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Virtual Training Program Orientation Guide

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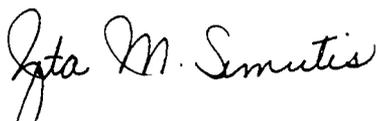
FOREWORD

Active Component (AC) and Reserve Component (RC) units increasingly face the challenge of conducting training within time and resource limitations. To help meet this challenge, a Virtual Training Program (VTP) has been established at Fort Knox, Kentucky. This program, initially known as the Reserve Component Virtual Training Program (RCVTP) and focused on Army National Guard (ARNG) armored units, was established with Fiscal Year 1993 research and development funding provided by Congress. It has been implemented and expanded to provide structured, compressed training to both AC and ARNG units, making innovative use of available simulation technologies.

The U. S. Army Research Institute for the Behavioral and Social Sciences (ARI), the Advanced Research Projects Agency, the National Guard Bureau, and the U.S. Army Armor Center and Fort Knox joined efforts (Memorandum of Agreement entitled "National Guard Armor Simulation Center," April 1993) to develop and implement the VTP. As part of Work Package 2124, "Strategies for Training and Assessing Armor Commanders' Performance with Devices and Simulations (STRONGARM)," the ARI Armored Forces Research Unit at Fort Knox has accomplished training research and development supporting the VTP through a series of contract and in-house efforts.

Initial training development for the VTP was accomplished through an ARI contract entitled "Simulation-Based Multiechelon Training Program for Armor Units (SIMUTA)." This project produced training support packages for two missions at platoon through battalion levels. A follow-on ARI contract entitled "SIMUTA-Battalion Exercise Expansion (SIMUTA-B)" developed training for a third mission, while a second follow-on ARI contract entitled "Simulation-Based Mounted Brigade Training Program (SIMBART)" expanded the training to brigade level. The breadth and scope of the VTP thus have grown considerably, and the program now serves as a common training thread for AC and ARNG units, providing unique training opportunities to both.

This Orientation Guide represents an update of the original RCVTP Orientation Guide (ARI Research Product 95-07, March 1995). It acquaints leaders of armor, mechanized infantry, and cavalry units with the VTP. Also, it provides leaders with sufficient information to enable them, in coordination with the Fort Knox VTP Observer/Controller Team or other program implementors, to decide on the type of simulation to use, along with the echelon and level of training to conduct, during a VTP rotation.



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PREFACE

The Virtual Training Program (VTP) was established at Fort Knox, Kentucky in 1004. The original name, Reserve Component Virtual Training Program (RCVTP), was changed as the VTP was implemented to train Active Component as well as Army National Guard (ARNG) units. A dedicated Observer/Controller (O/C) Team implements the VTP at Fort Knox. Portions of the VTP have been exported to ARNG sites in Idaho and Georgia. At these sites Reserve Training Detachment or unit personnel serve as O/Cs. The focus of this Orientation Guide is the VTP at Fort Knox, but points of contact (POCs) for ARNG are provided in the POC section.

The VTP is part of a larger, structured training program that is continuing to evolve at Fort Knox. This larger program is currently designated the Brigade and Below Simulations Training Program (B2STP). The VTP components of the B2STP are currently being redesignated as the Mounted Task Force Training Simulation and the Brigade Primary Staff Execution Training Simulation. These components are referred to as the VTP throughout this Orientation Guide. As names evolve, the user is advised to check with the O/C Team or other Fort Knox personnel for current designations.

This Orientation Guide updates and replaces the initial RCVTP Orientation Guide, published as U.S. Army Research Institute for the Behavioral and Social Sciences Research Product 95-07 in March 1995. The authors of the initial guide were Jack L. Turecek (BDM Federal, Inc.), Charlotte H. Campbell (Human Resources Research Organization), William E. Myers (BDM Federal, Inc.), and Timothy H. Garth (PRC, Inc.). The present Guide covers the expanded VTP, including an additional mission (Deliberate Attack) and an additional echelon (brigade primary staff).

VIRTUAL TRAINING PROGRAM ORIENTATION GUIDE

CONTENTS

	<u>Page</u>
Purpose of the Orientation Guide.....	1
Overview of the VTP	1
Components of the VTP.....	2
Training Environments.....	2
Simulation Networking (SIMNET).....	2
Janus.....	3
Observer/Controllers (O/Cs).....	4
Exercises/Tables	5
Take Home Package (THP).....	6
Exercise/Table Selection.....	7
Descriptions of Platoon Exercises/Tables.....	7
Armor Platoon.....	7
Difficulty Levels.....	7
Exercise Descriptions.....	8
Manning Levels.....	11
ARTEP-MTP Tasks.....	12
References	12
Mechanized Infantry Platoon	12
Difficulty Levels.....	14
Exercise Descriptions.....	14
Manning Levels.....	17
ARTEP-MTP Tasks.....	18
References	18
Scout Platoon.....	18
Difficulty Levels.....	19
Exercise Descriptions.....	19
Manning Levels.....	21
ARTEP-MTP Tasks.....	21
References	22

CONTENTS (Continued)

	<u>Page</u>
Descriptions of Armor Company and Tank Heavy Team Exercises/Tables	22
Difficulty Levels	23
Exercise Descriptions.....	23
Manning Levels	26
ARTEP-MTP Tasks	27
References	27
Descriptions of Cavalry Troop Exercises/Tables	28
Difficulty Levels	29
Exercise Descriptions.....	29
Manning Levels	31
ARTEP-MTP Tasks	32
References	32
Descriptions of Armor Battalion and Tank Heavy Task Force Exercises	32
Exercise Descriptions.....	33
Manning Levels	34
ARTEP-MTP Tasks	36
References	37
Descriptions of Brigade Staff Exercises	37
Exercise Descriptions.....	38
Manning Levels	38
ARTEP-MTP Tasks	40
References	41
Observer/Controller Visit with the Unit	42
Training Schedule Preparation	42
Points of Contact (POCs)	43
Appendix A: Observer/Controller Team Structure	A-1
Appendix B: Example Training Schedules.....	B-1

CONTENTS (Continued)

Page

List of Figures

Figure 1.	VTP training exercises/tables.	6
Figure 2.	Relative difficulty levels of armor platoon VTP exercises/tables.....	8
Figure 3.	Crosswalk of tasks trained in each armor platoon VTP exercise/table.	13
Figure 4.	Relative difficulty levels of mechanized infantry platoon VTP exercises/tables.....	14
Figure 5.	Crosswalk of tasks trained in each mechanized infantry platoon VTP exercise/table.....	18
Figure 6.	Relative difficulty levels of scout platoon VTP exercises/tables.....	19
Figure 7.	Crosswalk of tasks trained in each scout platoon VTP exercise/table.	22
Figure 8.	Relative difficulty levels of armor company/tank heavy team VTP exercises/tables.....	23
Figure 9.	Crosswalk of tasks trained in each armor company or company/team VTP exercise/table.....	28
Figure 10.	Relative difficulty levels of cavalry troop VTP exercises/tables.	29
Figure 11.	Crosswalk of tasks trained in each cavalry troop VTP exercise/table.....	33
Figure 12.	Battalion/task force exercise manning levels.	35
Figure 13.	Battalion/task force collective maneuver tasks.....	37
Figure 14.	Brigade exercise manning levels.	39

Virtual Training Program Orientation Guide

Purpose of the Orientation Guide

The primary purpose of this Orientation Guide is to acquaint leaders of Armor, Mechanized Infantry, and Cavalry units with the Virtual Training Program (VTP). It enables them to decide whether to train in the VTP. It also provides sufficient information to enable them, in coordination with the VTP Observer/Controller (O/C) Team, to decide on the type of simulation to use, along with the echelon and level of training to conduct during a VTP rotation.

A videotape entitled "Introduction to the Reserve Component Virtual Training Program (RCVTP)" (TVT #17-87) was developed to accompany the original version of this Orientation Guide. This videotape still provides a useful overview of the VTP. Copies can be obtained from the VTP O/C Team at Fort Knox (See POC Section) or through your supporting Training Support Center (TSC).

Overview of the VTP

The VTP provides simulation-based training, using the virtual environment of Simulation Networking (SIMNET) and the constructive environment of Janus. The training is structured to take advantage of the capabilities of simulation. Structured training allows the accomplishment of specific training objectives in a logical sequence. The objectives are defined in terms of tasks or subtasks, conditions, and standards. The tasks trained in the VTP are derived from Army Training and Evaluation Program Mission Training Plans (ARTEP- MTPs) and related publications.

The VTP includes collective training for the following unit types and echelons: armor brigade and battalion task force primary staffs; armor battalion task forces; armor companies and tank heavy teams; cavalry troops; and armor, mechanized infantry, and HMMWV scout platoons equipped with the High-Mobility, Multipurpose Wheeled Vehicle (HMMWV). The training is multiechelon. More than one echelon can be trained at a time, as simulation and O/C resources allow.

All training in the VTP is task-based. Each VTP exercise focuses on critical tasks and subtasks that can be performed in simulation. The sequence of exercises provides for a progression of performance difficulty (crawl-walk-run). There is also some redundancy of tasks across tables/exercises to allow repeated practice of critical skills.

The short structured VTP exercises are called tables. There are over 100 tables in all. Each table covers a short segment of a tactical mission. The missions included are: Movement to Contact, Defense in Sector (Area Defense), and Deliberate Attack; there is also a set of basic fundamental/rehearsal tables available. All missions are conducted on the National Training Center (NTC) terrain database.

The VTP is a "turn-key" operation focusing on maneuver execution. Training scenarios, operations orders, and training support packages are prepared and provided in advance to participating units. Units execute the orders that have been prepared and issued to them. Frequent performance feedback is provided through after action reviews (AARs) facilitated by qualified O/Cs. Take home packages (THPs) are prepared and provided to the training unit following the conduct of training. Other than familiarization with the advance materials provided by O/Cs and preparation required prior to a VTP rotation, planning and support requirements for the participating unit are minimal. Units can train during short rotations, such as weekend training periods, or during rotations of one or two weeks.

Tactical training in the VTP provides participants the opportunity to conduct repeatable exercises, enhances training to standard on selected tasks, and reinforces fundamental skills necessary for quick reaction to tactical situations. All of this is designed to maximize the effectiveness and efficiency of the limited time units have available to conduct training. It also enables units to take maximum advantage of the limited field training time available.

Components of the VTP

The VTP consists of four key components that are described below:

- Training Environments
- Observer/Controllers (O/Cs)
- Exercises/Tables
- Take Home Packages (THPs)

Training Environments

Simulation Networking (SIMNET)

The SIMNET system provides a virtual training environment through a local area network of simulator modules and computers supporting simulation of combined arms operations. It simulates many, but not all, real-world combat, combat support (CS), and combat service support (CSS) systems. In the VTP, SIMNET is used to train platoons, companies or teams, cavalry troops, and battalions or battalion task forces.

The SIMNET system includes combat vehicle simulators representing the M1 Abrams Tank, the M2 Bradley Fighting Vehicle (BFV), and the M3 Cavalry Fighting Vehicle (CFV). At Fort Knox these simulators are located in the Mounted Warfare Simulation Training Center (MWSTC). This facility includes 41 M1 simulators and nine M2/M3 simulators. More simulators may become available at this site; the VTP O/C Team can provide current numbers. At ARNG sites, either four M1 or four M2 simulators are available in a mobile facility. Training at these ARNG sites thus focuses on armor or mechanized infantry platoons.

Each SIMNET simulator is a separate module with space for all crew positions. The simulators are modeled after, but do not duplicate, the interiors of M1 and M2/M3 vehicles.

Most of the controls, switches, and displays found on actual vehicles are included in the simulators, but only selected ones are operational. Details on using the simulators are contained in operators' manuals that the O/C team or other personnel will provide to units training in the VTP.

The simulators operate in closed-hatch mode on a battleground created by computers. The simulated vehicles appear on the SIMNET battleground. Crew members see computer-generated views and hear computer-generated sounds that create the illusion of operating actual vehicles over real terrain. The SIMNET terrain includes many natural and man-made features, but it is smooth relative to the real world.

Intercom systems and radios are provided to support communications within and between simulators. Weapon systems and their effects are represented so that simulators can kill and be killed. The simulators operate under constraints that are similar to those affecting real vehicles; that is, simulators can break down or run out of fuel or ammunition.

Mock-ups of a Main Command Post (CP) and Combat Trains Command Post (CTCP) are part of SIMNET battalion-level exercises. These facilities appear on the simulated terrain, but personnel inside them do not see the SIMNET battleground. Main CP and CTCP personnel can communicate with personnel in combat vehicle simulators using radios that represent tactical radio networks. Fire support is controlled from computer stations, generally by members of the O/C Team. Logistical and maintenance support is controlled from a computer station collocated with the CTCP.

The SIMNET system includes additional features designed to support training. Semi-automated forces (SAF) capability is available to simulate either friendly or hostile elements. Opposing forces for all exercises, platoon through battalion, are represented by SAF, controlled by members of the O/C Team. These personnel may also represent adjacent friendly elements through SAF, and they play the roles of the higher-level unit commander and staff.

The O/Cs control and monitor VTP exercises from computer workstations. They also facilitate AARs at these same stations, using exercise replays and other tools. Unit personnel focus on executing missions in simulators and CP mock-ups, and on reviewing their performance during frequent AARs. This allows units to maximize learning during compressed time in SIMNET.

Janus

Janus, the second VTP training environment, is a constructive simulation used to train primary staff personnel or sections in information handling and support of the commander's decision-making. Janus consists of a network of computer workstations at which trained interactors control and monitor the operation of combat, CS, and CSS elements. The results of battle engagements are determined by the computer system using hit and kill probabilities.

The VTP uses a version of Janus developed by the Advanced Research Projects Agency. This version is similar to the standard Army Janus system, and is available at Fort Knox and at ARNG sites. Janus is used to drive or provide inputs to battalion and brigade staff exercises.

The design of Janus exercises in the VTP calls for O/Cs or other trained interactors to operate all workstations and role play subordinate, adjacent, and higher elements. These personnel provide inputs, based on the ongoing simulated battle, to battalion or brigade staff personnel through radios to drive staff actions. For example, during a battalion staff exercise interactors from the O/C team act as company commanders, scout platoon leaders and other supporting elements, fighting the battle using the networked workstations.

In fighting the battle, interactors adhere to the operations order (OPORD) provided and/or fragmentary orders (FRAGOs) they receive during the battle from the participating unit's commander and/or staff. Fire support and logistical and maintenance support are also controlled from workstations operated by interactors from the O/C Team. Units have the option to augment the O/C Team with actual unit commanders and other unit personnel to send reports to the battalion or brigade commander and staff personnel.

Janus training for the staff occurs in CP mock-ups in or near the Janus facility. This includes a Main CP and CTCP at battalion level, and a Main CP, Tactical CP, and Rear CP at brigade level. Personnel in these CPs do not interact directly with the simulation, but rather interact with the role players through radios. The unit commander and operations officer usually participate at workstations representing their vehicles on the simulated battlefield, with assistance from the O/Cs.

Like SIMNET exercises, VTP Janus exercises include features designed to support training while minimizing unit support requirements. Opposing forces are controlled by members of the O/C Team to facilitate learning. The O/C Team members also play the roles of the higher commander and his staff. Various tools and displays, such as exercise replays, are used to support AARs for staff sections and the staff as a whole.

During Janus exercises commanders and staffs of participating units must consider all aspects of employing their forces much as they would in actual combat. The commander and his staff must consider mission, enemy, terrain, troops, and time available (METT-T) and each battlefield operating system (BOS), in order to synchronize execution of the plan. The Janus exercises offer staffs a unique opportunity for training in command and control, information processing, battle analysis, and support of the commander's decision-making process.

Observer/Controllers (O/Cs)

The second component of the VTP is the O/C Team. At Fort Knox this team consists of members of the Total Force -- soldiers in the ranks of Sergeant First Class to Lieutenant Colonel, both Active Component and Army National Guard, as well as supporting Department of the Army civilians, most of whom have prior military experience. Each O/C has successfully served in the position he observes and coaches. All military O/Cs and supporting civilian training analysts are

totally dedicated to supporting units participating in the VTP. A diagram of the Fort Knox O/C Team structure is at Appendix A. Information on Reserve Training Detachment (RTD) and ARNG personnel who serve as O/Cs at other sites can be obtained from POCs listed at the end of this guide.

The O/C Team provides the following assistance and support to units participating in the VTP:

- A VTP POC
- Delivery of advance materials to unit
- Assistance in selecting training exercises or tables
- Assistance in preparing training schedules
- Guidance on preparation for a VTP rotation
- Training overhead support during a rotation
- Observation and feedback during rehearsals and exercise execution
- Facilitation of AARs
- Preparation of take home packages (THPs)

Exercises/Tables

The third component of the VTP is the training exercises and tables, each of which includes an AAR. There are 128 exercises/tables, platoon through brigade staff, shown in Figure 1. Exercises/tables at the different echelons are related, in that they use similar scenarios (Movement to Contact (MTC), Defense in Sector (DIS) or Area Defense, and Deliberate Attack (DATK)) and are conducted on the same terrain, the National Training Center (NTC).

As shown in Figure 1, for platoons, companies/teams, and troops, there are four to seven exercises, each comprised of three or four tables. The exercises and tables have been designed to follow a logical, tactical flow providing for increasing difficulty. In consultation with VTP O/C Team representatives, unit commanders will select the table on which to begin training. Subsequent tables selected for training should follow in sequence. At battalion and brigade levels the exercises are not broken into tables.

In addition to the exercises/tables, there is a two-hour familiarization course designed specifically for individual crew training. Its purpose is to familiarize vehicle crews with SIMNET, to reinforce basic crew duties, and to familiarize crews with navigating on the NTC terrain database. Use of the familiarization course is required for crews experiencing SIMNET for the first time, and is strongly encouraged for returning crews.

The first sets of platoon, company/team, and troop tables are unit fundamental or rehearsal tables, focusing on basic movement techniques, formations, and offensive and defensive battle drills, as well as providing further familiarization with the SIMNET NTC terrain database. These are optional tables, but training with them is highly recommended before moving on to mission-specific tables.

<u>Type & Echelon</u>	<u>Simulator/ Simulation</u>	<u>Number of Exercises</u>	<u>Number of Tables</u>	<u>Time per Exercise or Table*</u>	<u>Versions</u>
Armor Platoon	SIMNET	7	22	2 Hours	Fully Manned
Mech Inf Platoon	SIMNET	7	22	2 Hours	Fully Manned
Scout Platoon	SIMNET	4	12	2 Hours	Fully Manned
Armor Company	SIMNET	7	22	2 Hours	Blue SAF/Fully Manned
Tank Heavy Team	SIMNET	7	22	2 Hours	Blue SAF/Fully Manned
Cavalry Troop	SIMNET	4	15	2 Hours	Fully Manned
Battalion	SIMNET	3	--	(1)	Blue SAF/Fully Manned
Task Force	SIMNET	3	-	(1)	Blue SAF/Fully Manned
Battalion Staff	Janus	4	-	(2)	All SAF
Brigade Staff	Janus	3	-	(3)	All SAF

.....

* Includes unit preexercise preparation, exercise execution, and exercise AAR.

(1) Movement to Contact: 4.5 Hours
Defense in Sector: 5.0 Hours
Deliberate Attack: 5.0 Hours

(2) Movement to Contact: 4.5 Hours
Defense in Sector: 6.5 Hours
Deliberate Attack: 6.5 Hours

(3) Movement to Contact: 6.5 Hours
Area Defense: 6.5 Hours
Deliberate Attack: 6.5 Hours

Figure 1. VTP training exercises/tables

The AAR is a very important part of each VTP exercise/table. A member of the O/C Team facilitates each AAR to focus on performance of specific tasks and subtasks to standard. The purpose of the AAR is to review the training that has taken place, and to allow unit personnel to discover for themselves what happened, why it happened, and future actions that need to be taken. Unit personnel identify performance areas that need to be sustained or improved during each AAR. The AARs are also used to solicit ideas on how the training can be improved.

Take Home Package (THP)

The fourth component of the VTP is the THP. Following a unit's rotation to the VTP at Fort Knox, a short but thorough THP is prepared by the O/C Team and sent directly to the unit. The THP provides exercise summaries and O/Cs' observations on the unit's training performance, with emphasis on what the unit learned during the rotation and areas that need improvement. These observations are provided to assist the unit commander in making his own assessment of the unit's training status and to plan future training.

Exercise/Table Selection

Selecting the exercise(s) and/or tables for unit training is an important step in the VTP process. This should be done by the unit's chain of command prior to the O/C's visit to the unit, which will normally take place 90 to 120 days prior to a VTP rotation. Although the final decision needs to be made by the unit's leadership, coordination with and assistance from the O/C Team prior to selecting the exercises/tables for training is strongly encouraged. This prior coordination allows the O/C Team members to prepare properly for the visit and assures that the unit is provided appropriate advance materials in a timely manner.

As outlined in Army training doctrine, tasks for training evolve from a unit's mission essential task list (METL), which evolves from the unit's war plans and external directives. Based on the commander's assessment of his unit's METL training status, he can determine the tasks on which his unit needs to train.

The next few sections of this guide list the tasks that can be trained for each echelon and type of unit, addressing the tasks that can be trained in the simulations used in the VTP. This information, used in conjunction with the commander's assessment of the training status of his unit's METL, time available during a VTP rotation, and with the support of the O/C Team, enables the commander to select the VTP exercises/tables that best meet his unit's training requirements.

Descriptions of Platoon Exercises/Tables

Armor Platoon

There are seven armor platoon exercises, each comprised of three or four tables. The first exercise (Tables A1, A2, A3, and A4) consists of training in the fundamentals of movement, actions on contact, defense, and mounted minefield breaching. Three exercises (Tables B1 through B3, C1 through C3, and D1 through D3) cover offensive tasks in the context of a battalion movement to contact. Two exercises (Tables E1 through E3 and F1 through F3) focus on defensive operations in the context of a battalion defending in sector. One exercise (Tables G1 through G3) takes the platoon through a deliberate attack, including a minefield breaching operation.

Difficulty Levels

The relative difficulty levels of the VTP exercises/tables are shown in figure 2.

Difficulty	Fundamentals	Offense (MTC)			Defense (DIS)		Deliberate Attack (DATK)
Easier ↓ ↓ ↓ More difficult	A1						
	A2, A3	B1			E1		G1
	A4	B2			E2	F1	
		B3	C1		E3	F2	G2
			C2	D1		F3	
			C3	D2			G3
				D3			

Figure 2. Relative difficulty levels of armor platoon VTP exercises/tables

Exercise Descriptions

Descriptions of each of the armor platoon tables are presented below. Each description indicates the training intent of the table and a summary of the level of enemy contact in the table.

Fundamental/Rehearsal Exercises

Tactical Movement, Battle Drills, Actions on Contact, Defense, Minefield Breaching

- Table A1: The platoon maneuvers under close O/C direction to practice basic movement techniques, execute various formations, and exercise command and control procedures. The platoon reacts to indirect fire and enemy helicopters and executes actions on contact against platoon-size enemy forces.
- Table A2: The platoon maneuvers under close O/C direction to practice tactical movement and actions on contact. The platoon executes battle drills, actions on contact against a platoon-size enemy ground force, and indirect fire drills.
- Table A3: The platoon maneuvers under close O/C direction to practice basic defensive techniques. The platoon occupies a battle position, reacts to helicopters and indirect fire, defends against a company-size enemy force, and displaces to a subsequent battle position.
- Table A4: The platoon maneuvers under close O/C direction to practice basic minefield breaching. The platoon initially occupies a position (to attach plows), sends out and establishes close in security, breaches the minefield using attached plows, reacts to indirect fire, eliminates enemy forces encountered, and occupies a battle position to defend against an enemy counterattack.

Offensive (MTC) Exercises

Tactical Road March, Tactical Movement, Actions on Contact

- **Table B1:** With the O/C acting as the company commander, the tank platoon conducts a tactical road march from an assembly area to an attack position. The table is designed to emphasize basic command and control and tactical road march procedures. The platoon conducts a scheduled halt and encounters friendly elements along the route. No enemy is encountered.
- **Table B2:** The platoon maneuvers as the lead platoon of the lead company in a battalion movement to contact. The table focuses on command and control, basic tactical formations, and action drills. Friendly and enemy aviation assets are encountered along with a small enemy reconnaissance element.
- **Table B3:** The platoon continues to focus on tactical movement and actions on contact. In this table, the tempo of the enemy encountered is increased to four enemy reconnaissance elements of platoon-size or smaller. This is the first offense table that includes contact with enemy tanks.

Tactical Movement, Actions on Contact, Attack by Fire

- **Table C1:** The platoon executes a change of mission to establish a blocking position. The table focuses on the platoon leader's ability to maintain command and control in changing tactical situations. A small enemy ground element is encountered.
- **Table C2:** The platoon continues its original mission as the lead platoon of the lead company in a battalion movement to contact. Command and control and action drills are emphasized. The platoon encounters indirect fire and performs an assault for the first time. The platoon consolidates and reorganizes. A small enemy ground element and combat outpost are encountered.
- **Table C3:** The platoon attacks by fire, reacts to indirect fire, moves in column along a specified route, and executes actions on contact. This table focuses on fire control and the ability to react to a rapidly changing situation. Both an enemy ground element and anti-aircraft systems are encountered.

Tactical Movement, Actions on Contact, Hasty Defense

- **Table D1:** The platoon receives a FRAGO to locate and destroy an enemy artillery battery. The table focuses on tactical movement and actions on contact. Enemy activity is increased to a mix of enemy aviation elements, indirect fires, and a small ground element.

- Table D2: The platoon continues as the lead platoon of the lead company in a battalion movement to contact. Command and control, tactical movement, and actions on contact are the emphasis of the table. The platoon is confronted with enemy indirect fires, aviation, and an artillery battery. No enemy direct fire assets are encountered.
- Table D3: The platoon conducts a hasty occupation of a battle position and a hasty defense. The intent of this table is to emphasize actions on contact and hasty defense. Enemy assets include enemy direct and indirect fires.

Defensive (DIS) Exercises

Occupy a Battle Position, Defend a Battle Position

- Table E1: The platoon recons, prepares a complete sector sketch, prepares and rehearses the defense of a battle position, and recons regress routes. The focus of this table is the occupation of a battle position. The O/C, acting as the company commander, closely directs the actions of the platoon and reviews the sector sketches. No enemy is encountered.
- Table E2: The platoon defends a battle position against a small enemy ground force, indirect fires, and aviation assets. The focus is on command and control, fire control, and actions on contact. The platoon displaces to a subsequent battle position.
- Table E3: The platoon occupies a subsequent battle position by performing reconnaissance, preparation and rehearsal of the defense of the battle position, and reconnaissance of regress routes. This table is much like Table E1 and is designed to further focus on the occupation of a battle position.

Defend a Battle Position, Hasty Attack

- Table F1: The platoon defends a battle position as part of a company defense. The table focuses on command and control, fire control, defense, and actions on contact. The amount of enemy activity is increased from the previous defense tables and includes direct and indirect fires.
- Table F2: The platoon continues to defend the battle position, focusing on command and control, fire control, defense, and actions on contact. The amount of enemy activity is approximately the same as in Table F1.
- Table F3: The platoon conducts a hasty attack as part of a company counterattack. The table emphasizes command and control, actions on contact, and consolidation and reorganization. The enemy consists of direct and indirect fires and aviation assets.

Deliberate Attack (DATK) Exercise

Tactical Movement, Actions on Contact, Minefield Breaching, Assault/Attack by Fire, Consolidation and Reorganization

- Table G1: With the O/C acting as the company commander, the tank platoon conducts a tactical movement as part of the company/battalion movement toward the objective. The table is designed to emphasize basic command and control and tactical movement procedures within a large scale tactical maneuver. Only minimal enemy is encountered.
- Table G2: The platoon maneuvers as the breach force of the company with the mission to breach the minefield and establish a position on the far side, in a battalion deliberate attack. The table focuses on command and control, minefield breaching, and action drills. Friendly forces assist from support by fire positions. Enemy forces initially in platoon-size guard the minefield, with a reinforced motorized rifle company [MRC(+)] defending the objective area.
- Table G3: The platoon joins the battalion in a sweep of the objective area. This table continues to focus on tactical movement and actions on contact. In this table, the tempo of the enemy encountered is increased as the platoon encounters enemy forces regrouping in an effort to mount a counterattack. Enemy forces include dismounted antitank guided missile (ATGM) teams. The platoon is also required to perform consolidation and reorganization activities.

Manning Levels

Complete units should be fielded to the extent possible. The optimal manning level for armor platoon exercises is the full platoon of four tank crews.

If units are unable to field full platoons, the first priority is to have every tank manned with a three-man crew. Units should use the standard succession of command rules to replace missing personnel (platoon sergeant for platoon leader, gunner for tank commander, etc.). Cross-leveling of personnel within units is preferred. As an alternative to cross-leveling across platoons, intact crews may move from one platoon to another, at the discretion of the unit leaders.

The minimum effective level of manning for these exercises is three vehicles, each with a three-man crew. At this manning level, each vehicle should have a driver, gunner, and vehicle commander.

Rather than training with crews of fewer than three members, units will be given SAF vehicles to fill out the platoons. Although the platoon leader and his crew can perform the exercises with just one manned vehicle and three SAF vehicles, the training value for the platoon is greatly diminished.

ARTEP-MTP Tasks

Figure 3 presents a matrix indicating the Army Training and Evaluation Program-Mission Training Plan (ARTEP-MTP) tasks that are specifically trained in each VTP exercise/table.

References

The primary references for the tasks trained in these exercises/tables are listed below. Note that the MTC and DIS exercises/tables have not been updated for the new tank platoon ARTEP-MTP and FM. The effects of this should be minor, since the tasks are largely the same.

ARTEP 17-237-10-MTP, *Mission Training Plan for the Tank Platoon* (3 October 1988).

ARTEP 17-237-10-MTP, *Mission Training Plan for the Tank Platoon* (Final Draft, 6 December 1995 - for tables A4, G1, G2, G3).

FM 17-15, *Tank Platoon* (7 October 1987).

FM 17-15, *Tank Platoon* (3 April 1996 - for tables A4, G1, G2, G3).

Mechanized Infantry Platoon

There are seven mechanized infantry platoon exercises, each comprised of three or four tables. The first exercise (Tables A1, A2, and A3) consists of training in fundamentals of movement, actions on contact, and defense. Three exercises (Tables B1 through B3, C1 through C3, and D1 through D3) cover offensive tasks in the context of a battalion/task force movement to contact. Two exercises (Tables E1 through E3 and F1 through F3) focus on defensive operations, in the context of a battalion/task force defending in sector. One exercise (Tables G1 through G3) takes the platoon through a deliberate attack, including support of a minefield breaching operation.

ARTEP-MTP Tasks	VTP Exercises/Tables																						
	A				B			C			D			E			F			G			
	1	2	3	4	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	
Conduct Tactical Movement				*																	*	*	*
Execute Coil Formation	*	*																					
Execute Herringbone	*				*																		
Execute Column Formation	*		*		*				*					*	*								
Execute Staggered Column Formation	*																						
Execute Wedge Formation	*			*	*	*	*	*	*	*	*	*	*								*	*	*
Execute Vee Formation	*																						
Execute Line Formation	*																				*		
Execute Echelon Formation	*	*																					*
Execute Traveling	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*						*	*	*
Execute Traveling Overwatch	*																						
Execute Bounding Overwatch	*	*																					
Conduct Tactical Road March					*																		
Perform Attack by Fire				*					*													*	
Assault Enemy Position									*									*			*	*	*
Execute Actions on Contact	*	*		*	*	*	*	*	*	*	*	*	*								*	*	*
Execute a Platoon Defensive Mission			*										*		*		*	*					
Conduct Hasty Occupation of a Battle Position			*										*	*		*							*
Perform Consolidation and Reorganization Activities			*					*				*				*	*	*					*
Produce Platoon Fire Plan													*		*								
Conduct Breach Force Operations				*																		*	
Conduct Overwatch/Support by Fire				*																		*	
BATTLE DRILLS																							
BD #1: Change of Formation	*	*		*																	*		*
BD #2: Action Drill	*	*																			*	*	*
BD #3: Contact Drill	*	*																			*		*
BD #4: Air Attack Drill	*	*	*		*					*	*		*		*				*		*	*	*
BD #5: React to Indirect Fires	*	*	*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Figure 3. Crosswalk of tasks trained in each armor platoon VTP exercise/table.

Difficulty Levels

The relative difficulty levels of the VTP exercises/tables are shown in figure 4.

Difficulty	Fundamentals	Offense (MTC)		Defense (DIS)		Deliberate Attack (DATK)
Easier ↓ ↓ ↓ More difficult	A1					
	A2, A3	B1		E1		G1
	A4	B2		E2	F1	
		B3	C1	E3	F2	G2
			C2	D1	F3	
			C3	D2		G3
				D3		

Figure 4. Relative difficulty levels of mechanized infantry platoon VTP exercises/tables

Exercise Descriptions

Descriptions of each of the mechanized infantry platoon tables are presented in the following paragraphs. Each description indicates the training intent of the table and a summary of the level of enemy contact in the table.

Fundamental/Rehearsal Exercises

Command and Control, Tactical Road March, Tactical Movement, Formations, Actions on Contact, Assault, Defense, Support by Fire

- Table A1: The platoon maneuvers under close O/C direction to practice movement techniques and formations, and to focus on command and control procedures. There is no enemy in this table.
- Table A2: The platoon continues to emphasize platoon movement techniques and formations. Enemy elements are encountered for the first time and the platoon focuses on actions on contact and command and control. The enemy consists of small mechanized and armor elements and indirect fires.
- Table A3: The platoon executes a defensive mission which includes occupation procedures, defense of a battle position, and displacement. The enemy consists of a company-size ground element, aviation assets, and indirect fires.

- Table A4: The platoon executes a support of a team breaching mission which includes occupation procedures, support by fire, and displacement. The enemy consists of a platoon-size ground element and indirect fires.

Offensive (MTC) Exercises

Tactical Road March, Tactical Movement, Actions on Contact

- Table B1: With the O/C acting as the team commander, the platoon conducts a tactical road march from an assembly area to an attack position. The table is designed to focus on basic command and control and tactical road march procedures. The platoon conducts a scheduled halt and encounters friendly elements and enemy aviation along the route.
- Table B2: The platoon maneuvers as the left flank platoon of the lead team in a task force movement to contact. The table focuses on command and control, basic tactical formations, and action drills. Enemy aviation assets are encountered along with a small enemy reconnaissance element.
- Table B3: The platoon continues to focus on tactical movement and actions on contact. In this table the tempo of the enemy encountered is increased to three enemy reconnaissance elements. This is the first offense table that includes contact with an enemy tank.

Tactical Movement, Actions on Contact, Hasty Attack

- Table C1: The platoon executes a change of mission to move to a different location. The table focuses on the platoon leader's ability to command and control during changing tactical situations. An enemy reconnaissance element and indirect fires are encountered.
- Table C2: The platoon continues its original mission as the left flank platoon of the lead team in a task force movement to contact. Command and control and action drills are emphasized. The platoon encounters enemy helicopters, indirect fires, and a small ground element.
- Table C3: The platoon receives a change of mission and executes actions on contact. An enemy ground element is encountered. This table focuses on actions on contact and the ability to react to a rapidly changing situation.

Tactical Movement, Actions on Contact, Hasty Attack, Hasty Defense

- Table D1: The platoon continues its mission as the left flank platoon of a team movement. The table focuses on tactical movement and actions on contact. Enemy elements include both air and ground elements.

- Table D2: The platoon conducts an ambush, performs an attack by fire, and conducts actions on contact. Command and control, tactical movement, and actions on contact are the emphasis of the table. The platoon encounters three enemy platoon-size elements.
- Table D3: The platoon initially continues tactical movement but is quickly ordered to establish a hasty battle position as part of a hasty team defense. The intent of this table is to emphasize actions on contact and hasty defense. Enemy assets include indirect fires, aviation, and a fairly large enemy ground force.

Defensive (DIS) Exercises

Occupy a Battle Position, Defend a Battle Position

- Table E1: The platoon recons, prepares a complete sector sketch, prepares and rehearses the defense of a battle position, and recons regress routes. The focus of this table is the occupation of a battle position. The O/C, acting as the team commander, closely directs the actions of the platoon and reviews the sector sketches. Enemy helicopters fly into the area.
- Table E2: The platoon defends a battle position against enemy reconnaissance elements, indirect fires, and aviation assets. The focus is on command and control, fire control, and actions on contact. The platoon displaces to a subsequent battle position.
- Table E3: The platoon occupies the subsequent battle position by performing reconnaissance, preparation and rehearsal of the defense of the battle position, and reconnaissance of regress routes. This table is much like Table E1, designed to further focus on the occupation of a battle position.

Defend a Battle Position, Hasty Attack

- Table F1: The platoon defends a battle position as part of a team defense. The table focuses on command and control, fire control, defense, and actions on contact. The amount of enemy activity is increased from the previous defense tables, to include indirect fires, aviation assets, and ground elements.
- Table F2: The platoon continues to defend the battle position, focusing on command and control, fire control, defense, and actions on contact. The amount of enemy activity is increased and includes indirect fires, and a fairly large ground force.
- Table F3: The platoon attacks by fire as part of a team counterattack. The table emphasizes command and control, fire control, actions on contact, and consolidation and reorganization. The enemy consists of indirect fires and a small ground element.

Deliberate Attack (DATK) Exercise

Tactical Movement, Support by Fire, Mounted Assault, Reorganize

- Table G1: With the O/C acting as the team commander, the platoon conducts a tactical movement as part of the team movement toward the objective. The table is designed to emphasize basic command and control and tactical movement procedures within a large scale tactical maneuver. Only minimal enemy is encountered.
- Table G2: The platoon maneuvers as the support force of the team with the mission to overwatch the minefield breach, then follow the assault through the breach to establish a position on the far side, in the task force deliberate attack. The table focuses on command and control, and support/attack by fire. Friendly forces assist from other support by fire positions. Enemy forces initially in platoon-size guard the minefield.
- Table G3: The platoon joins the battalion in a sweep of the objective area. This table continues to focus on tactical movement and actions on contact. In this table, the tempo of the enemy encountered is increased as the platoon encounters enemy forces regrouping in an effort to mount a counterattack. The platoon is also required to perform consolidation and reorganization activities.

Manning Levels

Complete units should be fielded to the extent possible. The optimal manning level for the mechanized infantry platoon exercises is the full platoon of four Bradley crews.

If units are unable to field full platoons, the first priority is to have every vehicle manned by at least a two-man crew. Units should use the standard succession of command rules to replace missing leaders (platoon sergeant for platoon leader, gunner for vehicle commander, etc.). Cross-leveling of personnel within units is preferred. As an alternative to cross-leveling across platoons, intact crews may move from one platoon to another, at the discretion of the unit leaders.

The minimum effective level of manning for these exercises is three vehicles with three two-man crews. At this manning level, each vehicle will have a driver and a vehicle commander.

Rather than training with crews of fewer than two members, units will be given SAF vehicles to fill out the platoons. Although the platoon leader and his crew can perform the exercises with just one manned vehicle and three SAF vehicles, the training value for the platoon is greatly diminished.

ARTEP-MTP Tasks

Figure 5 presents a matrix indicating the ARTEP-MTP tasks that are specifically trained in each VTP exercise/table.

ARTEP-MTP Tasks	VTP Exercises/Tables																								
	A				B			C			D			E			F			G					
	1	2	3	4	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3			
Support by Fire				*			*															*		*	
Disengage (Mounted)			*												*										
React to Direct Fire/ATGM									*			*													
Defend Battle Position			*									*	*	*	*	*	*	*	*	*	*			*	
React to Indirect Fire	*	*	*	*			*	*	*	*		*	*	*	*	*	*	*	*	*	*				
Move Mounted	*	*						*				*	*	*	*							*	*	*	
Change Formation (Mounted)	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			*	*	*	*	
Secure at Halt	*			*																					
Execute Action Right or Left		*				*																			
Conduct a Tactical Road March	*			*																					
Acquire Targets/Distribute Fires			*	*			*					*	*	*	*	*	*	*	*	*	*	*		*	
React to Air Attack			*		*			*		*	*	*	*	*	*	*	*	*	*	*	*				
Consolidate and Reorganize		*										*	*	*	*	*	*	*	*	*	*	*	*	*	
Report	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
BATTLE DRILLS																									
BD #1A: Change of Formation																								*	
BD #2A: Action Drill	*	*		*	*	*	*	*	*	*	*	*	*									*	*	*	
BD #3A: Contact Drill		*							*	*	*	*													

Figure 5. Crosswalk of tasks trained in each mechanized infantry platoon VTP exercise/table.

References

The primary references for the tasks trained in these exercises/tables are:

ARTEP 7-247-11-MTP, *Mission Training Plan for the Mechanized Infantry Platoon and Squad (M2-Equipped)* (6 April 1987).

ARTEP 7-7J-DRILL, *Battle Drills for the Bradley Fighting Vehicle Platoon, Section, and Squad* (8 December, 1992).

FM 7-7J, *Mechanized Infantry Platoon and Squad (Bradley)* (7 May 1993).

Scout Platoon

There are four scout platoon exercises, each comprised of three tables. The first exercise (Tables A1, A2, and A3) consists of training in fundamentals of movement, actions on contact, and defense. Two exercises (Tables B1 through B3 and C1 through C3) cover offensive tasks in

the context of a battalion/task force movement to contact. One exercise (Tables D1 through D3) focuses on defensive operations, in the context of a battalion/task force defending in sector.

The scout platoon tables are intended to be performed by a ten-vehicle platoon of four two-vehicle teams, plus the platoon leader and platoon sergeant who position themselves as METT-T dictates. Because the MWSTC facility has no HMMWV simulators, scouts operate M2/M3 (Bradley) vehicles with no ammunition.

Difficulty Levels

The relative difficulty levels of the VTP exercises/tables are shown in figure 6.

Difficulty	Fundamentals	Offense		Defense
Easier	A1			
↓	A2, A3	B1		D1
↓		B2	C1	D2
↓		B3	C2	D3
More difficult			C3	

Figure 6. Relative difficulty levels of scout platoon VTP exercises/tables.

Exercise Descriptions

Descriptions of each of the Scout Platoon tables are presented in the following paragraphs. Each description indicates the training intent of the table and a summary of the level of enemy contact in the table.

Fundamental/Rehearsal Exercises

Command and Control, Tactical Movement, Zone Reconnaissance, Screen (Stationary and Moving)

- Table A1: The platoon maneuvers under close O/C direction to practice command and control and tactical movement. There is no enemy in this table.
- Table A2: The platoon conducts a zone reconnaissance and establishes a screen. Various disabled/destroyed enemy elements are in the zone, as well as active enemy forces.

- Table A3: This scout platoon practices stationary and moving screens in support of a battalion/task force. The enemy consists of small ground elements, an aviation element, and indirect fires.

Offensive (MTC) Exercises

Route Reconnaissance, Area Reconnaissance, Screen (Forward, Stationary)

- Table B1: With the O/C acting as the battalion operations officer, the scout platoon conducts a route reconnaissance from an assembly area to an attack position. The table is designed to emphasize basic command and control, movement, and reconnaissance procedures. The platoon encounters destroyed enemy equipment as well as enemy reconnaissance elements.
- Table B2: The platoon conducts an area reconnaissance of a battalion attack position. The table focuses on reporting, developing the situation, and command and control. Both friendly and enemy assets are encountered. The enemy consists of a small reconnaissance element.
- Table B3: The scout platoon conducts a forward and a stationary screen. Conducting surveillance and providing early warning are the focus of this table. Both friendly and enemy elements are encountered. Enemy elements consist of both ground and air assets.

Screen (Forward to Flank), Screen (Flank, Moving), Zone Reconnaissance

- Table C1: The platoon ends its forward screen of the battalion and moves to a flank screen. The table focuses on the platoon's ability to command and control in a changing tactical situation. Several enemy reconnaissance elements are encountered, as well as indirect fires.
- Table C2: The platoon executes a moving flank screen while other battalion elements attack an objective. Command and control and actions on contact are emphasized. The platoon encounters an enemy recon element, helicopters, a destroyed tank, and indirect fires.
- Table C3: The platoon conducts a zone reconnaissance forward of a battalion. The table focuses on conducting surveillance, providing reaction time and maneuver space, and reporting terrain information. The platoon encounters an abandoned enemy vehicle, an enemy recon unit, helicopters, and a company-size element.

Defensive (DIS) Exercises

Screen (Forward), Battle Handover

- **Table D1:** The scout platoon establishes a forward screen for a battalion and conducts battle handover to a tank company as enemy reconnaissance elements approach. The table focuses on conducting surveillance, providing early warning, gaining and maintaining contact, and developing the situation. Enemy elements consist of small reconnaissance units.
- **Table D2:** The platoon conducts a forward screen and battle handover to the battalion. The table focuses on conducting surveillance, providing reaction time and maneuver space, and providing early warning. The platoon is confronted with a fairly large enemy force and enemy helicopters.
- **Table D3:** The platoon conducts a forward screen and battle handover to the battalion. The intent of this table is to conduct surveillance, provide early warning, and provide for reaction time and maneuver space. Enemy assets include a large ground force.

Manning Levels

Complete units should be fielded to the extent possible. The optimal manning level for the scout platoon exercises is as full a platoon of three-man crews as simulator availability allows.

If units can't field full platoons, the first priority is to have every vehicle manned by at least a two-man crew. Units should use the standard succession of command rules to replace missing leaders (platoon sergeant for platoon leader, gunner for vehicle commander, etc.). Cross-leveling of personnel within units is preferred. As an alternative to cross-leveling across platoons, intact crews may move from one platoon to another, at the discretion of unit leaders.

The minimum effective level of manning for these exercises is five two-man crews. Rather than training with crews of fewer than two members, units will be given SAF vehicles to fill out the platoon with each scout team consisting of one manned vehicle and one SAF vehicle. Although the platoon can perform the exercises with five manned vehicles and five SAF vehicles, the training value to the platoon is greatly diminished.

ARTEP-MTP Tasks

Figure 7 presents a matrix indicating the ARTEP-MTP tasks that are specifically trained in each VTP exercise/table.

ARTEP-MTP and FM Tasks	VTP Exercises/Tables											
	A			B			C			D		
	1	2	3	1	2	3	1	2	3	1	2	3
Conduct Tactical Movement	*	*		*	*	*						
Perform Route Reconnaissance		*		*								
Perform Zone Reconnaissance		*				*			*			
Perform Area Reconnaissance					*							
Reconnoiter Obstacle and a Bypass		*		*								
Execute Actions on Contact			*		*		*	*		*		
Conduct Screen			*			*	*	*	*	*	*	*
Use Passive Air Defense Measures			*			*		*			*	
Fundamentals of Reconnaissance		*	*	*	*	*	*	*	*	*	*	*
Fundamentals of Security			*			*	*	*	*	*	*	*
React to Indirect Fire			*				*			*		

Figure 7. Crosswalk of tasks trained in each scout platoon VTP exercise/table.

References

The primary references for the tasks trained in these exercises/tables are:

ARTEP 17-57-10-MTP, *Mission Training Plan for the Scout Platoon* (27 December 1988).

FM 17-98, *Scout Platoon (Initial Draft)* (May, 1993).

Descriptions of Armor Company and Tank Heavy Team Exercises/Tables

There are seven armor company and seven tank heavy team exercises, each comprised of three or four tables. The first exercise (Tables A1, A2, A3, and A4) consists of training in fundamentals of movement, actions on contact, defense, and minefield breaching. Three exercises (Tables B1 through B3, C1 through C3, and D1 through D3) cover offensive tasks in the context of a battalion/task force movement to contact. Two exercises (Tables E1 through E3 and F1 through F3) focus on defense, in the context of a battalion/task force defending in sector. One exercise (Tables G1 through G3) takes the unit through a deliberate attack operation, including the breach of a simple minefield.

Because a single ARTEP-MTP addresses training for both the armor company and the company/team, the exercises/tables for the two unit types are very similar. The difficulty levels, table descriptions and training intents, and task-table crosswalk shown below are applicable to both sets of exercises/tables.

Difficulty Levels

The relative difficulty levels of the VTP exercises/tables are shown in figure 8.

Difficulty	Fundamentals	Offense (MTC)		Defense (DIS)	Deliberate Attack (DATK)	
Easier	A1					
	A2, A3	B1		E1		G1
↓	A4	B2		E2	F1	
↓		B3	C1	E3	F2	G2
↓			C2	D1	F3	
			C3	D2		G3
More difficult			D3			

Figure 8. Relative difficulty levels of armor company/tank heavy team VTP exercises/tables

Exercise Descriptions

Descriptions of each of the armor company and company/team tables are presented below. Each description indicates the training intent of the table and a summary of the level of enemy contact in the table. The term "company/team" is used to indicate that the descriptions are appropriate for both unit types.

Fundamental/Rehearsal Exercises

Command and Control, Tactical Road March, Tactical Movement, Formations, Actions on Contact, Defense, Breach an Obstacle

- Table A1: The company/team maneuvers under close O/C direction to practice company movement techniques and formations, and to emphasize command and control procedures. There is no enemy in this table.
- Table A2: The company/team continues to emphasize company movement techniques and formations. Enemy elements are encountered for the first time and the company/team emphasizes actions on contact and command and control. The table is

the first time that a company/team commander utilizes decision-making processes. The enemy is a mechanized platoon.

- Table A3: The company/team executes a defensive mission which includes occupation procedures, defense of a battle position, and displacement. The enemy consists of a combat reconnaissance patrol (CRP) and a forward security element (FSE).
- Table A4: The company maneuvers under close O/C direction to practice basic minefield breaching. The company initially occupies a position (to attach plows), sends out and establishes close in security, breaches the minefield using attached plows, reacts to indirect fire, eliminates enemy forces encountered, and occupies a battle position to defend against an enemy counterattack.

Offensive (MTC) Exercises

Tactical Road March, Tactical Movement, Actions on Contact

- Table B1: With the O/C acting as the battalion commander, the company/team conducts a tactical road march from an assembly area to an attack position. The table focuses on basic command and control and tactical road march procedures. The company/team conducts a scheduled halt and encounters friendly elements along the route. No enemy is encountered.
- Table B2: The company/team conducts offensive operations as the lead company in a battalion movement to contact. The table focuses on command and control, tactical formations, movement, and actions on contact. Friendly and enemy aviation assets are encountered, along with two small enemy reconnaissance elements.
- Table B3: The company/team continues to focus on command and control, tactical movement, formations, and actions on contact. Enemy reconnaissance patrols are encountered. This is the first table that includes contact with enemy tanks.

Tactical Movement, Actions on Contact, Support by Fire

- Table C1: The company/team executes a change of mission to establish a blocking position. The table focuses on the company/team commander's ability to command and control in changing tactical situations. Two small enemy ground elements are encountered.
- Table C2: The company/team continues its original mission as the lead company in a battalion movement to contact. Command and control and actions on contact are emphasized. The company/team encounters indirect fire and performs an assault for the first time. An enemy ground element and a combat outpost are encountered.

- Table C3: The company/team conducts a support by fire mission, reacts to indirect fire, moves in column along a specified route, and executes actions on contact. This table focuses on fire control and discipline and the ability to react to a rapidly changing situation. Both enemy ground and anti-aircraft elements are encountered.

Tactical Movement, Actions on Contact, Fire Control and Discipline, Command and Control

- Table D1: The company/team focuses on command and control, tactical movement, and actions on contact. The amount of enemy activity is increased with a mix of enemy aviation elements, indirect fires, and a small reconnaissance element.
- Table D2: The company/team receives a FRAGO to locate and destroy enemy artillery and mortar batteries. Command and control, tactical movement, and actions on contact are the emphasis of the table. The company/team is confronted with enemy indirect fires. No enemy ground direct fire assets are encountered.
- Table D3: The company/team conducts a hasty occupation of a battle position in order to set a base of fire for a battalion hasty attack. The intent of this table is to focus on the hasty occupation of a battle position and fire control and discipline. Enemy assets include indirect fires and a relatively large enemy ground force.

Defensive (DIS) Exercises

Occupy a Battle Position, Defend a Battle Position, Displacement

- Table E1: The company/team recons, prepares a complete sector sketch, prepares and rehearses the defense of a battle position, and recons regress routes. The focus of this table is the occupation of a battle position. An O/C, acting as the battalion commander, closely directs the actions of the company/team and reviews the sector sketches. No enemy is encountered.
- Table E2: The company/team defends a battle position against two small recon elements and indirect fires. The focus is on command and control, fire control, and actions on contact. The company/team displaces to a subsequent battle position.
- Table E3: The company/team occupies the subsequent battle position by performing reconnaissance, preparation and rehearsal of the defense of the battle position, and reconnaissance of regress routes. This table is much like Table E1 and is designed to further emphasize the occupation of a battle position.

Defend a Battle Position, Counterattack

- Table F1: The company/team defends a battle position as part of a battalion defense. The table focuses on command and control, fire control, and actions on contact. The amount of enemy activity is increased from the previous defense tables and includes direct and indirect fires.
- Table F2: The company/team continues to defend the battle position, focusing on command and control, fire control, defense, and actions on contact. Enemy assets include indirect fires, aviation assets, and a substantial ground force.
- Table F3: The company/team executes its on order mission to conduct a counterattack. The table emphasizes command and control, actions on contact, and consolidation and reorganization. The enemy consists of indirect fires and a small ground unit.

Deliberate Attack (DATK) Exercise

Tactical Movement, Breach Operations, Attack/Assault by Fire, Reorganize

- Table G1: With the O/C acting as the battalion/task force commander, the company/team conducts a tactical movement as part of the battalion/task force movement toward the objective. The table is designed to emphasize basic command and control and tactical movement procedures within a large-scale tactical maneuver. Only minimal enemy is encountered.
- Table G2: The company/team maneuvers as the breach force of the battalion/task force with the mission to breach the minefield and establish a position on the far side, in the deliberate attack. The table focuses on command and control, minefield breaching, and attack by fire. Friendly forces assist from support by fire positions. Enemy forces initially in platoon-size guard the minefield.
- Table G3: The company/team joins the battalion/task force in a sweep of the objective area. This table continues to focus on tactical movement and actions on contact. The tempo of the enemy encountered is increased as the company/team encounters enemy forces regrouping in an effort to mount a counterattack. The company/team is also required to perform consolidation and reorganization activities.

Manning Levels

Complete units should be fielded to the extent possible. The optimal manning level for the armor company and company/team exercises is the full company/team of three fully manned

platoons, along with the company/team commander (CO), executive officer (XO), first sergeant (1SG), fire support officer (FSO), and their crews.

If units are unable to field full companies/teams, the first priority is to have every M1 manned with a three-man crew and every M2 manned with a two-man crew. Units should use the standard succession of command rules to replace missing leaders (XO for CO, 1SG for XO, platoon sergeant for platoon leader, gunner for tank commander, etc.). Cross-leveling of personnel within units is preferred. As an alternative to cross-leveling across platoons or companies, intact crews may move from one platoon to another, at the discretion of the unit leaders.

Rather than training with crews of fewer than three members (two in M2/M3s), units will be given SAF vehicles to fill out the platoons. Although the unit can perform the exercises with just one manned vehicle per platoon, the training value is greatly diminished. If the unit plans to train with only its leaders, or with understrength platoons, the minimum acceptable manning includes all platoon leaders with three-man crews (two-man crews for M2/M3s).

In all of these manning configurations, it is imperative that the company/team commander and XO and their crews participate in the training.

ARTEP-MTP Tasks

Figure 9 presents a matrix indicating the ARTEP-MTP tasks that are specifically trained in each VTP exercise/table.

References

The primary references for the tasks trained in these exercises/tables are:

ARTEP 71-1-MTP, *Mission Training Plan for the Tank and Mechanized Infantry Company and Company/Team* (3 October 1988).

FM 71-1, *Tank and Mechanized Infantry Company Team* (22 November 1988).

ARTEP-MTP Tasks	VTP Exercises/Tables																								
	A				B			C			D			E			F			G					
	1	2	3	4	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3			
Perform Tactical Movement	*	*	*		*	*	*	*	*	*	*	*	*										*		*
Perform Tactical Road March	*				*																				
Perform Actions on Contact		*			*	*		*	*	*	*	*													*
Support by Fire				*						*			*											*	
Assault an Enemy Position (Mounted)		*						*																	*
Perform an Attack by Fire				*									*											*	
Defend			*											*	*	*	*	*	*						*
Employ Indirect Fire in the Offense				*				*			*	*													*
Employ Indirect Fire in the Defense														*	*	*	*	*	*				*	*	
Defend Against Air Attack (Active)					*						*								*						
Withdraw Not Under Enemy Pressure															*										
Perform Attack Position Activities					*	*																			
Breach an Obstacle				*																				*	
Perform Service Station Resupply																									*
Maintain Operation Security																							*		
Consolidate on the Objective																							*		*
Reorganize on the Objective																							*		*

Figure 9. Crosswalk of tasks trained in each armor company or company/team VTP exercise/table.

Descriptions of Cavalry Troop Exercises/Tables

There are four cavalry troop exercises, each comprised of three or four tables. The first exercise (Tables A1 through A4) consists of training in fundamentals of movement, reconnaissance, security, actions on contact, and defense. Two exercises (Tables B1 through B3 and C1 through C4) cover offensive tasks in the context of a squadron movement to contact. One exercise (Tables D1 through D4) focuses on defensive operations, in the context of a squadron defending in sector.

Difficulty Levels

The relative difficulty levels of the VTP exercises/tables are shown in figure 10.

Difficulty	Fundamentals	Reconnaissance	Offense (MTC)	Defense (DIS)
Easier	A1			
	A2, A3	B1		D1
↓	A4	B2	C1	D2
↓		B3	C2	D3
			C3	D4
More difficult			C4	

Figure 10. Relative difficulty levels of cavalry troop VTP exercises/tables.

Exercise Descriptions

Descriptions of each of the cavalry troop tables are presented in the following paragraphs. Each description indicates the training intent of the table and a summary of the level of enemy contact in the table.

Fundamental/Rehearsal Exercises

Route and Zone Reconnaissance, Offensive Operations, Security, Defense/Delay

- Table A1: The troop maneuvers under close control of the O/C, who acts in the role of the squadron operations officer (S-3) working with the unit in the field. The focus in the first part of the table (route reconnaissance) is on a thorough but expeditious coverage of the routes and surrounding terrain. In the second part of the table (zone reconnaissance), the emphasis is on a thorough but expeditious coverage of all terrain in the zone. While performing the zone reconnaissance, the troop makes contact with motorized rifle sections and platoons. Throughout the table, proper formations, techniques of movement, and reporting are stressed.
- Table A2: The troop performs a movement to contact, encountering indirect fire, infantry fighting vehicles (BMPs), and T-72 tanks. The focus is on the troop's reaction to contact, development of the situation, and employment of troop assets, especially the tank platoons. The O/C continues to act in the role of the squadron S-3.

- Table A3: The troop performs a forward screen, encounters enemy recon and forward security elements, and collapses the screen on order. Early identification of enemy forces by the scouts and battle handover to the tanks, as well as techniques of movement and reporting, are emphasized.
- Table A4: The troop occupies its sector and performs a delay, then displaces while continuing the delay. Enemy contact includes a combat reconnaissance patrol (CRP) and the forward security element (FSE). The focus is on occupation of good positions, identification of routes of withdrawal, and movement to subsequent positions, as well as techniques of movement and reporting.

Reconnaissance Exercises

Tactical Road March, Route Reconnaissance, Zone Reconnaissance

- Table B1: The O/C directs the troop's road march while acting in the role of the squadron S-3/XO. The emphasis is on the basics of road marching (interval, speed, intervehicular distances), proper formations, techniques of movement, and reporting.
- Table B2: The O/C plays the role of the squadron S-3/Cdr, directing the troop in a route reconnaissance during combat operations. No enemy are encountered. The training focuses on a thorough but expeditious coverage of the routes and surrounding terrain, as well as the proper deployment of forces, techniques of movement, and reporting.
- Table B3: While performing a zone reconnaissance, the troop makes contact with two reconnaissance units. Thorough coverage of all the terrain in the zone, techniques of movement, actions on contact, and reporting are stressed.

Offense (MTC) Exercises

Movement to Contact, Hasty Attack, Screen (Stationary)

- Table C1: The troop performs a movement to contact, encountering an enemy reconnaissance unit. Emphasis is on the troop's reaction to contact, development of the situation and employment of troop assets (especially the tank platoons), techniques of movement, and reporting.
- Table C2: The troop continues the movement to contact and encounters an enemy ground unit and indirect fire. The troop must develop the situation and properly employ troop assets (especially the tank platoons). Techniques of movement and reporting are also stressed.
- Table C3: Continuing the movement to contact, the troop conducts a hasty attack against a small enemy ground element. The focus in this table is on the troop's

reaction to contact, development of the situation, and employment of troop assets, especially the tank platoons.

- Table C4: The troop is ordered to conduct a zone reconnaissance and occupy a screen position. Enemy air and ground elements are observed moving ahead of the main body. This table emphasizes early identification of enemy forces by the scouts, continuous surveillance, and battle handover to the tanks, as well as techniques of movement and reporting.

Defense (DIS) Exercises

Screen (Stationary), Delay in Troop Sector, Defend in Troop Sector, Counterattack

- Table D1: The troop is located in a screen line, and makes contact with enemy reconnaissance elements. This table focuses on early identification of enemy forces by the scouts, continuous surveillance, and battle handover to the tanks, as well as techniques of movement and reporting.
- Table D2: While located in the screen line, the troop is to screen until it has identified the lead element of the enemy's main force, then delay while moving to battle positions. The troop's training emphasis is on early contact with the enemy, identifying routes of withdrawal, and moving to subsequent positions, as well as maintaining contact with the enemy and reporting.
- Table D3: The troop conducts a defense in sector, occupying its assigned position and engaging a large enemy force. The focus is on finding good positions, identifying routes to alternate/subsequent positions, and moving to subsequent positions, as well as maintaining contact with the enemy and reporting.
- Table D4: The troop is ordered to counterattack against remnants of the enemy's main body, which has established a hasty defense. The emphasis should be on the troop's reaction to contact, development of the situation, and employment of troop assets, especially the tank platoons.

Manning Levels

Complete units should be fielded to the extent possible. The optimal manning level for the cavalry troop exercises is the full troop of four fully manned platoons, along with the troop commander, the XO, the FSO, their vehicle crews, CP personnel, and mortar section.

If units are unable to field a full troop, the first priority is to have every M1 manned by at least a three-man crew, and every M3 manned by at least a two-man crew. Units should use the standard succession of command rules to replace missing leaders (XO for cavalry troop commander, senior platoon leader for XO, platoon sergeant for platoon leader, gunner for tank

commander, etc.). Cross-leveling of personnel within units is preferred. As an alternative to cross-leveling across platoons, intact crews may move from one platoon to another, at the discretion of the unit leaders.

Rather than training with crews of fewer than three members (two in CFVs), units will be given SAF vehicles to fill out the platoons. Although the unit can perform the exercises with just one manned vehicle per platoon, the training value is diminished.

If the unit plans to train with only its leaders, the minimum acceptable manning includes all platoon leaders, along with three-man crews (two-man crews for Bradleys).

In all of these manning configurations, it is imperative that the cavalry troop commander, XO, their crews, and CP personnel participate in the training.

ARTEP-MTP Tasks

Figure 11 presents a matrix indicating the ARTEP-MTP tasks that are specifically trained in each VTP exercise/table.

References

The primary references for the tasks trained in these exercises/tables are:

ARTEP 17-487-30-MTP, *Mission Training Plan for the Regimental Armored Cavalry Troop* (3 September 1991).

FM 19-97, *Cavalry Troop* (Initial Draft) (28 February 1994).

Descriptions of Armor Battalion and Tank Heavy Task Force Exercises

There are three types of exercises (Movement to Contact [MTC], Defend in Sector [DIS] and Deliberate Attack [DATK]) for the armor battalion/task force in the VTP. These exercises are conducted from beginning to end without specifically required breaks as in the platoon and company level tables. The MTC, DIS and DATK exercises can be conducted utilizing either SIMNET or Janus technologies. In SIMNET the unit in training normally executes an armor battalion OPORD (although they have the option of executing a task force OPORD if they bring the appropriate infantry personnel to do so), while in Janus they execute a task force OPORD. The Janus exercise versions focus on training of staff personnel. There is an additional DATK exercise in Janus which includes an Engineer company.

ARTEP-MTP Tasks	VTP Exercises/Tables															
	A				B			C				D				
	1	2	3	4	1	2	3	1	2	3	4	1	2	3	4	
Conduct Tactical Movement	*	*			*	*	*	*	*	*	*				*	
Perform Route Reconnaissance	*					*										
Perform Zone Reconnaissance	*						*				*					
Operate the Troop Command Post	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Perform Actions on Contact		*	*				*	*	*						*	
Perform Movement to Contact		*						*	*							
Perform Hasty Attack		*								*					*	
Perform Screen Operations			*								*	*				
Take Active Air Defense Measures Against Hostile Aircraft			*								*	*				
Defend in Troop Sector														*		
Defend a Battle Position														*		
Delay in Troop Sector				*								*				
Perform Tactical Road March					*											

Figure 11. Crosswalk of tasks trained in each cavalry troop VTP exercise/table.

Exercise Descriptions

Defend in Sector Exercise

The battalion or task force conducts a DIS against a Motorized Rifle Regiment (MRR). The unit's mission is to destroy the enemy's combat reconnaissance patrols (CRPs), forward security element (FSE), and then engage the motorized rifle battalions (MRBs) of the MRR. The unit is then directed to shift to subsequent battle positions, counterattack the MRR, reestablish the sector, destroy the remaining elements of the MRR, and prepare for an enemy counterattack.

Movement to Contact Exercise

The battalion or task force conducts a MTC operation to destroy the enemy in zone and seize objectives to prevent enemy forces from gaining control of the main avenue of approach into the friendly forces lodgment area. The battalion/task force is opposed by an independent MRB consisting of CRPs, FSE, and the MRB advance guard.

Deliberate Attack Exercise

The battalion or task force conducts a deliberate attack to breach a hasty minefield and seize passage lanes and key terrain as the brigade main attack. The battalion/task force is opposed by a MRC(+) defending the minefield/pass area, with additional reconnaissance and CS assets.

Manning Levels

The recommended manning levels for the command group, main command post, and the combat trains command post for both a Janus and a SIMNET exercise are as shown in figure 12. Those personnel indicated with an asterisk (*) are identified as the minimum essential positions that must be filled. If the person assigned to that position is not available, the functions inherent to that position must be performed by a designated assistant during the exercise. One radio telephone operator (RTO) per section is optional. Additional personnel can train in the CPs; however, only nominal benefit will be realized.

For SIMNET exercises, the following are the recommended manning levels for the M1 (four-man crew) and the M2 (three-man crew) simulators:

M1 and M2 Crews for the Command Group

The battalion commander, S-3, and their crews operate from M1 simulators. The FSO, Air Liaison Officer (ALO), and their drivers operate from an M2 simulator which replicates the tactical command post (TAC CP) M113. The simulator will have no direct fire weapons capability. The FSO can also operate as a crew member of the battalion commander's M1.

M1 Crews for a Task Force

A total of 34 M1 simulators are available for maneuver companies. At a minimum, units should have on hand the personnel to fully man the company commanders', executive officers', and the platoon leaders' tanks (15 total). Units should then man the remaining 19 tanks to a maximum of 14 tanks per company. Semi-automated forces (SAF) can be used to fill each company to 14 tanks. These forces are manipulated by members of the O/C Team at computer terminals following instructions from commanders of the training unit.

M1 Crews for an Armor Battalion

A total of 39 simulators are available for maneuver companies. At a minimum, units should have on hand the personnel to fully man the company commanders', executive officers', and the platoon leaders' tanks (20) total. Units should then man the remaining 19 tanks to a maximum of 14 tanks per company; SAF can be used to fill each company to 14 tanks.

Battalion/Task Force Command Post Manning			
	Command Group	Main Command Post	Combat Trains Command Post
OIC	* Battalion Commander ¹	* Executive Officer	* S4
Operations	* S-3 ¹	* Assistant S-3 or S-3 Air * Operations Sergeant Operations Assistant	
Intelligence		* S-2 * Intelligence Sergeant Intelligence Analyst	
Fire Support	* Fire Support Officer ¹	* Fire Support NCO Fire Support Specialist (2)	
Combat Support	Air Liaison Officer (ALO) ¹	Chemical Officer/NBC NCO Engineer Officer	
Combat Service Support			* S-4 * Supply Sergeant Supply Specialist * S-1 Personnel Services NCO Personnel Admin Specialist
* Minimum essential personnel			
¹ Located with the Command Group for a SIMNET exercise. Location is optional for a Janus staff exercise, preferably with the Command Group, but can be located in the Main Command Post.			
+ S4 commands the CTCP and is also the lead logistician for the battalion/task force			

Figure 12. Battalion/task force exercise manning levels.

M2 Crews for an Infantry Company

The unit should man a minimum of five simulators--company commander, XO, and the three platoon leaders. The unit can also man an additional two simulators as long as the total number of infantry company and scout platoon simulators does not exceed 9. The XO will operate from an M2 simulator, without ammunition, to replicate an M113.

Fire Support and Combat Observation and Lasing Teams

Because SIMNET does not have an M981 fire support vehicle (FSV) simulator, the FSO uses an M1 (preferably) or M2/3 simulator, without ammunition, to replicate the FSV. The FSO can also operate as a crew member of the battalion commander's M1.

Scout Platoon

Because SIMNET does not have HMMWVs, the platoon uses M2 simulators to replicate HMMWVs. Although the scout platoon is organized with 10 HMMWVs, only five simulators are manned with each simulator representing a two-vehicle section. SAF can be used to fill the platoon to 10 vehicles.

ARTEP-MTP Tasks

Listed below are the functional areas and some of the tasks associated with those functional areas that are used for the training of the commander and battalion/task force staff in the three SIMNET exercises and for the staff in the four Janus staff exercises. A more comprehensive list of tasks associated with each functional area can be found in the referenced ARTEP-MTP.

Command and Control

- Command and Control the Battalion/Battalion Task Force
- Perform S-3 Operations
- Maintain Communications

Intelligence

- Perform Intelligence Operations
- Perform S-2 Operations

Fire Support

- Employ Fire Support
- Operate Fire Support Section

Combat Service Support

- Perform Combat Service Support Operations
- Operate Combat Trains Command Post

In addition to the staff tasks listed above, below are the collective maneuver tasks used for training a battalion or task force participating in a SIMNET exercise.

Movement to Contact	Defense in Sector	Deliberate Attack
Move Tactically	Defend	Move Tactically
Fight a Meeting Engagement	Withdraw Under Enemy Pressure	Attack by Fire
Attack by Fire	Withdraw Not Under Enemy Pressure	Breach Defended Obstacles
Consolidate	Move Tactically	Assault
Reorganize	Consolidate	Consolidate
	Reorganize	Reorganize
		Defend

Figure 13. Battalion/task force collective maneuver tasks.

References

The primary references for the tasks trained in these exercises are:

ARTEP 71-2-MTP, *Mission Training Plan for the Tank and Mechanized Infantry Battalion Task Force* (3 October 1988).

FM 71-2, *The Tank and Mechanized Infantry Battalion Task Force* (27 September 1988).

FM 71-123, *Tactics and Techniques for Combined Arms Heavy Forces: Armored Brigade, Battalion/Task Force, and Company/Team* (30 September 1992).

Descriptions of Brigade Staff Exercises

There are three types of exercises (Movement to Contact [MTC], Area Defense [AD] and Deliberate Attack [DATK]) for the brigade staff in the VTP. These exercises are conducted from beginning to end without specifically required breaks as in the platoon and company level tables. The brigade exercises are conducted utilizing the Janus technology. The OPORDs used are developed from Division and Corps OPORD shells and are applicable to the task force exercises already discussed. That is, the OPORDs for the battalion/task force exercises are derived and developed from the OPORDs for the brigade exercises.

Exercise Descriptions

Area Defense (AD) Exercise

The brigade conducts an AD against a Motorized Rifle Division (MRD). The unit's mission is to defeat the attacking enemy forces and prevent penetration of the division's right (north) flank. The unit is deployed so as to mass combat power in the southern part of the brigade's sector, the most vulnerable area in the brigade area of operations. The brigade intends to destroy the first echelon enemy forces, displace and defeat the second echelon forces, and retain key terrain to protect the division's flank.

Movement to Contact (MTC) Exercise

The brigade conducts a MTC operation to secure objectives and establish a security zone to prevent enemy forces from gaining control of the main avenue of approach into the friendly forces lodgment area. The brigade is opposed by two MRRs moving in march formation on parallel routes, and a reinforced MRB acting as a flanking detachment.

Deliberate Attack (DATK) Exercise

The brigade conducts a DATK to seize objectives and key terrain to prevent enemy counterattacks to the South. Initially the brigade launches a strong supporting attack to the south, then breaches a hasty minefield and secures passage lanes through passes in the key terrain for follow-on brigade forces. The brigade then continues the attack to the west/northwest. The brigade is opposed by a battalion-sized force in company-sized positions. An MRC(+), with additional reconnaissance and CS assets, defends the minefield/pass area.

Manning Levels

The recommended manning levels for the tactical command post, main command post, and rear command post for a brigade staff Janus exercise are as shown in figure 14. One radio telephone operator (RTO) per section is required. Units should plan to use their own battalion-level personnel to assist and participate in the manning of battalion/task force response cells.

Brigade Command Post Manning			
	Tactical Command Post	Main Command Post	Rear Command Post
OIC	Brigade Commander ¹	Executive Officer	S4 ²
Operations	S-3 ¹ Operations Sergeant Operations Assistant	Assistant S-3 or S-3 Air Operations Sergeant Operations Assistant S-3 Plans Officer Assistant S-3 Plans Officer	
Intelligence	Assistant S-2 Intelligence Sergeant Intelligence Analyst	S-2 Intelligence Sergeant Intelligence Analyst S-2 Plans Officer	
Fire Support	Fire Support Coordinator (FSCOORD) ¹	Brigade Fire Support Officer Fire Support Targeting Officer Fire Support NCO Fire Support Specialist (2)	
Combat Support	Air Liaison Officer ¹	Engineer Officer Engineer Sergeant Chemical Officer/NBC NCO	
Combat Service Support			S-4 Supply Sergeant Supply Specialist S-1 Personnel Services NCO Personnel Admin Specialist
¹ location is optional, preferably with the Command Group, but can be located in the Tactical CP. ² S4 commands the Rear Command Post and is also the lead logistician for the brigade.			

Figure 14. Brigade exercise manning levels.

ARTEP-MTP Tasks

Listed below are the functional areas and some of the tasks associated with those functional areas that are used for the training of the brigade staff in the three Janus staff exercises. A more comprehensive list of tasks associated with each functional area can be found in the referenced ARTEP-MTP.

Command and Control

- Direct the efforts of the brigade staff
- Develop the operations estimate
- Maintain the current situation
- Synchronize tactical air (TACAIR) support in tactical operations
- Synchronize deep and rear operations with close operations
- Prepare fragmentary orders (FRAGO)
- Execute contingency plans
- Monitor brigade operations
- Establish the rear CP
- Activate the rear CP

Intelligence

- Prepare the intelligence estimate
- Analyze incoming information from maneuver elements in conjunction with intelligence received from higher headquarters G2
- Manage the intelligence effort
- Process specific information requirements data
- Process combat information and intelligence
- Maintain the brigade intelligence data base

Fire Support

- Synchronize fire support operations in tactical operations
- Conduct fire support planning
- Conduct fire support coordination in support of ground operations
- Supervise execution of the fire support plan
- Perform target analysis

Mobility/Survivability

- Integrate engineer support into tactical operations
- React to an enemy chemical or nuclear attack
- Develop the engineer estimate
- Plan air and artillery delivered family of scatterable mines (FASCAM)
- Conduct engineer operations staff supervision

Air Defense

- Synchronize air defense artillery (ADA) fire support into tactical operations

Combat Service Support

- Sustain the brigade
- Conduct logistical planning
- Strength management
- Conduct replacement operations
- Conduct (by name) casualty reporting
- Maintain information on the status of maintenance and supplies

Maneuver

- Conduct transportation and movement planning

References

The primary references for the tasks trained in these exercises are:

ARTEP 71-3-MTP, *Mission Training Plan for the Tank and Mechanized Infantry Battalion Task Force* (3 October 1988).

ARTEP 71-3-MTP, *Mission Training Plan for the Heavy Brigade Command Group and Staff (Initial Draft)* (29 March 1996).

FM 71-3, *The Armored and Mechanized Infantry Brigade* (8 January 1996).

FM 71-123, *Tactics and Techniques for Combined Arms Heavy Forces: Armored Brigade, Battalion/Task Force, and Company/Team* (30 September 1992).

Observer/Controller Visit with the Unit

One or two members of the VTP O/C Team will visit with the training unit 90 to 120 days prior to the unit's scheduled training (personnel serving as O/Cs at ARNG training sites use similar procedures). Prior to this visit, in telephonic coordination with the O/C Team and with the use of this Guide, the unit commander or his representative should decide what echelon(s)--platoon, company, troop, battalion, battalion staff, brigade staff--and the specific training exercises/tables the unit(s) will use during their VTP rotation.

During the visit, the O/C Team representatives will meet with the unit chain of command to finalize plans for the unit's training, to assist in preparing a detailed training schedule for their VTP rotation, and to recommend what the unit should do in the preparation phase in order to optimize training during the execution phase at Fort Knox. To assist in these efforts, the O/Cs will provide the following to the training unit:

1. Operations Orders with overlays for each type training unit (platoon, company, and/or battalion);
2. Maps for each training unit that should be used for both the preparation and execution phase of training;
3. Demonstration videos introducing crews to SIMNET, and M1 and/or M2 simulators;
4. Demonstration videos of exemplary units -- platoons, companies, battalions -- conducting successful VTP exercises;
5. M1 and/or M2/M3 simulator operators manuals;
6. Critical task lists for the exercises/tables to be trained (also available in this Guide);
7. Lessons learned from previous rotations.

Telephonic coordination between the unit and the O/C Team representatives will continue after the visit to complete or finalize any actions left open during the visit, or to resolve any issues that might arise prior to the unit's arrival at Fort Knox.

Training Schedule Preparation

The O/C Team will assist the unit in preparing a detailed training schedule during their visit to the unit, approximately 90 to 120 days prior to training. At Appendix B are examples of training schedules for units participating in VTP training, both for three-day and two-week periods. AC and RC units may use these as examples of how to prepare their day-to-day training schedules when involved in VTP simulation training.

Points of Contact (POCs)

Fort Knox

VTP Observer/Controller Team:

Commander	DSN: 464-7515/7558
HHT/16th Cav Regiment	Commercial: (502) 624-7515/7558
ATTN: ATSB-SBH-HOG	
Fort Knox, KY 40121-5000	

Reserve Component Support Division:

Commander	DSN: 464-2625/3910
USAARMC and Fort Knox	Commercial: (502) 624-2625/3910
ATTN: ATZK-PTE	
Fort Knox, KY 40121-5000	

G3/DPTM:

Commander	DSN: 464-1288/1289
USAARMC and Fort Knox	Commercial: (502) 624-1288
ATTN: ATZK-PTP-S	
Fort Knox, KY 40121-5000	

Mounted Warfare Simulation Training Center (MWSTC)/(SIMNET):

Commander	DSN: 464-4157/4257
HHT/16th Cav Regiment	Commercial: (502) 624-4157/4257
ATTN: ATSB-SBH-HOG	
Fort Knox, KY 40121-5000	

ARNG Sites

Georgia:

HQ, 48th Infantry Brigade	Commercial: (912) 751-3316
ATTN: RTD Team Chief	
475 Shurling	
Macon, GA 31208-1848	

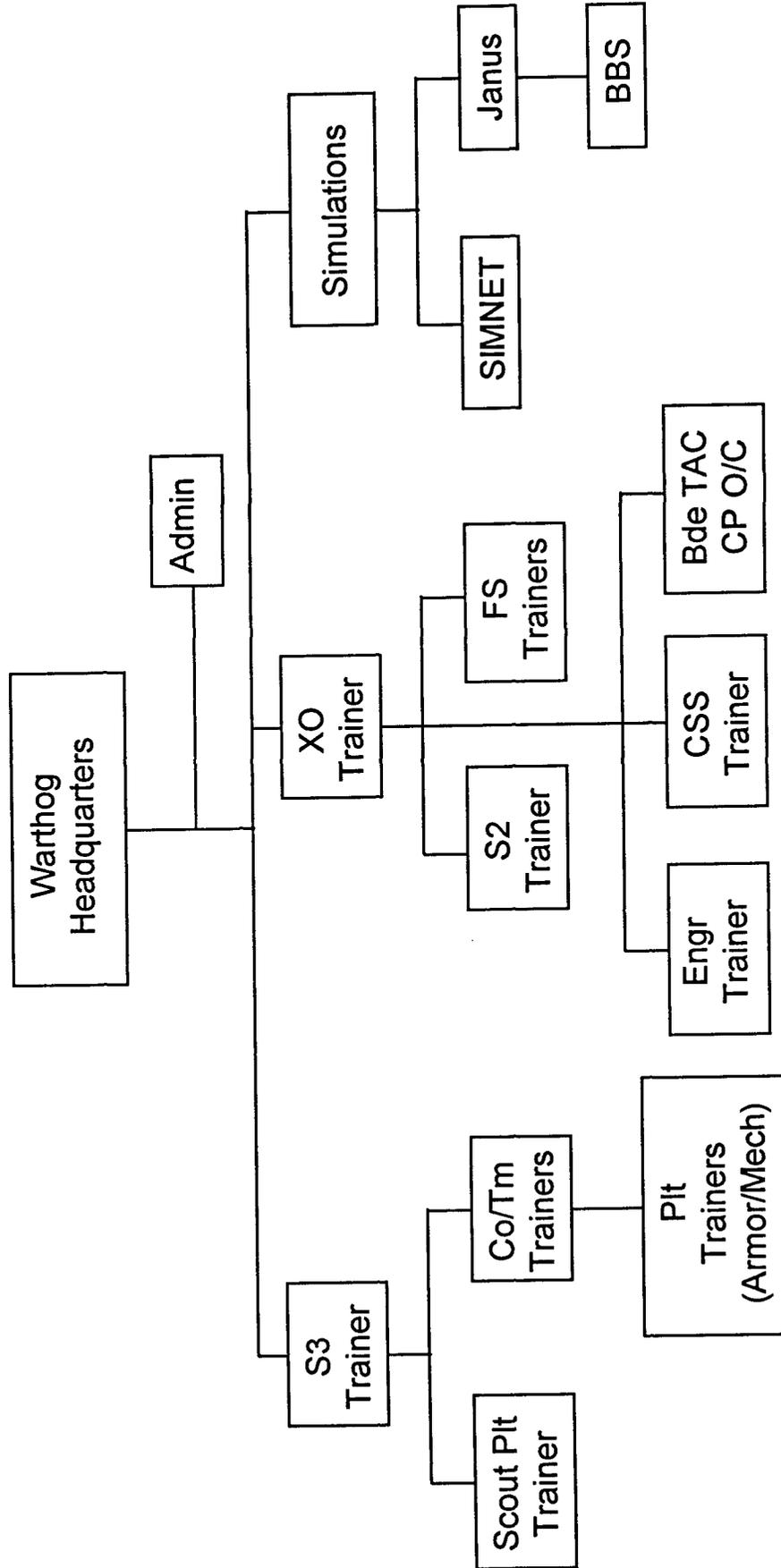
Idaho:

HQ, 116th Cavalry Brigade	Commercial: (208) 422-6978
ATTN: RTD Team Chief	
P.O. Box 45, Gowen Field	
Boise, ID 83703	

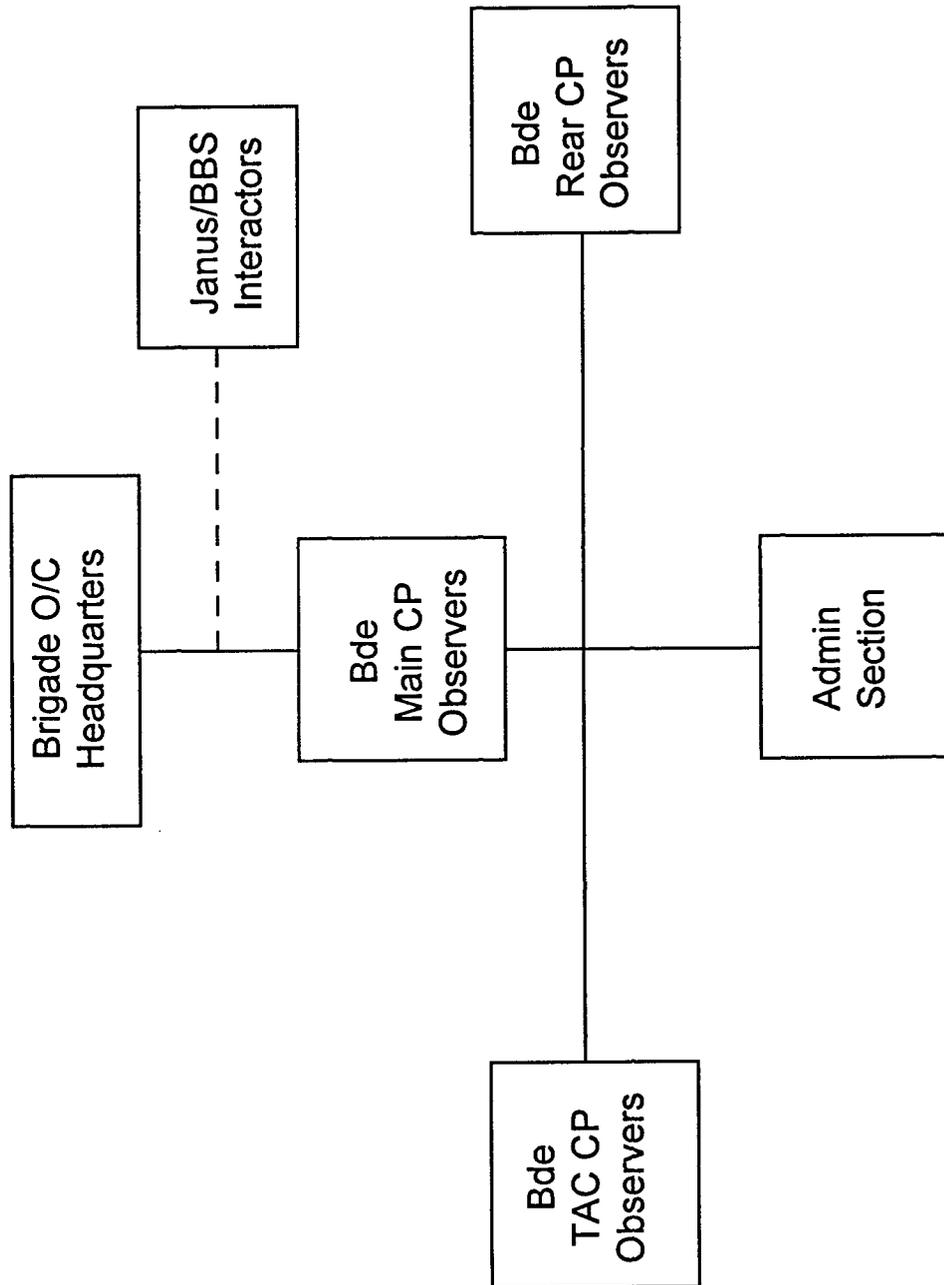
Appendix A

Observer/Controller Team Structure

**VTP O/C Team Organization
Battalion/Task Force and Below**



Brigade O/C Team Organization



Appendix B

Example Training Schedules

X-XXX Armor "Annual Training" Highlights (first week)

Week: _____

TIME	SUN	MON	TUES	WED	THUR	FRI	SAT
		0745 - 1700	0745 - 1700	0745 - 1700	0745 - 1700	0745 - 1700	0745 - 1700
O/C Primary Mission	←♦♦♦♦♦♦♦♦♦♦→	Platoon-Level O/C Supported Training					
O/C Secondary Mission	←♦♦♦♦♦♦♦♦♦♦→	←♦♦♦♦♦♦♦♦♦♦ Company Training♦♦♦♦♦♦♦♦♦♦→					
Unit Staff			←♦♦♦♦♦♦♦♦♦♦ Unit Preparation♦♦♦♦♦♦♦♦♦♦→			Janus Staff Exercise	Unit Preparation
Scout Platoon	←♦♦♦♦♦♦♦♦♦♦→	Scout Platoon Tables with O/C Support					
A Company Cdr & XO	COFT	←♦♦♦♦♦♦♦♦♦♦ Platoon-Level Tables♦♦♦♦♦♦♦♦♦♦→					
FSO							
1st Plt							
2nd Plt							
3rd Plt							
B Company Cdr & XO	←♦♦♦♦♦♦♦♦♦♦ Platoon-Level Tables					Unit-lead Preparation/ Training (Minimum O/C Support)	Company-Level Tables
FSO	COFT						
1st Plt	←♦♦♦♦♦♦♦♦♦♦ Platoon-Level Tables	←♦♦♦♦♦♦♦♦♦♦ Platoon-Level Tables♦♦♦♦♦♦♦♦♦♦→					
2nd Plt							
3rd Plt							
C Company Cdr & XO	←♦♦♦♦♦♦♦♦♦♦ Platoon-Level Tables♦♦♦♦♦♦♦♦♦♦→		COFT	←♦♦♦♦♦♦♦♦♦♦ Platoon-Level Tables♦♦♦♦♦♦♦♦♦♦→	Company-Level Tables	COFT	Unit-lead Preparation/ Training (Minimum O/C Support)
FSO							
1st Plt							
2nd Plt							
3rd Plt							
D Company Cdr & XO	←♦♦♦♦♦♦♦♦♦♦ Platoon-Level Tables♦♦♦♦♦♦♦♦♦♦→	Unit-lead Preparation/ Training (Minimum O/C Support)					
FSO							
1st Plt							
2nd Plt							
3rd Plt							

NOTE: Shading indicates unit activities without VTP O/C Support

X-XXX Armor "Annual Training" Highlights (second week)

Week: _____

	SUN 0745 - 1700	MON 0745 - 1700	TUES 0745 - 1700	WED 0745 - 1700	THUR 0745 - 1700	FRI 0745 - 1700	SAT
TIME	0745 - 1700	0745 - 1700	0745 - 1700	0745 - 1700	0745 - 1700	0745 - 1700	
O/C Primary Mission	Janus Staff Ex THP	SIMNET Prep THP	SIMNET Bn/TF Ex THP	SIMNET Prep THP	SIMNET Bn/TF Ex THP	THP THP	
O/C Secondary Mission	Janus Staff Ex	Janus Staff Ex					
Unit Staff	Janus Staff Ex	Janus Staff Ex					
Scout Platoon	Unit Prep	Unit Prep					
A Company Cdr & XO FSO 1st Plt 2nd Plt 3rd Plt	Company- Level Tables	Company- Level Tables					
B Company Cdr & XO FSO 1st Plt 2nd Plt 3rd Plt	Company- Level Tables	Unit-Lead Prep/Tng (Minimum O/C Support)	BATTALION MOVEMENT TO CONTACT	Unit-Lead Prep/Tng (Minimum O/C Support)	BATTALION DEFENSE IN SECTOR or DELIBERATE ATTACK	PREP FOR DEPLOY TO HOME STATION	
C Company Cdr & XO FSO 1st Plt 2nd Plt 3rd Plt	Unit-Lead Prep/Tng (Minimum O/C Support)	Unit-Lead Prep/Tng (Minimum O/C Support)					
D Company Cdr & XO FSO 1st Plt 2nd Plt 3rd Plt	COFT						

NOTE: Shading indicates unit activities without VTP O/C Support

**X-XXX ARMOR WEEKEND TRAINING SCHEDULE
SIMNET PLATOON OR COMPANY TABLES**

Unit: X-XXX Armor		DATE: XX - XX June 1997					
Unit Training Schedule	Personnel	Activity	Location	Trainers	References	Uniform/Equipment	Remarks
(Friday) xxxx - 1700	All	Travel to Fort Knox	-----	Commander		BDU	
1700 - 1800	All	Dinner	SIMNET Conference Room	Commander, O/C Team		BDU	
1800 - 1900	All	SIMNET Inbriefing	SIMNET Simulator Bay	O/C Team		BDU	
1900 - 2200	All	Familiarization Course	SIMNET Simulator Bay	O/C Team	SIMUTA Fam Course Volume V	BDU	
(Saturday) 0600 -0730	All	Breakfast	Dining Facility	ISG		BDU	
0730 - 0800	All	Travel to MWSTC	-----	ISG		BDU	Bus
0800 - 1200	All	Platoon/Company Tables	SIMNET Simulator Bay	Commander	(appropriate ARTEP and FM)	BDU	(Brown Bag or Mermite)
1200 - 1300	All	Lunch	Rear of Simulator Bay	ISG		BDU	
1300 - 1700	All	Platoon/Company Tables	SIMNET Simulator Bay	Commander	(appropriate ARTEP and FM)	BDU	
1700 - 1800	All	Dinner	Rear of Simulator Bay	ISG		BDU	(Brown Bag or Mermite)
1800 - 2200	All	Platoon/Company Tables	SIMNET Simulator Bay	Commander	(appropriate ARTEP and FM)	BDU	

**X-XXX ARMOR WEEKEND TRAINING SCHEDULE
SIMNET PLATOON OR COMPANY TABLES
(Continued)**

Unit: X-XXX Armor		DATE: XX - XX June 1997					
Unit Training Schedule	Personnel	Activity	Location	Trainers	References	Uniform/ Equipment	Remarks
(Sunday) 0600 - 0700	All	Breakfast	Dining Facility	ISG		BDU	
0700 - 0730	Selected Individuals	"Field" Chapel Services	TBD	Chaplain		BDU	
0730 - 0800	All	Travel to MWSTC	-----	ISG		BDU	Bus
0800 - 1200	All	Platoon/Company Tables	SIMNET Simulator Bay	Commander	(appropriate ARTEP and FM)	BDU	
1200 - 1300	All	Lunch	Rear of Simulator Bay	ISG		BDU	(Brown Bag or Mermite)
1300 - xxxx	All	Travel to Home Station	Simulator Bay	Commander		BDU	

**X-XXX ARMOR WEEKEND TRAINING SCHEDULE
SIMNET BATTALION/TASK FORCE EXERCISE**

Unit: X-XXX Armor		DATE: XX - XX June 1997					
Unit Training Schedule	Personnel	Activity	Location	Trainers	References	Uniform/Equipment	Remarks
(Friday) xxxx - 1700 1700 - 1800 1800 - 1900	All All All	Travel to Fort Knox Dinner SIMNET Inbriefing	----- SIMNET Conference Room SIMNET Simulator Bay	Commander Commander, O/C Team O/C Team		BDU BDU BDU BDU	
1900 - 2200	All	Familiarization Course	Simulator Bay	O/C Team	SIMUTA Fam Course Volume V	BDU	
(Saturday) 0600 - 0730 0730 - 0800 0800 - 1000	All All All	Breakfast Travel to MWSTC Company Tables	Dining Facility ----- SIMNET Simulator Bay	CSM CSM Commander		BDU BDU BDU	Bus
1000 - 1200	Selected Individuals	Battalion/Task Force Rehearsal	SIMNET Simulator Bay	Commander	FM 71-1 ARTEP 71-1-MTP FM 71-2 ARTEP 71-2-MTP	BDU	
1200 - 1300	All	Lunch	Simulator Bay (TOC)	ISG		BDU	(Brown Bag or Mermite)
1300 - 1700	All	Battalion/Task Force Exercise	Rear of Simulator Bay	Commander	FM 71-2 ARTEP 71-2-MTP	BDU	
1700 - 1800	All	Dinner	Simulator Bay Rear of Simulator Bay	ISG		BDU	(Brown Bag or Mermite)
1800 - 2200	All	Battalion/Task Force Exercise	SIMNET Simulator Bay	Commander	FM 71-2 ARTEP 71-2-MTP	BDU	

**X-XXX ARMOR WEEKEND TRAINING SCHEDULE
SIMNET BATTALION/TASK FORCE EXERCISE**

(Continued)

Unit Training Schedule	Unit: X-XXX Armor						DATE: XX - XX June 1997
Time	Personnel	Activity	Location	Trainers	References	Uniform/Equipment	Remarks
(Sunday) 0600 - 0700	All	Breakfast	Dining Facility	CSM		BDU	
0700 - 0730	Selected Individuals	"Field" Chapel Services	TBD	Chaplain		BDU	
0730 - 0800	All	Travel to MWSTC	-----	CSM	FM 71-1	BDU	Bus
0800 - 1200	All	Company Tables	SIMNET	Commander	ARTEP 71-1-MTP	BDU	(Brown Bag or Mermite)
1200 - 1300	All	Lunch	Simulator Bay Rear of Simulator Bay	CSM		BDU	
1300 - xxxx	All	Travel to Home Station	-----	Commander		BDU	Bus

**X-XXX ARMOR WEEKEND TRAINING SCHEDULE
JANUS TASK FORCE EXERCISE**

Unit: X-XXX Armor		DATE: XX - XX June 1997					
Unit Training Schedule	Personnel	Activity	Location	Trainers	References	Uniform/ Equipment	Remarks
(Friday) xxxx - 1800 1800 - 1900	TOC personnel All	Travel to Fort Knox Dinner	----- Dining Facility	Commander CSM		BDU BDU	
1900 - 2000	All	Janus Inbriefing and Command Post Setup	Janus Site	Commander; O/C Team	Unit SOP	BDU	
2000 - 2130	TOC personnel	Brief OPOD and conduct Rehearsal	Janus Site	Commander; O/C Team	FM 71-2 ARTEP 71-2-MTP	BDU	
(Saturday) 0600 - 0700 0700 - 0730	All TOC	Breakfast Travel to MWSTC	Dining Facility -----	CSM CSM		BDU BDU	Bus
0730 - 0830	personnel TOC	Conduct "Communications" Exercise	Janus Site	Commander	Unit SOP	BDU	
0830 - 1130	personnel TOC	Task Force Exercise	Janus Site	Commander; O/C Team	FM 71-2 ARTEP 71-2-MTP	BDU	
1130 - 1230	All	Lunch	Janus Site	CSM		BDU	
1230 - 1400	TOC	Task Force Exercise AARs	Janus Site	Commander; O/C Team		BDU	(Brown Bag or Mermite)
1400 - 1430	personnel TOC	Preparation for Task Force Exercise	Janus Site	Commander	Unit SOP	BDU	
1430 - 1730	personnel TOC	Task Force Exercise	Janus Site	Commander; O/C Team	FM 71-2 ARTEP 71-2-MTP	BDU	
1730 - 1830	All	Dinner	Janus Site	CSM		BDU	
1830 - 2000	TOC	Task Force Exercise AARs	Janus Site	Commander; O/C Team		BDU	(Brown Bag or Mermite)
2000 - 2100	personnel All	Brief Task Force Exercise OPOD	Janus Site	Commander	FM 71-2 ARTEP 71-2-MTP	BDU	

**X-XXX ARMOR WEEKEND TRAINING SCHEDULE
JANUS TASK FORCE EXERCISE
(Continued)**

Unit Training Schedule	Unit: X-XXX Armor						DATE: XX - XX June 1997
Time	Personnel	Activity	Location	Trainers	References	Uniform/Equipment	Remarks
(Sunday) 0600 - 0700	All	Breakfast	Dining Facility	CSM		BDU	
0700 - 0730	Selected Individuals	"Field" Chapel Services	TBD	Chaplain		BDU	
0730 - 0800	All	Travel to MWSTC	-----	CSM	Unit SOP	BDU	Bus
0800 - 0900	TOC personnel	Conduct "Communications" Exercise	Janus Site	Commander		BDU	
0900 - 1200	TOC personnel	Task Force Exercise	Janus Site	Commander, O/C Team	FM 71-2 ARTEP 71-2-MTP	BDU	
1200 - 1300	All	Lunch	Janus Site	CSM		BDU	
1300 - 1430	TOC personnel	Task Force Exercise AARs	Janus Site	Commander, O/C Team		BDU	(Brown Bag or Mermite)
1430 - xxxx	All	Travel to Home Station	-----	Commander		BDU	Bus

Weekday SIMNET Models for AC or RC Units

		DAY				
FOCUS	MONDAY (0745 - 1700)	TUESDAY (0745 - 1700)	WEDNESDAY (0745 - 1700)	THURSDAY (0745 - 1700)	FRIDAY (0745 - 1700)	
Platoon/Company	Familiarization Course Platoon Fundamental Tables	Platoon Offense and Defense Tables	Platoon Offense and Defense Tables	Company/Team Fundamental Tables	Company/Team Offense Tables	
Company/Battalion	Familiarization Course Platoon Fundamental Tables Company/Team Fundamental Tables	Company/Team Offense and Defense Tables Battalion/Task Force OPORD Prebrief (1800 - 1900)	Rock Drills Mounted Rehearsal Battalion/Task Force Exercise	Battalion/Task Force OPORD Prebrief Rock Drills Mounted Rehearsal	Battalion Defense in Sector	