army.mil/dotd/.

CHAPTER 2

Training Matrixes

2-1. <u>General</u>. The training matrix assists the commander in planning the training of his unit's personnel.

2-2. <u>Mission-to-Collective Task Matrix</u>. This matrix (Table 2-1) identifies the missions and their supporting collective tasks. The tasks are listed under the appropriate army tactical task from the Army Universal Task List (AUTL) which is indicated by an "X" in the matrix. A specific mission is trained by identifying collective tasks in the vertical column for the mission. Based on the proficiency of the unit, training is focused on operational weaknesses.

The mission identification table listed below (Figure 2-1) provides mission identification for the unit.

Mission Identification Table
Mission Title
• Provide short-range air and missile defense protection for maneuver forces and their critical assets.   (**44-M-0002**)   • Plan, coordinate, and integrate air and missile defense in support of military operations.   (**44-M-0005**)

Figure 2-1. Mission Identification Table.

Table 2-1. Mission-to-Collective Task Matrix.

COLLECTIVE TASKS		44-M-0002	44-M-0005
Develop Intelligence			
44-4-2261.44-AD2R	DEVELOP IPB	X	X
44-4-5102.44-AD2R	DEVELOP AN EARLY WARNING PLAN	X	X
Deploy/Conduct Maneuver			
07-2-1303.44-AD2R	CONDUCT TACTICAL ROAD MARCH	X	X
44-1-9046.44-AD2R	CONDUCT RSOP	X	X
44-2-7230.44-AD2R	PLAN AND CONDUCT UNIT AIRLIFT	X	X
Protect the Force			
03-2-C310.44-AD2R	CONDUCT A CHEMICAL SURVEY	X	X
03-2-C312.44-AD2R	CONDUCT THOROUGH DECONTAMINATION OPERATIONS	X	X
03-3-C201.44-AD2R	PREPARE FOR OPERATIONS UNDER NBC CONDITIONS	X	X
03-3-C202.44-AD2R	PREPARE FOR A CHEMICAL ATTACK	X	X
03-3-C203.44-AD2R	RESPOND TO A CHEMICAL ATTACK	X	X

Table 2-1. Mission-to-Collective Task Matrix (continued).

COLLECTIVE TASKS		44-M-0002	44-M-0005
Protect the Force (continued)			
03-3-C205.44-AD2R	PREPARE FOR A FRIENDLY NUCLEAR STRIKE	X	X
03-3-C206.44-AD2R	PREPARE FOR A NUCLEAR ATTACK	X	X
03-3-C209.44-AD2R	REACT TO SMOKE OPERATIONS	X	X
03-3-C223.44-AD2R	RESPOND TO THE INITIAL EFFECTS OF A NUCLEAR ATTACK	X	X
03-3-C225.44-AD2R	CONDUCT CHEMICAL RECONNAISSANCE	X	X
03-3-C226.44-AD2R	CROSS A CHEMICALLYCONTAMINATED AREA	X	X
05-5-0302.44-AD2R	PREPARE CREW-SERVED WEAPONS FIGHTING POSITIONS	X	X
07-2-1136.44-AD2R	OCCUPY ASSEMBLY AREA	X	X
07-3-C219.44-AD2R	ESTABLISH UNIT DEFENSE	X	X
44-1-C220.44-AD2R	USE PASSIVE AIR DEFENSE MEASURES	X	X
44-1-C221.44-AD2R	TAKE ACTIVE COMBINED ARMS AD MEASURES AGAINST HOSTILE AERIAL PLATFORMS	X	X
71-2-C332.44-AD2R	MAINTAIN OPERATIONS SECURITY	X	X
Perform CSS and Sustainment			
08-2-0003.44-AD2R	TREAT CASUALTIES	X	X
08-2-C316.44-AD2R	TRANSPORT CASUALTIES	X	X
08-2-R315.44-AD2R	PERFORM FIELD SANITATION FUNCTIONS	X	X
10-2-C317.44-AD2R	PROVIDE FOOD SERVICE SUPPORT	X	X
10-2-C319.44-AD2R	RECEIVE AIRDROP RESUPPLY	X	X
10-2-C320.44-AD2R	PROVIDE UNIT SUPPLY SUPPORT	X	X
10-2-C325.44-AD2R	RECEIVE EXTERNAL SLING-LOAD RESUPPLY	X	X
12-2-C201.44-AD2R	MAINTAIN UNIT STRENGTH	X	X
43-2-C322.44-AD2R	PERFORM UNIT LEVEL MAINTENANCE	X	X
43-2-C323.44-AD2R	MANAGE UNIT MAINTENANCE OPERATIONS	X	X
44-4-2282.44-AD2R	CONDUCT LOGPAC ACTIVITIES	X	X

Table 2-1. Mission-to-Collective Task Matrix (continued).

COLLECTIVE TASKS		44-M-0002	44-M-0005
Exercise Command and Control			
08-2-R303.44-AD2R	CONDUCT BATTLEFIELD STRESS REDUCTION AND PREVENTION PROCEDURES	X	X
11-2-C302.44-AD2R	ESTABLISH AND OPERATE A SINGLE-CHANNEL VOICE RADIO NET	X	X
11-5-0079.44-AD2R	PROVIDE IMPROVED HIGH FREQUENCY RADIO (IHFR) COMMUNICATIONS AN/GRC-193A/213 AND AN/PRC-104A	X	X
11-5-0201.44-AD2R	ESTABLISH PLATFORM WITH APPLIQUE, PRECISION LIGHTWEIGHT GPS RECEIVER (PLGR) AND SINCGARS SYSTEM IMPROVEMENT PROGRAM (SIP)	X	X
11-5-1102.44-AD2R	ESTABLISH A SINCGARS FREQUENCY HOPPING NET	X	X
44-1-1045.44-AD2R	SUSTAIN AIR DEFENSE OPERATIONS	X	X
44-1-2187.44-AD2R	PROVIDE COMMAND AND CONTROL	X	X
44-1-2295.44-AD2R	ESTABLISH THE BATTERY CP	X	X
44-1-3534.44-AD2R	PLAN AIR DEFENSE	X	X
44-1-5137.44-AD2R	COORDINATE AIR DEFENSE	X	X
44-2-2294.44-AD2R	CONDUCT TROOP-LEADING PROCEDURES	X	X
44-2-C222.44-AD2R	PLAN LOGISTICS FOR AMD OPERATIONS	X	X
44-4-5139.44-AD2R	DEVELOP THE ADA ESTIMATE AND ANNEX	X	X
44-4-5143.44-AD2R	ADJUST AIR DEFENSE COVERAGE	X	X
44-5-0003.44-AD2R	PROVIDE EARLY WARNING	X	X
44-5-2190.44-AD2R	ESTABLISH LIAISON TEAM	X	X
71-2-C326.44-AD2R	PERFORM RISK MANAGEMENT PROCEDURES	X	X

2-3. CPX/STX/FTX to Collective Task Matrix. This matrix (Table 2-2) displays the relationship between the unit training exercises and their supporting collective tasks. Use it to plan non-drill collective task training to support unit training. To use this matrix, determine which training exercise you plan to train and locate its representative number across the top of the columns. Now look down the column, an "X" in the column identifies each collective task and number supporting the training exercise. Prioritize collective tasks in the order you want to train them.

Table 2-2. CPX/STX/FTX to Collective Task Matrix.

EXERCISE NUMBER	EXERCISE TITLE					
CPX 44-2-E0001	CONDUCT C^{3}I ACTIVITIES					
STX 44-2-E0002	PLAN AND COORDINATE ADA FOR A BREACHING OPERATION					
STX 44-2-E0003	PLAN AND COORDINATE ADA FOR A STATIC ASSET					
STX 44-2-E0004	SUSTAIN AIR DEFENSE OPERATIONS					
FTX 44-2-E0005	CONDUCT AIR DEFENSE OPERATIONS					
BATTLEFIELD OPERATING SYSTEM, COLLECTIVE TASK NUMBER, AND TITLE		CPX E0001	STX E0002	STX E0003	STX E0004	FTX E0005
DEVELOP INTELLIGENCE						
44-4-2261.44-AD2R	DEVELOP IPB	X	X	X		X
44-4-5102.44-AD2R	DEVELOP AN EARLY WARNING PLAN	X	X	X		X
DEPLOY/CONDUCT MANEUVER						
07-2-1303.44-AD2R	CONDUCT TACTICAL ROAD MARCH	X	X		X	X
44-1-9046.44-AD2R	CONDUCT RSOP	X	X	X	X	X
44-2-7230.44-AD2R	PLAN AND CONDUCT UNIT AIRLIFT		X		X	X
PROTECT THE FORCE						
03-2-C310.44-AD2R	CONDUCT A CHEMICAL SURVEY		X			X
03-2-C312.44-AD2R	CONDUCT THOROUGH DECONTAMINATION OPERATIONS		X			X
03-3-C201.44-AD2R	PREPARE FOR OPERATIONS UNDER NBC CONDITIONS	X	X	X	X	X
03-3-C202.44-AD2R	PREPARE FOR A CHEMICAL ATTACK		X	X		X
03-3-C203.44-AD2R	RESPOND TO A CHEMICAL ATTACK		X	X		X
03-3-C205.44-AD2R	PREPARE FOR A FRIENDLY NUCLEAR STRIKE		X	X		X
03-3-C206.44-AD2R	PREPARE FOR NUCLEAR ATTACK		X	X		X
03-3-C209.44-AD2R	REACT TO SMOKE OPERATIONS		X	X		X
03-3-C223.44-AD2R	RESPOND TO THE INITIAL EFFECTS OF A NUCLEAR ATTACK		X	X		X
03-3-C225.44-AD2R	CONDUCT CHEMICAL RECONNAISSANCE		X	X		X
03-3-C226.44-AD2R	CROSS A CHEMICALLY CONTAMINATED AREA		X	X		X

Table 2-2. CPX/STX/FTX to Collective Task Matrix (continued).

EXERCISE NUMBER	EXERCISE TITLE
CPX 44-2-E0001	CONDUCT C^{3}I ACTIVITIES
STX 44-2-E0002	PLAN AND COORDINATE ADA FOR A BREACHING OPERATION
STX 44-2-E0003	PLAN AND COORDINATE ADA FOR A STATIC ASSET
STX 44-2-E0004	SUSTAIN AIR DEFENSE OPERATIONS
FTX 44-2-E0005	CONDUCT AIR DEFENSE OPERATIONS

BATTLEFIELD OPERATING SYSTEM, COLLECTIVE TASK NUMBER, AND TITLE		CPX E0001	STX E0002	STX E0003	STX E0004	FTX E0005
PROTECT THE FORCE (continued)						
05-5-0302.44-AD2R	PREPARE CREW-SERVED WEAPONS FIGHTING POSITIONS				X	X
07-2-1136.44-AD2R	OCCUPY ASSEMBLY AREA	X		X	X	X
07-3-C219.44-AD2R	ESTABLISH UNIT DEFENSE		X	X	X	X
44-1-C220.44-AD2R	USE PASSIVE AIR DEFENSE MEASURES	X	X			X
44-1-C221.44-AD2R	TAKE ACTIVE COMBINED ARMS AD MEASURES AGAINST HOSTILE AERIAL PLATFORMS	X	X	X		X
71-2-C332.44-AD2R	MAINTAIN OPERATIONS SECURITY	X	X			X
PERFORM CSS AND SUSTAINMENT						
08-2-0003.44-AD2R	TREAT CASUALTIES		X	X	X	X
08-2-C316.44-AD2R	TRANSPORT CASUALTIES		X	X	X	X
08-2-R315.44-AD2R	PERFORM FIELD SANITATION FUNCTIONS		X		X	X
10-2-C317.44-AD2R	PROVIDE FOOD SERVICE SUPPORT				X	X
10-2-C319.44-AD2R	RECEIVE AIRDROP RESUPPLY				X	X
10-2-C320.44-AD2R	PROVIDE UNIT SUPPLY SUPPORT		X		X	X
10-2-C325.44-AD2R	RECEIVE EXTERNAL SLING-LOAD RESUPPLY				X	X
12-2-C201.44-AD2R	MAINTAIN UNIT STRENGTH				X	X
43-2-C322.44-AD2R	PERFORM UNIT LEVEL MAINTENANCE				X	X
43-2-C323.44-AD2R	MANAGE UNIT MAINTENANCE OPERATIONS				X	X
44-4-2282.44-AD2R	CONDUCT LOGPAC ACTIVITIES				X	X
EXERCISE COMMAND AND CONTROL						
08-2-R303.44-AD2R	CONDUCT BATTLEFIELD STRESS REDUCTION AND PREVENTION PROCEDURES		X		X	X
11-2-C302.44-AD2R	ESTABLISH AND OPERATE A SINGLE-CHANNEL VOICE RADIO NET	X	X	X	X	X

Table 2-2. CPX/STX/FTX to Collective Task Matrix (continued).

EXERCISE NUMBER	EXERCISE TITLE
CPX 44-2-E0001	CONDUCT C^{3}I ACTIVITIES
STX 44-2-E0002	PLAN AND COORDINATE ADA FOR A BREACHING OPERATION
STX 44-2-E0003	PLAN AND COORDINATE ADA FOR A STATIC ASSET
STX 44-2-E0004	SUSTAIN AIR DEFENSE OPERATIONS
FTX 44-2-E0005	CONDUCT AIR DEFENSE OPERATIONS

BATTLEFIELD OPERATING SYSTEM, COLLECTIVE TASK NUMBER, AND TITLE		CPX E00001	STX E00002	STX E00003	STX E00004	FTX E00005
EXERCISE COMMAND AND CONTROL (continued)						
11-5-0079.44-AD2R	PROVIDE IMPROVED HIGH FREQUENCY RADIO (IHFR) COMMUNICATIONS AN/GRC-193A/213 AND AN/PRC-104A	X	X	X	X	X
11-5-0201.44-AD2R	ESTABLISH PLATFORM WITH APPLIQUE PRECISION LIGHTWEIGHT GPS RECEIVER (PLGR) AND SINCGARS SYSTEM IMPROVEMENT PROGRAM (SIP)	X	X	X	X	X
11-5-1102.44-AD2R	ESTABLISH A SINCGARS FREQUENCY HOPPING NET	X	X	X	X	X
44-1-1045.44-AD2R	SUSTAIN AIR DEFENSE OPERATIONS	X			X	X
44-1-2187.44-AD2R	PROVIDE COMMAND AND CONTROL	X	X	X	X	X
44-1-2295.44-AD2R	ESTABLISH THE BATTERY CP	X	X	X	X	X
44-1-3534.44-AD2R	PLAN AIR DEFENSE	X	X	X		X
44-1-5137.44-AD2R	COORDINATE AIR DEFENSE	X				X
44-2-2294.44-AD2R	CONDUCT TROOP-LEADING PROCEDURES	X	X	X	X	X
44-2-C222.44-AD2R	PLAN LOGISTICS FOR AMD OPERATIONS	X			X	X
44-4-5139.44-AD2R	DEVELOP THE ADA ESTIMATE AND ANNEX	X	X	X		X
44-4-5143.44-AD2R	ADJUST AIR DEFENSE COVERAGE	X				X
44-5-0003.44-AD2R	PROVIDE EARLY WARNING	X				X
44-5-2190.44-AD2R	ESTABLISH LIAISON TEAM	X	X	X		X
71-2-C326.44-AD2R	PERFORM RISK MANAGEMENT PROCEDURES			X	X	X

CHAPTER 3

Mission Outlines

3-1. <u>General</u>. The mission outlines illustrate the relationship between the missions and their supporting tasks. These outlines provide the trainer a diagram of the unit missions and tasks, and an example of the FTX and STXs that support them.

3-2. <u>Sample Training Exercise Numbering</u>. Sample training exercises are numbered for identification and for Armywide automation of MTP production. See Table 3-1.

3-3. <u>Mission Outlines</u>. Since unit training is mission-oriented, the mission outlines show how task training contributes to the ability of the unit to perform its mission. The mission outlines in Figures 3-1 and 3-2 provide the platoon leader with a visual outline of his unit's missions in a format that facilitates the planning and management of training.

Table 3-1. How to Number Training Exercises and Missions.

STEP	ACTION	EXAMPLE
1	Assign the proponent identification number to the <u>first two digits</u>	The ADA School will use "44."
2	Assign the echelon identification number to the <u>third digit.</u>	1 - Battalion 2 - Battery 3 - Platoon 4 - Squad, Section 5 - Crew, Team
3	Assign the exercise identification number to the <u>last five digits</u>. • Begin with the letter "E" to identify the number as being an exercise or the letter "M" to identify a mission. • Follow with a four-digit sequential number.	Exercise identification numbers range from E0001–E9999.

**AMD BATTERY IN THE ARMORED CAVALRY REGIMENT
AND THE
ARMORED AND MECHANIZED INFANTRY BRIGADE**

MISSION OUTLINE
44-M-0002
PROVIDE SHORT-RANGE AIR AND MISSILE DEFENSE
PROTECTION FOR MANEUVER FORCES AND THEIR CRITICAL ASSETS

FTX
44-2-E0005
CONDUCT AIR DEFENSE
OPERATIONS

STX
44-2-E0004
SUSTAIN AIR DEFENSE
OPERATIONS

STX
44-2-E0003
PLAN AND COORDINATE ADA FOR A
STATIC ASSET

STX
44-2-E0002
PLAN AND COORDINATE ADA FOR A
BREACHING OPERATION
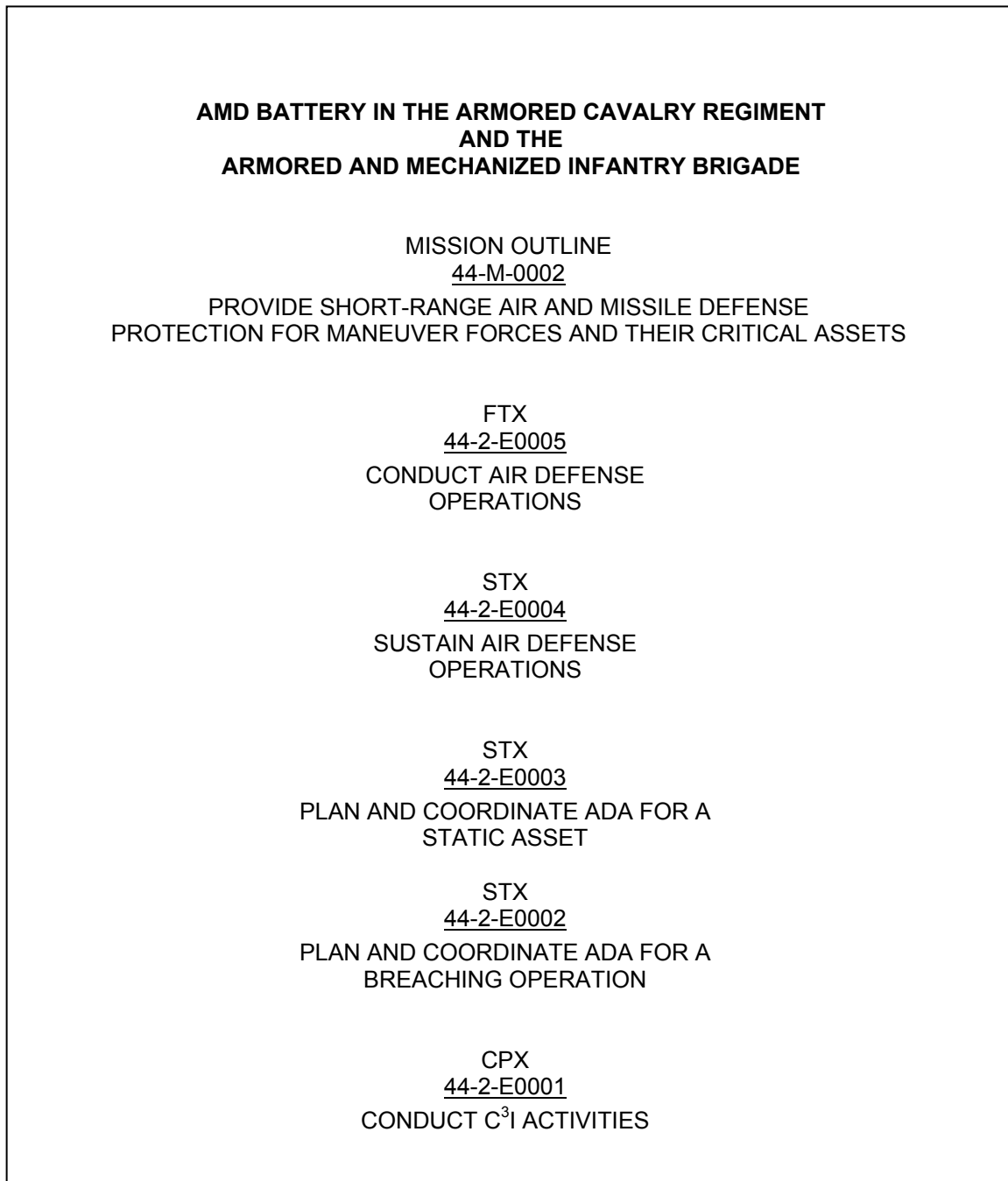

CPX
44-2-E0001
CONDUCT C^{3}I ACTIVITIES

Figure 3-1. Sample Mission Outline 44-M-0002.

**AMD BATTERY IN THE ARMORED CAVALRY REGIMENT
AND THE
ARMORED AND MECHANIZED INFANTRY BRIGADE**

MISSION OUTLINE
44-M-0005
PLAN, COORDINATE, AND INTEGRATE AIR AND MISSILE DEFENSE IN
SUPPORT OF MILITARY OPERATIONS

FTX
44-2-E0005
CONDUCT AIR DEFENSE
OPERATIONS

STX
44-2-E0004
SUSTAIN AIR DEFENSE
OPERATIONS

STX
44-2-E0003
PLAN AND COORDINATE ADA FOR A
STATIC ASSET

STX
44-2-E0002
PLAN AND COORDINATE ADA FOR A
BREACHING OPERATION

CPX
44-2-E0001
CONDUCT C^{3}I ACTIVITIES

Figure 3-2. Sample Mission Outline 44-M-0005.

CHAPTER 4

Training Exercises

4-1. <u>General</u>. Use training exercises to train and practice performance of collective tasks. There are three types of exercises in this MTP: the CPX, STX, and FTX. We designed these to assist you in developing, sustaining, and evaluating your unit's mission proficiency. This MTP includes one FTX, three STXs, and a CPX designed to provide a basic plan to achieve proficiency in your basic missions. Table 4-1 lists these exercises by number and title. You may develop additional FTXs, STXs, and CPXs as necessary to train identified training needs using the same outlines in this chapter.

Table 4-1. Training Exercises.

EXERCISE NUMBER	TITLE
CPX 44-2-E0001	CONDUCT C³I ACTIVITIES
STX 44-2-E0002	PLAN AND COORDINATE ADA FOR A BREACHING OPERATION
STX 44-2-E0003	PLAN AND COORDINATE ADA FOR A STATIC ASSET
STX 44-2-E0004	SUSTAIN AIR DEFENSE OPERATIONS
FTX 44-2-E0005	CONDUCT AIR DEFENSE OPERATIONS

Note: Exercises included in this MTP serve only as samples. Leaders and trainers are encouraged to tailor or create those exercises that best suit their element (TOE or MTOE).

4-2. <u>CPX</u>. The CPX is a medium-cost, medium-overhead training exercise that may be conducted in garrison or in the field. It is the most common exercise used for training the battalion staff and all commanders to lead and control tactical operations.

     a. The CPX is normally based on the battalion's wartime mission plans, using simulation or maps of the actual terrain on which they are expected to fight. In garrison, a CPX is an expanded MAPEX, using tactical communications systems and personnel in a CP environment. Normal battlefield distances between the CPs are usually reduced, and CPs do not need to exercise all tactical communications.

     b. The most effective CPXs are conducted in the field. In field operations, time-distance should realistically reflect Army doctrine and METT-TC. Operations should be continuous and support the use of all organic and supporting communications equipment. Commanders can practice combined arms integration and tactical emplacement and displacement of CPs. Each headquarters should practice survivability operations such as dispersion, camouflage, and security.

     c. Commanders use CPXs to train subordinate leaders and staffs at all echelons to—
- Function as effective teams and build cohesion.
- Exchange information.
- Prepare estimates.
- Give appraisals.
- Prepare plans.
- Issue orders.
- Reconnoiter, select, and tactically occupy CP locations.
- Establish and employ communications.
- Displace headquarters and CPs.
- Plan and execute CS and CSS activities.

d.   In preparation, units often conduct a TOCEX prior to conducting a CPX. This allows the principal and special staffs to organize for war (such as CPs and staff cells) and train MTP tasks. Additionally, it allows the command group and staffs the opportunity to practice setting up the CPs.

e.   Either the master schedule of events or battle simulations can control a CPX.

4-3. STX. The STX provides information for training smaller component tasks of a mission. The STX does the following important functions:

a. Provides repetitive training on bite-size chunks of missions.

b. Allows trainers to zero in on identified weaknesses.

c. Allows the unit to practice the selected critical parts of a mission before practicing the entire mission.

d. Saves time by providing a majority of the information needed to develop a vehicle for training.

e. Includes personnel and equipment safety procedures to support effective training of missions and collective tasks.

4-4. FTX. The FTX provides a training method for the battalion to train an entire mission. It provides a logical sequence for performance of tasks previously trained in STXs.

4-5. Simulation.

a.   First Battle and Army Training Battle Simulation System (ARTBASS). The First Battle: Battalion through corps game and the computer-driven ARTBASS are simulators that allow the battalion to execute a plan during a MAPEX or CPX. These simulations allow battalion commanders and staffs to—

(1) Practice emerging tactical war doctrine.

(2) Realize time-movement space factors.

(3) Task-organize and maneuver formations.

(4) Integrate combined arms assets.

(5) Supply and sustain assigned forces.

(6) Seek and use intelligence.

(7) Use terrain properly.

(8) Practice realistic warfare in a CPX environment.

b. Simulation network (SIMNET). SIMNET uses multiple full-crew interactive simulators to conduct large exercises simultaneously. The simulators permit real-time tactical training in a simulated combat environment with live forces up to battalion/battalion size, opposing one another in free play. Crews look at a computer-generated visual scene from their own perspective and interact in real time with an integrated OPFOR. The systems can be integrated over long distances. SIMNET can support battalion CPXs or FTXs without the high cost and overhead those exercises entail. The quality of the simulation does not compare with training in the field, but it does provide valuable training in command and control and operations planning. There is limited distribution of SIMNET facilities.

c.   Close combat tactical trainer (CCTT). The CCTT is the enhanced follow-on to the SIMNET system. The trainer will consist of simulated tank and fighting vehicle compartments for the full crew interconnected as platoons, company teams, and task forces. Although primarily designed for tactical

training, the CCTT will also contribute to the combat table program by training fire control and distribution skills and some of the tasks found in the tactical tables.

d. Janus Army (Janus A). This microcomputer-based, two-sided, interactive combat simulation model employs a dynamic graphical representation to simulate force-on-force engagements. Janus A focuses on individual fighting system engagements and assessments, with aggregation capability up to company-size elements. Command and control of the individual systems can be exercised, though simulation of CS and CSS is limited. Janus A trains NCOs and officer leaders at the platoon and company level in an educational setting. Simulation supports training of tactical leadership skills and is excellent for evaluating OPORDs and battle synchronization. Leaders can experiment and receive immediate, individual feedback. It is relatively easy to set up an exercise, but setup requires approximately 8 hours. A typical exercise takes approximately 4 hours, followed by an AAR lasting about an hour and a half.

e. Brigade and Battalion Simulation (BBS). This microcomputer-based simulation system trains officers and NCO leaders at brigade or battalion levels in all facets of combat, combat support, and combat service support operations in a CPX or STAFFEX mode. The full spectrum of command and control procedures can be exercised and objectively evaluated. This simulation is good for building effective teams, coordinating tasks, refining and standardizing processes, and receiving feedback through normal SOP reports. Setup is relatively easy, but it requires approximately 8 hours. An exercise requires from 2 to 8 hours to run. Development of a standardized, automated AAR has not been completed, but it is estimated that the AAR will take about the same time as for Janus A (1.5 hours).

4-6. Evaluation.

a. It is not enough to have an O/C assigned to an exercise. There must also be an evaluation plan used along with the T&EOs. A good evaluation plan requires that the chief O/C anticipate the critical events in the exercise, when and where these critical events will occur, and things the O/C should look for on the spot.

b. Above all, evaluators must be both tactically and technically proficient. Not all actions that occur during an exercise can be evaluated simply by following the T&EO like a checklist. The O/C must use professional judgment in interpreting and applying T&EO standards to a given situation with consideration given to the factors of METT-TC. The effectiveness of suppressive fire, for example, must be seen through professional eyes. The chief O/C anticipates what will happen and where it will happen then directs specific O/Cs to be on the spot to make the evaluation. He also provides them guidance in the form of remarks or essential elements of information (EEI) as to what they should look for. Table 4-2 shows a suggested format for an evaluation plan.

Table 4-2. Suggested Evaluation Plan Format.

EVENT:	What is expected to happen?
UNIT:	The unit or element involved in the event.
LOCATION:	Where the event will occur.
EVALUATOR:	The evaluator responsible for gathering data.
OBSERVE:	Guidance to the evaluator.

c. Table 4-3 lists some of the events that may be critical to the successful completion of an exercise. This list is only an example and is not intended to be all-inclusive. You should modify and expand the evaluation plan based on your specific training objectives.

Table 4-3. Sample Evaluation Plan.

EVENT:	**Prepare battalion OPORD**
STAFF ELEMENT:	S2
LOCATION:	Main CP
EVALUATOR:	Major Secret
OBSERVE:	Preparation of the event template. Is it readable?
	Is it up-to-date? Is it accurate?
EVENT:	**Prepare battalion OPORD**
STAFF ELEMENT:	S3
LOCATION:	Main CP
EVALUATOR:	LTC Planner
OBSERVE:	Is planning continuous? Does the operation portray a representative picture of the simulated situation?
	Is corps/division guidance properly reflected in the battalion OPORD?
EVENT:	**Prepare battalion OPORD**
STAFF ELEMENT:	S4
LOCATION:	Main CP
EVALUATOR:	Major Shortage
OBSERVE:	Does the logistics estimate accurately portray the unit's situation?
	Is the logistics annex complete?
EVENT:	**Prepare battalion OPORD**
STAFF ELEMENT:	Engineer
LOCATION:	Main CP
EVALUATOR:	LTC Ban Com
OBSERVE:	Is the engineer plan realistic (given time, materiel, and labor available)? Is it coordinated to best support the OPORD?

4-7. <u>Safety</u>. All soldiers and leaders must be safety conscious during the conduct of any training exercise. All evaluators and trainers have the responsibility to ensure that they conduct all training in a safe manner. Prior to the beginning of an exercise, brief all personnel on specific safety measures that they must observe during the exercise. Use T&EO 71-2-C326.44-AD2R, when planning training in risk management procedures and safety analysis.

4-8. <u>Fratricide</u>. Munitions cannot distinguish between friend and foe. All commanders, trainers, and leaders must plan, train, and stress all procedures, which must be followed to avoid fratricide. These procedures include IFF, weapon control status, vehicle and aircraft recognition, corridors, routes, zones, flight levels, and other control measures.

BATTERY

CPX

44-2-E0001

CONDUCT C³I ACTIVITIES

1. Objective. This CPX trains the battery commander, communications personnel, platoon leaders, and key NCOs in the proper method of reacting to reports (incoming/outgoing), establishing communications nets, and disseminating real-time early warning data and command and control procedures to the armored calvary regiment (ACR)/brigade combat team (BCT) and attached elements. This CPX also trains the battery key NCOs to—

   a. Build teamwork and unit cohesion.

   b. Exchange information by proper reporting per tactical SOPs.

   c. Prepare estimates, plans, and orders.

   d. Establish and employ tactical communications.

   e. Displace the battery CP.

   f. Integrate synchronized battlefield operating systems.

2. Interface. This CPX is supported by the following training activities:

   a. Battery.

      Conduct Air Defense Operations (FTX 44-2-E0005).

   b. BSVF/Linebacker Platoon. (ARTEP 44-177-15-MTP).

      Provide Command and Control (STX 44-4-E0001).

   c. Avenger Platoon. (ARTEP 44-117-22-MTP).

      Provide Command and Control (STX 44-4-E0001).

   d. Sensor Platoon. (ARTEP 44-176-15-MTP).

      Provide Command and Control (STX 44-4-E0001).

   e. Additionally, the battery headquarters element must coordinate with—

      (1) Air defense battalion headquarters.

      (2) Army aviation units who are a part of combined arms team to validate IFF and coordinate A^2C^2 and visual identification procedures.

3. Training. Recommended leader training for this CPX is shown below.

   a. The commander makes sure that officers participating in this CPX are proficient on their leader tasks, and—

(1) Allow sufficient time for planning and preparation.

(2) Make sure controllers train players in the conduct of the CPX, before starting the exercise.

(3) Designate training objectives for the CPX.

(4) Schedule training for controllers and players in the following areas:

(a) Purpose and scope of the CPX.

(b) Enemy and friendly situation.

(c) Controller chain of command.

(d) Communications plan.

(e) Controller duties, records, and reports.

(f) Casualty and damage assessment.

(g) Information flow.

(h) Fratricide.

(i) AARs.

b. The following tips for training are recommended:

(1) First, familiarize yourself with the requirements of establishing the battery CP, Task 44-1-2295.44-AD2R (See Chapter 2, FM 3-01.64, and the T&EOs in Table 4-5). These references will give you the basic procedures for preparing the CP for operation, sustaining operations, and processing early warning information.

(2) If possible, conduct a personal reconnaissance of the training area.

(3) During the sand table exercise or TEWT, emphasize—

(a) Rotary, fixed-wing, rotary-wing, UAVs, and CMs likely avenues of approach and forced routes of approach.

(b) The importance of speed in processing early warning information and the battery's responsibility in reporting and alerting the entire ACR/BCT of the low-altitude air threat.

(c) Movement techniques used in occupation of position.

(d) Limited visibility considerations, especially nighttime operations.

(e) Locations of the supported unit CP, platoon CP, Sentinel radar platoon, or other ground-based sensors in the EWBN.

(f) The need for accuracy, speed, and routing to the proper user when decoding and encoding USMTF (JINTACCS) messages.

(g) Communications nets between the battery CP, Sentinel radar, and the firing platoons CP.

(h) Hazards and control measures.

(4) You can use several options to train this CPX.

(a) Conduct the CPX with or without OPFOR.

(b) During the day or night.

(c) In all weather conditions.

(d) In a simulated NBC environment.

(e) Deployed to a field location (preferred method).

(f) In a garrison environment (least costly).

(5) Instructions for this CPX are as follows:

(a) This CPX should be initially trained and rehearsed slowly, on open terrain, with good visibility, and with frequent explanations and critiques by leaders. This simple execution, combined with a thorough prebrief and "chalk talks" constitutes the "crawl" stages of CPX training. The "walk" phase of this CPX entails conducting the training at closer to normal rates, on more difficult terrain, and with stops for explanation and critique only when problems occur (except for planned AARs). The CPX is executed under conditions as close to those expected in combat as possible for the "run" phase. Use full operational security and camouflage, realistic time frames and distances, challenging terrain, and aggressive OPFOR, NBC environment, and movement distances. This exercise is conducted at full speed after conducting building-block training (individual training and drills) to reach the run level of execution.

(b) The T&EO standards for this exercise are in Chapter 5. These standards must be meet to obtain the maximum benefits from training.

(c) This exercise should be conducted on a recurring basis to sustain proficiency; however, since many of the T&EOs in this CPX will be trained in other CPXs, practice may occur through integration rather than retraining the CPX.

Note: All commanders, trainers, and leaders must plan, train, and stress all procedures, which must be followed to avoid fratricide. (See this MTP, Task 44-1-3534.44-AD2R.)
----

c. Training Enhancers. The training enhancers for this CPX are as follows:

(1) Practice good camouflage and concealment.

(2) Record ideas to use when training with platoon CPs to increase communications nets or when reporting procedures efficiency.

(3) Provide training in individual tasks for all battery headquarters personnel.

(4) Conduct the CPX with the ACR/BCT headquarters element, if possible.

(5) ADA officer will brief the ACR/BCT on passive and active air defense measures per FM 44-8.

(6) Establish the communications nets required to operate the battery CP and platoons CPs. This gives personnel actual practice in using the EWBN communications equipment and its inherent problems of setup times, maintenance, and operating procedures.

(7) Plan and conduct communications outages to exercise the development of alternate communications methods and procedures.

(8) Conduct AARs with all elements involved as the exercise progresses.

(9) Prepare input message cards to use in training all battery headquarters operations.

(10) Exercise the EWBN with both live and simulated target information to achieve timeliness and accuracy.

4. General Situation. The general situation is as follows:

a. The battery is organized as the standard ADA battery in the light, airborne, air assault, heavy and corps.

b. Plan that the battery will move under threat of NBC attack or in an active NBC environment.

c. The battery is DS to the ACR/BCT.

d. The tactical situation is such that attack by UAVs, fixed- and rotary-wing, and other aerial hostile platforms is imminent.

e. Table 4-4 shows the estimated time needed for each part of the exercise. Table 4-4 is a suggested scenario.

Table 4-4. Estimated Time Needed to Train CPX 44-2-E0001.

BATTERY STX SCENARIO		
EVENT	**40 ACTION**	**ESTIMATED TIME ALLOCATED**
1.	Pre-exercise preparation and simulation training.	1 hour
2.	Receive ACR/BCT OPORD.	1 hour
3.	Develop ADA Battery OPORD.	1 hour
4.	STARTEX.	1 hour
5.	AAR.	1 hour
6.	Issue battery FRAGO.	1 hour
7.	React to CONTACT AND DETECTION report: • Location. • Enemy type (aircraft, APC, arty, tank). • Time.	1 hour
8.	React to SPOTREP report: • Size of unit. • Nature of enemy activity. • Action of the reporting unit.	1 hour
9.	AAR.	1 hour

ARTEP 44-413-34-MTP

Table 4-4. Estimated Time Needed to Train CPX 44-2-E0001 (continued).

BATTERY CPX SCENARIO		
EVENT	**ACTION**	**ESTIMATED TIME ALLOCATED**
10.	React to CALL FOR FIRE report: • Target type (tank, arty, vehicles, personnel). • Round type. • Priority. • Close air support.	1 hour
11.	AAR.	1 hour
12.	React to MEDEVAC report: • Pickup location. • Time. • Patients. • Frequency. • Call sign.	1 hour
13.	Note: If air MEDEVAC report: • Special equipment. • Number of ambulatory patients. • Number of litters. • Terrain description. • Pickup site markings. • Enemy activity (security) • Known NBC contamination in the pickup area • Patient nationality and status (civilian, military, EPW).	1 hour
14.	React to SITREP report: • Enemy activity. • Friendly location. • Operational vehicles. • Personnel. • Ammunition. • Fuel. • Tactical intent.	1 hour
15.	Exercise ends and final AAR.	3 hours
TOTAL		***17 hours**

*Allow extra time for night training, retraining, NBC conditions, and AARs. First, train events to standards, and then train to meet standards within time limitations. Time required will vary based on METT-TC factors and training proficiency of the battery headquarters sections.

5. Special Situation. The special situation is as follows:

a. The ACR/BCT or ADA battalion commander issues the FRAGO (Figure 4-1).

b. Begin the CPX by conducting RSOP, Task 44-1-9046.44-AD2R. This exercise ends when you have completed the T&EOs listed in Table 4-5 with a GO rating. You should conduct your AARs and critique each other at the end of the exercise. If necessary, repeat the exercise until your battery achieves a "GO" performance rating.

Classification

FRAGMENTARY ORDER_____

References: (Mandatory) Reference the order being modified.

Time Zone Used Throughout the Order: (Optional)

   1. SITUATION. (Mandatory) Include any changes to the existing order.

   2. MISSION.   (Mandatory) List new mission.

   3. EXECUTION.

        Intent: (Optional)

        a. Concept of operations. (Mandatory)

        b. Tasks to subordinate units. (Mandatory)

        c.   Coordinating Instructions.   (Mandatory) Include statement, "Current overlay remains in effect" or "See change 1 to Annex C, Operations Overlay," or issue a new overlay.

   4.   SERVICE SUPPORT. Include any changes to existing order or the statement, "No change to OPORD."

   5.   COMMAND AND SIGNAL. Include any changes to existing order or the statement, "No change to OPORD."

ACKNOWLEDGE: (Mandatory)

                                                                NAME (Commander's last name)
                                                                RANK (Commander's rank)
OFFICIAL: (Optional)
ANNEXES: (Optional)
DISTRIBUTION: (Optional)

Classification

Figure 4-1. Sample FRAGO for CPX 44-2-E0001.

6. Support Requirements. The support requirements for this CPX include the following:

   a. Minimum Trainers and Evaluators. The battery commander, who is the trainer and evaluator, conducts this exercise. If using OPFOR, additional evaluators and/or controllers are necessary.

   b. Vehicles and Communications. Those vehicles and communications equipment organic to the battery headquarters are required.

    c. General Purpose Items. Those items such as office supplies, map overlays, grease pencils, message and journal logs, maps, OPORD, report forms, unit SOPs, and appropriated reference material are required.

    d. Maneuver Area. An area of 5X5^2 km is recommended.

    e. Other Requirements. Additional requirements are as follows:

        (1) Equipment to replicate the TOC of the next higher element.

        (2) Equipment necessary to identify participants and provide security for the CP.

7. T&EO Sequence. Table 4-5 lists the T&EOs (found in Chapter 5) that the battery commander uses in training and evaluating this CPX.

Table 4-5. T&EOs for CPX 44-2-E0001.

T&EO SEQUENCE AND TASK TITLE	TASK NUMBER
CONDUCT RSOP	44-1-9046.44-AD2R
MAINTAIN OPERATIONS SECURITY	71-2-C332.44-AD2R
CONDUCT TROOP LEADING PROCEDURES	44-2-2294. 44-AD2R
PREPARE FOR OPERATIONS UNDER NBC CONDITIONS	03-3-C201.44-AD2R
CONDUCT TACTICAL ROAD MARCH	07-2-1303.44-AD2R
ESTABLISH THE BATTERY CP	44-1-2295.44-AD2R
OCCUPY ASSEMBLY AREA	07-2-1136.44-AD2R
DEVELOP IPB	44-4-2261. 44-AD2R
DEVELOP AN EARLY WARNING PLAN	44-4-5102.44-AD2R
PLAN AIR DEFENSE	44-1-3534.44-AD2R
ESTABLISH LIAISON TEAM	44-5-2190.44-AD2R
DEVELOP THE ADA ESTIMATE AND ANNEX	44-4-5139.44-AD2R
PROVIDE EARLY WARNING	44-5-0003.44-AD2R
PROVIDE IMPROVED HIGH FREQUENCY RADIO (IHFR) COMMUNICATIONS AN/GRC-193A/213 AND AN/PRC-104A	11-5-0079.44-AD2R
ESTABLISH PLATFORM WITH APPLIQUE, PRECISION LIGHTWEIGHT GPS RECEIVER (PLGR) AND SINCGARS SYSTEM IMPROVEMENT PROGRAM (SIP)	11-5-0201.44-AD2R
ESTABLISH A SINCGARS FREQUENCY HOPPING NET	11-5-1102.44-AD2R
TAKE ACTIVE COMBINED ARMS AD MEASURES AGAINST HOSTILE AERIAL PLATFORMS	44-1-C221.44-AD2R
USE PASSIVE AIR DEFENSE MEASURES	44-1-C220.44-AD2R
PROVIDE COMMAND AND CONTROL	44-1-2187.44-AD2R
SUSTAIN AIR DEFENSE OPERATIONS	44-1-1045.44-AD2R
COORDINATE AIR DEFENSE	44-1-5137.44-AD2R
ADJUST AIR DEFENSE COVERAGE	44-4-5143.44-AD2R

BATTERY

STX

44-2-E0002

PLAN AND COORDINATE ADA FOR A BREACHING OPERATION

1. Objective. This STX trains the battery commander, his platoon leaders, and NCOs in planning and coordinating AD for the ACR/BCT. This STX is designed as a free-play, force-on-force exercise that provides a flexible training vehicle for training objectives. The battery commander should modify the sequence of events through his selection of supporting events to meet his specific training objectives.

2. Interface. This STX supports the following training activities:

   a. Battery.

      Plan and Coordinate ADA for a Static Asset (STX 44-2-E0003).

   b. BSFV/Linebacker Platoon (ARTEP 44-177-15-MTP).

       Provide ADA During TF Breaching Operations (STX 44-3-E0002).

   c. Stinger Platoon (ARTEP 4-117-11-MTP).

       Provide ADA During Breaching (STX 44-3-E0004).

   e. Avenger Platoon (ARTEP 44-117-22-MTP).

       Provide ADA During Breaching (STX 44-3-E0004).

3. Training. Recommended leader training for this STX is shown below.

    a. Leaders for this STX may use any or all of the following methods:

        (1) Conduct a terrain board exercise using a duplicate of the area where they will conduct the STX.

        (2) Prepare for this exercise by conducting the CPX first and making sure that all collective task standards listed in the CPX are given a GO rating.

        (3) Conduct classes on IPB (Task 44-4-2261.44-AD2R).

    b. The following tips for leader training are recommended:

        (1) Make sure all your subordinate leaders know the requirement for conducting air defense operations per FMs 44-43, 44-44, and 3-01.64.

        (2) Conduct a personal reconnaissance of the maneuver area, if possible.

        (3) You can use several options to train this STX.

           (a) Conduct the STX with or without OPFOR.

           (b) During the day or night.

(c) In all weather conditions.

(d) With the combined arms team.

(e) With a mix of ADA systems (that is Linebacker, Avenger, Stinger, Sentinel).

(f) In a simulated NBC environment.

(4) Instructions for this STX are as follows:

(a) This STX should be initially trained and rehearsed slowly, on open terrain, with good visibility, and with frequent explanations and critiques by leaders. This simple execution, combined with a thorough prebrief and "chalk talks" constitutes the "crawl" stages of STX training. The "walk" phase of this STX entails conducting the training at closer to normal rates, on more difficult terrain, and with stops for explanation and critique only when problems occur (except for planned AARs). The STX is executed under conditions as close to those expected in combat as possible for the "run" phase. Use full operational security and camouflage, realistic time frames and distances, challenging terrain, and aggressive OPFOR, NBC environment, and movement distances. This exercise is conducted at full speed after conducting building-block training (individual training, drills) to reach the run level of execution.

(b) The T&EO standards for this exercise are in Chapter 5. These standards must be met to obtain the maximum benefits from training.

(c) This exercise should be conducted on a recurring basis to sustain proficiency; however, since many of the T&EOs in this STX will be trained in other STXs, practice may occur through integration rather than retraining the STX.

Note: All commanders, trainers, and leaders must plan, train, and stress all procedures, which must be followed to avoid fratricide. (See this MTP, Task 44-1-3534.44-AD2R.)

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c. Training Enhancers. The training enhancers for this STX are as follows:

(1) The training matrix in Chapter 2 shows the collective tasks that your battery must master to perform this STX.

(2) Give battery personnel a time limit to plan and coordinate air defense for the task force.

(3) Adjust the plan to the tactical situation.

(4) Practice good camouflage and concealment.

(5) Have battery personnel simulate engagements and submit all reports to battery CP.

(6) Practice MOPP with the advice from medical personnel.

(7) ADA officer will brief the ACR/BCT on passive and active air defense measures per FM 44-8.

4. General Situation. The general situation is as follows:

a. The tactical situation is such that attack by UAVs, fixed-wing, rotary-wing, CMs, and other aerial hostile platforms is imminent.

b. OPFOR has both chemical and nuclear capability and always employs chemical agents to cover their retrograde operations.

c. The battery headquarters is collocated with the ACR/BCT CP. The battery commander has briefed the battery on the mission.

d. The battery is DS to the ACR/BCT.

e. Table 4-6 shows the estimated time needed for each part of the exercise. Table 4-6 is a suggested scenario.

Table 4-6. Estimated Time Needed to Train STX 44-2-E0002.

BATTERY STX SCENARIO		
EVENT	ACTION	ESTIMATED TIME ALLOCATED
1.	Receive WO.	8 hours before starting time
2.	Issue WO.	1 hour
3.	Conduct recon.	Per OPORD
4.	Execute the STX.	Per OPORD
5.	Conduct AAR.	1 hour
6.	Establish battery CP.	1 hour
7.	Provide ADA to the ACR/BCT.	Throughout STX
8.	Occupy assembly area and implement sleep plan.	Per TSOP
9.	Conduct sustainment activities.	Throughout STX
10.	Final AAR.	1 hour
TOTAL		*12+ hours
*Allow extra time for night training, retraining, NBC conditions, and AARs. First, train events to standards, and then train to meet standards within time limitations. Time required will vary based on METT-TC factors and training proficiency of the battery headquarters sections.		

5. <u>Special Situation</u>. The special situation is as follows:

   a. The ACR/BCT or the ADA battalion commander issues the FRAGO (Figure 4-2).

_____
Classification

FRAGMENTARY ORDER_____

References: (Mandatory) Reference the order being modified.

Time Zone Used Throughout the Order: (Optional)

   1. SITUATION. (Mandatory) Include any changes to the existing order.

   2. MISSION.   (Mandatory) List new mission.

   3. EXECUTION.

      Intent: (Optional)

         a.   Concept of operations. (Mandatory)

         b.   Tasks to subordinate units. (Mandatory)

         c.   Coordinating Instructions.   (Mandatory) Include statement, "Current overlay remains in effect" or "See Change 1 to Annex C, Operations Overlay," or issue a new overlay.

      4.   SERVICE SUPPORT. Include any changes to existing order or the statement, "No change to OPORD."

      5.   COMMAND AND SIGNAL. Include any changes to existing order or the statement, "No change to OPORD."

ACKNOWLEDGE: (Mandatory)

                                        NAME (Commander's last name)
                                         RANK   (Commander's rank)
OFFICIAL: (Optional)
ANNEXES: (Optional)
DISTRIBUTION: (Optional)

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Classification

Figure 4-2. Sample FRAGO for STX 44-2-E0002.

   b. Issue warning order and coordinate with supported unit.

   c. You now alert your battery officers and key NCOs and start your map reconnaissance. This exercise ends when your battery headquarters completes the T&EOs listed in Table 4-8 with a GO rating.

   d. Conduct your AAR after the exercise and, if necessary, repeat the exercise or parts thereof as needed to attain proficiency.

6. <u>Support Requirements</u>. The support requirements for this STX include the following:

a. Minimum Trainers and Evaluators. The battery commander, who is the trainer and evaluator, conducts this exercise. If using OPFOR, additional evaluators and/or controllers are necessary.

b. Vehicles and Communications. Those vehicles and communications equipment organic to the battery headquarters are required.

c. Opposing Force. The OPFOR ground force should at least be a reinforced squad.

d. Maneuver Area. An area of 5X5^2 km is recommended.

e. Consolidated Support Requirements. See Table 4-7.

Table 4-7. Consolidated Support Requirements for STX 44-2-E0002.

AMMUNITION	DODIC	BASIC LOAD
5.56-mm, blank M16 rifle	1305-AO8O	40 rds
5.56-mm, blank M249 (AR)	1305-AO8O	300 rds
.50-caliber blank HB M2 mg	A111-A598	100 rds
.50-caliber blank M3P mg	A111-A598	100 rds
PYROTECHNICS	**DODIC**	**ANNUAL REQUIREMENTS**
Gren smk CS	1330-G963	28
Gren smk HC	1330-G960	48
Gren smk grn	1330-G940	16
Gren smk yel	1330-G945	48
Gren smk red	1330-G950	56
Gren smk viol	1330-G955	28
Smk pot gnd M4A2	1330-K867	20
Sig illum green para	1370-L305	8
Sig illum red para	1370-L306	28
Sig illum white para	1370-L307	20
Sig illum red star	1370-L311	8
Sig illum white star	1370-L312	20
Sig illum green star	1370-L314	20
Flare surface trip	1370-L495	28
Sim proj grnd burst	1370-L594	84
Sim arty gun flash	1370-L596	20
Sim booby trap flash	1370-L598	40
Sim booby trap illum	1370-L599	28
Sim booby trap whis	1370-L600	28
Sim hand gren	1370-L601	56
OTHER ITEMS	**REQUIREMENTS**	
OPFOR (air) aerial platforms (rotary-wing, fixed-wing, UAVs) (ground) Special Operation Forces	As Needed As Needed	
Controller guns	As Needed	
Maps: Military 1:50,000 Scale	As Needed	
MILES Equipment	As Needed	

Table 4-7. Consolidated Support Requirements for STX 44-2-E0002 (continued).

Notes:
  ● The annual pyrotechnics requirement figures represent the pyrotechnic allocation for a battery training year. Battery commander determines how much to use during each training exercise to meet his training objectives. However, he **cannot** exceed his annual allotment during the training year. OPFOR requirements are included in above table.
  ● MILES Equipment. The battery commander will request and use all MILES equipment authorized including OPFOR MILES equipment.

7. T&EO Sequence. Table 4-8 lists the T&EOs (found in Chapter 5) which the O/Cs use in evaluating STX 44-2-E0002.

Table 4-8. T&EOs for STX 44-2-E0002.

T&EO SEQUENCE AND TASK TITLE	TASK NUMBER
PROVIDE COMMAND AND CONTROL	44-1-2187.44-AD2R
CONDUCT TROOP-LEADING PROCEDURES	44-2-2294.44-AD2R
DEVELOP IPB	44-4-2261.44-AD2R
MAINTAIN OPERATIONS SECURITY	71-2-C332.44-AD2R
CONDUCT RSOP	44-1-9046.44-AD2R
CONDUCT TACTICAL ROAD MARCH	07-2-1303.44-AD2R
PREPARE FOR A FRIENDLY NUCLEAR STRIKE	03-3-C205.44-AD2R
PREPARE FOR OPERATIONS UNDER NBC CONDITIONS	03-3-C201.44-AD2R
REACT TO SMOKE OPERATIONS	03-3-C209.44-AD2R
PREPARE FOR NUCLEAR ATTACK	03-3-C206.44-AD2R
CONDUCT THOROUGH DECONTAMINATION OPERATIONS	03-2-C312.44-AD2R
RESPOND TO A CHEMICAL ATTACK	03-3-C203.44-AD2R
CONDUCT A CHEMICAL SURVEY	03-2-C310.44-AD2R
PREPARE FOR A CHEMICAL ATTACK	03-3-C202.44-AD2R
CONDUCT CHEMICAL RECONNAISSANCE	03-3-C225.44-AD2R
CROSS A CHEMICALLY CONTAMINATED AREA	03-3-C226.44-AD2R
ESTABLISH THE BATTERY CP	44-1-2295.44-AD2R
PROVIDE IMPROVED HIGH FREQUENCY RADIO (IHFR) COMMUNICATIONS AN/GRC-193A/213 AND AN/PRC-104A	11-5-0079.44-AD2R
ESTABLISH PLATFORM WITH APPLIQUE, PRECISION LIGHTWEIGHT GPS RECEIVER (PLGR) AND SINCGARS SYSTEM IMPROVEMENT PROGRAM (SIP)	11-5-0201.44-AD2R
ESTABLISH A SINCGARS FREQUENCY HOPPING NET	11-5-1102.44-AD2R
DEVELOP THE ADA ESTIMATE AND ANNEX	44-4-5139.44-AD2R
ESTABLISH LIAISON TEAM	44-5-2190.44-AD2R
PLAN AIR DEFENSE	44-1-3534.44-AD2R
DEVELOP AN EARLY WARNING PLAN	44-4-5102.44-AD2R
TAKE ACTIVE COMBINED ARMS AD MEASURES AGAINST HOSTILE AERIAL PLATFORMS	44-1-C221.44-AD2R
USE PASSIVE AIR DEFENSE MEASURES	44-1-C220.44-AD2R
TREAT CASUALTIES	08-2-0003.44-AD2R

Table 4-8. T&EOs for STX 44-2-E0002 (continued).

T&EO SEQUENCE AND TASK TITLE	TASK NUMBER
TRANSPORT CASUALTIES	08-2-C316.44-AD2R
CONDUCT BATTLEFIELD STRESS REDUCTION AND PREVENTION PROCEDURES	08-2-R303.44-AD2R
PERFORM FIELD SANITATION FUNCTIONS	08-2-R315.44-AD2R
PROVIDE UNIT SUPPLY SUPPORT	10-2-C320.44-AD2R
PLAN AND CONDUCT UNIT AIRLIFT	44-2-7230.44-AD2R

BATTERY

STX

44-2-E0003

PLAN AND COORDINATE ADA FOR A STATIC ASSET

1. <u>Objective</u>. This STX trains the battery commander, his platoon leaders, and key NCOs in planning and coordinating ADA for a static asset. This STX is designed as a free-play, force-on-force exercise that provides a flexible training vehicle for training objectives. The battery commander should modify the sequence of events through his selection of supporting events to meet his specific training objectives.

2. <u>Interface</u>. The following training activities support this STX:

   a. Battery.

      (1) Conduct C³I Activities (CPX 44-2-E0001).

      (2) Sustain Air Defense Operations (STX 44-2-E0004).

   b. Avenger Platoon (ARTEP 44-117-22-MTP).

         Provide ADA for Static Asset (STX 44-3-E0002).

   c. BSFV/Linebacker Platoon (ARTEP 44-177-15-MTP).

         Provide ADA During TF Movement to Contact (STX 44-3-E0003)

   d. Stinger Platoon (ARTEP 44-117-11-MTP).

         Provide ADA for Static Asset (STX 44-3-E0002)

3. <u>Training</u>. Recommended leader training for this STX is shown below.

   a. Leaders for this STX may use any or all of the following methods:

      (1) Conduct a terrain board exercise using a duplicate of the area where they will conduct the STX.

      (2) Prepare for this exercise by conducting STX 44-2-E0001 first and making sure that all collective task standards listed in the STX are given a GO rating.

      (3) Conduct classes on IPB per FMs 34-130 and 3-01.64.

   b. The following tips for leader training are recommended:

      (1) Make sure all your platoon leaders and key NCOs know the requirement for conducting air defense operations per FMs 44-43, 44-44, and 44-100.

      (2) Conduct a personal reconnaissance of the maneuver area, if possible.

      (3) You can use several options to train this STX.

         (a) Conduct the STX with or without OPFOR.

         (b) During the day or night.

(c) In all weather conditions.

(d) With the combined arms team.

(e) With a mix of ADA systems (that is Linebacker, Stinger, Sentinel, and Avenger).

(f) In a simulated NBC environment.

(5) Instruction for this STX is as follows:

(a) This STX should be initially trained and rehearsed slowly, on open terrain, with good visibility, and with frequent explanations and critiques by leaders. This simple execution, combined with a thorough prebrief and "chalk talks" constitutes the "crawl" stages of STX training. The "walk" phase of this STX entails conducting the training at closer to normal rates, on more difficult terrain, and with stops for explanation and critique only when problems occur (except for planned AARs). The STX is executed under conditions as close to those expected in combat as possible for the "run" phase. Use full operational security and camouflage, realistic time frames and distances, challenging terrain, and aggressive OPFOR, NBC environment, and movement distances. This exercise is conducted at full speed after conducting building-block training (individual training and drills) to reach the run level of execution.

(b) The T&EO standards for this exercise are in Chapter 5. These standards must be met to obtain the maximum benefits from training.

(c) This exercise should be conducted on a recurring basis to sustain proficiency; however, since many of the T&EOs in this STX will be trained in other STXs, practice may occur through integration rather than retraining the STX.

Note: All commanders, trainers, and leaders must plan, train, and stress all procedures, which must be followed to avoid fratricide. (See this MTP, Task 44-1-3534.44-AD2R.)
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c. Training Enhancers. The training enhancers for this STX are as follows:

(1) The training matrix in Chapter 2 shows the collective tasks that your battery must master to perform this STX.

(2) Give battery personnel a time limit to plan and coordinate air defense for the task force.

(3) Adjust the plan to the tactical situation.

(4) Practice good camouflage and concealment.

(5) Have battery personnel simulate engagements and submit all reports to battery CP.

(6) Practice MOPP with the advice from medical personnel.

(7) ADA officer will brief the ACR/BCT on passive and active air defense measures per FM 44-8.

4. General Situation. The general situation is as follows:

a. The tactical situation is such that attack by UAVs, fixed-wing, rotary-wing, CMs, and other aerial hostile platforms is imminent.

b. OPFOR has both chemical and nuclear capability and always employs chemical agents to cover their retrograde operations.

c. The battery headquarters is collocated with the ACR TOC. The battery commander has briefed the battery on the mission.

d. The battery is DS to the ACR/BCT.

e. Table 4-9 shows the estimated time needed for each part of the exercise. Table 4-9 is a suggested scenario.

Table 4-9. Estimated Time Needed to Train STX 44-2-E0003.

BATTERY STX SCENARIO		
EVENT	ACTION	ESTIMATED TIME ALLOCATED
1.	Receive WO.	8 hours before starting exercise
2.	Issue WO.	1 hour
3.	Conduct RSOP.	Per OPORD
4.	Execute the STX.	Per OPORD
5.	Conduct AAR.	1 hour
6.	Establish battery CP.	1 hour
7.	Provide AD to ACR/BCT during movement to contact.	Throughout STX
8.	Occupy NDP and implement sleep plan.	Per TSOP
9.	Conduct sustainment activities.	Throughout STX
10.	Conduct final AAR.	1 hour
TOTAL		***12+ hours**

*Allow extra time for night training, retraining, NBC conditions, and AARs. First, train events to standards, and then train to meet standards within time limitations. Time required will vary based on METT-TC factors and training proficiency of the battery headquarters sections.

5. <u>Special Situation</u>. The special situation is as follows:

a. The ACR/BCT (or ADA battalion commander) issues the FRAGO (Figure 4-3).

b. Issue warning order and coordinate with ACR/BCT unit.

c. You now alert your battery officers and key NCOs and start your map reconnaissance. This exercise ends when your battery headquarters completes all T&EOs listed in Table 4-11 with a GO rating. Conduct your AAR after the exercise and, if necessary, repeat the exercise or parts thereof as needed to attain proficiency.

_____
Classification

FRAGMENTARY ORDER_____

References: (Mandatory) Reference the order being modified.

Time Zone Used Throughout the Order: (Optional)

1. SITUATION. (Mandatory) Include any changes to the existing order.

2. MISSION.   (Mandatory) List new mission.

3. EXECUTION.

   Intent: (Optional)

   a. Concept of operations. (Mandatory)

   b. Tasks to subordinate units. (Mandatory)

   c. Coordinating Instructions. (Mandatory) Include statement, "Current overlay remains in effect" or "See Change 1 to Annex C, Operations Overlay," or issue a new overlay.

4. SERVICE SUPPORT. Include any changes to existing order or the statement, "No change to OPORD."

5. COMMAND AND SIGNAL. Include any changes to existing order or the statement, "No change to OPORD."

ACKNOWLEDGE: (Mandatory)

                        NAME (Commander's last name)
                         RANK (Commander's rank)

OFFICIAL: (Optional)
ANNEXES: (Optional)
DISTRIBUTION: (Optional)

_____
Classification

Figure 4-3. Sample FRAGO for STX 44-2-E0003.

6. <u>Support Requirements</u>. The support requirements for this STX include the following:

   a. Minimum Trainers and Evaluators. The battery commander, who is the trainer and evaluator, conducts this exercise. If using OPFOR, additional evaluators and/or controllers are necessary.

   b. Vehicles and Communications. Those vehicles and communications equipment organic to the battery headquarters are required.

   c. Maneuver Area. An area of $5X5^2$ km is recommended.

   d. Consolidated Support Requirements. See Table 4-10.

Table 4-10. Consolidated Support Requirements for STX 44-2-E0003.

AMMUNITION	DODIC	BASIC LOAD
5.56-mm, blank M16 rifle	1305-AO8O	40 rds
5.56-mm, blank M249 (AR)	1305-AO8O	300 rds
.50-caliber blank HB M2 mg	A111.A598	100 rds
.50-caliber blank M3P mg	A111.A598	100 rds
PYROTECHNICS	**DODIC**	**ANNUAL REQUIREMENTS**
Gren smk CS	1330-G963	28
Gren smk HC	1330-G960	48
Gren smk grn	1330-G940	16
Gren smk yel	1330-G945	48
Gren smk red	1330-G950	56
Gren smk viol	1330-G955	28
Smk pot gnd M4A2	1330-K867	20
Sig illum green para	1370-L305	8
Sig illum red para	1370-L306	28
Sig illum white para	1370-L307	20
Sig illum red star	1370-L311	8
Sig illum white star	1370-L312	20
Sig illum green star	1370-L314	20
Flare surface trip	1370-L495	28
Sim proj grnd burst	1370-L594	84
Sim arty gun flash	1370-L596	20
Sim booby trap flash	1370-L598	40
Sim booby trap illum	1370-L599	28
Sim booby trap whis	1370-L600	28
Sim hand gren	1370-L601	56
OTHER ITEMS		**REQUIREMENTS**
OPFOR (air) aerial platforms (rotary-wing, fixed-wing, UAVs) (ground) Special Operation Forces		As Needed As Needed
Controller guns		As Needed
Maps: Military 1:50,000 Scale		As Needed
MILES Equipment		As Needed

Notes:
- The annual pyrotechnics requirement figures represent the pyrotechnic allocation for a battery training year. Battery commander determines how much to use during each training exercise to meet his training objectives. However, he cannot exceed his annual allotment during the training year. OPFOR requirements are included in above table.
- MILES Equipment. The battery commander will request and use all MILES equipment authorized including OPFOR MILES equipment.

7. T&EO Sequence. Table 4-11 lists the T&EOs (found in Chapter 5) which the O/Cs use in evaluating STX 44-2-E0003.

Table 4-11. T&EOs for STX 44-2-E0003.

T&EO SEQUENCE AND TASK TITLE	TASK NUMBER
CONDUCT RSOP	44-1-9046.44-AD2R
OCCUPY ASSEMBLY AREA	07-2-1136.44-AD2R
ESTABLISH THE BATTERY CP	44-1-2295.44-AD2R
ESTABLISH A SINCGARS FREQUENCY HOPPING NET	11-5-1102.44-AD2R
PROVIDE IMPROVED HIGH FRQUENCY RADIO (IHFR) COMMUNICATIONS AN/GRC-193A/213 AND AN/PRC-104A	11-5-0079.44-AD2R
ESTABLISH PLATFORM WITH APPLIQUE, PRECISION LIGHTWEIGHT GPS RECEIVER (PLGR) AND SINCGARS SYSTEM IMPROVEMENT PROGRAM (SIP)	11-5-0201.44-AD2R
DEVELOP AN EARLY WARNING PLAN	44-4-5102.44-AD2R
PLAN AIR DEFENSE	44-1-3534.44-AD2R
ESTABLISH LIAISON TEAM	44-5-2190.44-AD2R
PREPARE FOR A FRIENDLY NUCLEAR STRIKE	03-3-C205.44-AD2R
PREPARE FOR OPERATIONS UNDER NBC CONDITIONS	03-3-C201.44-AD2R
REACT TO SMOKE OPERATIONS	03-3-C209.44-AD2R
PREPARE FOR A NUCLEAR ATTACK	03-3-C206.44-AD2R
CONDUCT THOROUGH DECONTAMINATION OPERATIONS	03-2-C312.44-AD2R
RESPOND TO A CHEMICAL ATTACK	03-3-C203.44-AD2R
PREPARE FOR A CHEMICAL ATTACK	03-3-C202.44-AD2R
CONDUCT CHEMICAL RECONNAISSANCE	03-3-C225.44-AD2R
TAKE ACTIVE COMBINED ARMS AD MEASURES AGAINST HOSTILE AERIAL PLATFORMS	44-1-C221.44-AD2R
TREAT CASUALTIES	08-2-0003.44-AD2R
TRANSPORT CASUALTIES	08-2-C316.44-AD2R
PROVIDE COMMAND AND CONTROL	44-1-2187.44-AD2R
PERFORM RISK MANAGEMENT PROCEDURES	71-2-C326.44-AD2R

BATTERY

STX

44-2-E0004

SUSTAIN AIR DEFENSE OPERATIONS

1. Objective. This STX trains the battery commander and key NCOs in conducting sustaining operations.
This STX is designed as a free-play, force-on-force exercise that provides a flexible training vehicle for
training objectives. The battery commander should modify the sequence of events through his selection
of supporting events to meet his specific training objectives. This STX also trains the battery commander
and key NCOs to—

   a. Supervise and manage battery sustaining operations.

   b. Supervise battery consolidation and reorganization.

   c. Request personnel services support from the battery or supported unit.

   d. Supervise battery PMCS on all battery vehicles and equipment.

   e. Prepare battery for next mission.

2. Interface. This STX supports the following battery training activities:

   a. Conduct C^{3}I Activities (STX 44-2-E0001).

   b. Plan and Coordinate ADA for a Breaching Operation (STX 44-2-E0002).

   c. Plan and Coordinate ADA for a Static Asset (STX 44-2-E0003).

   d. Conduct Air Defense Operations (FTX 44-2-E0005).

3. Training.

   a. Guidance. The trainer should review the individual, leader, and collective tasks and drills that are
performed during the STX. Determine which tasks may require initial or refresher training.

      (1) Individual training. Individual training should be on the soldier's manual tasks required to
support this STX. The individual tasks at the end of each training and evaluation outline in Chapter 5
should be used as a source. Individual training is based on the tasks, conditions, and standards in STPs
44-14R14-SM-TG and 44-14S14-SM-TG, and the soldier's common tasks manual. Training should be
hands-on and performance-oriented. During training, leaders assess soldier proficiency by evaluating
task performance against the soldier's manual standards, and provide feedback to the soldiers. The
individual training and evaluation program includes things such as common task test and commander's
evaluations.

      (2) Collective training. Collective training should be on the collective tasks required for the STX.
Battle drills and STXs are key tools for squads and platoons collective training. As with individual tasks,
drills should be trained to standards with feedback provided, as required. Collective tasks that can
support this STX and mission, as well as other missions, are in the Collective Task Number and Title to
STX matrix in Chapter 2.

      (3) Leader training. Leader training should be on leader tasks required for the exercise as well as
the individual tasks. One or all of the following methods trains in the same manner as stated in paragraph

3a or leader tasks. When materials and facilities are not available, innovation is the answer. Do not limit training to methods listed.

    (a) Classroom discussion on how to plan the exercise and how to implement unit SOP. (See FM 25-4, Chapter 2.)

    (b) Map reconnaissance that assists in terrain analysis and wargaming. (Use map of the area where the STX is to be conducted.)

    (c) Terrain board or sand table exercises that permit simulations or miniatures to be used to gain three-dimensional perspectives in wargaming and/or rehearsing the exercise. (Model terrain boards or sand table to match the terrain where the exercise will be conducted.)

    b. Training Tips. The following training tips are recommended:

    (1) First, you and all your NCOs must know the requirements for sustaining air defense operations, T&EO 44-1-1045.44-AD2R.

    (2) Review the standards for all the T&EOs and drills that support this STX.

    (3) You can use several options to train this STX.

    (a) With blank ammunition. The use of blank ammunition is encouraged to add realism to the exercise.

    (b) With or without MILES.

    (c) In all weather conditions.

    (d) During the day or night.

    (e) With or without NBC.

Note: All commanders, trainers, and leaders must plan, train, and stress all procedures, which must be followed to avoid fratricide. (See this MTP, Task 44-1-3534.44-AD2R.)

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    (4) Instructions for this STX are as follows:

    (a) This STX should be initially trained and rehearsed slowly, on open terrain, with good visibility, and with frequent explanations and critiques by leaders. This simple execution, combined with a thorough pre-brief and "chalk talks" constitutes the "crawl" stage of STX training. The "walk" phase of this STX entails conducting training at close to normal rates, on more difficult terrain, and with stops for explanation and critique only when problems occur (except for planned AARs). The STX is executed under conditions as close to those expected in combat as possible for the "run" phase. Use full operational security and camouflage, realistic time frames and distances, challenging terrain, and aggressive OPFOR, NBC environment, and movement distances. This exercise is conducted at full speed after conducting building-block training to reach the run level of execution.

    (b) The T&EO standards for this STX are in Chapter 5. These standards must be met to obtain the maximum benefits from training.

    (c) This exercise should be conducted on a recurring basis to sustain proficiency; however, since many of the T&EOs in this STX will be trained in other STXs, practice may occur through integration rather than retraining the STX.

(d) Ideally, the OPFOR replicates enemy forces in size and strength to realistically portray threat activities.

(e) At least one O/C should be assigned to control OPFOR activities. The O/C evaluates OPFOR actions, ensures realism, stresses safety, and assesses loss and damage. If the OPFOR is in groups for several simultaneous actions, additional O/Cs are required.

(f) OPFOR units should look and fight like potential enemy forces.

c. Training Enhancers. The training enhancers for this STX are as follows:

(1) The T&EOs at the end of this STX show the collective tasks that must be mastered to perform this critical wartime mission.

(2) Give battery personnel a time limit to plan and backbrief the planning process.

(3) Use all appropriate references when conducting sustaining activities.

(4) Practice good cover and concealment.

(5) Conduct STX in conjunction with higher echelon STX, if possible.

(6) Practice MOPP with the advice from medical personnel.

(7) Make sure that platoon personnel know the requirements for T&EO 44-1-1045.44-AD2R, Sustain Air Defense Operations.

4. General Situation.

a. The tactical situation is such that attack by UAVs, fixed- and rotary-wing, and other aerial hostile platforms is imminent.

b. This exercise begins with the receipt of the OPORD and ends after all T&EOs listed in Table 4-14 are rated GO by the evaluator(s). Conduct your AAR after the exercise and, if necessary, repeat the exercise or parts thereof as needed to attain proficiency.

c. Table 4-12 shows the estimated time needed for each part of the exercise. Table 4-12 is a suggested scenario.

Table 4-12. Estimated Time Needed to Train STX 44-2-E0004.

BATTERY STX SCENARIO		
EVENT	ACTION	ESTIMATED TIME ALLOCATED
1.	Battery is released from mission.	Per OPORD
2.	Issue movement order to key NCOs.	1 hour
3.	Start STX.	Per OPORD
4.	Start troop-leading procedures.	2 hours
5.	AAR.	Per TSOP
6.	Link up with ACR/BCT moving to assembly area.	1 hour
7.	Occupy assembly area X-ray.	1 hour
8.	AAR.	1 hour

Table 4-12. Estimated Time Needed to Train STX 44-2-E0004 (continued).

BATTERY STX SCENARIO		
EVENT	**ACTION**	**ESTIMATED TIME ALLOCATED**
9.	Plan battery CSS operations.	1 hour
10.	Start sustaining operations.	Per OPORD
11.	Maintain security in coordination with ACR/BCT.	Per TSOP
12.	Prepare for next mission.	Per OPORD
13.	AAR.	Per TSOP
14.	End STX.	Per OPORD
TOTAL		***7+hours**

*Allow extra time for night training, retraining, NBC conditions, and AARs. First, train events to standards, and then train to meet standards within time limitations. Time required to train an event will vary based on METT-TC factors and training proficiency of the platoon.

5. <u>Special Situation</u> The special situation is as follows:

    a. The battery commander issues the FRAGO (Figure 4-4).

    b. Issue warning order and coordinate with supported unit.

    c. You now alert your key NCOs and start your map reconnaissance. This exercise ends when your battery completes the T&EOs listed in Table 4-14 with a GO rating. Conduct your AAR after the exercise and, if necessary, repeat the exercise or parts thereof as needed to attain proficiency.

_____
Classification

FRAGMENTARY ORDER_____

References: (Mandatory) Reference the order being modified.

Time Zone Used Throughout the Order: (Optional)

   1. SITUATION. (Mandatory) Include any changes to the existing order.

   2. MISSION. (Mandatory) List new mission.

   3. EXECUTION.

     Intent: (Optional)

     a. Concept of operations. (Mandatory)

     b. Tasks to subordinate units. (Mandatory)

     c. Coordinating Instructions. (Mandatory) Include statement, "Current overlay remains in effect" or "See Change 1 to Annex C, Operations Overlay," or issue a new overlay.

   4. SERVICE SUPPORT. Include any changes to existing order or the statement, "No change to OPORD."

   5. COMMAND AND SIGNAL. Include any changes to existing order or the statement, "No change to OPORD."

ACKNOWLEDGE: (Mandatory)

                                NAME (Commander's last name)
                                RANK (Commander's rank)

OFFICIAL: (Optional)
ANNEXES: (Optional)
DISTRIBUTION: (Optional)

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Classification

Figure 4-4. Sample FRAGO for STX 44-2-E0004.

6. <u>Support Requirements</u>. The support requirements for this STX include the following:

   a. Minimum Trainers/Observer Controllers. The battery commander, who is the trainer and observer, conducts this exercise. If using OPFOR, additional O/Cs are necessary.

   b. Vehicles and Communications. Those vehicles and communications equipment organic to the battery headquarters are required.

   c. General Purpose Items. Those items such as office supplies, map overlays, grease pencils, message journal logs, maps, OPORD, report forms, unit SOPs, and appropriate reference material are required.

   d. Maneuver Area. An area of 5X5^2 km is recommended.

  e. Consolidated support requirements. See Table 4-13.

Table 4-13. Consolidated Support Requirements for STX 44-2-E0004.

AMMUNITION	DODIC	BASIC LOAD
5.56-mm, blank M16 rifle	1305-AO8O	40 rds
5.56-mm, blank M249 (AR)	1305-AO8O	300 rds
.50-caliber blank HB M2 mg	A111.A598	100 rds
rdrb.50-caliber blank M3P mg	A111.A598	100 rds
PYROTECHNICS	**DODIC**	**ANNUAL REQUIREMENTS**
Gren smk CS	1330-G963	28
Gren smk HC	1330-G960	48
Gren smk grn	1330-G940	16
Gren smk yel	1330-G945	48
Gren smk red	1330-G950	56
Gren smk viol	1330-G955	28
Smk pot gnd M4A2	1330-K867	20
Sig illum green para	1370-L305	8
Sig illum red para	1370-L306	28
Sig illum white para	1370-L307	20
Sig illum red star	1370-L311	8
Sig illum white star	1370-L312	20
Sig illum green star	1370-L314	20
Flare surface trip	1370-L495	28
Sim proj grnd burst	1370-L594	84
Sim arty gun flash	1370-L596	20
Sim booby trap flash	1370-L598	40
Sim booby trap illum	1370-L599	28
Sim booby trap whis	1370-L600	28
Sim hand gren	1370-L601	56

Table 4-13. Consolidated Support Requirements for STX 44-2-E0004 (continued).

OTHER ITEMS	REQUIREMENTS
OPFOR (air) aerial platforms (rotary-wing, fixed-wing, UAVs) (ground) Special Operation Forces	As Needed As Needed
Controller guns	As Needed
Maps: Military 1:50,000 Scale	As Needed
MILES Equipment	As Needed

Notes:
  • The annual pyrotechnics requirement figures represent the pyrotechnic allocation for a battery training year. Battery commander determines how much to use during each training exercise to meet his training objectives. However, he <u>cannot</u> exceed his annual allotment during the training year. OPFOR requirements are included in above table.
  • MILES Equipment. The battery commander will request and use all MILES equipment authorized, including OPFOR MILES equipment.

7. <u>T&EO Sequence</u>. Table 4-14 lists the T&EOs (found in Chapter 5) which the battery commander uses in training and evaluating this STX.

Table 4-14. T&EOs for STX 44-2-E0004.

T&EO SEQUENCE AND TASK TITLE	TASK NUMBER
CONDUCT RSOP	44-1-9046.44-AD2R
CONDUCT TACTICAL ROAD MARCH	07-2-1303.44-AD2R
PREPARE FOR OPERATIONS UNDER NBC CONDITIONS	03-3-C201.44-AD2R
PROVIDE COMMAND AND CONTROL	44-1-2187.44-AD2R
CONDUCT TROOP-LEADING PROCEDURES	44-2-2294. 44-AD2R
OCCUPY ASSEMBLY AREA	07-2-1136.44-AD2R
ESTABLISH THE BATTERY CP	44-1-2295.44-AD2R
PREPARE CREW-SERVED WEAPONS FIGHTING POSITIONS	05-5-0302.44-AD2R
PROVIDE IMPROVED HIGH FREQUENCY RADIO (IHFR) COMMUNICATIONS AN/GRC-193A/213 AND AN/PRC-104A	11-5-0079.44-AD2R
ESTABLISH PLATFORM WITH APPLIQUE, PRECISION LIGHTWEIGHT GPS RECEIVER (PLGR) AND SINCGARS SYSTEM IMPROVEMENT PROGRAM (SIP)	11-5-0201.44-AD2R
ESTABLISH A SINCGARS FREQUENCY HOPPING NET	11-5-1102.44-AD2R
PERFORM UNIT LEVEL MAINTENANCE	43-2-C322.44-AD2R
MANAGE UNIT MAINTENANCE OPERATIONS	43-2-C323.44-AD2R
CONDUCT LOGPAC ACTIVITIES	44-4-2282.44-AD2R
TREAT CASUALTIES	08-2-0003.44-AD2R
TRANSPORT CASUALTIES	08-2-C316.44-AD2R
PERFORM FIELD SANITATION FUNCTIONS	08-2-R315.44-AD2R
MAINTAIN UNIT STRENGTH	12-2-C201.44-AD2R
PROVIDE UNIT SUPPLY SUPPORT	10-2-C320.44-AD2R
PERFORM RISK MANAGEMENT PROCEDURES	71-2-C326.44-AD2R
CONDUCT BATTLEFIELD STRESS REDUCTION AND PREVENTION PROCEDURES	08-2-R303.44-AD2R

Table 4-14. T&EOs for STX 44-2-E0004 (continued).

T&EO SEQUENCE AND TASK TITLE	TASK NUMBER
SUSTAIN AIR DEFENSE OPERATIONS	44-1-1045.44-AD2R
PROVIDE FOOD SERVICE SUPPORT	10-2-C317.44-AD2R
RECEIVE EXTERNAL SLING-LOAD RESUPPLY	10-2-C325.44-AD2R
PLAN AND CONDUCT UNIT AIRLIFT	44-2-7230.44-AD2R
RECEIVE AIRDROP RESUPPLY	10-2-C319.44-AD2R

BATTERY

FTX

44-2-E0005

CONDUCT AIR DEFENSE OPERATIONS

1. Objective. This FTX trains the battery commander, platoon leaders, and key NCOs in conducting air defense operations. It also provides the battery commander, platoon leaders, and NCOs with practice in planning and supervising this FTX. This FTX is designed as a free-play, force-on-force exercise that provides a flexible training vehicle for training objectives. The battery commander should modify the sequence of events through his selection of supporting events to meet his specific training objectives.

2. Interface. The following battery training activities support this FTX:

   a. Battery.

      (1) Conduct C³I Activities (CPX 44-2-E0001).

      (2) Plan and Coordinate ADA for a Breaching Operation (STX 44-2-E0002).

      (3) Plan and Coordinate ADA for a Static Asset (STX 44-2-E0003).

      (4) Sustain Air Defense Operations (STX 44-2-E0004).

   b. Avenger Platoon (ARTEP 44-117-22-MTP).

      (1) Provide Command and Control (STX 44-4-E0001).

      (2) Provide ADA for a Static Asset (STX 44-3-E0002).

      (3) Provide ADA for a Movement to Contact (STX 44-3-E0003).

      (4) Provide ADA During Breaching (STX 44-3-E0004).

      (5) Provide ADA for a Convoy (Integrated) (STX 44-3-E0005).

      (6) Provide ADA for a River Crossing (STX 44-3-E0006).

      (7) Provide ADA for the Brigade Combat Team (FTX 44-3-E0008).

   c. BSFV/Linebacker Platoon (ARTEP 44-177-15-MTP).

      (1) Provide Command and Control (STX 44-4-E0001).

      (2) Provide ADA During TF Breaching Operations (STX 44-3-E0002).

      (3) Provide ADA During TF Movement to Contact (STX 44-3-E0003).

      (4) Conduct Air Defense Operations in Support of the TF (FTX 44-3-E0005).

   d. Sentinel Platoon (ARTEP 44-176-15-MTP).

      (1) Provide Early Warning to SHORAD Units (STX 44-3-E0005).

(2) Provide Air and Missile Threat Early Warning to the Force (FTX 44-M-E0004).

3. <u>Training Enhancers</u>. The training enhancers for this FTX are as follows:

a. The T&EOs at the end of this FTX show the collective tasks that must be mastered to perform this critical wartime mission. The following training fundamentals will help the unit perform the mission:

(1) Battery commander must ensure that the platoon leaders and key NCOs have a basic understanding of how the ACR/BCT operates in a defensive and offensive posture per FMs 3-90.1, 71-2, and 3-90.3, and how they can best protect the force from attack by aerial platforms. The following training activities are conducted to enhance this FTX:

(a) Map reconnaissance tasks.

(b) Terrain board exercises, using a depiction of the exact area where the FTX will be conducted.

(c) TEWT.

Note: All commanders, trainers, and leaders must plan, train, and stress all procedures, which must be followed to avoid fratricide. (See this MTP, Task 44-1-3534.44-AD2R.)
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(2) Conduct battlefield stress reduction and prevention procedures (T&EO 08-2-R303-44-AD2R).

(a) Ensure soldiers get 3 to 4 hours of uninterrupted sleep per day (FM 6-22.5).

(b) Adjust the plan to the tactical situation.

Note: This is the minimum requirement for sustainment operations.

(3) Always use OPFOR and MILES/AGES/AD equipment, if available. These add realism to the tactical situation and can point out mistakes made by your subordinates.

b. You must practice soldier's manual tasks during the FTX. See the T&EOs in Table 4-17 for a list of the applicable collective tasks. Individual supporting tasks are listed at the end of each T&EO in Chapter 5. You may group collective tasks as necessary to add realism to the mission. You may use them anywhere within the scenario to meet the demonstrated training needs of your battery headquarters. The scenario is a guide to appropriate collective training times. You may repeat selected collective tasks as reinforcement training, if necessary.

c. This exercise begins with the receipt of the OPORD and ends when the battery has completed all T&EOs listed in Table 4-17 with a GO rating. Evaluator(s) conduct your AAR after the exercise and, if necessary, repeat the exercise or parts thereof as needed to attain proficiency. Table 4-15 shows the estimated time needed for each part of the exercise. Table 4-15 is a suggested scenario.

Table 4-15. Estimated Time Needed to Train FTX 44-2-E0005.

BATTERY FTX SCENARIO		
EVENT	**ACTION**	**ESTIMATED TIME ALLOCATED**
1.	Receive WO.	8 hours before FTX
2.	Prepare for operations under NBC conditions.	Per OPORD
3.	Conduct map recon.	3 hours
4.	Recon team moves out.	4 hours
5.	Receive movement orders.	1 hour
6.	Receive OPORD.	1 hour
7.	Start the FTX.	Per OPORD
8.	Btry HQs prepares to move to task force CP.	4 hours
9.	Conduct AAR.	1 hour
10.	Advance party moves out.	2 hours
11.	Btry HQs tactical move to ACR/BCT TOC.	2 hours
12.	Occupy positions.	1 hour
13.	Establish Btry CP and train area.	Per OPORD
14.	Link up with ACR/BCT TOC.	1 hour
15.	Receive COAs.	1 hour
16.	Plan battery logistics operations.	1 hour
17.	Allocate AMD forces.	1 hour
18.	Issue DST to platoons (aerial IPB, A²C², CSS, and AMD scheme of maneuver).	2 hours
19.	Conduct rehearsals with ACR/BCT.	3 hours
20.	Conduct AAR.	1 hour
21.	Refine DST and DSM.	1 hour
22.	Execute FTX.	Per OPORD
23.	Conduct AAR.	1 hour
24.	Move to AA VICTOR and implement sleep plan.	Per TSOP
25.	Conduct sustaining operations.	4 hours

Table 4-15. Estimated time needed to train FTX 44-2-E0005 (continued).

BATTERY FTX SCENARIO		
EVENT	**BATTERY FTX SCENARIO**	**ESTIMATED TIME ALLOCATED**
26.	Provide C^{3}I	Throughout FTX
27.	Prepare for new mission.	Per OPORD
28.	Conduct map reconnaissance.	2 hours
29.	Administrative move to final AA SIERRA.	2 hours
30.	Conduct final AAR.	3 hours
31.	Exercise ends.	Per OP
TOTAL		*** 50 + hours**
*Allow extra time for night training, retraining, NBC conditions, and AARs. First, train events to standards, and then train to meet standards within time limitations. Time required will vary based on METT-TC factors and training proficiency of the battery headquarters sections.		

4. <u>General Situation</u>. The general situation is as follows:

   a. The ACR/BCT is conducting offensive operations.

   b. Threat forces have air superiority.

   c. Intelligence reports indicate heavy concentration of NBC attacks.

   d. Threat has special operations forces operating in the ACR/BCT AO.

5. <u>Special Situation</u>. The special situation is as follows:

   a. The ACR/BCT commander issues the FRAGO (Figure 4-5).

   b. You now begin your planning process for providing air defense coverage for ACR/BCT elements, tactical road march, and establishing and maintaining the battery CP.

Classification

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3d Bde, 65th ID DIV
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_____(D-2, H-4)

FRAGMENTARY ORDER__8

References: OPORD 1

Time Zone Used Throughout the Order: Local

Task Organization: A battery DS to ACR/BCT eff 141400ZJan.

    1. SITUATION Enemy motorized Infantry regiment delaying advance of ACR/BCT.

    2. MISSION No change.

    3. EXECUTION

        a. Tasks to subordinate units:

        (1) 1st platoon LOC TS456835, PTL 6400 mils.
        (2) 2nd platoon LOC TS481814, PTL 1600 mils.
        (3) 3rd platoon LOC TS454783, PTL 3100 mils.

        b. Coordinating instructions: "Current overlay remains in effect."

    4. SERVICE SUPPORT   No change to OPORD.

    5. COMMAND AND SIGNAL Battery CP currently collocated with ACR/BCT TOC.

ACKNOWLEDGE. Notify this headquarters upon receipt of order and again upon understanding the order. Direct coordination with supported unit is authorized.

                  CORREDOR
                  CPT

              _____
              Classification

Figure 4-5. Sample FRAGO for FTX 44-2-E0005.

6. <u>Support Requirements</u>. The support requirements for this FTX include the following:

    a. Minimum Trainers and Evaluators. The battery commander, who is the trainer and evaluator, conducts this exercise. If using OPFOR, additional evaluators and/or controllers are necessary.

    b. Vehicles and Communications. Those vehicles and communications equipment organic to the battery headquarters are required.

c. General Purpose Items. Those items such as office supplies, message and journal logs, report forms, unit TSOPs, maps, OPORD, and appropriate reference material are required.

d. Maneuver Area. An area of 5X5^2 km is recommended.

e. Consolidated Support Requirements. See Table 4-16.

Table 4-16. Consolidated Support Requirements for FTX 44-2-E0005.

AMMUNITION	DODIC	BASIC LOAD
5.56-mm, blank M16 rifle	1305-AO8O	40 rds
5.56-mm, blank M249 (AR)	1305-AO8O	300 rds
.50-caliber blank HB M2 mg	A111.A598	100 rds
.50-caliber blank M3P mg	A111.A598	100 rds
PYROTECHNICS	**DODIC**	**ANNUAL REQUIREMENTS**
Gren smk CS	1330-G963	28
Gren smk HC	1330-G960	48
Gren smk grn	1330-G940	16
Gren smk yel	1330-G945	48
Gren smk red	1330-G950	56
Gren smk viol	1330-G955	28
Smk pot gnd M4A2	1330-K867	20
Sig illum green para	1370-L305	8
Sig illum red para	1370-L306	28
Sig illum white para	1370-L307	20
Sig illum red star	1370-L311	8
Sig illum white star	1370-L312	20
Sig illum green star	1370-L314	20
Flare surface trip	1370-L495	28
Sim proj grnd burst	1370-L594	84
Sim arty gun flash	1370-L596	20
Sim booby trap flash	1370-L598	40
Sim booby trap illum	1370-L599	28
Sim booby trap whis	1370-L600	28
Sim hand gren	1370-L601	56
OTHER ITEMS		**REQUIREMENTS**
OPFOR (air) aerial platforms (rotary-wing, fixed-wing, UAVs) (ground) Special Operation Forces		As Needed As Needed
Controller guns		As Needed
Maps: Military 1:50,000 Scale		As Needed
MILES Equipment		As Needed
Notes: • The annual pyrotechnics requirement figures represent the pyrotechnic allocation for a battery training year. Battery commander determines how much to use during each training exercise to meet his training objectives. However, he <u>cannot</u> exceed his annual allotment during the training year. OPFOR requirements are included in above table. • MILES Equipment. The battery commander will request and use all MILES equipment authorized, including OPFOR MILES equipment.		

7. <u>T&EO Sequence</u>. Table 4-17 lists the T&EOs (found in Chapter 5) which the O/Cs use in evaluating this FTX.

Table 4-17. T&EOs for FTX 44-2-E0005.

T&EO SEQUENCE AND TASK TITLE	TASK NUMBER
PREPARE FOR OPERATIONS UNDER NBC CONDITIONS	03-3-C201.44-AD2R
MAINTAIN OPERATIONS SECURITY	71-2-C332.44-AD2R
CONDUCT TROOP-LEADING PROCEDURES	44-2-2294.44-AD2R
CONDUCT RSOP	44-1-9046.44-AD2R
CONDUCT TACTICAL ROAD MARCH	07-2-1303.44-AD2R
CROSS A CHEMICALLY CONTAMINATED AREA	03-3-C226.44-AD2R
REACT TO SMOKE OPERATIONS	03-3-C209.44-AD2R
OCCUPY ASSEMBLY AREA	07-2-1136.44-AD2R
ESTABLISH THE BATTERY CP	44-1-2295.44-AD2R
PREPARE CREW-SERVED WEAPONS FIGHTING POSITIONS	05-5-0302.44-AD2R
PROVIDE IMPROVED HIGH FREQUENCY RADIO (IHFR) COMMUNICATIONS AN/GRC-193A/213 AND AN/PRC-104A	11-5-0079.44-AD2R
ESTABLISH PLATFORM WITH APPLIQUE, PRECISION LIGHTWEIGHT GPS RECEIVER (PLGR) AND SINCGARS SYSTEM IMPROVEMENT PROGRAM (SIP)	11-5-0201.44-AD2R
ESTABLISH A SINCGARS FREQUENCY HOPPING NET	11-5-1102.44-AD2R
PROVIDE COMMAND AND CONTROL	44-1-2187.44-AD2R
ESTABLISH LIAISON TEAM	44-5-2190.44-AD2R
CONDUCT BATTLEFIELD STRESS REDUCTION AND PREVENTION PROCEDURES	08-2-R303.44-AD2R
DEVELOP IPB	44-4-2261.44-AD2R
PLAN AIR DEFENSE	44-1-3534.44-AD2R
DEVELOP THE ADA ESTIMATE AND ANNEX	44-4-5139.44-AD2R
DEVELOP AN EARLY WARNING PLAN	44-4-5102.44-AD2R
ADJUST AIR DEFENSE COVERAGE	44-4-5143.44-AD2R
PROVIDE EARLY WARNING	44-5-0003.44-AD2R
COORDINATE AIR DEFENSE	44-1-5137.44-AD2R
SUSTAIN AIR DEFENSE OPERATIONS	44-1-1045.44-AD2R
USE PASSIVE AIR DEFENSE MEASURES	44-1-C220.44-AD2R
MANAGE UNIT MAINTENANCE OPERATIONS	43-2-C323.44-AD2R
PERFORM UNIT LEVEL MAINTENANCE	43-2-C322.44-AD2R
CONDUCT LOGPAC ACTIVITIES	44-4-2282.44-AD2R
TREAT CASUALTIES	08-2-0003.44-AD2R
TRANSPORT CASUALTIES	08-2-C316.44-AD2R
PERFORM FIELD SANITATION FUNCTIONS	08-2-R315.44-AD2R
MAINTAIN UNIT STRENGTH	12-2-C201.44-AD2R
RECEIVE EXTERNAL SLING-LOAD RESUPPLY	10-2-C325.44-AD2R
RECEIVE AIRDROP RESUPPLY	10-2-C319.44-AD2R
PREPARE FOR A FRIENDLY NUCLEAR STRIKE	03-3-C205.44-AD2R
PREPARE FOR A NUCLEAR ATTACK	03-3-C206.44-AD2R
PREPARE FOR A CHEMICAL ATTACK	03-3-C202.44-AD2R
RESPOND TO A CHEMICAL ATTACK	03-3-C203.44-AD2R
CONDUCT CHEMICAL RECONNAISSANCE	03-3-C225.44-AD2R
CONDUCT THOROUGH DECONTAMINATION OPERATIONS	03-2-C312.44-AD2R

Table 4-17 T&EOs for FTX 44-2-E0005 (continued).

T&EO SEQUENCE AND TASK TITLE	TASK NUMBER
CONDUCT A CHEMICAL SURVEY	03-2-C310.44-AD2R
TAKE ACTIVE COMBINED ARMS AD MEASURES AGAINST HOSTILE AERIAL PLATFORMS	44-1-C221.44-AD2R
PERFORM RISK MANAGEMENT PROCEDURES	71-2-C326.44-AD2R
PROVIDE UNIT SUPPLY SUPPORT	10-2-C320.44-AD2R
PLAN AND CONDUCT UNIT AIRLIFT	44-2-7230.44-AD2R
PROVIDE FOOD SERVICE SUPPORT	10-2-C317.44-AD2R

CHAPTER 5

Training and Evaluation Outlines

5-1. Introduction. This chapter contains the training and evaluation outlines for the unit. T&EOs are the foundation of the MTP and the collective training of the units. T&EOs are training objectives (task, conditions, and standards) for the collective tasks which support critical wartime operations. The unit must master designated collective tasks to perform its critical wartime operations. T&EOs may be trained separately, in an STX, in an FTX, or in live-fire exercises. For collective live-fire standards, the trainer needs to refer to the applicable gunnery manual for the appropriate course of fire. Those standards and courses of fire need to be integrated into the training exercise.

5-2. Structure. The T&EOs in this chapter are listed in Table 5-1. The training matrix in Chapter 2 lists the T&EOs required to train the critical wartime missions according to their specific AUTL.

5-3. Format. The T&EOs are prepared for every collective task that supports critical wartime operation accomplishment. Each T&EO contains the following items:

   a. Element.   This identifies the unit or unit element(s) that performs the task.

   b. Task.   This is a description of the action to be performed by the unit, and provides the task number.

   c. References.   These are in parenthesis following the task number. The reference which contains the most information (primary reference) about the task is listed first and underlined. If there is only one reference, it is not underlined.

   d. Iteration.   Used to identify how many times the task is performed and evaluated during training. The "M" identifies when the task is performed in MOPP4.

   e. Commander/leader assessment.   This is used by the unit leadership to assess the proficiency of the unit in performing the task to standard. Assessments are subjective in nature and use all available evaluation data and submit leader input to develop an assessment of the organization's overall capability to accomplish the task. Use the following ratings:

       (1) T - Trained. The unit is trained and has demonstrated its proficiency in accomplishing the task to wartime standards.

       (2) P - Needs Practice. The unit needs to practice the task. Performance has demonstrated that the unit does not achieve standard without some difficulty or has failed to perform some task steps to standard.

       (3) U - Untrained. The unit cannot demonstrate an ability to achieve wartime proficiency.

   f. Conditions. A statement of the situation or environment in which the unit is to do the collective task.

   g. Task standards.

       (1) The task standards state the performance criteria that a unit must achieve to successfully execute the task. This overall standard should be the focus of training. It should be understood by every soldier.

       (2) The trainer or evaluator determines the unit's training status using performance observation measurements (where applicable) and his judgment. The unit must be evaluated in the context of the

METT-TC conditions. These conditions should be as similar as possible for all evaluated elements. This will establish a common base line for unit performance.

h. Task steps and performance measures. This is a listing of actions that are required to complete the task. These actions are stated in terms of observable performance for evaluating training proficiency. The task steps are arranged sequentially along with supporting individual tasks and their reference. Leader tasks within each T&EO are indicated by an asterisk (*). Under each task step are listed the performance measures that must be accomplished to correctly perform the task step. If the unit fails to correctly perform one of these task steps to standard, it has failed to achieve the overall task standard.

i. GO/NO-GO column. This column is provided for annotating the platoon's performance of the task steps. Evaluate each performance measure for a task step and place an "X" in the appropriate column. A major portion of the performance measures must be marked a "GO" for the task step to be successfully performed.

j. Task performance/evaluation summary block. This block provides the trainer a means of recording the total number of task steps and performance measures evaluated and those evaluated as "GO." It provides the evaluator a means to rate the unit's demonstrated performance as a "GO" or "NO-GO." It also provides the leader with a historical record for five training iterations.

k. Supporting individual tasks. This is a listing of all supporting individual tasks required to correctly perform the task. Listed are the task title, task number, and reference.

l. OPFOR standards. These standards specify overall OPFOR performance for each collective task. These standards ensure that OPFOR soldiers accomplish meaningful training and force the training unit to perform its task to standard or "lose" to the OPFOR. The OPFOR standards specify what must be accomplished--not how it must be accomplished. The OPFOR must always attain its task standards, using tactics consistent with the type of enemy they are portraying.

5-4. Use. The T&EOs can be used to train or evaluate a single task. Several T&EOs can be used to train or evaluate a group of tasks such as an STX or FTX.

5-5. Environment. Commanders, trainers, and leaders must include a review of environmental contamination in each applicable task that will be performed. This includes contamination to the subsurface, surface, waterways, vegetation, and super-surface (air). Contamination includes chemical, oil, grease, smoke, fumes, unexploded ordnance, et cetera.

Figure 5-1. List of T&EOs

ELEMENT: BATTERY HEADQUARTERS

TASK: DEVELOP IPB   (44-4-2261.44-AD2R)
(FM 34-130)   (FM 3-01.64)   (FM 44-43)
(FM 44-44)

ITERATION:	1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:			T	P	U		(Circle)

CONDITIONS: The battery receives the warning order. The task force commander has provided his planning guidance and concept of operations by requiring estimates. Threat forces have air superiority. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: The battery develops an IPB (third dimension), develops the unit's estimate, obtains approval, and publishes the estimate as part of the battery plans or orders. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

1. The battery receives warning order.
    a. Reviews OPORD and extracts all sensor EW information to include--
        (1) Sensor frequencies.
        (2) Sensor current and future locations.
        (3) Sensor security from air and ground attack.
        (4) Which sensor is broadcasting EW.
        (5) Designated NAIs to cover sensor dead space.
        (6) Sensor contingency plan (DEW net).
        (7) Other AMD assets.
    b. Defines the battlefield environment.
Note: The AO in air defense operations focuses on the third dimension: the unit of altitude. Unlike "ground" AOs, the air AO often encompasses smaller areas that are within the commander's AO, such as "no-fire" areas. Factors to consider in determining the locations of these points and the limits of the air AI are--
        o Location of tactical ballistic missiles.
        o Location of threat airfields.
        o Location of FARPs.
        o Location of aids to navigation.
        o Range capabilities of threat aircraft.
        o Altitude capabilities of threat aircraft.
        o Range capabilities of tactical ballistic missiles.
        o Flight profiles of tactical ballistic missiles.
 	
2. The battery describes the battlefield's effect. Specific considerations include--
    a. Probable target installations or areas. (Where are the threat's likely targets located?)
    b. Likely air AAs.
        o Do they provide ease of navigation?
        o Do they provide protection to the aircraft from radar and weapons?
        o Do they allow evasive maneuver?
        o Do they allow for the full use of aircraft speed?
        o Do they support ground force operations?
    c. Likely LZs or DZs.
 	
        o Are they target?		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

o Are they near likely objectives?
      o Do they provide concealment and cover to the delivered forces?
      o Do they allow easy aircraft ingress and egress?
  d. Likely standoff attack orbits.
  e. Line of sight from proposed ADA weapons locations.
  f. Limiting and success-inducing effects of weather on air operations.
  g. Expected times on targets based on weather effects or light data.
 	
3. The unit evaluates the threat. Focus on threats posed by--
  a. UAVs.
  b. Missiles (cruise and ballistic).
  c. Fixed-wing aircraft.
  d. Rotary-wing aircraft.
  e. Airborne and air assault forces.
  f. Flight operations tactics and delivery techniques.
  g. Ordnance types and availability.
  h. Threats to friendly ADA assets, including threat ground forces and EW assets.
 	
4. The unit determines threat courses of action.
  a. Determines air COAs (acquired supported unit basic IPB products, including situation templates).
  b. Evaluates the general COAs they portray and determines how the threat might support them with air power.
  c. Considers the following air COAs:
      o Likely locations of FARPs.
      o Likely timing of air strikes or air assault operations.
      o Likely targets and objectives. (Will the threat attempt destruction or neutralization?)
      o Likely air corridors and air AAs.
      o Strike package composition, flight profiles, and spacing in time and space, including altitudes.
      o Where friendly ADA assets fit into the threat COA. (Do they need to be destroyed or suppressed to ensure the operation's success?)
      o Threat ground COAs that might require movement of friendly ADA assets.
 	
5. The unit analyzes the military aspects of the terrain.
  a. Uses OCOKA to define ground.
  b. Uses OCOKA to define air as it supports the ground.
 	
6. The unit does a CVRT analysis of the mission.
  a. Creates a CVRT matrix.
  b. Identifies ADA priorities from matrix.
  c. Designates AT-AOIs to support the defense of the priorities.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
071-326-5502(SL2)	ISSUE A FRAGMENTARY ORDER	STP 21-24-SMCT
301-336-1303	PREPARE AND MAINTAIN SITUATION AND ASSOCIATED OVERLAYS	STP 44-14R14-SM-TG STP 44-14S14-SM-TG

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY HEADQUARTERS

TASK: DEVELOP AN EARLY WARNING PLAN   (44-4-5102.44-AD2R)
      (FM 3-01.64)   (FM 44-43)   (FM 44-44)

ITERATION:			1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:					T	P	U		(Circle)

CONDITIONS: The battery has received an ADA tactical mission.   Early warning is being received from external early warning systems. Note: Steps 1,2, & 3 are pre-conditions only. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: Develop an early warning plan to include: EW, ADWs, WCSs, and ACOs. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. Battery commander establishes liaison with other AMD sources when available.
    a. Liaison teams position at AMD early warning control centers.
    b. Liaison teams transmit early warning to battery via organic communications teams.
    c. Battery commander provides other AMD units with battery scheme of maneuver and intelligence updates.		

* 2. Sensor platoon leader, assisted by the platoon sergeant, develops sensor early warning plan. The plan--
    a. Supports the supported unit commander's intent.
    b. Supports division main effort during offensive operations.
    c. Supports division during defensive operations.
    d. Concentrates early warning resources as per IPB, ADA priorities, and designated NAI.
    e. Enhances ground-based sensors survivability during movement to contact and hasty attacks.		

* 3. The sensor platoon leader ensures that the early warning plan contains--
    a. Redundancy of coverage.
    b. Provisions to maintain air and ground coverage according to the IPB requirements.
    c. Provisions for attaching ground-based sensors under operational control of liaison officers in maneuver TOCs, if required by task organization.
    d. Provisions for transmission of early warning to supported units.
    e. Provisions for any air watch (at any level) to immediately transmit directed early warning over command nets.
     f. A survivability plan that includes frequent moves, engineer support, and communications support priority list.		

4. Battery deploys manual early warning sensors when so equipped.
    a. Deploys teams to forward areas, flanks, expected avenues of approach, and NAIs.
    b. Teams provide early warning to the force.		

5. The battery CP establishes early warning nets. a. Establishes voice communications (or electronic data links, when available) with the air defense coordination section at the nearest Air Force control and reporting center and other AMD unit(s), when available.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

b. Establishes voice communications (or electronic data links, when available) with the early warning sensors and other ground-based sensors.
c. Establishes voice communications (or electronic data links, when available) with the brigade A2C2 section.
d. Establishes voice communications (or electronic data links, when available) with the battery CPs.
e. Establishes voice communications (or electronic data links, when available) with other supported units.
f. Transmits EW received from early warning sensors to firing platoons and supported units.
 	
6. The battery CP receives external early warning information.
  a. Plotters receive and plot AMD track information on the early warning plotting board.
  b. Plotters receive and plot early warning track data on the early warning plotting board.
  c. Plotters receive information on aircraft operating over the division area from the FCC cell in the brigade and plot this data.
 	
7. The battery CP processes, evaluates, and disseminates early warning over the EWBN or C3I data links.
  a. OIC and NCOIC evaluate and correlate track plots over the brigade airspace and from the threat direction.
  b. OIC or NCOIC directs scrubbing of correlating duplicate tracks on the same plotting board.
  c. NCOIC or AMDWS (Air and Missile Defense Workstation) EW (early warning) operator retransmits track plots over the EWBN within 18 seconds of receiving the plot.
  d. NCOIC or AMDWS EW operator transmits airspace management and control information from the friendly aircraft board (routes, corridors, hold fire zones, et cetera) over the early warning broadcast net.
  e. OIC or NCOIC transmits ADW, WCS, and WCO over the EWBN, especially correlating information to protect friendly aircraft.
  f. OIC or NCOIC uses the EWBN as the battery emergency NBC net when needed.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
113-600-2001(SL1)	COMMUNICATE VIA A TACTICAL TELEPHONE	STP 21-1-SMCT
113-637-2001(SL1)	COMMUNICATE VIA A TACTICAL RADIO	STP 21-1-SMCT
301-336-1303	PREPARE AND MAINTAIN SITUATION AND ASSOCIATED OVERLAYS	STP 44-14R14-SM-TG STP 44-14S14-SM-TG
441-064-4001	CONDUCT PLATOON RSOP PROCEDURES	STP 44-14R14-SM-TG

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
441-066-1008	PERFORM CRITICAL WEAPON CHECKS ON THE STINGER WEAPON	STP 44-14S14-SM-TG
441-066-1040	VISUALLY IDENTIFY THREAT AND FRIENDLY AIRCRAFT	STP 44-14R14-SM-TG STP 44-14S14-SM-TG
441-066-2015	SELECT A MANPADS FIRING POSITION	STP 44-14R14-SM-TG
441-066-2022	PERFORM BEFORE-OPERATION PMCS ON THE IFF PROGRAMMER/BATTERY/CHARGER	STP 44-14S14-SM-TG
441-066-3005	SUPERVISE PLOTTING FIRE UNIT POSITION AND DIRECTED EARLY WARNING INFORMATION ON THE UTM GRID MATRIX	STP 44-14R14-SM-TG STP 44-14S14-SM-TG
441-092-1013	PERFORM AVENGER WEAPON SYSTEM SEARCH PROCEDURES	STP 44-14S14-SM-TG
441-092-1035	OPERATE INTERCOMMUNICATIONS SET AN/VIC-1	STP 44-14S14-SM-TG

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: CONDUCT TACTICAL ROAD MARCH   (07-2-1303.44-AD2R)
     (<u>FM 7-10</u>)   (FM 7-8)

ITERATION:	1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:			T	P	U		(Circle)

CONDITIONS: The unit is ordered to conduct a tactical road march. The enemy, no larger than platoon size, can assault mounted or dismounted, employ indirect fires, or employ air support. The enemy has NBC capability. Civilians, government agencies, nongovernmental organizations, and local and international media may be in the area. Rules of engagement (ROE) and rules of interaction (ROI) have been published. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: The unit crosses the start point and release point by the time specified in the order. The unit follows the prescribed route (tactically) without deviation, unless required otherwise by enemy action or higher headquarters orders. The unit main body is not surprised by the enemy. The unit remains combat effective and is prepared for follow-on missions. The unit complies with the ROE/ROI. Collateral damage is minimized. Unit coordinates with division transportation or higher HQ for all movements. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. The company commander develops the march order.
    a. Identifies the route, critical part, release points, and control measure.
    b. Identifies hazard areas, choke points, and gives guidance on how to prepare to cross these areas.
    c. Provides the organization for movement, order of march, march rate, and distances to be maintained between units.
    d. Provides a statement of the enemy situation, weather, and bad visibility conditions.
    e. Establishes security tasks for subordinate units to include all-round security and air guard coverage for the entire company.
     f. Addresses contingencies for action on enemy contact (ambush, indirect fire, air attack, NBC attack, or meeting engagement).
    g. Tailors the soldier's load guidance.
    h. Ensures subordinate leaders briefback their plans.
     i. Ensures that ROI and ROE have been disseminated to subordinate units.		

* 2. The company XO and 1SG prepare the company for movement.
    a. Conduct the necessary resupply (water, rations, ammunition, and batteries).
    b. Make provisions for the movement of casualties, supplies, and equipment that will not accompany the unit on the move.
    c. Depart to the destination with a quartering party that has security, communications, and guides from all company elements, if required.
    d. Ensure all platoons inspect soldiers for proper equipment, load tailoring, and readiness to move; complete a communications check with company headquarters; and report readiness to move.		

3. The company conducts a road movement.
    a. (Designated company elements) Reconnoiter the route to start point.
    b. Crosses the start point at the designated time.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

c. Follows the prescribed route without deviation.
    d. Maintains the rate of march, its prescribed position, and its interval in the unit column.
    e. Maintains the interval between all soldiers as specified in the march order or SOP.
    f. Conducts local security during stops longer than one minute. Some soldiers should exit vehicles to secure the flanks and pre-designated patrols should sweep sides of the route.
    g. (Platoons) Execute the road march as directed by the unit SOP or order.
 	
  4. The company maintains local security throughout the movement.
    a. Maintains all-round observation at all times, to include air guards.
    b. As directed, maintains platoon orientation to establish unit local security.
    c. (Platoons) Report and engage any enemy observance, as ordered.
 	
* 5. The company halts.
    a. Positions the platoons to ensure local security.
    b. Reports all halts to the battalion CP.
    c. Conducts halts at regular intervals according to the unit SOP (as tactical situation permits) to rest troops, to adjust and redistribute equipment, and to perform foot hygiene.
    d. Leaders check the condition of all soldiers, coordinate with the company commander and adjacent elements, and report status to company headquarters.
 	
* 6. The commander controls the company.
    a. Uses a messenger or report control measures as directed by the SOP or order.
    b. Ensures platoon leaders report control measures as directed by the SOP or order.
    c. Uses or modifies control measures from the march order, as needed.
 	
  7. The company arrives at the check or release points at the time specified.
    a. Meets the quartering party guide.
    b. Passes through the release point without halting.
    c. Reports all battalion control measures and deviations from the battalion plan.
    d. Reports all halts and starts from the battalion plan.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	**1**	**2**	**3**	**4**	**5**	**M**	**TOTAL**
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
551-721-4326(SL4)	PERFORM DUTIES AS CONVOY COMMANDER	STP 21-24-SMCT
551-88M-0001(SL3)	LEAD A CONVOY SERIAL/MARCH UNIT	STP 21-24-SMCT

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
551-88M-0005(SL1)	OPERATE A VEHICLE IN A CONVOY	STP 21-1-SMCT
850-001-2000(SL2)	EMPLOY ACCIDENT PREVENTION MEASURES AND RISK MGT PROCESS	STP 21-24-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: CONDUCT RSOP (44-1-9046.44-AD2R)
(<u>FM 3-01.64</u>)   (FM 44-43)   (FM 44-44)

ITERATION:	1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:		T	P	U			(Circle)

CONDITIONS: Unit receives a warning order. The unit commander directs the RSOP OIC to conduct the RSOP. The necessary trained personnel with equipment are available to perform the RSOP under all NBC and environmental conditions: both day and night. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: The RSOP departs within 30 minutes of the receipt of the movement warning order, performs a route reconnaissance, and secures and lays out the new site.   The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. Commander conducts a briefing for the RSOP OIC. The briefing includes, but is not limited to--
    a. The mission.
    b. Enemy and friendly situation.
    c. Any NBC intelligence.
    d. The challenge and password.
    e. Radio frequencies and call signs.
    f. Current ADW.
    g. Current state or stage of alert and ACO number.		

* 2. RSOP OIC and NCOIC perform a map reconnaissance and identify--
    a. Start point.
    b. Location of friendly units.
    c. Potential ambush sites.
    d. Checkpoints.
    e. Primary and alternate BTOC positions.
    f. Primary and secondary routes to the new site.		

* 3. The RSOP OIC or NCO assemble RSOP party, to include--
    a. OIC.
    b. NCOIC.
    c. The necessary personnel for security.
    d. Communications personnel.
    e. Mine-detecting team.
    f. NBC survey and monitoring team.
    g. Personnel to lay out the site.
    h. Drivers.
    i. Equipment guides.
    j. Road guides.		

* 4. The RSOP OIC ensures the loading of RSOP equipment per the unit load plan to include--
    a. A 3-day supply of rations and water.
    b. An M8A1 chemical alarm.
    c. NBC marking kit.
    d. M256A1 chemical agent detector kit.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
e. A mine-detecting set, portable, metallic, and nonmetallic.		
f. Radiacmeters IM-174/PD and IM-93A.		
g. Telephone sets TA-312/PT.		
h. An antenna group (OE-254).		
i. Cable, telephone, WD1.		
j. A measuring tape or a marked piece of engineer tape.		
k. Equipment marking stakes.		
l. A map of the area of operation.		
m. Camouflage screen systems.		
n. Individual weapons and ammunition for all personnel, including M203s.		
o. Individual protective equipment and LBE.		
p. A machine gun, 7.62-millimeter, with tripod.		
q. Night sights for selected individual weapons.		
r. Grounding rods.		
* 5. The RSOP OIC briefs RSOP party members on--		
a. All items covered in the commander's briefing.		
b. Convoy speeds, both day and night.		
c. Maximum catch-up speeds.		
d. Use of air guards.		
e. Procedures to follow in case of a vehicle breakdown, a ground attack, an air attack, or when encountering a road block.		
* 6. The RSOP OIC makes certain that--		
a. All drivers have a strip map.		
b. All personnel have their individual weapons, LBE, and MOPP gear for the appropriate MOPP level.		
c. The chemical alarm is operational and switched on.		
d. The towed loads are properly connected to the prime mover.		
e. The radio operator enters the battery command net.		
* 7. The OIC performs a route reconnaissance. The route reconnaissance determines if the selected route is acceptable. The OIC considers--		
a. Overhead clearance.		
b. Route security.		
c. Roadway trafficability.		
d. Roadway width.		
e. Bridge weight classification.		
f. Fording sites.		
g. Areas available for convoy dispersion.		
h. Distinguishable landmarks.		
i. Locations for road guides.		
* 8. The RSOP OIC directs specialty teams to secure the new site as follows:		
a. NBC team checks the area using radiacmeter, detector paper, and the chemical agent detector kit.		
b. The mine detection team conducts a broad zigzag sweep of the site. Mine detector operators do not carry their weapons while conducting sweep operations. The security guard stays at least 15 meters behind the mine sweeper.		
c. The NBC team and the automatic weapon remain behind the mine sweep team.		
d. The remainder of the party forms into two fire teams. The teams use bounding overwatch, and sweep abreast behind the mine detectors covering the entire area to be occupied. The fire team members remain at least 15 meters apart during the sweep operations.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

e. The RSOP OIC establishes the rear, flank, and forward LP or OP.
    f. The NBC team continually examines the area for contamination, and positions the alarm unit at the CP and the detector unit upwind.
    g. The RSOP OIC positions a machine gun to cover the site entry road.
    h. The RSOP OIC establishes a perimeter defense with rifleman positions or roving guards.
 Notes: The RSOP OIC initiates unmasking procedures per local SOP. When using unmasking procedures, the RSOP OIC declares, "All clear," or orders a lower level MOPP.
 	
 * 9. The RSOP OIC conducts a site survey and terrain analysis to ensure that the site--
    a. Provides immediate access.
    b. Provides concealment.
    c. Meets equipment requirements.
 	
 *10. The RSOP OIC lays out the new site. Designates areas for--
    a. Administration.
    b. Vehicle parking.
    c. Mess.
    d. Bivouac.
    e. Latrine.
    f. A "hide area" away from the FDS equipment to increase the survivability posture of the unit, if possible.
    g. System equipment (marked with survey markings for system emplacement).
 	
 *11. The RSOP OIC ensures that the equipment is laid out as follows:
    a. Orients the equipment to give maximum protection in the direction of the main avenue of approach.
    b. Emplaces equipment at the maximum cable length allowed by the site configuration.
 	
 *12. The RSOP OIC conducts a rehearsal for ground guides, for day and night procedures, and for entry into the site with their designated pieces of equipment.
    a. Ground guides proceed to dismount point for arrival of the equipment.
    b. The RSOP OIC makes sure ground guides have colored lens flashlights or chemical lights to use during the hours of darkness.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
071-326-5805(SL3)	CONDUCT A ROUTE RECONNAISSANCE MISSION	STP 21-24-SMCT

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
071-329-1006(SL1)	NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT WHILE DISMOUNTED	STP 21-1-SMCT
071-329-1030(SL1)	NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT WHILE MOUNTED	STP 21-1-SMCT
441-066-2018	PERFORM RSOP	STP 44-14R14-SM-TG STP 44-14S14-SM-TG

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS

TASK: GATHER INTELLIGENCE (44-0PFOR-0003)

CONDITION: The OPFOR headquarters requires intelligence on locations and identification of battery elements. A report is made on the battery's intentions.

STANDARD: 1. The OPFOR locate 70 percent or more of the battery's elements. 2. The OPFOR report the battery's intentions. 3. The OPFOR report the battery's strength (plus or minus 10 percent) or echelon of the unit (squad, platoon, and company). 4. The OPFOR obtain specified PIR on enemy units. 5. The OPFOR report all information to higher headquarters.

ELEMENT: BATTERY HEADQUARTERS

TASK: PLAN AND CONDUCT UNIT AIRLIFT   (44-2-7230.44-AD2R)
       (FM 3-01.64)

ITERATION:			1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:				T	P	U			(Circle)

CONDITIONS: The battery is given the mission to airlift the battery headquarters or a firing platoon from one location to another. The battery CP must plan the airlift. The battery conducts the mission in any flyable weather condition and MOPP, day or night. All platoon personnel are present. TOE equipment is on-hand and operational. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: The element airlifts without damage to equipment or injury to personnel. The battery complies with the movement times designated in the OPORD. The time required to perform this task in MOPP4 and or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
* 1. The battery commander receives a FRAGO requiring the battery to conduct an airlift of its battery headquarters or one or more firing platoons to reach their next area of operation.		

* 2. The XO reads and extracts the following information for planning purposes for briefing the battery commander:
    a. Type of aircraft (cargo or rotary-wing).
    b. Time of mission.
    c. Location of pickup zone.
    d. Location of landing zone.
    e. Type of aviation company to conduct the lift and its coordination element or point of contact.
    f. Next mission.		

3. The battery CP issues a warning order. It contains the following:
    a. Mission.
    b. Platoon instructions if required.
    c. Departure time.		

4. The battery CP coordinates the airlift with the aviation unit.
    a. Gets special instructions (if any).
    b. Coordinates pickup zone and landing zone locations.
    c. Coordinates pickup times.
    d. Coordinates air and ground communications.		

* 5. The battery commander and CP personnel plan the airlift.
    a. Ensure that elements prepare for airlift properly, by either helicopter or cargo aircraft.
    b. Ensure that elements are at designated pickup zones and are on time.
    c. Ensure that battery airlift equipment is operational and prepared for airlift.
    d. Prepare airlift load plans.
    e. Prepare battery FRAGO.		

* 6. XO issues FRAGO to sections and platoons. It contains--
    a. Mission.
    b. Friendly and threat situation.
    c. Pickup and landing zones.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

d. Times for battery or platoon pickup.
   e. Visual and radio signal instructions.
   f. Special instructions (if any).
 	
* 7. Platoon leaders, platoon sergeants, and section leaders supervise the airlift.
   a. Ensure that sections, platoons, and teams have prepared for airlift.
   b. Ensure that sections, platoons, and teams are at pickup locations on time.
   c. Coordinate attached ground-based sensor and node movements with their parent units.
   d. Coordinate with movement control officer at main landing zone.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
071-329-1019(SL2)	USE A MAP OVERLAY	STP 21-24-SMCT
071-329-1030(SL1)	NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT WHILE MOUNTED	STP 21-1-SMCT
441-066-3043	PLAN AND CONDUCT M998-SERIES VEHICLE CARGO AIRLIFT OR WATER-CROSSING OPERATIONS	STP 44-14S14-SM-TG
441-092-4009	COORDINATE PREPARATION FOR AIRLIFT	STP 44-14S14-SM-TG

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: CONDUCT A CHEMICAL SURVEY   (03-2-C310.44-AD2R)
        (FM 3-19)   (DA FORM 1971-2-R)

ITERATION:	1M 2M 3M 4M 5M	(Circle)
COMMANDER/LEADER ASSESSMENT:	T P U	(Circle)

CONDITIONS: Chemical contamination is present in an area of operational concern. Monitoring reports do not provide an accurate picture of the hazard area. Higher headquarters directs that the area be surveyed. This task is always performed in MOPP4.

TASK STANDARDS: The survey team must move to the suspected area of contamination, determine initial contamination limits, and define the actual boundary of contamination within 50 meters accuracy. The unit must submit survey results to higher headquarters. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. The battery leader issues guidance to the survey team.
    a. Ensures all soldiers receive guidance.
    b. Ensures all soldiers understand guidance.
 	
* 2. The survey control party leader briefs the survey team.
    a. States the amount of time allowed to complete the survey.
    b. Describes the tactical situation as it pertains to the conduct of the survey.
        (1) Describes the enemy and friendly situation.
        (2) States any factual information available about the suspected
            contaminated area.
Note: Information should include source of contamination, terrain, and weather, and how the contamination was delivered.
    c. Issues a clear and concise mission statement to include specific tasks to be
       accomplished.
    d. Briefs the survey team on the concept of the operation.
    e. States the specific coordinating instructions.
     f. Indicates primary/alternate routes to and from the suspected area of
       contamination.
    g. Indicates the time of departure and return.
    h. Identifies administrative and logistical requirements.
     i. Identifies required forms.
     j. Identifies required equipment.
    k. Identifies command and signal procedures.
 	
  3. The survey team prepares to conduct the survey.
    a. Ensures soldiers are at MOPP4 or assume MOPP4 before entering the
       suspected contaminated area.
    b. Attaches M9 detection paper to soldiers and vehicles.
    c. Uploads chemical agent detection equipment into survey vehicles. As a
       minimum, includes the following:
        (1) Automatic chemical agent alarm.
        (2) Chemical agent detector kit.
        (3) Chemical agent detector paper (M8 and M9).
        (4) Water test kit.
        (5) Chemical agent monitor.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 4. The survey team conducts the survey. The survey team leader--
  a. Moves the team to the suspected contaminated area.
  b. Identifies a starting point for the team per the initial overlay.
  c. Ensures that the team conducts tests with chemical agent detector kit at the initial testing point.
  d. Ensures that the team uses chemical agent detector paper and chemical agent monitor to take readings at every 200-meter interval until agent reacts with the detector paper or until each soldier comes within 200 meters of the attack center.
  e. Directs the collection of samples at designated intervals, if required.
  f. Ensures all soldiers reach the last test point at approximately the same time.
  g. Determines the initial limits of contamination.
  h. Ensures soldiers execute a 180-degree turn and return along the previously used path halfway to the last sampling point.
  i. Directs the survey team to use a bracketing technique to refine the initial limits of hazard.
   (1) Survey team leader analyzes the situation to approximate the suspected boundary of hazard.
   (2) Survey leader aligns the survey team, from the initial point of contamination, perpendicular to the suspected boundary of contamination with 10- to 100-meter intervals (depending on terrain).
   (3) Survey team continues testing and collecting samples until the entire boundary of the contamination is defined.
  j. Ensures that all soldiers exit the area using the established route.
 	
 * 5. Survey team leaders record the results of the chemical survey on the chemical survey data form (DA Form 1971-2-R).
  a. Record the type of agent(s) present within the area.
  b. Record the location of the contamination.
  c. Record the type of detector used.
 	
  6. The survey team completes the survey.
  a. Reports results to the control party.
  b. Marks the contaminated area.
  c. Moves to designated decontamination area.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1M	2M	3M	4M	5M		TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
031-503-1015(SL1)	PROTECT YOURSELF FROM NBC INJURY/CONTAMINATION WITH THE APPROPRIATE MISSION-ORIENTED PROTECTIVE POSTURE (MOPP) GEAR	STP 21-1-SMCT

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
031-503-1035(SL1)	PROTECT YOURSELF FROM CHEMICAL/BIOLOGICAL CONTAMINATION USING YOUR ASSIGNED PROTECTIVE MASK	STP 21-1-SMCT
031-503-1037(SL1)	DETECT CHEMICAL AGENTS USING M8 OR M9 DETECTOR PAPER	STP 21-1-SMCT
031-503-2001(SL2)	IDENTIFY CHEMICAL AGENTS USING M256-SERIES CHEMICAL AGENT DETECTOR KIT	STP 21-24-SMCT
031-503-3004(SL2)	SUPERVISE THE CROSSING OF A CONTAMINATED AREA	STP 21-24-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: CONDUCT THOROUGH DECONTAMINATION OPERATIONS (03-2-C312.44-AD2R)
(FM 3-5)   (FM 3-100)   (FM 3-3)
(FM 3-4)

ITERATION:	1M	2M	3M	4M	5M	(Circle)
COMMANDER/LEADER ASSESSMENT:		T	P	U		(Circle)

CONDITIONS: A unit is contaminated with a persistent chemical agent during combat operations. Time is available to conduct reconstitution, to include thorough decontamination. A supporting smoke/decon platoon is tasked to conduct the thorough decontamination mission. This task is always performed in MOPP4.

TASK STANDARDS: The smoke/decon platoon sets up the detailed equipment decon site and removes all contamination from the equipment/vehicles. The contaminated unit sets up the detailed troop decon (with technical advice from the decon platoon) and processes all personnel. The responsible units properly close the site and report the location to higher headquarters. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
* 1. Contaminated unit's leader determines extent of contamination and establishes decontamination priorities. a. Receives input from subordinate leaders and/or staff. b. Establishes priorities of decontamination.		
2. Contaminated unit submits request for decontamination to higher headquarters. Request should, as a minimum, include-- a. Designation of the contaminated unit. b. Location of the contaminated unit. c. Frequency and call sign of the contaminated unit. d. Time the unit became contaminated. e. Number of vehicles/equipment, by type, that are contaminated. f. Type of contamination. g. Earliest possible time the unit can move/begin decontamination. h. Special requirements (patient decon station, recovery assets, unit decon team, etc.).		
* 3. The contaminated unit's higher headquarters chemical staff-- a. Issues a warning order to the supporting chemical unit. b. Coordinates the movement of the contaminated unit to the link-up point and decon site. c. Coordinates with supporting elements (medical, engineer, air defense, military police, smoke support, etc.). Note: The contaminated unit is responsible for providing security for the decon site. Security support must be coordinated prior to arriving at the link-up point.		
4. Contaminated unit, decon platoon, and other supporting elements arrive at the link-up point.		
* 5. Decon unit leader briefs site layout and procedures.		
6. Contaminated unit conducts pre-decon site/staging area activities. a. Segregates contaminated vehicles/equipment from uncontaminated, if possible.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

b. Crews, except drivers, dismount the vehicles, ensuring that they--
   (1) Remove all equipment from the tops of the vehicles.
   (2) Do not reenter the vehicles once they have exited (to prevent further contamination of the interior of the vehicles).
 c. Prepares vehicles/equipment for detailed equipment decon.
   (1) Removes all heavy mud and debris from the vehicle using pioneer tools.
   (2) Removes and disposes of seat covers, canvas items, camouflage netting, and other materials which can absorb chemical contaminants.
   (3) Removes and disposes of NBC covers as contaminated waste.
 d. Moves contaminated personnel and vehicles/equipment to the detailed troop and equipment decon lines.		

7. Designated personnel set up and maintain communications within the decon site and coordinate with the supported unit for additional communications support.		
8. The decon unit sets up detailed equipment decon site stations. a. Station 1. Primary Wash. b. Station 2. DS2 Application. c. Station 3. Contact Time/Interior Decon. d. Station 4. Rinse. e. Station 5. Check.		
9. Contaminated unit sets up detailed troop decontamination site stations. a. Station 1. Individual Gear Decon. b. Station 2. Overboot and Hood Decon. c. Station 3. Overgarment Removal. d. Station 4. Overboot and Glove Removal. e. Station 5. Monitor. f. Station 6. Mask Removal. g. Station 7. Mask Decon Point. h. Station 8. Reissue Point.		
Note: The decon unit leader must establish a route to move vehicle operators from Station 3 of the detailed equipment decon site to the detailed troop decon site.		
*10. Leaders supervises overall thorough decon site operations.		
11. Battery processes vehicles/equipment through the detailed equipment decon stations. a. Contaminated unit provides guides to control vehicle traffic through the site. b. Drivers move the vehicles/equipment through the stations. c. Assistant drivers who have processed through the detailed troop decon stations replace the primary drivers at Station 3, once interior decon is completed. d. The primary drivers proceed to the detailed troop decon site to process through the stations. e. Soldiers from the detailed troop decon site and vehicles/equipment from the detailed equipment decon site and move to the reconstitution area.		
12. Contaminated unit processes personnel through the detailed troop decon stations.		

13. Decon unit soldiers close the detailed equipment decon site.
 a. Station 1.
   (1) Decon all equipment used at the station (PDDE, hoses, nozzles, etc).
   (2) Check all equipment for contamination, and decon again if necessary.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
(3) Drain water from tanks.		
(4) Load equipment on vehicles.		
(5) Spread a can of STB in each sump and cover the sumps.		
(6) Mark the sumps.		
b. Station 2 (for chemical/biological only).		
(1) Apply DS2 to PDDE, mops, handles, decon apparatus, and containers.		
(2) Discard mop heads, brushes, and station sign into Station 4 sump and then pull PDDE forward and wash entire application point.		
(3) Load unused decontaminants onto vehicles.		
(4) Mark the area and move all reusable equipment from Station 2 to Station 3.		
c. Station 3.		
(1) Inspect unused supplies for contamination; if uncontaminated, load onto vehicles.		
(2) Throw contaminated supplies into Station 4 sump.		
d. Station 4.		
(1) Decon all equipment used at the station (PDDE, hoses, nozzles, etc).		
(2) Check all equipment for contamination, and decon again if necessary.		
(3) Drain water from billets or fabric tanks.		
(4) Load equipment on vehicles.		
(5) Spread a can of STB in each sump and cover the sumps (after the residue from Station 5 has been placed in the sump).		
(6) Mark the sumps.		
e. Station 5.		
(1) Decon all equipment used at the station.		
(2) Load all reusable equipment onto vehicles.		
(3) Discard unusable items into Station 4 sump.		
14. The decon unit moves to the troop decon site for decon.		
15. Station operators clean up the detailed troop decon site.		
a. Place all used supplies from Station 7 into the Station 7 sump.		
b. Move all usable equipment and supplies from all stations to Station 1.		
c. Discard unusable supplies from Stations 5, 4, and 3 into the sump at Station 1.		
d. Decontaminate all supplies and equipment collected at Station 1.		
e. Empty and rinse the decontaminant containers from Station 1 into the sump at that station.		
f. Mark the area.		
g. Remove overgarments using the MOPP gear exchange technique.		
h. Dispose of used overgarments into the Station 1 sump.		
i. Move all equipment used to fill the sump upwind of the decon area.		
j. Decon rubber gloves and move all equipment from Station 1 upwind of the decon area. Keep this equipment separate from the equipment used to fill the sump.		
k. Spread a can of STB in each sump and cover the sumps.		
l. Mark the sumps.		
m. Submit NBC 4 Report to higher headquarters defining the areas of contamination resulting from the decon operation.		
16. Contaminated unit conducts reconstitution activities.		
a. Coordinates with supported battalions for assessment and recovery team(s).		
b. Coordinates and requests maintenance support.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
c. Coordinates and requests medical support. d. Coordinates and establishes logistical support for resupply activities.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1M	2M	3M	4M	5M		TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
031-503-1023(SL2)	PROTECT YOURSELF FROM NBC INJURY/CONTAMINATION WHEN CHANGING MISSION-ORIENTED PROTECTIVE POSTURE (MOPP) GEAR	STP 21-24-SMCT
031-506-2027	SELECT DETAILED EQUIPMENT DECONTAMINATION SITE	STP 3-54B2-SM
031-507-2013	SUPERVISE DETAILED EQUIPMENT DECONTAMINATION	STP 3-54B2-SM
031-507-2018	SUPERVISE DETAILED TROOP DECONTAMINATION	STP 3-54B2-SM
031-507-2038	CONTROL CONTAMINATED WASTE	STP 3-54B2-SM

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: PREPARE FOR OPERATIONS UNDER NBC CONDITIONS   (03-3-C201.44-AD2R)
    (FM 3-4)   (FM 3-100)   (FM 3-3)

ITERATION:	1 2 3 4 5 M	(Circle)
COMMANDER/LEADER ASSESSMENT:	T P U	(Circle)

CONDITIONS: Higher headquarters informs the unit that the OPFOR is conducting NBC warfare in the area. NBC equipment has been issued. Soldiers carry protective masks with their LCE, having MOPP gear readily available (within the work area). Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: The unit uses collective protection or takes measures to limit effects of NBC attacks and/or contamination and continues the mission.   The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. Unit leader checks accountability and serviceability of NBC defense equipment.
      a. Ensures that NBC detection equipment is issued to trained operators.
      b. Ensures that NBC detection equipment is employed and operating within 15 minutes.
      c. Identifies equipment shortages.
      d. Takes action to obtain replacement equipment.
 	
 2. Unit assumes MOPP levels as directed by higher headquarters or as the NBC situation dictates and is prepared to operate at the time specified in the OPORD.
      a. Soldiers can mask and hood within 15 seconds.
      b. Soldiers can assume MOPP 4 within 8 minutes.
 	
 3. Unit soldiers take actions to protect themselves against NBC attack.
      a. Set up and use collective protective shelters (if available).
      b. Prepare protective shelters such as individual fighting positions with overhead cover.
 	
 * 4. Unit leader adjusts MOPP level using MOPP analysis.
      a. Receives and analyzes the enemy NBC threat capability.
 Note: Some considerations are--Is the unit targeted or can it be targeted? - Does the enemy have the capability to deliver chemical or nuclear weapons? - When or where would the enemy most likely deliver the chemical or nuclear weapons?
      b. Collects and analyzes weather data.
 Note: Some considerations are--Is it day or night? - What are the current weather conditions (see CDM or weather report)? - What are the weather conditions 2, 4, 6 hours in the future (see CDM or weather report)?
      c. Collects and assesses weather data.
      d. Analyzes the battery status and mission.
 Note: Some considerations are--What is the mission? - What is the work rate? - How long will the work take? - What is the training and physical level of the battery? - How long will it take to warn all soldiers of an NBC attack?		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
031-503-1015(SL1)	PROTECT YOURSELF FROM NBC INJURY/CONTAMINATION WITH THE APPROPRIATE MISSION-ORIENTED PROTECTIVE POSTURE (MOPP) GEAR	STP 21-1-SMCT
031-503-1035(SL1)	PROTECT YOURSELF FROM CHEMICAL/BIOLOGICAL CONTAMINATION USING YOUR ASSIGNED PROTECTIVE MASK	STP 21-1-SMCT
031-504-1008	OPERATE THE M8A1 ALARM SYSTEM	STP 3-54B1-SM
031-504-1013	OPERATE THE M22 AUTOMATIC CHEMICAL-AGENT ALARM	STP 3-54B1-SM
031-505-1011	OPERATE THE AN/PDR27-SERIES RADIAC SET	STP 3-54B1-SM
031-505-2001	MAINTAIN AN/PDR 75 RADIAC SET	STP 3-54B2-SM
031-506-2010	CALCULATE TIME OF ENTRY/TIME OF STAY FOR FALLOUT AREAS	STP 3-54B2-SM
031-506-2019	SUPERVISE PREPARATION OF VEHICLES, EQUIPMENT, AND PERSONNEL FOR NBC RECON	STP 3-54B2-SM
031-506-2027	SELECT DETAILED EQUIPMENT DECONTAMINATION SITE	STP 3-54B2-SM
031-506-2054	ADVISE COMMANDER ON CROSSING CONTAMINATED AREA	STP 3-54B2-SM

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: PREPARE FOR A CHEMICAL ATTACK   (03-3-C202.44-AD2R)
(FM 3-4)   (FM 3-3)

ITERATION:	1 2 3 4 5 M (Circle)
COMMANDER/LEADER ASSESSMENT:	T P U (Circle)

CONDITIONS: The OPFOR is conducting chemical warfare, or intelligence indicates its use is imminent. Higher headquarters directs implementation of actions to minimize casualties and limit contamination. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: Unit personnel must assume MOPP4 within 8 minutes, and complete their preparation efforts prior to the attack or prior to its effects reaching their location. Unit protects its personnel, equipment, food, and water, and continues its mission.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
* 1. Unit leader issues a warning order.		

2. Unit personnel start defensive preparations for a chemical attack.
    a. Assume MOPP4 within 8 minutes after notification.
    b. Attach M9 detector paper to their right arms and left wrists, and to either their right or left ankles, and to vehicles.
    c. Conduct MOPP field sanitation procedures.
    d. Emplace chemical agent alarms upwind of position.		

3. Unit personnel prepare fighting positions/shelters.
    a. Use existing natural or man-made facilities as fighting positions and shelters (such as caves, ditches, culverts, and tunnels).
    b. Dig fighting positions and bunkers with overhead cover.
Note: Fighting positions should have overhead cover consisting of a minimum of 18 inches of soil, if time permits.		

4. NCOs check personnel and fighting positions.
    a. Ensure personnel are at MOPP4.
    b. Ensure individual and platoon fighting positions are hardened with sandbags and overhead cover.
    c. Ensure NBC detection equipment is properly emplaced.		

* 5. Unit leader takes additional actions consistent with the tactical situation by increasing, decreasing, or modifying MOPP level as appropriate.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
031-503-1013(SL1)	DECONTAMINATE YOURSELF AND INDIVIDUAL EQUIPMENT USING CHEMICAL DECONTAMINATING KITS	STP 21-1-SMCT
031-503-1015(SL1)	PROTECT YOURSELF FROM NBC INJURY/CONTAMINATION WITH THE APPROPRIATE MISSION-ORIENTED PROTECTIVE POSTURE (MOPP) GEAR	STP 21-1-SMCT
031-503-1019(SL1)	REACT TO CHEMICAL OR BIOLOGICAL HAZARD OR ATTACK	STP 21-1-SMCT
031-503-1035(SL1)	PROTECT YOURSELF FROM CHEMICAL/BIOLOGICAL CONTAMINATION USING YOUR ASSIGNED PROTECTIVE MASK	STP 21-1-SMCT
031-503-1036(SL1)	MAINTAIN YOUR ASSIGNED PROTECTIVE MASK	STP 21-1-SMCT
031-503-1037(SL1)	DETECT CHEMICAL AGENTS USING M8 OR M9 DETECTOR PAPER	STP 21-1-SMCT
031-503-2001(SL2)	IDENTIFY CHEMICAL AGENTS USING M256-SERIES CHEMICAL AGENT DETECTOR KIT	STP 21-24-SMCT
031-503-3008(SL2)	IMPLEMENT MISSION-ORIENTED PROTECTIVE POSTURE	STP 21-24-SMCT
031-506-2061(SL2)	CONDUCT A MASK FIT TEST	STP 21-24-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: RESPOND TO A CHEMICAL ATTACK   (03-3-C203.44-AD2R)
    (<u>FM 3-4</u>)   (FM 3-5)

ITERATION:	1M 2M 3M 4M 5M	(Circle)
COMMANDER/LEADER ASSESSMENT:	T P U	(Circle)

CONDITIONS: The unit is tactically deployed in MOPP2. Intelligence reports that OPFOR has initiated chemical warfare. Automatic alarm sounds, or detector paper changes color causing the element to react. This task is always performed in MOPP4.

TASK STANDARDS: Soldiers sound the alarm (vocal/nonvocal), go immediately to MOPP4, and use available shelter immediately, to prevent further exposure to contamination. The element reacts to the chemical alarm within 15 seconds. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. Unit leaders ensure that soldiers react to the sound of the chemical agent alarm or recognize the indicators for a chemical/biological attack.
    a. Put on protective masks with hoods within 15 seconds.
    b. Give the alarm: vocal/nonvocal.
    c. Assume MOPP4 as soon as possible.
    d. Seek additional shelter if available.
    e. Administer a nerve agent antidote (buddy aid) to other soldiers with symptoms of nerve agent poisoning (if applicable).
    f. Administer nerve agent antidotes to selves (if applicable).
    g. Check soldiers to ensure protective measures are followed.
 	
2. Soldiers take additional protective measures.
    a. Protect exposed equipment and supplies.
    b. Monitor the area by testing with detector kits.
    c. Use prevention procedures such as marking contaminated areas.
 	
3. Soldiers conduct immediate decontamination.
    a. Conduct skin decontamination.
    b. Conduct wipedown of personal equipment with M291 or M280 decon kits.
    c. Conduct operator's spraydown of equipment.
 	
* 4. Leaders initiate unmasking procedures and report to higher headquarters.
    a. Ensure that casualties are provided medical care.
    b. Report casualties.
    c. Submit NBC 1 report to higher headquarters immediately.
    d. Continue mission or request movement to alternate location.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1M	2M	3M	4M	5M		TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

    "*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
031-503-1019(SL1)	REACT TO CHEMICAL OR BIOLOGICAL HAZARD OR ATTACK	STP 21-1-SMCT
031-503-2001(SL2)	IDENTIFY CHEMICAL AGENTS USING M256-SERIES CHEMICAL AGENT DETECTOR KIT	STP 21-24-SMCT
031-503-3002(SL2)	CONDUCT UNMASKING PROCEDURES	STP 21-24-SMCT
031-503-3005(SL2)	SUBMIT NBC 1 REPORT	STP 21-24-SMCT
031-503-3008(SL2)	IMPLEMENT MISSION-ORIENTED PROTECTIVE POSTURE	STP 21-24-SMCT
081-831-1044(SL1)	PERFORM FIRST AID FOR NERVE AGENT INJURY	STP 21-1-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: PREPARE FOR A FRIENDLY NUCLEAR STRIKE   (03-3-C205.44-AD2R)
       (FM 3-4)   (FM 3-3)

ITERATION:		1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:			T	P	U			(Circle)

CONDITIONS: The unit receives notice of a STRIKWARN from higher headquarters directing specific actions to be implemented. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: The unit completes preparations within 30 minutes of friendly nuclear strike warning. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

1. Designated radio operator(s) acknowledges STRIKEWARN message.
    a. Authenticates the call.
    b. Acknowledges warning by return message.
 	
 * 2. Unit leader issues warning order.
    a. Warns subordinate and affected units.
    b. Ensures subordinates execute actions as directed.
 	
 3. Unit soldiers complete actions before detonation occurs.
    a. Place vehicles and equipment for best terrain shielding.
    b. Disconnect nonessential electronic equipment.
    c. Tie down essential antennas.
    d. Take down nonessential antennas and antenna leads.
    e. Improve shelters with consideration for blast, thermal, and radiation effects.
Note: Add sandbags to shelters, individual fighting positions, or tents in the direction of the strike. Cover openings or position them away from the strike.
    f. Zero dosimeters.
    g. Secure loose flammable, or explosive items, and food or water containers,
       to protect them from nuclear weapons effects.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	**1**	**2**	**3**	**4**	**5**	**M**	**TOTAL**
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

   "*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
031-503-1015(SL1)	PROTECT YOURSELF FROM NBC INJURY/CONTAMINATION WITH THE APPROPRIATE MISSION-ORIENTED PROTECTIVE POSTURE (MOPP) GEAR	STP 21-1-SMCT
031-503-1018(SL1)	REACT TO NUCLEAR HAZARD OR ATTACK	STP 21-1-SMCT

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
031-503-1035(SL1)	PROTECT YOURSELF FROM CHEMICAL/BIOLOGICAL CONTAMINATION USING YOUR ASSIGNED PROTECTIVE MASK	STP 21-1-SMCT
031-503-1037(SL1)	DETECT CHEMICAL AGENTS USING M8 OR M9 DETECTOR PAPER	STP 21-1-SMCT
031-503-2023(SL2)	MEASURE RADIATION DOSE RATE AND TOTAL DOSE	STP 21-24-SMCT
031-503-3002(SL2)	CONDUCT UNMASKING PROCEDURES	STP 21-24-SMCT
031-503-3004(SL2)	SUPERVISE THE CROSSING OF A CONTAMINATED AREA	STP 21-24-SMCT
031-503-3005(SL2)	SUBMIT NBC 1 REPORT	STP 21-24-SMCT
031-503-3008(SL2)	IMPLEMENT MISSION-ORIENTED PROTECTIVE POSTURE	STP 21-24-SMCT
031-503-4002(SL2)	SUPERVISE UNIT PREPARATION FOR NBC ATTACK	STP 21-24-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: PREPARE FOR A NUCLEAR ATTACK   (03-3-C206.44-AD2R)
(<u>FM 3-4</u>)   (FM 3-100)   (FM 3-3)

ITERATION:	1M	2M	3M	4M	5M	(Circle)
COMMANDER/LEADER ASSESSMENT:		T	P	U		(Circle)

CONDITIONS: The unit receives notice that a nuclear attack is probable, and takes actions to minimize casualties and damage. This task is always performed in MOPP4.

TASK STANDARDS: The unit hardens positions and equipment, and conducts periodic monitoring. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
* 1. The unit's leader issues a warning order to subordinate units, ensuring all soldiers understand the order.		
2. The unit begins defensive preparation for a nuclear attack. a. Places vehicles and equipment for best terrain shielding (hill masses, slopes, culverts, depressions). b. Turns off and disconnects nonessential electronic equipment per unit SOP. c. Ties down essential antennas. d. Takes down nonessential antenna leads per unit SOP or other guidance. e. Improves shelters with consideration for blast, thermal, and radiation effects. f. Zeros dosimeters. g. Secures loose, flammable, or explosive items, and food or water containers, to protect them from nuclear weapons effects. h. Takes cover in hardened shelters (if available). i. Uses field expedient shelters.		
3. The unit takes additional actions consistent with the tactical situation. a. Continues periodic monitoring. b. Reports all dose rate and dosimeter readings to higher headquarters.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1M	2M	3M	4M	5M		TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
031-503-1015(SL1)	PROTECT YOURSELF FROM NBC INJURY/CONTAMINATION WITH THE APPROPRIATE MISSION-ORIENTED PROTECTIVE POSTURE (MOPP) GEAR	STP 21-1-SMCT

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
031-503-1018(SL1)	REACT TO NUCLEAR HAZARD OR ATTACK	STP 21-1-SMCT
031-503-1023(SL2)	PROTECT YOURSELF FROM NBC INJURY/CONTAMINATION WHEN CHANGING MISSION-ORIENTED PROTECTIVE POSTURE (MOPP) GEAR	STP 21-24-SMCT
031-503-1035(SL1)	PROTECT YOURSELF FROM CHEMICAL/BIOLOGICAL CONTAMINATION USING YOUR ASSIGNED PROTECTIVE MASK	STP 21-1-SMCT
031-503-1036(SL1)	MAINTAIN YOUR ASSIGNED PROTECTIVE MASK	STP 21-1-SMCT
031-503-1037(SL1)	DETECT CHEMICAL AGENTS USING M8 OR M9 DETECTOR PAPER	STP 21-1-SMCT
031-503-2023(SL2)	MEASURE RADIATION DOSE RATE AND TOTAL DOSE	STP 21-24-SMCT
031-503-3002(SL2)	CONDUCT UNMASKING PROCEDURES	STP 21-24-SMCT
031-503-3004(SL2)	SUPERVISE THE CROSSING OF A CONTAMINATED AREA	STP 21-24-SMCT
031-503-3005(SL2)	SUBMIT NBC 1 REPORT	STP 21-24-SMCT
031-503-3008(SL2)	IMPLEMENT MISSION-ORIENTED PROTECTIVE POSTURE	STP 21-24-SMCT
071-326-5704(SL2)	SUPERVISE CONSTRUCTION OF A FIGHTING POSITION	STP 21-24-SMCT
071-332-5000(SL3)	PREPARE AN OPERATION OVERLAY	STP 21-24-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: REACT TO SMOKE OPERATIONS   (03-3-C209.44-AD2R)
(FM 3-50)

ITERATION:	1 2 3 4 5 M	(Circle)
COMMANDER/LEADER ASSESSMENT:	T P U	(Circle)

CONDITIONS: The threat impedes direct observation by using smoke as an obscuring measure, or organic smoke is used to conceal the unit's activities from threat observation. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: The unit exploits the threat smoke or employs organic smoke to conceal their own activities and continues the mission. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

1. Unit does not allow smoke to impede performance of mission.
   a. Performs its mission in the presence of smoke.
   b. Uses threat smoke to conceal their own movements.
   c. Moves to alternate positions to reduce the effects of the threat's use of smoke.
   d. Considers using countersmoke to conceal its own activities.
 	
2. The unit employs organic smoke grenade launchers, smoke pots, and smoke hand grenades.
   a. Coordinates smoke operations with supported unit.
   b. Determines wind direction and speed.
   c. Determines where to release smoke and where it will travel.
   d. Determines duration of smoke operations.
   e. Determines the effects of weather conditions on their smoke plan.
   f. Ensures that smoke covers a larger area than the unit position.
   g. Requests smoke support from other units (if organic systems will not accomplish the task).
 	
3. The unit uses target acquisition and guidance systems.
   a. Determines what available target and acquisition systems are effective in smoke and uses them.
   b. Requests target acquisition and guidance systems that are effective in smoke.
 	
* 4. NCOIC requests resupply of smoke munitions when required.
   a. Requests smoke grenades and smoke pots.
   b. Distributes smoke grenades and smoke pots.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	**1**	**2**	**3**	**4**	**5**	**M**	**TOTAL**
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
031-503-1023(SL2)	PROTECT YOURSELF FROM NBC INJURY/CONTAMINATION WHEN CHANGING MISSION-ORIENTED PROTECTIVE POSTURE (MOPP) GEAR	STP 21-24-SMCT
031-503-3002(SL2)	CONDUCT UNMASKING PROCEDURES	STP 21-24-SMCT
031-508-3061	PLAN SMOKE OPERATIONS	STP 3-54B34-SM-TG
031-508-3067	CONTROL SMOKE OPERATIONS	STP 3-54B34-SM-TG

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: RESPOND TO THE INITIAL EFFECTS OF A NUCLEAR ATTACK   (03-3-C223.44-AD2R)
    (<u>FM 3-4</u>)   (FM 3-100)   (FM 3-3)

                              ITERATION: 1   2   3   4   5   (Circle)

                              COMMANDER/LEADER ASSESSMENT: T   P   U   (Circle)

CONDITIONS: Soldiers observe a brilliant flash of light and/or a mushroom-shaped cloud. This task should not be trained in MOPP4.

TASK STANDARDS: The unit takes actions to minimize exposure to the initial effects of a nuclear detonation in its area and continues its mission.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

1. Soldiers take immediate protective actions in response to a nuclear attack:
    a. Without warning:
        (1) Close eyes immediately.
        (2) Drop to the ground in a prone position, with head toward blast, if possible (if in the hatch of an armored vehicle, immediately drop down inside the vehicle).
        (3) Keep head and face down and helmet on.
        (4) Remain prone until the blast wave passes and all debris stops falling.
    b. With warning:
        (1) Identify the best available shelter (fighting positions/inside shelters).
        (2) Move to the shelter.
        (3) Take actions to protect themselves from the blast and radiation.
        (4) Keep clothing loosely fitted with headgear on at all times.
        (5) Protect eyes and minimize exposed skin areas.		

* 2. Leaders reorganize the unit.
    a. Reestablish chain of command.
    b. Reestablish communications.
    c. Submit NBC 1 (Nuclear) report to higher headquarters.
    d. Treat casualties.
    e. Report casualties.
    f. Evacuate casualties.
    g. Evaluate facilities for protection from residual radiation.
    h. Implement continuous monitoring.
    i. Submit damage assessment to higher headquarters.
    j. Initiate area damage control plan as required.
    k. Extinguish all fires before they spread out of control.		

* 3. Leaders ensure weapon systems are operational.		

4. Soldiers right overturned vehicles.
    a. Check loss of coolant, fuel, and battery fluids.
    b. Perform operator's maintenance to restore moderately damaged vehicles to combat use.		

5. Soldiers improve cover (if applicable).
    a. Choose dense covering material.
    b. Cover in-depth.
    c. Provide strong support.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
d. Cover as much of the opening as practical.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	**1**	**2**	**3**	**4**	**5**		**TOTAL**
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
031-503-1018(SL1)	REACT TO NUCLEAR HAZARD OR ATTACK	STP 21-1-SMCT
031-503-2023(SL2)	MEASURE RADIATION DOSE RATE AND TOTAL DOSE	STP 21-24-SMCT
031-503-3004(SL2)	SUPERVISE THE CROSSING OF A CONTAMINATED AREA	STP 21-24-SMCT
031-503-3005(SL2)	SUBMIT NBC 1 REPORT	STP 21-24-SMCT
031-503-3008(SL2)	IMPLEMENT MISSION-ORIENTED PROTECTIVE POSTURE	STP 21-24-SMCT
081-831-0101(SL2)	REQUEST MEDICAL EVACUATION	STP 21-24-SMCT
081-831-1000(SL1)	EVALUATE A CASUALTY	STP 21-1-SMCT
081-831-1005(SL1)	PERFORM FIRST AID TO PREVENT OR CONTROL SHOCK	STP 21-1-SMCT
081-831-1007(SL1)	PERFORM FIRST AID FOR BURNS	STP 21-1-SMCT
081-831-1025(SL1)	PERFORM FIRST AID FOR AN OPEN ABDOMINAL WOUND	STP 21-1-SMCT
081-831-1033(SL1)	PERFORM FIRST AID FOR AN OPEN HEAD WOUND	STP 21-1-SMCT
081-831-1034(SL1)	PERFORM FIRST AID FOR A SUSPECTED FRACTURE	STP 21-1-SMCT
081-831-1042(SL1)	PERFORM MOUTH-TO-MOUTH RESUSCITATION	STP 21-1-SMCT
081-831-1046(SL1)	TRANSPORT A CASUALTY	STP 21-1-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: CONDUCT CHEMICAL RECONNAISSANCE   (03-3-C225.44-AD2R)
(FM 3-100)   (FM 3-4)

ITERATION:	1M	2M	3M	4M	5M	(Circle)
COMMANDER/LEADER ASSESSMENT:		T	P	U		(Circle)

CONDITIONS: The unit is operating in an active chemical environment and needs to determine if chemical agent hazards exist in a particular location. The unit has operational chemical detection equipment/supplies available. This task is always performed in MOPP4.

TASK STANDARDS: The unit detects, identifies, marks, and reports the location of all chemical agents in the assigned reconnaissance area to its higher headquarters. The unit marks and records the location of contamination within 100 meters accuracy of actual location. The time required to perform this task is increased when conducting it in MOPP4.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
* 1. The unit leader issues guidance to subordinate leaders.		

* 2. The unit leader begins preparations for the chemical reconnaissance.
    a. Performs map reconnaissance of the route and specific area for reconnaissance.
    b. Determines reconnaissance technique to use.
    c. Plans for decontamination (if necessary) following the reconnaissance operation.
    d. Coordinates for fire support with all BOS elements.
    e. Briefs personnel on proper reporting and recording procedures.
    f. Issues OPORD/FRAGO to subordinate leaders.		

3. The unit prepares for chemical reconnaissance mission.
    a. Prepares vehicles/equipment for chemical reconnaissance.
    b. Performs precombat checks on vehicles/equipment.
    c. Loads chemical agent detection equipment.
    d. Removes all external gear/equipment not needed or required for the mission.
    e. Attaches M9 paper to troops and vehicles.
    f. Covers exposed equipment with plastic or canvas.
    g. Covers internal area of vehicle for team members who dismount vehicle.
    h. Assumes appropriate MOPP level for the reconnaissance mission.
Note: In order to limit performance degradation, the unit leader should conduct MOPP analysis to determine the MOPP level appropriate for movement to the reconnaissance start point and to determine the point when the unit assumes MOPP4.		

4. The unit conducts the chemical reconnaissance.
    a. Uses proper movement techniques (per METT-T).
    b. Uses chemical agent detection equipment and chemical agent detection paper to locate contamination around and within the designated area.
    c. Maintains 25- to 100-meter spacing between vehicles across the axis of advance, depending on the terrain.
    d. Stops vehicles at selected intervals or in areas with visual indications of a chemical attack to check for contamination.
    e. Checks the area for visual indications of chemical contamination.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

(1) Dead/discolored vegetation.
       (2) Discolored soil.
       (3) Unusual liquid droplets.
       (4) Oily film on water.
       (5) Craters caused by bursting ammunitions.
       (6) Absence of insect life.
       (7) Dead animals/birds.
    f. Marks contaminated area per OPORD/SOP instructions.
 	
* 5. The unit leader submits an NBC 4 (Chemical) report of findings to higher headquarters.
 	
  6. The unit conducts recovery operations.
    a. Checks soldiers and vehicles for contamination.
    b. Segregates contaminated soldiers and equipment (if necessary).
    c. Coordinates for operational decontamination (if necessary).
    d. Moves to the preselected decontamination site (if necessary).
    e. Conducts operational decontamination (if necessary).
    f. Coordinates for reconstitution to include thorough decontamination (if applicable).		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1M	2M	3M	4M	5M		TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
031-503-1035(SL1)	PROTECT YOURSELF FROM CHEMICAL/BIOLOGICAL CONTAMINATION USING YOUR ASSIGNED PROTECTIVE MASK	STP 21-1-SMCT
031-503-1037(SL1)	DETECT CHEMICAL AGENTS USING M8 OR M9 DETECTOR PAPER	STP 21-1-SMCT
031-503-2001(SL2)	IDENTIFY CHEMICAL AGENTS USING M256-SERIES CHEMICAL AGENT DETECTOR KIT	STP 21-24-SMCT
031-503-2023(SL2)	MEASURE RADIATION DOSE RATE AND TOTAL DOSE	STP 21-24-SMCT
031-503-3004(SL2)	SUPERVISE THE CROSSING OF A CONTAMINATED AREA	STP 21-24-SMCT
031-503-3005(SL2)	SUBMIT NBC 1 REPORT	STP 21-24-SMCT
031-503-3008(SL2)	IMPLEMENT MISSION-ORIENTED PROTECTIVE POSTURE	STP 21-24-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: CROSS A CHEMICALLY CONTAMINATED AREA   (03-3-C226.44-AD2R)
(FM 3-3)

ITERATION:		1M	2M	3M	4M	5M	(Circle)
COMMANDER/LEADER ASSESSMENT:			T	P	U		(Circle)

CONDITIONS: Time and the mission dictate a contaminated area cannot be bypassed without unacceptably delaying the unit. The unit has sufficient time to cross and decontaminate itself. Approximate boundary of area is known or marked. The FBCB2 is initialized. This task is always performed in MOPP4.

TASK STANDARDS: The unit crosses contaminated area without sustaining casualties from a chemical agent. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. The unit leader selects a route across the contaminated area.
    a. Uses NBC 5 (Chemical) report and/or recon reports to select a route.
    b. Selects route that minimizes exposure consistent with the mission.
    c. Obtains route clearance and approval.
 	
2. The unit prepares to cross the area.
    a. Assumes MOPP4 for crossing the area.
    b. Ensures all drivers, vehicle commanders, and leaders know route of march and/or have strip maps.
    c. Ensures vehicles are buttoned up (mounted movement).
    d. Places externally stored equipment inside or covers with available material.
    e. Attaches M9 detector paper to soldiers and vehicles to provide warning of contamination.
 	
3. The unit crosses the area.
    a. Avoids low ground, overhanging branches and brush, to the extent allowed by the tactical situation.
    b. Conducts dismounted movement, if necessary, as rapidly as possible.
    c. Crosses area as quickly and carefully as possible.
 	
4. The unit exits the contaminated area.
    a. Checks for casualties.
    b. Reports casualties (if applicable).
    c. Conducts necessary decontamination.
    d. Continues the mission.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1M	2M	3M	4M	5M		TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
031-503-1013(SL1)	DECONTAMINATE YOURSELF AND INDIVIDUAL EQUIPMENT USING CHEMICAL DECONTAMINATING KITS	STP 21-1-SMCT
031-503-1035(SL1)	PROTECT YOURSELF FROM CHEMICAL/BIOLOGICAL CONTAMINATION USING YOUR ASSIGNED PROTECTIVE MASK	STP 21-1-SMCT
031-503-1037(SL1)	DETECT CHEMICAL AGENTS USING M8 OR M9 DETECTOR PAPER	STP 21-1-SMCT
031-503-1043	EMPLOY THE M100 SORBENT DECONTAMINATION SYSTEM (SDS)	STP 3-54B1-SM
031-507-1002	DECONTAMINATE EQUIPMENT USING ABC-M11 DECONTAMINATION APPARATUS	STP 3-54B1-SM
031-507-1022	DECONTAMINATE EQUIPMENT USING M13 DECONTAMINATION APPARATUS, PORTABLE	STP 3-54B1-SM
031-507-1039	TROUBLESHOOT M13 DECONTAMINATING APPARATUS, PORTABLE	STP 3-54B1-SM

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: PREPARE CREW-SERVED WEAPONS FIGHTING POSITIONS   (05-5-0302.44-AD2R)
     (<u>FM 5-10</u>)   (FM 5-100)

ITERATION: 1 2 3 4 5 M (Circle)	
COMMANDER/LEADER ASSESSMENT: T P U (Circle)	

CONDITIONS: The crew must construct their own crew-served fighting position using organic equipment. The section leader has selected, and the platoon leader has approved, the location. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: The crew constructs crew-served weapon fighting positions providing coverage of the sector of fire and final protective line (FPL), and protection from direct and indirect fire. The position does not restrict the operational capability of the weapon system. The time required to perform this task is increased when conducting it in MOPP4.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

1. The crew constructs a machine-gun position having a primary and secondary sector of fire. Reports intermediate status and completion to the squad leader.
   a. Constructs the position so the gun fires to the front or oblique (firing across the unit's front) with the oblique being the primary sector of fire.
   b. Digs the position in an inverted "T" shape with a firing platform in each corner.
   c. Uses the tripod on the side with the primary sector of fire and the bipod legs with the secondary sector of fire.
   d. Uses earth removed during construction of the position to provide frontal and flank protection if it does not interfere with sectors of fire. It should be high enough to cover both soldiers when they are operating the weapon.
   e. Shapes the hole so both the gunner and assistant gunner can get to the weapon.
   f. Reduces the weapon's height by digging the tripod platform down as much as possible yet keeps the weapon traversable across the entire sector of fire.
   g. When there is a three-soldier crew for a machine gun, the ammunition bearer digs a one-soldier fighting position to the flank. The crew connects this position to the gun position by a crawl trench.
   h. Digs the hole to armpit depth and slopes the floor outward toward each end of the hole.
   i. Digs grenade sumps approximately the width and depth of one entrenching tool at both ends of the hole.
   j. Over the middle of the position, builds overhead cover 46 centimeters (18 inches) thick when possible.
   k. If time permits, improves the position by adding cover, digging trenches to adjacent positions, and maintaining camouflage.
   l. Completes the position in 7 man-hours without overhead cover, or 12 man-hours with overhead cover.
 	
 2. The crew constructs a machine-gun position without a secondary sector of fire. Reports intermediate status and completion to the squad leader.
   a. Digs the position in a "V" shape with the firing position in the apex of the "V."
   b. Constructs the position following procedures in subtasks 1.d to 1.k.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

Completes it in 6 man-hours without overhead cover, or 11 man-hours with overhead cover.
 	
3. The crew constructs an M136 AT4/90mm recoilless rifle position. Reports intermediate status and completion to the squad leader.
    a. Uses earth removed during construction of the position for frontal and flank protection. However, leaves both muzzle blast and backblast areas clear of obstacles to prevent round deflection, fires, and pressure buildup. The backblast area is cleared of highly combustible material to a distance of 5 meters (5.5 yards) and is either level or sloping down and away from the position.
    b. If the crew builds cover on the flanks, ensure it is high enough to cover both soldiers.
    c. Digs the position to armpit depth and slopes the floor down toward each end of the hole.
    d. Digs grenade sumps approximately the width and depth of an entrenching tool at each end of the hole.
    e. Ensures the position width is narrow enough so the rear of the weapon extends over the rear of the hole when the soldier firing the rifle stands at the front of the position.
    f. Improves the position, if time permits, by digging trenches to adjacent positions and maintaining camouflage. Overhead cover is desired only if it protects the crew when they are not firing the weapon (due to the large backblast).
    g. Completes the position in 6 man-hours.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
052-191-1361(SL1)	CAMOUFLAGE YOURSELF AND YOUR INDIVIDUAL EQUIPMENT	STP 21-1-SMCT
071-325-4425(SL1)	EMPLOY AN M18A1 CLAYMORE MINE	STP 21-1-SMCT
071-326-0513(SL1)	SELECT TEMPORARY FIGHTING POSITIONS	STP 21-1-SMCT
071-326-5703(SL1)	CONSTRUCT INDIVIDUAL FIGHTING POSITIONS	STP 21-1-SMCT
071-326-5704(SL2)	SUPERVISE CONSTRUCTION OF A FIGHTING POSITION	STP 21-24-SMCT
071-326-5705(SL2)	ESTABLISH AN OBSERVATION POST	STP 21-24-SMCT
071-326-5775(SL4)	COORDINATE WITH AN ADJACENT PLATOON	STP 21-24-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: OCCUPY ASSEMBLY AREA   (07-2-1136.44-AD2R)
(FM 7-8)   (FM 3-01.64)

	ITERATION:	1	2	3	4	5	M	(Circle)
	COMMANDER/LEADER ASSESSMENT:		T	P	U			(Circle)

CONDITIONS: The unit is ordered to occupy an assembly area. The enemy has the ability to attack the company by air, indirect fire, and small (platoon-size) ground forces that have infiltrated the area. The unit has guidance provided by the rules of engagement (ROE) and from mission instructions, such as the peace mandate terms of reference, status-of-forces agreement (SOFA), and rules of interaction (ROI). Civilians, government agencies, nongovernmental organizations, private voluntary organizations, and local and international media may be in the area. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: The unit occupies the assembly area and completes preparations as specified in the OPORD. The unit main body is not surprised by the enemy and the company forces enemy platoon-size or smaller probes to withdraw. No friendly units suffer casualties or equipment damage as a result of fratricide. The unit complies with the ROE/ROI, mission instruction, higher headquarters, and other special orders. Collateral damage is minimized. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

1. The quartering party, under the supervision of the battery XO, or designated leader, moves to the assembly area and prepares the area for the battery arrival. Conducts RSOP.
    a. Establishes initial security.
    b. Reconnoiters the area.
    c. Assigns the platoon sectors. Platoon quartering party members prepare the area.
    d. Checks for and marks or removes enemy obstacles and mines.
    e. Checks the area for NBC contamination.
    f. Selects a location for the mortars (if applicable).
    g. Selects the antiarmor firing positions on armor avenues of approach.
    h. Selects a battery CP location and platoon CP positions.
    i. Selects a battery trains location, if not with the higher headquarter's trains.
    j. Lays communications wire, as needed.		

2. As the battery elements clear the release point, quartering party members, waiting in covered and concealed positions, move out to guide them to selected or designated areas without halting.		

3. The battery establishes and maintains local security from air and ground forces.
    a. Ensures the platoon leaders confirm platoon sectors with the commander.
    b. Places OPs on the critical avenues of approach based on the battery commander's guidance. The OPs establish communications with the battery CP.
    c. Maintains noise, light, and camouflage discipline.
    d. Complies with ROE/ROI and ensures collateral damage is minimized.
    e. Conducts patrols according to higher headquarter's orders.		

* 4. The commander establishes the priority of work, and the unit completes the work. Coordinates with all BOS elements.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
5. The battery prepares for the next mission.		

* 6. The commander coordinates, as a minimum, with the element on the left and the right.
    a. Establishes responsibility for overlapping enemy avenues of approach between adjacent squads and platoons.
    b. Exchanges information on OP locations and unit signals.
    c. Coordinates local counterattacks.		

* 7. The commander develops a defensive plan and coordinates with all BOS elements.
    a. Employs forward platoons.
    b. Designates a ready reaction force.
    c. Incorporates the employment of all antiarmor weapons (if applicable).
    d. Incorporates the employment of indirect fires.
    e. Incorporates the use of mines and obstacles.
     f. Incorporates security measures.
    g. Conducts combat service support.		

* 8. The commander forwards a sector sketch.
    a. Forwards the sector sketch to higher headquarters (digital or conventional).
    b. Retains one copy for unit use.		

9. On leaving the assembly area, the battery--
    a. Recovers all mines and obstacles.
    b. Does not leave anything of intelligence or materiel value.
    c. Eliminates signs of the unit's presence in the assembly area (trash, aiming stakes, communications wire, et cetera).		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
052-191-1361(SL1)	CAMOUFLAGE YOURSELF AND YOUR INDIVIDUAL EQUIPMENT	STP 21-1-SMCT
071-325-4401(SL1)	PERFORM SAFETY CHECKS ON HAND GRENADES	STP 21-1-SMCT
071-325-4407(SL1)	EMPLOY HAND GRENADES	STP 21-1-SMCT
071-325-4425(SL1)	EMPLOY AN M18A1 CLAYMORE MINE	STP 21-1-SMCT
071-326-0510(SL1)	REACT INDIRECT FIRE WITH DISMOUNTED	STP 21-1-SMCT
071-326-0511(SL1)	REACT TO FLARES	STP 21-1-SMCT
071-326-0513(SL1)	SELECT TEMPORARY FIGHTING POSITIONS	STP 21-1-SMCT
071-326-5703(SL1)	CONSTRUCT INDIVIDUAL FIGHTING POSITIONS	STP 21-1-SMCT

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
071-326-5704(SL2)	SUPERVISE CONSTRUCTION OF A FIGHTING POSITION	STP 21-24-SMCT
071-326-5705(SL2)	ESTABLISH AN OBSERVATION POST	STP 21-24-SMCT
071-326-5775(SL4)	COORDINATE WITH AN ADJACENT PLATOON	STP 21-24-SMCT
071-329-1019(SL2)	USE A MAP OVERLAY	STP 21-24-SMCT
071-329-1030(SL1)	NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT WHILE MOUNTED	STP 21-1-SMCT
071-331-0804(SL1)	PERFORM SURVEILLANCE WITHOUT THE AID OF ELECTRONIC DEVICES	STP 21-1-SMCT
071-331-0815(SL1)	PRACTICE NOISE, LIGHT, AND LITTER DISCIPLINE	STP 21-1-SMCT
071-331-1004(SL1)	PERFORM DUTY AS A GUARD	STP 21-1-SMCT
071-410-0012(SL3)	CONDUCT OCCUPATION OF AN ASSEMBLY AREA	STP 21-24-SMCT
101-92Y-0006(SL2)	INSPECT EQUIPMENT FOR ACCOUNTABILITY, CLEANLINESS, AND SERVICEABILITY	STP 21-24-SMCT
113-571-1023(SL1)	PREPARE A WRITTEN MESSAGE IN USMTF FORMAT	STP 21-1-SMCT
113-637-2001(SL1)	COMMUNICATE VIA A TACTICAL RADIO	STP 21-1-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: ESTABLISH UNIT DEFENSE   (07-3-C219.44-AD2R)
    (FM 7-8)   (FM 7-7)

ITERATION:	1 2 3 4 5 M	(Circle)
COMMANDER/LEADER ASSESSMENT:	T P U	(Circle)

CONDITIONS: The platoon has received an OPORD/FRAGO with a mission to occupy part of a larger unit's defensive sector or is isolated and must provide its own security/defense. The platoon may be opposed by as much as a motorized rifle company. Some iterations of this task are performed in MOPP4. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: The platoon completes all preparations for the defense not later than the time specified in the order. The platoon is not surprised by the enemy. The time required to prepare is increased when conducting this task in MOPP4.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. The platoon leader performs a leader's reconnaissance of the tentative defensive position.
    a. Searches area to ensure it is free of enemy, mines, and booby traps.
    b. Establishes local security.
    c. Surveys area for NBC contamination.
    d. Designates sectors and general locations for OPs, vehicles, automatic weapons, and antiarmor weapons based on METT-T.
Note: At night, the designation of positions must be more exact. Leaders may elect to reconnoiter the area first, position the OPs, and then have the guides bring the other members into position.
 	
2. Designated security or OP team(s) moves to assigned position(s).
    a. Emplaces the M8A1 chemical-alarm system (if assigned) within 5 minutes of occupying the observation post.
    b. Positions the OP within range of supporting small-arms fire.
    c. Provides cover and concealment for OP personnel.
    d. Designates covered and concealed routes to and from OP(s).
    e. Establishes communications from the OPs to unit command post (primary means should be wire, supplemented by messenger and radio).
    f. Disseminates locations of all friendly personnel in sector.
 	
3. The platoon leader and platoon FO designate targets to support OP(s).
    a. Identify TRPs.
    b. Include OP targets within fire plan.
 	
4. The OP team(s) provides early warning. (071-331-0804 [SL1])
    a. Provides continuous early warning out to a range that warns of enemy observation, direct fire, or assault on the main body.
    b. Detects all enemy activity within the vicinity of the unit position.
    c. Adjusts illumination or HE rounds on enemy targets.
    d. Emplaces expedient early warning devices before dark, if possible.
    e. Demonstrates correct use of current challenge and password.
    f. Alternates OP sites when required due to changing visibility or enemy activity.
 	
* 5. The platoon leader designates primary, alternate, and supplementary fighting		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

positions for key weapons/vehicles (where applicable), while emplacing the rest of the platoon.
    a. Positions machine guns to obtain grazing fire along the most likely dismounted avenue of approach.
    b. Positions antiarmor weapons to cover likely armor avenues of approach or assigned engagement area.
    c. Ensures positions are mutually supporting along armor and dismounted infantry avenues of approach.
    d. Positions M203 grenade launchers (if assigned) to cover dead space in terrain outside hand-grenade range.
 	
* 6. Leaders place fighting positions to engage targets in designated sectors of fire covering the most dangerous avenues of approach first.
    a. Determine sector of fire based on the type of weapon and the weapon's range.
    b. Assign all personnel to a fighting position.
 	
* 7. The platoon leader coordinates/contacts adjacent units.
    a. Establishes boundary responsibilities.
    b. Discovers and eliminates any gaps in defensive sector.
    c. Ensures observation and fires overlap.
 	
  8. The platoon occupies defensive position. (071-326-5703 [SL1]), (071-326-5704 [SL2])
Note: The leader establishes task priorities. Normally, these are in the unit SOP, but can be modified as needed (based on METT-TC considerations) by the platoon leader or the company commander.
    a. Physically occupies assigned positions.
    b. Physically reconnoiters in front of each position to become familiar with the terrain, locate dead space, and to view the terrain from the enemy perspective.
    c. Prepares and forwards crew-served weapons range cards to the squad leader within 15 minutes of positioning.
    d. Installs aiming stakes.
    e. Clears fields of fire.
    f. Emplaces obstacles per company obstacle plan.
    g. Digs fighting positions to armpit depth with 18 inches of parapet.
    h. Constructs overhead cover for fighting position.
    i. Camouflages positions/vehicles from aerial and ground observation. Ensures fighting positions cannot be detected from a distance of more than 35 meters from the front of the position.
    j. Stockpiles ammunition, food, and water.
    k. Constructs alternate and supplementary positions.
    l. Ensures all platoon members know the platoon CP location.
 	
* 9. The platoon leader with the FIST or FO, if applicable, plans for the employment of indirect fires. (061-283-6003 [SL2])
    a. Plans fires along enemy avenues of approach.
    b. Plans fires at known or likely enemy positions.
    c. Plans final protective fires (FPF) if allocated.
    d. Registers and adjusts target reference points (if available and if the situation permits).
 	
  10. The RATELO establishes communications.
    a. Uses wire as primary communications (if available).
    b. Ensures platoon/company CP has communications with OPs, higher and		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

subordinate leaders, adjacent units, and fire support.
c. Conducts periodic communications checks to ensure all communications are operational.
d. Plans and provides alternate means of communications.
 	
*11. Squad leader(s) prepares sector sketch.
    a. Identifies the main terrain features and the range to them.
    b. Identifies location of squad fighting positions.
    c. Indicates primary and secondary sectors of fire for each position.
    d. Identifies the type weapon and the fire control measures for each position (FPF, PDF, FPL).
    e. Identifies location of OPs and squad leader's position.
    f. Marks dead space on sketch.
    g. Identifies location of obstacles.
    h. Indicates direction of north.
    i. Forwards a copy of the sector sketch to the platoon leader within 30 minutes of being assigned a sector.
 	
*12. The platoon leader prepares a platoon sector sketch.
    a. Indicates the platoon sector or engagement area.
    b. Denotes squad positions (primary, alternate, and supplementary) and sectors of fire.
    c. Indicates locations of vehicles, antiarmor, and automatic weapons positions with the primary sectors of fire, FPL, or PDF for primary vehicle weapons system, automatic weapons, and TRPs.
    d. Identifies location of observation posts and patrol routes (if any have been planned).
    e. Indicates maximum engagement lines for primary weapon systems.
    f. Identifies location of indirect fire targets and FPFs (if any have been allocated).
    g. Indicates direction of north.
    h. Places unit identification up to company level.
    i. Indicates date-time group.
    j. Identifies position of the platoon command post.
    k. Forwards a copy of the platoon sketch to the company commander within 1 hour of assigning squad leaders' sectors.
 	
 13. The platoon continues to improve defensive positions.
    a. Improves per SOP work priorities.
    b. Improves as directed by higher headquarters.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
061-283-6003(SL2)	ADJUST INDIRECT FIRE	STP 21-24-SMCT

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
071-325-4407(SL1)	EMPLOY HAND GRENADES	STP 21-1-SMCT
071-326-5703(SL1)	CONSTRUCT INDIVIDUAL FIGHTING POSITIONS	STP 21-1-SMCT
071-326-5704(SL2)	SUPERVISE CONSTRUCTION OF A FIGHTING POSITION	STP 21-24-SMCT
071-331-0804(SL1)	PERFORM SURVEILLANCE WITHOUT THE AID OF ELECTRONIC DEVICES	STP 21-1-SMCT
071-331-0815(SL1)	PRACTICE NOISE, LIGHT, AND LITTER DISCIPLINE	STP 21-1-SMCT
071-430-0002(SL2)	CONDUCT A DEFENSE BY A SQUAD	STP 21-24-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: USE PASSIVE AIR DEFENSE MEASURES   (44-1-C220.44-AD2R)
          (FM 44-8)   (FM 44-80)

ITERATION:	1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:			T	P	U		(Circle)

CONDITIONS: The platoon is in a tactical position. Hostile aerial platforms (rotary-wing, fixed-wing, UAVs) have been operating in the general area. Platoon weapon control status is WEAPONS HOLD. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: OPFOR aerial platforms (rotary-wing, fixed-wing, UAVs) do not detect the unit. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. Unit leader uses passive air defense measures in a tactical position.
    a. Uses all available resources (camouflage, cover, concealment, dispersion, and so forth) to hide personnel and equipment to limit its vulnerability. Air situational awareness is achieved by unit monitoring the SHTUs/HTUs.
    b. Covers or shades shiny items, particularly windshields and optics.
    c. Establishes and rehearses air attack alarms.
    d. Disperses vehicles, tents, and supplies to reduce vulnerability to air attack.
    e. Constructs field fortifications with organic equipment as necessary to protect personnel and vulnerable mission-essential equipment.
    f. Mans OPs (daytime or nighttime) to provide warning of approaching aerial platforms (rotary-wing, fixed-wing, UAVs).
    g. Establishes a listening watch on the air defense early warning net, if equipment is available and operational.		

* 2. Unit leader uses passive air defense measures in a convoy.
    a. Convoy commander briefs all unit personnel.
    b. Camouflages vehicles and equipment before moving out.
    c. Selects column interval based on instructions, mission, and terrain.
    d. Places crew-served weapons throughout the convoy to cover front, rear, and flanks (avenues of approach).
    e. Assigns soldiers to air guard duties with specific search sectors covering 360 degrees.
    f. Visually identifies threat aerial platforms (rotary-wing, fixed-wing, UAVs).
    g. Reports all aircraft actions to higher headquarters.
    h. Establishes and rehearses air attack alarms.		

3. Unit personnel use passive air defense measures when occupying or displacing.
    a. Maintain vehicle interval specified in the movement order.
    b. Stagger vehicles to avoid linear patterns.
    c. Assign air guards to sectors of search that cover 360 degrees and maintain coverage until convoy completes the movement.
    d. Visually identify threat aerial platforms (rotary-wing, fixed-wing, UAVs).
    e. Report all aircraft actions to higher headquarters.
    f. Establish vehicle order of precedence.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
052-191-1361(SL1)	CAMOUFLAGE YOURSELF AND YOUR INDIVIDUAL EQUIPMENT	STP 21-1-SMCT
052-191-1362(SL1)	CAMOUFLAGE EQUIPMENT	STP 21-1-SMCT
071-326-5705(SL2)	ESTABLISH AN OBSERVATION POST	STP 21-24-SMCT
113-600-2001(SL1)	COMMUNICATE VIA A TACTICAL TELEPHONE	STP 21-1-SMCT
113-637-2001(SL1)	COMMUNICATE VIA A TACTICAL RADIO	STP 21-1-SMCT
301-371-1000(SL1)	REPORT INTELLIGENCE INFORMATION	STP 21-1-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS

TASK: CONDUCT AN AIR ATTACK ON ENEMY FORCES, STATIC SITE, OR MOVING FORCES (44-OPFOR-0004)

CONDITION: OPFOR units have located sensor team asset positions and MSRs in the forward area. OPFOR units are initiating an air and/or ground attack.

STANDARD: 1. Locate the selected target (static site or moving forces); 2.   Initiate an air attack on the selected target; 3.   Make two or more attack runs; 4. Inflict heavy damage to the selected target; 5. Lose no aircraft or ground troops; 6. Delay the moving force for more than 1 hour.

TASK: CONDUCT AIR RECONNAISSANCE (44-OPFOR-0005)

CONDITION: The OPFOR headquarters requires intelligence on locations and identification of team sections. An aircraft is dispatched to take photographs and make visual inspection of the forward area and selected MSRs.

STANDARD: 1. Locate sensor team positions in the forward area (command and control, static assets, and MSRs). 2. Photograph selected assets in the area of interest. 3. Make visual checks to support photographs. 4. Do not engage enemy forces.
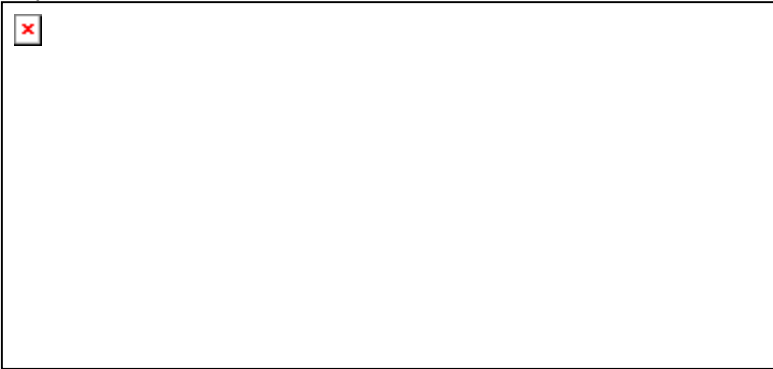
ELEMENT: BATTERY

TASK: TAKE ACTIVE COMBINED ARMS AD MEASURES AGAINST HOSTILE AERIAL PLATFORMS
(44-1-C221.44-AD2R)
      (FM 44-8)   (TSOP)

ITERATION:		1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:			T	P	U			(Circle)

CONDITIONS: Unit receives early warning of aerial platforms (rotary-wing, fixed-wing, UAVs) in the area. Unit personnel detect unknown or hostile aerial platforms (rotary-wing, fixed-wing, UAVs). Unit is in a tactical position. WCS is WEAPONS TIGHT. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: Unit destroys or forces the attacking aerial platforms (rotary-wing, fixed-wing, UAVs) away from friendly positions. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. Leaders direct combined arms air defense measures against hostile aerial platforms not attacking a stationary unit.
    a. Give air attack alarm.
    b. Occupy defensive positions.
    c. Search assigned sectors for aerial platforms.
    d. Identify and report presence of aerial platforms in the area and send PIR to higher headquarters.		

Note: When making the decision of whether or not to fire at non-attacking hostile aerial platforms with small arms, take into consideration the assigned mission and tactical situation. Unit must positively and visually identify aerial platforms prior to engaging with small arms unless the aircraft is committing a hostile act.
    e. Makes engagement decision.
    f. Unit engages the aerial platforms with all available small arms (rifles and machine guns).
Note: Expect the firing signature from small arms to disclose the unit's position.
    g. Engagement causes no fratricide.
    h. Reload weapons following engagement.
    i. Send PIRs to higher headquarters.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

Notes:

(1) Aim points for propeller-driven aircraft are the same as for helicopters.
(2) Select aim points in football field lengths: one football field equals approximately 91 meters.
(3) Once the lead distance is estimated, the riflemen and machine gunners aim and fire their weapons at the aim point until the aircraft has flown past that point. Maintain the aim point, not the lead distance. The weapon should not move once the firing cycle starts.
(4) Establish preselected aim points when the unit is in a static position.
(5) Accuracy in relation to target hits is not necessary. Accuracy in relation to the aim point is necessary. Volume fire, a coordinated high volume of fire that the aircraft has to fly through, will achieve the desired results.

      j. Evaluate situation and move unit position as directed by the unit
         commander.

* 2. Leaders direct small arms air defense measures against hostile aerial platforms
     not attacking a moving target.
      a. Give air attack alarm.
      b. Disperse vehicles laterally and in-depth or vehicle operators continue to
         move unit.
      c. Move vehicles to covered, concealed positions. All personnel not assigned
         crew-served weapons dismount and prepare to engage the aircraft or
         increase dispersion.
      d. Engage non-attacking aircraft only as directed.
      e. Visually identify threat aerial platforms.
      f. Report all aerial platforms actions to higher headquarters.
      g. Senior leader orders the unit to engage.
      h. Engage the aerial platforms with all available small arms.
      i. Reload weapons following engagement of aircraft.

* 3. Leaders direct combined arms air defense measures against aerial platforms
     attacking stationary unit.
      a. Give air attack alarm.
      b. All available personnel immediately engage attacking aerial platforms per
         TSOP.
      c. Reload weapons following the engagement.
      d. Personnel assigned OPs continue to scan their assigned sectors.
      e. Report any aircraft action to higher headquarters.
      f. Report casualties to higher headquarters.
      g. Evaluate situation and move unit position as directed by tactical situation or
         TSOP.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 4. Unit leader or NCO directs small air defense measures during convoy movement.
    a. Alerts vehicle commanders of impending attack.
    b. Disperses vehicles alternately to shoulders of the road (off road, if possible). Turns to covered, concealed position if terrain permits.
    c. Maintains vehicle intervals or increases interval or dispersion. Uses evasive driving techniques.
    d. Dismounts and takes up firing positions.
    e. Prepares personnel to fire on orders of the senior individual present or automatically returns fire (per engagement procedures) if an aircraft is attacking.
    f. Identifies the aerial platforms.
    g. Engages the aerial platforms with all available small arms (rifles and machine guns).
    h. Reloads weapons following the attack.
    i. Reports the attack and submits PIRs to higher headquarters.
    j. Reports casualties to higher headquarters.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
071-008-0007(SL1)	ENGAGE TARGETS WITH AN M16A1 OR M16A2 RIFLE USING AN AN/PAS-13 SERIES THERMAL SIGHT	STP 21-1-SMCT
113-637-2001(SL1)	COMMUNICATE VIA A TACTICAL RADIO	STP 21-1-SMCT
301-371-1000(SL1)	REPORT INTELLIGENCE INFORMATION	STP 21-1-SMCT
441-066-1040	VISUALLY IDENTIFY THREAT AND FRIENDLY AIRCRAFT	STP 44-14R14-SM-TG STP 44-14S14-SM-TG

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS

TASK: CONDUCT AN AIR ATTACK ON ENEMY FORCES, STATIC SITE, OR MOVING FORCES (44-OPFOR-0004)

CONDITION: OPFOR units have located sensor team asset positions and MSRs in the forward area. OPFOR units are initiating an air and/or ground attack.

STANDARD: 1. Locate the selected target (static site or moving forces). 2.   Initiate an air attack on the selected target. 3.   Make two or more attack runs. 4. Inflict heavy damage to the selected target. 5. Lose no aircraft or ground troops. 6. Delay the moving force for more than 1 hour.

TASK: CONDUCT AIR RECONNAISSANCE (44-OPFOR-0005)

CONDITION: The OPFOR headquarters requires intelligence on locations and identification of team sections. An aircraft is dispatched to take photographs and make visual inspection of the forward area and selected MSRs.

STANDARD: 1. Locate sensor team positions in the forward area (command and control, static assets, and MSRs). 2. Photograph selected assets in the area of interest. 3. Make visual checks to support photographs. 4. Do not engage enemy forces.

TASK: ATTACK AN ADA UNIT MOVING INTO A DEFENSIVE POSITION (44-OPFOR-0006)

CONDITION: The OPFOR observe an ADA unit moving into a defensive position.

STANDARD: 1. The OPFOR surprise the unit's main body. 2. The OPFOR prevent being fixed. 3. The OPFOR accomplish the assigned tasks, or (a) seize the assigned objectives, or (b) penetrate the defense with 50 percent or more of the OPFOR, or (c) force the unit to withdraw, or (d) maintain the specific rate of movement, or (e) disrupt sustainment operations in the rear area.

ELEMENT: BATTERY

TASK: MAINTAIN OPERATIONS SECURITY   (71-2-C332.44-AD2R)
      (AR 380-5)   (FM 20-3)   (FM 3-19.30)

ITERATION:		1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:				T	P	U		(Circle)

CONDITIONS: The unit is operating where it can be detected by the enemy. The enemy can use EW measures and air and ground reconnaissance units. The enemy can also use the local people and enemy intelligence agencies. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: The unit prevents the enemy from learning its strength, dispositions, and intentions. The unit prevents the enemy from learning any PIR. The unit prevents the enemy from surprising its main body. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. Leaders check or perform information security measures.
   a. Control information on a need-to-know basis.
   b. Prohibit fraternization with civilians, as applicable.
   c. Conduct alert, deployment preparation, and loading to minimize detection.
   d. Make sure maps contain only minimum essential information.
   e. Make inspections and give briefings to ensure that personnel do not carry details of military activities in personal materials such as letters, diaries, notes, drawings, sketches, or photographs.
   f. Sanitize all planning areas and positions before departure.
 	
2. The battery performs camouflage discipline.
   a. Uses natural concealment and natural camouflage materials, whenever possible, to prevent ground and air observation.
   b. Moves on covered and concealed routes.
   c. Covers all reflective surfaces and unit markings with nonreflective material such as cloth, mud, or camouflage stick.
   d. Covers or removes all vehicle markings.
 	
3. The battery camouflages individual positions and equipment to prevent detection from 35 meters or greater and camouflages vehicles and crew-served weapons to prevent detection from 100 meters or greater.
   a. Makes sure foliage is not stripped near positions.
   b. Camouflages earth berms.
   c. Makes sure camouflage nets, if used, are hung properly.
   d. Avoids crossing near footpaths, trails, and roads, where possible.
   e. Erases tracks leading into the positions.
   f. Makes sure vehicles parked in shadows are moved as shadows shift.
   g. Replaces and replenishes camouflage, as needed.
   h. Avoids movement in the area to prevent ground and air detection.
 	
4. The battery employs communications security, and the battalion NCS enforces communications discipline. Employs and enforces the following:
   a. SOI procedures (challenge, authentication and decode, call signs, and frequencies). Monitored traffic does not reveal information to the enemy.
   b. Approved RATELO procedures.
   c. Communications security procedures (short transmissions, lowest power settings possible, directional antennas, avoids transmission patterns, and		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
maintains radio silence, as directed). d. Procedures for operations during jamming. e. Maximum use of messenger and wire. f. Visual signals according to unit SOP. 5. The battery employs physical security measures and ensures the following are in place: a. Observation posts. b. Counterreconnaissance patrols. c. Stand-to-procedures. d. Mines and obstacles. e. Tie-ins with adjacent units (coordination and fire). f. Challenge and password. g. Limited access into the unit area. h. Safeguarding of weapons, ammunition, sensitive items, classified documents, and litter pickup. i. Air guards. * 6. Commander and all leaders enforce noise and light discipline. a. Employ stand-to procedures. b. Emplace mines and obstacles. c. Tie-in with adjacent units (coordination and fire). d. Use the challenge and password. e. Limit access into the battery area. f. Safeguard weapons, ammunition, sensitive items, and classified documents. g. Employ air guards. h. Use noise and light discipline. i. Use the proper litter discipline.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
113-573-0001	CHECK SIGNAL SECURITY (SIGSEC) PROCEDURES	STP 44-14J14-SM-TG
191-376-4114(SL1)	CONTROL ENTRY TO AND EXIT FROM A RESTRICTED AREA	STP 21-1-SMCT
301-371-1000(SL1)	REPORT INTELLIGENCE INFORMATION	STP 21-1-SMCT
301-371-1050(SL1)	IMPLEMENT OPERATIONS SECURITY (OPSEC) MEASURES	STP 21-1-SMCT
301-371-1052(SL1)	PROTECT CLASSIFIED INFORMATION AND MATERIAL	STP 21-1-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: TREAT CASUALTIES   (08-2-0003.44-AD2R)

(FM 4-25.11)	(AR 350-41)	(AR 600-8-1)
(FM 3-4)	(FM 3-5)	(FM 4-02.6)
(FM 4-02.7)	(FM 8-10)	(FM 8-10-6)
(FM 8-285)	(FM 8-42)	(FM 8-55)
(TSOP)		

ITERATION: 1   2   3   4   5   M   (Circle)

COMMANDER/LEADER ASSESSMENT: T   P   U   (Circle)

CONDITIONS: The unit has sustained casualties. The unit has no organic medical treatment personnel. Threat force contact has been broken. Soldiers have been wounded and may have chemical contamination or non-battle injuries. Some unit members have been assigned the additional duty of combat lifesavers. Unit personnel are performing first aid (self-aid/buddy aid) treatment and combat lifesavers are providing enhanced first aid treatment until medical treatment personnel arrive. This task is performed simultaneously with other reorganization tasks. Higher HQ TSOP and OPORD are available. SCPE is on hand and/or field-expedient and natural shelters are available. Note: This task should not be trained in MOPP4 except when treating NBC casualties. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: Unit personnel provide first aid treatment for casualties per FM 21-11, FM 8-285, and combat lifesaver certification standards. At MOPP level 4, performance degradation factors increase the time required to provide treatment and limits the type of treatment provided.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. Commander and leaders supervise first aid treatment of casualties.
    a. Develop treatment plan.
    b. Monitor treatment for compliance with FM 4-25.11 and to ensure all casualties are treated.
    c. Direct employment of combat lifesavers to treat casualties.
    d. Report casualties, as required.
    e. Coordinate replenishment of Class VIII supplies with higher HQ LOG element per the TSOP.
     f. Direct distribution of Class VIII supplies and equipment per the TSOP.
    g. Enforce QC procedures for Class VIII items issued to unit elements.		

2. Unit personnel survey casualties.
    a. Check for responsiveness.
    b. Check for breathing.
    c. Check for bleeding.
    d. Check for head injury.
    e. Check for shock.
     f. Check for fractures, to include cervical spine and back fractures.
    g. Check for burns.		

3. Unit personnel administer life-saving first aid treatment.
    a. Clear all objects from throat of casualty.
    b. Use jaw thrust method to open airway if cervical spine injury is suspected.
    c. Perform mouth-to-mouth resuscitation to restore casualty's breathing per CPR procedures.		

4. Unit personnel control hemorrhage.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
a. Apply dressing and bandages.		
b. Apply manual direct pressure to wound.		
c. Elevate extremities.		
d. Apply pressure dressing to wound.		
e. Apply tourniquet as last resort.		
5. Unit personnel dress wounds.		
a. Apply occlusive dressing to an open chest wound, if possible.		
b. Apply dressing to an open abdominal wound.		
c. Apply dressing to an open head wound.		
6. Unit personnel splint suspected fractures.		
a. Employ available materials to splint injury.		
b. Splint fracture in position found.		
c. Restrict movement of extremities.		
d. Check circulation for impairment.		
7. Unit personnel provide first aid treatment to casualties with burns.		
a. Extinguish thermal burn agent(s).		
b. Remove chemical burn agent(s).		
c. Eliminate electrical burn source.		
d. Uncover burn unless stuck to clothing or a chemical environment exists.		
e. Apply field dressing, if appropriate.		
8. Unit personnel provide first aid treatment for environmental injuries.		
a. Administer treatment for heat injuries.		
b. Administer first aid for frostbite.		
9. Unit personnel provide first aid treatment for chemical casualties.		
a. Take immediate protective steps to protect self and warn others per FM 8-285.		
b. Protect casualty from further contamination.		
c. Administer nerve agent antidote per FM 8-285.		
d. Administer CANA, if required.		
e. Decontaminate casualty per FM 8-285, if necessary.		
10. Unit personnel prevent shock.		
a. Position casualty in the correct anti-shock position per FM 4-25.11.		
b. Loosen clothing and equipment.		
c. Prevent casualty from chilling or overheating.		
d. Calm casualty by reassuring him.		
11. Unit combat lifesavers perform enhanced first aid treatment.		
a. Evaluate casualty for condition and type treatment needed.		
b. Measure casualty's vital signs.		
c. Insert oropharyngeal airway in an unconscious casualty.		
d. Apply a splint to a fractured limb.		
e. Administer first aid to chemical agent casualties.		
f. Initiate an intravenous infusion for hypovolemic shock.		
g. Identify environmental injuries.		
h. Treat environmental injuries.		
i. Manage BF casualties.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
081-831-1000(SL1)	EVALUATE A CASUALTY	STP 21-1-SMCT
081-831-1003(SL1)	PERFORM FIRST AID TO CLEAR AN OBJECT STUCK IN THE THROAT OF A CONSCIOUS CASUALTY	STP 21-1-SMCT
081-831-1005(SL1)	PERFORM FIRST AID TO PREVENT OR CONTROL SHOCK	STP 21-1-SMCT
081-831-1007(SL1)	PERFORM FIRST AID FOR BURNS	STP 21-1-SMCT
081-831-1008(SL1)	PERFORM FIRST AID FOR HEAT INJURIES	STP 21-1-SMCT
081-831-1025(SL1)	PERFORM FIRST AID FOR AN OPEN ABDOMINAL WOUND	STP 21-1-SMCT
081-831-1026(SL1)	PERFORM FIRST AID FOR AN OPEN CHEST WOUND	STP 21-1-SMCT
081-831-1032(SL1)	PERFORM FIRST AID FOR BLEEDING OF AN EXTREMITY	STP 21-1-SMCT
081-831-1033(SL1)	PERFORM FIRST AID FOR AN OPEN HEAD WOUND	STP 21-1-SMCT
081-831-1034(SL1)	PERFORM FIRST AID FOR A SUSPECTED FRACTURE	STP 21-1-SMCT
081-831-1042(SL1)	PERFORM MOUTH-TO-MOUTH RESUSCITATION	STP 21-1-SMCT
081-831-1044(SL1)	PERFORM FIRST AID FOR NERVE AGENT INJURY	STP 21-1-SMCT
081-831-1045(SL1)	PERFORM FIRST AID FOR COLD INJURIES	STP 21-1-SMCT
081-831-1047(SL4)	SUPERVISE THE IMPLEMENTATION OF PREVENTIVE MEDICINE POLICIES	STP 21-24-SMCT
081-831-1053(SL1)	PRACTICE INDIVIDUAL PREVENTIVE MEDICINE COUNTERMEASURES	STP 21-1-SMCT
081-831-1055(SL4)	ENSURE UNIT COMBAT LIFESAVER REQUIREMENTS ARE MET	STP 21-24-SMCT
081-831-9000(SL2)	IMPLEMENT PREVENTIVE MEDICINE MEASURES (PMM)	STP 21-24-SMCT
113-600-2001(SL1)	COMMUNICATE VIA A TACTICAL TELEPHONE	STP 21-1-SMCT
113-637-2001(SL1)	COMMUNICATE VIA A TACTICAL RADIO	STP 21-1-SMCT
805C-PAD-2060(SL2	REPORT CASUALTIES	STP 21-24-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: TRANSPORT CASUALTIES   (08-2-C316.44-AD2R)

(FM 8-10-6)	(AR 200-1)	(AR 385-10)
(FM 12-6)	(FM 3-0)	(FM 3-21.38)
(FM 3-4)	(FM 3-5)	(FM 4-25.11)
(FM 8-10)	(FM 8-285)	(FM 8-42)
(FM 8-55)	(TSOP)	

ITERATION: 1   2   3   4   5   M   (Circle)

COMMANDER/LEADER ASSESSMENT: T   P   U   (Circle)

CONDITIONS: Unit personnel are wounded and some may be chemically contaminated. Threat force contact has been broken. Unit defenses have been reorganized. Casualties are transported from defensive positions to designated casualty collection points. All methods of transport are employed. Some wounded EPW casualties may require transport. This task is performed simultaneously with other reorganization tasks. The TSOP and higher HQ OPORD are available. SCPE is on hand and/or field-expedient and natural shelters are available. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: Casualties are transported as soon as tactical situation permits per FM 8-10-6, the TSOP, OPORD, and the provisions of the Geneva Convention. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. Commander and leaders supervise transport of casualties.
        a. Monitor casualty transport operations.
        b. Identify casualty collection points.
        c. Identify transport requirements.
        d. Supervise preparation of casualties for transport.
        e. Coordinate transport of casualties from unit area with higher headquarters personnel element.
        f. Coordinate security requirements for the pick-up site with subelements and higher headquarters element.
        g. Disseminate transport information to unit personnel.
        h. Forward casualty feeder report and witness statements to higher headquarters personnel element.
        i. Submit proper reports to higher headquarters and supported unit personnel, vehicles, and equipment.
 	
   2. Unit personnel prepare casualties for transport.
        a. Provide first aid treatment to casualties.
Note: See Task 08-2-0003.44-AD2R for detailed treatment procedures.
        b. Report casualties, as required.
        c. Collect classified documents such as SOI/SSI, maps, overlays, and key lists.
        d. Secure custody of organizational equipment per TSOP.
        e. Forward casualty feeder reports to unit HQ per TSOP.
 	
   3. Unit personnel transport casualties to casualty collection points using manual carries.
        a. Select type of manual carry appropriate to situation and injury.
        b. Transport casualty without causing further injury.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

4. Unit personnel transport casualties to casualty collection points using litter carries.
   a. Identify litter team(s).
   b. Construct improvised litter from available material, as required.
   c. Secure casualty on litter.
   d. Transport casualty without causing further injury.		

5. Unit personnel transport casualties to an MTF using available vehicles.
   a. Load maximum number of casualties.
   b. Secure casualties in vehicle.
   c. Transport casualties without causing further injury.		

* 6. Commander and leaders request aeromedical evacuation.
   a. Transmit request.
   b. Select landing site, which provides sufficient space for helicopter hover, landing, and takeoff.
   c. Supervise removal of all dangerous objects likely to be blown about prior to aircraft arrival.
   d. Supervise security of landing site per the TSOP.		

7. Unit personnel assist in loading ambulance.
   a. Employ proper carrying and loading techniques.
   b. Load casualties in the sequence directed by crew.
   c. Load casualties without causing unnecessary discomfort.
   d. Employ safety procedures.
   e. Employ environmental protection procedures per AR 200-1 and TSOP.		

8. Unit personnel transport chemically contaminated casualties.
   a. Assume MOPP4.
   b. Mark contaminated casualties per the TSOP.
   c. Notify supporting MTF that contaminated casualties are en route to their location.
   d. Transport casualties directly to a designated decontamination and treatment station.
   e. Protect casualties from further contamination during transport.		

9. Unit personnel transport EPW casualties.
   a. Maintain security of EPW casualties per TSOP.
   b. Search EPW casualties for weapons and ordnance prior to evacuation.
   c. Transport EPW casualties per the provisions of the Geneva Convention and the TSOP.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
031-503-1015(SL1)	PROTECT YOURSELF FROM NBC INJURY/CONTAMINATION WITH THE APPROPRIATE MISSION-ORIENTED PROTECTIVE POSTURE (MOPP) GEAR	STP 21-1-SMCT
031-503-1035(SL1)	PROTECT YOURSELF FROM CHEMICAL/BIOLOGICAL CONTAMINATION USING YOUR ASSIGNED PROTECTIVE MASK	STP 21-1-SMCT
081-831-0101(SL2)	REQUEST MEDICAL EVACUATION	STP 21-24-SMCT
081-831-1046(SL1)	TRANSPORT A CASUALTY	STP 21-1-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: PERFORM FIELD SANITATION FUNCTIONS   (08-2-R315.44-AD2R)

(<u>FM 21-10</u>)	(AR 200-1)	(AR 385-10)
(AR 40-5)	(FM 10-52)	(FM 3-4)
(FM 3-5)	(FM 4-02.6)	(FM 4-02.7)
(FM 4-25.12)	(FM 8-10)	(TSOP)

ITERATION:	1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:		T	P	U		(Circle)

CONDITIONS: Health hazards exist, which require field sanitation measures. The unit is in the field without permanent sanitation or water facilities. The commander has selected and trained the unit field sanitation team.   The CHS plan, TSOP, and higher HQ OPORD are available. All required sanitation equipment is available. Field sanitation measures are continuous and are performed simultaneously with other operational tasks. SCPE is on hand and/or field-expedient and natural shelters are available. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: Field sanitation measures are accomplished per TSOP, OPORD, and FM 21-10. Field sanitation team performs field sanitation measures per TSOP, FM 21-10, and commander's guidance. At MOPP level 4, only minimum essential field sanitation activities are performed.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
* 1. Commander directs field sanitation measures. a. Directs field sanitation activities to counter the medical threat. b. Monitors field sanitation activities for compliance with FM 21-10, FM 4-25.12, and TSOP. c. Enforces individual field sanitation measures. d. Requests assistance from the supporting PVNTMED element for sanitation problems that are beyond the expertise of the unit's field sanitation team per TSOP and OPORD. e. Corrects field sanitation deficiencies. f. Reports to the FST field sanitation deficiencies which cannot be corrected by unit personnel. g. Enforces safety procedures per AR 385-10 and TSOP. h. Enforces environmental protection procedures per AR 200-1 and TSOP. 2. FST supervises unit field sanitation measures. a. Maintains field sanitation basic load per AR 40-5 and FM 4-25.12. b. Supervises distribution of field sanitation basic load items per AR 40-5 and FM 4-25.12. c. Tests unit water supply for required chlorine residual level per FM 4-25.12 and TSOP. d. Inspects water containers and trailers per FM 4-25.12 and TSOP. e. Monitors personnel to ensure use of personal protective measures against arthropods (skin, clothing, and bednet repellent) and rodents per applicable directives and commander's guidance. f. Conducts rodent surveys, as required. g. Monitors personnel for employment of correct hygiene measures. h. Monitors waste facilities and procedures for compliance with AR 40-5, FM 4-25.12, and TSOP, as required. i. Inspects latrines and urinals per FM 4-25.12 and TSOP. j. Inspects liquid and solid waste disposal facilities to ensure compliance with AR 40-5, FM 4-25.12, and TSOP.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

k. Inspects handwashing devices per FM 4-25.12 and TSOP.
l. Inspects transport, storage, preparation, and service of food for compliance with FM 4-25.12 and TSOP.
m. Provides advice, recommendations, and training requirements to the commander.
n. Enforces safety procedures per AR 385-10 and TSOP.
o. Enforces environmental protection procedures per AR 200-1 and TSOP.
 	
3. Unit personnel employ field sanitation measures.
  a. Maintain prescribed load of water purification materials per AR 40-5, FM 21-10, and TSOP.
  b. Prepare nonpotable water for personal use per FM 21-10 and TSOP.
  c. Consume only water designated as potable.
  d. Maintain latrines and handwashing facilities per FM 21-10 and TSOP.
  e. Employ preventive measures against cold and heat injuries.
  f. Employ personal hygiene measures.
  g. Employ preventive measures against arthropod and rodent infestation, to include using skin, clothing, and bednet repellent.
  h. Report field sanitation deficiencies to the field sanitation team.
  i. Employ safety procedures per AR 385-10 and TSOP.
  j. Employ environmental protection procedures per AR 200-1 and TSOP.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	**1**	**2**	**3**	**4**	**5**	**M**	**TOTAL**
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
081-831-1047(SL4)	SUPERVISE THE IMPLEMENTATION OF PREVENTIVE MEDICINE POLICIES	STP 21-24-SMCT
081-831-1053(SL1)	PRACTICE INDIVIDUAL PREVENTIVE MEDICINE COUNTERMEASURES	STP 21-1-SMCT
081-831-9000(SL2)	IMPLEMENT PREVENTIVE MEDICINE MEASURES (PMM)	STP 21-24-SMCT
101-92Y-0006(SL2)	INSPECT EQUIPMENT FOR ACCOUNTABILITY, CLEANLINESS, AND SERVICEABILITY	STP 21-24-SMCT
113-600-2001(SL1)	COMMUNICATE VIA A TACTICAL TELEPHONE	STP 21-1-SMCT
113-637-2001(SL1)	COMMUNICATE VIA A TACTICAL RADIO	STP 21-1-SMCT
850-001-2000(SL2)	EMPLOY ACCIDENT PREVENTION MEASURES AND RISK MGT PROCESS	STP 21-24-SMCT
850-001-3001(SL3)	CONTROL MISSION SAFETY HAZARD	STP 21-24-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: PROVIDE FOOD SERVICE SUPPORT   (10-2-C317.44-AD2R)
(FM 10-23)   (FM 10-23-1)

ITERATION:	1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:			T	P	U		(Circle)

CONDITIONS: Elements are requesting field feeding. Field kitchen area is set up, and rations and water are picked up. Additional rations are requested. Unit strength reports are available. Food and water may be transported to satellite areas. Disposal facilities have been prepared. NBC attacks and threat force intrusions can occur during field kitchen operations. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: Provide food service support per commander's guidance. The time required to perform this task is increased when conducting it in MOPP4.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. Food service sergeant plans food service support.
    a. Verifies strengths of all supported units.
    b. Requests required amount of subsistence.
    c. Prepares personnel work schedules.
    d. Assigns duties to all food service personnel.
    e. Prepares production schedule, as required.
    f. Coordinates distribution of food to remote areas with supported units.
    g. Develops NBC decontamination procedures for equipment, supplies, and personnel.
    h. Coordinates food service personnel defensive duties with battery CP.
    i. Requests kitchen mess attendants support from supported units.		

* 2. Food service sergeant supervises field kitchen operations.
    a. Establishes operational hours as prescribed by the field feeding plan and commander's guidance or both.
    b. Assigns work schedules consistent with personnel availability and meal schedules.
    c. Monitors equipment operations, maintenance, and safety for compliance with appropriate TMs and TSOP.
    d. Coordinates additional supply requests with battery supply facility.
    e. Forwards food service personnel and equipment status reports to battery CP.
    f. Performs periodic inspections of personnel and equipment for proper operations and personal hygiene.
    g. Monitors employment of preventive medicine measures for compliance with field sanitation policies and procedures in the TSOP.
    h. Supervises decontamination of contaminated equipment, supplies, and personnel.
    i. Checks operations to ensure safety measures are employed.		

3. Food service personnel pick up and store subsistence items.
    a. Inspect vehicle for cleanliness and proper dunnage.
    b. Inspect subsistence items for condition and quantity.
    c. Prepare shortages, overages, and unsatisfactory subsistence listings.
    d. Sign required documentation.
    e. Transport subsistence items from Class I point to unit field location.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
f. Store subsistence items per security measures and appropriate directives.		
g. Wash packaged or canned food after NBC attack.		
4. Food service personnel prepare meals.		
a. Inspect field kitchen equipment using appropriate TMs for proper operations.		
b. Employ personal hygiene measures.		
c. Perform preliminary food preparation procedures.		
d. Prepare menu items according to production schedule, when applicable.		
e. Employ preventive medicine measures.		
f. Prepare food for transport.		
g. Employ safety measures.		
h. Check insulated food containers and beverage dispensers to ensure that they are preheated/prechilled.		
i. Check insulated food containers and beverage dispensers to ensure that the food is properly packed for remote feeding.		
j. Check that all items to support remote feeding are assembled and packed.		
5. Food service personnel issue Class I to battery representative (1SG/supply sergeant) in maneuver battalions.		
a. Verify head count with 1SG/supply sergeant.		
b. Issue prepared food in insulated food containers.		
c. Issue beverages in beverage dispensers.		
d. Issue sanitized serving utensils, plates, cups, flatware, and condiments to support the meal.		
6. Food service personnel/unit personnel (depending on the method of feeding) serve meals.		
a. Employ personal hygiene measures.		
b. Set up serving line as dictated by the tactical situation.		
c. Inspect mess kits (if used) to ensure they are sanitized prior to serving.		
d. Employ portion control.		
e. Maintain food at proper temperature.		
f. Replenish food items.		
g. Open no more T ration pans than required during serving.		
h. Destroy opened food after NBC attack.		
i. Employ safety measures.		
7. Food service personnel maintain equipment.		
a. Perform before-, during-, and after-operations PMCS on assigned equipment.		
b. Maintain temperatures of wash and rinse water on wash line.		
c. Clean cooking equipment.		
d. Sanitize cooking equipment.		
e. Store clean equipment to allow air-drying.		
8. Food service personnel perform waste disposal.		
a. Initiate effective trash management procedures.		
b. Perform liquid waste disposal.		
c. Perform solid waste disposal.		
d. Clean vehicle thoroughly with prescribed cleaning agents.		
e. Sanitize vehicle thoroughly with prescribed cleaning agents.		
f. Employ preventive medicine measures.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	**1**	**2**	**3**	**4**	**5**	**M**	**TOTAL**
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
071-331-0815(SL1)	PRACTICE NOISE, LIGHT, AND LITTER DISCIPLINE	STP 21-1-SMCT
101-92Y-0001(SL4)	SUPERVISE SUPPLY ACTIVITIES	STP 21-24-SMCT
101-92Y-0006(SL2)	INSPECT EQUIPMENT FOR ACCOUNTABILITY, CLEANLINESS, AND SERVICEABILITY	STP 21-24-SMCT
101-CLT-0198(SL4)	SUPERVISE TACTICAL FEEDING OPERATION	STP 21-24-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: RECEIVE AIRDROP RESUPPLY   (10-2-C319.44-AD2R)
        (<u>FM 10-500-7</u>)   (FM 3-21.38)

ITERATION:				1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:					T	P	U		(Circle)

CONDITIONS: Since normal supply support transportation is unavailable, supplies and equipment are requested by airdrop. Note: Airdrop of supplies and equipment may be preplanned or immediate. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: Supplies and equipment, and rigging gear are derigged and recovered. The time to recover and derig is increased when in MOPP4.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

1. Battery requests supplies and equipment by airdrop.
    a. Identifies supplies and equipment needed.
    b. Identifies drop zone.
    c. States date and time of airdrop request.
    d. Forwards request for preplanned or immediate airdrop to S4 section.
 	
* 2. Battery commander and element leaders develop airdrop supply and equipment receipt plan.
    a. Designate a recovery officer and safety officer.
    b. Verify delivery time and location with S4 section.
    c. Coordinate survey of DZ or AO with either pathfinders, CCT, or DZST through S2/3 section.
    d. Prepare recovery and alternate plans.
    e. Identify the number of people, equipment, and vehicles required for the recovery of supplies and equipment.
    f. Coordinate transportation and MHE support with the S4 section.
    g. Brief personnel on the tactical situation, recovery plan, and alternative plans.
 	
3. Battery receives supplies and equipment.
    a. Secures DZ or AO.
    b. Derigs supplies and equipment.
    c. Records shortage.
    d. Identifies damaged items.
    e. Evacuates supplies and equipment.
    f. Retrieves airdrop rigging equipment.
    g. Buries or destroys airdrop rigging equipment that cannot be removed.
    h. Inspects the DZ to make certain no serviceable airdrop equipment is left behind.
    i. Forwards airdrop equipment to nearest collection point or other location as directed by the S4 section.
    j. Forwards SITREP to S2/3 and S4 sections.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
071-326-0608(SL2)	USE VISUAL SIGNALLING TECHNIQUES	STP 21-24-SMCT
101-92Y-0002(SL3)	PLAN TACTICAL RE-SUPPLY OPERATIONS	STP 21-24-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: PROVIDE UNIT SUPPLY SUPPORT   (10-2-C320.44-AD2R)

| (AR 710-2) | (DA PAM 710-2-1) | (FM 3-4) |
| (FM 3-5) | (FM 44-43) | (FM 44-44) |

ITERATION:	1 2 3 4 5 M	(Circle)
COMMANDER/LEADER ASSESSMENT:	T P U	(Circle)

CONDITIONS: The battery is in a tactical position supporting units on a mission. Normal supply operations must be sustained throughout the mission. FBCB2 is initialized. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: The battery supply section distributes equipment and supplies without interfering with mission requirements as outlined in the OPORD. The time required to perform this task in MOPP4 is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. Battery supply sergeant supervises unit supply operations.
        a. Reviews supply status daily.
        b. Conducts inventories when required.
        c. Plans and obtains storage facilities or areas.
        d. Reviews transaction forms.
        e. Supervises the issue of weapons and ammunition.
         f. Submits supply status reports when required.
        g. Maintains and follows unit supply SOP.
 	
2. The battery supply section requests supplies.
        a. Determines supply requirements.
        b. Prepares requests for supplies.
        c. Maintains appropriate document registers.
        d. Submits supply requests.
 	
3. The battery supply section receives supplies.
        a. Inspects supplies upon receipt.
        b. Completes accounting transactions.
        c. Stores supplies in appropriate facilities and areas.
        d. Protects supplies from theft, pilferage, and NBC contamination.
 	
4. The battery supply section issues supplies.
        a. Processes supply requests.
        b. Prepares supply transaction forms.
        c. Verifies proper requesting element.
        d. Maintains files of supply transactions.
 	
5. The battery supply section maintains small arms and ammunition.
        a. Controls the issue and storage of small arms and ammunition.
        b. Performs organizational-level maintenance on weapons and ammunition.
        c. Protects unissued weapons and ammunition from passive damage.
        d. Forwards weapons requiring repair beyond organizational capabilities to
            support maintenance unit.
        e. Requests ammunition resupply from battalion S4.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	**1**	**2**	**3**	**4**	**5**	**M**	**TOTAL**
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
101-92Y-0001(SL4)	SUPERVISE SUPPLY ACTIVITIES	STP 21-24-SMCT
101-92Y-0003(SL2)	ENFORCE COMPLIANCE WITH SUPPLY DISCIPLINE PROCEDURES	STP 21-24-SMCT
101-92Y-0004(SL2)	ENFORCE PROPERTY ACCOUNTABILITY POLICIES	STP 21-24-SMCT
101-92Y-0005(SL2)	ENFORCE COMPLIANCE WITH PROPERTY ACCOUNTABILITY POLICIES	STP 21-24-SMCT
101-92Y-0006(SL2)	INSPECT EQUIPMENT FOR ACCOUNTABILITY, CLEANLINESS, AND SERVICEABILITY	STP 21-24-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: RECEIVE EXTERNAL SLING-LOAD RESUPPLY   (10-2-C325.44-AD2R)
          (FM 10-450-5)

ITERATION:		1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:			T	P	U			(Circle)

CONDITIONS: Unit is alerted for incoming resupply by external sling load. Higher HQ staff elements notify the unit of the anticipated type and amount of supplies or equipment and the scheduled delivery time. The unit has personnel trained in sling-load procedures. Helicopter(s) deliver supplies and/or equipment to a designated LZ near the unit's position. The LZ is secured. Slings and allied materials may or may not be returned with delivery helicopter(s) to unit of origin. Unit TSOP and higher HQ OPORD are available. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: Supplies and/or equipment are derigged and cleared from LZ per the TSOP or OPORD.   The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. Commander and element leaders develop supplies and/or equipment receipt plan.
    a. Verify quantity and type of supplies and/or equipment and delivery time with higher HQ staff element.
    b. Coordinate LZ security and location with higher HQ staff element.
    c. Appoint LZ officer or NCO.
    d. Coordinate additional motor transport and special equipment requirements with higher HQ staff element.
    e. Assign appropriate number and composition of ground crew(s) based on tactical situation, type, and quantity of cargo, and size of LZ.
    f. Request required protective equipment from unit supply facility.
    g. Brief LZ officer or NCO on tactical situation, size of operation, preparation and clearance of LZ, protective equipment, and safety precautions.
    h. Disseminate plan to all unit elements.		

* 2. LZ officer/NCO supervises external sling-load resupply operations.
    a. Identifies wind direction and speed.
    b. Transmits wind direction and speed to incoming aircraft as requested.
    c. Identifies aircraft approach direction.
    d. Prepares LZ emergency security and reaction plan.
    e. Identifies ground crew(s) rendezvous or rally point(s).
    f. Secures all required LZ marking and personnel protection equipment.
    g. Organizes ground crew team(s).
    h. Briefs ground crew team(s) on tactical situation, size of operation, preparation and clearance of LZ, emergency procedures, protective equipment, and safety precautions.
    i. Assigns individual team member duties.
    j. Supervises derigging operations.
    k. Supervises loading of supplies and/or equipment on motor transport vehicles.
    l. Supervises LZ clearance activities.
    m. Enforces safety procedures.		

3. Ground crew(s) performs LZ preparation activities. a. Removes all obstructions from LZ.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

b. Marks all unremovable obstructions.
    c. Clears all loose debris from the LZ.
    d. Sets up all required visual markers.
    e. Positions vehicles and other special equipment out of the LZ.
    f. Rehearses arm-and-hand and other visual signals.
 	
4. Ground crew(s) derigs external sling-load supplies or equipment.
    a. Wears hearing and eye protection.
    b. Employs safety procedures.
    c. Employs visual signals to guide helicopter to derigging point.
    d. Grounds static discharge probe to cargo hook.
    e. Releases load from helicopter.
    f. Provides "affirmative" signal to pilot for liftoff when load is unhooked and clear of helicopter.
 	
5. Ground crew(s) prepares slings and/or nets for air transport retrograde.
    a. Removes cargo sling and/or nets from supplies or equipment.
    b. Secures all slings and/or nets in a cargo net.
    c. Employs proper hand signals to guide helicopter into position.
    d. Grounds static discharge probe to net rings.
    e. Connects sling equipment to helicopter cargo hook.
    f. Provides "affirmative" signal to pilot for liftoff when net is secure and all personnel are clear.
 	
6. Ground crew(s) and vehicle operator(s) clear LZ.
    a. Load all supplies or equipment on vehicle(s).
    b. Load all slings and/or nets and markers on vehicle(s).
    c. Remove all loose debris from LZ.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
441-066-2019	PERFORM SQUAD, TEAM, OR SECTION CONTINUOUS OPERATIONS	STP 44-14R14-SM-TG STP 44-14S14-SM-TG

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: MAINTAIN UNIT STRENGTH   (12-2-C201.44-AD2R)
(FM 12-6)   (DA FORM 1155)   (DA FORM 1156)

ITERATION:	1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:			T	P	U		(Circle)

CONDITIONS: The unit is deployed in support of units performing a combat mission, casualties have occurred, and replacements are being provided. TSOP is available. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: Unit strength, within plus or minus 5 percent, is known by the commander and reported to higher HQ; replacements are processed within 2 hours of their arrival.   The time required to perform this task in MOPP4 and or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
1. HQ element collects strength information from subordinate sections. a. Logs SITREP and other personnel information. b. Verifies strength data. c. Corrects erroneous and incomplete data. 2. HQ element processes information. a. Consolidates subordinate section personnel information. b. Determines critical shortages and cross-leveling requirements. c. Updates battle roster. d. Assigns control numbers to DA Forms 1155 (Witness Statement), and 1156 (Casualty Feeder Report). e. Prepares strength reports. 3. HQ element processes replacements. a. Conducts unit welcome/orientation briefing. b. Inspects for critical clothing and equipment shortages. c. Coordinates for issue of needed items. d. Performs administrative processing. e. Annotates battle rosters. f. Orients replacements on duties and responsibilities. * 4. First sergeant disseminates strength information. a. Briefs commander on unit strength and replacement status. b. Forwards PSR, DA Forms 1155 and 1156 to supporting headquarters. c. Forwards strength reports to higher HQ. d. Informs subordinate sections of projected replacements. * 5. Commander performs strength management functions. a. Performs cross-leveling. b. Verifies combat-critical personnel requirements. c. Approves strength management reports. d. Spot-checks strength information processing. e. Briefs superiors on unit strength and replacement status.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
805C-PAD-2060(SL2	REPORT CASUALTIES	STP 21-24-SMCT
805C-PAD-2461(SL2	MAINTAIN ACCOUNTABILITY OF PERSONNEL (STATUS REPORT)	STP 21-24-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: PERFORM UNIT LEVEL MAINTENANCE   (43-2-C322.44-AD2R)
    (AR 385-10)   (AR 220-1)   (AR 385-40)
    (AR 700-138)   (AR 750-1)   (DA PAM 738-750)

ITERATION:	1	2	3	4	5	M	(Circle)

COMMANDER/LEADER ASSESSMENT: T   P   U   (Circle)

CONDITIONS: The unit is tactically deployed and is currently engaged in combat. Unit maintenance personnel receive requests to repair inoperative equipment. The unit maintenance area is established. Required tools, repair parts, equipment, and personnel are available. Operators are performing preventive maintenance checks and services (PMCS) on the equipment. Recovery operations with injured operators on board may be required. The unit TSOP is available. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: Unit vehicles and equipment are maintained in an operational ready status per DA standards.   The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. Battery commander/motor officer directs unit maintenance program.
    a. Monitors implementation of unit maintenance program.
    b. Monitors unit operational levels by reviewing vehicle and equipment status reports.
    c. Identifies current or anticipated maintenance problems.
    d. Coordinates resolution of maintenance problems with higher headquarters.
    e. Requests control substitution approval from higher headquarters.
     f. Approves emergency field repairs.
    g. Prepares materiel condition status reports.
    h. Conducts periodic inspections of personnel and equipment to ensure safety program is enforced.		

* 2. Platoon/section leaders supervise operator maintenance.
    a. Monitor performance of PMCS.
    b. Inspect vehicle, weapons, and equipment.
    c. Coordinate maintenance assistance with the unit maintenance section.
    d. Monitor equipment repair parts status.
    e. Request approval for emergency field repairs.
     f. Maintain maintenance status of vehicle, weapons, and equipment.
    g. Provide input for materiel condition status report.		

3. Battery personnel perform operator maintenance.
    a. Perform PMCS.
    b. Notify supervisor of maintenance problems beyond operator's capability.
    c. Perform emergency field repairs.
    d. Assist unit maintenance personnel with repairs and services.		

* 4. Motor sergeant supervises unit maintenance personnel.
    a. Organizes unit maintenance personnel to perform unit maintenance activities.
    b. Supervises the Army maintenance management system (TAMMS) and prescribed load list (PLL) procedures for completeness and accuracy.
    c. Supervises repair and inspection procedures to ensure they are done safely and according to appropriate references.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

d. Requests approval for BDAR from battery commander when established repair procedures cannot be used.
   e. Supervises BDAR procedures to ensure procedures are done per appropriate BDAR manuals.
   f. Requests approval to use controlled exchange from battery commander when required repair parts are not available.
   g. Supervises use of controlled exchange for compliance with commander's guidance.
   h. Supervises recovery operations to ensure correct recovery and safety procedures are used.
   i. Supervises Army oil analysis program (AOAP) procedures to ensure testing of oil samples is done at required intervals.
   j. Coordinates maintenance status with platoon/section leaders.
   k. Provides unit maintenance status to battery commander.		

5. Unit maintenance personnel repair organic equipment.
   a. Diagnose faults on inoperative equipment.
   b. Request required repair parts from PLL clerk to complete the repair.
   c. Repair equipment per applicable TM(s).
   d. Request approval for BDAR through the motor sergeant when established repair procedures cannot be used.
   e. Perform BDAR per appropriate BDAR manual.
   f. Request approval for controlled exchange through motor sergeant when required repair parts are not available.
   g. Perform controlled exchange.
   h. Perform final inspection to ensure quality control of repairs.
   i. Record completed work on appropriate document(s).
   j. Employ safety procedures to minimize accidents.		

6. Unit maintenance personnel conduct transactions with support maintenance.
   a. Identify category of repair.
   b. Correct unit level deficiencies.
   c. Prepare required documentation for submission to support maintenance.
   d. Evacuate equipment to support maintenance.
   e. Verify completion of repairs.
   f. Pick up equipment upon completion of repairs.		

7. Unit maintenance personnel perform administrative support functions.
   a. Maintain PLL.
   b. Request repair parts for unit equipment.
   c. Perform required AOAP tasks.
   d. Turn in unserviceable repairable items.
   e. Maintain document registers.
   f. Maintain maintenance control records.
   g. Maintain technical publications on all organic equipment.
   h. Maintain tools and test equipment.
   i. Maintain power generation equipment.		

8. Maintenance personnel recover disabled vehicles.
   a. Verify location of disabled vehicles.
   b. Move on a concealed route to disabled vehicles.
   c. Inspect vehicles to determine required parts.
   d. Repair vehicles on site.
   e. Evacuate nonrepairable vehicles to unit maintenance area.		

9. Maintenance personnel react to battle damaged vehicle (recoverable) within a		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

hostile area.
    a. Request covering fire.
    b. Move on a concealed route to disabled vehicle.
    c. Tow vehicle to a concealed location.
    d. Remove casualties from vehicle.
    e. Perform self-aid/buddy aid.
    f. Request medical assistance, if required.
    g. Evacuate casualties.
    h. Perform battle damage assessment.
    i. Repair vehicle, if possible.
    j. Recover nonrepairable vehicle.
 	
10. Maintenance personnel react to battle damaged vehicle (unrecoverable) within a hostile area.
    a. Request direct and supporting fire.
    b. Move on a concealed route to disabled vehicle.
    c. Remove casualties from vehicle.
    d. Treat casualties.
    e. Request medical assistance, if required.
    f. Evacuate casualties.
    g. Request disposition of unrecoverable vehicle from battery commander.
    h. Conduct salvage operations.
    i. Prepare vehicle for destruction.
    j. Destroy vehicle on order from commander or designated representative.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
031-507-1040	PERFORM OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES ON M13 DECONTAMINATING APPARATUS, PORTABLE	STP 3-54B1-SM
071-216-0001	MAINTAIN THE TOW SYSTEM ON A BFV	STP 44-14R14-SM-TG
071-216-0004	MAINTAIN THE TRACK AND SUSPENSION SYSTEM ON A BFV	STP 44-14R14-SM-TG
071-216-0007	MAINTAIN THE HULL ON A BFV	STP 44-14R14-SM-TG
101-92Y-0006(SL2)	INSPECT EQUIPMENT FOR ACCOUNTABILITY, CLEANLINESS, AND SERVICEABILITY	STP 21-24-SMCT
113-587-0058	PERFORM OPERATOR'S TROUBLESHOOTING ON SINCGARS	STP 44-14J14-SM-TG STP 44-14R14-SM-TG STP 44-14S14-SM-TG
113-600-3029	PERFORM OPERATOR'S PMCS ON TELEPHONE SET TA-312/PT	STP 44-14R14-SM-TG

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
441-066-1012	PERFORM PMCS ON THE SHTU	STP 44-14R14-SM-TG STP 44-14S14-SM-TG
441-066-1018	PERFORM PMCS ON THE HTU	STP 44-14R14-SM-TG STP 44-14S14-SM-TG
441-066-1028	PERFORM OPERATOR PMCS ON EPLRS RADIO SET AN/VSQ-2(V)2	STP 44-14J14-SM-TG STP 44-14R14-SM-TG STP 44-14S14-SM-TG
441-066-1032	PERFORM PMCS ON THE PLGR (GPS)	STP 44-14J14-SM-TG STP 44-14R14-SM-TG STP 44-14S14-SM-TG
441-066-2025	PERFORM OPERATOR PMCS ON KIR-1C/TSEC COMPUTER	STP 44-14R14-SM-TG STP 44-14S14-SM-TG
441-066-3105	SUPERVISE CHARGING THE IFF INTERROGATOR BATTERIES	STP 44-14R14-SM-TG STP 44-14S14-SM-TG
441-066-3106	SUPERVISE PROGRAMMING IFF INTERROGATOR, AN/PPX-3A OR 3B (STINGER), USING THE KIR-1A/TSEC COMPUTER AND KIK-18/TSEC CODE CHANGER KEY	STP 44-14R14-SM-TG STP 44-14S14-SM-TG
441-066-3110	SUPERVISE OPERATOR PMCS ON KIR-1C/TSEC COMPUTER	STP 44-14R14-SM-TG STP 44-14S14-SM-TG
441-066-3112	SUPERVISE PROGRAMMING IFF INTERROGATOR, AN/PPX-3A OR 3B (STINGER), USING THE KIR-1C/TSEC COMPUTER AND KOI-18/TSEC TAPE READER OR ANCD	STP 44-14R14-SM-TG STP 44-14S14-SM-TG
441-066-3113	SUPERVISE PROGRAMMING IFF INTERROGATOR, AN/PPX-3A OR 3B (STINGER), USING THE KIR-1C/TSEC COMPUTER AND KYK-13/TSEC ELECTRONIC TRANSFER DEVICE	STP 44-14R14-SM-TG STP 44-14S14-SM-TG
441-066-3114	SUPERVISE PROGRAMMING KYK-13/TSEC ELECTRONIC TRANSFER DEVICE USING THE KOI-18/TSEC TAPE READER	STP 44-14R14-SM-TG STP 44-14S14-SM-TG
441-092-1001	TROUBLESHOOT THE AVENGER WEAPON SYSTEM	STP 44-14S14-SM-TG
441-092-1002	PERFORM PMCS ON THE AVENGER WEAPON SYSTEM	STP 44-14S14-SM-TG
441-092-1025	TROUBLESHOOT THE M3P MACHINE GUN	STP 44-14S14-SM-TG

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: MANAGE UNIT MAINTENANCE OPERATIONS   (43-2-C323.44-AD2R)
(<u>DA PAM 738-750</u>)   (DA FORM 2404)

ITERATION:	1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:			T	P	U		(Circle)

CONDITIONS: The unit deploys tactically with organic equipment. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: The unit maintains an operational readiness rate consistent with the tactical mission requirements and established Department of the Army standards. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. The commander supervises the unit maintenance activity.
    a. Establishes the maintenance priorities.
    b. Monitors the maintenance performed on the individual and TOE equipment.
    c. Monitors the equipment status.
    d. Monitors the maintenance personnel strength shortages.
    e. Conducts periodic inspections of personnel and equipment to check enforcement of safety measures and safe usage of equipment.
 	
2. Organizational maintenance personnel conduct a quality control program.
    a. Perform an initial inspection during turn-in operations.
    b. Record the inspection results on DA Form 2404.
    c. Perform an in-process inspection of new equipment.
    d. Perform a final inspection prior to turn-in to supply channels after operator preparation procedures are complete.
    e. Review the maintenance records.
    f. Monitor the PMCS conducted by operators and validate faults/correct deficiencies, if possible.
    g. Monitor equipment status.
    h. Verify inspection procedures.
    i. Inspect calibration equipment records.
 	
* 3. The maintenance supervisors maintain the unit equipment safety program.
    a. Brief the personnel on the specifics of the safety program.
    b. Conduct a safety inspection.
    c. Inspect disabled equipment for safety hazards.
    d. Enforce safety procedures.
    e. Report accidents and mishaps.
    f. Investigate accidents and mishaps.
    g. Maintain files on the safety inspections and accident reports.
 	
* 4. The maintenance officer or supervisor supervises the PLL operations.
    a. Verifies the PLL accuracy at prescribed intervals.
    b. Inspects the document register to verify the replenishment of repair parts.
    c. Inspects the PLL list for the approving authority's signature.
 	
5. The calibration coordinator monitors the calibration program.
    a. Develops a calibration schedule.
    b. Monitors the calibration schedule.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

c. Advises the supporting calibration laboratory of new or additional equipment.
   d. Verifies the maintenance of the TMDE.
 	
* 6. The battery commander enforces the unit safety program.
   a. Conducts a risk assessment of the working environment.
   b. Ensures that soldiers are aware of the inherent dangers of their equipment.
   c. Ensures that the soldiers are aware of the hazards their equipment poses to others.
   d. Ensures that the chain of command enforces safety.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
091-CLT-3009(SL4)	SUPERVISE MAINTENANCE OPERATIONS	STP 21-24-SMCT
091-CLT-4029(SL2)	SUPERVISE PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)	STP 21-24-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: CONDUCT LOGPAC ACTIVITIES   (44-4-2282.44-AD2R)
  (FM 3-01.64)   (FM 10-27-4)   (FM 44-43)
  (FM 44-44)

ITERATION:	1 2 3 4 5 M (Circle)
COMMANDER/LEADER ASSESSMENT:	T P U (Circle)

CONDITIONS: The unit is DS to the BCT. Unit headquarters is participating in BCT LOGPAC activities. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: Unit receives and distributes Stinger missiles, argon bottles, small arms munitions, and personnel replacements to platoons, as required. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
Note: Supported force LOGPAC operations at the supported force level are formed by companies and moved forward under the control of the support battery commander who normally organizes a convoy for movement of all LOGPACs under his control. In emergencies, he dispatches unit LOGPACs individually. The convoy may contain additional vehicles, such as maintenance vehicles with Class IX, to move to the unit maintenance collection point (UMCP), or additional ammunition and fuel for the combat trains. Anytime the Linebacker battery is DS, the basic principles of LOGPAC operations by the supported unit will apply.		
* 1. PSG coordinates LOGPAC activities with supported force. 　　　a. Makes sure the battery has the items required to accomplish the mission. 　　　b. Ensures LOGPAC is formed at the field trains. 　　　c. Ensures LOGPAC is moved forward to the logistics release point (LRP). 　　　d. Takes control of battery LOGPAC when LOGPAC elements reach the LRP. 　　　e. Notifies the battery XO immediately if peculiar items are not included in the supported force LOGPAC.		
* 2. PSG makes sure that the following supplies, equipment, and personnel replacements peculiar to the battery are included in the supported force LOGPAC plan. 　　　a. Class III and V. 　　　b. Personnel replacements. 　　　c. Class I. 　　　d. All other classes of supply (if necessary). 　　　e. Spare argon bottles.		
3. Battery coordinates maintenance activities with supported force. 　　　a. Coordinates maintenance and evacuation of damaged vehicles with the supported force or the ADA battery which is closest. 　　　b. Briefs battery personnel on location of UMCP.		
* 4. Battery XO notifies the supported force commander of support status.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	**1**	**2**	**3**	**4**	**5**	**M**	**TOTAL**
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
071-326-3013(SL3)	CONDUCT A TACTICAL ROAD MARCH	STP 21-24-SMCT
101-92Y-0001(SL4)	SUPERVISE SUPPLY ACTIVITIES	STP 21-24-SMCT
151-357-0001(SL4)	SUPERVISE CSS FUNCTIONS DURING PLATOON OPERATIONS	STP 21-24-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: CONDUCT BATTLEFIELD STRESS REDUCTION AND PREVENTION PROCEDURES   (08-2-R303.44-AD2R)
      (<u>FM 22-51</u>)   (FM 6-22.5)   (FM 8-51)
      (TSOP)

ITERATION:	1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:		T	P	U		(Circle)

CONDITIONS: CHS operations have commenced. Unit personnel are deployed in support of higher HQ operations. The unit's sleep plan and SOPs to manage BF soldiers have been developed. Personnel have been cross-trained on critical tasks. Operations are continuous over a prolonged period of time causing stressful situations for personnel. The commander has directed that battlefield stress management procedures be implemented. SCPE is on hand and/or field-expedient and natural shelters are available. Note: Due to the technical knowledge and skills required to perform some MOS-specific tasks, caution must be exercised when cross-training personnel. For instance, nonmedical personnel cannot be cross-trained to perform MOS-specific medical tasks. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: Unit applies techniques that counter battlefield stress. At MOPP level 4, performance degradation factors increase the need for stress prevention implementation.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. Commander and leaders perform stress prevention leader actions.
   a. Issue warning orders, OPORDs, and FRAGOs to the lowest possible level.
   b. Provide soldiers an accurate assessment of the friendly and enemy situation.
   c. Brief leader's intention to all unit personnel.
   d. Speak positively concerning the unit's missions, purpose, and abilities.
   e. Encourage a positive attitude throughout the unit.
   f. Institute an information dissemination plan designed to quell and prevent rumors.
   g. Inform personnel of availability of religious support.		

* 2. Commander and leaders implement sleep plan.
   a. Provide a safe and secure area away from vehicles and other high-noise activities.
   b. Adjust the sleep plan as dictated by tactical situation.
   c. Enforce the sleep plan per the TSOP.		

* 3. Leaders implement task rotation or restructuring procedures.
   a. Alternate cross-trained unit personnel on critical tasks, as required.
   b. Rotate unit personnel between demanding and nondemanding tasks.
   c. Assign two soldiers to function independently on tasks requiring a high degree of accuracy.
   d. Adjust task rotation policies and procedures to the tactical situation.		

* 4. Leaders implement stress-coping and management techniques.
   a. Integrate new unit members into the unit immediately.
   b. Assist soldiers in resolving homefront problems.
   c. Implement a buddy system to observe signs of stress or BF among soldiers and leaders.
   d. Provide instruction on relaxation techniques to all personnel prior to		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

deployment.
  e. Conduct after-action debriefings.
  f. Schedule a critical event debriefing after any especially traumatic event per FM 22-51.
  g. Conduct unit award, decoration, recognition, and memorial ceremonies.
 	
* 5. Commander and leaders implement stress control techniques.
  a. Implement a plan to deal with mild, seriously stressed, or BF cases.
  b. Assign soldiers showing signs of severe stress or BF to simple tasks.
  c. Direct personnel to be supportive of stressed or BF soldiers.
  d. Refer soldiers showing signs of serious stress or BF to supporting MTF for evaluation.
  e. Reintegrate RTD soldiers into their specific element.
 	
6. Unit personnel employ stress prevention measures.
  a. Maintain a positive attitude concerning the unit's mission, purpose, and abilities.
  b. Comply with commander's sleep plan.
  c. Identify other soldiers with signs of stress or BF.
  d. Provide immediate buddy aid support.
  e. Report signs of stress or BF in other soldiers to immediate supervisor.
  f. Accept new unit members immediately.
  g. Practice relaxation techniques at appropriate times and places.
  h. Participate in buddy systems and after-action debriefings.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
071-326-5503(SL2)	ISSUE A WARNING ORDER	STP 21-24-SMCT
113-600-2001(SL1)	COMMUNICATE VIA A TACTICAL TELEPHONE	STP 21-1-SMCT
113-637-2001(SL1)	COMMUNICATE VIA A TACTICAL RADIO	STP 21-1-SMCT
805C-PAD-1245(SL4	SUPPORT UNIT AND FAMILY READINESS THROUGH THE ARMY FAMILY TEAM BUILDING (AFTB) PROGRAM	STP 21-24-SMCT
805C-PAD-4595(SL4	SUPERVISE CROSS-LEVELING OF PERSONNEL	STP 21-24-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: ESTABLISH AND OPERATE A SINGLE-CHANNEL VOICE RADIO NET (11-2-C302.44-AD2R)
    (FM 24-1)   (FM 24-18)

ITERATION:	1 2 3 4 5 M (Circle)
COMMANDER/LEADER ASSESSMENT:	T P U (Circle)

CONDITIONS: The battalion is tactically deployed. Battery personnel must establish single-channel networks. Battery operators were briefed on the SOI extract. The OPFOR is conducting EW and has the capability to locate stations with direction-finding equipment. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: Radio operators establish and enter a radio net no later than the time prescribed in the OPORD. The time required to perform this task in MOPP4 is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
1. Radio operators install a radio set for operation. a. Secure radio in the mount. b. Connect audio accessories. c. Install antenna. d. Perform all preoperational and operational checks on the radio set. 2. Radio operators make initial entry into the net. a. Obtain appropriate call signs, suffixes, and frequency from current SOI. b. Contact NCS and request permission to enter the radio net. c. Authenticate, when challenged by the NCS. d. Enter net only after NCS has given permission. 3. Radio operators recognize frequency interference. a. Recognize ECM tactics. b. Check for accidental or unintentional interference. c. Check for intentional interference. 4. Radio operators initiate prescribed ECCM procedures. a. Disconnect antenna. b. Identify type of noise. c. Tune the receiver above or below the normal frequency. d. Identify jamming signals. e. Report interference received to the commander. f. Employ antijamming measures. g. Continue to operate on current frequency. 5. Radio operators employ preventive ECCM and radio procedures. a. Use COMSEC equipment, if available (TSEC/KY-38 or TSEC/KY-57). b. Set COMSEC equipment for the proper code. c. Safeguard COMSEC equipment and materiel when COMSEC is used. d. Use only approved radiotelephone procedures. e. Use challenge and reply authentications, as required by the SOI. f. Communicate using approved codes and brevity list. Encode and decode grid coordinates using the current SOI. g. Keep the length and number of transmissions to a minimum. h. Use the lowest power setting required to communicate with the desired stations.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
i. Use the correct call signs and frequencies. j. Observe periods of radio silence. k. Adhere to net discipline.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	**1**	**2**	**3**	**4**	**5**	**M**	**TOTAL**
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
031-503-1015(SL1)	PROTECT YOURSELF FROM NBC INJURY/CONTAMINATION WITH THE APPROPRIATE MISSION-ORIENTED PROTECTIVE POSTURE (MOPP) GEAR	STP 21-1-SMCT
031-503-1023(SL2)	PROTECT YOURSELF FROM NBC INJURY/CONTAMINATION WHEN CHANGING MISSION-ORIENTED PROTECTIVE POSTURE (MOPP) GEAR	STP 21-24-SMCT
071-326-0513(SL1)	SELECT TEMPORARY FIGHTING POSITIONS	STP 21-1-SMCT
071-331-0815(SL1)	PRACTICE NOISE, LIGHT, AND LITTER DISCIPLINE	STP 21-1-SMCT
113-571-1004	OPERATE IN RADIO NETS	STP 44-14J14-SM-TG STP 44-14R14-SM-TG STP 44-14S14-SM-TG
113-571-1023(SL1)	PREPARE A WRITTEN MESSAGE IN USMTF FORMAT	STP 21-1-SMCT
113-573-0001	CHECK SIGNAL SECURITY (SIGSEC) PROCEDURES	STP 44-14J14-SM-TG STP 44-14R14-SM-TG
113-573-4003	ENCODE AND DECODE MESSAGES USING KTC 600(*) TACTICAL OPERATIONS CODE	STP 44-14S14-SM-TG
113-587-0058	PERFORM OPERATOR'S TROUBLESHOOTING ON SINCGARS	STP 44-14J14-SM-TG STP 44-14R14-SM-TG STP 44-14S14-SM-TG
113-587-2001	OPERATE RADIO SET AN/PRC-77 OR AN/PRC-25	STP 44-14R14-SM-TG STP 44-14S14-SM-TG
113-587-2063	OPERATE RADIO SET AN/VRC-43 OR AN/VRC-46 WITH TSEC/KY-57	STP 44-14R14-SM-TG
113-587-2064	OPERATE RADIO SET AN/VRC-12 OR AN/VRC-47 WITH TSEC/KY-57	STP 44-14R14-SM-TG STP 44-14S14-SM-TG
113-587-2070	OPERATE SINCGARS SINGLE-CHANNEL (SC)	STP 44-14J14-SM-TG STP 44-14R14-SM-TG STP 44-14S14-SM-TG
113-587-2071	OPERATE SECURE SINCGARS FREQUENCY HOPPING (FH) (NET MEMBERS)	STP 44-14J14-SM-TG STP 44-14R14-SM-TG STP 44-14S14-SM-TG

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
113-587-2075	OPERATE SINCGARS DATA DEVICES	STP 44-14J14-SM-TG
		STP 44-14R14-SM-TG
		STP 44-14S14-SM-TG
113-587-2077	OPERATE SINCGARS REMOTE CONTROL UNIT (SRCU)	STP 44-14J14-SM-TG
		STP 44-14S14-SM-TG
113-596-1068	INSTALL ANTENNA GROUP OE-254/GRC	STP 44-14J14-SM-TG
		STP 44-14R14-SM-TG
113-637-2001(SL1)	COMMUNICATE VIA A TACTICAL RADIO	STP 21-1-SMCT
441-066-1028	PERFORM OPERATOR PMCS ON EPLRS RADIO SET AN/VSQ-2(V)2	STP 44-14J14-SM-TG
		STP 44-14R14-SM-TG
		STP 44-14S14-SM-TG
441-066-1029	OPERATE EPLRS RADIO SET AN/VSQ-2(V)2	STP 44-14J14-SM-TG
		STP 44-14R14-SM-TG
		STP 44-14S14-SM-TG
441-066-1030	LOAD EPLRS RADIO SET AN/VSQ-2(V)2 KEY SET	STP 44-14J14-SM-TG
		STP 44-14R14-SM-TG
		STP 44-14S14-SM-TG

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: PROVIDE IMPROVED HIGH FREQUENCY RADIO (IHFR) COMMUNICATIONS AN/GRC-193A/213 AND AN/PRC-104A   (11-5-0079.44-AD2R)
    (FM 6-02.72)   (FM 11-32)   (FM 11-43)

                            ITERATION: 1   2   3   4   5   M   (Circle)

                            COMMANDER/LEADER ASSESSMENT: T   P   U   (Circle)

CONDITIONS: The team and equipment have arrived on site. Current key lists and signal operating instructions/signal supplemental instructions (SOI/SSI) extracts are available. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: The radio set is properly installed and fully operational per time specified in the operation order/fragmentary order. Performance in MOPP4 will increase time required to complete the task.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
SAFETY NOTE: Follow all appropriate safety guidelines and regulations.		

* 1. Supervisor selects site for equipment placement.
    a. Selects site for antenna mast(s).
    b. Ensures location provides the best cover and concealment possible.
    c. Ensures location provides the best possible physical security.
    d. Ensures location provides access to at least one escape route from the opposing forces.
    e. Establishes/maintains physical security/control of communications security materials and documents containing essential elements of friendly information.		

2. The team installs generator set, if applicable.
    a. Positions generator.
    b. Unpacks cables and equipment.
    c. Conducts preoperational checks.
    d. Installs ground rod and strap.
    e. Connects auxiliary fuel hose as required.
    f. Establishes fuel/fire point.
    g. Attempts to reduce generator noise by sandbagging or other appropriate means.		

3. The team performs preoperational checks on AN/GRC-193A/213 radio set.
    a. Ensures equipment and cables are properly installed.
    b. Ensures proper installation of antenna.
    c. Ensures all power is off.
    d. Ensures proper grounding.
    e. Performs equipment presets.
    f. Ensures air intake and exhaust ports on amplifier and coupler are clear.		

4. The team presets RT-1209 and AMP-6874.
    a. Starts engine and adjusts throttle if using vehicle power.
    b. Sets power supply or generator breaker to ON (adjusts for 26.5 volts [V] direct current [DC]).
    c. Performs tuning procedures.
    d. Selects desired mode of operation.
    e. Establishes two-way communications.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

5. The team installs AN/GRA-50 or NVIS antenna, as required.
    a. Inspects antenna for completeness.
    b. Determines length of antenna.
    c. Assembles the antenna.
    d. Erects the antenna.
 	
6. Team prepares AN/PRC-104A for operation.
    a. Checks equipment for completeness.
    b. Checks equipment for damage.
    c. Interconnects RT-1209 and AM-6874.
    d. Connects battery pack CY-7541 to the RT-1209 and AM-6874.
    e. Connects handset.
    f. Connects antenna.
    g. Secures set in backpack.
    h. Makes initial control settings for voice operation.
 	
7. Team places radio set AN/PRC-104A into operation.
    a. Turns the radio set on.
    b. Performs tuning procedure.
    c. Establishes two-way communications.
 	
8. The team completes site preparation.
    a. Performs camouflage discipline.
    b. Implements physical security plan.
 	
* 9. The team chief inspects site.
    a. Checks installation of equipment.
    b. Checks generator installation, if applicable.
    c. Checks that preventive maintenance checks and services (PMCS) have been performed.
    d. Checks camouflage discipline.
 	
10. The team members maintain radio set.
    a. Perform PMCS as required.
    b. Perform fault isolation as required.
    c. Perform user level maintenance as required.
    d. Evacuate faulty equipment as required.
    e. Complete all necessary entries in maintenance records.
    f. Report all uncorrected deficiencies to immediate supervisor.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
113-573-0001	CHECK SIGNAL SECURITY (SIGSEC) PROCEDURES	STP 44-14J14-SM-TG STP 44-14R14-SM-TG

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
113-620-2028	OPERATE RADIO SET AN/GRC-193A	STP 44-14J14-SM-TG
113-620-3063	PERFORM OPERATOR PMCS ON RADIO SET AN/GRC-193A	STP 44-14J14-SM-TG

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: ESTABLISH PLATFORM WITH APPLIQUE, PRECISION LIGHTWEIGHT GPS RECEIVER (PLGR) AND SINCGARS SYSTEM IMPROVEMENT PROGRAM (SIP)   (11-5-0201.44-AD2R)
     (FM 6-02.72)   (FM 11-32)   (FM 11-43)
     (FM 24-35)

ITERATION:		1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:			T	P	U			(Circle)

CONDITIONS: The unit has been deployed. The platform/communication team has been directed to support the maneuver command post with communications. Team has all required hardware and software plus ancillary equipment needed to provide support. SOI/SSI and COMSEC materials are on hand and current. General condition applies. (See training matrix in Chapter 2, paragraph 2-2). Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: Crew/operator successfully initializes and is operating the radios and platform components in a planned network within 30 minutes. Crew/operator demonstrates knowledge of currently accepted troubleshooting procedures. Applique and radio set problems are located and minor repairs are completed within 5 minutes. For problems that are outside the capability of the crew/operator, crew/operator calls unit maintenance within 8 to 10 minutes of problem/fault discovery. Performance in MOPP4 increases the time required to complete the task.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

SAFETY: Follow all appropriate safety guidelines and regulations.   Note: Sequence of start-up procedures may vary, depending on platform configuration and software being used.
 	
1. The crew/operator initializes the applique.
    a. Performs visual inspection.
       (1) Checks for loose hardware, dents, cracks, or scratches on computer and keyboard.
       (2) Checks for cracks and scratches on monitor glass.
       (3) Checks for broken or missing keys on keyboard.
       (4) Checks cables for frayed or broken wires.
       (5) Checks connectors for cracked shells, missing parts, and corrosion.
    b. Performs mechanical inspection.
       (1) Presses keys to ensure that they can be depressed and do not stick.
       (2) Manipulates trackball to ensure it is operable.
       (3) Makes sure air vents are not blocked.
    c. Turns power switch to ON.
    d. Performs EPLRS start-up procedures per user's guide for software version being employed.
    e. Checks communication status per user's guide and software version being used.
 	
2. The crew/operator installs the PLGR.
    a. Inventories and inspects components.
    b. Performs preventive maintenance checks and services (PMCS) on PLGR.
    c. Installs memory battery (if not already installed), then installs primary batteries.
    d. Connects EXT antenna cable to PLGR antenna connector.
    e. Connects PLGR/applique interface cable to PLGR interface port connector.
    f. Connects EXT PWR cable to PLGR power connector.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

g. Ensures all connectors are properly connected and cables are routed to prevent damage.
    h. Powers up vehicle.
    i. Turns PLGR on.
    j. Observes PLGR self-test and complies with user guide for software version being employed.
    k. Sets up PLGR, if required.
    l. Enters current position, if required.
    m. Loads COMSEC variables, if required.
 	
3. The crew/operator uses the ANCD to load COMSEC variables into the PLGR.
 	
4. The crew/operator uses the ANCD to load COMSEC variables into the SINCGARS SIP.
 	
5. The crew/operator/maintainer implements applique troubleshooting procedures per user's guide for software version being used.
 	
6. The crew/operator/maintainer implements troubleshooting procedures for SINCGARS SIP per operator's guide for the radio.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
113-571-1004	OPERATE IN RADIO NETS	STP 44-14J14-SM-TG STP 44-14R14-SM-TG STP 44-14S14-SM-TG
113-571-1023(SL1)	PREPARE A WRITTEN MESSAGE IN USMTF FORMAT	STP 21-1-SMCT
113-573-0001	CHECK SIGNAL SECURITY (SIGSEC) PROCEDURES	STP 44-14J14-SM-TG STP 44-14R14-SM-TG
113-573-0002	CONDUCT OPERATIONS SECURITY (OPSEC) PROCEDURES	STP 21-24-SMCT
113-587-1064	PREPARE SINCGARS (MANPACK) FOR OPERATION	STP 44-14R14-SM-TG STP 44-14S14-SM-TG
113-587-2071	OPERATE SECURE SINCGARS FREQUENCY HOPPING (FH) (NET MEMBERS)	STP 44-14J14-SM-TG STP 44-14R14-SM-TG STP 44-14S14-SM-TG
113-587-2075	OPERATE SINCGARS DATA DEVICES	STP 44-14J14-SM-TG STP 44-14R14-SM-TG STP 44-14S14-SM-TG

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: ESTABLISH A SINCGARS FREQUENCY HOPPING NET   (11-5-1102.44-AD2R)
  (FM 11-32)   (FM 24-18)   (FM 24-19)
  (FM 24-33)   (FM 24-35)   (FM 24-35-1)
  (TM 11-5985-357-13)

ITERATION:	1 2 3 4 5 M	(Circle)
COMMANDER/LEADER ASSESSMENT:	T P U	(Circle)

CONDITIONS: The unit Air and Missile Defense Operations Center (AMDOC) is located in proximity to the Division Tactical Air Control (DTAC) to facilitate synchronization of current operations. It consists of two hard shelter HMMWVs containing all source analysis system (ASAS), maneuver control system (MCS), and two air and missile defense workstations (AMDWS) current and future operations, and one Joint Tactical Information Distribution System (JTIDS) radio. The team was briefed and has signal operating instructions/signal supplemental instructions (SOI/SSI) extracts, appropriate loading devices with keys, radio net diagram, maps, and grid coordinates. Subtasks 1 through 4 are done in the motor pool or staging area prior to going to the field location. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: The SINCGARS radio sets are operational per the tactical standing operating procedure and the operation plan/operation order. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

SAFETY NOTE: Follow all appropriate safety guidelines and regulations. ALL COMMANDERS WHO USE THE OE-254/RC-292 ANTENNA FAMILIES MUST COMPLY WITH THE FOLLOWING:
 	
 1. Follow procedures outlined in TM 11-5985-357-13.
 2. Wear protective equipment when erecting and assembling the antennas (eye goggles, helmet, gloves).
 3. Install element tip protectors (NSN: 5985-00-930-7223) or other suitable tip caps including locally modified tennis balls, rubber tubing, and so forth, over the tip ends as authorized in CECOM Message 031800Z Feb 89.
 4. Prohibit unauthorized modifications (that is, use of camouflage poles in lieu of the OE-254 mast sections).
 5. Prohibit raising the antenna past its maximum safe height.
 6. Inspect all OE-254 antenna masts for the presence of "through" cracks around the notch before and after erection. Remove all antenna masts from service if "through" cracks of ¼ inch or greater are identified, and order replacement for these masts.
 7. Use a gin pole or other suitable device to lift the antenna feed cone with elements off the ground to erect. This will reduce the stress placed on the antenna during erection.
 8. Do not place an individual under the antenna during the erection process.
 9. Remove one upper mast section as authorized by CECOM Message 102800Z Mar 90.
 	
 * 1. Supervisor checks radios for completeness and operability.
     a. Checks that vehicular and/or manpack systems are assembled correctly.
 WARNING: High voltages exist at connector J1 on the mounting adapter. Be sure J1 is covered or capped when not in use.
     b. Checks that operator has logged amp-hours (manpack only).
     c. Checks to ensure preoperational preventive maintenance checks and		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

services (PMCS) are completed.
CAUTION: RF energy is present near the antenna during transmission. Maintain at least 30 inches between vehicular antenna and personnel during transmission.
An antenna tip cap must be in place on the antenna. Tie down the antenna so the distance from the ground to the tip cap is 7 feet or more.
 	
* 2. The supervisor selects the site.
    a. Selects primary and alternate locations within the general site.
    b. Establishes/maintains camouflage discipline.
    c. Checks that location provides effective use of terrain in an electronic warfare environment.
    d. Checks that location avoids interference from power lines and other friendly sources of frequency interference.
 	
  3. Net members perform pre-mission checks for SINCGARS FH cold-start net opening.
    a. Perform before-operation PMCS.
    b. Load transmission security key (TSK) using MX-10579 or MX-18290 (non-ICOM) only.
    c. Load hopset using MX-18290 (ICOM only).
    d. Load traffic encryption key (TEK) using KYK-13.
 	
* 4. Net control station (NCS) performs pre-mission checks for SINCGARS FH cold-start net opening.
    a. Performs preoperational PMCS.
    b. Loads TSK and hopset using MX-10579 or MX-18290 (non-ICOM only).
    c. Loads hopset using MX-18290 (ICOM only).
    d. Loads TEK using KYK-13.
    e. Loads FH sync time per signal operating instructions/signal supplemental instructions (SOI/SSI).
    f. Loads CUE frequency.
    g. Directs ALT NCS to load CUE frequency as required.
    h. Changes net identification per SOI/SSI.
 	
  5. NCS opens net.
    a. Issues net call in the secure mode on the MAN channel.
    b. Issues electronic counter-countermeasures remote fill (ERF) instructions and sends ERF.
    c. Sets channel switch to hopset channel and issues net call.
    d. Opens net.
    e. Resets channel switch to MAN and calls missing net members.
    f. Repeats cold start.
    g. Sets FCTN switch to SQ ON.
 	
  6. Net members enter net.
    a. Respond in correct sequence to net call.
    b. Store ERF, set channel switch to hopset channel and FCTN switch to SQ ON.
    c. Respond in correct sequence to net call.
    d. Missed ERF or heard no communications on hopset channel, reset channel switch to MAN and FCTN switch to LO.
    e. Respond in sequence to NCS call.
 	
* 7. Net members perform late net entry (LNE), CUE, and ERF method.
    a. Perform pre-mission checks for FH cold-start (PM 3).
    b. Load CUE frequency per SOI/SSI.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
c. Initiate CUE call.		
d. Report into net.		
e. Switch to MAN channel and conduct cold-start net opening (PM 5).		
8. Net members use proper radio procedures.		
a. Keep the length and number of transmissions to a minimum.		
b. Use the lowest power setting required to communicate.		
c. Use authorized call signs and frequencies.		
d. Observe periods of radio listening silence.		
e. Operate on a random schedule.		
f. Adhere to net discipline.		
9. The team members recognize difference types of interference.		
a. Check RT SIG display when not transmitting if the display is constantly or intermittently higher than 1; disconnect antenna to determine if interference is internal or external.		
b. Notify maintenance of internal symptoms.		
c. Initiate electronic counter-countermeasures (ECCM) for external symptoms.		
10. The team members initiate ECCM actions.		
a. Continue to operate.		
b. Do not disclose in the clear the effectiveness of the jamming.		
c. Reduce transmission speed.		
d. Increase transmitter power.		
e. Relocate antenna.		
f. Prepare and forward MIJI Feeder Voice Template Message Report to supervisor.		
11. The team members extend the range of the radio station.		
a. Inspect OE-254 for serviceability.		
b. Install OE-254 antenna (team method).		
c. Accomplish the transaction from the whip to OE-254 without unnecessary interruption of service.		
12. The retrans team establishes a retransmission site.		
a. Installs and connects OE-254 antennas.		
b. Performs preoperational PMCS.		
c. Loads CMD NET MAN frequency in radio C.		
d. Loads CMD NET MAN and CUE frequencies in radio D.		
e. Loads TSK and TEK into both radios (non-ICOM only).		
f. Loads hopset and TEK into both radios (ICOM only).		
g. CUEs LNE using radio D.		
h. Stores ERF in both radios.		
i. Changes radio D to RTS MAN and CUE frequencies and RTS net ID.		
j. Sets radios C and D FCTN switches to RXMT.		
13. Team members initiate net radio interface (NRI) call.		
a. Call the NRI operator on the NRI hopset channel or initiate a CUE call on the NCI CUE channel as required.		
b. Switch to NRI MAN channel.		
c. Establish communications on the NRI hopset channel.		
d. Identify telephone subscriber by call sign or telephone number.		
14. The team members maintain SINCGARS radio net.		
a. Perform PMCS as required.		
b. Perform fault isolation as required.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

c. Perform user level maintenance as required.
d. Evacuate faulty equipment as required.
e. Complete all necessary entries in maintenance records.
f. Report all uncorrected deficiencies to immediate supervisor.
 	
*15. NCS closes the net.
    a. Calls net and issues close down instructions.
    b. Receives acknowledge in correct sequence.
    c. Acknowledges net members.
    d. Performs after-operation PMCS.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
113-571-1004	OPERATE IN RADIO NETS	STP 44-14J14-SM-TG STP 44-14R14-SM-TG STP 44-14S14-SM-TG
113-573-4003	ENCODE AND DECODE MESSAGES USING KTC 600(*) TACTICAL OPERATIONS CODE	STP 44-14S14-SM-TG
113-587-0058	PERFORM OPERATOR'S TROUBLESHOOTING ON SINCGARS	STP 44-14J14-SM-TG STP 44-14R14-SM-TG STP 44-14S14-SM-TG
113-587-1064	PREPARE SINCGARS (MANPACK) FOR OPERATION	STP 44-14R14-SM-TG STP 44-14S14-SM-TG
113-587-2071	OPERATE SECURE SINCGARS FREQUENCY HOPPING (FH) (NET MEMBERS)	STP 44-14J14-SM-TG STP 44-14R14-SM-TG STP 44-14S14-SM-TG
113-587-2075	OPERATE SINCGARS DATA DEVICES	STP 44-14J14-SM-TG STP 44-14R14-SM-TG STP 44-14S14-SM-TG
441-066-1028	PERFORM OPERATOR PMCS ON EPLRS RADIO SET AN/VSQ-2(V)2	STP 44-14J14-SM-TG STP 44-14R14-SM-TG STP 44-14S14-SM-TG
441-066-1029	OPERATE EPLRS RADIO SET AN/VSQ-2(V)2	STP 44-14J14-SM-TG STP 44-14R14-SM-TG STP 44-14S14-SM-TG
441-066-1030	LOAD EPLRS RADIO SET AN/VSQ-2(V)2 KEY SET	STP 44-14J14-SM-TG STP 44-14R14-SM-TG STP 44-14S14-SM-TG
441-092-1035	OPERATE INTERCOMMUNICATIONS SET AN/VIC-1	STP 44-14S14-SM-TG

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: SUSTAIN AIR DEFENSE OPERATIONS   (44-1-1045.44-AD2R)
     (<u>FM 3-01.64</u>)   (FM 44-43)   (FM 44-44)

ITERATION:		1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:			T	P	U			(Circle)

CONDITIONS: Battery is DS to a brigade combat team. The battery TOC must sustain air defense operations until mission completion, in any weather condition, day or night. All battery TOC personnel are present. TOE equipment is on hand and operational. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: The battery TOC maintains communications with deployed platoons and the brigade combat team throughout the mission. The battery TOC conducts its activities on a 24-hour basis. The battery TOC personnel submit and receive reports within the prescribed time limits of the OPORD. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. Battery TOC supervises and manages battery sustained operations.
    a. Supervises the reorganization of the platoon to allow for personnel shortages and receiving replacements according to the commander's intent.
    b. Monitors the intelligence situation and provides the subordinates with INTSUMs.
    c. Monitors OPSEC procedures implemented in all plans and enforces the information security program.
    d. Continuously performs the IPB process and makes recommendations to the brigade combat team commander based on his findings.
    e. Continuously synchronizes air defense coverage as the air battle progresses and air defense assets change.
    f. Redistributes equipment to improve the operational readiness of the unit.
    g. Continuously monitors the tactical situation and updates the air defense plan or OPORD as needed.
    h. Issues warning orders, FRAGOs, or verbal orders to support the brigade combat team commander's battle intent or changes in air defense priorities.
    i. Reorganizes and consolidates ADA battery assets as priorities change.
    j. The NBC NCO monitors the NBC situation and advises the commander accordingly.
    k. Battery adjusts the logistical plan to react to change in the tactical situation or operation.
    l. Coordinates resupply of platoons with ammunition and all classes of supply.
    m. CP personnel improve TOC position by using passive air defense measures. (44-1-C220.44-AD2R)
    n. Unit TOC continuously coordinates with BCT to keep pace with changes on the battlefield affecting their operations.
    o. Battery TOC prepares and executes sleep plans and crew rotations so that each crew member receives 4 hours or more sleep during a 24-hour period.
    p. Battery maintenance officer (BMO) supervises maintenance, PLL, and POL procedures.
 	
  2. Battery TOC maintains a journal of events containing the following information:
    a. Weapon control status (WCS) (beginning and changes).
    b. Air defense warning (ADW) (beginning and changes).		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

c. States of alert (SOA) (beginning and changes).
d. Operational reports (battle, personnel, and logistics).
e. Changes that affect the battalion's ability to do its mission or changes to mission.
 	
3. Battery TOC forwards the following reports to higher TOC:
  a. PRRs.
  b. NBC reports (as they occur).
  c. Materiel readiness condition report.
  d. PIR reported by its subordinate elements.
  e. Unit status.
  f. Changes in ADW and EW over the command line.
 	
* 4. The battery commander adjusts air defense coverage.
  a. Maintains continuous coverage over the corps or supported force's axis of movement.
  b. Adjusts fires to newly identified avenues of approach.
  c. Covers gaps in the defense caused by fire unit casualties.
  d. Supports higher headquarters scheme of maneuver.
  e. Tailors the defense by weapon system according to the air threat.
  f. Supports special missions or tactical movements.
  g. Provides ADA protection to the force.
  h. Prevents avoidable loss of air defense assets due to overwhelming enemy activities.
  i. Secures and defends unit positions.
  j. Takes advantage of additional support from corps assets or adjacent units.
  k. Leads the force.
 	
5. Battery TOC calls for fire support from FSE per battalion tactical fire support plan.
  a. Calls for fire support when tactical situation or defense posture of battery and platoons dictates fire support fires.
  b. Calls for smoke support when required by brigade combat team commander's scheme of maneuver to protect movements.
  c. Calls for allocated DS fires when in static area defense.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	**1**	**2**	**3**	**4**	**5**	**M**	**TOTAL**
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
091-CLT-3009(SL4)	SUPERVISE MAINTENANCE OPERATIONS	STP 21-24-SMCT
091-CLT-4029(SL2)	SUPERVISE PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)	STP 21-24-SMCT
101-92Y-0001(SL4)	SUPERVISE SUPPLY ACTIVITIES	STP 21-24-SMCT
101-92Y-0002(SL3)	PLAN TACTICAL RE-SUPPLY OPERATIONS	STP 21-24-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: PROVIDE COMMAND AND CONTROL   (44-1-2187.44-AD2R)
       (FM 3-01.64)   (FM 44-43)

ITERATION:	1 2 3 4 5 M	(Circle)
COMMANDER/LEADER ASSESSMENT:	T P U	(Circle)

CONDITIONS: Unit CP is collocated with the TF CP. Unit is providing air defense. This task is conducted in any weather condition and MOPP level, day or night.   All unit personnel are present. TOE equipment is on hand and operational. Enemy air threat is according to OPORD intelligence annex and intelligence summaries. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: Unit maintains command and control with subordinate elements throughout the mission and provides voice early warning to maneuver elements. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. Leader provides command and control by issuing the following orders:
    a. Air defense warnings.
    b. States of readiness.
    c. Weapon control status.
    d. States of alert.
    e. Early warning procedures to squads.		

2. CP personnel maintain the following records and reports:
    a. Air defense status chart with planned squad locations.
    b. Unit's call signs and frequencies.
    c. Unit's state of readiness.
    d. Unit's mission.
    e. Unit's and defended units' call signs and radio frequencies.
     f. Unit's ammunition and missile status.
    g. Ground-based sensor locations and radio frequencies.
    h. Remarks (vehicle, equipment, and personnel shortages affecting the
       mission).		

3. CP personnel maintain the operation overlay with the following information:
    a. Locations of friendly units.
    b. Boundaries.
    c. Control points.
    d. Coordination points.
    e. A2C2 overlay, enemy situation, obstacles, and planned fires in AO.		

4. CP personnel maintain a journal of events containing the following information:
    a. WCS (beginning and changes).
    b. ADW (beginning and changes).
    c. Squads states of alert (beginning and changes).
    d. Operational reports (battle, personnel, and logistics).
    e. Changes that affect the platoon's ability to do its mission or changes to the
       mission.		

* 5. Leader or his representative make sure that the following reports are submitted
    to higher headquarters CP:
    a. Fire unit engagements.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

b. Requests for small arms and Stinger missile resupply.
    c. Requests for medical evacuation of wounded or removal of KIA remains.
    d. PIR submitted by fire units to defended unit's S2.
    e. Unit state of readiness (SOR).
 	
* 6. Leaders manage maintenance operations.
    a. Maintenance of unit equipment.
    b. Equipment recovery operations.
    c. NBC defensive operations.
    d. Unit emergency destruction of equipment operations.
 	
  7. Unit maintains communications links with the ADA battery, early warning
    sensors, fire unit, and TF CP.
    a. Maintains a unit command net link.
    b. Maintains a TF command net link.
    c. Maintains an early warning link with early warning sensors.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	**1**	**2**	**3**	**4**	**5**	**M**	**TOTAL**
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
113-571-1023(SL1)	PREPARE A WRITTEN MESSAGE IN USMTF FORMAT	STP 21-1-SMCT
113-600-2001(SL1)	COMMUNICATE VIA A TACTICAL TELEPHONE	STP 21-1-SMCT
113-637-2001(SL1)	COMMUNICATE VIA A TACTICAL RADIO	STP 21-1-SMCT
441-091-3000(SL3)	SUPERVISE THE IMPLEMENTATION OF AIR DEFENSE MEASURES	STP 21-24-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS

TASK: CONDUCT AIR ATTACKS (19-OPFOR-1006)

CONDITION: The OPFOR elements in the rear area have forwarded the positions of enemy support sites and/or the locations of road march elements. OPFOR aircraft have been dispatched to attack enemy installations or convoys.

STANDARD: 1. Locate command and control sites or convoys. 2. Conduct attack runs on designated targets. 3. Destroy enemy equipment, supplies, vehicles, and personnel. 4. Sustain minimum aircraft losses.

TASK: CONDUCT ELECTRONIC WARFARE (19-OPFOR-1012)

CONDITION: The OPFOR employ a large number of radio direction finder sets and monitor enemy forces for loose communications security practices.

STANDARD: 1. Locate the positions of the enemy command, intelligence, and logistics radio nets. 2. Forward locations to the OPFOR HQ. 3. Use jamming signals against enemy radio receivers. 4. Monitor enemy radio nets for intelligence information.

TASK: CONDUCT AIR RECONNAISSANCE (44-OPFOR-0005)

CONDITION: The OPFOR headquarters requires intelligence on locations and identification of team sections. An aircraft is dispatched to take photographs and make visual inspection of the forward area and selected MSRs.

STANDARD: 1. Locate sensor team positions in the forward area (command and control, static assets, and MSRs). 2. Photograph selected assets in the area of interest. 3. Make visual checks to support photographs. 4. Do not engage enemy forces.

ELEMENT: BATTERY HEADQUARTERS

TASK: ESTABLISH THE BATTERY CP   (44-1-2295.44-AD2R)
     (FM 3-01.64)

ITERATION:	1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:			T	P	U		(Circle)

CONDITIONS: Battery receives a tactical mission as part of the task force during military operations under any weather condition. All battery personnel are present and all TOE equipment is operational. Threat forces have air superiority. Radio operators were briefed on SOI, numerical cipher, brevity codes, and authentication codes. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: Battery headquarters personnel establish and provide security for the battery CP on a 24-hour basis. Battery CP personnel conduct CP activities and coordinate for timely support of battery. CP chain of command is established. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

1. Battery headquarters personnel under the 1SG's or his representative's supervision establish the battery CP according to the task force concept of operations and TSOP.
   a. Locate CP where it can best establish communication with the company team TOC.
   b. Ensure the CP consists of the battery headquarters and key personnel.
   c. Establish communications nets to the higher headquarters CP, support units, and subordinate units consisting of AM and FM radio nets, wire land lines, and aerial and Sentinel sensor nets.
   d. Coordinate CP perimeter guard.
   e. Improve tactical positions using passive air defense measures.
 	
2. Battery personnel implement CP checklist--
   a. Ensure good communication with--
     (1) Sections.
     (2) Sensors.
     (3) Maneuver force.
   b. Observe COMSEC/ECCM procedures.
     (1) Enter net according to unit SOI procedures.
     (2) Establish battery net.
     (3) Enforce net discipline.
   c. Ensure all required reports are identified and submitted in a timely manner.
   d. Establish maintenance recovery procedures for battery.
   e. Ensure AD information is disseminated during OPORD briefs.
   f. Ensure logistical resupply of the battery occurs.
   g. Ensure all CP supplies are on hand.
   h. Know current SOI and authentication passwords.
   i. Know and display, on map, the current locations of all sections and teams, supported unit control measures, A2C2 measures, obstacles, etc.
   j. Ensure second-in-command is briefed on plans and operations to serve as point of contact in event of leader's absence. At a minimum, but not limited to--
     (1) Mission.
     (2) Battery combat power.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
(3) Front-line trace.		
(4) Friendly air and ground situation.		
(5) Enemy air, ground, NBC, and EW situation.		
(6) Location of decontamination points and clean and dirty routes.		
(7) SOI requirements and changes.		
(8) Bridging, route, and obstacle information.		
k. Take corrective action on non-operational equipment.		
l. Make coordination with adjacent units.		
m. Ensure sections and teams with non-operational equipment still maintain cover and concealment. Camouflage and secure disabled equipment.		
n. Ensure sections with problems continue to provide AD coverage to the greatest extent possible. If all Stingers are disabled, individual weapons can still be fired.		
o. Ensure battery performs before-, during-, and after-operation maintenance on all equipment.		
p. Ensure adequate security measures are taken for classified documents, missiles, and other sensitive items.		
q. Ensure battery members are clean-shaven and perform personal hygiene daily.		
3. Radio operators install radio sets for operations.		
a. Install antennas.		
b. Perform operational checks of radios.		
4. Radio operators establish the battery NCS.		
a. Establish appropriate call signs, suffixes, and frequencies from the SOI.		
b. Make initial entry into the radio net.		
c. Authenticate when challenged by higher NCS.		
5. Radio operators recognize frequency interference.		
a. Determine if ECM is being employed.		
b. Check for accidental or intentional jamming interference.		
6. Radio operators initiate preventive ECCM techniques by minimizing transmissions.		
a. Ensure that all transmissions are necessary.		
b. Preplan messages prior to transmitting them.		
c. Transmit as quickly and precisely as possible.		
d. Use an alternate means of communications whenever possible.		
7. Radio operators protect transmissions from enemy interception.		
a. Use low power.		
b. Select and use proper antennas with the shortest range capability that is feasible or use directional antennas.		
c. Select a site that masks transmitted signals from enemy interception.		
d. Use mobile antennas.		
8. Radio operators use good RTO procedures.		
a. Reduce operator distinguishing characteristics.		
b. Operate on a random schedule.		
c. Authenticate.		
d. Encrypt all data that falls in EEFI categories.		
e. Use COMSEC equipment, when available.		
9. Radio operators recognize jamming and initiate remedial ECCM.		
a. Determine whether the interference is external or internal to the radio.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
b. Determine whether the interference is jamming or unintentional interference.		
c. Report interference and jamming incidents.		
10. Radio operators overcome jamming.		
a. Continue to operate.		
b. Improve the signal-to-jamming ratio by adjusting the receiver or increasing the transmitter power output.		
c. Establish a retransmitting station and relocate the antenna.		
d. Use an alternate means of communication.		
e. Change frequencies.		
*11. Battery XO and PSG supervise the operation of the battery CP.		
a. Operate the CP on a 24-hour basis and have "jump" or bounding capabilities to maintain command and control during movement.		
b. Coordinate with the AD A2C2 element.		
c. Conduct CP activities.		
d. Establish and maintain communications.		
e. Prepare plans and orders to support the conduct of battery combat operations.		
f. Exercise tactical control of air defense operations.		
g. Maintain current information on the operational status of equipment.		
h. Maintain current information on the location and mission of firing batteries and attached elements.		
i. Provide for coordination of logistical support of the battery and/or batteries.		
j. Maintain status reports on personnel, casualties, and replacements.		
*12. The battery commander or PSG manages the activities of the CP.		
a. Monitors the air and land battle operations on the regiment and/or brigade situation board in the CP.		
b. Keeps PSG and sections informed of entire tactical situation.		
c. Conducts briefings of the battle situations on a regular basis to battery or task force commander.		
d. Ensures that the intelligence collection process is timely and information is properly disseminated to users.		
e. Ensures that the fire units react to changing battle situations.		
*13. Battery commander conducts intelligence activities.		
a. Develops IPB (T&EO 44-4-2261.44-AD2R).		
b. Receives, processes, and disseminates combat intelligence.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	**1**	**2**	**3**	**4**	**5**	**M**	**TOTAL**
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
031-503-1015(SL1)	PROTECT YOURSELF FROM NBC INJURY/CONTAMINATION WITH THE APPROPRIATE MISSION-ORIENTED PROTECTIVE POSTURE (MOPP) GEAR	STP 21-1-SMCT
031-503-1018(SL1)	REACT TO NUCLEAR HAZARD OR ATTACK	STP 21-1-SMCT
031-503-1019(SL1)	REACT TO CHEMICAL OR BIOLOGICAL HAZARD OR ATTACK	STP 21-1-SMCT
071-326-5703(SL1)	CONSTRUCT INDIVIDUAL FIGHTING POSITIONS	STP 21-1-SMCT
071-326-5704(SL2)	SUPERVISE CONSTRUCTION OF A FIGHTING POSITION	STP 21-24-SMCT
071-331-0815(SL1)	PRACTICE NOISE, LIGHT, AND LITTER DISCIPLINE	STP 21-1-SMCT
071-331-1004(SL1)	PERFORM DUTY AS A GUARD	STP 21-1-SMCT
113-571-1023(SL1)	PREPARE A WRITTEN MESSAGE IN USMTF FORMAT	STP 21-1-SMCT
113-587-2070	OPERATE SINCGARS SINGLE-CHANNEL (SC)	STP 44-14J14-SM-TG STP 44-14R14-SM-TG STP 44-14S14-SM-TG
113-587-2075	OPERATE SINCGARS DATA DEVICES	STP 44-14J14-SM-TG STP 44-14R14-SM-TG STP 44-14S14-SM-TG
113-600-2001(SL1)	COMMUNICATE VIA A TACTICAL TELEPHONE	STP 21-1-SMCT
113-637-2001(SL1)	COMMUNICATE VIA A TACTICAL RADIO	STP 21-1-SMCT
191-376-4114(SL1)	CONTROL ENTRY TO AND EXIT FROM A RESTRICTED AREA	STP 21-1-SMCT
301-371-1050(SL1)	IMPLEMENT OPERATIONS SECURITY (OPSEC) MEASURES	STP 21-1-SMCT
441-066-1029	OPERATE EPLRS RADIO SET AN/VSQ-2(V)2	STP 44-14J14-SM-TG STP 44-14R14-SM-TG STP 44-14S14-SM-TG
441-066-1030	LOAD EPLRS RADIO SET AN/VSQ-2(V)2 KEY SET	STP 44-14J14-SM-TG STP 44-14R14-SM-TG STP 44-14S14-SM-TG

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY HEADQUARTERS

TASK: PLAN AIR DEFENSE   (44-1-3534.44-AD2R)
  (<u>FM 3-01.13</u>)   (FM 3-01.64)   (FM 3-01.85)

ITERATION:	1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:			T	P	U		(Circle)

CONDITIONS: Unit is given the mission to provide air defense to support the EAC/corps/division/TF critical assets during defensive or offensive operations, in any weather condition, day or night. Leaders know the critical aspects of the plan. All unit personnel are present. TOE equipment is on hand and operational. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: The unit prepares a synchronized air defense plan while the batteries prepare to deploy. Commander allows units time for troop-leading procedures. Commander briefs the commanders on the tactical situation. The time required to perform this task in MOPP4 is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
Note: The evaluator will start with a warning order and briefs the commander on the mission (defensive or offensive).		
* 1. The commander receives the mission (a list of the unit's air defense priorities) to use when planning air defense. They must obtain-- a. Unit's scheme of maneuver objectives and overall intent. b. Maps of the operational area. c. Routes of march or axis of advance. d. Air defense coverage for battle formations. e. AMD defense design. f. Threat IPB.		
2. The air and missile defense coordination officer (AMDCO) notifies the battalions of the new mission. a. Begins estimates and ADA annexes to the EAC, corps, and division OPORD. b. If situation permits, the battalion commander should move to the planning cell, usually the corps or division main TOC. c. Begins mission analysis.		
3. TOC/CP issues warning orders. a. Shows the echelon's missions. b. Explains TF organizing (when required). c. Gives the general area of the missions. d. Gives the time(s) of the mission(s).		

* 4. Offensive Operations.
 a. Using the DST, METT-TC analysis, the commander conducts planning. The higher echelon commander's intent is to identify AMD priorities for each enemy course of action and phase of the battle.
Note: Priorities include maneuver units; command, control, and communications (C3) nodes; reserve forces; and critical assets.
   (1) Reorganizes and consolidates assets as priorities change.
   (2) Task-organizes available air defense forces in support of the concept of operations.
 b. The commander makes a synchronized air defense plan that achieves mass through the establishment of decisive force ratios at the critical time		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

and place on the battlefield. Sufficient forces will be allocated to allow platoons and batteries to adhere to the employment guidelines (mutual support, overlapping fires, balanced fires, weighted coverage, early engagement, and defense in depth).
   (1) Designs plan to defend forward maneuver units against enemy attack helicopter regiments and critical assets in division and rear areas against frontal aviation assets.
   (2) Synchronizes air defense protection with Patriot. Identifies additional resource requirements to higher headquarters.
   (3) Coordinates early warning with Patriot, supported, and subordinate AMD units.
   (4) Coordinates airspace with Army aviation and Air Force assets in conjunction with the air defense plan.
   (5) Provides AMD protection for the force.
 c. Sustain Air Defense Operations, Collective Task 44-1-1045.44-AD2R, (TOC/CP).
   (1) Establishes support relationships with TF.
   (2) Uses TF as primary means for logistical support.
 	
* 5. Defensive Operations.
 a. Using the DST, METT-TC analysis, the commander and staff conduct planning. The higher echelon commander's intent is to identify AMD priorities for each enemy course of action and phase of battle.
Note: Priorities include maneuver units; command, control, and communications (C3) nodes; reserve forces; and critical assets.
   (1) Task-organizes available air defense forces in support of the concept of operations.
   (2) Integrates AMD assets.
   (3) Plans for the supported unit to mass fires in defense of maneuver priorities.
 b. Performs thorough IPB, thus refining higher headquarters IPB and, if appropriate, coordinates IPB analysis with S2 of supported unit.
   (1) Conducts battlefield area evaluation, focusing on EAC, corps rear area, and division areas.
   (2) Conducts terrain and weather analysis.
   (3) Conducts threat evaluation. Focuses evaluation on enemy ground scheme of maneuver and air-associated capabilities, with specific emphasis on fixed-wing employment, air assault landing zones, and TM threats.
   (4) Conducts threat integration with emphasis on relating threat air to enemy ground courses of action.
   (5) Identifies NAI(s) and assists S3 in preparing DST and establishing TAI(s).
 c. The commander makes a synchronized air defense plan that achieves mass through the establishment of decisive force ratios at the critical time and place on the battlefield. Sufficient forces will be allocated to allow platoons and batteries to adhere to the employment guidelines (mutual support, overlapping fires, balanced fires, weighted coverage, early engagement, and defense in depth).
   (1) Task-organizes available air defense forces in support of the concept of operations.
   (2) Synchronizes air defense protection with Patriot.
   (3) Secures and defends unit positions.
   (4) Identifies additional resource requirements to higher headquarters.
   (5) Coordinates early warning with Patriot, supported, and subordinate		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
AMD units.		
(6) Coordinates airspace with Army aviation and Air Force elements in conjunction with the air defense plan.		
d. Performs thorough IPB, thus refining higher headquarters IPB and coordinating IPB analysis with elements passing through choke point.		
(1) Conducts battlefield area evaluation, focusing on EAC and the corps present and future area of operation and area of interest.		
(2) Conducts terrain and weather analysis.		
(3) Conducts threat evaluation, analyzing threat attack helicopter and fixed-wing capabilities and predicting enemy course of action based on friendly ground scheme of maneuver.		
(4) Conducts threat integration relating enemy air courses of action to ground courses of action. Analyzes location of choke points to predict time and location for the commitment of attack helicopter regiment and fixed-wing aircraft.		
(5) Prepares NAI(s) and assists the S3 in identifying TAI(s) and in preparing the DST.		
e. Using the DST, METT-TC analysis, the commander and staff conducts planning. The higher echelon commander's intent is to identify AMD priorities for each enemy course of action and phase of the battle.		
(1) Analyzes elements passing through each choke point.		
(2) Analyzes elements for each enemy course of action and phase of the battle.		
(3) Develops third-dimensional IPB.		
f. The commander makes a synchronized air defense plan that achieves mass through the establishment of decisive force ratios at the critical time and place on the battlefield. Sufficient forces will be allocated to allow platoons and batteries to adhere to employment guidelines (mutual support, overlapping fires, balanced fires, weighted coverage, early engagement, and defense in depth).		
(1) Develops execution matrix based on DST for elements passing through the choke points.		
(2) Uses DST in relation to the location of choke points to determine primary air threats. The plan will focus on defeating the attack helicopter regiment against forward maneuver units and fixed-wing aircraft in rear battle areas.		
(3) Synchronizes air defense protection with Patriot. Identifies additional resource requirements to higher headquarters.		
(4) Coordinates early warning with Patriot, supported, and subordinate AMD units.		
(5) Coordinates airspace with Army aviation and Air Force elements in conjunction with air defense plan.		
g. Performs thorough IPB, thus refining higher headquarters IPB, and, if appropriate, coordinates IPB analysis with battalion S2 of supported unit.		
(1) Conducts battlefield area evaluation, focusing on EAC, corps rear area and division areas.		
(2) Conducts terrain and weather analysis.		
(3) Conducts threat evaluation. Focuses evaluation on enemy ground scheme of maneuver and associated air capabilities, with specific emphasis on fixed-wing aircraft employment, air assault landing zones, and TM threats.		
(4) Conducts threat integration with emphasis on relating threat air to enemy ground courses of action.		
(5) Identifies NAI(s) and assists S3 in preparing DST and establishing		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
TAI(s).		
h. Using the DST, METT-TC analysis, the commander and staff conduct planning. The higher echelon commander's intent is to recommend AMD priorities for each enemy course of action and phase of the battle.		
(1) Makes synchronized air defense plan that achieves mass through the establishment of decisive force ratios at the critical time and place on the battlefield.		
(2) Allocates sufficient forces so batteries and platoons will adhere to the employment guidelines of mutual support and balanced fires.		
(3) Synchronizes coverage with Patriot. Identifies additional resource requirements to higher headquarters.		
(4) Synchronizes coverage with Patriot. Identifies additional resource requirements to higher headquarters.		
(5) Coordinates early warning dissemination with Patriot.		
(6) Coordinates airspace with Army aviation and Air Force assets according to the air defense plan.		
i. TOC/CP establishes liaison with Patriot source.		
(1) ADC broadcasts early warning, ADWs, WCSs, and ACOs.		
(2) TOC/CP rebroadcasts early warning and Patriot data on ADCN via AM radio.		
(3) ADC team keeps the Patriot battalion current on other AMD unit locations and statuses.		
j. TOC/CP develops early warning scheme of maneuver.		
(1) Analyzes Patriot radar coverage diagram. Considers Patriot dead space when developing early warning systems plan.		
(2) Develops an air defense R&S plan, establishing responsibilities for early warning systems (Patriot) to cover specific NAI(s) and TAI(s).		
(3) When reinforcing divisional air defense units, coordinates early warning systems coverage to provide depth to the division sector. This allows supported unit to concentrate coverage forward to support the division's main effort.		
k. TOC/CP maintains continuous and reliable early warning.		
(1) Plan contains redundancy.		
(2) Rehearses early warning plan at all levels.		
(3) ABMOC integrates Patriot and early warning systems coverage and assigns distinctive track numbers.		
(4) Uses DST to include early warning in air defense execution matrix.		
l. TOC/CP establishes plans to disseminate early warning to TF.		
(1) Establishes liaison officers to supported units.		
(2) Passes early warning information to and from the ABMOC.		
(3) CPs broadcast alert and cueing information to platoons and firing units (for example, "Dynamite, Dynamite from the east").		
(4) Liaison officers broadcast voice and data messages over supported unit command net.		
m. TOC/CP coordinates and synchronizes the air defense plan with the brigade/division TOC.		
(1) Writes the air defense annex to the division or AMD brigade OPORD.		
(2) Gives the current unit battle roster to the brigade S1.		
(3) Coordinates medical support for the battalion with the brigade main support battalion (MSB).		
(4) Coordinates physical security measures for the battalion CP with the brigade TOC (challenge and password, protective fires, enemy prisoner of war [EPW], and night defensive position [NDP]).		
(5) Coordinates logistical support for the batteries with the brigade MSB.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

(6) Coordinates with brigade signal officer (crypto security material).
n. TOC/CP develops and distributes the battalion OPORD to the batteries. The OPORD contains—
  (1) Situation. Information on enemy and friendly forces, weather, and terrain; mission; and planned actions of the defended units and other AMD units in the area.
  (2) Mission(s). Mission(s) of the battalion, batteries, and task-organized elements, when required.
  (3) Execution. The battalion commander's tactical plan to do the mission(s) and the tasks each battery must do.
  (4) Service Support. Administrative instructions for ammunition resupply; casualty evacuation and reporting; rations issue; and maintenance, EPW, and common supply issues.
  (5) Command and Signal. Instructions and initial WCS, ADW, SOI, CP locations, call signs, and location of early warning systems, sensor platoon, and local air defense warning/directed early warning (LADW/DEW).
o. Commander briefs subordinates and TOC/CP personnel. This ensures that—
  (1) The OPORD is understood (backbrief).
  (2) Units have maps of the operational area.
  (3) Commanders understand the TF commander's intent.
p. Commander and leaders plan measures against antifratricide. The plan must—
  (1) Require training in IFF procedures.
  (2) Require training in aircraft and armored vehicle recognition.
  (3) Emphasize the meaning of each weapon control status.
    (a) WEAPONS HOLD—Do not fire except in self-defense.
    (b) WEAPONS TIGHT—Fire only at aircraft positively identified as hostile.
    (c) WEAPONS FREE—Fire at any aircraft not positively identified as friendly.
Note: Self-defense is never denied in any weapon control status.
  (4) (SHORAD ONLY) Emphasize the meaning of each fire control order.
    (a) ENGAGE—Gunner fires.
    (b) CEASE ENGAGEMENT—Gunner changes an ongoing engagement from one target to another of higher priority.
    (c) HOLD FIRE—Gunner ceases all tactical action, continues tracking (resumes search of assigned PTL).
    (d) CEASE FIRE—Gunner does not fire—continues to track.
  (5) Require absolute compliance with WCS, IFF procedures, vehicle and aircraft recognition requirements, hostile criteria, ROE, and airspace control measures.
  (6) Explain the meaning of rules of engagement to supported unit(s) to include—
    (a) The use of fire power and specific circumstances under which aircraft will be engaged.
    (b) Establishing varying degrees of control over ADA fires.
    (c) Providing protection of friendly aircraft.
    (d) Maintaining the level of defense required by the tactical situation.
  (7) Explain the two basic rules of engagement which are applicable to all air defense contributors.
    (a) Right of self-defense. Commanders at all levels have the right to protect their forces.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
(b) Hostile criteria. Hostile criteria are basic rules that help in the identification of friendly or hostile aircraft. Hostile criteria may include the factors of—		
Speed.		
Altitude.		
Heading.		
Range.		
Hostile acts. (Dropping flares does not constitute a hostile act.)		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
441-091-3000(SL3)	SUPERVISE THE IMPLEMENTATION OF AIR DEFENSE MEASURES	STP 21-24-SMCT
441-096-3006	SUPERVISE FORCE OPERATIONS	STP 44-14J14-SM-TG
441-096-3007	SUPERVISE ENGAGEMENT OPERATIONS	STP 44-14J14-SM-TG
441-096-4001	MONITOR ENGAGEMENT OPERATIONS	STP 44-14J14-SM-TG
441-096-4002	MONITOR FORCE LEVEL OPERATIONS	STP 44-14J14-SM-TG

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY HEADQUARTERS

TASK: COORDINATE AIR DEFENSE   (44-1-5137.44-AD2R)
      (FM 44-100)   (FM 3-01.64)

ITERATION:		1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:				T	P	U		(Circle)

CONDITIONS: Unit is in a tactical position with a supported unit. The AMDCOORD (air and missile defense coordinator) element is attached to the nearest TOC/CP. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: Unit TOC/CP is kept current on the status and location of its supporting ADA units. The AMDCOORD element receives and passes messages between the ADA commander and the TF TOC/CP. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

Note: The task steps below will be accomplished using AMDWS when indicated in the performance measures. BCTs without AMDWS will substitute SOP procedures for task steps that require AMDWS.
 	
* 1. AMDCOORD/NCOIC conducts battle tracking using AMDWS.
     a. Tracks the air battle by maintaining an Army airspace command and control (A2C2) overlay.
     b. Maintains and disseminates the current status of air defense artillery (ADA) control measures.
     c. Maintains current unit location and operational status for each ADA unit in the BCT area.
     d. Provides air defense early warning using the following guidelines:
          (1) Survivability of sensors.
          (2) Continuous early warning.
          (3) Redundant early warning.
          (4) Support for future operations.
 	
* 2. AMDCOORD advises the maneuver unit on the use of passive and active AMD and resolves land management issues with all users.
 	
* 3. AMDCOORD coordinates with executive officer (XO/S3) to ensure adequate air defense of forces during movements through--
     a. Restricted operation areas and terrain.
     b. Standard-use Army aircraft air corridors.
     c. Weapons-free zones.
 	
  4. AMDCOORD coordinates with higher AMD elements for--
     a. Supplemental fire control measures.
     b. Hostile criteria for AMD systems.
     c. Identification authority.
     d. AMD fire distribution or airspace control.
     e. Measures in the airspace control order (ACO) and special instructions (SPINS).
 	
* 5. AMDCOORD recommends the repositioning of ADA assets to replace loss assets or mass against significant air threats.
 	
* 6. AMDCOORD functions as a member of the A2C2 element.
     a. Provides A2C2 requirements to the battlefield coordination detachment		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
(BCD) at the joint air operation center (AOC).		
b. Identifies and resolves potential airspace conflicts in order to reduce potential air defense firing on friendly aircraft(s).		
c. Recommends airspace use restrictions.		
d. Inputs and maintains the airspace utilization map for ADA.		
(1) Lists air defense fire unit positions.		
(2) Lists airspace control authority (ACA).		
* 7. AMDCOORD transmits A2C2 information to supporting ADA units.		
a. Temporary transmits A2C2 information to supporting ADA units.		
b. Weapon engagement zones.		
c. Routes and time of missions.		
d. Battle positions.		
e. Attack by fire positions.		
* 8. AMDCOORD coordinates and integrates A2C2 with the S3-Air by relaying information concerning--		
a. Air defense weapon control status.		
b. Air defense warning (ADW).		
c. Rules of engagement (ROE).		
d. Establishment of coordinating altitudes.		
e. Friendly ADA unit locations and coverage.		
* 9. AMDCOORD informs A2C2 of selective identification feature (SIF) and identification, friend or foe (IFF) procedures for ADA, to include--		
a. Location of the IFF/SIF/passive identification on (PIDON)/passive identification off (PIDOFF) lines.		
b. Identification of safe passage corridors.		
*10. AMDCOORD alerts ADA units when smoke is to be employed to include air avenues of approach.		
*11. AMDCOORD monitors readiness status and maintenance of ADA units during operations.		
a. Maintains communication systems, both digital and voice.		
b. Keeps the S4 informed of equipment status and levels of supply.		
c. Coordinates logistical, recovery, and evacuation support with the S4.		
d. Provides AMD coverage for the BCT during the preparation phase of the operation.		
e. Obtains updated obstacle overlay and plots on situation map (SITMAP) to disseminate to subordinates.		
*12. AMDCOORD/NCOIC forwards a list of all contaminated areas to the ADA units.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
113-571-1023(SL1)	PREPARE A WRITTEN MESSAGE IN USMTF FORMAT	STP 21-1-SMCT
113-587-2070	OPERATE SINCGARS SINGLE-CHANNEL (SC)	STP 44-14J14-SM-TG STP 44-14R14-SM-TG STP 44-14S14-SM-TG
113-587-2071	OPERATE SECURE SINCGARS FREQUENCY HOPPING (FH) (NET MEMBERS)	STP 44-14J14-SM-TG STP 44-14R14-SM-TG STP 44-14S14-SM-TG
113-600-2001(SL1)	COMMUNICATE VIA A TACTICAL TELEPHONE	STP 21-1-SMCT
113-637-2001(SL1)	COMMUNICATE VIA A TACTICAL RADIO	STP 21-1-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: CONDUCT TROOP-LEADING PROCEDURES (44-2-2294.44-AD2R)
  (<u>FM 7-8</u>)   (FM 3-01.64)   (FM 44-43)
  (FM 44-44)

ITERATION:	1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:		T	P	U			(Circle)

CONDITIONS: The battery receives warning order. Squads are providing air defense for the task force. Task can be accomplished in any weather condition and MOPP level, day or night. All unit personnel are present. TOE equipment is on hand and operational. Enemy air threat is according to OPORD intelligence annex and intelligence summaries. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: Battery commander conducts the eight troop-leading procedures per FM 7-8. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
Note: The battery receives the mission in the form of WO, OPORD, or FRAGO. Upon receipt of the order, the commander and CP personnel exchange information and conduct a preliminary METT-TC analysis to gather pertinent information for a battery WO. Simultaneously, CP personnel conduct a mission analysis, formulate the restated mission, and develop an initial time analysis.		

* 1. Battery commander receives the mission. (STEP 1)
        a. Conducts initial mission analysis.
            (1) What is the mission of the battery?
            (2) What is the commander's intent?
            (3) What is the battery command relationship?
            (4) Where is the enemy, his strength, air threat, and his weakness?
        b. Key NCOs prepare battery personnel for mission.
        c. Squad leaders start pre-combat checks (Appendix D, FM 44-43).		

* 2. Battery commander receives the air defense plan which includes--
        a. ADA task organization.
        b. Battery mission.
        c. Current situation (enemy, friendly).
        d. Supported force commander's intent.		

* 3. Battery commander issues the warning order. (STEP 2)
        a. Briefs the battery on the upcoming mission.
        b. Briefs when and where a detailed OPORD will be issued.
        c. Briefs specific, general instructions, and timeline.		

* 4. Battery commander makes a tentative plan. (STEP 3)
        a. Reviews the information collected during mission analysis.
        b. Conducts backward planning, based on available time. The result of this planning may include the following events:
            (1) Mission execution time (line of departure or defend not later than time).
            (2) OPORD issue time.
            (3) Movement time between positions.
            (4) Emplacement time. (The initial time line must be disseminated to the battery as soon as possible and updated as necessary.)		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 5. Battery commander develops the ADA plan.
    -Plan air defense (T&EO 44-1-3534.AD2R).
 	
* 6. Battery commander initiates necessary battery movement. (STEP 4)
    a. Begins movement as soon as possible following the warning order. (Often, movement occurs simultaneously with the initiating of the planning process.)
    b. Reports to the supported force TOC and begins the planning process with the staff.
    c. 1SG conducts resupply operations for the battery.
    d. Battery links up with the supported force.
 	
* 7. Battery commander, XO, or 1SG conduct reconnaissance. (STEP 5)
    -Conducts RSOP (T&EO 44-1-9046.44-AD2R)
 	
* 8. Battery commander completes the plan. (STEP 6)
    a. Adjusts the plan based on the IPB, METT-TC, and commander's guidance.
    b. Adds details to the air defense annex to the supported force OPORD.
    c. Finalizes the battery OPORD.
 	
* 9. Battery commander issues the battery OPORD. (STEP 7)
    a. Ensures each soldier knows how to accomplish the mission.
    b. Ensures each soldier knows how they fit into the plan.
    c. Ensures squad leaders provide backbrief including orientation on terrain, sand tables, or terrain models (if time is available for their construction).
 	
*10. Battery key NCOs rehearse, execute, and supervise the plan. (STEP 8)
    a. Conduct rehearsals prior to each mission on the ground, over the radio, or on sand tables or terrain boards.
    b. Ensure every soldier attends the rehearsals.
    c. Use battery execution matrix.
    d. Leave rehearsals with a clear understating of its mission and where it fits into the supported force commander scheme of maneuver.
    e. Ensure vehicles are in correct position for the move.
    f. Ensure radio nets are monitored.
    g. Ensure the battery is ready to execute according to its matrix.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK

ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
113-637-2001(SL1)	COMMUNICATE VIA A TACTICAL RADIO	STP 21-1-SMCT
159-200-2020(SL4)	INTEGRATE THREAT CAPABILITIES INTO MISSION PLANNING	STP 21-24-SMCT
441-066-2008	CONDUCT A TACTICAL BRIEFING	STP 44-14R14-SM-TG STP 44-14S14-SM-TG

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
441-066-2018	PERFORM RSOP	STP 44-14R14-SM-TG
		STP 44-14S14-SM-TG
441-066-4000	PLAN AND EXECUTE A ROUTE	STP 44-14S14-SM-TG
551-88N-0003(SL4)	PLAN UNIT MOVE	STP 21-24-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: PLAN LOGISTICS FOR AMD OPERATIONS   (44-2-C222.44-AD2R)
     (FM 3-01.64)   (FM 101-5)

ITERATION:		1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:			T	P	U			(Circle)

CONDITIONS: The battery is preparing for, or is engaged in, an operation. Communications have been established. Reports are being received. The maneuver force's S3 is developing or has issued an OPORD/OPLAN. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: The battery commander/XO plans, monitors, and anticipates logistic requirements in order to provide continuous sustained operations per the OPORD and unit SOP. Support priorities are adjusted to ensure the battery retains the capability to conduct continued operations. Battery logistic requirements are incorporated into the ACR/BCT OPORD/OPLAN according to the supported commander's guidance.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
* 1. The battery commander is responsible for logistics support to battery elements. The battery commander normally coordinates with the maneuver force's S4 and other members of the maneuver staff as required. During combat operations, the XO, 1SG, supply sergeant, and maintenance warrant officer execute the logistics support plan.		

* 2. Battery commander conducts mission analysis.
    a. Identifies specified and implied tasks.
    b. Collects maintenance status.
    c. Forecasts vehicle/weapon status.
    d. Collects supply status of classes I, III, IV, V, and IX.
    e. Identifies constraints and limitations and the acceptable level of risk that may have an impact on the battery/ACR/BCT mission.
    f. Identifies essential logistic tasks necessary to accomplish the mission.
    g. Receives commander's planning guidance after briefing.
       (1) Location of supply assets.
       (2) Supply priorities in terms of manning, fueling, fixing, arming, transporting, sustaining, and protecting.
       (3) MEDEVAC treatment and guidance.
       (4) Classes of supply.
       (5) Controlled supply rates (CSR).		

* 3. The XO is the primary logistics support planner. The XO--
    a. Coordinates with the maneuver forward support brigade (FSB) for logistics to support the tactical plan.
    b. Provides battery commander with input on CSS and supply operations that affect the battery mission.		

4. The 1SG--
    a. Executes the battery's logistical plan, using the battery and ACR/BCT unit SOP.
    b. Supervises and controls the battery trains.
    c. Receives logistics reports from the PSGs.
    d. Provides information to the XO.
    e. Helps complete logistical support preparations.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

5. The supply sergeant--
    a. Represents the battery in the supporting unit's field trains.
    b. Is responsible for assembling the standardized logistics package (LOGPAC) and moving it forward to the battalion logistics release point (LRP).
    c. Works for the 1SG at the battery resupply point.
    d. Assists in resupply operations.
 	
6. The maintenance warrant officer--
    a. Advises the XO and 1SG on vehicle recovery, repair, and emergency destruction.
    b. Organizes the battery maintenance contact teams.
    c. Directs the contact teams forward when the situation dictates.
    d. Evaluates battle damages.
    e. Assesses repairs.
ENVIRONMENTAL NOTE: The XO is responsible for monitoring and coordinating all environmental-related issues in the battery/platoon area of responsibility (AOR) (such as spill clean-up and solid/hazardous waste disposal.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
101-92Y-0001(SL4)	SUPERVISE SUPPLY ACTIVITIES	STP 21-24-SMCT
101-92Y-0002(SL3)	PLAN TACTICAL RE-SUPPLY OPERATIONS	STP 21-24-SMCT
101-CLT-0198(SL4)	SUPERVISE TACTICAL FEEDING OPERATION	STP 21-24-SMCT
151-357-0001(SL4)	SUPERVISE CSS FUNCTIONS DURING PLATOON OPERATIONS	STP 21-24-SMCT
151-357-0002(SL4)	COORDINATE COMBAT SERVICE SUPPORT (CSS) OPERATIONS	STP 21-24-SMCT

SUPPORTING COLLECTIVE TASKS

Task Number	Task Title	References
10-2-C317.44-AD2R	PROVIDE FOOD SERVICE SUPPORT	ARTEP 44-413-34-MTP
10-2-C319.44-AD2R	RECEIVE AIRDROP RESUPPLY	ARTEP 44-413-34-MTP
10-2-C320.44-AD2R	PROVIDE UNIT SUPPLY SUPPORT	ARTEP 44-413-34-MTP
10-2-C325.44-AD2R	RECEIVE EXTERNAL SLING-LOAD RESUPPLY	ARTEP 44-413-34-MTP
44-1-1045.44-AD2R	SUSTAIN AIR DEFENSE OPERATIONS	ARTEP 44-413-34-MTP
44-4-2282.44-AD2R	CONDUCT LOGPAC ACTIVITIES	ARTEP 44-413-34-MTP

OPFOR TASKS AND STANDARDS

TASK: ATTACK (19-OPFOR-1010)

CONDITION: The enemy rear-area combat service support base has been located by an OPFOR element. Priority intelligence requirements and other intelligence requirements have been obtained by OPFOR patrols. The OPFOR element has automatic and antiarmor weapons and light mortars. The OPFOR element is approximately the size of two platoons.

STANDARD: 1. Develop an attack plan. 2. Initiate the attack using a scheme of maneuver that exploits enemy flanks, gaps, and weaknesses. 3. Use covered and concealed routes to approach enemy units' flanks, gaps, or weakly-held areas. 4. Employ indirect fire to support the attack. 5. Penetrate enemy defenses. 6. Destroy equipment and supplies. 7. Inflict heavy casualties. 8. Isolate the combat service support base by blocking reinforcements. 9. Force enemy units to displace. 10. Withdraw before the combat service support base is reinforced with tactical combat forces.

ELEMENT: BATTERY HEADQUARTERS

TASK: DEVELOP THE ADA ESTIMATE AND ANNEX (44-4-5139.44-AD2R)
     (FM 3-01.64)   (FM 44-100)   (FM 44-43)
     (FM 44-44)

ITERATION:	1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:			T	P	U		(Circle)

CONDITIONS: The battery CP is emplaced and operational. The TF commander is preparing his OPORD for the mission and requires input from the ADA battery. The degree of detail presented in the ADA estimate depends on the planning time available. However, all elements of the estimate must be considered to make valid recommendations. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: The battery prepares ADA estimate and annex to support the TF commander's intent. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. The battalion commander receives the mission or task from the force S3 or G3.
    a. Briefs his staff and subordinate commanders.
    b. Issues a warning order.
    c. Completes his mission analysis with staff assistance.
    d. Issues his restated mission planning guidance calling for staff estimates.
 	
  2. BATTALION STAFF START THE ADA ESTIMATE PROCESS. (Sample below)
ESTIMATE OF THE AIR DEFENSE SITUATION
(Classification)
 	
Copy ___ of ___ copies
Issuing Headquarters
Place
Date, time, and zone
Message reference number
 	
AIR DEFENSE ESTIMATE NUMBER ___
References: Maps, charts, or other documents.
Time Zone Used Throughout the Estimate:
 	
  3. MISSION
 	
    When the estimate's purpose is to support the force level commander's operation, use the force level commander's mission statement. As the commander or operations officer, use the unit's mission statement when the estimate's purpose is to determine which course of action best accomplishes the support mission.
 	
  4. SITUATION AND CONSIDERATIONS
 	
    This paragraph describes the conditions under which the unit will perform its mission and the possible courses of action of the supported force.
    a. Characteristics of area of operation. For this paragraph, determine those factors of the situation which influence friendly and threat actions and which, therefore, may influence the choice of a course of action. In the absence of facts, use logical assumptions that might directly affect the		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

mission. Include analysis of the effects of pertinent characteristics on conducting air and missile defense operations.
  (1) Weather. Put the analysis of data from predicted weather and light conditions for the period in this paragraph. Assess how the weather affects friendly operations. Also include the evaluation of how weather and light conditions might affect the use of threat UAVs; missiles; aircraft, both fixed and rotary-wing; and airborne or air assault operations. Try to determine or predict when the threat will probably use those assets due to the weather.
  (2) Terrain. Analyze the effects of terrain, including effects on observation and fire; cover and concealment; movement (surface and air); employment of friendly and threat unconventional warfare; psychological operations; and other aspects of military operations. Determine key terrain and air avenues of approach. Also discuss terrain features that might canalize or force air targets to fly a particular profile. Try to determine where the threat will most probably use air assets.
  (3) Other pertinent factors. List analysis of political, economic, sociological, psychological, and other factors (such as hydrography, environment, communications, science, technology, materiel, transportation, safety and accident prevention, and manpower). Include deduction about their effects on friendly and threat operations.
b. Threat Forces. A threat evaluation discusses threat capabilities that are or may be a threat to the operation.
  (1) Disposition. List locations of threat forces that will participate in air or missile operations or that threaten friendly air and missile defense operations. Determine combinations of air platforms that the threat may use when conducting a particular type of operation.
  (2) Composition. The threat organization for combat includes identity of units, types of air platforms and missiles, and armament. Also address how many sorties and missiles are expected to be flown per day, and possible composition of those sorties.
  (3) Strength. Numbers and sizes of committed and reinforcing units. Consider the location of the threat, threat doctrine, and the unit's mission. Identify air and missile assets and air support units that could or may affect the operation. When, where, and how many air platforms will the threat fly during this operation?
  (4) Other considerations. Threat forces not discussed above.
  (5) Recent and present significant activities. Summary of recent threat activities that were both successful and unsuccessful. Highlight any threat air activity to include number, type of air platforms, and locations.
  (6) Peculiarities and weaknesses. Indicate threat peculiarities and weaknesses that might influence combat effectiveness, including vulnerability to deception.
  (7) Threat courses of action. A compilation of available information from which to draw conclusions about possible threat air courses of action and how they relate to the threat ground courses of action.
c. Friendly forces. The friendly force air and missile defense force disposition, composition, and strength. Highlight the vulnerability of the force to threat air and missile attacks and surveillance.
  (1) Friendly courses of action. State the force commander's course of action. Include any guidance that affects air and missile defense operations. Include description of any phasing of operations in the		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
courses of action and the impact of those operations on support relationships or requirements.		

   (2) Current status of resources within staff area of responsibility. The status of personnel and logistics in the unit. Identify civil-military operations requirements. Identify limitations that affect or may affect the conduct of air and missile defense operations. Can the mission be accomplished?

   (3) Current status of other resources that affect ADA area of responsibility.

   (4) Comparison of requirements versus capabilities and recommended solutions.

   (5) Key considerations (evaluation criteria) for COA supportability.

  d. Assumptions.

5. ANALYSIS

Analyze each COA using evaluation criteria to determine advantages and disadvantages. Identify those aspects in the commander's plan which create difficulty in providing air and missile defense coverage and affect the ability of the force to accomplish its mission.

6. COMPARISON

Compare COAs using evaluation criteria. Rank order COAs for each key consideration. A decision matrix should visually support comparison. Present an air defense course of action for each of the supported force courses of action. Each ADA course of action presented should include the following aspects:

- Air defense mission.
- Air defense priorities.
- Air defense fires.
- Air defense scheme of maneuver.
- ADA task organization.
- Command and support relationships.
- Key passive air defense measures.
- Type of action required in each operational area (close, deep, and rear).
- Combined arms for air defense active measures.

7. RECOMMENDATION AND CONCLUSIONS. Recommended COA based on the comparison.

- Indicate which course or courses of action ADA can best support (using the elements of who, what, when, where, how, and why).
- Recommend a list of air defense priorities.
- State the recommended ADA organization for combat, and employment of other active air and missile defense assets.
- Possible OCA targets.
- Passive and active air and missile defense measures that will be most effective.
- Issues, deficiencies, and risks with recommendations to reduce their impacts.

_____
NAME
RANK

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
(Air Defense Coordinator)		
ANNEXES: (as required)		
ESTIMATE OF THE AIR DEFENSE SITUATION		
(Classification)		
8. BATTALION STAFF DEVELOP THE ADA ANNEX. (Sample Below)		
(Classification)		
Copy of ____ of ____ copies Issuing headquarters Place of Issue Date-time group of signature Message Reference Number		
ANNEX (AIR DEFENSE) TO OPERATION ORDER NO ____		
References: Maps, charts, or other relevant documents. Time Zone Used Throughout the Order: Task Organization		

9. SITUATION
    a. Enemy. See Annex B (Intelligence).
      (1) Terrain. Identify most likely threat ingress and egress routes.
      (2) Weather. Identify threat aircraft all-weather capabilities and
          limitations.
      (3) Threat air capability and/or activity.
          (a) Air threat data. List air-capable organizations including air
              platforms by number and type.
          (b) Additional air threat information. List air threat information
              pertinent to the operation but not covered in the Intelligence
              Annex. Highlight specific air threat considerations like sortie
              rates, subordination of air elements to ground units, ordnance
              peculiarities, target preferences, tactics, and recent significant
              activities.
          (c) Air avenues of approach. List all expected air avenues of
              approach and identify by air platform their potential users. List all
              known beginning points and describe avenue of approach as it
              goes through the area of interest.
    b. Friendly situation. ADA missions at all applicable levels. Describe how the
      air defense plan integrates with higher echelon plans.
      (1) Higher units. Outline higher AD unit intent and plans.
      (2) Adjacent units. Outline adjacent AD unit intent and plans.
      (3) Supporting elements. Note supporting units and support relationship.
    c. Attachments and detachments. Identify air and missile defense resources
      attached from other commands and identify those air and missile defense
      resources detached.		

10. MISSION		
Who, what, when, where, how, and why statement of the mission for the air defense artillery unit.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

11. EXECUTION
    a. Scheme of ADA support. Commander's overall ADA plan to include the intent, objectives, and priorities.
    b. Tasks to subordinate units. Briefly discuss ADA plan, command and support relationships, and priority of protection.
    c. Coordinating instructions. Instructions applicable to two or more subordinate units. Include references to other applicable annexes.
        (1) ADW and ADW authority. LADW and LADW authority also.
        (2) WCS and WCS authority. Include any plans to change WCS.
        (3) Hostile criteria. Basic rules the commander has established to assist in the identification of friendly or hostile air vehicles. Include pre-planned changes.
        (4) Rules of engagement. Address ROE unique to the operation or points in the operation where changes are intended. Include use of supplemental fire control measures.
        (5) Passive air defense. Specific passive air defense measures that all units should take to protect themselves from air and missile attack or surveillance during this operation.
        (6) Combined arms for air defense. Briefly discuss specific techniques units should use to help in defending themselves against an air or missile attack or surveillance.
        (7) Early warning. Review method and format for passing early warning to the entire force.
 	
12. SERVICE SUPPORT
 	
    See Service Support Annex.
 	
13. COMMAND AND SIGNAL
    a. Command.
        (1) ADA CP locations.
        (2) Succession of command.
    b. Signal. See Signal Annex.
        (1) IFF code edition and book number.
        (2) Communications links for early warning equipment.
 	
        ACKNOWLEDGE:
        OFFICIAL:
 	
        RANK (Commander's rank)
        NAME (Commander's last name)
 	
        APPENDIXES:
        DISTRIBUTION:
 	
        ANNEX G (AIR DEFENSE) TO OPERATION ORDER NO ____
 	
        (Classification)		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	**1**	**2**	**3**	**4**	**5**	**M**	**TOTAL**
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
441-096-4012	SUPERVISE SENSOR PLATOON TACTICAL OPERATIONS	STP 44-14J14-SM-TG
441-096-4013	PLAN SENSOR COVERAGE OF A STATIC OR CRITICAL ASSET	STP 44-14J14-SM-TG
441-096-4014	PLAN SENSOR COVERAGE OF A MANEUVER FORCE	STP 44-14J14-SM-TG

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: ADJUST AIR DEFENSE COVERAGE   (44-4-5143.44-AD2R)
    (FM 3-01.64)   (FM 44-100)

ITERATION:		1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:			T	P	U			(Circle)

CONDITIONS: The battery is participating in combat operations. The threat or priorities change, air defense assets are not sufficient to cover all critical assets, or division suffers a significant loss of maneuverability. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: The battery adjusts air defense coverage to support the regiment scheme of maneuver as it changes. The air defense battery maintains coverage with its remaining assets. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. Battery commander recommends priorities and develops new air defense plan (warning order, FRAGO, or verbal order).
 	
- Reorganizes and consolidates ADA assets as priorities change.
 	
Notes:
   (1) Due to time limitations, adjustments to the original plan will probably occur in the form of a verbal FRAGO or execution matrix.
   (2) Events that may drive the need for coverage adjustment include--
      a. Intelligence reports concerning aerial reinforcements of frontline enemy units changing the threat or changes in large enemy unit positions affecting the templated objectives of the enemy in the supported regiment sector.
      b. A change in the air defense assets available by air defense losses in one particular area of the regiment sector or additional support from division assets.
      c. A change in the supported unit assets by the addition of a major maneuver such as a squadron or significant losses of maneuver assets in one particular area of the regiment, such as one squadron becoming combat ineffective.		

2. The battery CP continues third-dimensional IPB process.
    a. Keeps the battery commander informed of all changes within the regiment's area of interest and major changes in adjacent unit intelligence pictures.
    b. Keeps platoon leaders informed of the intelligence picture.		

3. The battery CP issues warning orders to subordinate and supported units.
    a. Warning order allows adequate preparation time for movement of units from one location to another.
    b. Notifies supported units to facilitate changes in logistics support and establishment of support relationships.
    c. Maintains command and control through verification of movement and contact with newly supported unit(s).		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	**1**	**2**	**3**	**4**	**5**	**M**	**TOTAL**
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
071-326-5502(SL2)	ISSUE A FRAGMENTARY ORDER	STP 21-24-SMCT
071-326-5503(SL2)	ISSUE A WARNING ORDER	STP 21-24-SMCT
071-326-5775(SL4)	COORDINATE WITH AN ADJACENT PLATOON	STP 21-24-SMCT
071-329-1006(SL1)	NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT WHILE DISMOUNTED	STP 21-1-SMCT
071-329-1019(SL2)	USE A MAP OVERLAY	STP 21-24-SMCT
071-329-1030(SL1)	NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT WHILE MOUNTED	STP 21-1-SMCT
071-332-5000(SL3)	PREPARE AN OPERATION OVERLAY	STP 21-24-SMCT
071-332-5021(SL3)	PREPARE A SITUATION MAP	STP 21-24-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: PROVIDE EARLY WARNING   (44-5-0003.44-AD2R)
      (FM 44-48)   (FM 3-01.64)

| | | | | | | |
ITERATION: 1   2   3   4   5   M   (Circle)

COMMANDER/LEADER ASSESSMENT: T   P   U   (Circle)

CONDITIONS: The unit air and missile defense operations center (AMDOC) is located in proximity to the division tactical air control (DTAC) to facilitate synchronization of current operations. It consists of two hard shelter HMMWVs containing all source analysis system (ASAS), maneuver control system (MCS), and two air and missile defense workstations (AMDWS) current and future operations, and one joint tactical information distribution system (JTIDS) radio. Sentinel radars are occupying designated positions. Early warning target data has been received from the ABMOC. The OPFOR are using electronic warfare to include MIJI. Enemy air threat is according to the OPORD intelligence annex and intelligence summaries. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: The sensor teams must detect, identify, and verify target dissemination within 2 to 6 seconds. The time required to perform this task in MOPP4 is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

1. Team maintains air surveillance of their sector.
    a. Uses ECM to reduce radiation detection.
    b. Uses ECCM to combat MIJI tactics used by the OPFOR.
 	
2. Team detects and evaluates aerial targets.
    a. The software automatically evaluates targets based on heading and local airspace management procedures and controls.
    b. The software displays targets on the monitor screen.
 	
* 3. Team chief supervises the operator disseminating target information over the SINCGARS or EPLRS data broadcast net.
    a. When possible, target location, tentative identification, and number of aircraft are reported at maximum range.
    b. The software automatically disseminates target data over the SINCGARS or EPLRS data net.
    c. The software automatically updates track information over the SINCGARS or EPLRS data net every 2 seconds.
    d. The software automatically scrubs tracks when no longer within range.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	1	2	3	4	5	M	TOTAL
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
441-096-1064	OPERATE THE SENTINEL SENSOR	STP 44-14J14-SM-TG
441-096-1084	REACT TO AIR TRACK ALERTS ON THE BSD	STP 44-14J14-SM-TG
441-096-1085	TOGGLE TRACK LINKS ON THE BSD	STP 44-14J14-SM-TG
441-096-1088	SET TRACK FILTERS ON THE BSD	STP 44-14J14-SM-TG
441-096-1089	SELECT OVERLAYS ON THE BSD	STP 44-14J14-SM-TG
441-096-1092	ACKNOWLEDGE AND REVIEW MESSAGES AND STATUS ON THE BSD	STP 44-14J14-SM-TG
441-096-1094	TERMINATE TACTICAL BSD OPERATIONS	STP 44-14J14-SM-TG

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS

TASK: CONDUCT ELECTRONIC WARFARE (19-OPFOR-1012)

CONDITION: The OPFOR employ a large number of radio direction finder sets and monitor enemy forces for loose communications security practices.

STANDARD: 1. Locate the positions of the enemy command, intelligence, and logistics radio nets. 2. Forward locations to the OPFOR HQ. 3. Use jamming signals against enemy radio receivers. 4. Monitor enemy radio nets for intelligence information.

ELEMENT: BATTERY

TASK: ESTABLISH LIAISON TEAM   (44-5-2190.44-AD2R)
(FM 3-01.64)   (FM 3-52)   (FM 44-43)

ITERATION:		1	2	3	4	5	M	(Circle)
COMMANDER/LEADER ASSESSMENT:			T	P	U			(Circle)

CONDITIONS: The platoon is attached to supported units. The supported unit's CP establishes a position for the platoon CP to provide coordinated air defense and airspace management during combat operations. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: The supported unit is kept current on the status and location of its supporting ADA units. The platoon CP receives and passes messages between the ADA commander and the TF CP. The liaison team resolves airspace conflicts with the brigade TOC A2C2 section affecting platoon operations. The time required to perform this task in MOPP4 and/or blackout conditions is increased.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. Unit leader establishes an operational position at the supported unit's TOC.
  a. Installs communications link with parent ADA unit.
  b. Posts operational information where required in the TOC.		

* 2. Unit leader coordinates ADA activities with the supported unit's staff and the battery CP.
  a. Keeps the supported commander informed of the ADA unit status.
  b. Coordinates ADA reports within the TOC.
  c. Receives and passes messages between the supported unit's TOC and the battery CP.
  d. Advises the supported unit on active and passive air defense measures to include ADW and WCS changes.
  e. Responds to the changing needs on the battlefield by advising the supported unit commander on ADA capabilities and limitations.
  f. Passes early warning for air attacks over supported unit's command net.
  g. Assists supported unit's S2 in preparing the IPB by identifying likely enemy air avenues of approach.
  h. Advises the supported unit commander on changes on the battlefield affecting ADA operations as supported units conduct combat operations.
  i. Resolves air management issues with the supported unit's S3 section.		

* 3. The ADA liaison officer coordinates air defense with echelon above division (EAD) air defense units in support of brigade operations.
  a. Keeps the EAD air defense unit updated on the division's and brigade's schemes of maneuver.
  b. Provides EAD air defense unit with brigade INTSUMs.
  c. Passes applicable EAD air defense early warning information through the brigade early warning system.
  d. Coordinates with EAD air defense unit for reinforcing fires to support the brigade's scheme of maneuver.
  e. Integrates EAD air defense early warning coverage with other ground-based sensor assets to maintain early warning while sensors move.		

* 4. Unit leader identifies and resolves airspace conflicts affecting platoon operations over the brigade. a. Monitors operations of airspace users through spot reports, SITREPs, and		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
radio traffic.		
b. Monitors intelligence reports.		
c. Disseminates unscheduled, high-volume use of airspace.		
d. Informs airspace users at each echelon of any loss of communications affecting any airspace user.		
e. Identifies and correlates situations affecting airspace use for unscheduled events.		
f. Analyzes airspace use on the situation map to determine and resolve conflicts.		
g. Recommends shifting or ending fires when affecting high priority aviation missions.		
h. Disseminates changes of control or restriction measures, WCS, and NBC information which affect airspace users.		
i. Reviews immediate air request (Army) for conflicts with current operations.		
j. Analyzes OPLANs and OPORDs for possible conflicts among flight routes, control measures, artillery and ADA locations, and flight obstructions to determine the impact; develops and recommends alternatives.		
* 5. Unit leader provides platoon inputs to airspace utilization and situation overlays. Provides:		
a. ADA unit locations.		
b. ADA unit WCS.		
c. Weapon system coverage (both echelon above division and divisional air defense).		
d. A2C2 control measures and restrictions.		
* 6. Liaison team leader relays all C3I information to TF to include--		
a. Sensors frequencies.		
b. Sensors locations.		
c. Sensors security from air and ground attack.		
d. Which sensors are broadcasting EW.		
e. Sensors contingency plans.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	**1**	**2**	**3**	**4**	**5**	**M**	**TOTAL**
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
113-600-2001(SL1)	COMMUNICATE VIA A TACTICAL TELEPHONE	STP 21-1-SMCT
113-637-2001(SL1)	COMMUNICATE VIA A TACTICAL RADIO	STP 21-1-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

ELEMENT: BATTERY

TASK: PERFORM RISK MANAGEMENT PROCEDURES   (71-2-C326.44-AD2R)
(FM 100-14)   (AR 385-10)   (FM 3-0)
(FM 7-0)

	ITERATION:	1	2	3	4	5	M	(Circle)
	COMMANDER/LEADER ASSESSMENT:			T	P	U		(Circle)

CONDITIONS: Unit is in a tactical position performing its combat mission. Some iterations of this task should be performed in MOPP4.

TASK STANDARDS: All leaders and soldiers are aware of all potential safety problems inherent in the conduct of the task. Unit trains to standard and does not take shortcuts that endanger unit members. All risks taken are necessary to accomplish training objectives. Appropriate measures are taken to minimize risks. The time required to perform this task is increased when conducting it in MOPP4.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO

* 1. Commander identifies risk or safety hazards.
    a. Analyzes OPLAN, FRAGO, or OPORD for specified and implied missions (tasks).
    b. Integrates safety into every phase of the planning process.
    c. Assesses risks before issuing a FRAGO when missions or conditions change.
 	
* 2. Leaders evaluate risk and safety hazards identified in the operation.
    a. Compare the risk to the acceptable level of risk in the commander's intent based on the stated training objective.
    b. Determine the likelihood of equipment and personnel losses from accidents.
    c. Quantify the risk.
    d. Describe the operation in terms of high, medium, or low risk.
    e. Prepare courses of action that minimize accidental losses.
 	
* 3. Commander and leaders eliminate or reduce risk and safety hazards.
    a. Choose course of action that maximizes the operation and minimizes risk.
    b. Develop procedures that reduce risk and safety hazards.
    c. Prescribe safety and protective equipment.
 	
  4. Battalion carries out safety procedures.
    a. Conduct safety briefings prior to all operations.
    b. Practice safety procedures during all mission rehearsals.
    c. Ensure members make on-the-spot safety corrections.
Notes:
• Safety: Safety is a part of realism and realism includes building safety into training so that safe practices which eliminate accidents become second nature during war (FM 7-0).
• Risk: FM 3-0 emphasizes the need for boldness. Commanders must take "risks and tenaciously press soldiers and systems" as an imperative of the AirLand Battle. However, such an imperative is founded on the premise that protecting the force to the maximum possible ensures winning the battle. Formally, risk is an expression of possible loss over a specific time or number of operational cycles as defined by the Center for Army Safety.		

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION	**1**	**2**	**3**	**4**	**5**	**M**	**TOTAL**
TOTAL TASK STEPS EVALUATED							
TOTAL TASK STEPS "GO"							
TRAINING STATUS "GO"/"NO-GO"							

"*" indicates a leader task step.

SUPPORTING INDIVIDUAL TASKS

Task Number	Task Title	References
850-001-2000(SL2)	EMPLOY ACCIDENT PREVENTION MEASURES AND RISK MGT PROCESS	STP 21-24-SMCT
850-001-3001(SL3)	CONTROL MISSION SAFETY HAZARD	STP 21-24-SMCT
850-001-4001(SL4)	INTERGRATE RISK MGT INTO PLATOON	STP 21-24-SMCT

SUPPORTING COLLECTIVE TASKS: NONE

OPFOR TASKS AND STANDARDS: NONE

CHAPTER 6

External Evaluation

6-1. General. An external evaluation is conducted to evaluate the battery's ability to perform its missions. This chapter is a guide for preparing an external evaluation. The using units should modify the evaluation based on METT-TC and other considerations, such as contingency plans. Selected T&EOs in Chapter 5 are used for evaluation, which involves the total unit and employs a realistic OPFOR and the use of MILES. At the completion of the evaluation, the commander can identify the strengths and weaknesses of his unit. These strengths and weaknesses are the basis for future training and resource allocations.

Note: The forms indicated in the chapter can be downloaded from the Army Publishing Directorate (APD) Internet site at http://www.apd.army.mil/.

6-2. Preparing the Evaluation. The commander must standardize evaluation procedures to accurately measure the battery's capabilities.

a. Preparing the Evaluation Instrument. The sample evaluation scenario in Figure 6-1 contains the missions as well as the appropriate tasks necessary to develop the scenario evaluation. Selective tailoring is required, because it is not possible to evaluate every task. The following procedures are suggested for developing the evaluation.

(1) Identify the missions for evaluating each echelon or element, using Table 2-1, Chapter 2. Record the selected missions in the Unit Proficiency/Evaluation Worksheet (DA Form 7506).

(2) List each mission on a Task Summary Sheet (DA Form 7502).

(3) Select the tasks for the evaluation of every mission. List the selected tasks on the Task Summary Sheets, which are used for recording the results of the evaluation.

(4) Compile the selected missions and tasks in the order they logically occur in the scenario. Group the selected missions and tasks in parts for continuous operations (see Figure 6-1). Parts can be interrupted at logical points to assess MILES casualties and to conduct in-process AARs.

b. Forecasting and Requisitioning Resources. Adequate training ammunition, equipment, and supplies must be forecasted and requisitioned. Table 6-1 is a consolidated list of support requirements for this evaluation. It is based on experience with the scenario on Figure 6-1. The evaluating headquarters will prepare its own consolidated support requirements.

EVENT	ACTION	DURATION	TIME FRAME
1.	Conduct pretest (install MILES and troubleshoot equipment and vehicles; conduct inspections, implement OPSEC measures, and conduct fratricide avoidance training).		
			DAY 1
2.	Receive OPORD.	1 hour	0400
3.	Start IPB (third dimension).	3 hours	0700
4.	Issue warning orders—start evaluation.	1 hour	0800
5.	Establish and maintain communications.	2 hours	1000
6.	Move and occupy assembly area.	1 hour	1100
7.	Plan and conduct AMD operations (defense).	3 hours	1400
8.	Continue to update IPB and AMD plan.	1 hour	1500
9.	Coordinate AMD with supported unit.	3 hours	1800
10.	Move to NDP and conduct AAR.	2 hours	2000
11.	Conduct sustaining activities; prepare for next mission.	2 hours	2000
			DAY 2
12.	Receive FRAGO.	1 hour	2300
13.	Issue warning order.	1 hour	2400
14.	Link up battery with supported unit.	2 hours	0200
15.	Plan and conduct AMD operations (offense).	3 hours	0500
16.	React to OPFOR ground attack.	1 hour	0600
17.	Conduct AAR and sustaining activities.	3 hours	0900
			DAY 3
18.	React to BMNT alerts.	1 hour	1000
19.	Receive FRAGO.	1 hour	1100
20.	Adjust the AMD plan.	1 hour	1200
21.	Provide continuous AMD coverage to TF (movement to contact).	4 hours	1600

Figure 6-1. Sample Evaluation Scenario.

EVENT	ACTION	DURATION	TIME FRAME
22.	React to early warning.	1 hour	1700
23.	Repel aerial attack (Hinds).	1 hour	1800
24.	Submit engagement reports to btry TOC or TF.	1 hour	1900
25.	Conduct AAR and sustaining activities.	4 hours	2300
26.	React to OPFOR smoke.	1 hour	2400
27.	React to NBC attack.	1 hour	0100
28.	Conduct decontamination operations.	2 hours	0300
29.	Consolidate and reestablish chain of command.	1 hour	0400
30.	Sentinel destroyed by special operation forces.	1 hour	0500
31.	Provide command and control, and instruct squads to start search and scan procedures.	1 hour	0600
32.	Sentinel early warning restored.	1 hour	0700
33.	OPFOR retreats.	1 hour	0800
34.	Conduct AAR and sustaining activities.	4 hours	1200
			DAY 4
35.	Receive FRAGO.	1 hour	1300
36.	Link up with supported unit.	1 hour	1400
37.	Plan and conduct AMD operations (retrograde).	4 hours	1800
38.	React to early warning.	1 hour	1900
39.	Counter aerial attack (four Hinds).	1 hour	2000
40.	Submit engagement report and request missile resupply to btry CP and/or TF TOC.	1 hour	2100
41.	Conduct final AAR—exercise ends.	4 hours	0100
	TOTAL TIME	70 hours	

Figure 6-1. Sample Evaluation Scenario (continued).

Table 6-1. Consolidated Support Requirements.

AMMUNITION	DODIC	BASIC LOAD
5.56-mm, blank M16 rifle	1305-AO8O	40 rds
5.56-mm, blank M249(AR)	1305-AO8O	300 rds
.50 cal, blank M2 HB MG	1305-A598	100 rds
7.62-mm, blank coax	A111	1600 rds
PYROTECHNICS	**DODIC**	**ANNUAL REQMTS**
Gren smk CS	1330-G963	28
Gren smk HC	1330-G960	48
Gren smk grn	1330-G940	16
Gren smk yel	1330-G945	48
Gren smk red	1330-G950	56
Gren smk viol	1330-G955	28
Smk pot gnd M4A2	1330-K867	20
Sig illum green para	1370-L305	8
Sig illum red para	1370-L306	28
Sig illum white para	1370-L307	20
Sig illum red star	1370-L311	8
Sig illum white star	1370-L312	20
Sig illum green star	1370-L314	20
Flare surface trip	1370-L495	28
Sim proj grnd burst	1370-L594	84
Sim arty gun flash	1370-L596	20
Sim booby trap flash	1370-L598	40
Sim booby trap illum	1370-L599	28
Sim booby trap whis	1370-L600	28
Sim hand gren	1370-L601	56
OTHER ITEMS		**REQUIREMENTS**
OPFOR (air) aerial platforms (rotary-wing, fixed-wing, UAVs) (ground)		As Needed
Controller guns		As Needed
Maps: Military 1:50,000 Scale		6ea
MILES Equipment		As Needed
Binocular: Modular construction, Mil Scale Reticle 7X50-mm W/E		As Needed
Camouflage Screen Support System		As Needed
Antenna Group: OE-254/GRC		2ea
Cable telephone: WD-1/TT DR-8 1/2 Km		9ea
Reeling Machine Cable Hand: RL-39		9ea
Headset Microphone: H-182/PT		8ea
Elec Transfer Keying Device ETKD: KYK-13/TSEC		1ea
Gen Set: Ded Skid MTD 3KW 60HZ		1ea
Night Vision Goggle: AN/PVS-7		12ea
Radio Set: AN/VRC-87D		1ea
Radio Set: AN/VRC-90D		2ea
Radio Set: AN/VRC-92D		2ea
Switchboard Telephone Manual: SB-993/GT		1ea
Telephone Set: TA-312/PT		3ea
Water Heater: Mounted Ration		1ea
Navigation Set: GPS Receiver		5ea

Table 6-1. Consolidated Support Requirements (continued).

OTHER ITEMS	REQUIREMENTS
Camouflage Screening System: Ultra-LTWT Radar scattering Gen Purpose	As Needed
Radiac Set: AN/UDR-13	2ea
Radiac Set: AN/VDR-2	1ea
Monitor Chemical Agent	2ea
Alarm Chemical Agent Automatic: M22	1ea
Data Transfer Device: AN/CYZ-10 (C)	5ea
Mast Antenna 10 meters: AB-XXX	2ea
BCIS Transponder	1ea
Computer Set: Digital AN/UYK-128	2ea
Notes:	

Notes:
• The annual pyrotechnics requirement figures represent the pyrotechnic allocation for a battery training year. Unit commanders determine how much to use during each training exercise to meet their training objectives. However, commanders cannot exceed their annual allotment during the training year. OPFOR requirements are included in above table.
• MILES Equipment. The commander will request and use all MILES equipment authorized, including OPFOR MILES equipment.

6-3. Selecting and Training Observer/Controller (O/C). A successful evaluation depends heavily on selecting O/Cs with the proper experience, training them to fulfill their responsibilities, and supervising them throughout the conduct of the evaluation.

   a. A six-person O/C team comprised of the following personnel is suggested for performing an external evaluation of the battery:

      (1) Senior O/C.

      (2) Battery O/C.

      (3) Operations O/C.

      (4) Recorder O/C.

      (5) Logistics O/C.

      (6) NBC O/C.

   b. O/Cs are required to be thoroughly familiar with the battery's mission, organization, equipment, and doctrine. They must understand the overall operation of the battery and how it is integrated into and how it supports the force protection-operation. Team members must have a working knowledge of the common individual and collective tasks in areas such as local defense, convoy procedures, air defense, communications, and NBC. One member of the team must have detailed experience in NBC and local defense common tasks areas. O/Cs should be equal in grade to the person in charge of the element they are evaluating. O/Cs should have previous experience in the position being evaluated. All team members must make objective evaluations, function effectively as team members, and state their findings in writing and briefings.

   c. O/C training focuses on providing O/Cs a general understanding of the overall evaluation, providing each O/C a detailed understanding of specific responsibilities and on building a spirit of teamwork. O/C training includes—

(1) The overall evaluation design, general scenario, master events list, and specific evaluation purpose, and objectives.

(2) The battery METL and its linkage to the T&EOs and other materials contained in this MTP.

(3) The O/C team composition and general duties and responsibilities of each other team member.

(4) Detailed responsibilities of individual team members with special emphasis on the master events list items that are their responsibility.

(5) A review of the written instructions and materials contained in the O/C's folders.

(6) A detailed reconnaissance of the area for the evaluation.

(7) The O/C communications and command and control system.

(8) Safety procedures.

(9) Evaluation data collection plan and procedures.

(10) AAR procedures and techniques.

(11) A talk-through of the entire evaluation which includes wargaming all items of the master events list in order of their occurrence and review of each team member's responsibilities and anticipated problems.

d. The senior O/C supervises the operation of the team. He provides leadership and focuses his efforts on ensuring O/Cs fulfill their responsibilities and adhere to the plan. He answers questions concerning the evaluation plan, resolves problems, synchronizes the efforts of team members, ensures close coordination among team members, holds team coordination meetings, plans and orchestrates the battery AAR, and conducts specific evaluation team AARs.

6-4. Selecting and Training the OPFOR. The OPFOR support for an external evaluation of the battery is limited to dismounted infantry personnel and two to five individuals who serve as enemy agents. Although OPFOR support is only used for some tasks, proper training and employment of this force is important to ensure a proper assessment of the battery's capabilities.

a. The OPFOR commander should be a battery grade officer or senior NCO who is well trained in OPFOR tactics and operations. In addition to his duties and responsibilities in leading various OPFOR elements, the OPFOR commander serves as part-time member of the O/C team. In order to fulfill O/C responsibilities, the OPFOR commander must participate in O/C planning and training activities. He must be present during AARs.

b. OPFOR elements are trained, organized, and equipped to operate in a manner that depicts threat forces as realistically as possible. Their training includes—

(1) Threat tactics and rules of engagement.

(2) OPFOR missions and responsibilities.

(3) OPFOR tasks and standards.

(4) Threat weapons and equipment, if available.

(5) Command and control.

(6) Safety.

6-5. <u>Conducting the Evaluation</u>.   The senior O/C has overall responsibility for the conduct of the evaluation. He orchestrates the overall evaluation and the support provided by the various individuals and elements which are specially selected and trained to fulfill designated functions and responsibilities.

Notes:
   • Safety. All soldiers and leaders must be safety conscious during the conduct of any training exercise. All O/Cs and trainers have the responsibility to ensure that they conduct all training in a safe manner. Prior to the beginning of an evaluation, brief all personnel on specific safety measures that they must observe during this particular exercise. Use T&EO 71-2-C326.44-AD2R, Chapter 5, when planning training in risk management procedures and safety analysis.
   • Fratricide. In this exercise, you will engage hostile aircraft with your Linebacker and small arms. You will use IFF, positive identification, and comply with the weapon control status in force. Your target engagements will be closely monitored. The evaluation will be stopped when fratricide violations are observed.

         a. O/Cs must be free to observe, report, and record the actions of the battery.

         b. The headquarters two echelons above the battery being evaluated should select and train the control element for the evaluation. They issue orders, receive reports, provide feeder information, and control the OPFOR.

         c. All exercise participants and supporting personnel must ensure that every facet of the evaluation is conducted in a safe manner. Personnel observing unsafe conditions must take prompt action to halt them and advise their superiors of the situation.

6-6. <u>Recording External Evaluation Information</u>. The senior O/C has overall responsibility for the implementation of the evaluation scoring system. Although the senior O/C makes the final evaluation, the full team participates in this process. Their reports reflect the overall ability of the unit to accomplish the missions.

         a. The evaluation scoring system is based on an evaluation of the unit's performance of each mission-essential task and any other collective task contained in the overall evaluation plan. This evaluation has four steps.

                 (1) Identify the MTP T&EOs which correspond to each of the evaluation plan tasks.

                 (2) Use T&EO standards to evaluate the unit's performance of the tasks. This is done for each evaluation plan.

                 (3) Record on the T&EO a GO for each performance measure performed to standard and a NO-GO for each performance measure not performed to standard.

                 (4) Record the unit's overall capability to perform the task by using GO/NO-GO information recorded on each T&EO. Use the following definitions as guidance in making this determination.

                         (a) GO—the unit successfully accomplished the task or performance measure to standard.

                         (b) NO-GO—the unit did not accomplish the task or performance measure to standard.

         b. Other locally designed reports approved by the senior O/C and prescribed in the evaluation plan may be used to collect information. These reports assist the team in recording the information concerning the unit's capability to perform its wartime mission per established standards. This information will assist the senior O/C to determine the unit's overall final rating. These reports may include—

                 (1) Unit Data Sheet (DA Form 7505). This report records personnel and equipment status information.

(2) Environmental Data Sheet (DA Form 7503). This report records information concerning weather and terrain conditions present during the evaluation period.

(3) Personnel and Equipment Loss Report (DA Form 7504). This report records information concerning battery personnel, equipment, and enemy losses during OPFOR engagements.

6-7. <u>The AAR</u>. After completion of each evaluation phase and the evaluation, provide feedback to the battery to increase and reinforce learning by conducting AARs.

a. Feedback. In an AAR, because all members of the unit participate, each member becomes a source of feedback. This provides a richer database for key points. For example, a leader's assessment of the situation and the basis for his decisions are known only to him. The AAR leader tries to draw this information out so that it becomes an important part of the discussion and forms the context for discussing alternative courses of action.

b. Prepare the AAR. AAR preparation involves four steps:

(1) Review training orders and objectives. Training objectives are the focus of the discussion of the exercise results. The FRAGOs and OPORD included in the exercise design implement these objectives. The O/C should be familiar with the objectives, FRAGOs, and OPORD so that he can note orders given by leaders of the evaluated unit and its subordinate echelons that either implement these objectives or deviate from them.

(2) Observe the exercise. This is an active process. The emphasis is on noting the actions that make the difference between a unit's success or failure. The O/C need not remain overly close to the unit leader since more can be seen from high ground near the lead element's location, or along the unit's route when moving. Since unit orders may identify important activities, checkpoints, and so forth, the O/C should position himself so that he can best observe anticipated critical events. Example of critical events include—

(a) Loss of a major weapon system or item of equipment.

(b) Major breach of security.

(c) Major command and control failures.

(d) Acquisition of important intelligence.

(e) Successful deceptive AMD maneuver.

(f) Occupation or control of major terrain features.

(g) Neutralization or destruction of major OPFOR capabilities, elements, or weapons.

(h) Fratricide violations.

(3) Select the site and assemble the participants. After the exercise, select a site for the AAR. If possible, hold the AAR where the majority of action occurred, where the most critical events took place (normally where the OPFOR was positioned), or where the terrain can be observed. Most often the OPFOR or unit objectives will be suitable for assembling the players and conducting AARs.

(4) Debrief the O/Cs. While the units are moving to the selected site, debrief the O/Cs. The senior O/C must have a complete understanding of what happened in the exercise. Therefore, the fourth step in AAR preparation is to obtain a detailed description of the exercise's major tactical events in the order in which they occurred. Descriptions should emerge from the debriefing of the subordinate unit O/Cs and the OPFOR leader and/or controller. After the senior O/C has a sound understanding of what

happened during the exercise, he should review the critical events and rank them in terms of their relevance to the exercise training objectives and their contribution to the exercise outcome. He should then select as many critical events as can be covered in detail during the time allowed for the AAR and place them in chronological order.

    c. Conduct the AAR. Conducting the AAR requires four steps:

       (1) Organize the participants. When the O/C and/or AAR leader assembles the participants, he groups them according to their organization in the exercise. Each subordinate element's O/C is with the unit for which he is responsible.

       (2) State the training objectives. The AAR leader makes a brief statement of the training objectives for the exercise. He describes these as specifically as possible. The AAR leader also states any additional teaching points that he intends to cover during the AAR. Limit the number to three or four key points to keep the AAR focused and prevent it from becoming excessively long.

       (3) Lead the discussion. The AAR leader guides the discussion of the major tactical events in their order of occurrence. He uses diagrams to help players visualize the exercise development. The AAR leader starts by sketching the main terrain features and, as the AAR proceeds, has the participants draw routes of advance, objectives, locations of engagements, and so forth. Discuss each major event in detail to make teaching points about the unit's performance during the event. In an effective AAR, the AAR leader—

         (a) Avoids giving a critique or 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 also 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) Encourages the participants to use diagrams to illustrate teaching points and to show routes, phase lines, objectives, and so forth.

         (i) Prohibits players from offering self-serving excuses for inappropriate tactical actions.

         (j) Discusses each incident of fratricide, near fratricide, or possible fratricide in each AAR in which any of these three incidents may occur.

Note: In complying with (j) above, use the following:

- Each time you fired munitions, the possibility of hitting friendly forces or their equipment existed. The better you observed all required performance measures, the better your chances were that you did not commit fratricide. In this exercise, you engaged hostile aircraft with your small arms and/or primary weapon system. You should have used IFF, hostile criteria, visual aircraft recognition, and complied with the weapon control status which was in force.
- Your engagements in this exercise and/or evaluation were closely monitored. We will now thoroughly review your observance of the following required fratricide performance measures:
    - • Use of IFF and hostile criteria to identify all targets.

• • Visual identification of vehicles and aircraft.

• • Observance of weapon control status.

• • Observance of corridors, routes, zones, flight levels, and other airspace control measures.

• • Observance of allied aircraft scheduled flyovers.

• • Compliance with ground defense plan control measures to prevent friendly casualties including sign and countersign, range cards, sectors of fire, and coordination with friendly units for their locations and planned movements.

(4) Summarize key points. The AAR leader briefly summarizes teaching points in terms of training objectives covered in the AAR. After the summary, the AAR leader can have a private conversation with the battery leader regarding his strengths and weaknesses and what he can do to further improve his performance and that of his unit. A good AAR leader—

(a) Maintains order and discipline.

(b) Reviews training objectives.

(c) Holds a discussion of the important events. This addresses events as they occurred and how the unit could have done better. The AAR leader guides this discussion. The leader avoids a detailed examination of events not directly related to the training objective.

(d) Traces the chain of events so that the results of mistakes are understood by all participants (one mistake is often the partial cause of another).

(e) Clearly relates tactical events to teaching points.

(f) Holds the attention of the participants and involves them in the discussion.

(g) Ensures that new training objectives are clear and concise.

(h) Uses sketches, diagrams, or terrain models to reinforce points made in the AAR.

Note: Within the constraints of the scenario developed by the implementing headquarters, subordinate O/Cs may conduct an intermediate AAR after the completion of each evaluation phase. Reference materials for conducting an AAR are TC 25-20 and FM 7-1.

APPENDIX A

Linebacker Gunnery Tables

Section I. Introduction

A-1. <u>Purpose</u>. The purpose of the Linebacker gunnery program is to develop and test the proficiency of the individual, squad, and platoon in gunnery techniques. It prepares individuals, squads, and platoons to execute their mission in combat. It standardizes Linebacker training and gunnery skill qualifications through performance-oriented, sequentially progressive, realistic, and challenging training. The Linebacker gunnery strategy is a consolidated comprehensive gunnery program reference for the Linebacker squad. The Linebacker squad should cross-train using Tables I and II as outlined in the Linebacker gunnery training strategy (Figures A-2 and A-3). The Linebacker squad training is outlined in each table of this training program.

A-2. <u>General</u>. The gunnery tables provide mandatory qualification standards and training strategies for the Linebacker squads. Tables focus on preparing the individual to perform as part of a squad to accomplish the unit mission. Standards outlined in the MTPs, drills, and STPs are the minimum acceptable levels of performance.

      a. The Linebacker squad (one fire unit) consists of a four-man, MOS 14R, Linebacker crew (a gunner, assistant gunner, driver, and squad leader). The platoon is comprised of a platoon headquarters and four fire units.

      b. The training strategy is based on the building-block approach in which individuals are trained in basic skills before being integrated into squads. Squads train progressively from basic tasks through integration as platoon, battery, battalion, or regimental elements performing a wartime mission. Unit commanders have flexibility in applying these strategies in support of their METL. They may integrate command and control, maneuver, and survival and sustainment skills into the training as they see fit.

A-3. <u>Responsibilities</u>. Commanders are responsible for conducting training and gunner qualification per the established gunnery tables, drills, and MTPs. Commanders, however, have the latitude to adjust event frequency based on local operational requirements, unit METL, contingency directives, and command guidance.

Section II. Preliminary Gunnery

A-4. <u>Preliminary Crew Gunnery.</u> Preliminary crew gunnery training develops individual crew member skills needed to operate the vehicle and turret weapon systems. It is conducted year-round at the home station and consists of classroom instruction and hands-on, performance-oriented training. Performance of this training is mandatory for all newly assigned crew members and will be completed within 90 days of arrival at the unit. Crew members failing to meet established standards (FM 3-23.1) will train and retest until standards are met before progressing to the next performance level. As a minimum, the following training will be conducted:

    a. Classroom subjects (FM 3-23.1).

      (1) Weapon systems capabilities.

      (2) Ammunition capabilities.

      (3) Engagement process (FM 3-23.1).

    b. Boresight and zero procedures.

c. PGS training.

d. SVML training.

e. PMCS.

f. Performance-oriented training (standards per FM 3-23.1).

g. BGST training and testing (standards per FM 3-23.1).

h. MANPADS training (standards per tables in Figure A-1).

i. STPT (standards per DA Pamphlet 350-38).

j. Crew/battle drills (standards per ARTEP 44-177-14-Drill).

k. SHTU/HTU (standards per STP 44-14R14-SM-TG).

l. PLGR/EPLRS training (standards per STP 44-14R14-SM-TG).

m. SINCGARS (STP 44-14R14-SM-TG).

TABLE	EVENT	LEVEL	TADSS EQUIPMENT	FREQUENCY TRC A	TRC B	STANDARDS (See Notes)
I	Weapons Proficiency Stinger, Critical Checks RMP	Crew Member	FHT, STPT	6	3	2
II	VACR, IFF, SHTU, HTU, PLGR, ANCD	Crew Member	ANCD; PLGR; ART-V Slide Kit; VACR CD-ROM, Version 3; IFF Subsystems	6	3	2
III	MANPADS Certification	Crew Member	FHT; STPT; ART-V slide kit; VACR CD ROM, Version 3; ANCD; PLGR; IFF Subsystems	6	3	2
IV	Single/Multiple Target Tracking Procedures	Crew	FHT, TPT, IFF Subsystems	3	2	1, 2
V	Single/Multiple Target Engagement Procedures	Crew	FHT, TPT, IFF Subsystems	3	2	1, 2
VI	Battle/Crew Drills	Crew	FHT, TPT, IFF Subsystems	3	2	1, 2
VII	Tables I–VI Crew Prequalification	Crew	FHT, TPT, IFF Subsystems	2	2	1, 2
Notes: 1. Per standards in ARTEP 44-117-11-Drill. 2. Per standards in STP 44-14S14-SM-TG.						

Figure A-1. MANPADS/Stinger Crew Tables.

A-5. Conduct of Fire Trainer. The COFT provides the Linebacker squad leader and gunner a simulated environment to gain proficiency with crew coordination skills. COFTs do not provide a driver's station; however, drivers are encouraged to participate with the squad leader and gunner and develop the coordination needed to synchronize movement of the vehicle into and out of defensive positions.

    a. The gunner is trained and evaluated on—

        (1) Reacting to fire commands.

        (2) Performing engagement techniques.

    b. The squad leader is trained and evaluated on—

        (1) Initiating fire commands.

        (2) Acquiring and designating targets.

        (3) Conducting target hand-off procedures.

        (4) Performing target engagement.

A-6. Crew Device Gunnery. Crew device gunnery consists of Linebacker Table I, Crew Defense, and Linebacker Table II, Linebacker Crew Proficiency Course (LCPC). These tables train crews to engage stationary and moving aerial and ground targets using all onboard weapon systems from a stationary and moving Linebacker, during the day and night. Crews are required to engage targets using the SVML, manual/power controls, gunner and commander hand stations, and the integrated sight unit and auxiliary sight. Linebacker Table II is a prerequisite for full-caliber live fire. All crews must perform Linebacker Table II to standard within 3 months of live fire.

A-7. Linebacker Device Gunnery Tables. Linebacker device gunnery trains the collective skills of crews and sections. Device gunnery consists of two parts: crew and section gunnery. Crew and section training is conducted at a local training area, using PGS or thru-sight video (TSV). Device gunnery tables are building-block steps for Linebacker Table VIII, Crew Qualification, and Linebacker Table X, Section Qualification. Device gunnery consists of the following tables:

- Linebacker Table I, Crew Defense.
- Linebacker Table II, Linebacker Crew Proficiency Course.
- Linebacker Table III, Linebacker Section Exercise.
- Linebacker Table IV, Linebacker Section Practice 1.

A-8. Linebacker Table I, Crew Defense. The crew defense table (Figure A-2) allows the driver to be integrated into the crew's coordination by moving the vehicle into and out of firing positions during daytime and nighttime engagements. All engagements are fired from a defensive position. Linebacker Table I introduces crews to training in a gunnery environment. Crews train to engage stationary and moving targets during the day and night. Crew defense consists of 10 engagements. All engagements are rated Trained (T), Needs Practice (P), or Untrained (U).

LINEBACKER	CONDITIONS	TARGET TYPE/POSTURE
1. Stationary	Gunner, Auxiliary Sight*	AP Stationary (Frontal)
2. Stationary	Gunner, ISU, Manual Mode	HE Stationary (Frontal)
3. Stationary	Commander, CSE	AP Stationary (Frontal) Coax Point
4. Stationary	Gunner, ISU, NBC	AP Moving (Flank) AP Stationary (Frontal)
5. Stationary	Commander, CSE	HE Stationary (Frontal)
6. Stationary	Gunner, ISU	Aerial
7. Stationary	Commander, CSE	HE Stationary (Frontal)
8. Stationary	Gunner, ISU	Aerial
9. Stationary	Gunner, ISU, NBC	AP Moving (Flank) AP Stationary (Frontal)
10. Stationary	Gunner, ISU	Aerial
*At night, ISU is used.		

Figure A-2. Linebacker Table I, Crew Defense.

Task: Engage and destroy stationary and moving targets from a stationary Linebacker during day and night conditions.

Conditions: Given a PGS- or TSV-equipped Linebacker in a defensive position during the day and night.

Standards: During the day or night, the crew must achieve a minimum of a "P" rating on 7 of 10 engagements with 1 of the 7 being an NBC engagement.

A-9. <u>Linebacker Table II, Linebacker Crew Proficiency Course</u>. The LCPC introduces crews to offensive operations. This table (Figure A-3) develops the driving skills of the driver, while the crew engages targets on-the-move. Crews engage single and multiple, moving and stationary, aerial and ground targets from a stationary and moving Linebacker during the day and night. LCPC consists of 12 engagements. All engagements are rated Trained (T), Needs Practice (P), or Untrained (U).

DAYTIME ENGAGEMENTS		
LINEBACKER	**CONDITIONS**	**TARGET TYPE/POSTURE**
1. Moving	Gunner, ISU	1/5th Scale Su-25 Frogfoot
2. Stationary	Gunner, ISU, Manual Mode	HE Stationary (Frontal)
3. Moving	Gunner, ISU	AP Moving (Flank) HE Stationary (Frontal)
4. Stationary	Gunner, Auxiliary Sight	HE Stationary (Frontal) Coax Point
5. Stationary	Gunner, ISU	1/5th Scale Mi-24 Hind
6. Stationary	Gunner, ISU, NBC	AP Moving (Flank) Coax Area
7. Stationary	Gunner, ISU	1/5th Scale Su-25 Frogfoot
NIGHTTIME ENGAGEMENTS		
8. Stationary	Gunner, ISU	AP Stationary (Frontal) Coax Area
9. Moving	Gunner, ISU	AP Moving (Flank) HE Stationary (Frontal)
10. Stationary	Gunner, ISU	HE Moving (Flank) Coax Area
11. Moving	Commander, CSE	HE Stationary (Frontal)
12. Stationary	Gunner, ISU, NBC	AP Stationary (Frontal) Coax Point

Figure A-3. Linebacker Table II, Linebacker Crew Proficiency Course.

      Task: Engage and destroy stationary and moving, aerial and ground targets from a stationary and moving Linebacker during the day and night.

      Conditions: Given a PGS- or TSV-equipped Linebacker, suitable maneuver and engagement area with targets, during the day and night.

      Standards: The crew must achieve a minimum of a "P" rating on 9 of 12 engagements with—

            1. 1 of the 9 being an NBC engagement.
            2. 2 of the 9 being nighttime engagements.
            3. 2 of the 9 being aerial engagements.

A-10. <u>Section/Platoon Device Gunnery.</u> Section device gunnery consists of Linebacker Table III, Linebacker Section Exercise, and Linebacker Table IV, Linebacker Section Practice 1. These tables train and evaluate collective tasks of sections. The tables are conducted using PGS or TSV with targets. All evaluations are linked directly to FM 44-43, ARTEP 44-177-15-MTP, and the combat drills in ARTEP 44-177-14-Drill. Units will develop scenarios to support their respective METL and training emphasis. Table development and standards are linked directly to Section III, Advanced Gunnery.

A-11. <u>Linebacker Crew Live-Fire Gunnery Tables</u>. Linebacker crew live-fire gunnery trains and evaluates a single fire unit's ability to engage stationary and moving, single and multiple, aerial and ground targets. Training is conducted during daytime and nighttime conditions from a stationary and moving fire unit using full-caliber ammunition. These tables train and evaluate single fire unit crew proficiency.

Crew gunnery consists of the following tables:

- Linebacker Table V, Crew Practice 1.
- Linebacker Table VI, Crew Practice 2.
- Linebacker Table VII, Crew Practice 3.
- Linebacker Table VIII, Crew Qualification.

A-12. Linebacker Table V, Crew Practice 1. Linebacker Table V, Crew Practice 1 (Figure A-4), introduces crews to a live-fire gunnery environment. This table uses the 7.62-mm coaxial machine gun, in the single-shot mode, as a subcaliber device replicating main gun engagements. Due to the limited engagement range of the coaxial machine gun, half-scale targets are placed at half the engagement distance. Gunners must use the actual straight-line distances when engaging targets.

DAYTIME ENGAGEMENTS		
LINEBACKER	CONDITIONS	TARGET TYPE/POSTURE
1. Defensive	Gunner, ISU, Manual Mode	HE Stationary (Frontal)
2. Offensive/Retrograde	Gunner, ISU	HE Stationary (Frontal) AP Moving (Flank)
3. Defensive	Gunner, Auxiliary Sight	HE Stationary (Frontal)
4. Offensive/Retrograde	Commander, CSE	HE Stationary (Frontal) AP Moving (Flank)
5. Defensive	Gunner, ISU, NBC	AP Moving (Flank)
NIGHTTIME ENGAGEMENTS		
6. Defensive	Gunner, ISU	AP Stationary (Frontal) HE Stationary (Frontal)
7. Offensive/Retrograde	Gunner, ISU, NBC	AP Moving (Flank)
8. Defensive	Commander, CSE	AP Stationary (Frontal) HE Stationary (Frontal)
9. Offensive/Retrograde	Commander, CSE	AP Moving (Flank) HE Stationary (Frontal)
10. Defensive	Gunner, ISU	AP Moving (Flank) HE Stationary (Frontal)
Ammunition requirements for this table are 7.62-mm tracer, 160 rounds.		

Figure A-4. Linebacker Table V, Crew Practice 1.

Task: Engage and destroy single stationary and moving targets from a stationary and moving Linebacker during the day and night.

Conditions: Given a Linebacker using the coaxial machine gun with a single-shot adapter as a subcaliber device. Authorized allocation of ammunition, suitable live-fire ranges with targets, during the day and night.

Standards: The crew must achieve a minimum of a "P" rating on 7 of 10 engagements with—
1. 1 of the 7 being an NBC engagement.

2. 2 of the 7 being nighttime engagements.

A-13. Linebacker Table VI, Crew Practice 2. Linebacker Table VI, Crew Practice 2 (Figure A-5), is the first table that requires the crew to fire with full-caliber ammunition. Crews engage targets using all onboard weapon systems. Engagements are fired from a baseline position. Linebacker Table VI uses combat ranges to train crews in 25-mm, 7.62-mm coaxial machine gun, and Stinger engagements using the SVML against stationary and moving aerial and ground targets, during the day and night.

DAYTIME ENGAGEMENTS			
LINEBACKER	CONDITIONS	TARGET TYPE/POSTURE	AMMUNITION
1. Defensive	Gunner, Auxiliary Sight	AP Stationary (Frontal) Coax Area	8 Rounds AP 100 Rounds 7.62-mm
2. Defensive	Gunner, ISU, NBC	1/5th Scale Su-25 Frogfoot Coax Point	CFT 50 Rounds 7.62-mm
3. Defensive	Gunner, ISU	1/5th Scale Su-25 Frogfoot HE Stationary (Frontal)	CFT 8 Rounds HE
4. Defensive	Commander, CSE	AP Stationary (Frontal)	8 Rounds AP
5. Defensive	Gunner, ISU	1/5th Scale Mi-24 Hind	20 Rounds HE
NIGHTTIME ENGAGEMENTS			
6. Defensive	Gunner, ISU	HE Moving (Flank) Coax Point	8 Rounds HE 50 Rounds 7.62-mm
7. Defensive	Gunner, ISU, NBC	HE Stationary (Frontal) Coax Area	8 Rounds HE 100 Rounds 7.62-mm
8. Defensive	Gunner, ISU Manual Mode	HE Stationary (Frontal)	8 Rounds HE
Ammunition requirements • TPDS-T 16 rounds • TP-T 52 rounds • 7.62-mm 300 rounds			

Figure A-5. Linebacker Table VI, Crew Practice 2.

Task: Engage and destroy stationary and moving, aerial and ground targets from a stationary Linebacker, during the day and night.

Conditions: Given a Linebacker, authorized allocation of ammunition, suitable live-fire range with targets, during the day and night.

Standards: The crew must achieve a minimum of a "P" rating on 6 of 8 engagements with—
  1. 1 of the 6 being an NBC engagement.
  2. 1 of the 6 being a nighttime engagement.
  3. 2 of the 6 being aerial engagements.

A-14. <u>Linebacker Table VII, Crew Practice 3</u>. Linebacker Table VII, Crew Practice 3 (Figure A-6), is the first table that requires the Linebacker crew to conduct offensive engagements with full-caliber ammunition at combat ranges. Linebacker Table VII trains the crew to engage moving and stationary, aerial and ground targets using all onboard weapon systems during the day and night from a stationary and moving fire unit.

DAYTIME ENGAGEMENTS			
LINEBACKER	CONDITIONS	TARGET TYPE/POSTURE	AMMUNITION
1. Offensive/Defensive	Gunner, ISU	1/5th Scale Su-25 Frogfoot Coax Point	CFT 50 Rounds 7.62-mm
2. Offensive/Defensive	Gunner, Auxiliary Sight	AP Moving (Flank) AP Stationary (Frontal)	8 Rounds AP 8 Rounds AP
3. Offensive/Defensive	Gunner, ISU, NBC	1/5th Scale Mi-24 Hind AP Stationary (Frontal)	20 Rounds HE 8 Rounds AP
4. Offensive/Defensive	Gunner, ISU	1/5th Scale Su-25 Frogfoot HE Stationary (Frontal)	CFT 8 Rounds HE
5. Offensive/Defensive	Commander, CSE	AP Moving (Flank) Coax Point	8 Rounds AP 50 Rounds 7.62-mm
NIGHTTIME ENGAGEMENTS			
6. Offensive/Defensive	Gunner, ISU, NBC	AP Moving (Flank) Coax Area	8 Rounds AP 100 Rounds 7.62-mm
7. Offensive/Defensive	Gunner, ISU	1/5th Scale Su-25 Frogfoot AP Stationary (Frontal)	CFT 8 Rounds AP
8. Offensive/Defensive	Gunner, Manual Mode	AP Stationary (Frontal)	8 Rounds AP
9. Offensive/Defensive	Gunner, ISU	1/5th Scale Mi-24 Hind Coax Point	20 Rounds HE 50 Rounds 7.62-mm
Ammunition requirements • TPDS-T 48 rounds • TP-T 56 rounds • 7.62-mm 250 rounds			

Figure A-6. Linebacker Table VII, Crew Practice 3.

Task: Engage and destroy stationary and moving aerial and ground targets from a stationary and moving Linebacker, during the day and night.

Conditions: Given a Linebacker, authorized allocation of ammunition, suitable live-fire range with targets during the day and night.

Standards: The crew must achieve a minimum of a "P" rating on 7 of 9 engagements with—
>   1. 1 of the 7 being an NBC engagement.
>   2. 2 of the 7 being nighttime engagements.
>   3. 3 of the 7 being aerial engagements.

A-15. <u>Linebacker Table VIII, Crew Qualification</u>. Linebacker Table VIII, Crew Qualification (Figure A-7), is a single fire unit qualification table. This table evaluates the crew's ability to acquire and engage targets during various firing conditions using all onboard weapon systems.

DAYTIME ENGAGEMENTS			
LINEBACKER	CONDITIONS	TARGET TYPE/POSTURE	AMMUNITION
1. Defensive	Gunner, ISU, NBC	AP Stationary (Frontal) 1/5th Scale Su-25 Frogfoot	8 Rounds AP CFT
2. Offensive/Retrograde	Commander, CSE (Swing Task)	AP Stationary (Frontal)	8 Rounds AP
3. Defensive	Gunner, ISU	1/5th Scale Mi-24 Hind Coax Point	20 rounds HE 50 Rounds 7.62-mm
4. Offensive/Retrograde	Gunner, ISU	1/5th Scale Su-25 Frogfoot HE Stationary (Frontal)	CFT 8 Rounds HE
5. Defensive	Gunner, Auxiliary Sight	Coax Area AP Moving (Flank)	100 Rounds 7.62-mm 8 Rounds AP
NIGHTTIME ENGAGEMENTS			
6. Defensive	Gunner, ISU	1/5th Scale Su-25 Frogfoot HE Stationary (Frontal)	CFT 8 Rounds HE
7. Offensive/Retrograde	Gunner, ISU, NBC	AP Stationary (Frontal) Coax Point	8 Rounds AP 50 Rounds 7.62-mm
8. Defensive	Gunner, ISU Manual Mode (Swing Task)	AP Stationary (Frontal)	8 Rounds AP
9. Offensive/Retrograde	Gunner, ISU	1/5th Scale Mi-24 Hind AP Stationary (Frontal)	20 rounds HE 8 Rounds AP
10. Defensive	Gunner, ISU	HE Moving (Flank) Coax Area	8 Rounds HE 100 Rounds 7.62-mm

Ammunition requirements
- TPDS-T   48 rounds
- TP-T   64 rounds
- 7.62-mm   300 rounds

Figure A-7. Linebacker Table VIII, Crew Qualification.

Task: Engage and destroy stationary and moving, aerial and ground targets from a stationary and moving Linebacker, during the day and night.

Conditions: Given a Linebacker, authorized allocation of ammunition, and suitable live-fire range with targets, during the day and night.

Standards: The crew must achieve a Distinguished, Superior, or Qualified rating as follows:

- Distinguished: Trained (T) on a least 9 of 10 engagements.
- Superior: Trained (T) on 8 of 10 engagements with—
    1. 1 of the 8 being an NBC engagement.
    2. 2 of the 10 being nighttime engagements.
    3. 3 of the 8 being aerial engagements.
- Qualified: Trained (T) or Needs Practice (P) on 7 of 10 engagements with—
    1. 1 of the 7 being an NBC engagement.
    2. 2 of the 7 being nighttime engagements.
    3. 3 of the 7 being aerial engagements.

- Unqualified: Untrained (U) on 4 or more engagements as follows:
  1. Untrained (U) on both NBC engagements.
  2. "T" or "P" on only 1 night engagement.
  3. "T" or "P" on only 2 aerial engagements.

A-16. <u>Crew Gunnery Table Development</u>. Linebacker crew gunnery outlines the air defense standard for training and evaluation while allowing battalion commanders to tailor engagements for their particular contingency missions and training emphasis. This section identifies engagement tasks, conditions, and standards. The battalion S3, with the assistance of the battalion master gunner, identifies specific threat target types and engagement distances. The following requirements must be included in table development:

a. Linebacker Tables V through VII are building-block steps for Linebacker Table VIII, Crew Qualification. Training resources may prohibit firing Linebacker Tables V through VII as prescribed in this section. Linebacker Table VIII must be fired per the standards in this chapter.

b. The battalion S3, with the assistance of the battalion master gunner, will provide range scenarios for Linebacker Table VIII, Crew Qualification.

c. All offensive and retrograde engagements will be fired from a moving vehicle using the stabilization system.

d. All defensive engagements begin with the firing vehicle in the turret-defilade position, then move to a hull-defilade position to engage the targets (does not apply to Stinger and 25-mm aerial engagements). On ranges where this cannot be done or defilade positions do not exist, units will train using simulated positions. Fire units must move at least one fire unit length in any of these positions.

e. The battalion S3, with the assistance of the battalion master gunner, will determine the range of the aerial targets based on the range complex accommodations.

f. Linebacker Table VIII, Crew Qualification, has a total of four swing tasks: two daytime and two nighttime. Swing tasks provide commanders and master gunners with the flexibility to adjust the number of tasks fired during daytime or nighttime to match available light conditions. Swing tasks cannot be substituted with each other. Only swing tasks can be moved to either day or night scenarios. No other task can be used as a swing task.

g. FAAD C^{3}I sensors/slew-to-cue will be used on all aerial engagements. Engagements will be conducted manually only when the data link is not available. The following procedures, materials, and guidance are designed to help the Sentinel radar acquire and continuously track 1/5th scale targets so that STC engagements can be performed effectively and safely on ranges **with limited area and line of sight from radar to target**.

(1) Equipment. The entire data link network should be up and running. The minimum equipment required consists of a Sentinel radar, a FAAD C^{3}I (sensor node), and a weapon platform with HTU/SHTU receiving data. Two additional HTU/SHTUs are required: one at the range tower location and one HTU/SHTU with the 1/5th scale target controllers. The target personnel need the HTU/SHTU displaying the tracks to maintain accurate flight profiles. The HTU/SHTU is needed at the tower for the range OIC to safely validate the track and ensure all crews have the same success opportunities.

(2) Targets. The 1/5th scale fixed- and rotary-wing targets are to be used for the qualification ranges. The target needs to fly at altitudes in excess of 150 meters from the ground and should fly a steady path out to at least 5 kilometers. On a narrow range, it is important to use the shown flight profile.

(3) Location. Range area is key in determining the positioning of equipment on the range. The Sentinel should be deployed at least 2 kilometers to the left or right and behind the weapon systems. On

ranges that do not have the area to put the radar at that distance, it should be placed as far back as possible. To reduce the minimum tracking distance which enables the radar to work at distances of 1.2 kilometers and greater, a software patch can be installed on the radar to enhance target tracking.

(4) Targetry. The following target information contains the target requirements for all Linebacker engagements:

• Aerial Targets. The Su-25 Frogfoot and the Mi-24 Hind-D auto-gyro remotely piloted vehicle target systems (RPVTS) support aerial engagements. Typical speeds for rotary-wing aircraft are 45 to 70 miles per hour. The fixed-winged aircraft will be presented at speeds of 45 to 100 miles per hour. One-fifth scale targets must be equipped with PGS retroreflectors and smoke for device gunnery. Targets should be equipped with infrared source and a miss distance indicator (MDI) scoring system for live fire of both Stinger and 25-mm aerial engagements.

• Ground Targets. Targets are constructed per TC 25-8. They should be equipped with signature devices, such as a Hoffman, to simulate enemy fire. Targets should also be equipped with thermal signatures.

• Targets should represent the actual threat array a crew can encounter on the battlefield. Crews will encounter a realistic array of single and multiple ground and aerial targets. Friendly targets may be added to emphasize the importance of fratricide training. When the target array consists of multiple targets, simultaneous target exposure will be used.

• For offensive and retrograde engagements, total target exposure time is established using the applicable timing matrix. The master gunner uses the individual target conditions and range to determine the specific target exposure time.

Note: Target exposure time begins when the target is fully exposed. Total target exposure time does not include target lift time.

• Defensive Engagements. The total target exposure time for all ground targets is 50 seconds. However, the vehicle cannot remain exposed beyond the vehicle exposure timing matrixes.

• Coax Machine Gun. The coax machine gun is primarily an offensive weapon. Engagement techniques include point and area target techniques as follows:

•• Point target engagements. RPG or ATGM teams will be three E-type silhouettes placed on line or in a wedge formation. They will not be more than 5 meters apart or 10 meters deep. Unarmored targets (within 900 meters) can be designated a coax point target. However, these targets must have a unique design, easily identifiable to the crew (silhouette or thermal image). This reduces confusion as to what ammunition type is used to engage that target.

•• Area target engagements. Area target arrays will be seven E-type silhouettes placed on line, column, or in a wedge formation. Targets will not be more than 5 meters apart and will not extend beyond 30 meters in width or 20 meters in depth.

• All 25-mm ground targets will be placed within a minimum of 500 meters to a maximum of 1,600 meters.

• All 7.62-mm coax targets will be placed within a minimum of 300 meters to a maximum of 700 meters.

• All aerial targets will be placed within a minimum of 1,000 meters to a maximum of 5,000 meters.

(5) Ammunition. Ammunition requirements are listed for all weapons.

• Stinger or CFT. (*Note: Live missile will be used when available.)*
• 25-mm gun.
    •• 20 rounds of TP-T per aerial target.
    •• 8 rounds of TP-T per HE point target.

- •• 8 rounds of TPDS-T per AP point target.
- 7.62-mm machine gun.
  - •• 50 rounds of 7.62-mm per RPG or ATGM team or unarmored target less than 900 meters.
  - •• 100 rounds of 7.62-mm per area target.
  - •• 10 rounds per target (Linebacker Table V only).

   h. Allowable variations. The following variations are allowed in table development:

   (1) Battalion commanders may add friendly targets to Linebacker Tables V through VIII.

   (2) Battalion commanders may modify the number of tasks to fire on Linebacker Tables V through VII to overcome weaknesses.

   (3) If a moving target is not available, a stationary frontal target of the same type and at the same range can be used.   If a stationary target is used, target conditions must be adjusted.

   (4) If the firing unit's stabilization system fails, the crew must report it immediately to the range controllers. The engagement will be terminated, and the fire unit will not conduct any offensive engagements until the system is corrected.

Note: Each member of the crew must meet the following prerequisites before crew gunnery:

- Qualify on BGST within last 3 months.
- Qualify on Linebacker Table II within last 3 months.

A-17. <u>Linebacker Gunnery Evaluation</u>. Crews must be evaluated on their ability to function together while engaging aerial and ground targets. These abilities consist of crew coordination, weapon system proficiency, and marksmanship. All crew gunnery engagements (device and live fire) are evaluated as Trained (T), Needs Practice (P), or Untrained (U), based on the GO or NO-GO criteria of the engagement task and subtask standards.

A-18. <u>Engagement Standards</u>. Engagement standards consist of task and subtask standards. Task standards must be met for a successful engagement. Subtasks support the task standards. Subtask standards are categorized as critical, leader, and noncritical. Critical subtasks are those tasks that are so critical they must be accomplished to meet the engagement task standards. Leader and noncritical subtasks support the engagement task, but their success or failure will have little impact on accomplishment of the engagement task. Not all subtasks apply to all engagements; however, the task standards will apply to every engagement. Engagement evaluation criteria for crew gunnery follows:

- T = GO on all task standards, a GO on all critical subtask standards and leader subtask standards, and no more than one NO-GO on a noncritical subtask standard.
- P = GO on all task standards and a GO on all critical subtask standards, with a NO-GO on one or more leader subtask standards or a NO-GO on two or more noncritical subtask standards.
- U = NO-GO on one or more task standards or NO-GO on one or more critical subtask standards.

A-19. <u>Task Standards</u>. Engagement task standards require the crew to hit a given target with an appropriate number of rounds and type of ammunition without exposing the vehicle beyond the given target's capability to hit the vehicle.

Note: Partial credits for an engagement will not be given. A crew must kill all targets in an engagement according to the appropriate engagement standards to receive credit for the overall engagement.

a. Target Kill Standards. The kill standards for crew gunnery are shown in Figure A-8. These kill standards identify minimum hits required to achieve a kill on a given target type. Budget constraints and limited resources effect these kill standards. They do not reflect actual combat conditions. Crews receive an untrained rating if they fail to achieve a kill in accordance with kill standards or if they use ammunition that is not designated for destroying a target.

Aerial Targets	Hit with a minimum of 1 Stinger round (CFT)
25-mm Aerial Targets	Hit with a minimum of 5 rounds
25-mm Point Targets	Hit with a minimum of 3 rounds
25-mm Area Targets	Suppress 75% of target using a Z pattern (one round in 6 of 8 boxes)
Coax Point Targets	Troop–Hit one target with 1 round Truck–Hit with a minimum of 3 rounds
Coax Area Targets	Hit one troop target with 1 round and suppress area with Z pattern

Figure A-8. Target Kill Standards Chart.

b. Exposure Matrixes. Fire unit exposure matrixes are used to determine the crew's allowable exposure time to a given target. There are three matrixes for the Linebacker: Light-armored and unarmored, aerial, and troop. These matrixes are based on threat target's time to hit a fire unit. See Figures A-9 through A-12. This methodology is based on various threat weapon system capabilities:

(1) Matrix condition. Times in the light-armored/unarmored, aerial, and troop matrixes are based on the worst-case threat targets of the given category. There are three conditions that apply to the threat target. Each of these conditions gives the Linebacker crew additional time to engage the target, because it takes the threat additional time to engage the Linebacker.

(a) NBC environment. NBC environments affect the threat's ability to rapidly engage a Linebacker. Therefore, the threat needs more time to place a hit on the fire unit than it does during normal conditions.

(b) Moving Linebacker. It is more difficult for the threat to hit a moving Linebacker. Therefore, the threat needs more time to place a hit on the moving fire unit.

(c) Moving threat target. It is more difficult for the threat on the move to place effective fire on a Linebacker. Therefore, a moving threat target needs more time to place a hit on a fire unit than it does if the threat is stationary.

(d) Exposure time. To determine the allowable exposure time to a given target, the BCE must know the following:

- Target category.
  - •• Light-armored/unarmored.
  - •• Dismounted troops.
  - •• Aerial.
- Number of target conditions.
  - •• Normal conditions.
  - •• 1, 2, or 3 additional conditions

(e) Target range. Once the BCE knows the target category, conditions, and range, he refers to the applicable exposure matrix. When using an exposure matrix, the BCE looks at the left-hand column for the target range. He then follows that row to the right until it intersects with the number of conditions that apply to that target. The number in the corresponding box is the maximum allowable vehicle exposure time to that target. For targets that are not at 100-meter increments, the BCE rounds the range up or down to the nearest 100 meters. For example: 1,536 meters is rounded down to 1,500 meters and 1,668 meters is rounded up to 1,700 meters.

Note: *When alternate targets must be used, such as substituting a stationary for moving target, the BCE uses the conditions that apply to the alternate target.*

      (2) Timing procedures. The BCE must record the fire unit exposure times for each task fired, even when computers are used. Exposure time is the time the fire unit is exposed to any threat target. Timing procedures apply to single as well as multiple target engagements. During multiple target engagements, each target is timed separately. Variations are not permitted.

RANGE (Meters)	TARGET CONDITIONS			
	NORMAL (Seconds)	1 CONDITION (Seconds)	2 CONDITIONS (Seconds)	3 CONDITIONS (Seconds)
400	11	12	16	17
500	12	13	17	18
600	13	14	18	19
700	14	15	19	20
800	14	17	20	21
900	15	18	21	22
1,000	16	19	22	24
1,100	17	20	23	25
1,200	18	21	24	26
1,300	18	22	26	28
1,400	19	23	27	29
1,500	20	24	28	30
1,600	21	25	29	32
1,700	22	26	30	33
1,800	22	28	31	35
1,900	23	29	32	36
2,000	24	30	33	37
2,100	25	31	34	38
2,200	26	32	36	40
2,300	26	33	37	41
2,400	27	34	38	42
2,500	28	35	39	43

Figure A-9. Target Exposure Timing Matrix to Light-Armored/Unarmored Target.

RANGE (Meters)	TARGET CONDITIONS			
	NORMAL (Seconds)	1 CONDITION (Seconds)	2 CONDITIONS (Seconds)	3 CONDITIONS (Seconds)
400	9	10	12	16
500	10	11	12	16
600	10	11	13	17
700	10	11	13	17
800	10	11	13	18
900	10	12	14	18
1,000	11	12	14	19
1,100	11	12	14	19
1,200	11	13	15	19
1,300	11	13	15	20
1,400	11	13	15	20
1,500	12	13	15	21
1,600	12	14	15	21
1,700	12	14	16	21
1,800	12	14	16	22
1,900	13	14	16	22
2,000	13	14	16	23
2,100	13	15	16	23
2,200	13	15	17	23
2,300	14	15	17	24
2,400	14	15	17	24
2,500	14	16	17	24

Figure A-10. Target Exposure Timing Matrix to Aerial Target.

Note: Only used in conjunction with allowable variation, paragraph A-16h on page A-12.

RANGE (Meters)	TARGET CONDITIONS		
	NORMAL (Seconds)	1 CONDITION (Seconds)	2 CONDITIONS (Seconds)
300	8	10	13
400	9	10	14
500	9	11	14
600	9	11	15
700	10	12	16
800	10	12	16
900	11	13	16
1,000	11	13	16
1,100	12	14	17
1,200	12	14	17
1,300	12	15	18
1,400	12	15	19
1,500	13	16	19
1,600	13	17	20
1,700	14	17	21
1,800	14	18	21
1,900	15	18	22
2,000	15	19	23
2,100	16	19	23
2,200	16	20	24
2,300	17	20	25
2,400	17	21	25
2,500	18	21	26

Figure A-11. Target Exposure Timing Matrix to Dismounted Troop Target.

c. Aerial exposure matrixes. Aerial exposure matrixes are used to determine the crew's allowable exposure time against an aerial threat target. There are two aircraft matrixes that apply to the Linebacker, fixed- and rotary-wing. Times are based on the threat target's time to hit a Linebacker. This methodology is based on various threat weapon systems capabilities. Matrix condition times are based on the worst-case threat targets of the given category. See Figure A-12.

Mi-24 Hind		Su-25 Frogfoot	
Range	Time	Range	Time
1,000m	20 seconds	2,000m	30 seconds
1,500m	25 seconds	2,500m	35 seconds
2,000m	30 seconds	3,000m	40 seconds
2,500m	35 seconds	3,500m	45 seconds
3,000m	40 seconds	4,000m	50 seconds

Figure A-12. Exposure Matrix for Aerial Threat Targets.

A-20. Timing Standards. Timing standards for dismounted Stinger engagements are listed below. Dismounted engagements are according to ARTEP 44-177-14-Drill.

a. Dismounted engagement is as follows:

(1) Emplace/prepare for action within 10 seconds.

(2) Emplace/prepare for action in an NBC environment. Time is increased to within 15 seconds.

(3) Engage target within 10 seconds.

(a) Time *starts* when gunner announces "Contact."

(b) Time *stops* when the team chief announces "Fire."

(c) Engagement in an NBC environment time is increased to within 15 seconds.

b. Offensive/retrograde engagements. In an offensive/retrograde engagement, the firing Linebacker is exposed in the open and on the move. Target exposure (presentation) indicates threat engagement time has begun.

(1) For an offensive engagement, time *starts* when one of the following occurs:

(a) Target or simultaneous targets are fully exposed (target lock).

(b) The first round is fired from the vehicle.

(c) Local air defense warning "DYNAMITE-DYNAMITE" is given (aerial engagement only).

(2) For an offensive engagement, timing *stops* when one of the following occurs:

(a) Each target in an engagement is killed.

(b) Target exposure time has expired.

(c) The launcher superelevates.

(d) Multiple engagement targets are killed.

c. Defensive engagements. In a defensive engagement, the firing Linebacker must start in a turret-defilade position, move into a hull-defilade position to engage targets, then return to the turret-defilade position. For Stinger and 25-mm aerial engagements, movement to hull-defilade is not required if there is sufficient clearance between the launcher and berm.

(1) For a defensive engagement, time *starts* when one of the following occurs:

(a) All targets are fully exposed (target lock) and the vehicle is stopped in the hull-defilade position.

(b) The crew fires the first round.

(c) Local air defense warning "DYNAMITE-DYNAMITE" is given (aerial engagement only).

(2) For a defensive engagement, time *stops* for each individual target if, during an engagement, one of the following conditions occurs:

(a) During or after an engagement, the firing vehicle begins to move back into a turret-defilade position.

(b) The target is killed.

(c) Target exposure time has expired.

(d) The launcher superelevates (Stinger engagement).

(3) For coax area engagements, time *stops* when one IRETS target is killed. The Z pattern is used but not timed.

Note: Time resets before the firing fire unit returns to the hull-defilade position.

d. Fire unit exposure standards. If a crew is exposed to a target longer than the allotted time, the crew receives an untrained rating for the engagement. Conditions for refiring are defined below:

(1) Refires for Qualification. A section that failed to qualify must refire only the engagements in which the crew failed and only the number of engagements needed to obtain a qualified rating. The highest rating that a refiring section can obtain is a rating of "P" (needs practice).

(2) Alibis. Battalion commanders are the deciding authority on alibis. All alibi engagements will be refired. Alibis are only given for the following conditions:
- Target failures or malfunctions.
- Equipment failures that are not the result of section error.
- Unsafe conditions not related to the fire unit or section.

A-21. Critical Subtask Standards. Critical subtask standards evaluate the crew's ability to engage targets in less than normal operating conditions. If the crew does not meet all of the applicable subtask standards, the engagement task standards cannot be met. Therefore, the crew is assessed an untrained rating on the given engagement task.

a. Crew engages target(s) using the auxiliary sight.

(1) Gunner's engagement: Gunners must use the auxiliary sight to engage target(s), and the commander will not view through the commander's sight extension.

(2) Commander's engagement: Commander must use auxiliary sight to engage target(s), and the gunner will not view through the ISU.

b. Crew engages target(s) in an NBC environment.

(1) Crew members must be in MOPP 4 according to STP 21-1-SMCT.

(2) Crew members must close all vehicle hatches.

(3) All crew members must restore internal communications with each other.

(4) Commander must restore radio communications with exercise controllers.

c. Crew engages target(s) using manual controls.

(1) Gunner must place traverse drive select lever in MANUAL position.

(2) Gunner must place the gun elevation drive select lever in MANUAL position.

(3) Gunner must engage target(s) using the traverse and elevation manual hand wheels and trigger.

(4) The ELRF will not be used (ODS models).

d. Commander engages target(s) using the commander's hand station.

e. Crew does not engage friendly target(s).

(1) Crew must identify target(s) as friendly.

(2) Crew does not fire on friendly target(s).

f. Crew engages target(s) using the Stinger missile system.

(1) Gunner's hatch must be closed.

(2) Gunner places Stinger control box in ENGAGE mode and arms Stinger system.

(3) Gunner interrogates target.

(4) Gunner activates missile.

(5) Commander and gunner ensure acquisition tone is heard.

(6) Gunner uncages missile.

(7) Commander and gunner ensure missile lock tone is heard.

(8) Gunner fires the system.

A-22. Leader Subtask Standards. The leader subtask standards evaluate the Linebacker commander's ability to control the crew, fire unit, and weapon systems. Without this control, engagements will not be synchronized and efficiency will suffer.

a. The commander uses proper fire commands for each engagement.

(1) The commander must include the required six elements of a precision fire command in proper sequence during single-target defensive engagements. For ODS models, the fire unit commander must include the required five elements of a precision fire command in proper sequence during single-target defensive engagements (the range element is optional).

- Alert.
- Ammunition.
- Description.
- Range (optional ODS models).
- Execution.
- Termination.

(2) The commander must include the required five elements of a battlesight fire command in proper sequence during single-target offensive/retrograde engagements.

- Alert.
- Battlesight.
- Description.
- Execution.
- Termination.

(3) The commander must include the required 11 elements of a multiple-precision fire command in proper sequence during double-target defensive engagements (only if targets are presented simultaneously). If ELRF is used, the commander must include the required 9 elements of a multiple-

precision fire command in proper sequence during double-target defensive engagements (range elements are optional).

- Alert.
- Ammunition (for first target).
- Description (of all targets followed by repeating first target).
- Range (optional ODS).
- Execution.
- Termination (first target).
- Ammunition (for second target).
- Description (for second target).
- Range (optional ODS).
- Execution.
- Termination (final target).

(4) The commander must include the required eight elements of a multiple battlesight fire command in proper sequence during double-target offensive/retrograde engagements.

- Alert.
- Battlesight.
- Description (of all targets followed by repeating first target).
- Execution.
- Termination (first target).
- Description (second target).
- Execution.
- Termination (final target).

(5) The commander must include the required six elements of **Stinger fire command** in proper sequence for both defensive and offensive engagements.

(EXAMPLE)

ELEMENT	COMMANDER	GUNNER
Alert	"Gunner"	
Ammunition	"Missile"	
Description	"Plane/Jet/Chopper/UAV"	
Range	"Interrogate"	"Identified"
Execution	"Fire"	"On the Way"
Termination	"Cease Fire"	

Note: *If targets are not exposed simultaneously (3 seconds or more separation), the commander may use two single-target battlesight fire commands.*

b. The commander ensures the most dangerous target is engaged before the least dangerous.

c. The commander ensures the proper ammunition and weapon systems for the target selected according to unit engagement criteria.

d. The commander ensures the fire unit moves at least one vehicle length when going from a turret-defilade to a hull-defilade position and when returning.

e. The commander ensures that the gunner does not fire before receiving the command to fire.

A-23. <u>Noncritical Subtask Standards</u>. Noncritical subtask standards apply to the techniques and procedures crews should use for successful engagements. If these subtask standards are not met, the crew can still meet the engagement task standards.

a. The commander or gunner must use proper response terms in support of the leader subtask standards.

(1) Gunner confirms target by announcing, "Identified."

(2) Commander or gunner announces, "Cannot identify" when he cannot identify the target.

(3) Gunner announces, "Cannot engage" when he is inhibited from firing.

(4) Commander or gunner notifies the crew by announcing, "On the way" before he fires a weapon system.

b. The commander or gunner uses proper engagement techniques according to FM 3-23.1.

(1) Commander or gunner fires a sensing round, two if the ammunition has changed, then fires a 3- to 5-round burst (25-mm point targets).

(2) Commander or gunner fires a 15- to 20-round burst (25-mm) on high rate at aerial target(s) while adjusting on the target.

(3) Commander or gunner fires a 10- to 15-round initial burst, then fires additional 10- to 15-round bursts at point targets (coax).

(4) Commander or gunner fires a 10- to 15-round initial burst at center mass of a coax area target, then uses an effective Z pattern using a 10- to 15-round burst to suppress the remainder of the target area.

c. Driver uses proper driving techniques.

(1) Returns to the hull-defilade position after a defensive engagement (does not apply to Stinger and 25-mm aerial engagements if there is sufficient clearance between the launcher and berm).

(2) Maintains a steady platform while in an offensive/retrograde engagement.

(3) Stays on course roads as briefed in the range safety briefing.

(4) Does not cause damage to the vehicle.

(5) Does not exceed the established range speed limits.

Section III. Advanced Gunnery

A-24. <u>General</u>. Linebacker Advanced Gunnery tables are linked directly to the platoon, section, and squad operations per FM 44-43, ARTEP 44-177-15-MTP, and the combat drills in ARTEP 44-177-14-Drill. Tasks are selected and developed to support the commander's mission, based on the unit's METL. A Linebacker platoon, when supporting a task force, is primarily broken down into two sections with the platoon leader maintaining command and control to support the task force commander's intent, based on the METT-TC. Linebacker tactical tasks and gunnery tasks are integrated into the advanced tables. Linebacker sections are evaluated on their collective abilities to shoot, move, communicate, and sustain while the platoon leader maintains command and control. Tactical tasks and gunnery tasks are now integrated into the advanced tables. These tables provide the commander the opportunity to evaluate his

platoon on the ability to execute tactical and gunnery tasks. Guidelines and procedures can be used in establishing device-based gunnery exercises. Advanced gunnery tables consist of—

- Linebacker Table IXA, Section Aerial Practice 2.
- Linebacker Table XA, Section Aerial Qualification.

A-25. Exercise Development. The MTP and the advanced gunnery exercises contained in this appendix outline the standard for training and evaluation while allowing battalion commanders to tailor engagements for their particular contingency missions and training emphasis. This appendix identifies the required gunnery target presentations to support collective tasks. Units determine specific threat target types and engagement distances. Evaluation procedures and standards are in FM 3-23.1 and ARTEP 44-177-15-MTP. The following guidelines apply to both practice and qualification tables.

A-26. Requirements. BSFV/Linebacker section practice is a building block for section qualification. Both exercises are fully resourced with ammunition. However, other training resource constraints may prohibit firing section practice as prescribed. Section qualification will be conducted according to the guidelines and standards in FM 3-23.1 as follows:

- Advanced gunnery tables will incorporate a minimum of eight collective tasks. The first five tasks are mandatory.
- The S3 identifies three additional collective tasks from the Battlefield Operating System Task List (see pages A-24 and A-25) to support their METL.
- The S3 develops an operation order that supports the execution of the mission.
- The battalion master gunner coordinates all necessary resources and personnel to support the gunnery exercise.
- Although this is not a timed event, commanders may impose time standards to coincide with the unit METL.
- FAAD C^{3}I sensors will be used on all aerial engagements. Engagements will be conducted manually only when the data link is not available.

A-27. Live-Fire Requirements.

- The live-fire collective tasks are conducted on a range complex that provides the best available target and maneuver area.
- Section practice and qualification may be conducted on the same range. However, target presentations will not be in the same sequence.
- When the target array consists of more than one target, simultaneous target exposure must be used. A simultaneous target exposure occurs when all targets for the task are presented at the same time, requiring crews to use proper engagement techniques.
- Targets should represent the actual threat arrays a section can encounter on the battlefield. Sections will encounter a realistic array of single and multiple ground and aerial targets. Friendly targets may be added to emphasize the importance of fratricide training.

A-28. Minimum Standards. The following are the minimum standards each squad of the section must execute:

a. Linebacker Table XA, each squad of the section must execute as a minimum—

(1) Three SVML engagements.

(2) One 25-mm aerial engagement.

(3) One dismounted Stinger engagement (MANPADS).

(4) Five 25-mm ground engagements.

(5) Three 7.62-mm coaxial engagements.

(6) One ground engagement using the auxiliary sight.

(7) One engagement under NBC conditions.

b. Targetry.

(1) Ground targets will be constructed per TC 25-8. Targets should be equipped with signature devices, such as a Hoffman, to simulate enemy fire. Targets should also be equipped with thermal signatures.

(2) Aerial targets will consist of the Su-25 Frogfoot and the Mi-24 Hind-D auto-gyro remotely piloted vehicle target systems (RPVTS). Typical speeds for rotary-wing aircraft are 45 to 70 miles per hour. The fixed-wing aircraft will be presented at speeds of 45 to 100 miles per hour.

c. The following requirements support target engagements:

(1) One-fifth scale targets must be equipped with PGS retroreflectors and smoke for device gunnery.

(2) Targets should be equipped with infrared source and a miss distance indicator (MDI) scoring system for live fire of both Stinger and 25-mm aerial engagements.

(3) All 25-mm ground targets will be placed a minimum of 500 meters to a maximum of 1,600 meters.

(4) Coax targets will be placed a minimum of 300 meters to a maximum of 700 meters.

(5) Aerial targets will be placed a minimum of 1,000 meters to a maximum of 5,000 meters.

d. Ammunition. Ammunition is allocated according to DA Pamphlet 350-38. Section practice tables are fully resourced for Linebackers. The following allocation is per vehicle, per table:

LINEBACKER TABLES IXA AND XA	
Ammunition Type	**Quantity**
TPT	60 rounds
7.62mm	200 rounds
ATWESS	1

A-29. Vehicle Exposure Time. Target exposure times are according to the standards in FM 3-23.1.

A-30. Timing Standards. The timing standards for dismounted Stinger engagements are according to ARTEP 44-177-14-Drill.

A-31. Evaluation Standards. Tactical tasks can be conducted at a nearby training area and combined with the gunnery portion if range areas are not extensive enough to allow tactical maneuvering. Commanders should integrate the tactical and gunnery tasks to maximize the training effectiveness of these tables.

a. Each section of the platoon must achieve, as a minimum, 420 points on collective tasks.

b. Each section of the platoon must achieve, as a minimum, 280 points on gunnery tasks (aerial and ground targets combined).

A-32. <u>Scoring Procedures</u>. Each table uses a 1,000-point system for the areas of tactics and gunnery. The breakdown of scoring is as follows:

a. Tactics is worth 600 points. Evaluators will use the performance checklist in ARTEP 44-177-15-MTP.

b. Gunnery is worth 400 points. Aerial and ground targets will be combined and averaged. The final numbers are used to determine a total score for that section.

c. Scores for both sections of the platoon (tactics and gunnery) will be combined and averaged for one overall rating for the platoon. Point formula for total cumulative points is as follows:

(EXAMPLE ONLY)		
Collective Tasks Attempted	**Collective Tasks Passed**	**Score**
10	8	480 out of 600 points
Aerial/Ground Targets Presented	**Aerial/Ground Targets Engaged**	**Score**
24	20	333 out of 400 points
Total score for section (combining tactical and gunnery):		480 + 333 = 813

d. Platoon Rating. To be considered qualified after combining and averaging both section scores, the platoon must have a combined score of 700 on tactics and gunnery. Ratings are as follows:

- Distinguished: combined score of at least 900 points.
- Superior**:** combined score of 899 to 700 points.
- Qualified: combined score of 799 to 700 points.
- Unqualified**:** combined score of 699 or less, or failure to achieve a minimum of 420 points on tactics or failure to achieve a minimum of 280 points on gunnery.

A-33. The following training and evaluation outlines (see ARTEP 44-177-15-MTP) are collective tasks that the gunnery tables will incorporate.

Mandatory Collective Tasks:	**Number**
PERFORM RISK MANAGEMENT PROCEDURES	71-2-C326.44-L30H
CONDUCT LOGPAC ACTIVITIES	44-3-2182.44-L30H
ESTABLISH UNIT DEFENSE	07-3-C219-44-L30H
RESPOND TO A CHEMICAL ATTACK	03-3-C203-44-L30H
CONDUCT AIR DEFENSE OPERATIONS	44-2-7008.44-L30H
Additional Collective Tasks:	
DEVELOP IPB	44-4-2261.44-L30H
HANDLE ENEMY PRISONERS OF WAR	19-3-3106.44-L30H
CONDUCT RSOP	44-1-9046.44-L30H
CONDUCT A CONVOY	55-2-C324.44-L30H
ESTABLISH THE PLATOON CP	44-4-2160.44-L30H
CONDUCT SECURITY OF A COMMAND POST	19-3-2205.44-L30H
CROSS A CHEMICALLY CONTAMINATED AREA	03-3-C226.44-L30H
PREPARE FOR OPERATIONS UNDER NBC CONDITIONS	03-3-C201.44-L30H
USE PASSIVE AIR DEFENSE MEASURES	44-1-C220.44-L30H
REACT TO SMOKE OPERATIONS	03-3-C209.44-L30H

Additional collective tasks (continued)

MAINTAIN OPERATIONS SECURITY	71-3-C232.44-L30H
CONDUCT OPERATIONAL DECONTAMINATION	03-3-C224.44-L30H
TAKE ACTIVE COMBINED ARMS AD MEASURES AGAINST HOSTILE AERIAL PLATFORMS	44-1-C221.44-L30H
PERFORM FIELD SANITATION FUNCTIONS	08-2-R315.44-L30H
PERFORM UNIT LEVEL MAINTENANCE	43-2-C322.44-L30H
TREAT CASUALTIES	08-2-0003.44-L30H
CONDUCT BATTLEFIELD STRESS REDUCTION AND PREVENTION PROCEDURES	08-2-R303.44-L30H
PROVIDE COMMAND AND CONTROL	44-3-2187.44-L30H
CONDUCT TROOP-LEADING PROCEDURES	44-2-2294.44-L30H
PLAN AIR DEFENSE	44-1-3534.44-L30H
ESTABLISH LIAISON TEAM	44-5-2190.44-L30H
SUSTAIN AIR DEFENSE OPERATIONS	44-1-1045.44-L30H

APPENDIX B

BSFV Gunnery Tables

Section I. Introduction

B-1. Purpose. The BSFV gunnery program is designed to develop and test the proficiency of the individual, squad, and platoon in gunnery techniques. It prepares individuals, squads, and platoons to execute their mission in combat. It standardizes BSFV training and gunnery skill qualifications through performance-oriented, sequentially progressive, realistic, and challenging training. The BSFV gunnery strategy is a consolidated comprehensive gunnery program reference for the BSFV squad. The BSFV squad should cross-train using Tables I and II as outlined in the BSFV gunnery training strategy (Figures B-2 and B-3). The BSFV squad training is outlined in each table of this training program.

B-2. General. The gunnery tables provide mandatory qualification standards and training strategies for the BSFV squads. Tables focus on preparing the individual to perform as part of a squad to accomplish the unit mission. Standards outlined in the MTPs and STPs are the minimum acceptable levels of performance.

a. The BSFV squad (one fire unit) consists of a four-man, MOS 14R, BSFV crew (a gunner, assistant gunner, driver, and squad leader). The platoon is comprised of a platoon headquarters and four fire units.

b. The training strategy is based on the building-block approach in which individuals are trained in basic skills before being integrated into squads. Squads train progressively from basic tasks through integration as platoon, battery, battalion, or regimental elements performing a wartime mission. Unit commanders have flexibility in applying these strategies in support of their METL. They may integrate command and control, maneuver, and survival and sustainment skills into the training as they see fit.

B-3. Responsibilities. Commanders are responsible for conducting training and gunner qualification per established CATS and MTPs. Commanders, however, have the latitude to adjust event frequency based on local operational requirements, unit METL, contingency directives, and command guidance.

Section II. Preliminary Gunnery

B-4. Preliminary Gunnery. Preliminary crew gunnery training develops individual crew member skills needed to operate the vehicle and turret weapon systems. It is conducted year-round at the home station and consists of classroom instruction and hands-on, performance-oriented training. Performance of this training is mandatory for all newly assigned crew members and will be completed within 90 days of arrival at the unit. Crew members failing to meet established standards (FM 3-23.1) will train and retest until standards are met before progressing to the next performance level. As a minimum, the following training will be conducted:

a. Classroom Subjects (FM 3-23-1).

(1) Weapons systems capabilities.

(2) Ammunition capabilities.

(3) Engagement process.

b. Unit conduct of fire trainer (UCOFT).

c. Boresight procedures.

    d. Zero procedures.

    e. PGS training.

    f. PMCS.

    g. Performance-oriented training.

    h. BGST training.

    i. STPT (DA Pamphlet 350-38).

    j. Crew/battle (44-177-14-Drill).

    k. SHTU/HTU (STP 44-14R14-SM-TG).

    l. PLGR/EPLRS training (STP 44-14R14-SM-TG).

    m. SINCGARS (STP 44-14R14-SM-TG).

    n. MANPADS training (standards per tables in Figure B-1).

				FREQUENCY		STANDARDS
TABLE	**EVENT**	**LEVEL**	**TADSS EQUIPMENT**	**TRC A**	**TRC B**	
I	Weapons Proficiency Stinger, Critical Checks RMP	Crew Member	FHT, STPT	6	3	2
II	VACR, IFF, SHTU, HTU, PLGR, ANCD	Crew Member	ANCD, PLGR, CD-ROM Version 3, IFF Systems	6	3	2
III	MANPADS Certification	Crew Member	FHT, STPT, CD-ROM Version 3, ANCD, PLGR, IFF Subsystems	6	3	2
IV	Single/Multiple Target Tracking Procedures	Crew	FHT, TPT, IFF Subsystems	3	2	1,2
V	Single/Multiple Target Engagement Procedures	Crew	FHT, TPT, IFF Subsystems	3	2	1,2
VI	Battle/Crew Drills	Crew	FHT, TPT, IFF Subsystems	3	2	1,2
VII	Tables I–VI, Crew Prequalification	Crew	FHT, TPT, IFF Subsystems	2	2	1,2

MANPADS TRAINING

Notes:
According to standards in ARTEP 44-117-11-Drill.
According to standards in STP 44-14S14-SM-TG.

Figure B-1. MANPADS/Stinger Crew Tables.

B-5. <u>Crew Device Gunnery.</u> Crew device gunnery consists of Bradley Table I, Crew Defense, and Bradley Table II, Bradley Crew Proficiency Course. These tables train crews to engage stationary and moving targets using all weapon systems from a stationary and moving BSFV, during the day and night. Crews are required to engage targets using the manual/power controls, gunner and commander hand stations, integrated sight unit and auxiliary sight. Bradley Table II (BCPC) is a prerequisite for full-caliber live fire. All crews must perform Bradley Table II to standard within 3 months of live fire**.**

(1) Bradley Table I, Crew Defense. The crew defense table (Figure B-2) allows the driver to be integrated into the crew's coordination by moving the vehicle into and out of firing positions during day and night engagements. This table trains crews to engage targets with training devices and introduces them to training in a gunnery environment during day and night. Crew defense consists of ten engagements. These ten engagements are conducted during the day and conducted again at night.

BSFV	Conditions	Target Type/Posture
1. Stationary	Gunner, Auxiliary Sight *	AP Stationary (Frontal)
2. Stationary	Gunner, ISU, Manual Mode	HE Stationary (Frontal)
3. Stationary	Commander, CSE	AP Stationary (Frontal) Coax Point
4. Stationary	Gunner, ISU	AP Moving (Flank) Coax
5. Stationary	Gunner, ISU, NBC	AP Moving (Flank) AP Stationary (Frontal)
6. Stationary	Gunner, ISU	TOW Moving HE Stationary (Flank)
7. Stationary	Gunner, ISU	Aerial
8. Stationary	Commander, CSE, NBC	TOW Stationary
9. Stationary	Gunner, ISU	HE Area
10. Stationary	Commander, CSE	AP Moving (Flank) HE Stationary (Frontal)
* At night, ISU is used.		

Figure B-2. Bradley Table I, Crew Defense.

TASK: Engage and destroy stationary and moving targets from a defensive position during the day and night.

CONDITIONS: Given a PGS or TSV equipped BSFV in a defensive position with suitable engagement area with targets during the day and night.

STANDARDS: During the day and the night engagements, the crew must achieve a minimum of "P" rating on 7 of 10 engagements with 1 of the 7 being NBC engagement.

(2) Bradley Table II, Bradley Crew Proficiency Course. The BCPC introduces crews to moving BSFV engagements. This table (Figure B-3) develops the driving skills of the driver, while the crew engages targets on-the-move. Crews engage moving and stationary targets from a moving and stationary BSFV. BCPC consists of 6-day engagements and 6-night engagements.

DAYTIME ENGAGEMENTS		
BSFV	**Conditions**	**Target Type/Posture**
Stationary	Gunner, ISU	TOW Moving
Stationary	Gunner, ISU, Manual Mode	HE Stationary (Frontal)
Moving	Gunner, ISU	AP Moving (Flank) HE Stationary (Frontal)
Stationary	Gunner, Auxiliary Sight	HE Stationary (Frontal) Coax Point
Moving	Commander, CSE	AP Stationary (Frontal) Coax Point
Stationary	Gunner, ISU, NBC	AP Moving (Flank) Coax Area
Stationary	Gunner, ISU	TOW Stationary
NIGHTTIME ENGAGEMENTS		
BSFV	**Conditions**	**Target Type/Posture**
Stationary	Gunner, ISU	AP Stationary (Frontal) Coax Area
Moving	Gunner, ISU	AP Moving (Flank) HE Stationary (Frontal)
Stationary	Gunner, ISU	HE Moving (Flank) Coax Area
Moving	Commander, CSE	HE Stationary (Frontal)
Stationary	Gunner, ISU, NBC	AP Stationary (Frontal) Coax Point

Figure B-3. Bradley Table II, Bradley Crew Proficiency Course.

TASK: Engage and destroy stationary and moving targets from a stationary and moving BSFV during day and night.

CONDITIONS: Given a PGS or TSV equipped BSFV, suitable engagement area with targets during the day and night.

STANDARDS: The crew must achieve a minimum of a "P" rating on 9 of the 12 engagements with 1 of the 9 being an NBC engagement, 1 of the 9 being a TOW engagement, and 2 of the 9 being night engagements.

B-6. Section Device Gunnery Tables. BSFV device gunnery trains the collective skills of crews and sections. Device gunnery consists of Bradley Table III, BSFV Section Exercise, and Bradley Table IV, BSFV Section Practice 1. The tables are conducted using PGS or TSV. All evaluations are linked directly to FM 44-43, ARTEP 44-177-15-MTP, and the combat drills in ARTEP 44-177-14-DRILL. Units will develop scenarios to support their respective METL and training emphasis. Table development and standards are linked directly to the Advanced Gunnery chapter of FM 3-23-1.

B-7. Bradley Crew Live-Fire Gunnery Tables. Bradley Crew live-fire gunnery trains and evaluates a single vehicle's ability to engage stationary and moving, single and multiple targets. Training is

conducted during the day and night from a stationary and moving vehicle using full-caliber ammunition. These tables train and evaluate single vehicle crew proficiency. Crew gunnery consists of the following tables:

- Bradley Table V, Crew Practice 1.
- Bradley Table VI, Crew Practice 2.
- Bradley Table VII, Crew Practice 3.
- Bradley Table VIII, Crew Qualification.

B-8. Bradley Table (BT) V, Crew Practice 1. BT V, Crew Practice 1, (Figure B-4) introduces crews to a live-fire gunnery environment. This table uses the 7.62-mm coax machine gun in the single-shot mode, as a subcaliber device replicating main gun engagement. Due to the limited engagement range of the coax, half-scale targets are placed at half the engagement distance; for example, for a 1,200-meter engagement requirement, a half-scale target is placed at 600 meters. Gunners must use the actual straight-line distances when engaging targets (600 meters for a replicated 1,200-meter target).

DAYTIME ENGAGEMENTS		
BSFV	**Conditions**	**Target Type/Posture**
Defensive	Gunner, ISU, Manual Mode	HE Stationary (Frontal)
Offensive/Retrograde	Gunner, ISU	HE Stationary (Frontal) AP Moving (Flank)
Defensive	Gunner, Auxiliary Sight	HE Stationary (Frontal)
Offensive/Retrograde	Commander, CSE	HE Stationary (Frontal) AP Moving (Flank)
Defensive	Gunner, ISU, NBC	AP Moving (Flank)
NIGHTTIME ENGAGEMENTS		
BSFV	**Conditions**	**Target Type/Posture**
Defensive	Gunner, ISU	AP Stationary (Frontal) HE Stationary (Frontal)
Offensive/Retrograde	Gunner, ISU, NBC	AP Moving (Flank)
Defensive	Commander, CSE	AP Stationary (Frontal) HE Stationary (Frontal)
Offensive/Retrograde	Commander, CSE	AP Moving (Flank) HE Stationary (Frontal)
Defensive	Gunner, ISU	AP Moving (Flank) HE Stationary (Frontal)
Ammunition requirements: • 7.62-mm tracer • 160 rounds		

Figure B-4. Bradley Table V, Crew Practice 1.

TASK: Engage and destroy stationary and moving targets from a stationary and moving BSFV during the day and night.

CONDITIONS: Given a BSFV, using the coax machine gun with a single-shot adapter as a subcaliber device, authorized allocation of ammunition, suitable live-fire range with targets, during the day and night.

STANDARDS: The crew must achieve a minimum of a "P" rating on 7 of 10 engagements with 1 of the 7 being an NBC engagement and 2 of the 7 being night engagements.

B-9. Bradley Table VI, Crew Practice 2. BT VI, Crew Practice 2, (Figure B-5) is the first table that requires the crew to fire with full-caliber ammunition using the 25-mm gun and the 7.62-mm coax burst techniques. Engagements are fired from a baseline position. BT VI uses combat ranges to train BSFV crew 25-mm and 7.62-mm coax engagement techniques during daylight and darkness against stationary and moving targets and against point and area targets.

DAYTIME ENGAGEMENTS			
BSFV	**Conditions**	**Target Type/Posture**	**Ammunition**
Stationary	Gunner, ISU, Manual Mode	AP Stationary (Frontal)	8 rounds AP
Stationary	Gunner, Auxiliary Sight	AP Stationary (Frontal)	8 rounds AP
Stationary	Commander, CSE	AP Stationary (Frontal) Coax Point	8 rounds AP 50 rounds 7.62-mm
Stationary	Gunner, ISU, NBC	AP Moving (Flank) Coax Area	8 rounds AP 100 rounds 7.62-mm
NIGHTTIME ENGAGEMENTS			
BSFV	**Conditions**	**Target Type/Posture**	**Ammunition**
Stationary	Gunner, ISU	HE Stationary (Frontal) Coax Area	8 rounds HE 100 rounds 7.62 mm
Stationary	Commander, CSE	HE Moving (Flank)	8 rounds HE
Stationary	Gunner, ISU, NBC	HE Stationary (Frontal) Coax Point	8 rounds HE 50 rounds 7.62-mm

Ammunition Requirements:
   • TPDS-T   32 rounds
   • TP-T   24 rounds
   • 7.62mm 300 rounds			

Figure B-5. Bradley Table VI, Crew Practice 2.

TASK: Engage and destroy stationary and moving targets from a stationary BSFV during the day and night.

CONDITIONS: Given a BSFV authorized allocation of ammunition, suitable live-fire range with targets during the day and night.

STANDARDS: The crew must achieve a minimum of a "P" rating on 5 of 7 engagements with 1 of the 5 being an NBC engagement and 1 of the 5 being a night engagement.

B-10. Bradley Table VII, Crew Practice 3. BT VII, Crew Practice 3, (Figure B-6) is the first table that requires the BSFV crew to conduct offensive engagements with full-caliber ammunition at combat ranges. BT VII trains the BSFV crew to engage moving and stationary targets during daylight and darkness from a stationary and a moving firing vehicle.

DAYTIME ENGAGEMENTS			
BSFV	**Conditions**	**Target Type/Posture**	**Ammunition**
Defensive	Gunner, Auxiliary Sight	AP Moving (Flank) AP Stationary (Frontal)	8 rounds AP 8 rounds AP
Offensive/ Retrograde	Gunner, ISU	HE Stationary Coax Area	8 rounds HE 100 rounds 7.62-mm
Defensive	Commander, CSE NBC	HE Stationary (Frontal) Coax Point	8 rounds HE 50 rounds 7.62-mm
Offensive/ Retrograde	Gunner, ISU	AP Moving (Flank) HE Stationary	8 rounds AP 8 rounds HE
NIGHTTIME ENGAGEMENTS			
BSFV	**Conditions**	**Target Type/Posture**	**Ammunition**
Defensive	Gunner, ISU	AP Moving (Flank) Coax Point	8 rounds AP
Offensive/ Retrograde	Commander, CSE	AP Stationary (Frontal)	8 rounds AP 50 rounds 7.62-mm
Defensive	Gunner, ISU, NBC	AP Stationary (Frontal) Coax Area	8 rounds AP 100 rounds 7.62-mm
Offensive/ Retrograde	Gunner, ISU	AP Moving (Flank) Coax Area	8 rounds AP 100 rounds 7.62-mm

Ammunition Requirements:
   • TPDS-T   56 rounds
   • TP-T   24 rounds
   • 7.62-mm 400 rounds			

Figure B-6. Bradley Table VII, Crew Practice 3.

TASK: Engage and destroy stationary and moving targets from a stationary and moving BSFV during the day and night.

CONDITIONS: Given a BSFV, authorized allocation of ammunition, suitable live-fire range with targets during the day and night.

STANDARDS: The crew must achieve a minimum of a "P" rating on 6 of 8 engagements with 1 of the 6 being an NBC engagement and 2 of the 6 being night engagements.

B-11. <u>Bradley Table VIII, Crew Qualification</u>. BT VIII, Crew Qualification, (Figure B-7) is a single-vehicle table. This table evaluates the crew's ability to acquire and engage targets during various firing conditions. Units are encouraged to fire on ranges that can accommodate dual scenarios. However, firing vehicles will not assist each other acquiring targets. Firing crew members will not conduct inspections of range targetry during crew qualification. Crews may receive a range orientation of the downrange area and limit markers, but no targets will be presented. The range briefing will not contain task sequences or detail the location of particular tasks that will be fired. If BT VIII is conducted on the same range as BT VII, Table VIII range scenarios (target array) will not be the same as BT VII.

DAYTIME ENGAGEMENTS			
BSFV	**Conditions**	**Target Type/Posture**	**Ammunition**
Defensive	Gunner, ISU, Manual Mode (Swing Task)	HE Stationary (Frontal)	8 rounds HE
Offensive/Retrograde	Gunner, ISU (Swing Task)	AP Moving (Flank) HE Stationary (Frontal)	8 rounds AP 8 rounds HE
Defensive	Gunner, Auxiliary Sight	HE Stationary (Frontal) Coax Point	8 rounds HE 50 rounds 7.62-mm
Offensive/Retrograde	Commander, CSE	AP Stationary (Frontal) Coax Point	8 rounds AP 50 rounds 7.62-mm
Defensive	Gunner, ISU, NBC	AP Stationary (Frontal) Coax Area	8 rounds AP 50 rounds 7.62-mm
NIGHTTIME ENGAGEMENTS			
BSFV	**Conditions**	**Target Type/Posture**	**Ammunition**
Defensive	Gunner, ISU	AP Stationary (Frontal) Coax Area	8 rounds AP 50 rounds 7.62-mm
Offensive/Retrograde	Gunner, ISU, NBC	AP Moving (Flank) HE Stationary (Frontal)	8 rounds AP 8 rounds HE
Defensive	Gunner, ISU	HE Moving (Flank) Coax Area	8 rounds HE 100 rounds 7.62-mm
Offensive/Retrograde	Commander, CSE	HE Stationary (Frontal)	8 rounds HE
Defensive	Gunner, ISU	AP Stationary (Frontal) Coax Point	8 rounds AP 50 rounds 7.62-mm
Ammunition Requirements: • TPDS-T 48 rounds • TP-T 48 rounds • 7.62-mm 450 rounds			

Figure B-7. Bradley Table VIII, Crew Qualification.

TASK: Engage and destroy stationary and moving targets from a stationary and moving BSFV during the day and night.

CONDITIONS: Given a BSFV, authorized allocation of ammunition, suitable live-fire range with targets during the day and night.

STANDARDS: The crew must achieve a distinguished, superior, or qualified rating.

Distinguished = Trained (T) on at least 9 of 10 total engagements.

Superior = Trained (T) on at least 8 of 10 total engagements with 1 of the 8 being an NBC engagement and 2 of the 8 being night engagements.

Qualified = Trained (T) or needs practice (P) on 7 of 10 engagements with 1 of the 7 being an NBC engagement and 2 of the 7 being night engagements.

Unqualified = Untrained (U) on 4 or more engagements or "U" on both NBC engagement, or "T" or "P" on only 1 night engagement.

Section III. Advanced Gunnery Tables

B-12. Advanced gunnery tables are linked directly to the platoon and squad operations in accordance with FM 44-43, ARTEP 44-177-15-MTP, and the combat drills in ARTEP 44-177-14-Drill. Each task has been selected and developed to support the commander and is based on the unit's METL. Gunnery events progress from preliminary gunnery to device gunnery to live-fire gunnery. To this point, all training revolves around the squad and is in a non-tactical environment. Tactical tasks and gunnery tasks are now integrated into the advanced tables. These tables provide the commander the opportunity to evaluate his platoon on their ability to execute tactical and gunnery tasks. Platoons are evaluated on their collective ability to shoot, move, and communicate. Commanders should make use of Air Defense sensor systems to assist crews in the acquisition and identification of friendly and hostile aerial targets. Guidelines and procedures in this appendix can be used in establishing device-based gunnery exercises. Advanced gunnery tables consist of—

- Bradley Table IXA, Section Aerial Practice 2
- Bradley Table XA, Section Aerial Qualification

B-13. Exercise Development. The MTP and the advanced gunnery exercises contained in this appendix outline the standard for training and evaluation while allowing battalion commanders to tailor engagements for their particular contingency missions and training emphasis. This appendix identifies the required gunnery target presentations to support collective tasks. Units determine specific threat target types and engagement distances. Evaluation procedures and standards are in FM 3-23.1 and ARTEP 44-177-15-MTP. The following guidelines apply to both practice and qualification tables.

B-14. Requirements. BSFV/Linebacker section practice is a building block for section qualification. Both exercises are fully resourced with ammunition. Other training resource constraints, however, may prohibit firing section practice as prescribed. Section qualification will be conducted according to the guidelines and standards in FM 3-23.1.

- Advanced gunnery tables will incorporate a minimum of eight collective tasks. The first five tasks are mandatory.
- The S3 identifies three additional collective tasks from the Battlefield Operating System Task List to support the unit METL.
- The S3 develops an operations order that supports the execution of the mission.
- The battalion master gunner coordinates all necessary resources and personnel to support the gunnery exercise.
- Although this is not a timed event, commanders may impose time standards to coincide with the unit METL.
- The platoon is organized into two maneuver sections. One section is composed of three vehicles and the other section is composed of two vehicles. The platoon leader maintains command and control over one section, and the senior section leader maintains command and control over the other section. Tactics and gunnery scores for each section are combined and averaged into one overall rating for the platoon.
- FAAD C^3I sensors will be used on all aerial engagements. Engagements will be conducted manually only when the data link is not available.

B-15. Live-Fire Requirements.

- The live-fire collective tasks are conducted on a range complex that provides the best available target and maneuver area.
- Section practice and qualification may be conducted on the same range. However, target presentations will not be in the same sequence.
- When the target array consists of more than one target, simultaneous target exposure must be used. A simultaneous target exposure occurs when all targets for the task are presented at the same time, requiring crews to use proper engagement techniques.

- Targets should represent the actual threat arrays a section can encounter on the battlefield. Sections will encounter a realistic array of single and multiple ground and aerial targets. Friendly targets may be added to emphasize the importance of fratricide training.

B-16. The following are the minimum standards each squad of the section must execute.

a. Bradley Table XA, each squad of the section must execute at a minimum—

(1) Three dismounted Stinger engagements.

(2) Two 25-mm aerial engagements.

(3) One 7.62-mm coaxial engagement.

(4) One ground engagement conducted using the auxiliary sight.

(5) Five 25-mm ground engagements.

(6) One engagement conducted under NBC conditions.

b. Targetry.

(1) Ground targets will be constructed according to TC 25-8. Targets should be equipped with signature devices, such as a Hoffman, to simulate enemy fire. Targets should also be equipped with thermal signatures.

(2) Aerial targets will consist of the Su-25 Frogfoot and the Mi-24 Hind-D autogyro remotely piloted vehicle target systems (RPVTS). Typical speeds for rotary-wing aircraft are 45-70 mph. The fixed-winged aircraft will be presented at speeds of 45 to100 mph.

c. The following requirements support target engagements:

(1) One-fifth scale targets must be equipped with PGS retro-reflectors and smoke for device gunnery.

(2) Targets should be equipped with infrared (IR) source and miss distance indicator (MDI) scoring system for live-fire of both Stinger and 25-mm aerial engagements.

(3) 25-mm targets will be placed a minimum of 500 meters to a maximum of 1,600 meters.

(4) Coax targets will be placed a minimum of 300 meters to a maximum of 700 meters.

(5) Aerial targets will be placed a minimum of 1,000 meters to a maximum of 5,000 meters.

d. Ammunition. Ammunition is allocated according to DA Pamphlet 350-38. Section practice tables are fully resourced for Bradley Stinger Fighting Vehicles and Linebackers. The following allocation is per vehicle (see Figure B-8).

Ammunition Type	Quantity
TPT	80 rounds
7.62-mm	50 rounds
ATWESS	3

Figure B-8. Bradley Table IXA and XA.

B-17. Vehicle Exposure Time. Target exposure times are in accordance with standards in FM 3-23.1.

B-18. Timing Standards. The timing standards for dismounted Stinger engagements are in accordance with ARTEP 44-177-14-Drill.

B-19. Evaluation Standards. Tactical tasks can be conducted at a nearby training area and combined with the gunnery portion if range areas are not extensive enough to allow tactical maneuvering. Commanders should integrate the tactical and gunnery tasks to maximize the training effectiveness of these tables.

    a. Each section of the platoon must achieve as a minimum 420 points on collective tasks.

    b. Each section of the platoon must achieve as a minimum 280 points on gunnery tasks (aerial and ground targets combined).

B-20. Scoring Procedures. Each table uses a 1,000-point system for the areas of tactics and gunnery. The breakdown of scoring is as follows:

    a. Tactics is worth 600 points. Evaluators will use the performance checklist in ARTEP 44-177-15-MTP.

    b. Gunnery is worth 400 points. Aerial and ground targets will be combined and averaged. The final numbers will be used to determine a total score for that section.

    c. Scores for both sections of the platoon (tactics and gunnery) will be combined and averaged for one overall rating for the platoon. Figure B-9 shows an example of a point formula for total cumulative points.

EXAMPLE ONLY		
Collective Tasks Attempted	Collective Tasks Passed Score	Score
10	8	480 out of 600 points
Aerial/Ground Targets Presented	Aerial/Ground Targets Engaged	Score
24	20	333 out of 400 points
Note: Total score for section (combining tactical and gunnery): 480 + 333 = 813		

Figure B-9. Point Formula Example.

    d. Platoon Rating. To be considered qualified after combining and averaging both section scores, the platoon must have a combined score of 700 on tactics and gunnery. Ratings are as follows:

- **Distinguished** - combined score of at least 900 points.

- **Superior** - combined score of 899 - 700 points.

- **Qualified** - combined score of 799 - 700 points.

- **Unqualified** - combined score of 699 or less, or failure to achieve a minimum of 420 points on tactics or 280 points on gunnery.

B-21. The following training and evaluation outlines (see ARTEP 44-177-15-MTP) are collective tasks that the gunnery tables will incorporate:

Mandatory Collective Tasks	Number
PERFORM RISK MANAGEMENT PROCEDURES	71-2-C326.44-L30H
ESTABLISH UNIT DEFENSE	07-3-C219.44-L30H
RESPOND TO A CHEMICAL ATTACK	03-3-C203.44-L30H
SUSTAIN AIR DEFENSE OPERATIONS	44-1-1045.44-L30H
CONDUCT LOGPAC ACTIVITIES	44-3-2182.44-L30H
Additional Collective Tasks	**Number**
DEVELOP EARLY WARNING PLAN	44-4-5102.44-L30H
DEVELOP IPB	44-4-2261.44-L30H
CONDUCT RSOP	44-1-9046.44-L30H
CONDUCT A CONVOY	55-2-C324.44-L30H
ESTABLISH THE PLATOON CP	44-4-2160.44-L30H
CONDUCT THOROUGH DECONTAMINATION OPERATIONS	03-2-C312.44-L30H
CONDUCT SECURITY OF A COMMAND POST	19-3-2205.44-L30H
USE PASSIVE AIR DEFENSE MEASURES	44-1-C220.44-L30H
REACT TO SMOKE OPERATIONS	03-3-C209.44-L30H
MAINTAIN OPERATIONS SECURITY	71-3-C232.44-L30H
CONDUCT OPERATIONAL DECONTAMINATION	03-3-C203.44-L30H
CONDUCT AIR DEFENSE OPERATIONS	44-2-7008.44-L30H
TAKE ACTIVE COMBINED ARMS AD MEASURES AGAINST HOST AERIAL PLATFORMS	44-1-C221.44-L30H
TREAT CASUALTIES	08-2-0003.44-L30H
MAINTAIN PLATOON STRENGTH	12-3-C216.44-L30H
MAINTAIN UNIT MAINTENANCE OPERATIONS	43-2-C323.44-L30H
PERFORM FIELD SANITATION FUNCTIONS	08-2-R315.44-L30H
CONDUCT BATTLEFIELD STRESS REDUCTION AND PREVENTION PROCEDURES	08-2-R303.44-L30H
ESTABLISH AND OPERATE A SINGLE-CHANNEL VOICE RADIO NET	11-2-C302.44-L30H
OPERATE/MAINTAIN/TROUBLESHOOT PLATFORM WITH APPLIQUÉ, PRECISION LIGHTWEIGHT GPS RECEIVED (PLGR) AND SINCGARS SYSTEM IMPROVEMENT PROGRAM (SIP)	11-5-0201.44-L30H
INSTALL/OPERATE/MAINTAIN A SINGLE CHANNEL GROUND AND AIRBORNE RADIO SYSTEM (SINCGARS) FREQUENCY HOPPING (FH) NET	11-5-1102.44-L30H
INSTALL/OPERATE/MAINTAIN A SINGLE CHANNEL VOICE RADIO STATION (FM) NET	11-5-0102.44-L30H
PROVIDE COMMAND AND CONTROL	44-1-2187.44-L30H
DEVELOP THE ADA ESTIMATE AND ANNEX	44-4-5139.44-L30H
PLAN AIR DEFENSE	44-1-3534.44-L30H

APPENDIX C

Stinger Gunnery Tables

C-1. Purpose. The purpose of the Stinger gunnery tables is to develop and test the proficiency of the individual, team, section, and platoon in gunnery techniques. They prepare individuals, teams, sections, and platoons to execute their mission in combat. They also standardize Stinger gunnery training and gunnery skill qualifications through performance-oriented, sequential, progressive, realistic, and challenging training.

C-2. General. The gunnery tables provide mandatory qualification standards and training strategies for the Stinger system. These tables focus on preparing the individual to perform as part of a team to accomplish the unit mission. Standards outlined in the MTPs and/or STPs are the minimum acceptable levels of performance.

 a. The Stinger team consists of a team leader, gunner, and one vehicle. The Stinger section (five Stinger vehicles) consists of a section sergeant, five team leaders, and five gunners. A platoon is comprised of two sections (10 Stinger vehicles).

 b. The gunnery strategy is based on the building-block approach, in which individuals are trained in basic skills before being integrated into teams. Teams train progressively from basic tasks through integration as section, platoon, battery, battalion, or regimental elements performing their wartime mission. Unit commanders have flexibility in applying these strategies and may integrate command and control, maneuver, and survival and sustainment skills into the training as they see fit.

C-3. Responsibilities. Commanders are responsible for conducting training and gunner qualification per established drills, MTPs, and STPs. However, commanders have the latitude to adjust event frequency based on local operational requirements, unit METL, contingency directives, and command guidance.

C-4. Basic Gunnery Tables. Train individuals to perform as crew members to effectively conduct drills in a controlled environment. Basic gunnery skills include Tables I through III (Figure C-1). Performance of these tables is mandatory for all crew members and will be completed within 90 days of arrival at the unit. Crew members failing to meet established standards will train and retest until standards are met before progressing to the next performance level. Tables I and II will be performed, as required, for sustainment of skills once Table III has been validated.

 a. Table I, Stinger Weapon System Components/PMCS/Functions and Platoon/Section/Team Operations: Develops a working understanding of the Stinger weapon system. Trains the individual to identify the components of the Stinger weapon system and the Stinger 13 critical checks, and to understand the function of Stinger components and PMCS performed at the operator level. Trains the individual on knowledge of platoon, section, and team operations.

- Standard: Crew members will correctly identify and state the function of the Stinger weapon system, the Stinger 13 critical checks, and perform PMCS, per TM 9-1425-429-12. The crew member must achieve a minimum score of 80 percent on the platoon, section, and team operations.

 b. Table II, VACR/IFF/SHTU/HTU/PLGR/ANCD/IFF Operations: Trains the crew member to recognize enemy and friendly aircraft. The crew member also receives instruction on SHTU/HTU/PLGR/ANCD operations, charging the IFF programmer batteries, and IFF code loading procedures.

- Standard: The individual must achieve a minimum score of 90 percent on the VACR test; receive GOs in SHTU/HTU linkup and PLGR/ANCD operations; successfully program the IFF to accept a code; and receive GOs in other IFF procedures and battery charging, per STP 44-14S14-SM-TG.

- Standard: Each crew member must identify 45 out of 50 aircraft by correct nomenclature or aircraft name within 5 seconds, per FM 44-80 (VACR).

c. Table III, Crew Member Certification: This table is a critical gate used to provide an evaluation for the Stinger crew members, per STP 44-14S14-SM-TG.

- Standard: Each crew member must receive a minimum score of 90 percent for his part in each evaluated task. If an individual fails to certify on Table III, he will be retrained and must satisfactorily complete Table III prior to advancing to the next phase.

C-5. <u>Intermediate Gunnery Tables</u>. Train Stinger teams to engage aerial targets in a static position using the THT or STPT (includes Tables IV through VIII).

- Standard: Table VIII is the standard required and must be successfully completed prior to advancing to the next phase of training.

a. Table IV, Tracking Practice: Trains the Stinger team in tracking procedures through the use of aerial targets using the THT or the STPT. The team leader controls the tracking practice.

- Standard: Each Stinger team will successfully track four out of five aerial targets with the STPT.

- Standard: The individual must achieve a score of GO on all drills.

b. Table V, Battle/Crew Drill Practice: This table trains the Stinger team in engagement procedures using the STPT. The team leader controls the engagement. The Stinger team deploys to a unit training area and operates the STPT or THT against live aircraft, when available. The STPT will be used to maintain Stinger proficiency and Table VIII qualification. MILES (FOFT) trainers should be available for Stinger in the near future.

- Standard: Each Stinger team must achieve a score of GO on all drills. It is the responsibility of the platoon leader and platoon sergeant to ensure that the teams follow the correct engagement procedures.

c. Table VI, Battle/Crew Drill Certification: Table VI is a critical gate that prepares the Stinger team by practical exercise for drill qualification (Table VIII). The individual will perform drill tasks required for his position as specified in ARTEP 44-117-11-Drill.

- Standard: Each Stinger team (team leader and gunner) must correctly engage two out of five hostile target presentations using the STPT and must score GOs on all drills. It is the responsibility of the platoon leader and platoon sergeant to ensure that the teams follow the correct engagement procedures.

d. Table VII, Team Prequalification (Tables 1 thru VI): This table prepares the Stinger team for qualification in Table VIII. The platoon leader and/or platoon sergeant will administer a practice and/or diagnostic test on all elements of Table VIII. Teams who are not proficient will receive additional training to prepare them for qualification.

- Standard: Each crew member must achieve 90 percent on VACR and range ring test; 80 percent on the platoon, section, and team test; and GOs on all crew drills, IFF programming, SHTU/HTU linkup and PLGR/ANCD operations.

- Standard: Each Stinger team (team leader and gunner) must correctly engage three out of five hostile target presentations using the STPT.

e. Table VIII, Team Qualification: Table VIII is a critical gate. A battalion evaluation team will evaluate drills. The failure of any task results in an unqualified team.

- Standard: Each crew member must achieve 90 percent on VACR and range ring test; 80 percent on the platoon, section, and team test; and GOs on all crew drills, IFF programming, SHTU/HTU linkup and PLGR/ANCD operations.

- Standard: Each Stinger team (team leader and gunner) must correctly engage four out of five hostile target presentations using the STPT.

C-6. Advanced Gunnery Tables. Train the team to engage targets in various modes under various conditions. Advanced gunnery skills include Tables IX and X. Satisfactory performance on Table VIII indicates the Stinger team is qualified to perform a live engagement at an aerial target.

a. Table IX, Platoon Operations Evaluation: Trains the Stinger teams to march order, emplace, and engage aerial targets under various conditions through the use of live aircraft and MILES. The platoon leader and platoon sergeant maintain command and control. Teams deploy to the LTA, which may be in conjunction with a unit FTX, and emplace and engage aerial targets. The team and/or platoon is trained to conduct an RSOP and to select firing positions. Upon completion of activities, the platoon leader and platoon sergeant consolidate data, assess platoon tactical plans, validate the platoon's defense, and conduct an AAR for platoon members. This training event may encompass more than one training day to be satisfactorily completed.

- Standard: Activities will be evaluated based upon principles of air defense employment contained in ARTEP 44-117-11-MTP; FMs 7-1, 44-18, 44-18-1, 44-100, 3-01.13, and 3-01.11; and appropriate OPLANs, OPORDs, and SOPs.

b. Table X, LFX (Annual Service Practice): This training event may encompass more than one training day to be satisfactorily completed.

- Standard: Activities will be evaluated based upon principles of air defense employment contained in ARTEP 44-117-11-MTP; FMs 7-1, 44-18, 44-18-1, 44-100, 3-01.13, and 3-01.11, and appropriate OPLANs, OPORDs, and SOPs.

- Standard: Selected Stinger teams will engage an aerial target with a Stinger missile and successfully perform drills, per ARTEP 44-117-11-Drill.

STINGER GUNNERY TABLES					
TABLE	EVENT [1]	LEVEL	HOW [2]	WHERE [3]	FREQUENCY
I	Stinger Weapon System Components/PMCS/Functions Plt/Section/Team Operations	Crew Member	(C)(D)(PE) (4)(6)(10)(14)	UTA	Monthly
II	VACR/IFF/SHTU/HTU PLGR/ANCD/IFF Operations	Crew Member	(C)(D)(PE) (4)(5)(6)(10)(11)(14)	UTA	Monthly
III*	Crew Member Certification Tables I & II	Crew Member	(E) (4)(5)(6)(10)(11)(14)	UTA	Monthly
IV	Tracking Practice	Team	(D)(PE) (1)(2)(3)(4)(6)(7)(12)(14)	UTA	Quarterly
V	Battle/Crew Drill Practice	Team	(D)(PE) (1)(2)(3)(4)(6)(7)(12)	UTA	Quarterly
VI*	Battle/Crew Drill Certification	Team	(D)(PE) (1)(2)(3)(4)(6)(7)(12)	UTA	Quarterly
VII	Tables I thru VI Team Prequalification	Team	(D)(PE) (1)(2)(3)(4)(5)(6) (7)(10)(11)(12)(14)	UTA LTA	Semiannually
VIII*	Team Qualification	Team	(E) (1)(2)(3)(4)(5)(6) (7)(10)(11)(12)(14)	UTA LTA	Semiannually
IX	Platoon Operations Evaluation	Platoon	(PE)(E) (4)(6)(7)(9)(10)(12) (13)(14)(15)(16)(17)(18)	MTA UTA LTA	Annually
X	LFX (Annual Service Practice)	Platoon	(D)(E) (3)(5)(8)(10)(12)(13) (14)(15)(17)(18)(19)	MTA UTA LTA	Annually

* Critical gate—must perform to standard to progress to next table.

Notes:

   1. EVENT—Track and engage aerial targets.
      a. 50 percent of displays are multiple aircraft and a mix of friend and foe.
      b. 50 percent hostile aircraft employ IRCM.

   2. HOW
     (C) Conference
     (D) Demonstration
     (E) Evaluation
    (PE) Practical Exercise (hands-on)
     (1)   STPT
     (2)   IMTS
     (3)   THT
     (4)   FHT
     (5)   VACR kit
     (6)   Tactical equipment (IFF and Stinger)
     (7)   Tactical aircraft, when available

Figure C-1. Stinger Gunnery Tables.

STINGER GUNNERY TABLES

(8) Targets (1/5th scale target or equivalent)

(9) MILES

(10) TM 9-1425-429-12

(11) FM 44-80

(12) ARTEP 44-117-11-Drill

(13) ARTEP 44-117-11-MTP

(14) STP 44-14S14-SM-TG

(15) ARTEP 44-177-35-MTP

(16) Unit METL

(17) ATWESS cartridge will be used in battery-level and higher-level supported FTXs.

(18) TRC B/C units will perform during training year.

(19) One team will fire while all other available section members will track with THT (TRC A—one missile per platoon per year; TRC B/C—one missile per platoon per training year).

3. WHERE
    a. UTA unit training area
    b. LTA local training area
    c. MTA maneuver training area

Figure C-1. Stinger Gunnery Tables (continued).

STINGER GUNNERY STRATEGY										
ELEMENT	TABLE I	TABLE II	TABLE III	TABLE IV	TABLE V	TABLE VI	TABLE VII	TABLE VIII (12)	TABLE IX	TABLE X
TEAM	X	X	X	X	X	X	X	X		
SECTION									X	X
PLATOON									X	X
CRITICAL GATE			X			X		X		
REQUIREMENTS										
AC (13)	M	M	M	Q	Q	Q	SA	SA	A	A
RC (13)	Q	Q	Q	SA	SA	SA	A	A	A	A
RESOURCES										
OPTEMPO (HMMWV) (11)	10			25	25	200	50	50	50	200
AMMO (10)										
TADSS	(4) (6)	(4) (5) (6)	(4) (5) (6)	(1) (2) (3) (4) (6) (7)	(1) (2) (3) (4) (6) (7)	(1) (2) (3) (4) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)	(4) (6) (7) (9)	(3) (6) (8)
RANGES										
TRAINING LAND KM^2		.5					.5	.5	.4	25 (km^2)

Notes:

    (1)   STPT
    (2)   IMTS
    (3)   THT
    (4)   FHT
    (5)   VACR kit
    (6)   Tactical equipment (IFF and Stinger)
    (7)   Tactical aircraft, when available
    (8)   Targets (1/5 scale target or equivalent)
    (9)   MILES
  (10)   See DA Pamphlet 350-38 (ammo matrix for Stinger).
  (11)   OPTEMPO for Reserves does not include movement from home station to training area.
  (12)   Stinger teams must certify quarterly on Table VI.
  (13)   A—Annually   SA—Semiannually   Q—Quarterly   M—Monthly

Figure C-2. Stinger Gunnery Strategy.

C-7. The following training and evaluation outlines (see ARTEP 44-117-11-MTP) are collective tasks that the gunnery tables will incorporate (Figure C-3). The first five are mandatory.

Mandatory Collective Tasks	Number
PERFORM RISK MANAGEMENT PROCEDURES	71-2-C326.44-M30L
CONDUCT LOGPAC ACTIVITIES	44-4-2282.44-M30L
OCCUPY A TEAM FIRING POSITION	44-5-4027.44-M30L
RESPOND TO A CHEMICAL ATTACK	03-3-C203.44-M30L
CONDUCT AIR DEFENSE OPERATIONS	44-2-7008.44-M30L
Additional Collective Tasks	**Number**
DEVELOP IPB	44-4-2261.44-M30L
HANDLE ENEMY PRISONERS OF WAR	19-3-3106.44-M30L
CONDUCT RSOP	44-1-9046.44-M30L
CONDUCT A CONVOY	55-2-C324.44-M30L
ESTABLISH THE PLATOON CP	44-4-2160.44-M30L
CONDUCT SECURITY OF A COMMAND POST	19-3-2205.44-M30L
CROSS A CHEMICALLY CONTAMINATED AREA	03-3-C226.44-M30L
PREPARE FOR OPERATIONS UNDER NBC CONDITIONS	03-3-C201.44-M30L
USE PASSIVE AIR DEFENSE MEASURES	44-1-C220.44-M30L
REACT TO SMOKE OPERATIONS	03-3-C209.44-M30L
MAINTAIN OPERATIONS SECURITY	71-3-C232.44-M30L
CONDUCT OPERATIONAL DECONTAMINATION	03-3-C224.44-M30L
TAKE ACTIVE COMBINED ARMS AD MEASURES AGAINST HOSTILE AERIAL PLATFORMS	44-1-C221.44-M30L
PERFORM FIELD SANITATION FUNCTIONS	08-2-R315.44-M30L
PERFORM UNIT LEVEL MAINTENANCE	43-2-C322.44-M30L
TREAT CASUALTIES	08-2-0003.44-M30L
CONDUCT BATTLEFIELD STRESS REDUCTION AND PREVENTION PROCEDURES	08-2-R303.44-M30L
PROVIDE COMMAND AND CONTROL	44-1-2187.44-M30L
CONDUCT TROOP-LEADING PROCEDURES	44-2-2294.44-M30L
PLAN AIR DEFENSE	44-1-3534.44-M30L
ESTABLISH LIAISON TEAM	44-5-2190.44-M30L
SUSTAIN AIR DEFENSE OPERATIONS	44-1-1045.44-M30L

Figure C-3. Mandatory and Additional Collective Tasks.

APPENDIX D

Avenger Gunnery Tables

D-1. <u>Purpose</u>. The Avenger gunnery tables are designed to develop and test the proficiency of the individual, team, section, and platoon in gunnery techniques. They prepare individuals, teams, sections, and platoons to execute their mission in combat and standardize Avenger gunnery training and gunnery skill qualifications through performance-oriented, sequential, progressive, realistic, and challenging training.

D-2. <u>General</u>. The gunnery tables (Figure D-1) provide mandatory qualification standards and training strategies for the Avenger weapon system. These training tables focus on preparing the individual to perform as part of a team to accomplish the unit mission. Standards outlined in the MTPs and/or STPs are the minimum acceptable levels of performance.

      a. The Avenger team consists of a team leader and gunner with one fire unit. The Avenger section (three fire units) consists of a section sergeant, two team leaders, and three gunners. A platoon is comprised of two sections (six fire units).

      b. The gunnery strategy (Figure D-2) is based on the building-block approach in which individuals are trained in basic skills before being integrated into teams. Teams train progressively from basic tasks through integration as section, platoon, battery, battalion or regimental elements performing their wartime mission. Unit commanders have flexibility in applying these strategies and may integrate command and control, maneuver, and survival and sustainment skills into the training as they see fit.

D-3. <u>Responsibilities</u>. Commanders are responsible for conducting training and gunner qualification per established CATS and MTPs. However, commanders have the latitude to adjust event frequency based on local operational requirements, unit METL, contingency directives, and command guidance.

D-4. <u>Basic Gunnery Tables</u>. Train individuals to perform as team members to effectively conduct drills in a controlled environment. Basic gunnery skills include Tables I through III (Figure D-1). Performance of these tables is mandatory for all crew members and will be completed within 90 days of arrival at the unit. Crew members failing to meet established standards will train and retest until standards are met before progressing to the next performance level. Tables I and II will be performed, as required, for sustainment of skills once Table III has been validated.

      a. Table I, Avenger Weapon System Components/PMCS/Functions and Platoon/Section/Team Operations. Develops a working understanding of the Avenger weapon system. Trains the individual to identify the components of the Avenger weapon system and the Stinger 13 critical checks, and to understand the function of Avenger components and PMCS performed at the operator level. Trains the individual on knowledge of platoon, section, and team operations.

      • Standard. Crew members will correctly identify and state the function of the Avenger weapon system and Stinger missile components and perform PMCS, per TMs 9-1425-433-10 and 9-1425-429-12. Each crew member must achieve a minimum score of 80 percent on platoon, section, and team operations.

      b. Table II, VACR/IFF/FBCB2/SHTU/HTU/PLGR/ANCD. Trains the crew member to recognize enemy and friendly aircraft. The crew member also receives instruction on FBCB2/SHTU/HTU/PLGR/ANCD operations, charging the IFF programmer batteries, and IFF code loading procedures.

      • Standard. The individual must achieve a minimum score of 90 percent on the VACR test; receive GOs in FBCB2/SHTU/HTU linkup, PLGR/ANCD operations; successfully program the IFF to accept a code; and receive GOs in other IFF procedures and battery charging, per STP 44-14S14-SM-TG.

- Standard. Each crew member must identify 45 out of 50 aircraft by correct aircraft name or nomenclature within 5 seconds, per FM 44-80 (VACR).

c. Table III, Crew Member Certification. This table is a critical gate used to provide an evaluation for the Avenger crew members on Tables I and II, per STP 44-14S14-SM-TG.

- Standard. Each crew member must receive a minimum score of 90 percent for his part in each evaluated task. If an individual fails to certify on Table III, he will be retrained and must satisfactorily complete Table III prior to advancing to the next phase.

D-5. <u>Intermediate Gunnery Tables</u>. Train teams to engage ground and aerial targets in static, remote, and shoot-on-the-move modes, using missiles and the M3P machine gun (includes Tables IV through VIII).

- Standard. Table VIII is the required standard and must be successfully completed prior to advancing to the next phase of training.

a. Table IV, Tracking Practice. Trains the Avenger team to track procedures through the use of aerial targets and ground targets using the Avenger weapon system. The team leader controls the tracking practice.

- Standard. Each Avenger team must successfully track four out of five aerial targets with the captive flight trainer (CFT).

- Standard. The individual must achieve a score of GO on all drills.

b. Table V, Battle/Crew Drill Practice. The Avenger team is trained in aerial engagement procedures using the AVG TTT. The team leader controls the engagement. The Avenger team deploys to a unit training area and operates the Avenger weapon system CFT against live aircraft, when available. The Avenger weapon system is used to maintain Avenger proficiency and preparation for Table VIII team qualification.

- Standard. The Avenger team must achieve a score of GO on all drills.

c. Table VI, Battle/Crew Drill Certification. Table VI is a critical gate that prepares the Avenger teams by practical exercise for team qualification (Table VIII). The individual will perform drill tasks required for his position as specified in ARTEP 44-117-21-Drill.

- Standard. The team will fire 10 engagement presentations with the Avenger weapon system. The 10 engagements must consist of 5 aerial engagements with the CFT and 5 M3P machine gun engagements. One of the 10 engagements will be under NBC conditions. The 5 M3P machine gun engagements consist of 4 ground targets and 1 aerial target engagement. The Avenger team leader will perform 4 of the 10 engagements. The 4 team leader engagements will consist of 2 aerial engagements with the CFT and 2 ground engagements with the M3P machine gun. The gunner will perform 6 of the 10 engagements. The 6 gunner engagements will consist of 4 aerial engagements and 2 ground engagements. The 2 ground engagements will be with the M3P machine gun. The 4 aerial engagements will consist of 3 CFT engagements and 1 M3P machine gun engagement. Each team must successfully complete 3 of 6 aerial engagements and 2 of 4 ground engagements with the Avenger weapon system, and must score a GO on all drills. It is the platoon leader and platoon sergeant's responsibility to ensure that the teams follow the correct engagement procedures.

d. Table VII, Team Prequalification (Tables I thru VI). Prepares the Avenger team for qualification in Table VIII. The platoon leader and/or platoon sergeant will administer a practice and/or diagnostic test on all elements of Table VIII. Teams who are not proficient will receive additional training to prepare them for qualification.

• Standard. Each crew member must achieve a 90 percent rating on the VACR and range ring test; an 80 percent rating on the platoon, section and team test; and a GO on all crew drills, IFF programming, FBCB2/SHTU/HTU linkup, and PLGR/ANCD operations.

• Standard. All assigned Avenger teams (team leader and gunner) must successfully meet the standards for Table VII prior to executing Table VIII. The unit commander may set the standards for Table VII for advancing to Table VIII. The Avenger team will fire 10 of the 13 engagement presentations. The 10 engagements must consist of 5 aerial engagements with the CFT and 5 M3P machine gun engagements. (One of the 10 engagements will be under NBC conditions). The 5 M3P machine gun engagements consist of 4 ground targets and 1 aerial target engagement. The Avenger team leader will perform 4 of the 10 engagements from the RCU. The 4 team leader engagements will consist of 2 aerial engagements with the CFT and 2 ground engagements with the M3P machine gun. The Avenger gunner will perform 6 of the 10 engagements from inside the turret. The 6 gunner engagements will consist of 4 aerial engagements and 2 ground engagements. The 2 ground engagements will be with the M3P machine gun. The 4 aerial engagements will consist of 3 CFT engagements and 1 M3P machine gun engagement. The unit commander may decide which 10 of the 13 engagements the Avenger teams perform according to the guidelines in STRAC. Each Avenger team will fire 25 rounds per M3P machine gun engagement.

e. Table VIII, Team Qualification. Table VIII is a critical gate. A battalion evaluation team will evaluate drills. The failure of any task results in an unqualified team.

• Standard. Each crew member must achieve a 90 percent rating on the VACR and range ring test; an 80 percent rating on the platoon, section, and squad test; and a GO on all crew drills, IFF programming, FBCB2/SHTU/HTU linkup, and PLGR/ANCD operations.

• Standard. Each team must correctly engage five out of six hostile aerial targets using the 1/5th scale remotely piloted vehicle target system (RPVTS). The six aerial engagements consist of five CFTs and one M3P machine gun. Additionally, Table VIII requires the successful engagement of three out of four ground targets using the M3P machine gun within the past 6 months. The engagements for the CFT and the M3P machine gun are contained in Table 4-8 of STRAC.

• Standard. The Avenger team will fire 10 of the 13 engagement presentations listed in Table 4-8 of STRAC. The 10 engagements must consist of 5 aerial engagements with the CFT and 5 M3P machine gun engagements. (One of the 10 engagements will be under NBC conditions). The 5 M3P machine gun engagements will consist of 4 ground targets and 1 aerial target engagement. The Avenger team leader will perform 4 of the 10 engagements from the RCU. The 4 team leader engagements will consist of 2 aerial engagements with the CFT and 2 ground engagements with the M3P machine gun. The Avenger gunner will perform 6 of the 10 engagements from inside the turret. The 6 gunner engagements will consist of 4 aerial engagements and 2 ground engagements. The 2 ground engagements will be with the M3P machine gun. The 4 aerial engagements will consist of 3 CFT engagements and 1 M3P machine gun engagement. The unit commander may decide which 10 of the 13 engagements the Avenger teams perform according to the guidelines in the STRAC.

D-6. Advanced Gunnery Tables. Train the team to engage targets in various modes under various conditions. Advanced gunnery skills include Tables IX and X. Satisfactory performance on Table VIII indicates the Avenger team has qualified with live ammunition (M3P machine gun).

a. Table IX, Platoon Operations Evaluation. Trains the Avenger teams to march order, emplace, and engage aerial targets under various conditions through the use of live aircraft and MILES. The platoon leader and platoon sergeant maintain command and control. Teams deploy to the LTA, which may be in conjunction with a unit FTX, and emplace and engage aerial targets. The team and/or platoon is trained to conduct an RSOP and to select firing positions. Upon completion of activities, the platoon leader and platoon sergeant consolidate data, assess platoon tactical plans, and validate the platoon's

defense, and conduct an AAR for platoon members. This training event may encompass more than one training day to be satisfactorily completed.

- Standard. Activities will be evaluated based upon principles of air defense employment contained in ARTEP 44-117-22-MTP, FMs 7-1, 44-44, and 44-100, and appropriate OPLANs, OPORDs, and SOPs.

b. Table X, LFX (Annual Service Practice). This training event may encompass more than one training day to be satisfactorily completed.

- Standard. Activities will be evaluated based upon principles of air defense employment contained in ARTEP 44-117-22-MTP, FMs 7-1, 44-44, and 44-100; also appropriate OPLANs, OPORDs, and SOPs.

- Standard. Selected Avenger teams will engage an aerial target with a Stinger missile and successfully engage ground targets with the M3P machine gun. Drills will be successfully performed, per ARTEP 44-117-21-Drill.

AVENGER GUNNERY TABLES					
TABLE	EVENT [1]	LEVEL	HOW [2]	WHERE [3]	FREQUENCY
I	Avenger Weapon System Components/PMCS/Functions Plt/Section/Team Operations	Crew Member	(C)(D)(PE) (1)(2)(3)(10)	UTA	Monthly
II	VACR/IFF/FBCB2/SHTU/HTU/ PLGR/ANCD	Crew Member	(C)(D)(PE) (11)	UTA	Monthly
III*	Crew Member Certification Tables I and II	Crew Member	(E)(1)(2)(3)(5) (6)(7)(8)(12)	UTA	Monthly
IV	Tracking Practice	Team	(D)(PE)(1)(2)(3) (4)(5)(6)(7)(8)	UTA	Quarterly
V	Battle/Crew Drill Practice	Team	(D)(PE) (5)(12)(13)	UTA	Quarterly
VI*	Battle/Crew Drill Certification	Team	(E) (3)(5)(8)(12)	UTA	Quarterly
VII	Tables I thru VI Team Prequalification	Team	(PE) (3)(4)(5)(7)(8)	UTA/ LTA	Semiannually
VIII*	Team Qualification	Team	(E)(3)(4)(5) (7)(8)(12)(13)	UTA/ LTA	Semiannually

Figure D-1. Avenger Gunnery Tables.

AVENGER GUNNERY TABLES					
TABLE	EVENT [1]	LEVEL	HOW [2]	WHERE [3]	FREQUENCY
IX	Platoon Operations Evaluation	Platoon	(PE)(E) (3)(5)(7)(8)9)	UTA/ LTA	Annually
X	LFX (Annual Service Practice)	Platoon	(E) (3)(5)(8)(9)	LTA	Annually

Notes:

1. EVENT—Track and engage aerial targets.
    a. 50 percent of displays are multiple aircraft and a mix of friend and foe.
    b. 50 percent hostile aircraft employ IRCM.

2. HOW
    (C)   Conference
    (D)   Demonstration
    (E)   Evaluation
   (PE)   Practical Exercise (hands-on)
    (1)   STPT/AVG TTT
    (2)   IMT
    (3)   CFT
    (4)   VACR kit
    (5)   Tactical equipment (IFF, Stinger, and Avenger)
    (6)   THT
    (7)   FHT
    (8)   Tactical aircraft, if available
    (9)   Targets (1/5th scale target or equivalent)
   (10)   MILES
   (11)   TM 9-1425-433-10
   (12)   FM 44-80
   (13)   ARTEP 44-117-21-Drill
   (14)   M3P machine gun
   (15)   TM 9-1425-429-12
   (16)   Unit METL
   (17)   ATWESS cartridge will be used in battery-level and higher-level supported FTXs.
   (18)   TRC B/C units will perform upon mobilization.
   (19)   One team will fire while all other available section members will track with CFT
          (TRC A—one missile per four teams per year; TRC B/C—one missile per platoon per
          training year).

3. WHERE
    a. UTA—unit training area
    b. LTA—local training area
    c. MTA—maneuver training area

*Critical gate—must perform to standard to progress to next table.

Figure D-1. Avenger Gunnery Tables (continued).

	TABLE I	TABLE II	TABLE III	TABLE IV	TABLE V	TABLE VI	TABLE VII	TABLE VIII (13)	TABLE IX	TABLE X
ELEMENT										
AVENGER GUNNERY STRATEGY										
TEAM	X	X	X	X	X	X	X	X		
SECTION									X	
CRITICAL GATE			X			X		X		
REQUIREMENTS										
AC (15)	M	M	M	Q	Q	Q	SA	SA	A	A
RC (15)	Q	Q	Q	SA	SA	SA	A	A	A	A
RESOURCES										
OPTEMPO (HMMWV) (12)	12	12	12	4	4	4	2	2	1	1
AMMO (11)										
TADSS	(1)(2)(3)	(4)(6)(7)	(1)(2)(3)(5)(6)(7)	(1)(7)	(1)(2)(3)(5)(6)(7)(8)(10)	(3)(5)	(3)(4)(5)(7)	(3)(4)(5)(7)	(3)(5)(7)(8)(10)	(3)(5)(8)(10)
RANGES (14)										
TRAINING LAND KM^2		.5					.5	.5	.4	25 (km^2)

Notes:

(1) STPT/AVG TTT
(2) IMTS
(3) CFT
(4) VACR kit
(5) Tactical equipment (IFF, Stinger, and Avenger)
(6) THT
(7) FHT
(8) Tactical aircraft, if available
(9) Targets (1/5th scale target or equivalent)
(10) MILES
(11) See DA Pamphlet 350-38 Table 4-9 (Annual Ammunition Requirements for Avenger).
(12) OPTEMPO for Reserves does not include movement from home station to training area.
(13) Avenger teams must certify quarterly on Table VI.
(14) Shoot-on-the-move range facilities.
(15) A—Annually   SA—Semiannually   Q—Quarterly   M—Monthly

Figure D-2. Avenger Gunnery Strategy.

D-7. <u>T&EO Collective Tasks.</u> The following training and evaluation outlines (see ARTEP 44-117-22-MTP) are collective tasks that the gunnery table will incorporate (Figure D-3). The first five are mandatory.

Mandatory Collective Tasks	Number
PERFORM RISK MANAGEMENT PROCEDURES	71-2-C326.44-A30H
CONDUCT LOGPAC ACTIVITIES	44-4-2282.44-A30H
PLAN AIR DEFENSE	44-1-3534.44-A30H
COORDINATE AIR DEFENSE	44-1-5137.44-A30H
CONDUCT AIR DEFENSE OPERATIONS	44-2-7008.44-A30H
Additional Collective Tasks	
DEVELOP IPB	44-4-2261.44-A30H
CONDUCT RSOP	44-1-9046.44-A30H
CONDUCT A CONVOY	55-2-C324.44-A30H
PREPARE FOR OPERATIONS UNDER NBC CONDITIONS	03-3-C201.44-A30H
REACT TO SMOKE OPERATIONS	03-3-C209.44-A30H
CONDUCT OPERATIONAL DECONTAMINATION	03-3-C224.44-A30H
CROSS A CHEMICALLY CONTAMINATED AREA	03-3-C226.44-A30H
CONDUCT SECURITY OF A COMMAND POST	19-3-2205.44-A30H
USE PASSIVE AIR DEFENSE MEASURES	44-1-C220.44-A30H
TAKE ACTIVE COMBINED ARMS AD MEASURES AGAINST HOSTILE AERIAL PLATFORMS	44-1-C221.44-A30H
MAINTAIN OPERATIONS SECURITY	71-3-C232.44-A30H
TREAT CASUALTIES	08-2-0003.44-A30H
CONDUCT BATTLEFIELD STRESS REDUCTION AND PREVENTION PROCEDURES	08-2-R303.44-A30H
PERFORM FIELD SANITATION FUNCTIONS	08-2-R315.44-A30H
HANDLE ENEMY PRISONERS OF WAR	19-3-3106.44-A30H
PERFORM UNIT LEVEL MAINTENANCE	43-2-C322.44-A30H
SUSTAIN AIR DEFENSE OPERATIONS	44-1-1045.44-A30H
PROVIDE COMMAND AND CONTROL	44-1-2187.44-A30H
CONDUCT TROOP-LEADING PROCEDURES	44-2-2294.44-A30H
ESTABLISH THE PLATOON CP	44-4-2160.44-A30H
ADJUST AIR DEFENSE COVERAGE	44-4-5143.44-A30H
DISSEMINATE EARLY WARNING	44-5-0003.44-A30H
ESTABLISH LIAISON TEAM	44-5-2190.44-A30H

Figure D-3. Mandatory and Additional Collective Tasks.

APPENDIX E

**Combat Readiness or Deployability
Certification Criteria**

E-1. General. This appendix provides guidance for certifying the AMD battery in the light, airborne, air assault, and heavy divisions applicable to both AC and ARNG units. Deployability certification is the method of documenting that a unit is trained well enough on its basic SRC competencies (formerly base or basic METL). Basic SRC competencies are those tasks which a unit must perform to established standards to accomplish their TOE mission(s). Certification is required for all newly organized AMD units and all nondeployed AMD units that are issued a new weapon system. Combat readiness certification is the method of documenting that a deployed unit is trained well enough on its METL to perform its wartime mission with its newly issued weapon system. METL is defined as a compilation of collective mission-essential tasks which must be successfully performed if an organization is to accomplish its wartime mission(s). This appendix, in conjunction with DA Pamphlet 350-38, establishes the certification criteria. AC and ARNG battalions must qualify with their weapon system by DA Pamphlet 350-38 standards as a part of the certification process. Each MACOM is responsible for evaluation and certification of assigned AC units that require either type of certification. The adjutant general of each state is responsible for the certification of ARNG units in his state.

E-2. METL. The combat readiness certification evaluation is based on the rated unit's METL derived from that unit's wartime mission(s). The rated unit must submit an approved unit METL to the senior O/C before an evaluation begins. Evaluate nondeployed units on the basic SRC competencies at Figure E-4 on page E-7. For either type certification, the unit must perform all selected tasks to the standards established in Chapter 5.

E-3. Requirements. You may conduct a combat readiness or deployability certification evaluation simultaneously with an ARTEP MTP evaluation or as a separate evaluation. In either case, the certifying authority must provide O/Cs to assist in the evaluation and collect that data necessary to determine if the unit is qualified for deployment. These O/Cs must prepare and complete the following:

a. Evaluated unit data sheets and environmental data sheets (discussed in Chapter 6) before the evaluation starts and as data changes during the evaluation.

b. A task evaluation work sheet (Figure E-1, page E-4) for each task as it is performed (paragraph E-5 explains grading).

c. A consolidated task evaluation sheet for deployed units (Figure E-2, page E-5) or a consolidated task evaluation sheet for nondeployed units (Figure E-4, page E-7).

d. The Deployed Unit Certification Statement at Figure E-3, page E-6, if the unit is combat ready or the Nondeployed Unit Certification Statement (Figure E-5, page E-8) if the unit is deployable. Address battalion certifications to the battalion commander.

e. An AAR as explained in Paragraph E-7.

f. A report as explained in Paragraph E-8.

E-4. Preparation for Evaluation. To ensure an evaluation measures a unit's capabilities, the senior O/C must standardize evaluation procedures for all elements of the unit consistent with training and evaluation guidance contained in this MTP. The evaluation scenario in Chapter 6 contains the events and collective tasks necessary to execute an evaluation. Use it as a guide to develop a scenario which includes all elements of the battalion. You may include non-METL tasks to have a smooth-flowing evaluation scenario. Chapter 6 also lists equipment which O/Cs will require. Preparation for the evaluation should supplement and be according to information provided in FM 7-1.

E-5. Grading. Use standard grades and work sheets as explained below.

   a. Standard grades are GO and NO-GO. (Record as NE those tasks which are not evaluated.) Grade definitions are as follows:

      (1) GO. The element evaluated accomplished the standards with no unnecessary expenditure of resources, danger to troops, or misuse of equipment. Minor errors or delays did not affect task accomplishment.

      (2) NO-GO. The element evaluated did not meet the standards. Some of the following conditions existed: equipment, facilities, or resources were inadequate in number or condition. Safety or correct use of equipment was sacrificed. Delays caused nonaccomplishment of the task. Task was performed more than once and different procedures were used each time, some correct and some incorrect.

      b. A sample task evaluation work sheet is at Figure E-1. This work sheet is self-explanatory and should be filled out by the O/C as the performing element demonstrates its proficiency on each task. In preparation for an evaluation, reproduce one task evaluation work sheet for each task to be evaluated. Provide narrative comments at paragraph 2 of the task evaluation work sheet for all tasks graded other than GO. These comments should address shortages of equipment and key personnel which would adversely affect task performance, identification of any task or subtask (of the standards) that was not satisfactorily performed, et cetera.

E-6. Consolidated Task Evaluation Work Sheet. The senior O/C will review the ratings submitted by subordinate O/Cs to decide if an accurate evaluation of training proficiency was conducted. Fill in the consolidated task evaluation sheet (Figure E-2) from the evaluated unit's METL for deployed units (paragraph E-3). The basic SRC competencies at Figure E-4 apply to nondeployed units. Use the applicable consolidated task evaluation sheet to compile evaluation data for all tasks. Then use these compiled data to determine a recommended overall unit training rating of Combat Ready or Not Combat Ready, Deployable or Nondeployable. The evaluated unit must receive a GO on every collective task listed on its METL or basic SRC competencies to be certified. Develop the consolidated task evaluation sheet before an evaluation starts. Do not use non-METL tasks in the scenario to determine deployability.

E-7. AAR. Using all the ratings, the senior O/C gives an AAR outlining the overall proficiency of unit performance. He discusses specific areas of strengths and weaknesses. He makes brief recommendations when appropriate. This action allows the battalion commander to take immediate corrective action while the results of the evaluation are still fresh in the minds of the participants. The AAR includes, but is not limited to, applicable information from the following list:

   a. Did the unit operate effectively in a tactical environment?

   b. Was the unit capable of sustained operations?

   c. Was the unit able to perform its mission while operating in a hostile environment?

   d. Did overall physical fitness of personnel in the unit restrict task performance?

   e. What collective task(s), if any, needs additional training?

   f. On what collective task(s), if any, does the unit excel?

   g. Is the unit rated Combat Ready or Deployable?

Note: Report tasks performed correctly as a consequence of personnel temporarily assigned or attached to augment the unit's strength for evaluation purposes as NO-GO. The senior O/C's final report will, however, bring to full light the reason for this rating by addressing personnel shortages.

E-8. <u>Report</u>. The senior O/C prepares a written report to the certifying authority. It includes the consolidated task evaluation sheet, a narrative about the evaluation results, and a recommended overall rating of Combat Ready or Not Combat Ready and Deployable or Nondeployable. If rated Combat Ready or Deployable (see AR 220-1), he includes a certification statement prepared for signature (Figure E-3 or E-5). A copy of this report is given to the commander of the evaluated unit.

TASK EVALUATION WORK SHEET

1. CONTROL DATA:

O/C _____ DATE _____

TASK NUMBER _____ RATING _____

2. NARRATIVE: Comments for ratings other than GO. (In determining the task rating, consider shortages of equipment and key personnel that had a bearing on the performance of the task. This may cause a rating of NO-GO, but should have appropriate remarks. Rate an element GO on a task only if it was performed to the stated task standard satisfactorily. If the task was not evaluated, explain why).

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Figure E-1. Sample Task Evaluation Work Sheet.

CONSOLIDATED TASK EVALUATION SHEET (DEPLOYED UNITS)

TASK NUMBER AND TITLE	T&EO PAGE	RATING

Figure E-2. Sample Consolidated Task Evaluation Sheet (Deployed Units).

Notes:
- Fill in task numbers and T&EO page numbers prior to the start of an evaluation (see paragraphs E-3 and E-6).

- Compile ratings from the task evaluation work sheets (see paragraph E-5b).

(Letterhead)

OFFICE SYMBOL   (DATE)

MEMORANDUM FOR Commander (full unit designation, including battalion identification)

SUBJECT: Combat-Ready Certification

1. My designated O/Cs conducted the required evaluation of your unit on (date).
This evaluation was conducted using the guidance and the task standards specified in
ARTEP 44-413-34-MTP. Your unit performed all of its METL tasks satisfactorily and
is considered capable of performing its combat mission.

2. The personnel of this battalion have also proven their weapon system capability
by meeting the applicable qualification standards specified in DA Pamphlet 350-38.

3. (Full unit designation) is hereby certified Combat Ready.

                                                    OFFICIAL SIGNATURE BLOCK
                                                    XXX, XX
                                                    Xxxxxxxxx, Xxxxxxxxxxxxxxxxx

Figure E-3. Sample Deployed Unit Certification Statement.

CONSOLIDATED TASK EVALUATION SHEET (NONDEPLOYED UNITS)

TASK NUMBER AND TITLE	RATING
44-4-2261.44-AD2R DEVELOP IPB	
44-1-9046.44-AD2R CONDUCT RSOP	
03-3-C201.44-AD2R PREPARE FOR OPERATIONS UNDER NBC CONDITIONS	
44-1-1045.44-AD2R SUSTAIN AIR DEFENSE OPERATIONS	
44-1-2187.44-AD2R PROVIDE COMMAND AND CONTROL	
44-1-3534.44-AD2R PLAN AIR DEFENSE	
44-2-2294.44-AD2R CONDUCT TROOP-LEADING PROCEDURES	
44-5-2190.44-AD2R ESTABLISH LIAISON TEAM	

Figure E-4. Sample Consolidated Task Evaluation Sheet (Nondeployed Units).

Note: Compile rating from task evaluation work sheets (see paragraph E-5b).

(Letterhead)

OFFICE SYMBOL   (DATE)

MEMORANDUM FOR Commander (full unit designation, including battalion identification)

SUBJECT: Deployability Certification

1. My designated O/Cs conducted the required evaluation of your unit on (date).
This evaluation was conducted using the guidance and the task standards specified in
ARTEP 44-413-34-MTP. Your unit performed all of its basic SRC competencies satisfactorily
and is considered capable of performing its combat mission.

2. The personnel of this battalion have also proven their weapon system capability by meeting
the applicable qualification standards specified in DA Pamphlet 350-38.

3. (Full unit designation) is hereby certified Deployable.

                                         OFFICIAL SIGNATURE BLOCK
                                         XXX, XX
                                         Xxxxxxxxxxxxxxxxx

Figure E-5. Sample Nondeployed Unit Certification Statement.

APPENDIX F

Threat to the AMD Battery

F-1. <u>General</u>. The aerial threat to US forces conducting force-projection operations will consist of BM, CM, TASM, RISTA, UAV, RPV, armed UAVs and RPVs, RW aircraft, and limited numbers of FW aircraft. These FW aircraft are aircraft that friendly air forces are unable to destroy (approximately 10 percent of the enemy's total FW assets). FM 44-100 describes the aerial threat to AMD units.

     a. Complementary efforts. Ground-based air defense will have the primary mission of countering enemy missiles, UAVs, RPVs, and RW aircraft. Friendly air forces can neutralize most of the FW aircraft.

     b. Threat attack profiles. All AMD personnel must become proficient in OPFOR air attack mission profiles to use their weapon systems effectively. FM 44-80 describes these profiles in detail.

F-2. <u>AMD Battery Air Threat</u>. AMD units will provide force protection for friendly units during all operational phases of force-projection operations. FM 3-0 describes these phases in detail. In particular, AMD units will focus on and defeat the low-altitude threat that includes: UAVs and RPVs (both RISTA and armed), RW aircraft, and FW aircraft.

     a. If deployed during early operations, AMD units will counter UAVs and RPVs conducting RISTA operations, FW aircraft conducting deep strikes against friendly early entry forces and sites, and possible armed UAVs and RPVs.

     b. During the expansion buildup of combat power, AMD units continue countering UAVs and RPVs in the RISTA role, defeat armed UAVs and RPVs targeted against radars and C³I nodes and assets, and protect against limited RW aircraft possibly conducting airmobile operations. FW aircraft will be conducting deep attacks and possibly RISTA.

     c. During decisive operations, AMD units will counter enemy UAVs and RPVs to prevent surprise and accurate targeting information, RW aircraft conducting airmobile and air insertions, and any FW aircraft conducting deep strikes.

     d. During reconstitution, when friendly units are rearming, refitting, and refueling as they prepare for subsequent operations, AMD units will counter low-altitude aerial threats attempting to target and/or disrupt friendly reconstitution efforts.

F-3. <u>Terrorist Threat</u>. AMD units present lucrative vulnerable targets for terrorist operations due to their small size, dispersion, and highly transportable air defense weapons. To counter this threat, obtain current information from supporting MI units and S2s, incorporate it into every phase of training planning, and include it in TSOPs.

APPENDIX G

Tactical Internet

Section I. Introduction

G-1. This appendix provides the commander with a basic understanding of the tactical Internet, capabilities, and limitations. The digitized battery in support of the digitized BCT is equipped with the most modern, automated command and control systems available in the Army.

G-2. The major components of the digitized battery are incorporated into the Force XXI battle command brigade and below (FBCB^2) concept. These enhancements center around brigade and below command and control (B^{2}C^2) systems, and compatible digital communications systems.   The central components addressed in this appendix are—

- Battery command post (CP).
- Platoon CP.
- Section CP.
- Fire unit.

G-3. The term digitized battery is used throughout this manual to refer to the battery equipped with digitized components (Appliqué). There are numerous other automated systems in the Army that may have some effect on digitized battery operations. These systems are addressed in this appendix only as they relate to digitized battery operations.

G-4. The digitized battery possesses an improved capability to achieve the agility, depth, and synchronization that characterize successful Army operations. The commander must fully understand and selectively employ these improved capabilities during the execution of a mission to maintain synchronization with both digitized and conventionally equipped units. Leaders at every level must remain cognizant of the fact that some critical combat and combat support assets may be unable to share the timesaving benefits of automation in receiving, processing, and distributing combat information. Careful planning and use of both voice and digitized communications must be used to ensure nondigitized combat, CS, and CSS units remain in the loop, while taking full advantage of the capabilities digitization provides.

G-5. This appendix addresses the capabilities and limitations of the digitized battery in support of the digitized task force, operating with digitized and conventional combat, CS, and CSS assets. It also addresses the additional planning and command and control functions performed within the digitally-equipped unit. It defines the use of B^{2}C^2 technology within the framework of the seven battlefield operating systems (BOS). Finally, this appendix provides an overview of the operational concept for the digitized battery in both offensive and defensive operations.

Section II. Capabilities and Limitations

G-6. The digitized battery possesses capabilities and limitations distinctly separate from its conventionally equipped predecessor. These enhancements center on the FBCB^2 concept. The sensor/C^3 node's Sentinel, the Linebacker's standard vehicle-mounted launcher (SVML), with slew-to-cue (STC) and ODS package, and the Avenger's STC provide additional capabilities for the commander, not available in conventionally equipped AMD units. Along with these capabilities, however, are limitations in interfacing with both digitized and conventional combat and CS assets typically arrayed within a task force.

G-7. Other automated systems that enhance the performance of the digitized battery are—
  - FAAD command, control, communications, computers and intelligence (C^4I).
  - Precision lightweight GPS receiver (PLGR).
  - Enhanced position location and reporting system (EPLRS).
  - The digitized soldier.
  - Various digital intelligence distribution systems.

This appendix addresses these systems only as they relate to the operations of the digitized battery.

CAPABILITIES

G-8. The commander of the digitized battery has significant advantages over his conventionally equipped counterpart. The most significant advantages are—
  - Increased situational awareness.
  - Enhancements to the planning and orders preparation and distribution process.
- Digital aids that enhance the timeliness and accuracy of the reporting process and employment of battery assets.

The commander employs some or all of these enhancements to improve the combat potential of his battery based on the factors of METT-TC.

SITUATIONAL AWARENESS

G-9. The increased situational awareness provided to the commander and his subordinates, due to B^2C^2, is a significant aid to command and control. Digital systems enable the commander to receive, process, and distribute combat data to subordinate squads in near real time. By observing his tactical display, the commander can see icons representing the location of friendly elements operating on the battery/BCT FM radio or EPLRS communications net. The friendly unit icons are created through automatic position updates digitally broadcast by each of the AMD's and other BOS's B^2C^2. The commander can also display the unit's operations overlays on his tactical display screen to see the unit's locations relative to established control measures. Some digital systems (B^2C^2) also provide a terrain database that allows the commander to see friendly units locations relative to the actual terrain features on the map. When used correctly, IVIS and B^2C^2 provide the commander and his subordinate leaders with a good idea of the location and disposition of AMD digitally-equipped units, as well as other combat and CS digitally-equipped units. With this information, the commander will be able to make informed decisions and respond quickly and decisively to make changes in the tactical situation.

G-10. Improved situational awareness also permits the commander to increase lateral dispersion and depth within battery and/or subordinate unit formations, enhancing survivability and reducing the chance of fratricide. Digital systems speed tactical and logistical reporting procedures, as well as the exchange of command and control information between echelons (platoon/squads/battery and BCT). Effectiveness, however, depends on the ability to keep the system updated. This is especially true of the enemy situation. The enemy situation will only be updated based on manual inputs by either the unit in contact or through the S2. Updating the enemy situation becomes difficult for a unit in contact because the unit will default to voice communications as a faster and easier way to pass information. An element of the unit not in contact needs to be designated to input the information into the digital system so other elements of the unit and task force receive the tactical Internet information. The above procedure should be addressed in the battery SOPs.

COMMAND AND CONTROL

G-11. The tactical Internet enhances the command and control of the digitized platoon. The commander has the ability to receive, process, and distribute combat information (warning orders, FRAGOs, OPORDs, and overlays) in near real time. The commander receives enemy locations from the battalion and supported unit S2 and subordinate spot reports. The commander or XO sends that information to the

supported force. The supporting force staff combines spot report information with ASAS data and information from higher and adjacent units. The BCT S2 combines the information into a common picture of the battle space using MCS/P. The commander and subordinate leaders receive the enemy disposition as a graphic overlay.

PLANNING PROCESS

G-12. B^2C^2 provides significant enhancements to the battery planning process. The commander and subordinate leaders can digitally issue warning orders (WO) with draft operations overlays early in the orders process to allow subordinate leaders to begin their troop-leading procedures, rehearsals, and reconnaissance much sooner than previously possible. The unit can significantly speed up the distribution of CS overlays, such as fire support, enemy, and obstacle overlays, by using and coordinating existing information, prior to the actual issuance of the operations order (OPORD). When the unit has completed the planning process and is prepared to issue the OPORD, the unit digitally sends updated operational overlays to subordinate leaders prior to the issuance of the OPORD. This allows units to initiate actions at their level while the commander is occupied elsewhere. There are many other ways the digitized battery can use digital communications to enhance the planning process. METT-TC and the creativity of the unit determine how they can most effectively use the digital systems available to them.

REPORTING

G-13. The ability to digitally send tactical reports can aid the commander and his subordinate leaders in shaping the battlefield and reacting to changing tactical situations. The B^2C^2 system has preformatted reports a user can quickly produce and send. Contact reports and spot reports (SPOTREPs) are the primary combat reports used to help the commander and his subordinate leaders develop the tactical situation. The initiator of the report can create an enemy icon on his tactical display by lasing to a potential target. He then has the option to digitally send that icon, with some descriptive text, up the chain of command as a contact or SPOTREP. Upon receipt of the report, the recipient can review the report and the location of the enemy icon and has the option to forward it to higher headquarters. At each level of the chain of command, the recipient of the report can look at the location of the reported enemy element and compare it to his operational graphics and friendly unit locations to determine if there is a potential problem with the disposition or orientation of friendly units and adjust accordingly. Additionally, all contact and SPOTREPs can be converted into calls for fire or close air support (CAS) requests with one additional button push at any level of the reporting hierarchy.

G-14. There are also automated logistics reports available to aid the commander and his subordinate leaders. Situation reports (SITREPs) and medical evacuation (MEDEVAC) requests assist the unit in assessing the logistics status of subordinate units and in pushing necessary support forward.

LIMITATIONS

G-15. Even with the significant capabilities of the digital systems, there are some limitations. The most significant limitations are—

- Digital systems may not be installed in some key combat, CS, or CSS elements.
- Digital hardware and software may have physical limitations.
- Digital communications on FM radios and EPLRS communications nets require precise procedures and strict net discipline.
- Digital to nondigital information/data exchanges (and vice versa) require additional resource and time expenditures.

G-16. At the battery level, digital and voice data are carried over the SINCGARS radio. If digital and voice data are sent at the same time, the digital message may be lost. A communications SOP must be developed to ensure the battery does not experience contention when using the radio.

G-17. Units default to voice communications only when in contact. This results in digital dead time when the tactical Internet situational awareness may not reflect the known situation. Commanders must develop an SOP to designate a person to continue inputting information into the digital system when the battery is using voice communications so that the unit, the supported force, and adjacent units are kept abreast of the situation in sector.

NONDIGITAL UNITS

G-18. The integration of conventionally equipped (nondigital) elements within the task force presents special challenges for the digitized commander and his subordinate leaders. The unit must specify specific procedures for communicating both digitally and by voice. The control measures used on digital overlays must be identical to the hard copy overlays, and the commander must make provisions for the nondigital unit to receive automated information with the rest of the unit. Additionally, nondigital adjacent units will not have the benefit of the automated information sharing capabilities. Units will have to establish liaison officers (LNOs) or other positive control measures to ensure proper coordination is completed. Several techniques for accomplishing these tasks are addressed in FM 3-01.64.

HARDWARE AND SOFTWARE LIMITATIONS

G-19. With increased reliance on digital technology come limitations of the hardware and software associated with the systems. Each version of software used in these digital communications systems has peculiarities unique to that system. The user has relatively little flexibility in terms of what types of messages can be sent and what graphic control measures are available for use on overlays. The hardware has limitations as well. The current electronic technology is not perfected for a single communications net to host both voice and digital traffic simultaneously. The result is at times the two conflict with one another, resulting in degraded performance in digital traffic, voice traffic, or both. There are also limitations in the memory capabilities of the computer systems used. When messages, or in particular overlays, exceed the system's memory capabilities, units will experience difficulty transmitting the message or overlay. Given these limitations, the commander must decide when the use of digital reporting is counterproductive. There are some cases, such as during offensive operations, when voice reporting may be more expedient and digital reports are used as follow-up reports. Each of these shortcomings has solutions and is presented simply to illustrate that digital technology, although powerful, is not yet mature. The remainder of this appendix is devoted to identifying situations and establishing procedures that allow digital systems to serve as effective combat multipliers for the digitized platoon.

Section III. Organization and Functions

G-20. This section highlights the additional capabilities and functions the digital communications systems bring to key leaders within the digitized battery. The digitized battery is equipped with the most modern, automated command and control system available in the Army.

COMMANDER

G-21. The role of the commander is essentially unchanged from that described in FMs 44-43 and 3-01.64. With improvements to the AMD sensor and weapon systems, the commander now has at his disposal timely and highly accurate friendly and enemy information. This permits the commander to see the battlefield with improved clarity. The net effect has increased situational awareness. The commander will be able to see the battlefield more clearly and potentially will be able to make more informed tactical decisions. When properly positioned, digitized units provide the commander with continuous and highly reliable combat information necessary to make timely battlefield decisions.

SUBORDINATE LEADERS

G-22. Commanders and squad leaders directly influence the battle by employing their AMD systems to ensure air defense coverage of the task force and critical assets. They are the commander's principle means of fighting the battle. Subordinate leaders use digitally generated combat information to guide the

employment of their sensor and weapon systems and synchronize the use of combat support assets provided to them by the task force commander. When operating as a task-organized element with nondigitally-equipped units, commanders and section chiefs exploit the position location capabilities of their systems to fix the location of the enemy and issue pertinent instructions by voice.

COMBAT SUPPORT

G-23. The commander and subordinate leaders use selected CS assets (field artillery, CAS, engineers, military intelligence, and chemical units) to integrate and synchronize combat multipliers in support of operational plans. Digital interfaces with these elements tighten their integration into the planning process and improve their situational awareness during tactical operations. Most or all of these elements at the task force level will have some access to digital communications systems, although task-organized elements, such as individual engineer squads, may not. Integration of these elements presents special challenges at battery and below. The commander and subordinate leaders need to ensure information from maneuver digital nets is passed on to supporting CS elements. As stated previously, the commander and subordinate leaders must make special provisions for these elements to receive and send vital information passed on the digital nets.

Section IV. Operational Concept

G-24. The introduction of the digitized battery with its weapon and sensor system enhancements and automated tactical reporting presents unique opportunities and operational challenges for the commander and subordinate leaders. This section briefly illustrates several tactical situations where the advanced capabilities of the digitized battery can be effectively exploited. Specific techniques and procedures for the employment of digitized units in various types of combat operations are discussed in detail in FM 3-01.64.

OFFENSIVE OPERATIONS

G-25. During offensive operations, the digitized battery has some unique capabilities. The POSNAV system and automated reporting functions make the digitized battery particularly well suited to provide air defense coverage for lead maneuver units in a deliberate attack or for the advance guard in a movement to contact. There are some limitations, however, in digital reporting capabilities during offensive operations. The physical difficulties of manipulating buttons while moving and the speed in which events occur make digital reporting, while in contact in offensive operations, difficult at best. The commander must establish SOPs for automated reporting to maximize the advantages of digital reporting without being encumbered by the system.

G-26. Automated reporting is useful for synchronizing the scheme of maneuver during unexpected contingencies such as identification of enemy obstacles. In this situation, battery, in conjunction with lead maneuver units, can identify, designate, and transmit the left and right limits of the obstacle system, bypass routes, or suitable breach sites to the BCT commander. The battery can digitally issue FRAGOs to subordinate units as he adjusts the air defense plan in support of the BCT's adjusted plan. Automated reporting can also be used to warn forces of chemical hazards. As supported force or AMD elements identify contaminated areas, the commander or subordinate leaders can use digitally provided bypass lanes and updated enemy situational templates/Operations 2 overlay to modify the scheme of maneuver to avoid the contamination.

G-27. The battery CP personnel use combat information (for example, avenues of approach and types of enemy aerial platforms detected and their location) to analyze the enemy's disposition and advise the commander on changes to the enemy situation. This information can be forwarded to the BCT to assist in formulating changes to the enemy overlay or the scheme of maneuver. This exchange of automated combat information provides the supported force commander with critical information necessary to maintain and exploit the initiative during offensive operations.

G-28. Upon the conclusion of offensive operations, the digitized commander begins consolidation and reorganization operations. Subordinate units occupying predetermined positions marked with automated checkpoints digitally provided by the supported force complete consolidation. If necessary, the commander can issue new control measures to reorient subordinate units. The reorganization phase is initiated with subordinate units sending automated SITREPs on the administrative/logistics (A/L) net to initiate A/L resupply.

DEFENSIVE OPERATIONS

G-29. The commander's air defense plan must support the supported force scheme of maneuver. The commander's plan must address air defense coverage during all phases of the defense. The commander needs to mass enough forces at the critical place and time to defeat the enemy helicopters, UAVs, CAS fixed-wing assets, and deny aerial surveillance of friendly assets. AMD weapon systems must be integrated and remain within AMD employment guidelines. The plan needs to address air defense of deep, close, and rear operations.

G-30. Upon receipt of the WO from the BCT main CP, the commander prepares and digitally transmits his WO to subordinate units. He develops his air defense plan and digitally transmits this to the BCT main CP. Upon receipt of the battery WO, platoons move to their battle positions and begin defensive preparations. Commanders and section chiefs begin to digitally coordinate their plans with their supported force. Air defense information (for example, sectors of search and primary target lines) can be digitally assigned and forwarded to higher echelons. This information is then integrated into the air defense plan and forwarded to the supported force. The BCT leaders can review the air defense plan to see if it meets the intent. Digital transmission of all information speeds ups the entire process and provides opportunities to better plan all aspects of an operation.

G-31. The commander and/or XO assist the BCT in the completion of the planning process. Final operations graphics are digitally transmitted to all units. Units make refinements or adjustments prior to receiving the final supported force OPORD. Upon return from receiving the OPORD, the commander should conduct rehearsals and complete his troop-leading procedures.

G-32. When enemy aerial platforms are detected, the digitized battery reports enemy locations using a combination of voice and digital reporting. Digital contact and SPOTREPs are well suited for reporting during defensive operations. The commander monitors his tactical display screens and issues voice and digital orders to make adjustments necessary to counter the enemy threat. If necessary, the commander issues voice FRAGOs and automated graphics to reposition forces. Time permitting, the commander issues updated operations overlays to adjust his scheme of maneuver.

Section V. Command and Control

G-33. This section describes command and control techniques and procedures that exploit the unique capabilities of automated forces. It is designed to assist the AMD battery, CP personnel, and subordinate leaders to realize the advantages of automated information exchange during the planning and execution phases of combat operations.

G-34. To be successful in battle, commanders must make sound decisions rapidly. The digitized battery has enhanced capabilities with which to command and control their units. CP personnel assist the commander in making these decisions and translating them into coherent plans and changes to the scheme of maneuver. Units must act quickly and decisively once changes are received to gain or retain the initiative and defeat the enemy.

COMMAND AND CONTROL RESPONSIBILITIES AND FACILITIES

G-35. The digitized battery maintains the same basic division of responsibility among key leaders as outlined in FM 3-01.64. Digitization, however, provides the tactical Internet equipped battery with

additional capabilities (information sharing and situational awareness) that modify the manner key leaders execute command and control responsibilities. The automated battery exercises its command and control function from a CP equipped with all C^4I POSNAV systems. CP equipment and personnel should be continuously uploaded in the vehicles where all battlefield analysis functions are conducted. This equipment and personnel make seamless information exchange between combat, CS, and CSS assets now possible during the planning, coordination, and execution of combat operations. This section highlights how the commander, section chiefs, and squad leaders use digitized systems to accomplish command and control duties and responsibilities.

COMMANDER

G-36. The commander plans, prepares, and executes tactical operations. He uses the tactical Internet system to streamline not only the planning and preparation stages, but also the execution of combat operations. He has the capability to send digitized maneuver, fire support, and enemy and obstacle overlays to subordinate leaders. The commander exercises command and control functions using both voice and digital communications. B^2C^2 situation reporting provides the commander with a graphical representation of pertinent aspects of the scheme of maneuver, such as situational templates, indirect fire plan, and maneuver control measures as well as enemy and friendly position location information. Precise and continuous (real time) updating of both the friendly and enemy situation provides the commander with critical combat information necessary to effectively control and synchronize combat operations once contact or detection is made.

G-37. The commander performs the majority of his command and control functions prior to contact/detection by monitoring his respective displays. Once contact/detection is made and the initial automated contact or SPOTREP is received, the commander transitions to voice reporting to issue instructions and develop the situation. CP personnel assist the commander by modifying existing overlays (operations and enemy) to depict the current tactical situation and by distributing them digitally to subordinate units. This process provides the commander with timely and accurate position location information on both friendly and enemy units. This facilitates rapid and coordinated execution of revised plans and orders.

G-38. During offensive operations, the commander receives automated and voice tactical reports from his platoons. He analyzes these reports, evaluates possible courses of action, issues appropriate orders, and executes his plan using capabilities provided by FAAD C^2 FO and tactical Internet. He monitors unit movements in relation to known (icon) and suspected (templated) enemy locations. The tactical Internet allows the commander to quickly gain positional advantage over the enemy and mass the effects of his unit's combat power at the decisive point.

G-39. During defensive operations, the commander controls his platoons using the digitized sector sketch. As the enemy closes on his position, he uses primary target lines (PTLs) and sectors of responsibility as the primary method of fire distribution and control. At the conclusion of all tactical operations, the commander can quickly review internal logistical status reports.

EXECUTIVE OFFICER

G-40. The XO, as second in command, assists in command and control of the battery. He receives, verifies, and consolidates automated tactical reports from the platoons/sections, and forwards them digitally to the BCT TOC. The commander or PSG sends these reports to the BCT TOCs. This process reduces voice communications between echelons and reduces the susceptibility of intervehicular communications to enemy electronic countermeasures (ECM). The XO performs the following:

• Before a battle, the XO ensures the digital network link is complete and the unit has updated its PLGR devices. These pre-execution checks ensure digitized communication between locations and positive navigational reporting of the unit to TF headquarters. The XO also transmits battery maneuver graphics and the air defense plan for integration into higher and adjacent unit plans. The XO must pass overlay information to subordinate and adjacent units to increase SA and allow for subordinate planning.

• During a battle, the XO tracks the battle and reports unit status to higher headquarters. If established by unit SOP, the XO may be required to transpose voice reports into digital input (primarily for enemy situation, as the friendly situation is updated automatically through EPLRS).

• After a battle, the XO collects SITREPs from platoons/sections and reviews ammunition, fuel, personnel, and vehicle status. Critical supply and equipment or personnel shortages are reported by exception to the BCT CP.

COMMAND POST

G-41. The battery CP is the control, coordination, and communications center for combat operations within the platoon. It facilitates the synchronization of combat operations by integrating CS and CSS into the scheme of maneuver, facilitates planning of future operations, and assists in command and control by maintaining contact and coordination with higher, subordinate, and adjacent units. The CP can operate in a dispersed mode during both mobile and stationary operations to increase survivability.

G-42. External communication with higher or adjacent units is accomplished digitally via B^2C^2 during the planning, preparation, and execution of combat operations. B^2C^2 provides increased functionality in that it has greater flexibility in tailoring automated overlays and tactical reports. This minimizes the need for lengthy voice radio transmissions and significantly improves the precision of combat information received.

PLATOON LEADERS/PLATOON SERGEANTS/SQUAD LEADERS

G-43. The platoon leaders/platoon sergeants/squad leaders retain responsibility for the tactical employment and logistics of their platoons/squads. They inform the commander and the XO on the tactical situation by using automated contact and SPOTREPs. Voice communications are kept to a minimum prior to contact to facilitate the timely transmission and receipt of automated reports.

G-44. The platoon leaders/platoon sergeants/squad leaders monitor ammunition and fuel status of their sections/squads through periodic automated SITREPs submitted from individual fire units/teams. Requests for emergency resupply are reported by exception using standard voice report formats. After the battle, the platoon leader/platoon sergeant/squad leader consolidates digital SITREPs from the sections/squads and forwards an aggregate SITREP digitally to the battery XO.

FIRST SERGEANT

G-45. The first sergeant's combat service support requirements remain the same. The methods available to fulfill these requirements are greatly enhanced. Using the digital system, the 1SG consolidates the unit's logistics SITREPs and ensures support operations are being conducted through the CTCP.

SUPPLY

G-46. The battery XO, 1SG, and supply sergeant plan and coordinate sustainment for tactical operations and provide command and control for resupply efforts. They monitor and update the CSS status of the battery by monitoring the command and administrative/logistics nets and by reviewing digital (B^2C^2) reports. SITREPs are aggregated with information received from voice reports rendered by the unit to determine the logistical status of the platoon. This information is transferred into digital report formats and forwarded to supported force CPs.

G-47. The battery XO, 1SG, and supply sergeant plan and coordinate sustainment for tactical operations and provide C^2 for resupply efforts. They monitor and update the CSS status of the battery by monitoring command and administrative/logistics nets and by reviewing digital reports. SITREPs are aggregated with information received from voice reports rendered by the unit to determine the logistical status of the battery. This information is transferred into digital report formats and can be forwarded higher. The 1SG or supply NCO can assist the CTCP in conducting supply operations for the unit.

G-48. The XO, 1SG, and supply NCO continually assess the logistical posture of the battery, anticipate requirements, and push necessary support forward as the tactical situation permits. The XO, 1SG, PSG, and section SGT monitor the tactical situation on digital displays and forward MEDEVAC requests to the medical commander in the supported force aid station as required. They also use the personnel information contained within the automated SITREP to initiate replacement operations.

Section VI. The Planning Process

G-49. The planning process is a systematic approach to formulating tactical plans that involve the interrelated processes of troop-leading procedures, the estimate of the situation (METT-TC), and IPB. The availability of time and other resources drives the planning process; however, automation eases the burden of planning by automating various steps in the process. This section outlines automated techniques and procedures the commander and his staff can employ to conserve time.

TROOP-LEADING PROCEDURES
TIME MANAGEMENT

G-50. Time management techniques used throughout the conduct of tactical operations must incorporate standard troop-leading procedures. This is combined with leveraging of available automated systems to maximize the time available to plan, prepare, and ultimately execute a mission. Key considerations for time management include—

- Available sunlight.
- Impact on subordinates.
- Time to supervise and conduct precombat checks and inspections.
- Simplicity as an inherent aspect of the plan.

G-51. A deliberate timeline is developed and managed throughout the planning and preparation process to facilitate the execution of the mission. The commander and CP personnel should implement troop-leading procedures that promote the flow of available information and facilitate parallel planning among the CP and subordinate units. The commander should implement a process that digitally disseminates critical information through a series of WOs culminating with an OPORD, subsequent backbriefs, and rehearsals.

G-52. The collection, analysis, and distribution of information are a continuous staff requirement during the formulation of a tactical plan. Troop-leading procedures structure this process and ensure that time is used wisely. The integration of automated information sharing into the troop-leading process speeds the distribution of crucial information within the battery and supported force. Each step in the troop-leading process is examined to illustrate the impact of automation.

RECEIVE THE MISSION

G-53. The digitized battery receives the mission in the form of a WO, OPORD, or FRAGO. Upon receipt of the order, the commander and CP personnel exchange information and conduct a preliminary METT-TC analysis to gather pertinent information for a platoon WO. Simultaneously, CP personnel conduct a mission analysis, formulate the restated mission, and develop an initial time analysis.

G-54. The time analysis is critical as it affects both planning and execution of combat operations. Backward planning timelines are useful for producing a schedule of critical events that must occur. Available time also affects the commander's decision to adopt a particular method of developing the OPORD. Automation can shorten the orders preparation and dissemination process when CP personnel prepare annotated overlays accompanied by voice implementing instructions.

G-55. Once the commander has approved or modified the restated mission recommended by the staff, he issues his planning guidance. The commander includes in his guidance how he envisions employing

automated subordinate units. He might also task CP personnel to specifically develop courses of action that exploit the information sharing advantage provided by automated command and control systems.

G-56. Although the fifth step in the troop-leading process is reconnaissance, the commander may elect to conduct his reconnaissance at this time instead of later. The automated information sharing capabilities of combat vehicles through digital systems support this type of change in routine. As an example, the commander can conduct terrain walks concurrently with the development of the plan. Continuity is maintained throughout the orders process by the automated distribution of annotated digital overlays followed by brief voice implementing instructions. This technique enables section/squad leaders to implement a plan with greater precision and in less time than if they were required to personally receive the OPORD.

ISSUE A WARNING ORDER

G-57. The CP issues a WO to subordinates immediately upon receipt of a WO from higher headquarters. An updated WO is prepared and sent after the commander issues his planning guidance. Normally, the WO is issued to subordinate units by voice. An alternative to issuing the WO by voice is to append the WO to an operations overlay with a short free text message. In this way, the battery minimizes its electronic warfare signature and reduces the likelihood of the WO being intercepted or the unit being targeted for indirect fire.

MAKE A TENTATIVE PLAN

G-58. Development of a tentative plan involves the interaction of both the commander and CP personnel. The command estimate is an integral part of the battery decision-making process. Rather than repeat procedures published elsewhere, this section describes additional considerations the commander and CP personnel must address when formulating the tentative plan. The command estimate serves as the vehicle for discussing the application of automation to the decision-making process.

G-59. The analysis of the situation, specifically the friendly situation, must include an assessment of the platoon's capability to employ automated command and control techniques and procedures at various echelons (such as platoon or section). This step in the estimate process is designed to assist in determining the status of friendly forces relative to the type of operation to be conducted. Integral to this process is a review of the composition of subordinate units and identification of command and support relationships. Focusing on the ability of subordinate units to digitally exchange information across echelons enables the CP to assess the advantages and disadvantages of implementing automated command and control techniques. This information aids the commander in selecting a particular course of action later in the estimate process.

G-60. Once an analysis of the situation is complete, probable courses of action are developed. Consideration should be given to making initial contact with a fully automated force in order to exploit enhanced target acquisition and information sharing capabilities. Based on the comparison of courses of action, the commander chooses or modifies one course of action and provides guidance to CP personnel in the form of a concept of operation. The tentative plan results from the commander's guidance and concept, and becomes the basis for the final plan. The plan consists of task organization, a mission statement, scheme of maneuver, and operations overlay.

INITIATE MOVEMENT

G-61. An initial time-distance analysis should have been conducted upon receipt of a mission to determine when units must start movement in order to conduct the mission on time. This analysis determines if there is sufficient time to issue the OPORD before any movement begins. If movement occurs concurrently with planning, the movement route is included on an automated operations overlay. Pertinent implementing instructions (movement times) are posted to the movement overlay as a free text message and distributed digitally.

CONDUCT RECONNAISSANCE

G-62. Reconnaissance is conducted concurrently with the planning process. To facilitate this, the commander prepares and distributes an automated reconnaissance plan to initiate movement. This is accomplished by assigning subordinate units specific critical points that correspond to reconnaissance objectives. Other pertinent control measures such as a limit of advance, contact points, and tentative battle positions are also included. This technique enables units to designate assigned critical points as way points and use POSNAV to navigate to reconnaissance objectives. Upon arrival, units conduct a physical reconnaissance, considering the effects of METT-TC on the tentative plan, and annotate findings on their automated operations overlay. At a predetermined time, subordinate leaders forward the results of their reconnaissance digitally to the platoon CP. This information is used to support or confirm the commander's guidance or to make necessary changes to the plan. When required, section/squad leaders physically link up with the commander to backbrief the results of their reconnaissance.

COMPLETE THE PLAN

G-63. The plan is refined based on information gathered during the reconnaissance. Once the plan is finalized, automated overlays (such as operations, enemy, fire support, and engineer) are updated. During this process, the CP must exercise discretion in determining which control measures should be included in the overlay. The size of the screen, coupled with limitations in creating doctrinally correct operational symbols, prohibits a direct transfer of control measures from an acetate overlay to its tactical Internet equivalent.

G-64. The completed operations overlay, annotated with the battery mission statement and instructions to subordinate units (task and purpose), is transmitted digitally to subordinate leaders in advance of the OPORD to allow them time to post pertinent overlays to their maps. This technique permits subordinates to familiarize themselves with their role in the platoon scheme of maneuver prior to receiving the OPORD and to identify issues that affect implementation of the plan.

ISSUE THE ORDER

G-65. B^2C^2 lacks the capability to send comprehensive matrix-type OPORDs. Therefore, the order is issued in the manner described in existing doctrinal publications.

SUPERVISE

G-66. Once orders are issued, the commander and subordinate leaders supervise preparation for combat by conducting backbriefs, inspections, and rehearsals. Backbriefs present the commander and his subordinate leaders with an opportunity to state their intent for automated reporting during the mission. They should include event driven triggers to move to voice reporting during the mission, to preclude confusion. This is also a good time to review procedures for initiating automated versus voice requests for fire support.

G-67. If time permits full rehearsals, the commander and subordinate leaders should practice sending automated tactical reports according to the platoon's SOP and the commander's intent. Emphasis is placed on minimizing FM voice transmissions prior to contact/detection of the enemy to ensure timely receipt of automated reporting. Rehearsals also provide leaders the opportunity to review and refine criteria that triggers moving from automated to voice reporting.

AUTOMATED IPB PROCESS

G-68. IPB is a systematic and continuous process of analyzing the enemy, weather, and terrain in a specific area of operation. The IPB process integrates enemy doctrine with weather and terrain and postulates how these factors will influence the enemy's scheme of maneuver. The functions of the IPB process (to determine the battlefield environment, describe the battlefield's effects, evaluate the threat, and determine threat courses of action) are unchanged by fielding automated command and control

systems. Automation, however, expedites the passing of IPB products from BCT to battery and platoons. Using the All Source Analysis System (ASAS), intelligence products developed at the brigade can be easily and quickly transmitted to subordinate units. After refinement, the situation template becomes the basis for the automated situation overlay.

ABBREVIATED DECISION-MAKING PROCESS

G-69. The abbreviated decision-making process retains all steps in the traditional decision-making process; however, time spent completing each step is compressed. Tactical Internet is integrated into this process using a combination of automated overlays annotated with free text messages to convey key aspects of a scheme of maneuver. This technique significantly reduces the time spent developing and distributing combat orders and maximizes planning time at the battery and section/squad leader's level.

Section VII. Command Post Operations

G-70. CP operations include those actions taken to assist key leaders in analyzing enemy information, developing and recommending courses of action, tracking the battle, synchronizing combat multipliers, and reporting to adjacent and higher headquarters. This section outlines specific functions of the CPs in two distinct but interrelated areas: precombat functions and combat functions.

COMMAND POST

G-71. CP functions are identical to those of a nondigital CP except key functions are automated. First, personnel develop and distribute automated overlays (B^2C^2) from the CP. Second, personnel use the displays during the battle to track positions and activities of both friendly and enemy forces. Finally, the CP facilitates revision of existing overlays based on real-time intelligence gathered from the battlefield and plans follow-on operations.

PRECOMBAT FUNCTIONS

G-72. During preparation for combat, the CP uses the B^2C^2 system to speed distribution of combat orders and to monitor reconnaissance activity. Digital capabilities allow the CP to develop and retain five distinct overlays:

- Operations 1 Overlay.
- Operations 2 Overlay.
- Fire Support Overlay.
- Enemy Overlay.
- Obstacle Overlay.

Each of these overlays has specified uses during the planning process and subsequent preparation for combat.

OPERATIONS 1 OVERLAY

G-73. The Operations 1 overlay is used to record scheme of maneuver for any given tactical operation. Although simplified to avoid cluttering the automated displays, it is equivalent of the acetate operations overlay. The plan is developed over the terrain database depicted on the B^2C^2 displays. Once the plan has been finalized, the completed automated overlay is distributed digitally to subordinate leaders and fire units prior to the order so they have an opportunity to review the plan and post the overlay to their maps. Operators must be familiar with specific techniques and procedures to efficiently develop and manipulate automated overlays in the tactical Internet.

OPERATIONS 2 OVERLAY

G-74. The Operations 2 overlay has several uses based on where the battery is in the troop-leading process and the type of mission it is assigned. When the WO is issued, the Operations 2 overlay is used to distribute reconnaissance objectives to digitally-equipped subordinate units during refinement of the tentative plan.

G-75. During offensive operations, the Operations 2 overlay is reserved for maneuver graphics pertaining to the prepared missions. This technique reduces clutter on automated tactical displays by assigning probable or contingency missions to a separate overlay until they are implemented. It may also be used to direct scheme of maneuver changes resulting from enemy use of chemical weapons.

G-76. During defensive operations, the Operations 2 overlay is used for the supported force fire plan. This fire plan aggregates subordinate fire plans into a single automated overlay that is used to verify the synchronization of direct fire weapon systems and to ensure the commander's intent has been met.

FIRE SUPPORT OVERLAY

G-77. The fire support overlay is used for recording and distributing the task force fire support plan. Input into the fire support officer's fire plan during the planning process is accomplished by the company fire support team (FIST) vehicle through the digital message device (DMD). The fire support officer uses input received from company fire support officers to adjust the fire support plan and distribute a final (approved) indirect fire plan prior to the start of the mission.

G-78. All control measures typically placed on an acetate fire support overlay are included on the automated equivalent. Automated calls for fire are passed to company fire support officers in the TACFIRE message format and can be fed directly to the artillery fire direction center in a matter of seconds. For this reason, it is advantageous for leaders to have the complete indirect fire plan available for use at a moment's notice. Although automation of the call-for-fire speeds the process of requesting fires, fires are still more responsive if they are based upon planned versus opportunity targets.

G-79. Fire support overlays are still a product of top-down fire planning with bottom-up refinement. Fire support overlays can be accessed and changed by any member of that particular net and do not have any connectivity with AFATDS. Therefore, changes to the overlay must be closely controlled and coordinated with the fire support officer at each level. During bottom-up refinement, the fire support officer will coordinate changes and additions according to the commander's guidance for fire support.

ENEMY OVERLAY

G-80. The automated enemy overlay is used during both offense and defense for counterreconnaissance operations. It is also used to distribute and update the situation template.

G-81. Digitally updating leaders on the enemy situation shortens the process and minimizes any potential misunderstanding. It also provides subordinate units with a simplified enemy overlay that is useful in formulating their scheme of maneuver. Superimposing the enemy overlay with the automated overlay (Operations 1 or 2) assists leaders in identifying triggers for changes in movement techniques and formations based on the enemy's probable disposition.

G-82. During counterreconnaissance operations, the automated enemy overlay is used to confirm or deny the situation template and update the reconnaissance force on changes to the enemy situation. Enemy icons transmitted digitally by the reconnaissance force are automatically posted to the enemy overlay. This allows the S2 to quickly confirm or deny his situation template and postulated enemy course of action by comparing actual locations of enemy icons against the ASAS situation template. Revisions to the initial situation template are prepared and transmitted to subordinate units based on the S2's analysis. Enemy information reported by voice is manually posted to the enemy overlay and analyzed in a similar manner.

OBSTACLE OVERLAY

G-83. The obstacle overlay is used primarily during defensive operations to distribute the supported force obstacle plan. However, in the offense, the obstacle overlay is used as a supplement to the enemy overlay as a detailed sketch that shows the actual compilation of enemy tactical obstacle(s). Limitations in replicating doctrinally correct obstacle symbology using the automated symbol set requires the task force engineer to use the label function to differentiate between the various obstacles.

COMBAT FUNCTIONS

G-84. During combat operations, the automated battery CP maintains the digital link to the commander and digitally-equipped subordinate units. The CP tracks the location of friendly and enemy icons, monitors digital reporting between the commander and subordinate units, and distributes digital information. Digital information received over digital systems is logged and posted on SITMAPs in the CP identically to combat information gathered from the radio. This technique ensures that the CP has a manual backup and is postured to operate from the map if automated command and control systems fail. It also increases situational awareness among CP personnel by summarizing digital combat information on SITMAPs and charts where it is accessible to all personnel.

G-85. The CP retains the requirement to keep the commander, as well as the supported force, apprised of the tactical situation. The CP communicates with the commander using a combination of digital (B^2C^2) and voice reporting. To simplify communications between echelons, the commander must develop and rehearse a situation-specific communications plan. When digitally-equipped subordinate units play a major role in the supported force scheme of maneuver, digital systems are used to track the movement of these units until enemy contact/detection is made. Once contact/detection is established and the initial automated contact or SPOTREP is received and acknowledged, all communications within the unit default to voice. While battery and subordinate units develop the situation, the CP monitors unit movement on digital displays, reviews automated reports, and updates situation displays (SITMAPs and charts). Simultaneously, the CP updates the supported force and adjacent units with this information digitally (B^2C^2) and by voice.

G-86. When an enemy is destroyed, the battery returns to radio listening silence and subordinate units submit automated SITREPs to the CP to update their combat status. Concurrently, the CP personnel prepare and distribute annotated updates to the Operations 1 overlay and enemy overlays based on guidance received from the commander. Upon receipt of updated overlays and any necessary implementing instructions, the CP aggregates the combat status of subordinate units and updates combat power charts. This process is repeated every time contact/detection is established with the enemy until the mission or operation is accomplished.

Section VIII. Command and Control of Operations

G-87. The digitized battery provides the commander with new challenges and increased capabilities. The near real-time distribution of combat information, up to and including initial contact with the enemy, provides a significant advantage over conventional systems. This section provides techniques to facilitate the use of both voice and digital reporting during the execution of a mission.

SUCCESSION OF COMMAND

G-88. The battery SOP normally governs succession of command. If it is modified based on the mission or personnel turbulence, it is stated in paragraph five of the OPORD. This is also true for the digitally-equipped platoon. Although the digital system will identify if a link is broken and will automatically route messages through an alternate link, this will not be apparent to the unit. The commander will still need to establish techniques for identifying when a key leader is a casualty and for notifying the second in command to take charge. Note that not all platforms (vehicles) will have the same capabilities. There are two methods available:

a. The subordinate assumes the "role" of the leader who has been killed. He logs off as himself and logs on as the leader. The tactical Internet routing matrix will begin to pass data to the platform as if it were the leader's vehicle. However, the leader's vehicle must in fact be dead (off the net) which must be practiced in training, though it will likely not be an issue in combat. When the leader is capable of reassuming his duties, he notifies the subordinate either face-to-face, via voice, or via someone relaying a message; and when the subordinate has logged off as the leader, then the leader may log back on.

b. Time permitting, the subordinate may notify the battery (of his intent to log on as the leader), which can have the information system analysis operators (soldiers with MOS 74B) in the system integration vehicle (SIV) execute a manual change to the routing matrix. This, however, is time-consuming and is not the preferred method. It would be appropriate if the leader was out of the area of operations, but would be returning later.

COMMUNICATIONS

G-89. The communications capabilities of the digitally-equipped battery are vastly superior to those possessed by conventional units. These communications capabilities, however, are tempered by the co-use of the SINCGARS radio for both digital and voice traffic at the platoon/section/squad level. During precombat and postcombat phases of an operation, the bulk of administrative reporting within the battery should be in the form of automated SITREPs. This reduces the unit's electronic warfare signature by exploiting the tactical Internet burst capabilities of automated reporting. Crew members serve as the radio-telephone operators during preparation for combat operations and alert leaders, as necessary, when digital reports are received. The platoon sergeant acts as the platoon net control station.

G-90. Prior to crossing the line of departure during offensive operations, elements configure their tactical displays with the Operations 1 overlay displayed. Once enemy contact is made, the section or battery in contact initiates a voice contact report to alert the platoon. The battery in contact transmits the enemy icon digitally to the commander with an automated contact report. This technique immediately alerts the battery that contact with the enemy has been established; the contact report orients the battery by providing the location and initial strength of the enemy. Once the commander verifies receipt of the automated contact report, tactical reporting on the battery net reverts to FM voice until the mission is completed. As the battery deploys to develop the situation, the XO eavesdrops on the battery net and sends a SPOTREP digitally to the BCT commander and S3 to apprise them of the tactical situation.

G-91. Radio net discipline is crucial during this period because voice transmissions take precedence over digital traffic. Poor net discipline causes digital systems to store reports in a queue until there is a pause on the net of sufficient duration to transmit the entire report digitally. As a matter of SOP, restrict FM voice transmissions to the unit in contact until the commander or XO acknowledges receipt of the initial automated contact report on the battery net.

MANEUVER CONTROL

G-92. The digitized battery possesses enhanced maneuver control capabilities over its predecessors, which simplifies control of tactical movement and enhances situational awareness. Current POSNAV technology provides leaders with accurate position locations for individual vehicles, which are updated according to settings in the tactical Internet (that is, every 15 minutes or 100 meters of movement). Digital systems can also graphically depict the location of individual vehicles logged onto the battery net. The commander uses this information to improve the security and survivability of the battery by monitoring the lateral dispersion/depth of battery elements during offensive operations and periods of limited visibility.

G-93. The commander needs to establish how often and by what protocol the situational awareness will be updated. Movement (every 100 meters) can update it, by time (every X minutes), or both. The platoon/section element locations are transmitted over SINCGARS to the commander/section chief (battery sergeant is the alternate gateway), and the battery relays these over EPLRS to the commander

(this is all automatic). Units equipped with BCIS will also send the location of interrogated units over the BCIS. This information will be transferred to the tactical Internet and relayed higher.

G-94. During periods of limited visibility, each platoon/section is assigned a series of way points along a designated axis to maintain lateral dispersion and orientation. Caution, however, must be exercised when moving in formation during limited visibility. Although vehicles have PLGRs to assist in navigation, the range of the drivers' view limits their mobility. Each of these techniques must be integrated into existing SOPs and practiced in order to exploit the advanced navigational and command and control capabilities of the digitally-equipped platoon.

Section IX. Communications

G-95. Communications is the means through which command and control is exercised. Communications take on increased importance in the digitized platoon, as both voice and digital traffic are passed on the same radio net. There must be open lines of communication vertically and horizontally to realize the full command and control capabilities of AMD weapon and sensor systems. Similarly, the commander must understand the capabilities, limitations, and vulnerabilities of this communications system.

RADIO NETS

G-96. The digitized battery operates on the same three primary radio nets as its nondigitized counterpart: command net, supported unit net, and early warning net. The command net is used for both voice and B^2C^2 digital traffic. Voice traffic has precedence over digital messages on this net to facilitate timely communication during enemy contact/detection. The cost is that digital communications are stored in a queue in the radio interface unit (RIU) initiating the message until a sufficient pause exists on the net to send the transmission in its entirety. This phenomenon requires strict radio discipline on the command net, particularly during enemy contact/detection, until the unit acknowledges receipt of the digital contact or SPOTREP. This technique ensures that the digital report is received in a timely manner and that the unit is alerted to the precise location of the enemy. Once the report is received and the icon is displayed, the commander defaults to voice communications and develops the situation.

DIGITAL COMMUNICATIONS

G-97. The configuration of the RIU and the routing matrices imbedded in the B^2C^2 software create unique reporting limitations, which must be addressed by a series of work-arounds. The B^2C^2 communications page has possible user IDs: each user ID has specific reporting capabilities and limitations that correspond to the radio net the user normally uses. This limitation induces artificiality into the reporting process in specific situations such as sending the CP digital report on the supported force net. In most cases, the commander is too busy issuing instructions and developing the situation to report digitally once contact/detection is made. The XO, on the other hand, is normally located at the battery CP and can report digitally. The routing matrix, however, will not allow the CP to report in this manner. This limitation is addressed by having the XO assume the commander's user ID prior to crossing a line of departure or the defend no later than (NLT) time specified in the order. This technique allows the commander to receive all automated reports forwarded by subordinates and enables the XO to forward pertinent reports digitally to the supported force.

G-98. The capability of B^2C^2 equipped systems to digitally request fires using a fire request grid format requires that the commander give specific guidance on how that capability is to be used. It also requires that the supported force fire support officer coordinate and include in the fire support plan, the details of any digital quick-fire links to include address identifiers.

Section X. Preparation for Combat

G-99. The digitized battery uses the advanced navigation, information sharing, and communications capabilities during preparation for combat operations. These capabilities enable the battery to improve both efficiency and effectiveness of critical preparatory tasks such as assembly area operations and

rehearsal activities. The time leaders traditionally spend performing or supervising these activities can now be devoted to developing, refining, and implementing the air defense plan. The cumulative effect of this process is improved comprehension and synchronization during execution of the plan.

ASSEMBLY AREAS

G-100. The battery occupies an assembly area to prepare for future operations. Preparations typically include reorganization, receipt, and distribution of combat orders; resupply activities; and maintenance of vehicles and equipment. The digitized battery facilitates the compression of the time normally allocated for these activities by integrating digital systems into the planning, preparation, and execution of assembly area operations. Normally, the battery will prepare and transmit a movement route and other pertinent control measures to subordinate units digitally as an operations overlay.

QUARTERING PARTY

G-101. The battery quartering party (for movement into an assembly area) should include a digitally-equipped vehicle to allow the quartering party OIC to communicate digitally with the supported force, the battery CP, and/or other digitally-equipped elements. Similarly, each subordinate unit quartering party should include at least one digitally-equipped vehicle. This technique allows the quartering party to exploit the position-location, navigation, and automated reporting capabilities inherent in digital command and control systems.

G-102. Prior to beginning movement to the assembly area, digitally-equipped combat vehicles display the automated operations overlay on the tactical display. This overlay typically includes the movement route, way points, specific critical points identifying tentative positions, and PTLs for weapon orientation and observation during movement. Control measures must be few in number and related to quartering party operations to prevent tactical displays from becoming cluttered to the point that they are unusable. Based on the tactical situation, additional control measures such as contact points, coordination points, OPs, and screen lines may be included to enhance control and security. If fire support, obstacle, and enemy overlays are also available, quartering party members should store these in their digital database in the event they are necessary.

G-103. Special care should be taken to ensure that digital communication is possible between the quartering party OIC and representatives from each subordinate unit. When necessary, the OIC passes critical information to the commander digitally or by FM voice. Representatives from subordinate units log onto the command net prior to initiating movement. This technique facilitates transmission of digital message traffic (reports and overlays) both within the quartering party and between the OIC and the CP. The quartering party annotates changes to the published route on the operations overlay and notifies the CP by digitally forwarding an overlay update.

G-104. An alternative technique is to send the CP with the quartering party to establish command and control while the platoon's main body is moving. If planning time is short, key members of the staff can move with the quartering party. This enables the staff to begin detailed planning immediately upon the arrival in an assembly area. Digital systems are used to prepare and transmit automated overlays (tentative plan), review automated reports, and monitor the progress of the main body. This technique facilitates transitioning to new missions by pre-positioning key members of the staff so planning can occur concurrently with movement of the main body. Upon arrival in an assembly area, the quartering party uses POSNAV systems to navigate to assigned positions and execute the required reconnaissance. Quartering parties from the battery—

- Determine locations for individual vehicles and record the eight-digit grid from the tactical display.
- Identify sectors of search, PTLs, and left/right limits for their units.

- Record this information on their digital operations overlay and send the updated overlay digitally to the commander.

Concurrently, CP personnel accomplish the following tasks:

- Determine the location for the CP and record it on the automated display.

- Verify subordinate unit locations and sectors of search to ensure there are no gaps in air defense coverage.
- Ensure necessary routes are cleared.

- Transmit changes/updates to the CP to alert the main body to changes to the route and/or assembly area.

G-105. Although position location devices and digital command and control systems improve the battery's ability to navigate, the commander or subordinate leader must decide if and when guides are required to assist in occupying the assembly area. Normally, the use of guides should be planned for occupations during periods of limited visibility or when the task organization consists of predominantly nondigitized units.

OCCUPATION OF ASSEMBLY AREAS

G-106. The digitized battery begins movement to an assembly area with an updated movement route, specific eight-digit grid coordinates for vehicle locations, and a confirmed defensive scheme for occupation of the assembly area. When possible, a scout UAV or helicopter should fly in advance of the movement to reconnoiter the intended route of movement and confirm the selected assembly area. This enables the unit to transition quickly from road march into the actual occupation of the assembly area while maintaining overall air defense coverage for the main body.

G-107. During the road march, the CP monitors the progress of the unit on tactical displays, reviewing digital reports as required. This technique results in a significant reduction in FM voice communications as information previously transmitted over the radio can now be gathered simply by observing the tactical display. Subordinate leaders track the progress of digitally-equipped units with respect to control measures (SP, checkpoints, RPs) depicted on the automated operations overlay during both movement to and occupation of the assembly area.

G-108. If the unit contacts/detects the enemy during the movement, the initial contact/detection report is transmitted by voice followed immediately by an automated contact report. Upon receipt of the automated report, the commander and/or subordinate leaders issue instructions by voice to initiate pertinent battle drills and develop the situation. They use tactical displays to assess the tactical situation and monitor movement of subordinate units with respect to known enemy location(s). Upon request, subordinate units transmit updated enemy locations to the task force and/or CP as either contact or SPOTREPs.

G-109. Occupation of the assembly area is simplified when the battery leads with digitized subordinate units and positions nondigitized units further back in the column. This technique exploits the advanced navigation and position location capabilities of the digital units by allowing nondigitally-equipped units to follow them. As nondigitally-equipped vehicles occupy the assembly area, they position themselves by moving right or left of the base digitized unit. This enables the entire unit to rapidly occupy the designated assembly areas with great accuracy while maintaining unit integrity.

ACTIONS IN ASSEMBLY AREA

G-110. The digitally-equipped battery conducts actions in the assembly area in the same manner as before with a few exceptions. Administrative/logistics actions are carried out according to the SOP. Each digitally-equipped subordinate develops detailed sector sketches and transmits them to the CP on the automated operations overlay. By combining section/squad sector sketches, the battery CP develops a detailed battery sketch including both subordinate unit sectors of fire and indirect fire control measures. During this process, however, the staff must exercise caution, selecting only the control measures

required to provide security in the assembly area. The updated operations overlay detailing the organization of the assembly area is forwarded digitally to the BCT commander and S3.

PRECOMBAT INSPECTIONS

G-111. The commander and subordinate leaders conduct a precombat inspection to determine the battery readiness to execute its assigned mission. During planning for combat operations, precombat inspections typically are informal and focused on particular areas, activities, or units of concern to the commander. Due to technical sophistication and the time-consuming nature of setup and initialization procedures, digitally-equipped units must include digitized systems in their scheduled precombat inspections.

G-112. Informal precombat inspections allow the commander and subordinate leaders to verify setup functions that determine the effectiveness of digitized vehicles during combat. Tasks such as inspecting the communications page on command vehicles, reviewing the content and composition of automated overlays (operations, enemy and fire support), and verifying initialization data (grid location and spheroid) on POSNAV devices are specific areas that must be inspected. Other pertinent information such as the status of prefire checks, boresighting, and synchronization can be gathered during precombat inspections by a simple conversation with vehicle crews and key leaders with subordinate units. Topics such as the unit's communications plan before and during combat operations, triggers to shift to voice reporting, and processing of automated calls for fire also provide valuable insight to the unit's combat readiness.

Section XI. Rehearsals

G-113. Rehearsals replicate actions or processes that are fundamental to the success of a tactical scheme of maneuver. Rehearsing key combat actions allows participants to familiarize themselves with the commander's intent for automated information exchange as well as ascertain the feasibility and adequacy of automated command and control measures. To be efficient and effective during combat, rehearsals of automated information exchange and command and control techniques must be both comprehensive and realistic. Local SOPs must identify appropriate automated rehearsal techniques and establish advantages of digitization.

LEVELS OF REHEARSALS

G-114. Rehearsals are classified by technique employed and level of participation. Digitization expands the rehearsal process by integrating the role of automated reporting and command and control functions (B^2C^2). Figure G-1 illustrates personnel requirements by rehearsal level, as described below:

- Level IV rehearsals are full-scale battery dress rehearsals involving the use of real-time operations over actual or similar terrain. Rehearsals include preparing and sending automated reports and initiating squad battle drills based on information displayed on automated tactical displays. Level IV rehearsals are the most productive type of rehearsals; however, they are also the most resource and time intensive.
- Level III rehearsals are full-dress battery rehearsals of automated reporting and command and control procedures performed on actual vehicles. Level III rehearsals do not involve the movement of vehicles—they are designed simply to exercise the automated reporting process. Exercising the automated reporting process allows the commander or subordinate leaders to effectively gauge the feasibility, adequacy, and level of comprehension of the role of digital command and control systems. Level III rehearsals must be planned and executed whenever the designated scheme of maneuver centers on initiating contact and/or direct/indirect fire with digitally-equipped units. Failure to allocate sufficient time to perform this type of rehearsal under these conditions significantly increases the risk of losing synchronization during the battle.
- Level II rehearsals are scaled rehearsals using key leaders mounted in vehicles over similar terrain. Level II rehearsals cover less area and are less resource intensive than Levels III and IV; however, they fail to exercise automated reporting and command and control functions. They focus

primarily on specific actions or events within an operation such as actions on contact/detection or an in-stride breach of an obstacle.

• Level I rehearsals are small-scaled rehearsals that do not involve interaction with any type of vehicle or equipment. They typically include techniques such as sand table exercises, rock drills, walk-throughs, or war gaming. Because they do not involve actual interaction with equipment, Level I rehearsals are the least preferred type of rehearsal for digitally-equipped units. If a decision is made to execute Level I rehearsals, the commander must talk through his intent for digital reporting and thoroughly review his communications plan once contact/detection is established. As mentioned earlier, failure to allocate time to rehearse and refine these functions significantly increases the probability that synchronization will be lost during the fight.

Participation	Level I	Level II	Level III (Digital)	Level IV (Digital)
Commander	X	X	X	X
XO			X	X
1SG			X	X
Plt Ldr	X	X	X	X
Plt Sgt	X	X	X	X
	Increasing Time →			

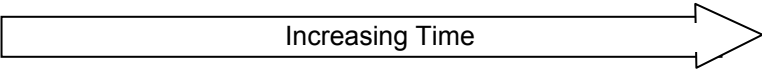Figure G-1. Personnel Requirements by Rehearsal Type.

CONDUCT OF REHEARSALS

G-115. The single most important action that digitally-equipped units must rehearse is when and under what circumstances digital and voice communications are to be used. When voice and digital message traffic is passed at the same time on the same radio net, the RIU forces digital information into a queue. Digital information remains in the queue until there is a pause on the net of sufficient duration to allow the complete digital message to be passed unencumbered. This phenomenon requires disciplined use of the radio and clearly articulated guidance from the commander outlining his intent for automated tactical reporting.

G-116. The commander's plan for integrating voice and digital communications during the execution of a mission is developed during the war-gaming process. The result of this war-gaming process is a clear and comprehensive plan outlining the priority of communications by the phase of the operation. Ideally, voice communications are minimized prior to contact/detection of the enemy. Once contact/power is established and the initial automated contact/detection report is received, the battery switches to voice communications. Specific events such as aerial threat detection, crossing a particular phase line, or establishing contact are suitable triggers for toggling from digital to voice reporting and must be practiced during rehearsals. Similarly, the timing and circumstances preceding a return to digital message traffic must also be rehearsed.

G-117. Leaders at all levels must also be proficient in sending, receiving, and manipulating digital reports during an operation. Integrating these tasks into rehearsals increases a leader's confidence in the equipment and helps identify critical times during an operation when the use of B^2C^2 is neither practical nor beneficial.

G-118. Finally, rehearsals should replicate the same reporting intensity expected during combat. This allows leaders to gain experience in making the mental transition required to apply visual information on the tactical display back to the map and the terrain. This process is a perishable skill that must be rehearsed in advance of combat operations whenever possible. Lack of experience in performing this function will negate the advantage of increased situational awareness made possible by digitization. Table G-1 describes the variable message flow into the tactical Internet.

Table G-1. VMF Message Flow Into Tactical Internet.

NUMBER	MESSAGE	PURPOSE
KO1.50	FREE TEXT	To send free text information not covered by other messages.
KO1.51	FILE TRANSFER	To provide the capability to send and receive tactical computer screen display and files.
KO1.52	UNIT REFERENCE QUERY	To verify, request, or assign a unit reference number or unit name.
KO2.1	CHECK FIRE	To order a check fire or cancel a check fire by target number, by fire unit, and target number, or all targets.
KO2.4	CALL FOR FIRE	To request resources from supporting or adjacent fire support agencies.
KO2.5	SHELL, BOMB, MORTAR REPORT	To report enemy shelling, location of enemy fire units, and transmission of data for crater analysis.
KO2.6	OBSERVER NOTIFICATION	To provide the observer information concerning his request for fire and/or subsequent adjustment.
KO2.14	MESSAGE TO OBSERVER	To transmit fire mission data to an observer.
KO2.15	COORD MEASURES	To define, modify, or delete coordination measures.
KO2.16	END OF MISSION AND SURVEILLANCE	To direct end of mission processing of a fire mission, or to cancel a firing unit or aircraft assignment to an on-going mission during current operations.
KO2.22	SUBSEQUENT ADJUSTMENT	To adjust fall of shot against an area target or for a registration fire mission.
KO2.27	TACTICAL AIR REQUEST	To request immediate or preplanned close air support.
KO2.31	MISSION REQUEST REJECTION	To inform a requester that a planned fire mission(s) or a planned or immediate air mission(s) is rejected.
KO2.32	TACTICAL AIR REQUEST (TAR) ACCEPTANCE	To inform C^2 agencies that a tactical air mission request has been accepted.
KO2.33	TACTICAL AIR REQUEST AIRCREW BRIEFING	To provide aircrews all-essential aircrew briefing information for a close air support mission.
KO2.34	AIRCRAFT ON-STATION	(For the pilot or flight leader.) To notify the control agency that he and his flight have arrived at the prescribed control station.

Table G-1. VMF Message Flow Into Tactical Internet (continued).

NUMBER	MESSAGE	PURPOSE
KO2.35	AIRCRAFT DEPART INITIAL POINT	(For the pilot or flight leader.) To notify the initial point control agency that he and his flight are departing the initial point to complete the assigned air support mission.
KO2.36	AIRCRAFT MISSION UPDATE	To confirm, update, or change an aircraft's assigned mission.
KO2.50	OBSERVER STATUS	(Used by fire support units.) To transmit the status of forward observer, fire support location, or radar location and status, or to transmit data to dedicate a howitzer to target acquisition agency.
KO2.58	AIRBORNE FIRE MISSION	To request resources from supporting Army aviation fire support agencies.
KO3.50.	SHOT AT REPORT	To provide a battle damage assessment from a target engagement.
KO3.51	WEATHER REPORT REQUEST	To distribute a severe weather warning and 12-, 24-, and 48-hour weather forecasts to all units. The weather report is requested by units from the WX personnel (Air Force).
KO4.9	BRIDGE REPORT	To report or confirm the tactical use of bridge(s) to support military operations.
KO4.50	LAND ROUTE REPORT	To report the military use of a land route for combat operations.
KO4.51	RADAR TARGETS AND INTELLIGENCE	To provide situation awareness and early warning, and/or engagement by other systems. This message allows for near real-time transmission of the detected target array for targeting and intelligence information.
KO4.52	SPOT/SALUTE REPORT	To report spot, contact, engagement, and SALUTE reports. This report is submitted by subordinate units to their higher headquarters.
KO4.53	OBSTACLE REPORT	To report obstacle type, location, impact on movement, bypass locations, safe corridors, and enemy activity near the obstacle.
KO4.54	DOCTRINAL/TEMPLATE	To provide commander with enemy templating capability for intelligence situation developments.
KO5.1	POSITION REPORT	To provide own, subordinate, and friendly unit location data.
KO5.51	SITUATION REPORT	To report and define tactical situations and status only. This report is submitted by subordinate units to their higher headquarters.
KO5.52	OVERLAY MESSAGE	To provide a means of sending and receiving overlay information.

Table G-1. VMF Message Flow Into Tactical Internet (continued).

NUMBER	MESSAGE	PURPOSE
KO5. 53	THREAT WARNING MESSAGE	To notify units, commanders, and personnel of an imminent ballistic missile, aircraft, or NBC attack.
KO5.54	FIELD ORDERS	(Standardized information format used by commander and staff.) To issue plans/orders to effect the coordinated execution of an operation. Also used to provide FRAGO or WO.
KO5.55	INFORMATION REQUEST/RESPONSE MESSAGE	To provide commander with request/response capability for information elements.
KO5.56	REDCON/MOPP	To notify subordinates of level of security readiness and mission-oriented protective posture (MOPP).
KO5.57	BASIC WIND REPORT	To transmit wind direction and speed for either the nearest 6 hours or for a period more than 6 hours into the future.
KO5.58	CHEMICAL DOWNWIND MESSAGE	To transmit chemical downwind information. This information is transmitted every 6 hours and contains a forecast of the meteorological data needed for chemical hazard area (CHA) prediction procedure for three consecutive 2-hour periods, for either the nearest 6 hours or for a period more than 6 hours into the future.
KO5.59	EFFECTIVE DOWNWIND REPORT	To transmit the actual effective downwind data needed for prediction of fallout areas resulting from a nuclear burst for either the nearest 6 hours or for a period of more than 6 hours into the future.
KO5.61	NBC 1 REPORT	To transmit an observer's initial report of basic data pertinent to an NBC attack.
KO5.62	NBC 2 REPORT	To transmit evaluated data of an NBC attack resulting from the processing of one or more NBC 1 reports.
KO5.63	NBC 3 REPORT	To transmit immediate warning of predicted contamination and hazard areas following NBC attacks.
KO5.64	NBC 4 REPORT	To transmit NBC monitoring and survey results.
KO5.65	NBC 5 REPORT	To transmit actual NBC contamination areas.
KO5.66	NBC 6 REPORT	To transmit detailed information on biological or chemical attacks.
KO7.1	MEDICAL EVACUATION REQUEST	To request ground or aircraft support to evacuate friendly and/or enemy casualties.
KO7.50	LOGISTICS REPORT	To report individual units or multiple units combat-essential equipment readiness status and degree of supply readiness.
KO7.51	PERSONNEL STATUS	To report individual units or multiple unit daily or periodic personnel strength and status.

Table G-1. VMF Message Flow Into Tactical Internet (continued).

NUMBER	MESSAGE	PURPOSE
KO7.52	CTI/BRIL ACTION MESSAGE	To inform units of materiel and personnel that a force-level commander has directed to be tracked and/or to modify/establish the BRIL.
KO7.53	MINEFIELD LAYING REPORT	To report on friendly minefield laying operations
KO7.55	EPW/DETAINEE CAPTURE/STATUS REPORT	(This report will be used by the capturing unit.) To inform higher headquarters (info only) and supporting military police of the capture or detainment of EPWs, civilian detainees, civilian internees, or displaced civilian refugees. This message provides accurate and timely information to effect transportation, security, processing, and transfer of these categories of personnel to the custody of the MPs.
KO8.50	CACHE REPORT	To report cache sites. The cache report is used by outstations and the base station.

GLOSSARY

1SG	first sergeant
A/C	aircraft
A/L	administrative/logistics
A^{2}C^2	Army airspace command and control
AA	avenue of approach; antiaircraft; assembly area
AAA	antiaircraft artillery; air avenue of approach
AAR	after-action review
ABMOC	air battle management operations center
AC	Active Component; aircraft commander; alternating current
ACA	airspace control authority; airlift clearance authority
ACO	airspace control order; airspace coordination orders
ACR	armored cavalry regiment
AD	air defense; armored division
ADA	air defense artillery
ADC	air defense control; air defense coordination; air defense command
ADCN	air defense coordination net
ADW	air defense warning
AFATDS	Advanced Field Artillery Tactical Display System
AFTB	Army Family Team Building
AGES	air-to-ground engagement system
AI	air interdiction; airborne intercept; area of interest
alt	altitude; alternate
AM	amplitude modulation; ante meridiem
AMD	air and missile defense
AMDCO	air and missile defense coordination officer
AMDCOORD	air and missile defense coordinator
AMDOC	Air and Missile Defense Operations Center

AMDWS	Air and Missile Defense Workstation
ANCD	automated net control device
AO	area of operations
AOAP	Army Oil Analysis Program
AOC	air operation center; area of concentration
AOR	area of responsibility
AP	armor-piercing; ammunition point
APC	armored personnel carrier
APD	Army Publishing Directorate
AR	Army Regulation; Army Reserve; automatic rifle
ARNG	Army National Guard
ARTBASS	Army Training Battle Simulation System
ARTEP	Army Training and Evaluation Program
ART-V	aircraft recognition training-visual
arty	artillery
ASAS	All Source Analysis System
AT-AOI	air track-area of interest
ATGM	antitank guided missile
ATSC	Army Training Support Center
attn	attention
ATWESS	antitank weapon effect simulator system
AUTL	Army Universal Task List
Avg, avg	Avenger; average
B^{2}C^2	Brigade-and-Below Command and Control System (Army term)
BBS	Brigade and Battalion Simulation
BCD	battlefield coordination detachment
BCE	battlefield coordination element; Bradley crew evaluator
BCIS	Battlefield Combat Identification System

BCPC	Bradley Crew Proficiency Course
BCT	basic combat training; battle coordination team; brigade combat team
BDAR	battlefield damage assessment and repair
BDU	battle dress uniform
BF	battle fatigue
BFV	Bradley Fighting Vehicle
BGST	Bradley gunner skill test
BM	ballistic missile; battlefield management; bimonthly (once every two months)
BMNT	beginning morning nautical twilight
BMO	battery maintenance officer
BOS	battlefield operating system
BRIL	basic resources item list
BSFV	Bradley Stinger Fighting Vehicle
BT	basic training; Bradley table
C^2	command and control
C^3	command, control, and communications
C^3I	command, control, communications, and intelligence
C^4I	command, control, communications, computers, and intelligence
CANA	convulsant antidote for nerve agent (diazepam)
CAS	close air support
CATS	Combined Arms Training Strategy
CCT	combat control team
CCTT	close combat tactical trainer
CDM	chemical downwind message
CD-ROM	compact disk-read only memory
CECOM	communications-electronics command
CFT	captive flight trainer
CHA	chemical hazard area

CHS	combat health support; common hardware and software
CM	crew member; cruise missile
CMD	command; cruise missile defense
COA	course of action
COFT	conduct-of-fire trainer
COMSEC	communications security
CP	command post
CPR	cardiopulmonary resuscitation
CPT	captain
CPX	command post exercise
CS	combat service; combat support; chemical smoke (gas); Chlorobenzalmalononitrile; curbside
CSE	commander's sight extension
CSR	central source registry; commander in chief's (CINC's) summary report; commander's summary report; controlled supply rate
CSS	combat service support
CTCP	combat trains command post
CTI	commander tracked item
CVRT	critability, vulnerability, recuperability, and threat
DA	Department of the Army
DC, dc	District of Columbia; direct current
DEW	directed early warning; directed-energy weapon
DMD	digital message device
DODAC	Department of Defense Ammunition Code
DODIC	Department of Defense Identification Code
DS	direct support
DS2	decontaminating solution #2
DSM	decision support matrix
DSN	Defense Switchboard Network

DST	decision support template
DTAC	Digitized Training Access Center; division tactical air control; Division Tactical Access Center
DZ	drop zone
DZST	drop zone support team
EAC	echelons above corps
EAD	echelons above division
ECCM	electronic counter-countermeasures
ECM	electronic countermeasures
EEFI	essential elements of friendly information
EEI	essential elements of information
ELRF	eye safe laser range finder
EPLRS	enhanced position location reporting system
EPW	enemy prisoner of war
ERF	ECCM remote fill; electronic remote fill
EW	early warning; electronic warfare
EWBN	early warning broadcast net
ext	external; exterior
FAAD	forward area air defense
FARP	forward arming and refueling point
FASCAM	family of scattered mines
FBCB2	Force XXI Battle Command, Brigade, and Below
FCC	flight coordination center
fctn	function
FDS	fire distribution section; fire direction section
FH	frequency hopping
FHT	field handling trainer
FIST	fire support team
FM	field manual; frequency modulation

FO	forward observer; force operations; field order
FOFT	force-on-force trainer
FPF	final protective fire
FPL	final protective line
FRAGO	fragmentary order
FSB	forward support battalion; forward support brigade; fire support base
FSE	fire support element
FST	field sanitation team
FTX	field training exercise
FW	fixed wing
G-3	Army or Marine Corps component operations staff officer (Army division or higher staff, Marine Corps brigade or higher staff)
gnd	ground
GPS	gunner primary sight; Global Positioning System
gren	grenade
grn	green
grnd	ground
HB	heavy barrel
HC	hexachloroethane
HE	high explosive
HMMWV	high-mobility multipurpose wheeled vehicle
HQ	headquarters
HTU	handheld terminal unit
ICOM	integrated COMSEC; imbedded communications
ID	identification; infantry division
IFF	identification, friend, or foe
IHFR	improved high-frequency radio
illum	illumination
IMTS	improved moving target simulator

INTSUM   intelligence summary

IPB   intelligence preparation of the battlefield; Installation Property Book

IR   infrared radiation; intelligence requirement

IRCM   infrared countermeasures

IRETS   infantry remoted target system

ISU   integrated sight unit

IVIS   intervehicular information system

JANUS   Joint Army Navy Uniform Simulation

JINTACCS   Joint Interoperability of Tactical Command and Control Systems

JTIDS   Joint Tactical Information Distribution System

KIA   killed in action

km   kilometer

KTC   cryptography transmission code

LADW   local air defense warning

LBE   load-bearing equipment

LCE   load-carrying equipment

LCPC   Linebacker Crew Proficiency Course

ldr   leader

LFX   live fire exercise

LNE   late net entry

LNO   liaison officer

LOG   logistics

LOGPAC   logistics package

LP   listening post

LRP   logistics release point

LTA   local training area

LTC   lieutenant colonel

ltwt   lightweight

LZ	landing zone
MACOM	major Army command
man	manuever; manual
MANPADS	man-portable air defense system
MAPEX	map exercise
MCS	Maneuver Control System
MDI	miss distance indicator
MEDEVAC	medical evacuation
METL	mission-essential task list
METT-TC	mission, enemy, terrain and weather, troops, time available, and civil considerations
MG	machine gun
MHE	materials handling equipment
MI	Military Intelligence
MIJI	meaconing intrusion jamming interference
MIJIFEEDER	meaconing intrusion jamming interference feeder
MILES	Multiple Integrated Laser Engagement System
mm	millimeter
MOPP	mission-oriented protective posture
MOS	military occupational specialty
MSB	main support battalion; main support brigade
MSR	main supply route; missile simulator round; missile site radar
MTA	maneuver training area
MTF	medical treatment facility
MTOE	modified table of organization and equipment
MTP	mission training plan; MOS training plan
NAI	named area of interest
NBC	nuclear, biological, and chemical
NCO	noncommissioned officer

NCOIC	noncommissioned officer in charge
NCS	net control station
NDP	night defensive position
NE	not evaluated
NET	new equipment training; network entity title
NLT	not later than
NRI	net radio interface
NSN	nonstandard number; national stock number
NVIS	near vertical incidence skywave
O/C	observer/controller
OCA	offensive counterair; operational control authority
OCOKA	observation and fields of fire, cover and concealment, obstacles, key terrain, and avenues of approach
ODS	Optical Disk System; operator decision specification; Operation Desert Storm
OIC	officer in charge
OP, op	observation post; operator
OPFOR	opposing forces
OPLAN	operation plan
OPORD	operation order
OPSEC	operations security
OPTEMPO	operational tempo
para	parachute; paragraph
PDDE	power-driven decontamination equipment
PDF	principal direction of fire
PGS	precision gunnery system
PIDOFF	passive identification off
PIDON	passive identification on
PIR	priority intelligence requirement

PLGR	precision lightweight GPS receiver
PLL	prescribed load list
plt	platoon
PMCS	preventive maintenance checks and services
POL	petroleum, oils, and lubricants
POSNAV	position navigation
proj	projectile
PRR	personnel requirements report
PSG	platoon sergeant
PSR	personnel status report; personnel summary report
PTL	primary target line
PVNTMED	preventive medicine
pwr	power
QC	quality control
R&S	reconnaissance and surveillance
RATELO	radiotelephone operator
RC	Reserve Component
RCU	remote control unit
rd	round
RDL	Reimer Digital Library
REDCON	readiness condition
RISTA	reconnaissance, intelligence, surveillance, and target acquisition
RIU	radio interface unit
RMP	reprogrammable microprocessor
ROE	rules of engagement
ROI	rules of interaction
RP	release point
RPG	radar processor group; rocket-propelled grenade

RPV	remotely piloted vehicle
RPVTS	remotely piloted vehicle target system
RSOP	reconnaissance, selection, and occupation of position; readiness standing operating procedure(s)
RT	receiver/transmitter
RTD	return to duty
RTO	radiotelephone operator
RTS	remote transfer switch
RW	rotary wing
rxmt	retransmit
S1	Adjutant (US Army)
S2	Intelligence Officer (US Army)
S3	Operations and Training Officer (US Army)
S4	Supply Officer (US Army)
SA	selective availability; semiannually; situation awareness; surface-to-air; subject area
SALUTE	size, activity, location, unit, time, equipment
SATS	Standard Army Training Systems
SC	single channel
SCPE	simplified collective protective equipment
SGT	sergeant
SHORAD	short-range air defense
SHTU	simplified handheld terminal unit
SIF	selective identification feature
SIG, sig	signal
sim	simulated; simulator
SIMNET	simulation network
SINCGARS	single-channel ground and airborne radio system
SIP	System Improvement Program

SITMAP	situation map
SITREP	situation report
SIV	system integration vehicle
SL	squad leader; skill level; sea level
SMCT	soldier's manual of common tasks
smk	smoke
SOA	state of alert
SOFA	status-of-forces agreement
SOI	signal operation instructions
SOP	standing operating procedure
SOR	state of readiness
SP	start point; self-propelled
SPINS	special instructions
SPOTREP	spot report
SQ	squelch
SRC	standard requirements code
SRCU	securable remote control unit ;SINCGARS remote control unit
SSI	special skill identifier; signal standing instructions; signal supplemental instructions
STAFFEX	staff exercise
STARTEX	start of exercise
STB	super tropical bleach
STC	slew-to-cue
STLS	Stinger training launch simulator
STP	soldier training publication
STPT	Stinger troop proficiency trainer
STRAC	standards in training commission
STRIKWARN	strike warning
STX	situational training exercise

SVML	standard vehicle-mounted launcher (missile pod)
T&EO	training and evaluation outline
TACFIRE	tactical fire
TADSS	training aids, devices, simulators, and simulations
TAI	target area of interest
TAMMS	The Army Maintenance Management System
TAR	Training and Administration of the Reserve
TASM	tactical air-to-surface missile
TBP	to be published/provided
TC	technical coordinator; training circular
TEK	traffic encryption key
TEWT	tactical exercise without troops
TF	task force
TG	trainer's guide
THT	tracking head trainer
TM, tm	technical manual; theater missile; team
TMDE	test, measurement, and diagnostic equipment
TOC	tactical operations center
TOCEX	tactical operations center exercise
TOE	table of organization and equipment
TOW	tube-launched, optically tracked, wire-guided (missile)
TPDS-T	target practice discarding sabot-tracer
TPT	troop proficiency trainer; target practice tracer
TP-T	target practice-tracer
TRADOC	Training and Doctrine Command
TRC	training readiness condition
TRP	target reference point
TSK	transmission security key

TSOP	tactical standing operating procedure
TSV	thru-sight video
TTT	table-top-trainer
UAV	unmanned aerial vehicle
UCOFT	unit conduct-of-fire trainer
UMCP	unit maintenance collection point
US	United States
USA	United States Army
USAADASCH	United States Army Air Defense Artillery School
USMTF	United States Message Text Format
UTA	unit training area
UTM	universal transverse mercator (grid); unit training mission
VACR	visual aircraft recognition
vic	vicinity
viol	violet
VMF	variable message format
WBGT	wet bulb globe temperature
WCO	weapon control order
WCS	weapon control status
whis	whistle
WO	warning order; warrant officer
WX	weather
XO	executive officer
yel	yellow
Z	ZULU time (Greenwich Mean Time)

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Required publications are sources that users must read in order to understand or to comply with this publication.

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DA FORM 7504	Personnel and Equipment Loss Report.
DA FORM 7505	Unit Data Sheet.
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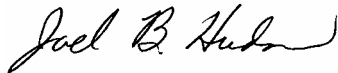**ARTEP MISSION TRAINING PLAN USER FEEDBACK**

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