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Research Product 85-28

**Training and Evaluation Products for the
Basic Noncommissioned Officer Course
for M1 Tank Commanders (19K BNCOC)**

ARI Field Unit at Fort Knox, Kentucky
Training Research Laboratory

July 1985

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U. S. Army Research Institute for the Behavioral and Social Sciences

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Human Resources Research Organization

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Research Product 85-28

**Training and Evaluation Products for the
Basic Noncommissioned Officer Course
for M1 Tank Commanders (19K BNCOC)**

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FOREWORD

The ARI Fort Knox Field Unit has been involved for approximately 10 years in the development of innovative approaches to training for the armor community and the Army as a whole. During the past year, this effort has been given special emphasis through formation of the Training Technology Field Activity (TTFA), a partnership among ARI, Training and Doctrine Command, and the U.S. Army Armor Center and School. The purpose of the TTFA is to increase the effectiveness and efficiency of training through the application of appropriate new technologies.

Initial efforts of the Fort Knox TTFA are being concentrated on the institutional program for training M1 tank commanders. Before introducing new technologies into the training program, it is necessary to ensure that the appropriate groundwork in analysis, design, and development has been accomplished. Previous reports presented the results of the analysis and design phases. The report on the analysis phase provided a review and supplement of available job and task analyses for the M1 tank commander duty position. The report on the design phase built on the analysis by presenting a general design for an M1 tank commander training program. The present report focuses on the development phase. It addresses the development of selected aspects of the technology-based training program and contains six training and evaluation products for the Basic Noncommissioned Officer Course for M1 Tank Commanders (19K BNCOC). The present product should be of special interest to training managers and developers in the armor community.



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TRAINING AND EVALUATION PRODUCTS
FOR THE BASIC NONCOMMISSIONED OFFICER COURSE
FOR M1 TANK COMMANDERS (19K BNCOC)

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TRAINING AND EVALUATION PRODUCTS
FOR THE BASIC NONCOMMISSIONED OFFICER COURSE
FOR M1 TANK COMMANDERS (19K BNCOC)

BACKGROUND

The Secretary of Defense, on the advice of the Defense Science Board (1982), has recently directed the Military Departments to increase their funding and management emphasis on research and development of training technology. Among the specific actions recommended were activities such as the accelerated use of computer-based instructional methods via portable aids and/or embedded technology devices (e.g., arcade-like devices) to motivate and teach fundamental skills, and increased development and use of emerging technologies (voice recognition, interactive displays, personal job aids, etc.).

To facilitate an examination of the new technology, the Army established the Training Technology Agency (TTA). It is the mission of this agency to improve Army training by implementing existing technologies or technologies that will be available during the next three years. To facilitate the implementation of these technologies, the Army established Training Technology Field Activities (TTFA) at selected military posts. The first TTFA was established at Fort Knox. Elements of the US Army Training and Doctrine Command (TRADOC), the US Army Research Institute for the Behavioral and Social Sciences (ARI), and the US Army Armor Center and School (USAARMC), working in concert, were designated as the managers of the Fort Knox TTFA.

Under contract with ARI, the Human Resources Research Organization (HumRRO) was requested to perform work for the TTFA. The TTFA elected to explore the application of the new technology by determining how it might be applied in a specific course, the 19K Basic Noncommissioned Officer Course (BNCOC). This is a course designed to train tank commanders for the M1 tank. Interest in the use of the new technology focused on both the BNCOC instructor as he trained BNCOC students and on the BNCOC student when he later became a tank commander and was charged with training his crew.

PREVIOUS WORK

Previous work can be broken down into two phases corresponding to the first two phases of the instructional systems development (ISD) process: analysis and design. The analysis phase is described in detail in a report by Drucker, Hannaman, Melching, and O'Brien (1984), whereas the results of the design phase can be found in a report by Morrison, Drucker, and O'Brien (1985). In addition, a job aid has been prepared by Morrison (1985) describing in detail how to perform the analysis and design stages of instructional development when revising an existing course.

Analysis

The first requirement of the analysis phase was to confirm and update the training needs of the BNCOC student (MOS 19K30). Since the initial analysis of the 19K duty position (M1 tank crewman) was conducted before any soldiers were actually assigned to M1 tanks, it was deemed necessary to examine the results of the initial analysis. Of particular concern was the identification of new critical tasks. Also at the forefront of attention were new noncritical tasks that the 19K30 might need to perform if he were to employ the products of new technology in BNCOC or in units training his crew. To determine the training needs of the BNCOC students, several activities were performed during the first phase of the project. A major portion of the Phase I effort was to identify tasks which should be added to 19K BNCOC, those which should be modified, and those which should be deleted (Drucker et al., 1984).

In addition to these recommendations, a major portion of the effort conducted during the first phase of the project was devoted to identifying nonprocedural tasks that are performed by tank commanders, but which are not in the 19K task inventory. While many of these nonprocedural tasks are already being taught during 19K BNCOC as steps or subtasks of other tasks, it was felt that the identification of nonprocedural tasks was important so that proper task documentation could be prepared for them. Three types of nonprocedural tasks were identified: problem solving tasks, decision making tasks, and interactive tasks. Problem solving tasks require tank commanders to analyze the factors that are considered when making decisions. Decision making tasks require the tank commander to consolidate the results of different analyses in order to select an action from among two or more alternatives. Interactive tasks require the tank commander to coordinate the actions of his tank with those of one or more other vehicles or tasks whose performance requires the tank commander to communicate, either verbally or nonverbally, to persons outside of his crew. Nonverbal tasks are tasks which involve communication without the use of spoken or written words. Three types of verbal tasks were identified: orders received by tank commanders, information either received or submitted by tank commanders, and requests submitted by tank commanders.

In addition to supplementing the list of procedural tasks performed by tank commanders and identifying nonprocedural tasks that were not the traditional focus of previous analyses, an effort was made during the first phase of the project to identify the training devices, aids, and materials that can be used by tank commanders in BNCOC when serving as students or in units when training their crews. Devices, aids, and materials that are already available or that would be available for use in training during the next three years were determined, and the clusters of tasks (e.g., target acquisition, tank gunnery) for which each is most appropriate were identified.

Design

A second requirement was to use the results of the updated training analysis to revise the 19K BNCOC course so that it can better meet the training needs of the BNCOC student (MOS 19K30). Since several changes were made in the tasks that were recommended for training, and since nonprocedural tasks were not identified in the Army's initial analysis, the course design needed to be revised in order to incorporate these recommendations. In addition, biographical information on 19K BNCOC students, which was not available during the initial course design, was now available and could impact the course design.

Four activities were performed during the design phase of the project (Morrison et al., 1985). These activities provided basic information needed to prepare a new course outline for 19K BNCOC. The first of these activities was to conduct a learning analysis of the 19K30 duty position. Since a learning analysis had already been performed for the 19K30 duty position, the analysis consisted of a review of the previous analysis and the conduct of a new analysis for the new or revised procedural tasks for which learning analyses had not been previously performed. The second activity was to identify the relevant skills, knowledges, and aptitudes of the students in 19K BNCOC. Biographical background data taken from questionnaires and records, and performance data taken from diagnostic tests were analyzed to obtain this information. The results of these analyses were used to prepare a description of the students that had already been enrolled in 19K BNCOC. The third activity was to establish training priorities that would allow the course to be adjusted to the amount of time that might be made available. These priorities were based on two sets of factors: (a) the results of a criticality survey in which qualified tank commanders rated how important it was for a tank commander to know how to perform each task, and (b) a Delphi technique in which civilian and military training experts selected tasks for training based on the results of the criticality survey and other training considerations. The final activity was to prepare crosswalks showing the procedural tasks during which each decision making, problem solving, and interactive task was likely to occur. The results of these crosswalks were used to identify the one procedural task most closely linked to each nonprocedural task. This activity was performed in order to allow the nonprocedural tasks to be incorporated in the 19K BNCOC design.

Using the results of these activities, a proposed outline for a new 19K BNCOC was prepared. The course outline listed each of the recommended blocks of instruction and included both the procedural tasks and the nonprocedural tasks that would be trained in each block. In addition, a land navigation course and two types of field exercises were developed: (a) a single tank tactical exercise that would enable each student to practice tank commander tasks in a field environment without interference caused by the need to coordinate with other tanks in the platoon, and (b) an intra-platoon tactical exercise that would enable students to practice tank commander tasks in a tactical environment provided by a full platoon. Also, the course outline suggested the development of a leadership reaction course to provide students with an opportunity to practice leadership tasks in a field environment.

Finally, it suggested the development of a military stakes proficiency test (previously listed as the "Country Fair Skills Test") as a means of motivating students while enabling their skills to be evaluated.)

WORK PERFORMED DURING THE DEVELOPMENT PHASE

The present report is concerned with the third phase of the instructional systems development process: development. Six products were developed or revised during this phase: (a) The Leadership Reaction Course (LRC), (b) The Pathfinder Land Navigation Course (PLNC), (c) The Military Stakes Proficiency Test (MSPT), (d) The Single Tank Tactical Exercise (STTX), (e) The Intra-Platoon Tactical Exercise (I-PTX), and (f) a lesson plan for the task Analyze Terrain Using the Five Military Aspects of Terrain.

The first five products were designed to motivate the students and enhance their performance in 19K BNCOC by enabling each student to practice the performance of tank commander tasks in tactical environments of increasing complexity. The development of these products was based on the crawl-walk-run concept of training which suggests that students should learn to perform tasks in training environments of increasing complexity and greater realism. More specifically, the exercises will provide each student an opportunity to practice and the instructors an opportunity to evaluate:

- The performance of tank commander tasks in a tactical environment free of the need to command a crew.
- The performance of tank commander tasks while commanding a tank crew in a single tank tactical environment.
- The performance of tank commander tasks, including the interface with other tank commanders, while commanding a tank crew in a platoon tactical environment.

These products, which are presented as the first five annexes to this report, contain five major components: (a) a layout diagram, (b) a participation schedule, (c) task training and evaluation outlines, (d) accuracy and time score sheets, and (e) resource requirements. A total of 65 3/4 hours of training time will be required for a class of eight students to complete the five training and evaluation products. The training time required for each product is as follows:

LRC:	7 1/2 hours per student (4 students per team)
	8 1/2 hours per class
PLNC:	2 3/4 hours per student (4 students per heat)
	5 3/4 hours per class

MSPT: 4 hours per student (2 students per heat)
5 1/2 hours per class

STTX: 4 hours per student (2 students per tactical run)
20 hours per class

I-PTX: 12 hours per student (2 students per tactical run)
26 hours per class

TOTAL: 30 1/4 hours per student
65 3/4 hours per class

The sixth product contained in this report, the lesson plan for the task Analyze Terrain Using the Five Military Aspects of Terrain, was developed to illustrate a procedure for training 19K BNCOC students to perform nonprocedural tasks. The lesson plan, which is the sixth annex to this report, provides opportunities for students to receive instruction on nonprocedural tasks and to practice these tasks during lesson previously devoted to only a single procedural task.

A summary of the six training and evaluation products is contained below.

Leadership Reaction Course

The development of the Leadership Reaction Course was recommended by Morrison et al. (1985) in their report describing the design phase of the project. The purpose of the course is to enable 19K BNCOC students to exercise leadership behaviors and to solve leadership problems in both non-combat and combat-oriented situations. The course itself is comprised of 12 independent stations. The students will be organized into four-person teams, and each team will be given a leadership problem at each of the 12 stations. The students on a team are to take turns serving as the leader so that each student will serve as the team leader at three of the stations. The students are to work together under the team leader to solve each problem.

The Leadership Reaction Course, Annex A of this report, contains three different types of problems. The first type is non-combat related. For example, the teams will be required to lay out the diamond of a baseball field and to construct a temporary field shelter. The remaining two types are both combat related, but differ in whether or not they are performed in the context of a combat scenario. Among the problems that are not presented in the context of a specific scenario are (a) to move fuel drums across a gap in a bridge using various materials that will be provided (e.g., planks, boards, tent stakes, nails), and (b) to relay messages from an observation post that is located on a steep hill by a creek with fast-running water. Among the problems that are presented in the context of a specific scenario are (a) to conduct a reconnaissance patrol to determine whether or not a bridge is intact, and if so, whether it is prepared for demolitions, and (b) to pass through an enemy minefield in order to return to the company.

Pathfinder Land Navigation Course

An early version of this course was contained in the report by Morrison et al. (1985). The purpose of the course was to provide students with an opportunity to perform in the field the 13 land navigation tasks that are contained in the Land Navigation Block of Instruction proposed for 19K BNCOC. The original version of the course was incomplete, however, since it did not contain instructions on how the course was to be laid out, a schedule, the resource requirements, or scoring sheets. In addition, the original set of standards was in need of revision.

The course itself, which is Annex B of this report, consists of five different stations at which students are required to perform two or more land navigation tasks. For example, at the first station students will be required to use marginal information on a map, identify adjoining map sheets, identify terrain features on a map, orient a map to the ground by terrain association, and orient a map using a compass. In addition, the students are required to perform several tasks while navigating between stations. For example, between the first two stations, students will be required to determine magnetic azimuth using a compass and to navigate from one point on the ground to another point. In addition to the 13 land navigation tasks recommended for the Land Navigation Block of Instruction for 19K BNCOC, the course contains three skill level 1 tasks.

Military Stakes Proficiency Test

The development of the Military Stakes Proficiency Test, which was originally referred to as the Country Fair Skills Test by Morrison et al., (1985), was recommended in order to provide the students an opportunity to perform in a competitive situation many of the tasks that they should have learned in 19K BNCOC. It was anticipated that the test would serve as an incentive for students to practice and perform these tasks to standard prior to formal field exercises, while providing the instructors an opportunity to detect the need for additional training prior to these exercises. The test, which is Annex C of this report, requires students to perform a total of 16 tank commander tasks selected from seven task clusters: training, NBC, communications, land navigation, maintenance, tank gunnery, and tactics. Among these tasks are Conduct Training, Conduct Partial Decontamination, Enter and Leave a Radio Net, and Conduct Direct Fire Adjustment. The test contains seven stations, each station corresponding to one of the seven task clusters.

Single Tank Tactical Exercise

This exercise was originally contained in the report by Morrison et al. (1985). The purpose of the exercise was to enable 19K BNCOC students to practice in the field the tasks that they learned earlier in the classroom, including problem solving and decision making tasks. The exercise differed from the field exercises currently used in 19K BNCOC, Situational Training Exercises (STX), in that each participant would

direct his tank while operating alone rather than as part of a platoon. By participating alone, each student would control his tank and perform the tank commander tasks learned in 19K BNCOC without having to coordinate with the other tanks in the platoon. This approach was recommended in order to provide instructors an opportunity to evaluate performance and to provide remedial training before conducting more complex and more expensive field exercises where evaluation and remediation of individual students would be more difficult.

The present version of the Single Tank Tactical Exercise, which is Annex D of this report, is a revised and expanded version of the exercise that appeared in the report by Morrison et al. (1985). The exercise consists of a sequence of five scenarios during which each student is required to perform 44 procedural tasks and 17 nonprocedural tasks. The scenarios are: (a) Prepare for a Tactical Road March, (b) Conduct a Tactical Road March, (c) Prepare for a Movement to Contact, (d) Conduct a Movement to Contact, and (e) Occupy and Defend a Battle Position. Among the tasks are: (a) Set Headspace and Timing on a Caliber .50 M2 HB Machinegun, (b) Compare the Lethality of Multiple Enemy Targets, (c) Conduct a Map Reconnaissance, (d) Call for and Adjust Indirect Fires, and (e) Prepare a Situation Report.

Intra-Platoon Tactical Exercise

This exercise, which was originally contained in the report by Morrison et al. (1985), differs from the Single Tank Tactical Exercise in two important respects: (a) The exercise is to be conducted in the context of a platoon operation rather than as an exercise for a single tank, and (b) It requires the tank commanders to perform interactive tasks as well as problem solving and decision making tasks. The purpose of the exercise is to enable 19K BNCOC students to practice selected tank commander tasks in the field in a more complex and realistic context than that provided by the Single Tank Tactical Exercise.

The present version of the Intra-Platoon Tactical Exercise, which is Annex E of this report, is a revised and expanded version of the exercise that appeared in the report by Morrison et al. (1985). The exercise consists of a sequence of four scenarios during which each student is required to perform 88 procedural tasks and 15 nonprocedural tasks. The scenarios are: (a) Assembly Areas and Tactical Road March, (b) Movement to Contact, (c) Hasty Attack, and (d) Occupy and Defend Battle Positions. Among the tasks are: (a) Maintain Position in Platoon Formation, (b) Issue a Fire Command, (c) Decide Whether or Not to Override Designated Search Area, (d) Decide When to Stop Firing, and (e) Maintain Wingman Position in Wedge Formation.

Procedure for Training Nonprocedural Tasks

A major objective of this project was to identify nonprocedural tasks performed by M1 tank commanders and to develop a procedure for training students in 19K BNCOC to perform these tasks. The effort concentrated on three types of nonprocedural tasks: decision making, problem solving, and interactive tasks.

Decision Making Tasks. A decision making task was defined in the report by Drucker et al. (1984) as one in which a decision maker must select a response from among several alternative responses. During the analysis phase of the project, a list of 42 decision making tasks performed in combat by tank commanders was derived from an analysis of tank commander duties.

Problem Solving Tasks. A problem solving task was defined in the report as one in which a problem solver subjectively analyzes the factors that are taken into account when making a decision. For example, the need to keep the presence of the friendly force hidden from the enemy is a problem whose solution impacts on the decision of whether or not to fire at the enemy. A list of 66 problem solving tasks was derived during the analysis phase of the project.

Interactive Tasks. Interactive tasks were defined as tasks whose performance requires the tank commander to coordinate his actions with the actions of other vehicles or to communicate with persons outside of his crew. Two types of interactive tasks were identified during the analysis phase of the project: verbal and non-verbal. Non-verbal tasks involved coordination or communication without the use of spoken or written words, while verbal tasks involved communications through spoken or written words. Three types of verbal tasks were identified: orders received from outside of the tank, information that the tank commander received or submitted, and requests which the tank commander submitted.

Current Training of Nonprocedural Tasks. While it was recognized that students were already being trained in 19K BNCOC to perform some nonprocedural tasks, few of the decision making, problem solving, or interactive tasks identified during the analysis phase of the project are contained in the 19K10-40 task list. Thus, the skills involved in performing these tasks are often subsumed under procedural tasks as subtasks or steps, or are assumed to be supporting knowledges and skills required to perform these tasks. As a result, there can be no assurance that students in 19K BNCOC are being adequately trained to perform these tasks to standard. By identifying these tasks during the analysis phase of the project and by determining their criticality during the design phase, the groundwork was laid for the development of a more systematic approach to training nonprocedural tasks. In addition, the assumption was made that nonprocedural tasks could be taught efficiently by inserting them into the lessons already developed for procedural tasks. Consequently, a crosswalk was conducted between the two types of tasks. Once the crosswalk was completed, the results were examined to select the procedural task which would provide the most meaningful context for training each nonprocedural task.

Sample Lesson Plan Incorporating Training of Nonprocedural Tasks. A sample lesson plan was prepared for the task Analyze Terrain Using the Five Military Aspects of Terrain. This lesson plan, which is Annex F of the report, is a modification of the lesson plan prepared by the Directorate of Training and Doctrine and follows the requirements specified on the US Army Armor Center's Training Development Handbook (1980). The first part of the lesson plan is the cover page. Although the handbook specifies that seven items of essential information appear on this page,

two additional items of information were added: (a) a list of the nonprocedural tasks that are contained in the lesson plan and (b) a crosswalk relating the lesson plan to other procedural tasks that are taught in 19K BNCOC. The nonprocedural tasks were added to the cover page to make the instructor aware that tasks other than the procedural task Analyze Terrain Using the Five Military Aspects of Terrain would be taught during the lesson. The crosswalk to other procedural tasks was added to make the instructor aware of the other 19K BNCOC tasks students must be able to perform prior to the lesson.

Changes were also made in the introduction to the lesson plan. The reason statement, which is an explanation of the need for training, was expanded to explain how the nonprocedural tasks relate to the job of a tank commander. The objective, which tells the students what they will do during the unit of instruction, was expanded to include nonprocedural tasks. Finally, the Procedures section, which explains how the class will be organized and conducted, was revised to include training of nonprocedural tasks.

The next section of the lesson plan, Explanation/Demonstration/Application, contains teaching points and subpoints that can be understood by a subject matter expert. The points and subpoints are in the sequence in which they are to be taught during the unit of instruction. The section is organized into two parts: (a) the procedural task that is the subject of the lesson and (b) the nonprocedural tasks that are trained during the same lesson. Each point or subpoint of the lesson is to be demonstrated using a slide. A description of the slides is contained in Appendix 1 of Annex F. A note following each point or a set of points designates which slide should be shown to illustrate the point, and it describes what the instructor should do for the illustration.

The next section of the lesson plan, Practical Exercise, describes student participation in the actual performance of the task. The original lesson plan requires the instructor to conduct a question/answer session. Since this procedure does not provide students an opportunity to practice the performance of either the procedural or nonprocedural tasks in a real life situation, the section was extensively revised. The revision requires students to first practice the performance of the tasks using color photographs and to practice them later in the field on actual terrain. Each student is to receive a set of eight color photographs of terrain which will be covered in plastic. A description of these photographs is contained in Appendix 2 of Annex F. The students will be required to analyze the terrain in the photographs and to indicate the results of their analyses using a grease pencil. They will also be required to solve problems and make decisions based on their analyses and to indicate the results of these efforts.

The lesson plan also requires that students be taken into the field of teams of two where they are to practice the performance of the procedural and nonprocedural tasks while simulating movement to contact, attack, and defend battle position tactical operations. The students will be required to indicate the results of their analyses on acetate covered maps. Following each phase of the exercise, the students will

discuss their terrain analysis with the instructor who will then critique their performance. Because of time and resource constraints, the evaluation of student performance is to take place during the two practical exercises. The lesson plan contains guidelines describing the activities of the instructor during this phase of training.

Finally, an Advance Sheet was prepared. This document, which is contained in Appendix 3 of Annex F, is given to students prior to class to inform them about class requirements. The Advance Sheet lists all the procedural and nonprocedural tasks for which the students will receive training.

SUMMARY

The following six products, which are contained as annexes to this report, were developed for 19K BNCOC in order to facilitate the adoption of state-of-the-art training technologies at Fort Knox: (a) The Leadership Reaction Course, a 12-station exercise that will enable 19K BNCOC students to practice leadership and solve leadership problems in both non-combat and combat-oriented situations, (b) The Pathfinder Land Navigation Course, a 5-station field exercise that will enable 19K BNCOC students to practice land navigation tasks, (c) The Military Stakes Proficiency Test, a 7-station test that will enable 19K BNCOC students to perform tank commander tasks without the need to command a crew, (d) The Single Tank Tactical Exercise, a field exercise in which each student will be able to command his tank and perform critical tank commander tasks without having to coordinate with other tanks in the platoon, (e) The Intra-Platoon Tactical Exercise, a field exercise which requires the student to coordinate with the rest of the platoon while commanding his tank in a tactical environment, and (f) a sample lesson plan that was developed to illustrate how nonprocedural tasks (i.e., problem solving, decision making, and interactive tasks) can be trained in 19K BNCOC.

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ANNEX A

LEADERSHIP REACTION COURSE (LRC)

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ANNEX A
LEADERSHIP REACTION COURSE (LRC)

GENERAL

1. The Leadership Reaction Course (LRC) is designed to evaluate the reaction of tank commanders to unpredictable leadership problems.
2. The LRC will accomplish the following:
 - Measure the degree to which leadership traits are possessed by a student.
 - Provide students with an opportunity to apply leadership traits, principles of leadership, and problem solving procedures.
 - Enable students to recognize the necessity of team effort and cooperation in accomplishing assigned tasks.
3. The scope of the LRC is twelve unpredictable leadership problems: four are combat related and scenario driven, four are combat related, but without a scenario, and four are not combat related.
4. The LRC is scheduled during daylight hours and after formal leadership instruction. The course is conducted dismounted.
5. The LRC includes twelve test stations. When a team of four students arrives at the course, the NCOIC will randomly select a team leader for each of the twelve test stations with the restriction that each student serve as the team leader at one of the four stations dedicated to each type of leadership problem (i.e., combat related--scenario driven, combat related--not scenario driven, and non-combat related). Appendix B of this annex contains a schedule with possible student assignments. When a team arrives at a station the station chief will describe the problem to the team leader, the team leader will discuss the problem with other team members, the team leader will make a decision as to how the problem will be resolved, announce his decision, and then direct and supervise the execution of the decision by the team. Team members may provide input to the team leader during the problem solving discussion, but once the team leader has made and announced his decision, team members will only respond to the team leader's orders. Team leader performance will be measured at each station by two criteria: 1) leadership accuracy, and 2) problem subtask accuracy. Time to complete the task will not be a performance measure.

6. When a team completes an LRC problem, the station chief will provide time for the team leader to discuss the performance of his team with the other team members. After the discussion the station chief will critique the team leader's leadership performance, including his problem solving and supervisory procedures, and the responses of the team members to his directions.

INSTRUCTOR'S GUIDE

1. The Instructor's Guide is a detailed plan for administering and scoring the LRC. The guide consists of five appendixes: 1) Layout Diagram, 2) Participation Schedule, 3) Unpredictable Leadership Problem Outlines, 4) Accuracy Score Sheets, and 5) Resource Requirements.
2. Layout Diagram (Appendix 1). The layout diagram illustrates how the LRC is conducted. The diagram shows twelve test stations, an in and out processing station, and the sequence of student movement between stations. Enclosure 1 illustrates the unpredictable leadership problems by station.
3. Participation Schedule (Appendix 2). The schedule indicates the time required to conduct the LRC with eight students. The first four students begin the course at 0730 hours and complete the course at 1500 hours. The second four students begin the course at 0830 hours and complete the course at 1600 hours. The first hour of the course is reserved for a problem solving lesson of unpredictable leadership problems.
4. Unpredictable Leadership Problem Outlines (Appendix 3). There are twelve unpredictable problems in the LRC. For each problem there is an outline to assist each test station administrator. Each outline includes: 1) a problem statement, 2) conditions under which the problem will be resolved, 3) accuracy standards, 4) instructions to the team leader, and 5) a problem solution.
5. Accuracy Score Sheets (Appendix 4). There is a score sheet for each student when he serves in a team leader role. The score sheet includes: 1) problem solving action verb statements, 2) required problem solving action steps, 3) a performance point allocation column, 4) a performance points earned column, and 5) a points scored recapitulation block.
6. Resource Requirements (Appendix 5). This appendix indicates personnel, equipment, and facilities required to conduct the LRC. Requirements are indicated by problem.

APPENDIX 1 LAYOUT DIAGRAM

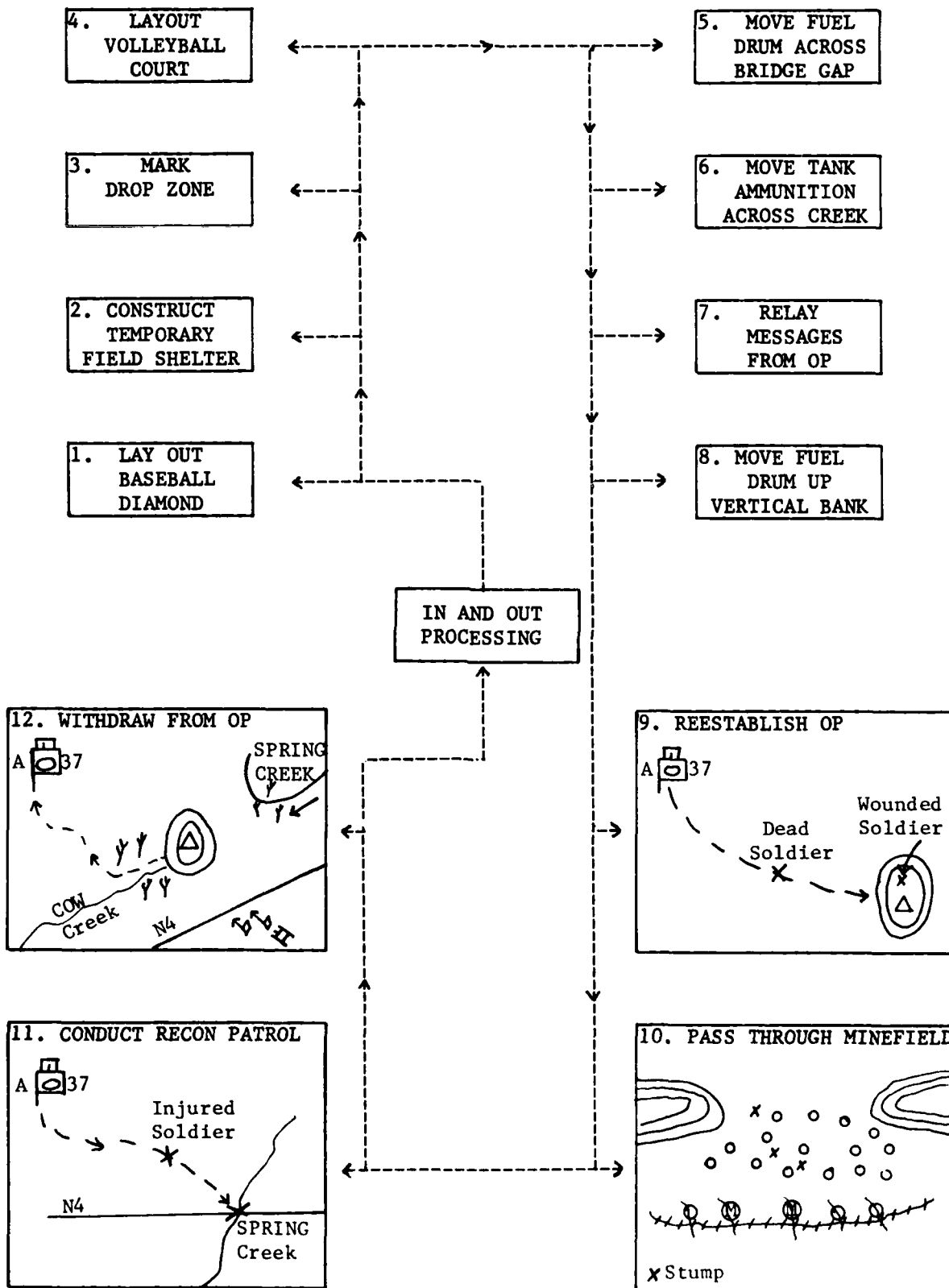
APPENDIX 2 PARTICIPATION SCHEDULE

APPENDIX 3 UNPREDICTABLE LEADERSHIP PROBLEM OUTLINES

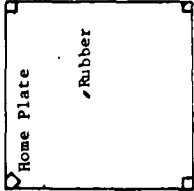
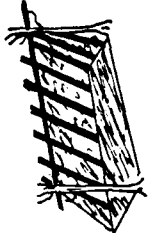
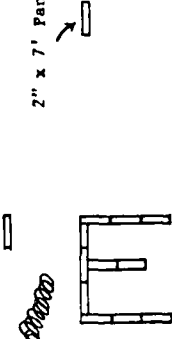
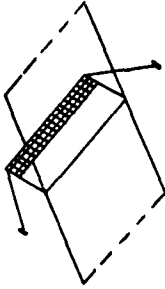
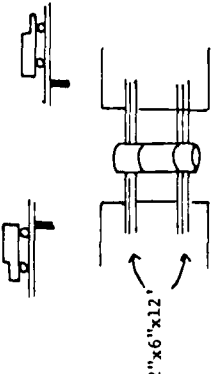
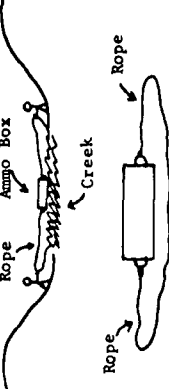
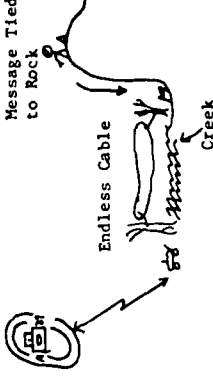
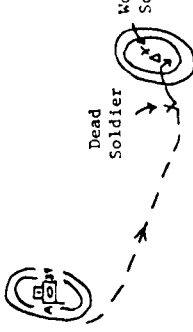
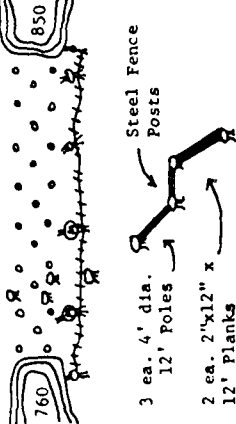
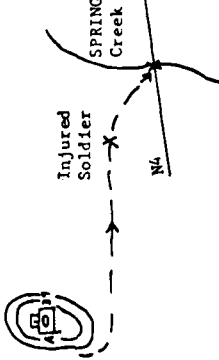
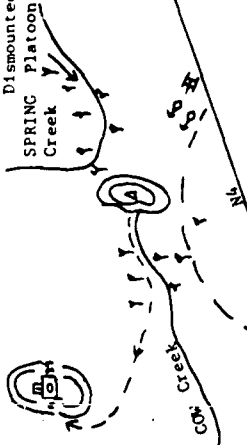
APPENDIX 4 PROBLEM SOLVING ACCURACY SCORE SHEET

APPENDIX 5 RESOURCE REQUIREMENTS

APPENDIX 1 LRC LAYOUT DIAGRAM



ENCLOSURE 1 TO APPENDIX 1
LRC UNPREDICTABLE LEADERSHIP PROBLEMS

1. Lay Out Baseball Diamond 	2. Construct Temporary Field Shelter 	3. Mark Aerial Resupply Drop Zone 	4. Lay Out Volleyball Court 
5. Move Fuel Drum Across Bridge Gap 	6. Move Tank Ammunition Across Creek 	7. Relay Messages from Observation Post 	8. Move Fuel Drums Up Vertical Bank 
9. Reestablish Observation Post 	10. Pass Through Minefield 	11. Conduct Reconnaissance Patrol 	12. Withdraw from Observation Post 

APPENDIX 2
LRC PARTICIPATION SCHEDULE

TEAM	TEAM LEADER	PRE LRC* CLASS	STATIONS											
			1	2	3	4	5	6	7	8	9	10	11	12
1	TC 1	X	X				X				X			
	TC 2	X		X			X				X			
	TC 3	X			X				X			X		
	TC 4	X				X				X				X
TIME LINE 0730			0830	0900	0930	1000	1030	1100	1130	1200	1230	1300	1330	1400
			1430	1500										

2	TC 5	X	X				X				X			
	TC 6	X		X				X				X		
	TC 7	X			X				X				X	
	TC 8	X				X				X				X
TIME LINE 0830			0930	1000	1030	1100	1130	1200	1230	1300	1330	1400	1430	1500
			1530	1600										

*This class will include: 1) a review of leadership traits, 2) the application of problem solving procedures, and 3) a practical exercise of applying problem solving procedures to unpredictable situations depicted and illustrated by three combat scenarios.

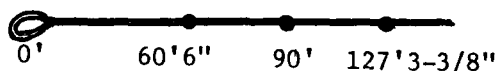
APPENDIX 3
LRC UNPREDICTABLE LEADERSHIP PROBLEM OUTLINES

1. There are twelve unpredictable leadership problem outlines to aid test station administrators in administering the LRC. The LRC is a situational oriented course in which a team of four students start at station 1 and proceed through the course in station number sequence. At station 1 a team member is selected as the team leader, at station 2 a different team member is selected as the team leader, etc. By the end of the course each student will have had the opportunity to be team leader three times. Each unpredictable leadership problem outline includes: 1) the problem statement, 2) the conditions under which the problem will be resolved, 3) accuracy standards, 4) instructions to the team leader, and 5) a solution to the problem.
2. The problems in the unpredictable leadership problem outlines are shown below.

- P-1 Lay out the diamond of a baseball field.
- P-2 Construct temporary field shelter.
- P-3 Mark aerial resupply drop zone.
- P-4 Lay out a volleyball court.
- P-5 Move fuel drums across a bridge gap.
- P-6 Move tank ammunition across a creek.
- P-7 Relay message from an observation post.
- P-8 Move fuel drums up a vertical bank.
- P-9 Reestablish an observation post.
- P-10 Pass through a minefield.
- P-11 Conduct a reconnaissance patrol.
- P-12 Withdraw from an observation post.

ENCLOSURE 1 TO APPENDIX 3
(PROBLEM 1)
UNPREDICTABLE LEADERSHIP PROBLEM OUTLINE

1. PROBLEM: Lay out the diamond of a baseball field.
2. CONDITIONS: Given a flat open field approximately 40 yards square, a home plate marker, five tent pins, a hammer, and a 140' length of rope with knots indicating 60'6", 90', and 127'3-3/8" measurements.



3. STANDARDS:

- Leadership**
- Tm. Ldr. discussed problem with team members.
 - Tm. Ldr. arrived at a viable course of action.
 - Tm. Ldr. announced decision to team members.
 - Tm. Ldr. delegated tasks to each team member.
 - Tm. Ldr. was in charge while solving the problem.

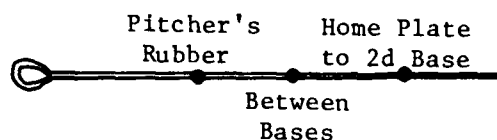
- Task Accuracy**
- Distance between bases along base lines = 90'
 - Distance from home plate to second base = 127'3-3/8"
 - Distance from home plate to pitcher's rubber = 60'6"
 - Angles between base line at bases and home plate = $\pm 5^\circ$ of 90°

- Time**
- 20 minutes

4. INSTRUCTIONS TO TEAM LEADER: "Here we have five tent pins, a home plate marker, a hammer, a length of rope, and a flat field. The knots in the rope represent distances associated with the diamond of a baseball field. Your job is to lay out the diamond, using only the items indicated. Mark the location of home plate, 1st, 2d, and 3d bases, and the pitcher's rubber with the tent pins. When you are finished all distances must be accurate and the base lines at the bases and home plate must form a 90° angle. You may discuss the problem with the other team members, but once you begin to lay out the diamond you may not receive problem solving advice from team members. You are in charge. You have twenty minutes. Are there any questions?"

5. SOLUTION:

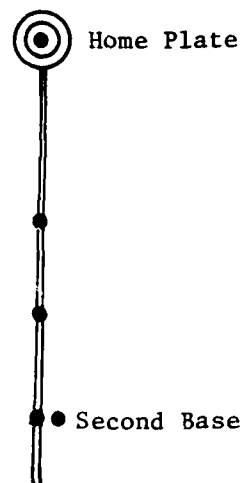
- Step 1. Determine what the lengths between the eyelet and the knots on the rope represent in regards to distances on a baseball diamond.



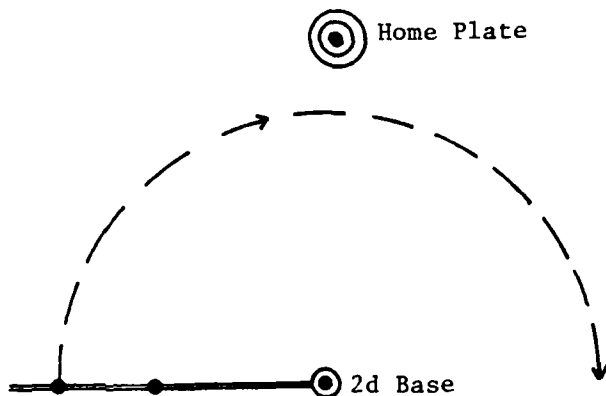
Step 2. Drive a pin into the ground and mark the point as home plate.



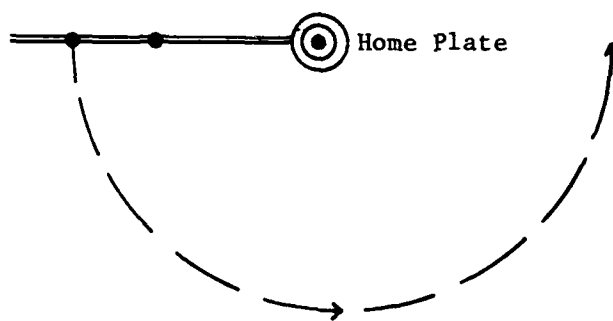
Step 3. Place the rope eyelet over the tent pin and extend the rope to the last knot. Drive a tent pin in the ground at this point. This is the location of second base.



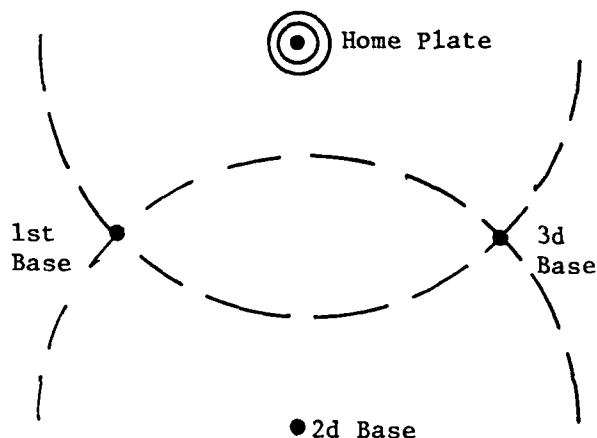
Step 4. Stand beside the second base tent pin and face the home plate marker. Place the rope eyelet over the 2d base tent pin and extend the rope to the left to the second knot. Fasten a tent pin to and inside the second knot. Using the tent pin like a point on a compass and keeping the rope taut trace a semicircle on the ground by first moving toward the home plate marker and then moving away from the home plate marker.



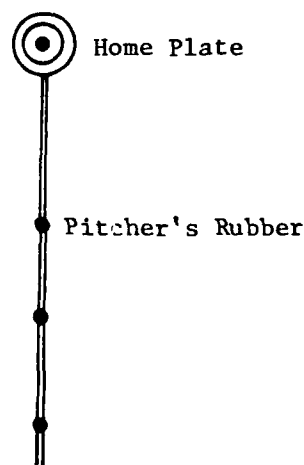
Step 5. Stand beside the home plate marker and face the 2d base tent pin. Place the rope eyelet over the home plate marker tent pin and extend the rope to the left to the second knot. Fasten a tent pin to and inside the second knot. Using the tent pin like the point on a compass and keeping the rope taut trace a semicircle on the ground by first moving toward the 2d base tent pin and then moving away from the 2d base.



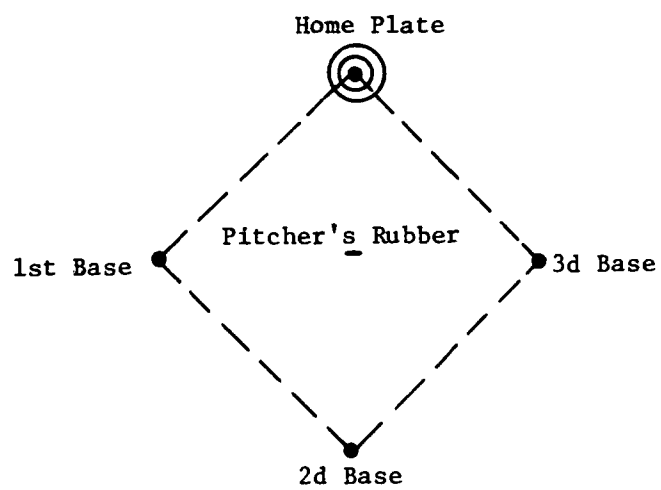
Step 6. The semicircle traces cross at two points. At these points drive a tent pin into the ground. Looking from the 2d base tent pin toward the home plate marker, the pin to the left is 1st base and the pin to the right is 3d base.



Step 7. Place the rope eyelet over the tent pin at the home plate marker and extend the rope to the 2d base tent pin. From the home plate tent pin move to the first knot on the rope and at this point drive a pin into the ground. This is the location of the pitcher's rubber.



Problem Solved.

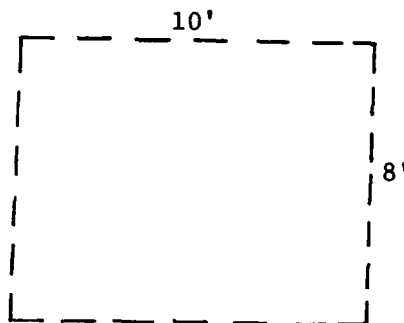


ENCLOSURE 2 TO APPENDIX 3
(PROBLEM 2)
UNPREDICTABLE LEADERSHIP PROBLEM OUTLINE

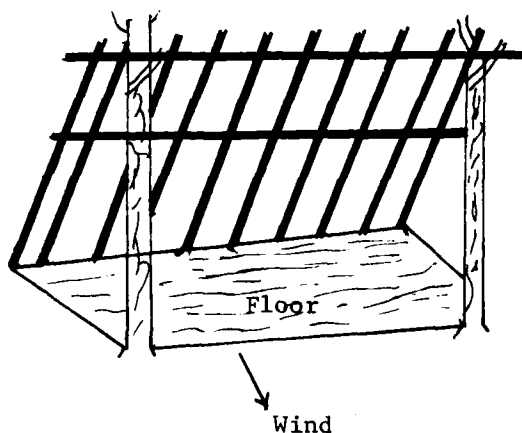
1. PROBLEM: Construct temporary field shelter.
2. CONDITIONS: Given a designated rest area in forest of mixed oak and pine trees, two axes, one shovel, three ponchos, four blankets, three shelter halves, four shelter half ropes, five matches, four canteens of water, four mess kits, and one case of C rations (12 meals). Personnel are dressed in BDUs with pile cap, wool underwear, field jackets, boots, and gloves. Projected weather is 36° high and 29° low, winds from the west at 15 miles per hours, and a 50% chance of freezing rain in the next 24 hours. It is now 0800 hours.
3. STANDARDS:
 - Leadership
 - Tm. Ldr. discussed problem with team members.
 - Tm. Ldr. arrived at a viable course of action.
 - Tm. Ldr. announced decision to team members.
 - Tm. Ldr. delegated tasks to each team member.
 - Tm. Ldr. was in charge while solving the problem.
 - Task Accuracy
 - Select well drained and smooth piece of ground for shelter.
 - Construct shelter frame with back toward wind.
 - Cover shelter roof with insulating material.
 - Cover shelter roof with water resistant material.
 - Cover floor of shelter with water resistant material.
 - Cover floor of shelter with insulating material.
 - Trench shelter with drains leading away from the shelter.
 - Equally divide food among team members.
 - Provide for continuous fire.
 - Time
 - 20 minutes.
4. INSTRUCTIONS TO TEAM MEMBERS: "You have been working for the past thirty-six hours on a disaster relief detail and have been brought to this area for thirty-six hours of rest. Here we have two axes, one shovel, three ponchos, four blankets, three shelter halves, four shelter half ropes, five matches, four canteens of water, four mess kits, and one case of C rations. The current temperature is 32°, expected high is 36°, expected low is 29°. Wind is from the west at 15 MPH and there is a 50% chance of rain in the next 24 hours. Your job is to use the material available to provide the best survival environment you can. You may discuss the problem with other team members, but once you begin to work you may not receive problem solving advice from team members. You are in charge. You have twenty minutes. Are there any questions?"

5. SOLUTION:

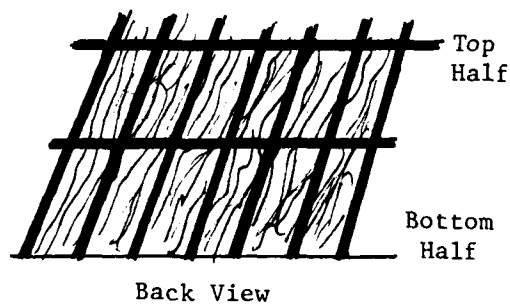
Step 1. Select well drained and smooth piece of ground approximately 8' by 10'.



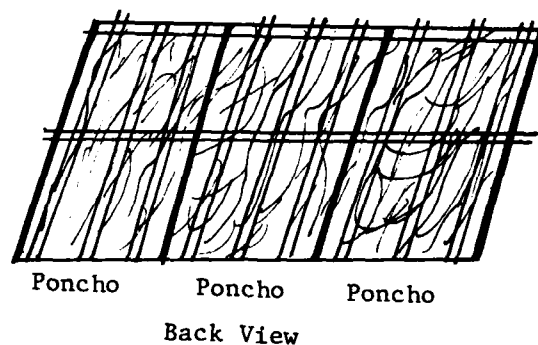
Step 2. Construct shelter frame with back toward the wind.



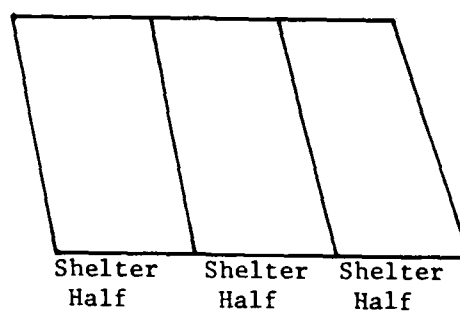
Step 3. Cover shelter roof with insulating material. Place bottom half of pine boughs on frame first. When placing top half of pine boughs on frame overlap bottom half.



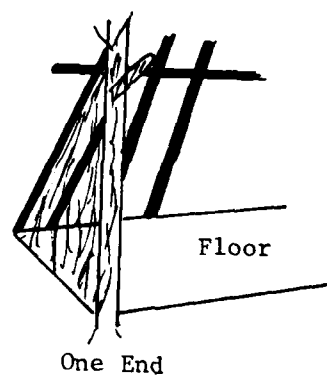
Step 4. Cover shelter roof with water resistant material (shelter halves or ponchos).



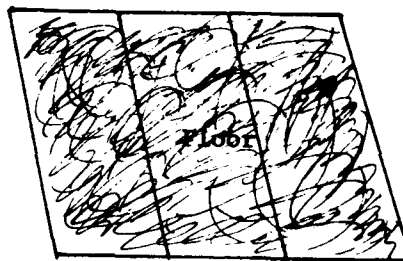
Step 5. Cover floor of shelter with water resistant material (shelter halves or ponchos).



Step 6. Close ends of shelter with branches and pine boughs.

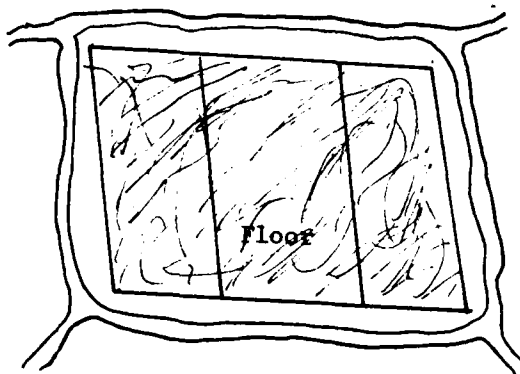


- Step 7. Cover floor of shelter with insulating material (pine needles, leaves, etc.).



1' Insulation

- Step 8. Trench shelter with drains leading away from shelter.



Front

- Step 9. Equally divide C rations among team members (3 meals each).

- Step 10. Before it starts to rain start a fire in front of the shelter. Collect additional fire wood and cover with pine boughs. After shelter is completed announce a fire guard roster to insure continuous fire.

ENCLOSURE 3 TO APPENDIX 3
(PROBLEM 3)
UNPREDICTABLE LEADERSHIP PROBLEM OUTLINE

1. PROBLEM: Mark aerial resupply drop zone.
2. CONDITIONS: Given a 2 km x 2 km flat and open field surrounded by scattered trees, a ground signal panel kit consisting of fifteen orange, 7' x 2' panels, one smoke grenade, and an abbreviated CEOI.

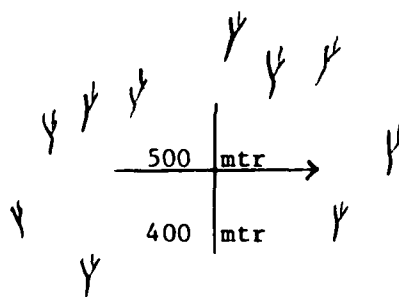
3. STANDARDS:

- Leadership
- Tm. Ldr. discussed problem with team members.
 - Tm. Ldr. arrived at a viable course of action.
 - Tm. Ldr. announced decision to team members.
 - Tm. Ldr. delegated tasks to each team member.
 - Tm. Ldr. was in charge while solving the problem.
- Task Accuracy
- Select code letter location and far panel location which will provide an obstacle free drop area 400 meters wide and 500 meters long.
 - Identify correct code letter from the CEOI.
 - Place code letter on the location selected so that the flight leader can read the letter.
 - Insure code letter is at least 20' by 20'.
 - Place far panel at the location selected.
 - Place flank panel 200 meters to the left of the code letter and parallel to the code letter/far panel axis.
 - Ignite smoke grenade when aircraft is reported five miles from the drop zone.
 - Insure smoke does not obscure drop zone markers.
- Time
- 20 minutes

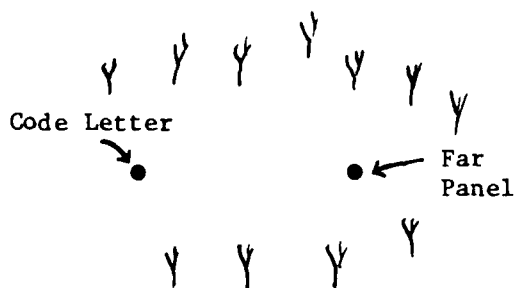
4. INSTRUCTIONS TO TEAM LEADER: "Here we have a flat and open field surrounded by scattered trees, a ground signal panel kit consisting of fifteen orange panels, one smoke grenade, and a CEOI. Your job is to mark a drop zone for aerial resupply. The drop area must be at least 400 meters wide and 500 meters long. You must select a location for the code letter on the ground at the approach end of the drop zone and the far panel at the other end of the drop zone at a distance of 500 meters. The far panel must be on an axis with the aircraft pass over the drop zone. The code letter must be at least 20 feet by 20 feet and positioned so the pilot can read it when approaching the drop zone. From the code letter place a flank panel at 200 meters to the left of the code letter and positioned so it is parallel to the code letter/far panel axis. Ignite the smoke grenade when the aircraft is reported five miles from the drop zone. I will tell you when that occurs. You may discuss the problems with other team members, but once you begin work you may not receive problem solving advice from team members. You are in charge. You have fifteen minutes. Are there any questions?"

5. SOLUTION:

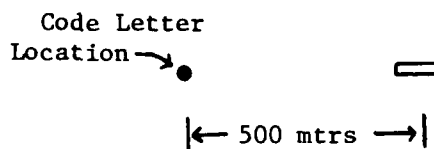
Step 1. Select drop zone and desired approach to and exit from the drop zone.



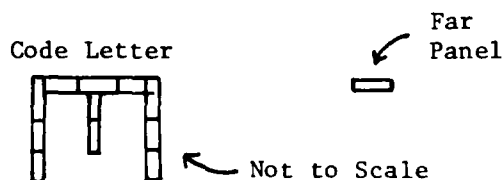
Step 2. Select location for the code letter on the ground at the approach and of the drop zone and location of the far panel at the other end of the drop zone at a distance of 500 meters from the code letter.



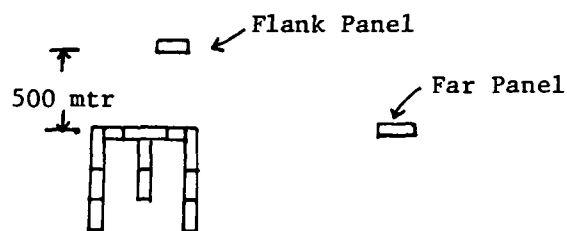
Step 3. Place far panel at the selected location and on an axis to the aircraft pass over the drop zone.



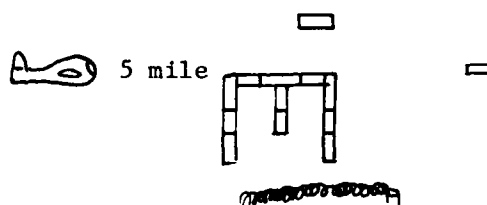
Step 4. Place code letter at the selected location at the aircraft approach end of the drop zone and oriented so the pilot can read it. The code letter must be at least 20' x 20'.



Step 5. From code letter place a flank panel 200 meters to the left of the code letter and parallel to the code letter/far panel axis.



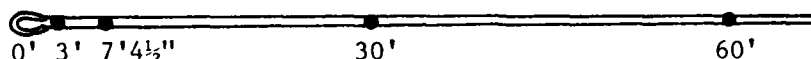
Step 6. Ignite the smoke grenade when the aircraft is reported five miles from the drop zone.



Step 7. Insure smoke does not obscure drop zone markers.

ENCLOSURE 4 TO APPENDIX 3
(PROBLEM 4)
UNPREDICTABLE LEADERSHIP PROBLEM OUTLINE

1. PROBLEM: Lay out a volleyball court.
2. CONDITIONS: Given a flat open field approximately 30 yards square, two 8' poles, six tent pins, four tent stakes, a hammer, two 30' lengths of $\frac{1}{2}$ " rope, two 35' lengths of $\frac{1}{2}$ " rope, a knife, a ball of heavy twine, and a 120' length of rope with knots indicating 3', 7'4 $\frac{1}{2}$ ", 30', and 60' measurements.



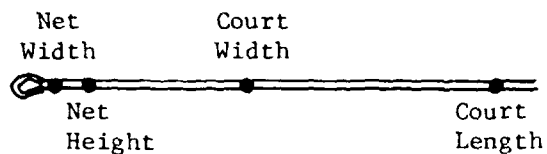
3. STANDARDS:

- Leadership
- Tm. Ldr. discussed problem with team members.
 - Tm. Ldr. arrived at a viable course of action.
 - Tm. Ldr. announced decision to team members.
 - Tm. Ldr. delegated tasks to each team member.
 - Tm. Ldr. was in charge while solving the problem.
- Task Accuracy
- Distance between ends of court = 60'
 - Distance between sides of court = 30'
 - Distance from ends of court to net = 30'
 - Distance from ground to top of net = 7'4 $\frac{1}{2}$ "
 - Width of net = 3'
 - Angles of sides and ends of court = $\pm 5^\circ$ of 90°
 - Net construction will indicate when ball strikes below top net rope
- Time
- 20 minutes

4. INSTRUCTIONS TO TEAM LEADER: "Here we have two poles, four tent stakes, six ten pins, a hammer, four lengths of rope, a knife, a ball of heavy twine, and a fifth length of rope with knots which represent distances associated with a volleyball court. Your job is to lay out the volleyball court, complete with net. The net must be constructed in such a way that it is readily apparent when the ball, served or struck, hits below the top of the net."

5. SOLUTION:

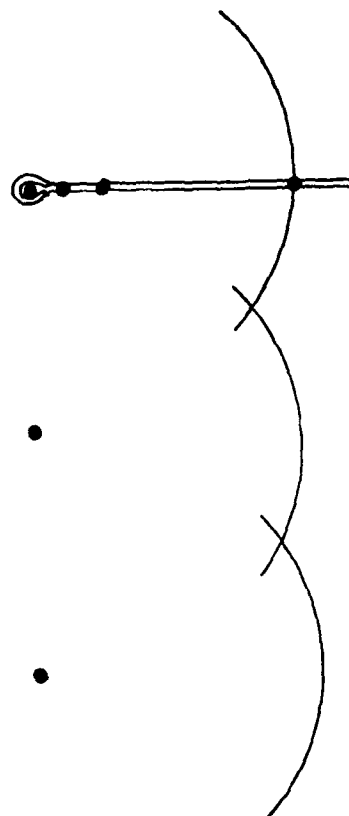
Step 1. Determine what the lengths between the eyelet and the knots on the rope represent in regards to distances on a volleyball court.



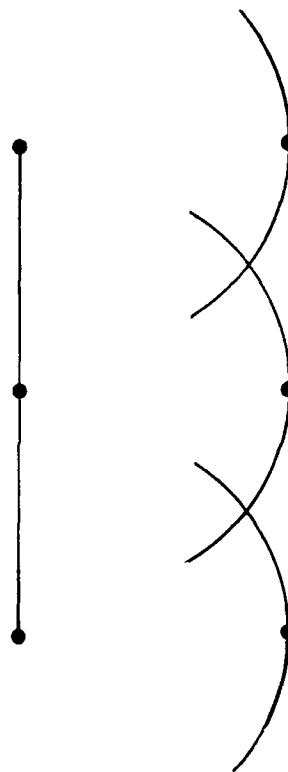
Step 2. Drive a pin into the ground, place the rope eyelet over the tent pin, extend the rope to the last knob, and drive a pin into the ground at the last knob, and at the third knot. The pins indicate the ends and the center points of one side of the volleyball court.



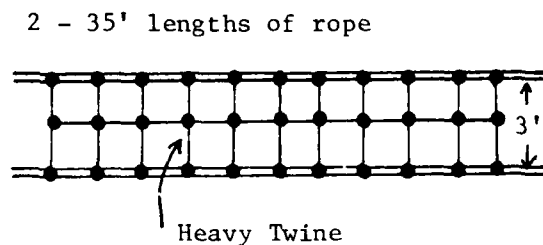
Step 3. Place the rope eyelet over one of the end pins and extend the rope 90° away from the pin to the third knot. Fasten a tent pin to the inside of the third knot. Using the tent pin like a point on a compass and keeping the rope taut trace a quarter circle on the ground. Repeat this step at the center pin and the other end pin.



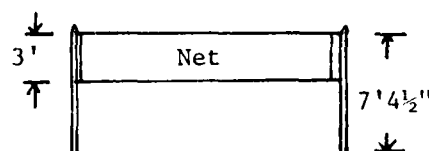
- Step 4. Join the three quarter circles together by tracing a straight line on the ground. Drive a tent pin into the ground where the straight line touches each quarter circle. These pins represent the end and center points of the other side of a volleyball court.



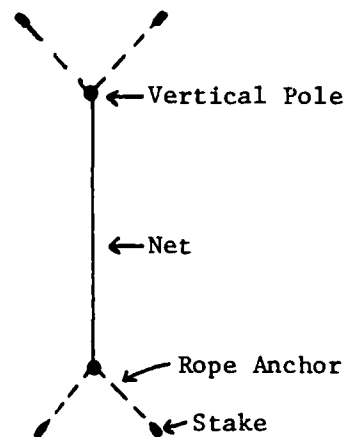
- Step 5. Cut sixty 4' lengths of heavy twine. Tie one end of each length of heavy twine six inches apart to one 35' length of rope. Tie the other end of each length of heavy twine six inches apart to the other 35' length of rope. The lengths of the heavy twine between the two ropes should be 3'. Connect the centers of the vertical twine horizontally with heavy twine.



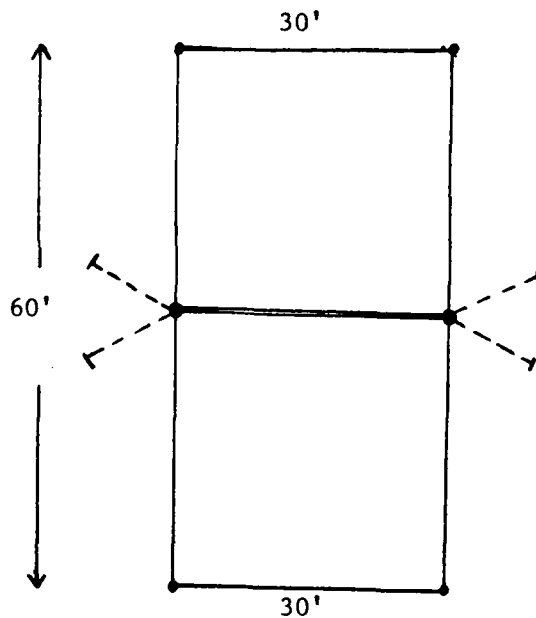
- Step 6. Tie the net ropes to the poles in such a manner that the top of the net will be 7' 4½" above the ground when the net is erected. Insure the bottom rope of the net is tied to the poles in such a manner as to insure that the net will be 3' wide (high).



Step 7. Place the poles, with the net attached, at each center pin and raise the poles vertically. Drive two tent stakes into the ground, outward from the center pins three yards and three yards apart. Attach one end of a 30' length of rope to one stake, around the top of one pole and then to the second stake. Tighten the rope until the pole is vertical. Repeat the tie down process with the other 30' length of rope and the other pole.



Problem Solved.



ENCLOSURE 5 TO APPENDIX 3
(PROBLEM 5)
UNPREDICTABLE LEADERSHIP PROBLEM OUTLINE

1. PROBLEM: Move fuel drums across a bridge gap.
2. CONDITIONS: Given a one way bridge with an eight foot gap, a 55 gallon drum of fuel, six 2" x 6" x 12' planks, four 1" x 4" x 3' boards, eight tent stakes, six 30' lengths of 3/4 in. rope, a hammer, an ax, and a package of nails.

3. STANDARDS:

- Leadership
- Tm. Ldr. discussed problem with team members.
 - Tm. Ldr. arrived at a viable course of action.
 - Tm. Ldr. announced decision to team members.
 - Tm. Ldr. delegated tasks to each team member.
 - Tm. Ldr. was in charge while solving the problem.
- Task Accuracy
- Collect gap spanning material from ammo truck.
 - Collect gap spanning material from fuel truck.
 - Construct gap spanning runner (ladder).
 - Anchor gap spanning runner (ladder).
 - Anchor fuel drum guide ropes on each side of bridge gap.
 - Place fuel drum on gap spanning runner (ladder) and loop guide ropes over fuel drum.
 - Guide fuel drum across bridge gap.

Time - 20 minutes

4. INSTRUCTIONS TO TEAM LEADER: "Your team is a security element for an ammunition truck loaded with urgently needed tank ammunition. Just as your truck crossed this bridge an artillery barrage destroyed the center span of the bridge. After traveling a quarter of a mile your truck ran out of fuel because of a hole in the fuel tank caused by a piece of shrapnel. The hole can be repaired but you need fuel. Upon returning to the bridge you see on the other side of the stream a truck lying on its side and several 55 gallon drums scattered on the ground. Your job is to cross the bridge and get a 55 gallon drum and bring it back across the bridge. You may not walk around the bridge or jump across the gap in the bridge. If a team member falls off of the bridge he is a casualty. You may discuss the problem with other team members, but once you begin implementing a procedure for moving the drum across the bridge gap you may not receive problem solving advice from team members. You are in charge. You have twenty minutes. Are there any questions?"

5. SOLUTION:

Step 1. Collect gap spanning material from ammunition truck.

Ammo truck → 

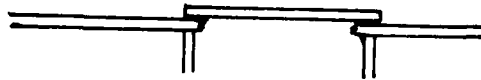
three 2" x 6" x 12' planks
two 30' lengths 3/4 in. rope
one ax, one hammer, box of
nails

Step 2. Construct 6" x 6" x 12' beam.



6" x 6" beam

Step 3. Span bridge gap with 6" x 6" beam and cross two team members across gap.



Step 4. Collect gap spanning material from fuel truck and one 55 gallon fuel drum.



← fuel truck

three 2" x 6" x 1' planks
four 30' lengths of 3/4 in.
rope
eight tent stakes
four 1" x 4" x 3' boards

Step 5. Construct second 6" x 6" x 12' beam.

See Step 2.

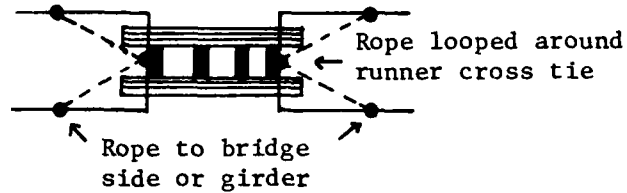
Step 6. Space bridge gap with second 6" x 6" beam and connect the two 6" x 6" beams together with 1" x 4" boards.



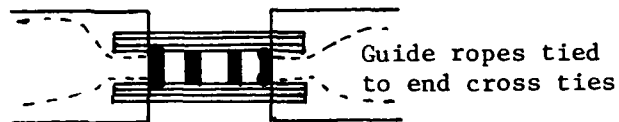
Step 7. Flip bridge gap runner (ladder) over so cross ties are on the bottom.



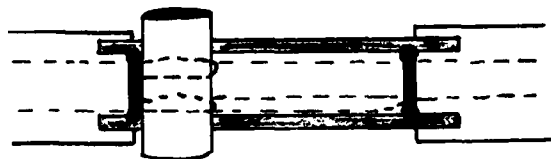
Step 8. Anchor bridge gap runner (ladder).



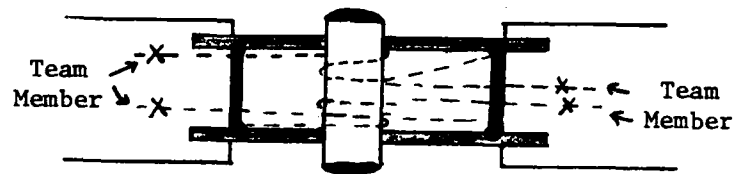
Step 9. Tie two fuel drum guide ropes to each end cross tie board.



Step 10. Bring barrel to bridge gap runner and loop far side guide ropes over center of the fuel drum and near side guide ropes over the fuel drum and one foot from each end of fuel drum.



Step 11. Guide fuel drum across bridge gap.



Problem Solved.



ENCLOSURE 6 TO APPENDIX
(PROBLEM 6)
UNPREDICTABLE LEADERSHIP PROBLEM OUTLINE

1. PROBLEM: Move tank ammunition across a creek.
2. CONDITIONS: Given a creek that is twenty feet wide and has fast running water thirty inches deep, eight boxes of 105mm tank ammunition (16 rounds), and a 60' length of 3/4 in. rope.

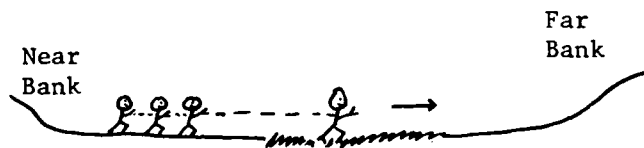
3. STANDARDS:

- Leadership
- Tm. Ldr. discussed problem with team members.
 - Tm. Ldr. arrived at a viable course of action.
 - Tm. Ldr. announced decision to team members.
 - Tm. Ldr. delegated tasks to each team member.
 - Tm. Ldr. was in charge while solving the problem.
- Task Accuracy
- Pick strongest team member to cross creek first.
 - Use rope as a safety device when team members cross the creek.
 - Send two team members across the creek.
 - Connect ends of rope to handles on ammo boxes.
 - Pull ammo boxes across the creek while team members on each bank retain control of the rope.
- Time
- 20 minutes

4. INSTRUCTIONS TO TEAM LEADER: "Your team is to pick up sixteen rounds of urgently needed 105mm tank ammunition. A battalion supply truck dumped the ammunition on the far side of this creek. The creek is approximately twenty feet wide and has fast running water thirty inches deep. You have this length of rope. Your job is to bring the ammunition from the far side of the creek to this side of the creek. You may discuss the problem with other team members, but once you begin implementing a procedure for moving the ammunition across the creek you may not receive problem solving advice from team members. You are in charge. You have twenty minutes. Are there any questions?"

5. SOLUTION:

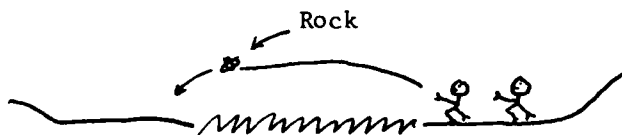
- Step 1. Tie one end of rope around the strongest team member and direct him to cross the creek while other team members hold the rope.



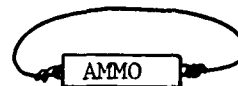
Step 2. Tie, at one third point on the rope, the rope around a second team member and direct him to cross the creek while the team member on the far bank pulls him in and the team members on the near bank "play out" the rope.



Step 3. Direct team member on the far bank to hold the rope at the center point and to throw the loose end of the rope back across the creek.



Step 4. Direct team member on near bank to tie the end of the rope to the ammo box handles.



Step 5. Direct team members on far bank to pull the ammo box across the creek while team members on the near bank "play out" the rope.



Step 6. Direct team members on the far bank to untie the rope from the ammo box handles and then tie the rope ends together.



Step 7. Direct team member on the near bank to pull the knotted ends of the rope back across the creek while team members on the far bank retain control of the rope.



Problem Solved.



ENCLOSURE 7 TO APPENDIX 3
(PROBLEM 7)
UNPREDICTABLE LEADERSHIP PROBLEM OUTLINE

1. PROBLEM: Relay message from an observation post.
2. CONDITIONS: Given an observation post on a hill within an 80° rear slope, a creek fifty feet wide with six feet deep fast running water, a 1/4 ton truck with an AN/VRC-47 radio, a 150' length of field wire, and three "canned" written messages.

3. STANDARDS:

Leadership - Tm. Ldr. discussed problem with team members.
- Tm. Ldr. arrived at a viable course of action.
- Tm. Ldr. announced decision to team members.
- Tm. Ldr. delegated tasks to each team member.
- Tm. Ldr. was in charge while solving the problem.

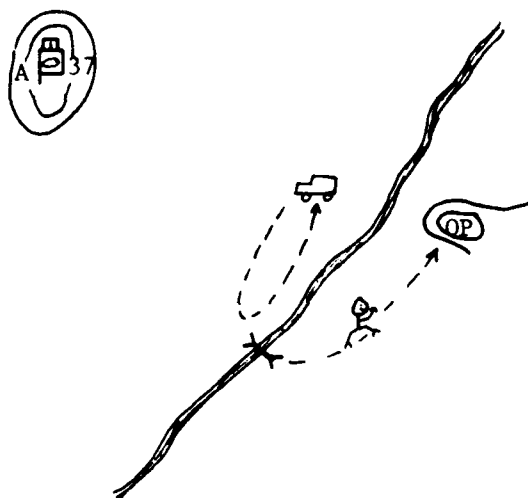
Task Accuracy - Send one team member to man the observation.
- Direct two team members to install field wire cable message tramway across creek.
- Direct one team member to transmit relayed messages to the CP by radio.
- Messages received by the CP are accurate.

Time - 20 minutes

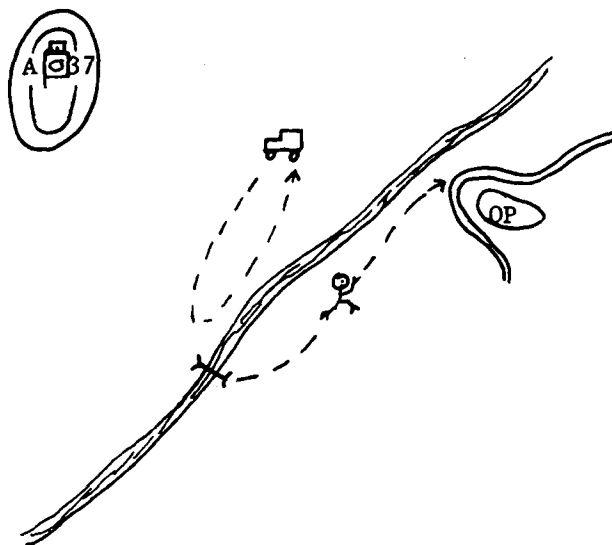
4. INSTRUCTIONS TO TEAM LEADER: "Your team is to operate an observation post across the creek on that hill. The creek is approximately fifty feet wide and has six feet of fast running water. South of here approximately one kilometer is a foot bridge. You have a 1/4 ton truck with an AN/VRC-47 radio and a 150' length of field wire. Your job is to keep the CP promptly informed if enemy activity forward of the observation post. You may discuss the problem with other team members, but once you begin implementing a procedure for rapidly transmitting messages from the OP to the CP you may not receive problem solving advice from team members. You are in charge. You have twenty minutes. Are there any questions?"

5. SOLUTION:

Step 1. Send one team member, by the foot bridge route, to man the observation post. Instruct the team member to throw written reports of enemy activity to a second team member who will be by the creek and at the near base of the OP hill.



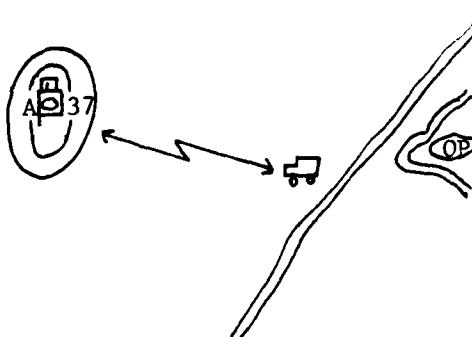
Step 2. Send a second team member, by the foot bridge route, to take up a position on the far bank of the creek and at the base of the OP hill. Instruct the team member to retrieve written messages from the OP and relay them across the creek by the field wire tramway.



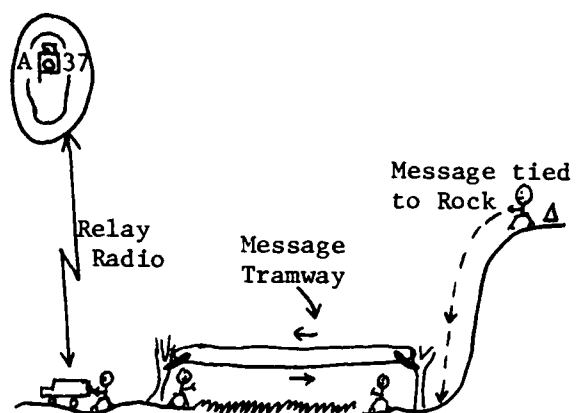
Step 3. Direct a third team member to throw one end of the field wire across the creek and with the team member on the far bank of the creek construct a tramway across the creek.



Step 4. Relay messages from the observation post to the CP.



Problem Solved.



ENCLOSURE 8 TO APPENDIX 3
(PROBLEM 8)
UNPREDICTABLE LEADERSHIP PROBLEM OUTLINE

1. PROBLEM: Move fuel drums up a vertical bank.
2. CONDITIONS: Given a vertical bank that is six feet high, four logs 8" in diameter and 10' long, three 30' lengths of 3/4" rope, six tent stakes, one ax, one shovel, and one 55 gal. drum of fuel.
3. STANDARDS:

Leadership - Tm. Ldr. discussed problem with team members.
 - Tm. Ldr. arrived at a viable course of action.
 - Tm. Ldr. announced decision to team members.
 - Tm. Ldr. delegated tasks to each team member.
 - Tm. Ldr. was in charge while solving the problem.

Task Accuracy - Dig 90° trench 6' long, 6' from vertical bank.
 - Cut four 8" notches 12" apart at the top of the vertical bank.
 - Place one end of each log in the ground trench and the other end in one of the notches at the top of the vertical bank.
 - Tie one end of a 30' length of rope to each double tent stake.
 - Roll the fuel drum to the bottom of the log ramp.
 - Throw the three ropes down from the top of the vertical bank, loop the ends of the ropes around the fuel drum, and throw the loose ends of the ropes back to the top of the vertical bank.
 - Direct three team members, at the top of the vertical bank, to pull the fuel drum up the log ramp and over the top of the bank.
 - Guide the fuel drum up the log ramp.

Time - 20 minutes

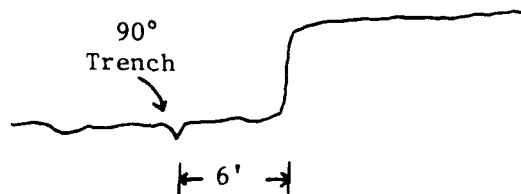
4. INSTRUCTIONS TO TEAM LEADER: "Your team is to move a 55 gallon drum of fuel to a tank in a defilade position. As the team is rolling the drum toward the tank they are confronted by a vertical bank. Your job is to get the fuel drum over the vertical bank and to the tank. You may use any material you find in the area or that you can obtain from the tank. You may discuss the problem with other team members, but once you begin implementing a procedure for moving the fuel drum over the vertical bank you may not receive problem solving advice from team members. You are in charge. You have twenty minutes. Are there any questions?"

5. SOLUTION:

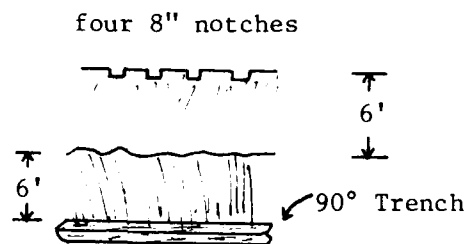
Step 1. Direct search of area
for ramp materials.



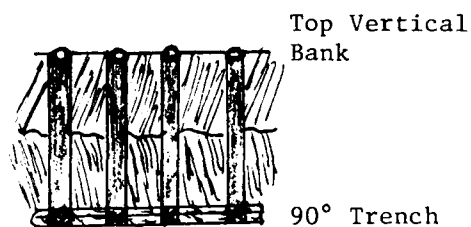
Step 2. Dig 90° trench, 6' long, 6' from vertical bank.



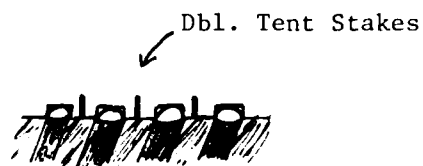
Step 3. Cut four 8" notches 12" apart at the top of the vertical wall.



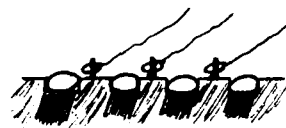
Step 4. Place one end of each log in the ground trench and the other end in one of the notches at the top of the vertical bank.



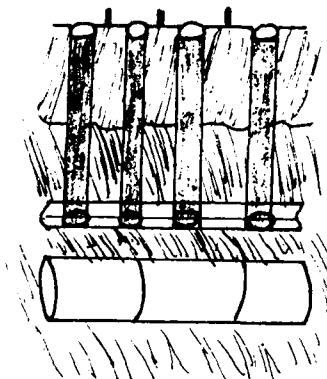
Step 5. Drive a double tent stake into the ground, 2' to the rear of each 8" notch at the top of the vertical bank.



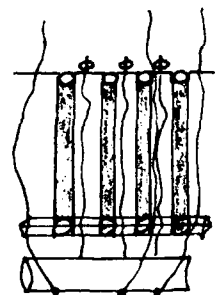
Step 6. Tie one end of a 30' length of rope to each double tent stake.



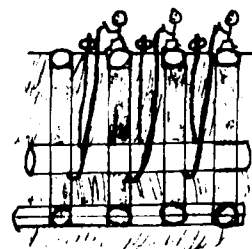
Step 7. Roll the fuel drum to the bottom of the log ramp.



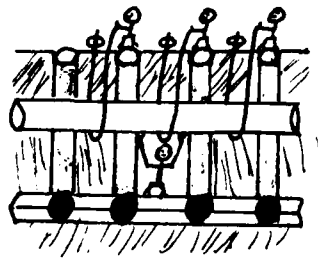
Step 8. Throw the three ropes down from the top of the vertical bank, loop the ends of the ropes around the fuel drum, and throw the loose ends of the rope to the top of the vertical bank.



Step 9. Direct three team members, at the top of the vertical bank, to pull the fuel drum up the log ramp and over the top of the bank.



Step 10. Guide the fuel drum
up the top of the
log ramp.



Problem Solved.

See Step 10.

ENCLOSURE 9 TO APPENDIX 3
(PROBLEM 9)
UNPREDICTABLE LEADERSHIP PROBLEM OUTLINE

1. PROBLEM: Reestablish an observation post.
2. CONDITIONS (General): Given a tactical situation in which an observation post team failed to report on schedule and an order from the commanding officer for a patrol to move to the OP and reestablish communications with the command post.

PROBLEM 9A

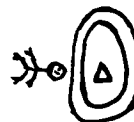
1. PROBLEM: React to dead soldier at the base of OP hill.
2. CONDITIONS: Given a dead soldier, a member of the OP team, is found at the base of the OP hill.
3. STANDARDS:

Leadership	- Patrol Ldr. took immediate security actions. - Patrol Ldr. arrived at a viable course of action. - Patrol Ldr. announced plan of action.
Task Accuracy	- Halted patrol by hand and arm signal. - Directed security action to flanks and rear by hand and arm signals. - Checked dead soldier for booby traps. - Checked dead soldier for cause of death. - Signaled second in command forward and explained situation and next course of action. - Reported situation to CP by radio. - Signaled line formation and patrol to move out.
Time	- 10 minutes

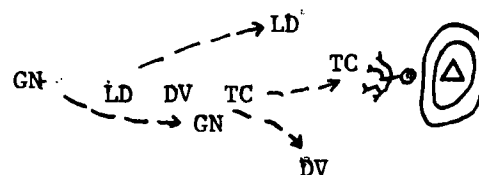
4. INSTRUCTIONS TO PATROL LEADER: "The OP on this hill has not reported for over an hour. Your patrol will move out and investigate the problem at the OP. When you get there reestablish communications with the command post and take over the OP surveillance mission. You have a PRC 119 radio. Are there any questions?"
5. SOLUTION:

Step 1. Halt patrol upon seeing dead soldier.

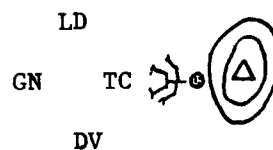
GN LD DV TC-- →



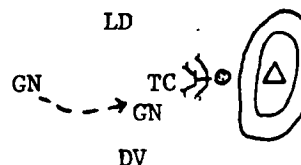
Step 2. Signal for flank and rear security.



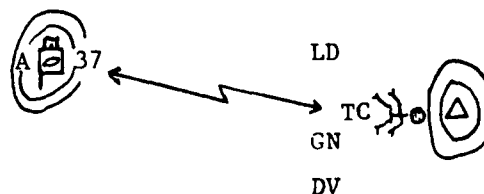
Step 3. Check dead soldier for booby traps and cause of death.



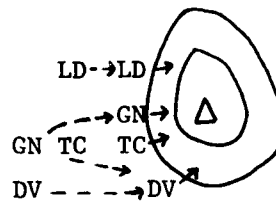
Step 4. Signal second in command to come forward and explain situation and next course of action.



Step 5. Report situation to CP.



Step 6. Signal line formation
and patrol move out to
OP.



Problem Solved. Patrol Leader's Conclusions and Actions

The OP team was attacked by enemy indirect fire and ground assault. The dead soldier was hit by shrapnel, tried to escape from the OP, and was shot in the back. The questions are: 1) Where is the other OP team member, and 2) Does the enemy occupy the OP? Actions: 1) Report the situation to the CP, and 2) Move up the hill to the OP with caution.

PROBLEM 9B

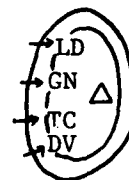
1. PROBLEM: React to wounded soldier at the OP and reestablish the OP.
2. CONDITIONS: Given a wounded soldier, a destroyed field telephone, and shredded field wire at the OP site.
3. STANDARDS:

Leadership	- Patrol Ldr. took immediate security action. - Patrol Ldr. arrived at a viable course of action. - Patrol Ldr. announced plan of action.
Task Accuracy	- Halted the patrol at the crest of the hill by hand and arm signals. - Directed security action to the flanks by hand and arm signals. - Checked wounded soldier for nature of wounds. - Signaled second in command forward to treat wounded soldier. - Checked condition of OP and OP equipment. - Reported situation to CP by radio. - Directed second in command and one man to evacuate the wounded and to return to the OP with a field telephone and field wire. - Directed remaining patrol member to move closer to the OP and provide local security. - Reestablish OP surveillance mission.
Time	- 20 minutes

4. INSTRUCTIONS TO PATROL LEADER: None (Patrol leader must react to the situation.)

5. SOLUTION:

Step 1. Halt patrol at crest of hill.



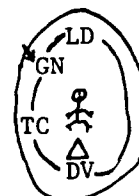
Step 2. Signal for flank security.



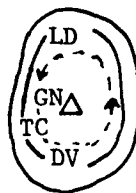
Step 3. Check wounded soldier for nature of wounds.



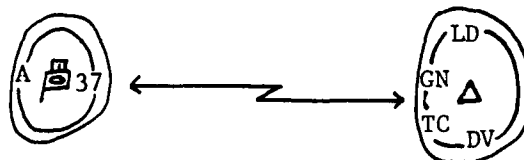
Step 4. Signal second in command to come forward and treat wounded man.



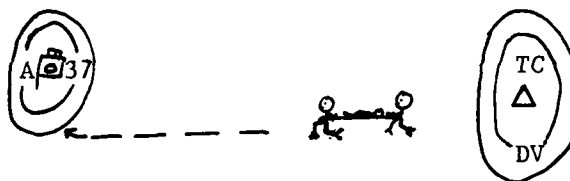
Step 5. Check condition of OP and OP equipment.



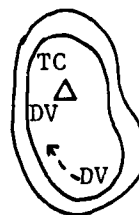
Step 6. Report situation to CP.



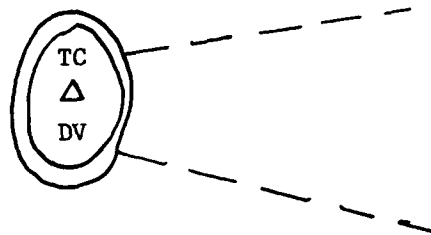
Step 7. Direct second in command and one man to evacuate the wounded and to return to the OP with a field telephone and field wire.



Step 8. Direct remaining patrol member to move closer and provide local security.



Step 9. Reestablish OP surveillance mission.



Problem Solved. Patrol Leader's Conclusions and Actions

The patrol leader's first conclusion is that the OP team had been attacked by enemy indirect fire and a ground assault was confirmed upon reaching the OP and checking the situation there. The second OP team member was found suffering from a shrapnel wound, rifle cartridge cases were scattered on the ground, the top of the hill was pock-marked with shell craters, the field telephone was destroyed, and field wire was shredded. Actions: 1): Treat the wounded, 2) Check the OP and OP equipment, 3) Report the situation to the CP, 4) Evacuate the wounded, 5) Arrange for a replacement field telephone and field wire, and 6) Reestablish the OP.

ENCLOSURE 10 TO APPENDIX 3
(PROBLEM 10)
UNPREDICTABLE LEADERSHIP PROBLEM OUTLINE

1. PROBLEM: Pass through a minefield.
2. CONDITIONS: Given a tactical situation in which a patrol has inadvertently gotten behind an enemy minefield and must cross the minefield in order to return undetected to the company.

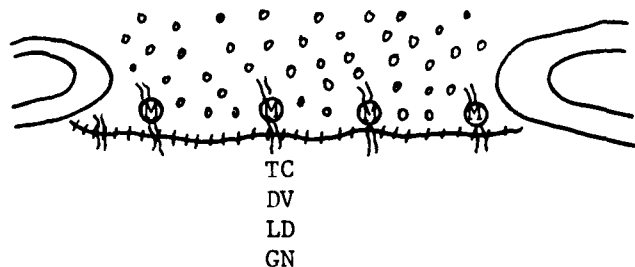
3. STANDARDS:

- Leadership
- Patrol Ldr. took immediate security actions.
 - Patrol Ldr. arrived at a viable course of action.
 - Patrol Ldr. announced plan of action.
- Task Accuracy
- Halted patrol upon seeing minefield markers.
 - Directed security action to the flanks and rear by hand and arm signals.
 - Signaled second in command forward and explained situation and next course of action.
 - Collected available material for passing over minefield.
 - Selected passage lane over minefield.
 - Arranged available material for passing over minefield.
 - Kept material used for passing over minefield from touching the ground.
 - Kept patrol members from touching the ground when passing over the minefield.
 - Directed security action on friendly side of minefield.
- Time
- 20 minutes

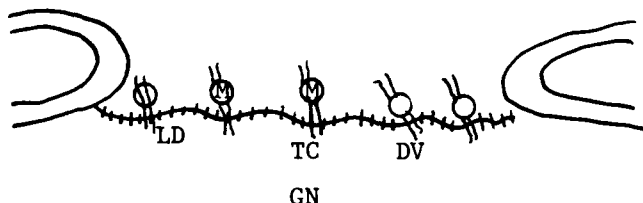
4. INSTRUCTIONS TO PATROL LEADER: " You are on a patrol in enemy territory and your patrol has inadvertently gotten behind an enemy minefield. You cannot return to your unit, because of enemy activity in the area, without passing through the minefield. Your job is to get the patrol safely across the minefield. You may use any material available in the area. Are there any questions?"

5. SOLUTION:

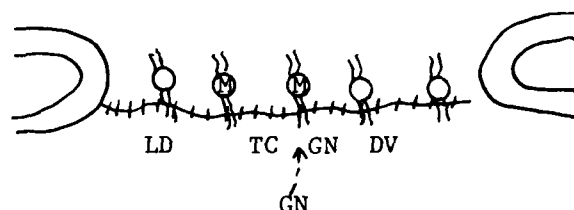
Step 1. Halt patrol upon seeing minefield markers.



Step 2. Signal for flank and rear security.



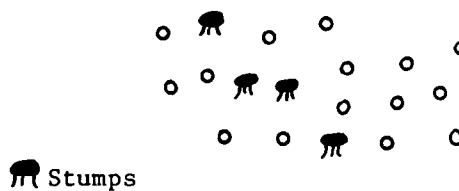
Step 3. Signal second in command to come forward and explain situation and next course of action.



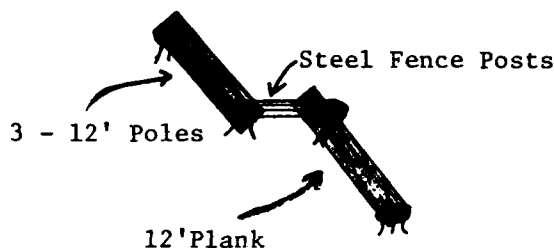
Step 4. Collect available material for passing over minefield.

3 - 4" dia. 12' poles
2 - 2" x 12" x 12' planks
5 - 6' steel fence posts
Barb wire

Step 5. Select passage lane over minefield.



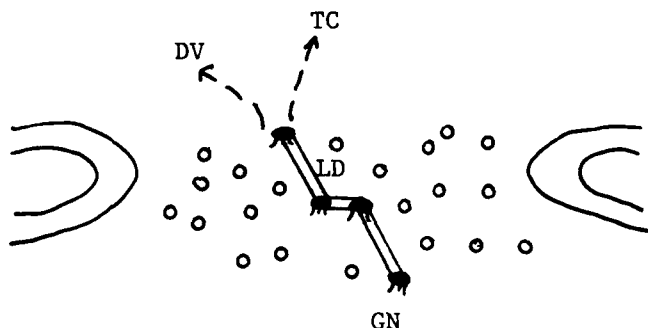
Step 6. Arrange material for passing over minefield.



Step 7. Keep material used for passing over minefield off of the ground.

Step 8. Keep patrol members from touching the ground when passing over the minefield.

Step 9. Direct security action on friendly side of minefield.



Problem Solved. Patrol Leader's Conclusion and Actions

The minefield must be crossed to avoid enemy units in the area. The patrol leader and one man collect available material for crossing over the minefield, e.g., poles, planks, steel posts, and barb wire. Two members of the patrol provide security. The patrol leader checks the minefield for possible passage lane and sees four tree stumps in the minefield. Action: 1) Connect the first and second stumps with the two planks, 2) Connect the second and third stumps with the steel posts, and 3) Connect the third and fourth stumps with the three poles. As each man passes over the minefield security is established on the friendly side of the minefield.

ENCLOSURE 11 TO APPENDIX 3
(PROBLEM 11)
UNPREDICTABLE LEADERSHIP PROBLEM OUTLINE

1. PROBLEM: Conduct a reconnaissance patrol.
2. CONDITIONS: Given a tactical situation in which a patrol is conducting a reconnaissance to determine if a highway bridge is intact and if the bridge is intact if it is prepared for demolitions. Given an injured friendly soldier on the patrol route.

3. STANDARDS:

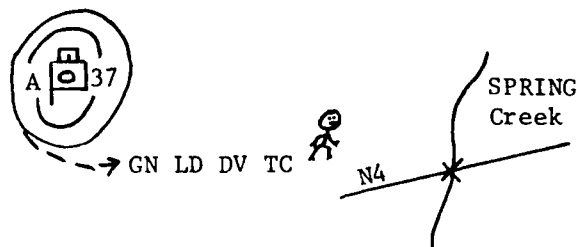
- Leadership
- Patrol Ldr. took immediate security actions.
 - Patrol Ldr. arrived at a viable source of action.
 - Patrol Ldr. announced plan of action.
- Task Accuracy
- Halted patrol upon seeing friendly soldier.
 - Directed security action to the flanks and to the rear by hand and arm signals.
 - Checked friendly soldier for wounds and injuries.
 - Signaled second in command forward to treat injured soldier.
 - Questioned injured soldier about name, unit, where he had been, what he had seen.
 - Explained to second in command next course of action.
 - Reported situation to CP by radio.
 - Left injured soldier with patrol member.
 - Completed reconnaissance of the bridge.
 - Picked up injured soldier and patrol member on way back to CP after completing bridge recon.

Time - 20 minutes

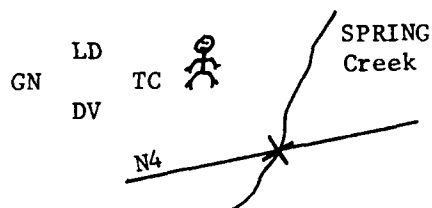
4. INSTRUCTIONS TO PATROL LEADER: "You are to conduct a reconnaissance patrol along this route to determine if that highway bridge is intact. If the bridge is intact, determine if it has been prepared for demolitions. You have a PRC 119 radio. Are there any questions?"

5. SOLUTION:

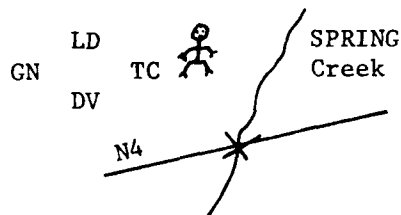
Step 1. Halt patrol upon seeing friendly soldier.



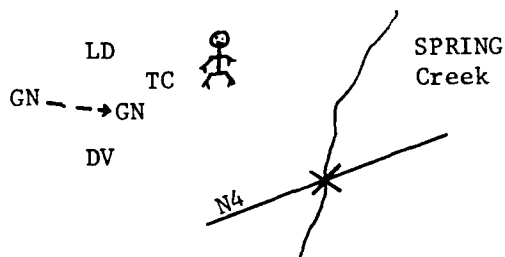
Step 2. Signal for flank and rear security.



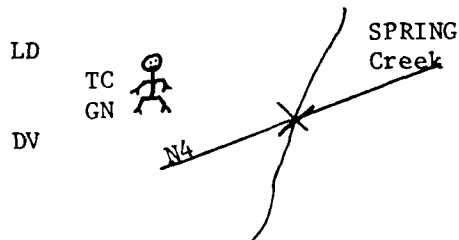
Step 3. Check friendly soldier for wounds and injuries.



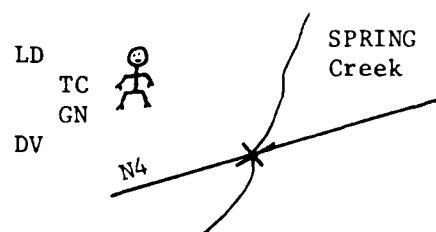
Step 4. Signal second in command to come forward and treat the injured soldier.



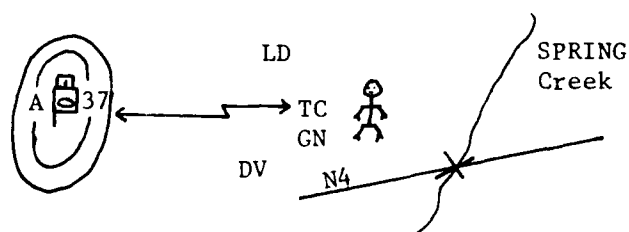
Step 5. Question injured soldier about name, unit, where he had been, and what he had seen.



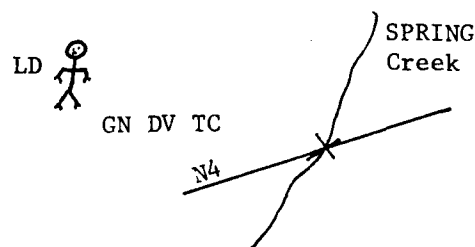
Step 6. Explain to second in command the next course of action.



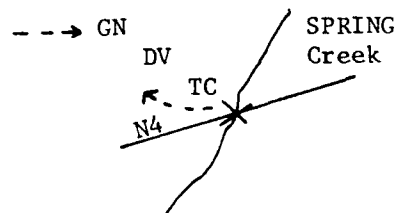
Step 7. Report situation to CP by radio.



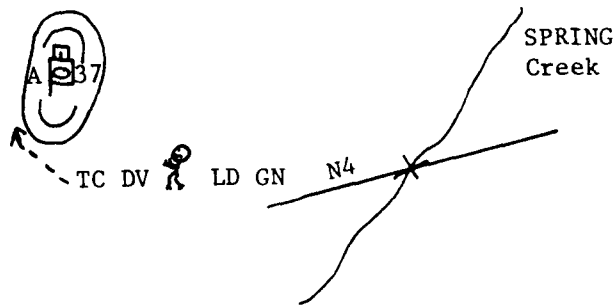
Step 8. Leave injured soldier with one patrol member.



Step 9. Complete recon of bridge.



Step 10. Pick up injured soldier and patrol member on the way back to the CP after completing recon of bridge.



Problem Solved. Patrol Leader's Conclusions and Actions

The patrol leader determined that the friendly soldier was suffering from a concussion. During questioning, the friendly soldier, in a rambling and disjointed manner, said the bridge was destroyed and he had heard enemy soldiers in the area. The patrol leader concluded that due to the friendly soldier's physical condition he could not depend upon the information the soldier provided. Action: 1) Report situation to CP by radio, 2) Leave injured soldier with patrol member, 3) Complete bridge recon, and 4) Pick up injured soldier and patrol member on the way back to the CP.

ENCLOSURE 12 TO APPENDIX 3
(PROBLEM 12)
UNPREDICTABLE LEADERSHIP PROBLEM OUTLINE

1. PROBLEM: Withdraw from an observation post.
2. CONDITIONS: Given a tactical situation in which an observation post team is threatened with being overrun by enemy action, and the team has been told to withdraw only on order or if an enemy platoon size or more force threatens the team by coming within 500 meters of the OP.
3. STANDARDS:

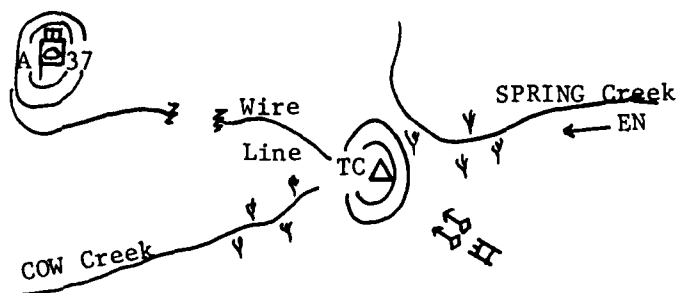
Leadership - Team Ldr. recognized enemy force of platoon plus size is threatening the OP.
 - Team Ldr. arrived at a viable course of action.
 - Team Ldr. announced plan of action.

Task Accuracy - Attempted to report situation to the CP.
 - Attempted to get permission from the CP to withdraw.
 - Explained to second in command course of action.
 - Insured all equipment and material was accounted for and would be evacuated from the OP.
 - Directed second in command and one team member to withdraw to rear of OP hill.
 - Maintained surveillance on approaching enemy.
 - Took remaining team member and joined second in command at rear of OP hill.
 - Used smoke grenades to conceal movement from rear of OP hill to COW Creek.
 - Directed team to move behind smoke screen to COW Creek.
 - Withdrew team toward CP along COW Creek stream bed.
 - Exited COW Creek after reaching tree line and returned to CP.

Time - 20 minutes

4. INSTRUCTIONS TO TEAM LEADER: "Your team is manning the OP. Your instructions are to report on enemy activity in the area. You will not withdraw from the OP except on orders or if an enemy of platoon size or more force threatens the team by coming within 500 meters of the OP. Are there any questions?"
5. SOLUTION:

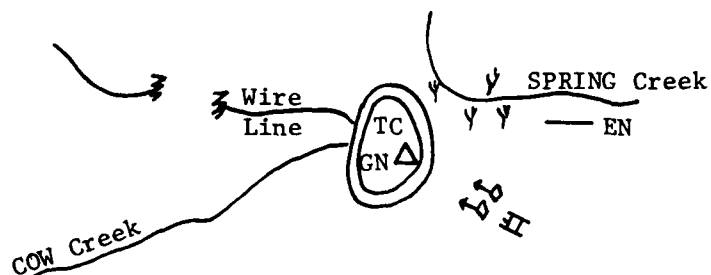
Step 1. Attempt to report the situation to the CP.



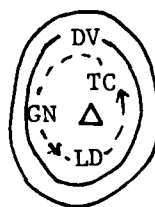
Step 2. Attempt to get permission from the CP to withdraw.

Same as Step 1.

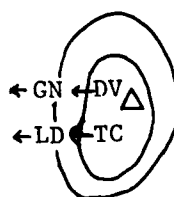
Step 3. Explain to second of command the situation and the next course of action.



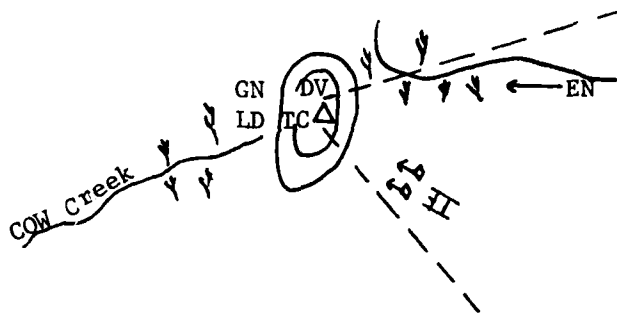
Step 4. Insure all equipment and material is accounted for and is evacuated from the CP.



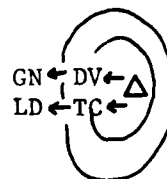
Step 5. Direct second in command to take one team member and withdraw to rear of OP hill.



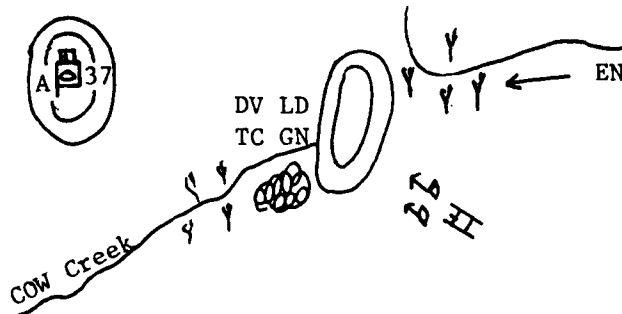
Step 6. Main surveillance on approaching enemy.



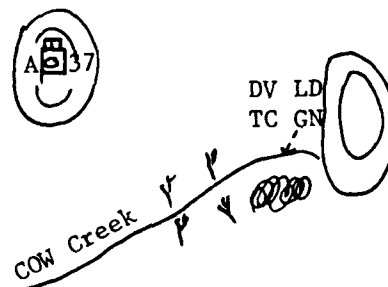
Step 7. Take remaining team member and join second in command at rear of OP hill.



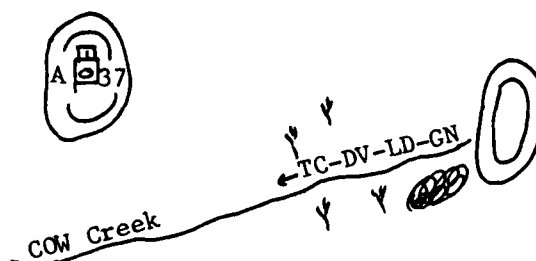
Step 8. Use smoke grenades to conceal movement from rear of OP hill to COW Creek.



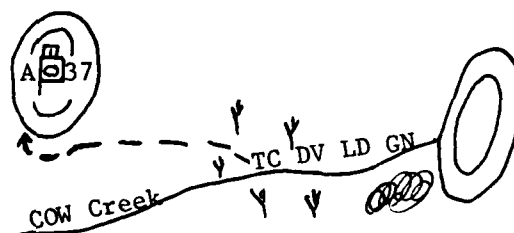
Step 9. Direct team to move behind smoke screen to COW Creek.



Step 10. Withdraw team toward CP along COW Creek stream bed.



Step 11. Exit COW Creek after reaching tree line and return to CP.



Problem Solved. Team Leader's Conclusions and Actions

The team leader concluded that the enemy action must be reported and it is a threat to the OP team. He also concludes that the enemy movement along SPRING Creek could cut off the team's withdrawal from the OP. Actions: 1) Report enemy activity to the CP, 2) Request permission to withdraw from the OP, 3) Withdraw team by sections while maintaining surveillance on enemy activity, 4) Screen area between rear of OP hill and COW Creek with smoke to cover movement to COW Creek, move team along COW Creek stream bed away from OP, and 5) Exit COW Creek at tree line and proceed to CP.

APPENDIX 4
LRC PROBLEM SOLVING ACCURACY SCORE SHEET

1. The problem solving accuracy score sheet includes: problem solving action verb statements, required problem solving action steps, a performance point allocation column, a performance points earned column, and a points scored recapitulation block.
2. Time to resolve a problem is not a scoring criterion in the PLC. Twenty minutes is allocated to resolve each problem, and if the problem has not been resolved in the allotted time the team leader will be penalized the value of uncompleted required actions associated with the problem.

ENCLOSURE 1 TO APPENDIX 4
(PROBLEM 1)
ACCURACY SCORE SHEET

Lay Out the Diamond of a Baseball Field

Team Leader _____	Date _____
Team Members _____	Start Time _____
_____	End Time _____

SCORING

	<u>Possible Points</u>	<u>Points Earned</u>
Team leader discussed problem with team members.	<u>5</u>	_____
Team leader arrived at a course of action.	<u>5</u>	_____
Team leader announced decision to team members.	<u>5</u>	_____
Team leader delegated tasks to team members.	<u>3</u>	_____
Team leader was in charge.	<u>5</u>	_____
Correct distance from home plate to 2d base.	<u>1</u>	_____
Correct distance between bases along the baseline.	<u>4</u>	_____
Correct distance from home plate to pitcher's rubber.	<u>1</u>	_____
Base lines at home plate and bases formed right angle.	<u>4</u>	_____
TOTAL POINTS	<u>33</u>	_____

ENCLOSURE 2 TO APPENDIX 4
(PROBLEM 2)
ACCURACY SCORE SHEET

Construct Temporary Field Shelter

Team Leader _____ Date _____
Team Members _____ Start Time _____
_____ End Time _____

SCORING

	<u>Possible Points</u>	<u>Points Earned</u>
Team leader discussed problem with team members.	<u>5</u>	_____
Team Leader arrived at a course of action.	<u>5</u>	_____
Team leader announced decision to team members.	<u>5</u>	_____
Team leader delegated tasks to team members.	<u>3</u>	_____
Team leader was in charge.	<u>5</u>	_____
Selected well drained and smooth piece of ground.	<u>1</u>	_____
Constructed shelter with following considerations:		
- Back of shelter toward wind.	<u>1</u>	_____
- Roof covered with insulating material.	<u>1</u>	_____
- Roof covered with water resistant material.	<u>1</u>	_____
- Floor covered with water resistant material.	<u>1</u>	_____
- Floor covered with insulating material.	<u>1</u>	_____
- Drainage ditch.	<u>1</u>	_____

PROBLEM 2 SCORE SHEET (Cont'd.)

	<u>Possible Points</u>	<u>Points Earned</u>
Equally divided food among team members.	<u>2</u>	<u> </u>
Provided for continuous fire.	<u>2</u>	<u> </u>
TOTAL POINTS	<u>34</u>	<u> </u>

ENCLOSURE 3 TO APPENDIX 4
(PROBLEM 3)
ACCURACY SCORE SHEET

Mark Aerial Resupply Drop Zone

Team Leader _____ Date _____

Team Members _____ Start Time _____

_____ End Time _____

SCORING

	<u>Possible Points</u>	<u>Points Earned</u>
Team leader discussed problem with team members.	<u>5</u>	_____
Team leader arrived at a course of action.	<u>5</u>	_____
Team leader announced decision to team members.	<u>5</u>	_____
Team leader delegated tasks to team members.	<u>3</u>	_____
Team leader was in charge.	<u>5</u>	_____
Selected obstacle free drop zone with minimum dimensions of 500 meters long by 400 meters wide.	<u>1</u>	_____
Marked drop zone as follows:		
- Selected correct code letter from CEOI.	<u>1</u>	_____
- Selected code letter location oriented on aircraft approach end of drop zone.	<u>1</u>	_____
- Placed code letter at selected location, oriented so pilot could read code letter when approaching drop zone.	<u>1</u>	_____
- Laid out code letter markers so code letter would be at least 20' x 20'.	<u>1</u>	_____

PROBLEM 3 SCORE SHEET (Cont'd.)

	<u>Possible Points</u>	<u>Points Earned</u>
- Selected far panel marker 500 meters from code letter and oriented an aircraft pass over drop zone.	<u>1</u>	_____
- Laid out far panel marker so that its long axis was on the same axis as the code letter/far panel axis.	<u>1</u>	_____
- Selected flank panel location 200 meters to the left of the code letter (as team leader looks from the code letter to the far panel).	<u>1</u>	_____
- Laid out flank panel marker so that its long axis was parallel to the code letter/far panel axis.	<u>1</u>	_____
Ignited smoke grenade when aircraft was reported five minutes from the drop zone.	<u>1</u>	_____
Insured smoke did not obscure drop zone markers.	<u>1</u>	_____
TOTAL POINTS	<u>34</u>	_____

ENCLOSURE 4 TO APPENDIX 4
(PROBLEM 4)
ACCURACY SCORE SHEET

Lay Out a Volleyball Court

Team Leader _____ Date _____
Team Members _____ Start Time _____
_____ End Time _____

SCORING

	<u>Possible Points</u>	<u>Points Earned</u>
Team leader discussed problems with team members.	<u>5</u>	_____
Team leader arrived at a course of action.	<u>5</u>	_____
Team leader announced decision to team members.	<u>5</u>	_____
Team leader delegated tasks to team members.	<u>3</u>	_____
Team leader was in charge.	<u>5</u>	_____
Correct distance between ends of court.	<u>1</u>	_____
Correct distance between sides of court.	<u>1</u>	_____
Correct distance between ends of court and net.	<u>1</u>	_____
Correct distance from top of net to the ground.	<u>1</u>	_____
Correct width (height) of net.	<u>1</u>	_____
Angles of sides and ends of court formed right angles.	<u>1</u>	_____
Net constructed so ball could not go through the net undetected.	<u>1</u>	_____
TOTAL POINTS	<u>30</u>	_____

ENCLOSURE 5 TO APPENDIX 4
(PROBLEM 5)
ACCURACY SCORE SHEET

Move Fuel Drums Across a Bridge Gap

Team Leader _____ Date _____
Team Members _____ Start Time _____
_____ End Time _____

SCORING

	<u>Possible Points</u>	<u>Points Earned</u>
Team leader discussed problem with team members.	<u>5</u>	_____
Team leader arrived at a viable course of action.	<u>5</u>	_____
Team leader announced decision to team members.	<u>5</u>	_____
Team leader delegated tasks to team members.	<u>5</u>	_____
Team leader was in charge.	<u>5</u>	_____
Collected gap spanning material from ammo truck.	<u>1</u>	_____
Collected gap spanning material from fuel tank.	<u>1</u>	_____
Constructed gap spanning runner (ladder).	<u>1</u>	_____
Anchored gap spanning runner (ladder).	<u>1</u>	_____
Placed fuel drum on gap spanning runner (ladder) and looped guide ropes over fuel drum.	<u>1</u>	_____
Guided fuel drum along gap spanning runner (ladder) over the bridge gap.	<u>1</u>	_____
TOTAL POINTS	<u>30</u>	_____

ENCLOSURE 6 TO APPENDIX 4
(PROBLEM 6)
ACCURACY SCORE SHEET

Move Tank Ammunition Across a Creek

Team Leader _____ Date _____
Team Members _____ Start Time _____
_____ End Time _____

SCORING

	<u>Possible Points</u>	<u>Points Earned</u>
Team leader discussed problem with team members.	<u>5</u>	_____
Team leader arrived at a viable course of action.	<u>5</u>	_____
Team leader announced decision to team members.	<u>5</u>	_____
Team leader delegated tasks to each team member.	<u>5</u>	_____
Team leader was in charge.	<u>5</u>	_____
Picked strongest team member to cross creek first.	<u>1</u>	_____
Used rope as a safety device when team members crossed the creek.	<u>1</u>	_____
Sent two team members across the creek.	<u>1</u>	_____
Connected ends of rope to handles in ammo boxes.	<u>1</u>	_____
Pulled ammo boxes across creek while team members on each bank retained control of the rope.	<u>1</u>	_____
TOTAL POINTS	<u>28</u>	_____

ENCLOSURE 7 TO APPENDIX 4
(PROBLEM 7)
ACCURACY SCORE SHEET

Relay Message from an Observation Post

Team Leader _____ Date _____
Team Members _____ Start Time _____
_____ End Time _____

SCORING

	<u>Possible Points</u>	<u>Points Earned</u>
Team leader discussed problem with team members.	<u>5</u>	_____
Team leader arrived at a viable course of action.	<u>5</u>	_____
Team leader announced decision to team members.	<u>5</u>	_____
Team leader delegated tasks to team members.	<u>5</u>	_____
Team leader was in charge.	<u>5</u>	_____
Sent one team member by foot bridge to man OP.	<u>1</u>	_____
Sent one team member to far bank of creek to retrieve and attach messages to field wire tramway.	<u>1</u>	_____
Directed one team member to throw end of field wire across creek and with team member on far bank construct a field wire message relay tramway.	<u>1</u>	_____
Relayed messages from OP to CP.	<u>1</u>	_____
Messages relayed were accurate.	<u>1</u>	_____
TOTAL POINTS	<u>30</u>	_____

ENCLOSURE 8 TO APPENDIX 4
(PROBLEM 8)
ACCURACY SCORE SHEET

Move Fuel Drums Up a Vertical Bank

Team Leader _____ Date _____

Team Members _____ Start Time _____

_____ End Time _____

SCORING

	<u>Possible Points</u>	<u>Points Earned</u>
Team leader discussed problem with team members.	<u>5</u>	_____
Team leader arrived at a viable course of action.	<u>5</u>	_____
Team leader announced decision to team members.	<u>5</u>	_____
Team leader delegated tasks to each team member.	<u>5</u>	_____
Team leader was in charge.	<u>5</u>	_____
Dug 90° trench, 6' long, 6' from vertical bank.	<u>1</u>	_____
Cut four 8" notches 12" apart at the top of the vertical bank.	<u>1</u>	_____
Placed one end of each log in the ground trench and the other end in a notch at the top of the vertical bank.	<u>1</u>	_____
Drove a double tent stake into the ground 2" to the rear of each notch at the top of the vertical bank.	<u>1</u>	_____
Tied one end of a 30' length of rope to each double tent stake.	<u>1</u>	_____
Rolled the fuel drum to the bottom of the log ramp.	<u>1</u>	_____

PROBLEM 8 SCORE SHEET (Cont'd.)

	<u>Possible Points</u>	<u>Points Earned</u>
Threw the ropes down from the top of the vertical bank, looped the ends of the ropes around the fuel drum, and threw the loose ends of the ropes back to the top of the vertical bank.	<u>1</u>	<u> </u>
Directed three team members, at the top of the vertical bank, to pull the fuel drum up the log ramp and over the top of the bank.	<u>1</u>	<u> </u>
Guided the fuel drum up the log ramp.	<u>1</u>	<u> </u>
TOTAL POINTS	<u>32</u>	<u> </u>

ENCLOSURE 9 TO APPENDIX 4
(PROBLEM 9)
ACCURACY SCORE SHEET

Reestablish an Observation Post

Patrol Leader _____ Date _____

Patrol Members _____ Start Time _____

_____ End Time _____

SCORING

Problem 5a. React to dead soldier at base of OP hill.

	<u>Possible Points</u>	<u>Points Earned</u>
Patrol leader took immediate security action.	<u>5</u>	_____
Patrol leader arrived at a viable course of action.	<u>5</u>	_____
Patrol leader announced his plan of action.	<u>5</u>	_____
Patrol leader's execution of the plan of action included:		
- Halting patrol, by hand and arm signals, upon seeing dead soldier.	<u>1</u>	_____
- Directing security action to flanks and rear by hand and arm signals.	<u>1</u>	_____
- Checking dead soldier for booby traps.	<u>1</u>	_____
- Checking dead soldier for cause of death.	<u>1</u>	_____
- Signaling second in command to come forward and explaining situation and next course of action.	<u>1</u>	_____
- Reporting the situation to the CP by radio.	<u>1</u>	_____
- Signaling a line formation and the patrol to move out.	<u>1</u>	_____
TOTAL POINTS	<u>22</u>	_____

Problem 5b. React to wounded soldier at OP and reestablish OP.

	<u>Possible Points</u>	<u>Points Earned</u>
Patrol leader took immediate security action.	<u>5</u>	<u> </u>
Patrol leader arrived at a viable course of action.	<u>5</u>	<u> </u>
Patrol leader announced his plan of action.	<u>5</u>	<u> </u>
Patrol leader's execution of the plan of action included:		
- Halting the patrol, by hand and arm signals, at the crest of the hill.	<u>1</u>	<u> </u>
- Directing security actions, by hand and arm signals, to the flanks.	<u>1</u>	<u> </u>
- Checking wounded soldier for nature of wounds.	<u>1</u>	<u> </u>
- Signaling second in command to come forward and treat the wounded soldier.	<u>1</u>	<u> </u>
- Checking the condition of the OP and OP equipment.	<u>1</u>	<u> </u>
- Reporting the situation the the CP by radio.	<u>1</u>	<u> </u>
- Directing second in command to take one man and evacuate the wounded.	<u>1</u>	<u> </u>
- Directing second in command to return to the OP with a field telephone and field wire.	<u>1</u>	<u> </u>
- Directing remaining patrol member to move closer to the OP and provide local security.	<u>1</u>	<u> </u>
- Reestablishing the OP surveillance mission.	<u>1</u>	<u> </u>
TOTAL POINTS	<u>25</u>	<u> </u>

ENCLOSURE 10 TO APPENDIX 4
(PROBLEM 10)
ACCURACY SCORE SHEET

Pass Through a Minefield

Patrol Leader _____ Date _____

Patrol Members _____ Start Time _____

_____ End Time _____

SCORING

	<u>Possible Points</u>	<u>Points Earned</u>
Patrol leader took immediate security action.	<u>5</u>	_____
Patrol leader arrived at a viable course of action.	<u>5</u>	_____
Patrol leader announced his plan of action.	<u>5</u>	_____
Patrol leader's execution of the plan of action included:		
- Halting patrol, by hand and arm signals, when seeing minefield markers.	<u>1</u>	_____
- Directing security action to flanks and rear by hand and arm signals.	<u>1</u>	_____
- Signaling second in command to come forward and explaining situation and next course of action.	<u>1</u>	_____
- Collecting available material for passing over the minefield.	<u>1</u>	_____
- Selecting passage lane over the minefield.	<u>1</u>	_____
- Connecting stumps in the minefield with crossing material without the material touching the ground.	<u>1</u>	_____

PROBLEM 10 SCORE SHEET (Cont'd.)

	<u>Possible Points</u>	<u>Points Earned</u>
- Passing patrol members over the minefield without them touching the ground.	<u>1</u>	<u> </u>
- Directing security action on the far side of the minefield by patrol members who had crossed the minefield.	<u>1</u>	<u> </u>
TOTAL POINTS	<u>23</u>	<u> </u>

ENCLOSURE 11 TO APPENDIX 4
(PROBLEM 11)
ACCURACY SCORE SHEET

Conduct a Reconnaissance Patrol

Patrol Leader _____ Date _____

Start Time _____

End Time _____

SCORING

	<u>Possible Points</u>	<u>Points Earned</u>
Patrol leader took immediate security action.	<u>5</u>	_____
Patrol leader arrived at a viable course of action.	<u>5</u>	_____
Patrol leader announced his plan of action.	<u>5</u>	_____
Patrol leader's execution of the plan of action included:		
- Halting patrol, by hand and arm signals, when seeing friendly soldier.	<u>1</u>	_____
- Directing security action to the flanks and rear by hand and arm signals.	<u>1</u>	_____
- Checking friendly soldier for wounds and injuries.	<u>1</u>	_____
- Signaling second in command to come forward to treat the injured soldier.	<u>1</u>	_____
- Questioning the injured soldier about name, unit, where he had been, what he had seen.	<u>1</u>	_____
- Explaining to second in command next course of action.	<u>1</u>	_____
- Reporting situation to CP by radio.	<u>1</u>	_____
- Leaving injured soldier with patrol member.	<u>1</u>	_____

PROBLEM 11 SCORE SHEET (Cont'd.)

	<u>Possible Points</u>	<u>Points Earned</u>
- Completing bridge recon.	<u>1</u>	_____
- Picking up injured soldier and patrol member after bridge recon.	<u>1</u>	_____
TOTAL POINTS	<u>25</u>	_____

ENCLOSURE 12 TO APPENDIX 4
(PROBLEM 12)
ACCURACY SCORE SHEET

Withdraw from an Observation Post

Team Leader _____ Date _____

Team Members _____ Start Time _____

_____ End Time _____

SCORING

	<u>Possible Points</u>	<u>Points Earned</u>
Team leader recognized enemy force of platoon plus size is threatening the OP.	<u>5</u>	_____
Team leader arrived at a viable course of action.	<u>5</u>	_____
Team leader announced course of action.	<u>5</u>	_____
Team leader's execution of the plan of action included:		
- Attempting to report situation to the CP.	<u>1</u>	_____
- Attempting to get permission from the CP to withdraw.	<u>1</u>	_____
- Insuring that all equipment and material were accounted for and would be evacuated from the OP.	<u>1</u>	_____
- Directing second in command and one team member to withdraw to the rear of OP hill.	<u>1</u>	_____
- Maintaining surveillance on approaching enemy.	<u>1</u>	_____
- Taking remaining team member and joining second in command at rear of OP hill.	<u>1</u>	_____
- Using smoke grenades to conceal movement from rear of OP hill to COW Creek.	<u>1</u>	_____

PROBLEM 12 SCORE SHEET (Cont'd.)

	<u>Possible Points</u>	<u>Points Earned</u>
- Withdrawing team toward CP along COW Creek stream bed.	<u>1</u>	<u> </u>
- Exiting COW Creek after reaching tree line and returning to CP.	<u>1</u>	<u> </u>
TOTAL POINTS	<u>24</u>	<u> </u>

APPENDIX 5
LRC RESOURCE REQUIREMENTS

Resource requirements, personnel, and equipment are indicated below.

1. Instructor personnel

- 1 - NCOIC
- 2 - Test station scorers

2. Test station equipment, material, and support personnel

a. Problem 1. Lay out the diamond of a baseball field.

- (1) An open flat field 40 yards square
- (2) A home plate marker
- (3) Five tent pins
- (4) A hammer
- (5) A 140' length of 1/2 inch rope with an eyelet on one end and knots indicating 60'6", 90', and 127'3-3/8" measurements

b. Problem 2. Organize disaster relief rest period.

- (1) A small forest area of mixed oak and pine trees
- (2) Two axes
- (3) One shovel
- (4) Three ponchos
- (5) Four blankets
- (6) Three shelter halves
- (7) Four shelter half ropes
- (8) Five matches
- (9) Four canteens of water
- (10) Four mess kits
- (11) One case of C rations (12 meals)

c. Problem 3. Mark a drop zone for a daylight resupply.

- (1) A 2 km x 2 km flat and open field
- (2) A ground signal panel kit consisting of fifteen orange 7' x 2' panels
- (3) One smoke grenade
- (4) One abbreviated CEOI

d. Problem 4. Lay out a volleyball court.

- (1) An open flat field 30 yards square
- (2) Two 8' poles
- (3) Six tent pins
- (4) Four tent stakes
- (5) A hammer
- (6) Two 30' lengths of 1/2 inch rope
- (7) Two 35' lengths of 1/2 inch rope
- (8) A knife

- (9) A ball of heavy twine
 - (10) A 120' length of 1/2 inch rope with an eyelet on one end and knots indicating 3', 7'4-1/2", and 60' measurements
- e. Problem 5. Move fuel drums across a bridge gap.
- (1) A one-way bridge with an 8' gap
 - (2) Two cargo trucks (simulated)
 - (3) A 55 gallon drum (filled with water)
 - (4) Six 2" x 6" x 12' planks
 - (5) Four 1" x 4" x 3' boards
 - (6) Eight tent stakes
 - (7) Six 30' lengths of 3/4 inch rope
 - (8) A hammer
 - (9) An ax
 - (10) A package 3 inch and 2 inch nails
- f. Problem 6. Move tank ammunition across a creek.
- (1) A twenty feet wide creek with thirty inches of fast running water
 - (2) Eight boxes of 105mm tank ammunition (2 rounds per box)
 - (3) A 60' length of 3/4 inch rope
- g. Problem 7. Relay message from an observation post.
- (1) A hill with an 80° near slope
 - (2) A fifty feet wide creek with six feet of fast running water
 - (3) A 1/4 ton truck with an AN/VRC-47 radio
 - (4) A 150' length of field wire
 - (5) Three "canned" written messages
- h. Problem 8. Move fuel drums up a vertical bank.
- (1) A vertical bank 6' high
 - (2) Four logs 10' long and 8" in diameter
 - (3) Three 30' lengths of 3/4 inch rope
 - (4) Six tent stakes
 - (5) One ax
 - (6) One shovel
 - (7) One 55 gallon drum (filled with water)
- i. Problem 9. Reestablish an observation post.
- (1) A dead soldier (simulated)
 - (2) A wounded soldier (simulated)
 - (3) A hill representing an observation post
 - (4) A PRC-119 radio
 - (5) Shredded field wire
 - (6) One hundred empty cartridge cases
 - (7) A broken field telephone (simulated)

j. Problem 10. Pass through a minefield.

- (1) A thirty meter wide, three row dummy minefield
- (2) Forty meters of barb wire
- (3) Five 6' iron posts
- (4) Three 12' poles, 4" in diameter
- (5) Two 2" x 12" x 12' planks

k. Problem 11. Conduct a reconnaissance patrol.

- (1) One bridge
- (2) One injured soldier (simulated)
- (3) One PRC 119 radio

1. Problem 12. Withdraw from an observation post.

- (1) A hill to serve as an OP
- (2) Two BMPs and one T-72 tank (simulated)
- (3) An inoperative field telephone
- (4) A twenty yard length of field wire
- (5) Two smoke grenades
- (6) A tree lined creek running from the base of the OP hill toward the CP

ANNEX B

PATHFINDER LAND NAVIGATION COURSE (PLNC)

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HumRRO, Fort Knox, Kentucky

May 1985

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ANNEX B
PATHFINDER LAND NAVIGATION COURSE (PLNC)

GENERAL

1. The Pathfinder Land Navigation Course (PLNC) is designed to evaluate the performance of individual procedural tasks by tank commanders in a field environment.
2. The scope of the PLNC is thirteen Skill Level 3 tasks and three Skill Level 1 tasks.
3. The PLNC is scheduled during daylight hours and after formal instruction of land navigation tasks.
4. The PLNC is conducted dismounted.
5. Accuracy in task performance is the primary criteria for evaluating student performance. Task procedural deficiencies, which do not affect a student's task response accuracy will be noted by station chiefs for the purpose of post PLNC feedback to the student. Time to complete the PLNC will also be an evaluation criteria and value given for "time completion" will be included in each student's overall course score.
6. After a student completes the PLNC, the instructor will provide time for the student to discuss his performance. After the discussion the instructor will critique the student's performance and inform him what he did right and what he did wrong.

INSTRUCTOR'S GUIDE

1. The Instructor's Guide is a detailed plan for administering and scoring the PLNC. The guide consists of five appendixes: 1) Layout Diagram, 2) Participation Schedule, 3) Task Training and Evaluation Outlines, 4) Accuracy and Time Score Sheets, and 5) Resource Requirements.
2. Layout Diagram (Appendix 1). The layout diagram illustrates how the PLNC is conducted. The diagram shows five test stations, an in and out processing station, and the sequence of student movement between stations. The PLNC will be conducted in two heats of four students in each heat.
3. Participation Schedule (Appendix 2). The schedule indicates the time required to conduct the PLNC with a class of eight students. The first four students begin the course at 0730 hours and complete it at 1000 hours. The second four students start at 1030 hours and finish at 1300 hours.

4. Task Training and Evaluation Outlines (Appendix 3). There are sixteen individual procedural land navigation tasks in the PLNC. Some tasks are performed more than once at some stations and some tasks are performed at more than one station. To aid the station chiefs in administering the PLNC there is a task training evaluation outline for each station. These outlines include: 1) a situation which "sets the stage" for task performance, 2) task statements, 3) conditions under which the task will be performed, 4) accuracy standards, 5) task references, and 6) task performance points.
5. Accuracy and Time Score Sheets (Appendix 4). There is a score sheet for each student. The score sheet provides: 1) point value of each task, 2) blocks for points earned or lost for each task, 3) a block for total points earned for each station, 4) and blocks for recapitulation of accuracy and time points earned. An enclosure to the score sheet indicates how time points are computed.
6. Resource Requirements (Appendix 5). This appendix indicates personnel, equipment, and facilities required to conduct the PLNC. Equipment requirements are indicated by station.

APPENDIX 1 LAYOUT DIAGRAM

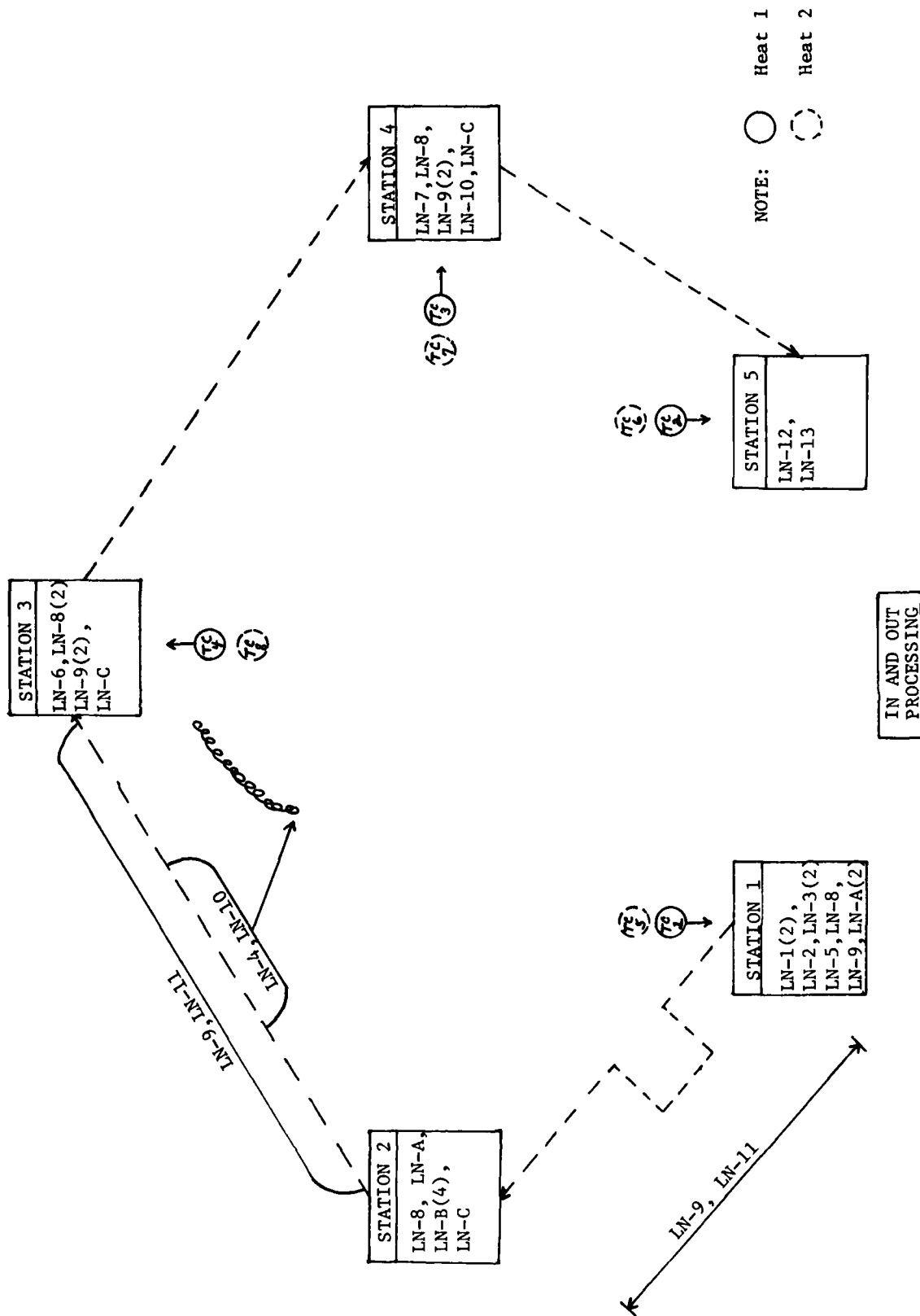
APPENDIX 2 PARTICIPATION SCHEDULE

APPENDIX 3 TASK TRAINING AND EVALUATION OUTLINES

APPENDIX 4 ACCURACY AND TIME SCORESHEET

APPENDIX 5 RESOURCE REQUIREMENTS

APPENDIX 1 PLNC LAYOUT DIAGRAM



APPENDIX 2
PLNC PARTICIPATION SCHEDULE

STATION	INPROCESS	1	BETWEEN 1 AND 2	2	BETWEEN 2 AND 3	3	4	5	OUTPROCESS
TC	TASKS	---							---
		LN-1(2), LN-2 LN-3(2), LN-5 LN-8, LN-9 LN-A(2)	LN-9, LN-11	LN-8, LN-A LN-B(4), LN-C	LN-4, LN-9 LN-10, LN-11	LN-6, LN-8(2) LN-9(2), LN-C	LN-7, LN-8, LN-9(2) LN-10, LN-C	LN-12 LN-13	
	TC-1 (1-2-3-4-5)	0715		0800	--	0830	0900	0930	1000
	TC-2 (5-1-2-3-4)	0715		0830	--	0900	0930	0730	1000
	TC-3 (4-5-1-2-3)	0715		0830	--	0930	0730	0800	1000
	TC-4 (3-4-5-1-2)	0715		0930	--	0730	0800	0830	1000
	TC-5 (1-2-3-4-5)	1015		1100	--	1130	1200	1230	1300
	TC-6 (5-1-2-3-4)	1015		1130	--	1200	1230	1030	1300
	TC-7 (4-5-1-2-3)	1015		1200	--	1230	1030	1100	1300
TC-8 (3-4-5-1-2)	1015		1230	--	1030	1100	1130	1300	

APPENDIX 3
PLNC TASK TRAINING AND EVALUATION OUTLINES

1. There are five task training and evaluation outlines to aid station chiefs in conducting the PLNC. The PLNC is a situational oriented course in which students start at a designated station and perform land navigation requirements. At each station several procedural tasks must be performed. At some stations a task may be performed more than once and some tasks are performed at more than one station. Therefore, task training and evaluation outlines are designed to cover all tasks performed at a station. Each outline includes: 1) the situation which leads to task performance, 2) task statements, 3) the conditions under which the tasks are performed, 4) accuracy standards, 5) task references, and 6) scoring points for each task.
2. The land navigation tasks in the task training and evaluation outlines are shown below. (Task identifiers with number suffixes are Skill Level 3 tasks. Task identifiers with letter suffixes are Skill Level 1 tasks.)

- LN-1 Use Marginal Information on a Map
- LN-2 Identify Adjoining Map Sheets
- LN-3 Identify Terrain Features (Natural or Man Made) on a Map
- LN-4 Orient a Map to the Ground by Terrain Association
- LN-5 Orient a Map Using a Compass
- LN-6 Locate an Unknown Point on a Map or on the Ground by Intersection
- LN-7 Locate an Unknown Point on a Map or on the Ground by Resection
- LN-8 Determine Azimuth Using a Protractor
- LN-9 Determine Magnetic Azimuth Using a Compass
- LN-10 Determine Location on the Ground by Terrain Association
- LN-11 Navigate from One point on the Ground to Another Point
- LN-12 Conduct a Map Reconnaissance
- LN-13 Analyze Terrain Using the Five Military Aspects of Terrain
- LN-A Locate a Point on a Map by Grid Coordinates

LN-B Measure Distance on a Map

LN-C Determine the Grid Coordinates of a Point on a Military Map
Using the Military Grid Reference System

3. The tasks by station are shown below.

STATION	TASKS	DUPLICATES	TOTAL
1	LN-1, LN-2, LN-3, LN-5 LN-8, LN-9, LN-A	LN-1, LN-3, LN-A	10
BETWEEN STATIONS	LN-9, LN-11		2
2	LN-8, LN-A, LN-B, LN-C	LN-B (3)	7
BETWEEN STATIONS	LN-4, LN-9, LN-10, LN-11		4
3	LN-6, LN-8, LN-9, LN-C	LN-8, LN-9	6
4	LN-7, LN-8, LN-9, LN-10 LN-C	LN-9	6
5	LN-12, LN-13		2
TOTAL	28	9	37

ENCLOSURE 1 Station 1
ENCLOSURE 2 Station 2
ENCLOSURE 3 Station 3
ENCLOSURE 4 Station 4
ENCLOSURE 5 Station 5

ENCLOSURE 1 TO APPENDIX 3
(STATION 1)
TASK TRAINING AND EVALUATION OUTLINE

<u>SITUATION</u>	<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
A. "Here are five map sheets. Join the two map sheets that have a common boundary. What is the name and number of each adjoining map sheet?" B. "Here is the map sheet you will use during the Pathfinder Course. Orient the map with the compass." (NOTE: Station chief indicates station map location to the student.)	LN-2: Identify Adjoining Map Sheets	Given five 1:50,000 military maps, one 1:50,000 scale military map of the PLNC area, one 1:50,000 grid coordinate scale, one straight edge, one lensatic compass, and coordinates representing a point on the ground and the location of a man-made terrain feature.	Correctly select from five map sheets the two map sheets that have a common boundary. Correctly identify the number and the name of the two adjoining map sheets.	FM 17-19K3
	LN-5: Orient a Map Using a Compass		Orient the map on the ground so that the north seeking arrow on the compass is within 3 degrees of the angle shown in the GM angle of the declination diagram on the map.	FM-21-3

<u>SITUATION</u>	<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
C. "What man-made terrain feature is located at NA ____?"	LN-A: Locate a Point on a Map by Grid Coordinates		Correctly locate, within 100 meters tolerance, a point on a map by grid coordinates.	FM 21-2
	LN-1: Use Marginal Information on a Map		Correctly identify a man-made terrain feature on the map by referring to marginal information on the map.	NOTE: New Task
	LN-3: Identify Terrain Features (natural and man-made) on a Map		Correctly identify a man-made terrain feature located on the map by a designated grid coordinate. (LN-A above)	FM 21-2
D. "What is the magnetic azimuth from your present position to that man-made terrain feature at NA ____?"	LN-9: Determine Magnetic Azimuth Using a Compass		Correctly determine the magnetic azimuth to a designated point within 3 degrees.	FM 21-2
E. "You will now leave Station 1 and proceed to NA ____ by the most feasible route. When you arrive at that location you will be at Station 2. There you will be required to report the straight line distance from Station 1 to Station 2 and the actual distance you traveled	LN-A: Locate a Point on a Map by Grid Coordinates		Correctly locate, within 100 meters tolerance, a point on a map by grid coordinates.	FM 21-2
	LN-1: Use Marginal Information on a Map		Correctly identify, by referring to marginal information on the map, symbols of major obstacles.	NOTE: New Task
	LN-3: Identify Terrain Features (Natural and Man-Made) on a Map		Correctly identify major obstacles between the present position and the destination.	FM 21-2

<u>SITUATION</u>	<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
from Station 1 to Station 2." (NOTE: Tasks LN-A, LN-1, LN-3, and LN-8 are performed before the student departs to Station 2.)	LN-8: Determine Azimuth Using a Protractor		Plot a route on the map from the present position to the destination avoiding major obstacles. Determine the grid azimuth of each leg of the route, within 1° or 20 mils tolerance, with a protractor. Convert the grid azimuth of each leg of the route to magnetic azimuth, within 1° or 20 mils, using the map GM declination diagram.	FM 17-19K3
NOTE: Task LN-9 and LN-11 are performed by the student while moving from Station 1 to Station 2.	LN-9: Determine Magnetic Azimuth Using a Compass		Correctly follow the magnetic azimuth from the start of each leg to the end of each leg of the legs on the route from Station 1 to Station 2.	FM 21-7
	LN-11: Navigate from One Point on the Ground to Another Point		Move from Station 1 to Station 2.	FM 21-3

SCORING POINTS

LN-2:	6
LN-5:	2
LN-A:	3
LN-1:	2
LN-3:	2
LN-9:	2
LN-A:	3
LN-1:	2
LN-3:	2
LN-8:	2
LN-9:	2
LN-11:	5
	<u>33</u>

ENCLOSURE 2 TO APPENDIX 3
(STATION 2)
TASK TRAINING AND EVALUATION OUTLINE

<u>SITUATION</u>	<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
A. "You are located at NA (Station 2). What is the straight line distance from this place to Station 1, the place you just left?" B. "What is the straight line distance you actually traveled from Station 1 to Station 2?" C. "What is the difference in meters between the straight line distance from Station 1 to Station 2 and the distance actually traveled from Station 1 to Station 2."	LN-A: Locate a Point on a Map by Grid Coordinates	Given a 1:50,000 scale military map of the PLNC area, a 1:50,000 grid coordinate scale, a lensatic compass, and coordinates representing a point on the ground.	Correctly locate, within 100 meters tolerance, a point on the map by grid coordinates.	FM 21-2
	LN-B: Measure Distance on a Map		Measure the distance, within 100 meters tolerance, from Station 1 to Station 2.	FM 21-3
	LN-B: Measure Distance on a Map		Measure the distance, within 100 meters tolerance, actually traveled from Station 1 to Station 2.	FM 21-3
NOTE: This is not a procedural task. Student will simply subtract the straight line distance from Station 1 to Station 2 from the distance actually traveled from Station 1 to Station 2.			Correctly subtract the distance from Station 1 to Station 2 from the distance actually traveled from Station 1 to Station 2.	

<u>SITUATION</u>	<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
D. "From your present location at NA _____ you will plot a grid azimuth of _____ degrees. Now from your present position trace the grid azimuth out to 2500 meters. What are the coordinates at that point?"	LN-8: Determine Azimuth Using a Protractor LN-B: Measure Distance on a Map		Correctly plot the grid azimuth of _____ degrees on the map. Measure the straight line distance, within 100 meters tolerance, from the present position out along the _____ degree grid plot.	FM 17-19K3 FM 21-3
	LN-C: Determine the Grid Coordinate of a Point on a Military Map Using the Military Grid Reference System		Determine the six digit grid coordinates, within 100 meters tolerance, for a point on the map (including letters and numbers).	FM 21-2
E. "Now from your present location move out along the grid azimuth 2000 meters. That is where Station 3 is." (NOTE: Prior to departing Station 2 the student will perform Task LN-B.)	LN-B: Measure distance on a map		Measure the straight line distance, within 100 meters tolerance, from the present position (Station 2) along the _____ degree plotted azimuth out to 2000 meters.	FM 21-3
NOTE: Tasks LN-9 and LN-11 are performed by the student while moving from Station 2 to Station 3.	LN-9: Determine Magnetic Azimuth Using a Compass		Correctly convert the _____ degree grid azimuth from Station 2 to Station 3 to magnetic azimuth and then follow the magnetic azimuth 2000 meters to Station 3.	FM 21-2

<u>SITUATION</u>	<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
NOTE: Halfway to Station 3 the student sees smoke to the flank. The student will determine his location and the location of the smoke. Tasks LN-4 and LN-10 are performed at this time. NOTE: Student will show the results of his performance of task LN-4 and LN-10 to the Station 3 chief.	LN-11: Navigate from One Point on the Ground to Another Point LN-4: Orient a Map to the Ground by Terrain Association LN-10: Determine Location on the Ground by Terrain Association		Move from Station 2 to Station 3. Orient the map to north within 30 degrees. Determine the six digit coordinates, within 100 meters tolerance, of your position. Determine the six digit coordinates, within 100 meters tolerance, of the smoke position.	PM 21-3 PM 21-3 PM 21-3

SCORING POINTS

LN-A: 3
LN-B: 1
LN-B: 1
LN-B: 2
LN-B: 1
LN-B: 1
LN-C: 3
LN-B: 1
LN-9: 2
LN-11: 5
LN-4: 4
LN-10: 4
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ENCLOSURE 3 TO APPENDIX 3
(STATION 3)
TASK TRAINING AND EVALUATION OUTLINE

<u>SITUATION</u>	<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
A. "During your move from Station 2 you observed smoke to your flank. What were the coordinates of your location at that time and what were the coordinates of the smoke?" (NOTE: Student reports coordinates determined during movement.)		Given a 1:50,000 scale military map of the PLNC area, a 1:50,000 grid coordinate scale, a lensatic compass, a straight edge, a field telephone wired to an OP, and a target.		
B. "You are at OP ALPHA which is at NA _____. This field telephone is connected to OP	LN-9: Determine Magnetic Azimuth Using a Compass		Correctly determine the magnetic azimuth to the lone pine tree within 3 degrees.	FM 21-2

<u>SITUATION</u>	<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
CHARLIE which is at NA _____. The FIST will be here in a few minutes and he wants you to have a center of sector marker located when he gets here. The lone pine tree on that ridge would be a good center of sector marker. Determine the grid coordinates of that lone pine tree."	LN-8: Determine Azimuth Using a Protractor		Convert the magnetic azimuth from your position to the lone pine tree to grid azimuth by using the GM declination diagram. Plot the grid azimuth on the map, from your position to the lone pine tree.	FM 17-19K3
	LN-6: Locate an Unknown Point on a Map or on the Ground by Intersection		Plot the OP CHARLIE location on your map. Call OP CHARLIE on the field telephone and request a grid azimuth from that location to the lone pine tree. Plot the OP CHARLIE grid azimuth to the lone pine tree on the map.	FM 17-19K3
	LN-C: Determine the Grid Coordinates of a Point on a Military Map Using the Military Grid Reference System		Determine the six digit grid coordinates (letters and numbers), within 100 meters tolerance, of the point where your grid azimuth to the lone pine tree and OP CHARLIE's grid azimuth to the lone pine tree crosses.	FM 21-2
C. "A target has appeared in your sector and you are preparing to request indirect fire. Part of the request is to determine and announce the observer-target (OT) line.	LN-9: Determine Magnetic Azimuth Using a Compass		Correctly determine the magnetic azimuth to a designated point within 3 degrees.	FM 21-2
	LN-8: Determine Azimuth Using a Protractor		Convert the magnetic OT azimuth to grid OT azimuth by using the GM declination diagram.	FM 17-19K3

<u>SITUATION</u>	<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
What is the magnetic OT line from your position? What is the grid OT line from your position?" "You will now proceed along this road until you meet the chief of Station 4."				
SCORING POINTS LN-9: 2 LN-8: 2 LN-6: 5 LN-C: 3 LN-9: 2 LN-8: <u>2</u> 16				

ENCLOSURE 4 TO APPENDIX 3
(STATION 4)
TASK TRAINING AND EVALUATION OUTLINE

<u>SITUATION</u>	<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
A. "You are now at OP XRAY, however you do not know exactly where OP XRAY is located. You have your map but you are unable to find your compass. Determine your present location, mark it on the map, and report the coordinates of your location."	LN-10: Determine Location on the Ground by Terrain Association	Given a 1:50,000 scale military map of the PLMC area and a 1:50,000 grid coordinate scale	Determine the six digit coordinates, within 100 meters tolerance, of your position.	FM 21-3
B. "You have found your compass and now you want to confirm your present location. Determine your present location and report the coordinates of your location."	LN-9: Determine Magnetic Azimuth Using a Compass		Correctly determine the magnetic azimuth to a readily identifiable terrain feature to your right front. Correctly determine the magnetic azimuth to a readily identifiable terrain feature to your left front.	FM 21-2

<u>SITUATION</u>	<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
C. "Now from your present position move out on a magnetic azimuth of degrees and you will find Station 5."	LN-8: Determine Azimuth Using a Protractor		Convert the magnetic azimuth to grid azimuth by using the GM declination diagram.	FM 17-19K3
	LN-7: Locate an Unknown Point on a Map or on the Ground by Resection		Project a grid back azimuth from each readily identifiable terrain feature, by using the protractor, onto the map.	FM 17-19K3
	LN-C: Determine the Grid Coordinate of a Point on a Military Map Using the Military Grid Reference System		Determine the six digit grid coordinates (letters and numbers), within 100 meters tolerance, of the point where the grid back azimuths cross.	FM 21-2
	LN-9: Determine Magnetic Azimuth Using a Compass		Correctly follow a route along a designated magnetic azimuth to a designated location.	FM 21-2

SCORING POINTS

LN-10: 4
LN-9: 2
LN-8: 2
LN-7: 5
LN-C: 3
LN-9: 2
18

ENCLOSURE 5 TO APPENDIX 3
(STATION 5)
TASK TRAINING AND EVALUATION OUTLINE

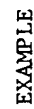
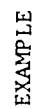
<u>SITUATION</u>	<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
A. "You are TC 12, 1st Plat, Co A, 37th Armor. You are in an assembly area and have just received the platoon leader's order for tomorrow's operation. The company will conduct a movement to contact east along Highway 1, 1st Plat leading from the 3d Cav screen to Hill After crossing RJ the 1st Plat will occupy an overwatch position and the 2d Plat will take over the lead. You will conduct a map recon	LN-13: Conduct a Map Reconnaissance	Given a 1:50,000 scale military map of the PLNC area, a straight edge, a platoon movement to contact operation order with overlay, and a sketch board of a platoon defensive position with a tank sector of fire	Correctly determine or identify the thirteen items listed under the SITUATION column.	NOTE: New Task

<u>SITUATION</u>	<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
from the 3d Cav screen to RJ ____. To conduct the map recon determine/ identify the following." - The operation start point (SP) - The operation passage point (PP) - The movement route from the cavalry screen to RJ ____ - Check points along the movement route - Two obstacles to movement along the route and right and left of the route out to 1000 meters - One defile along the route where the platoon would be forced into a column formation - Two overwatch positions which provide cover, concealment, entry, exit, and a minimum of 1000 meters field of fire - Three highest points within 3000 meters of the route of advance				

<u>SITUATION</u>	<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
- Two areas of observation that extend out to 3000 meters along the route of advance - Two areas along the route of advance where the enemy has a 2000 meter minimum field of fire - An overwatch position to cover the passage through a defile - Two area of cover and concealment which will permit movement past enemy flank fields of fire that extend to 2000 meters. - The Highway _____ distance from the cavalry screen to RJ _____	LN-12: Analyze Terrain Using the Five Military Aspects of Terrain B. "You are TC 12, 1st Plat, Co A, 37th Armor. You are on a platoon battle position. Determine/identify for your tank's sector fire the following: - Fields of observation - Fields of fire - Concealment (enemy) - Cover (enemy)			
			Correctly determine or identify the 8 items listed under the SITUATION column.	FM 21-3

<u>SITUATION</u>	<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
- Obstacles - Key terrain (front of battle position) - Avenue of approach (enemy, mounted) - Avenue of approach (enemy, dismounted)				
SCORING POINTS				
LN-13: 23				
LN-12: 8				
31				

Tank Platoon Battle Position and Tank 12 Sector of Fire



APPENDIX 4
PLNC TASK ACCURACY AND TIME SCORE SHEET

1. The task accuracy and time score sheet consists of station sections and a scoring recapitulation section. Each station section includes: 1) task statements, 2) points for each task, 3) GO and NO GO blocks for recording points earned or lost by task performance, 4) accumulative points for the station, and 5) a block for points earned at the station. The scoring recapitulation section includes: 1) a recapitulation of accuracy points (allowed, earned, and missed) by station, 2) time data and time points earned block, and 3) overall points accumulated (accuracy plus time points) by a student.
2. The time completion scoring formula indicates how to compute point values for the time required to complete the PLNC. The base value X, the time the fastest student completed the course, is worth 25 points. All other student completion times are based upon the base value, e.g., if X is 160 minutes and another student completes the test in 180 minutes the 20 minutes extra time means it took the student 12% more time to complete the test, and by entering the line $X + 10\%$ to 15% on the Time Completion Scoring Formula Table the point value is shown to be 20. The NCOIC cannot enter time completion values in the accuracy scoring sheets until all student times have been recorded, X time determined, and all times exceeding X are computed for point values.
3. The accumulative value of accuracy points and time completion points represents a student's performance score for the PLNC.

**ENCLOSURE 1 TO APPENDIX 4
ACCURACY SCORE SHEET**

Student Name _____

SSN _____

Station 1			
a. Task LN-2: Identify Adjoining Map Sheets		f. Task LN-9: Determine Magnetic Azimuth Using a Compass	
Points	GO	NO GO	
6	☐	☐	
b. Task LN-5: Orient a Map Using a Compass		g. Task LN-A: Locate a Point on a Map by Grid Coordinates	
Points	GO	NO GO	
2	☐	☐	
c. Task LN-A: Locate a Point on a Map by Grid Coordinates		h. Task LN-1: Use Marginal Information on a Map	
Points	GO	NO GO	
3	☐	☐	
d. Task LN-1: Use Marginal Information on a Map		i. Task LN-3: Identify Terrain Features (Natural and Man-Made) on a Map	
Points	GO	NO GO	
2	☐	☐	
e. Task LN-3: Identify Terrain Features (Natural and Man-Made) on a Map		j. Task LN-8: Determine Azimuth Using a Protractor	
Points	GO	NO GO	
2	☐	☐	

k. Task Ln-9: Determine Magnetic Azimuth Using a Compass

Points	GO	NO GO

2	☐	☐

1. Task LN-11: Navigate from One Point on the Ground to Another Point

Points	GO	NO GO

5	☐	☐

Points 33

Points Earned



Scoring Criteria - See Encl 1 to App 3

Station 2

a. Task LN-A: Locate a Point on a Map by Grid Coordinate

Points	GO	NO GO
3	☐	☐

f. Task LN-C: Determine Grid Coordinates of a Point on a Military Map Using the Military Grid Reference System

Points	GO	NO GO
3	☐	☐

b. Task LN-B: Measure Distance on a Map

Points	GO	NO GO
1	☐	☐

g. Task LN-B: Measure Distance on a map

Points	GO	NO GO
1	☐	☐

c. Task LN-B: Measure Distance on a Map

Points	GO	NO GO
1	☐	☐

h. LN-9: Determine Magnetic Azimuth Using a Compass

Points	GO	NO GO
2	☐	☐

d. Task LN-8: Determine Azimuth Using a Protractor

Points	GO	NO GO
2	☐	☐

i. Task LN-11: Navigate from One Point on the Ground to Another Point

Points	GO	NO GO
5	☐	☐

e. Task LN-B: Measure Distance on a Map

Points	GO	NO GO
1	☐	☐

j. Task LN-4: Orient a Map to the Ground by Terrain Association

Points	GO	NO GO
4	☐	☐

k. Task LN-10: Determine Location
on the Ground by Terrain
Association

Points

GO

NO GO

4

☐☐

Points 27

Points Earned

Scoring Criteria - See Encl 2 to
App 3

Station 3

a. Task LN-9: Determine Magnetic Azimuth Using a Compass

Points	GO	NO GO
2	☐	☐

b. Task LN-8: Determine Azimuth Using a Protractor

Points	GO	NO GO
2	☐	☐

c. Task LN-6: Locate an Unknown Point on a Map or on the Ground by Intersection

Points	GO	NO GO
5	☐	☐

d. Task LN-C: Determine the Grid Coordinates of a Point on a Military Map Using the Military Grid Reference System

Points	GO	NO GO
3	☐	☐

e. Task LN-9: Determine Magnetic Azimuth Using a Compass

Points	GO	NO GO
2	☐	☐

f. LN-8: Determine Azimuth Using a Protractor

Points	GO	NO GO
2	☐	☐

Points 16

Points Earned

Scoring Criteria - See Encl 3 to App 3

Station 4

a. Task LN-10: Determine Location on the Ground by Terrain Association

Points	GO	NO GO
4	☐	☐

b. Task LN-9: Determine Magnetic Azimuth Using a Compass

Points	GO	NO GO
2	☐	☐

c. Task LN-8: Determine Azimuth Using a Protractor

Points	GO	NO GO
2	☐	☐

d. Task LN-7: Locate an Unknown Point on a Map or on the Ground by Resection

Points	GO	NO GO
5	☐	☐

e. Task LN-C: Determine the Grid Coordinates of a Point on a Military Map Using the Military Grid Reference System

Points	GO	NO GO
3	☐	☐

f. Task LN-9: Determine Magnetic Azimuth Using a Compass

Points	GO	NO GO
2	☐	☐

Points 18 ☐

Points Earned

Scoring Criteria - See Encl 4 to App 3

Station 5

a. Task LN-13: Conduct a Map Reconnaissance

Points	GO	NO GO
23	☐	☐

b. Task LN-12: Analyze Terrain Using the Five Military Aspects of Terrain

Points	GO	NO GO
8	☐	☐

Points 31

Points Earned ☐

Scoring Criteria - See Encl 5 to App 3

SCORING RECAPITULATION

1. Accuracy

	<u>Total Points</u>	<u>Points Earned</u>	<u>Points Missed</u>
Station 1	33		
Station 2	27		
Station 3	16		
Station 4	18		
Station 5	31		
TOTAL	125		

2. Time

Time Started _____ X Time _____

Time Ended _____ % Beyond X Time _____

Total Time _____ Points Earned

3. Points Accumulation

Accuracy	Time	PLNC Point Total

ENCLOSURE 2 TO APPENDIX 4
TIME COMPLETION SCORING FORMULA

1. Time Completion Scoring Formula Table

PLNC COMPLETION TIME	POINTS
X = fastest time	25
X + to 5%	24
X + 5% + to 10%	22
X + 10% + to 15%	20
X + 15% + to 20%	18
X + 20% + to 25%	16
X + 25% + to 30%	14
X + 30% + to 35%	13
X + 35% + to 40%	12
X + 40% + to 45%	11
X + 45% + to 50%	10
X + 50% + to 55%	9
X + 55% + to 60%	8
X + 60% + to 65%	7
X + 65% + to 70%	6
X + 70% + to 75%	5
X + 75% + to 80%	4
X + 80% + to 85%	3
X + 85% + to 90%	2
X + 90% + to 95%	1
X + 95% + to 100%	0

2. Time Completion Scoring Example

- Student 5 completes the PLNC in the shortest time, 160 minutes.
X is 160. Student 5's point total is 25.

- Student 4 completed the PLNC in 180 minutes. Student 4's point total is 20.

(1) 180 min. (Student 4)	(2) 160	$\frac{12^*}{20.00}$
<u>160 min. (Student 5)</u>		<u>160</u>
20 min.		400
		<u>320</u>
		280

- (3) Go to Time Scoring Formula Table.
Enter 10% + to 15% line, answer is 20.

- Student 1 completed the PLNC in 165 minutes. Student 1's point total is 24.

(1) 165 min. (Student 1)	(2) 165	$\frac{3^*}{5.00}$
<u>160 min. (Student 5)</u>		<u>495</u>
5 min.		5

- (3) Go to Time Scoring Formula Table.
Enter X + to 5% line, answer is 24.

*Do not carry division step to fractions of percentage points.

3. After computing the student's earned point total, enter the total in the appropriate block at the bottom of the accuracy score sheet.

APPENDIX 5
PLNC RESOURCE REQUIREMENTS

Resource requirements, personnel and equipment are indicated below.

a. Personnel

- 1 - NCOIC
- 5 - Station chiefs (scorers)
- 1 - Scorer

b. Equipment and material

Station 1

- (1) 5 - 1:50,000 scale military maps, of which two have common boundaries
- (2) 1 - man-made point terrain feature within sight of Station 1

Station 2 None

Station 3

- (1) 2 - field telephones connected with field wire (Station chief will use the second field telephone and act as the observer of OP CHARLIE)
- (2) 1 - stationary target

Station 4 None

Station 5

- (1) 1 - platoon operation order with overlay (See Enclosure to Enclosure 5 of Appendix 3)
- (2) 1 - sketch (See Enclosure to Enclosure 5 of Appendix 3)

- c. Each student will be issued at the inprocessing station: 1 - 1:50,000 scale military map of the PLNC area, 1 - 1:50,000 grid coordinate scale, 1 lensatic compass, 1 straight edge, and 1 pencil.

ANNEX C

MILITARY STAKES PROFICIENCY TEST (MSPT)

Richard E. O'Brien

HumRRO, Fort Knox, Kentucky

May 1985

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ANNEX C
MILITARY STAKES PROFICIENCY TEST (MSPT)

GENERAL

1. The Military Stakes Proficiency Test (MSPT) is designed to evaluate the performance of selected individual procedural tasks by tank commanders.
2. The MSPT also provides a challenging evaluation procedure which enhances student motivation and provides a "break" in the course routine.
3. The scope of the MSPT is sixteen individual procedural tasks selected from seven task clusters: training, NBC, communications, land navigation, maintenance, tank gunnery, and tactics.
4. The MSPT will be scheduled after individual procedural task training has been completed and just prior to the Single Tank Tactical Exercise (STTX)
5. The MSPT will be conducted in a "country fair" evaluation procedure environment. Each student begins the test at a start point, runs to the first station and performs a specified procedural task, and then proceeds through a series of successive stations where he performs additional procedural tasks. Upon completing the last task the student runs to the release point. Accuracy in task performance is the primary criteria for evaluating each student's performance. However, time to complete the entire test will also be an evaluation criterion and the value given for "time completion" will be included in each student's overall test score. The MSPT will be administered during daylight hours and in a garrison environment.
6. After a student completes the MSPT, the instructor will provide time for the student to discuss his performance. After the discussion the instructor will critique the student's performance and inform him what he did right and what he did wrong.

INSTRUCTOR'S GUIDE

1. The Instructor's Guide is a detailed plan for administering and scoring the MSPT. The guide consists of five appendixes: 1) Layout Diagram, 2) Participation Schedule, 3) Task Training and Evaluation Outlines, 4) Accuracy and Time Score Sheets, and 5) Resource Requirements.
2. Layout Diagram (Appendix 1). The layout diagram illustrates how the MSPT is administered to two students simultaneously. The diagram shows task test stations, in and out processing stations, start and release points, and routes from start points to release points.

3. Participation Schedule (Appendix 2). The schedule illustrates the time required to conduct the MSPT with a class of eight students. The first two students start the test at 0730 hours and complete the test by 1130 hours. The last two students start the test at 0900 hours and complete the test by 1300 hours. There is a thirty minute delay between each heat of two students.
4. Task Training and Evaluation Outlines (Appendix 3). There are sixteen individual procedural tasks in the MSPT. For each task there is a training and evaluation outline to assist each test station administrator. Each training and evaluation outline includes: 1) task statement and when appropriate subtask statements, 2) conditions under which the task will be performed, 3) accuracy standards, 4) task references, and 5) task and subtask performance points.
5. Accuracy and Time Score Sheets (Appendix 4). There are two accuracy score sheets, one for students 1, 3, 5, and 7 and one for students 2, 4, 6, and 8. The score sheet for students 1, 3, 5, and 7 are structured to coincide with the sequence of test stations these students proceed through, e.g., stations D, C, B, A, G, F, and E. The score sheet for students 2, 4, 6, and 8 are structured to coincide with the sequence of test stations these students proceed through, e.g., stations E, F, G, A, B, C, and D. There is one time score sheet for each student. Time begins when a student crosses the start point and time ends when a student crosses the release point. The shorter the time it takes for a student to complete the test, the higher point value the student will receive. The combined value of accuracy points and time points is the student's MSPT score.
6. Resource Requirements (Appendix 4). This appendix indicates personnel, equipment, and facilities required to administer the MSPT. Equipment requirements are indicated by tasks.

APPENDIX 1 LAYOUT DIAGRAM

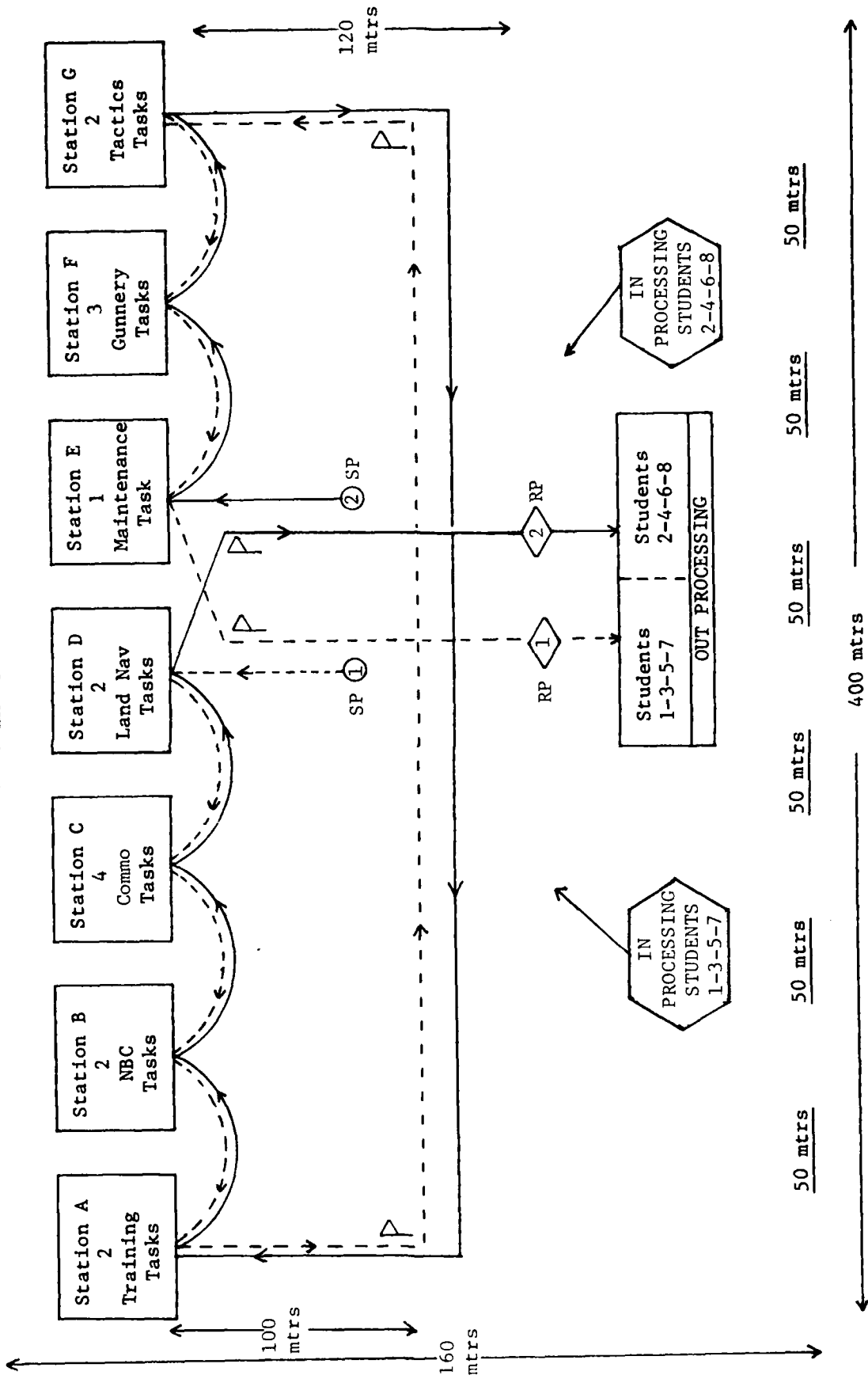
APPENDIX 2 PARTICIPATION SCHEDULE

APPENDIX 3 TASK TRAINING AND EVALUATION OUTLINES

APPENDIX 4 ACCURACY AND TIME SCORESHEETS

APPENDIX 5 RESOURCE REQUIREMENTS

APPENDIX 1
MSPT LAYOUT DIAGRAM



APPENDIX 2 MSPT PARTICIPATION SCHEDULE

CLUSTER STATION TASK	TRAINING A		NBC B		COMMO C				LAND NAV D		MAINT E	TANK GRY F			TACTICS G	
	A-1 Prep Tng	A-2 Cndr Tng	B-1 Read Rpt Rad Dose	B-2 Cndct Part Decon	C-1 Use Auto CEOI	C-2 Use Cipher Authen System	C-3 Encode & Decode Msgs	C-4 Enter & Leave Rad Net	D-1 Detr Grid Coord	D-2 Detr AZ & Back AZ	E Before Ops Checks CWS	F-1 Prep CWS	F-2 Emply 3-Man Crew	F-3 Direct Fire Adjust	G-1 Sketch Range Card	G-2 Target Acqst
TC-1	1000	0930	0900	0800	0830	1030	1100	0800	0730	1130	1030					
TC-2	0900	0930	1000	1100	0830	1130	0800	0830	0730	1130	0830					
TC-3	1030	1000	0930	0830	0900	1100	1130	0800	0800	1200	1000					
TC-4	0920	1000	1030	1130	1100	0930	0830	0900	0830	1200	0900					
TC-5	1100	1030	1000	0900	0930	1200	1130	0830	0830	1230	1130					
TC-6	1000	1030	1100	1200	1130	0900	0930	0830	0830	1230	0930					
TC-7	1130	1100	1030	0930	1000	1230	1130	0900	0900	1300	1200					
TC-8	1030	1100	1130	1230	1200	0900	0930	0830	0900	1300	1000					

NOTES: Performance _____

TCs 1-3-5-7: Running from Station D, through C, B, A, G, F to E
 TCs 2-4-6-8: Running from Station E, through F, G, A, B, C to D

APPENDIX 3
MSPT TASK TRAINING AND EVALUATION OUTLINES

1. There are sixteen task training and evaluation outlines (A-1 through G-2) to aid test station administrators in administering the MSPT. For each task there is a task training and evaluation outline which includes: 1) the task statement and when appropriate the subtask statement, 2) the conditions under which the task will be performed, 3) accuracy standards, 4) appropriate task and subtask references, and 5), scoring points for each task and when appropriate scoring points for each subtask.
2. The tasks in the task training outlines are shown below.
 - A-1 Prepare to Conduct Training
 - A-2 Conduct Training
 - B-1 Read and Report Radiation Dosages
 - B-2 Conduct Partial Decontamination
 - C-1 Use an Automated Communications-Electronics Operation Instructions (CEOI)
 - C-2 Use the KTC 1400D Numerical Cipher/Authentication System
 - C-3 Encode and Decode Messages Using the KTC 600 Tactical Operations Code
 - C-4 Enter and Leave a Radio Net
 - D-1 Determine the Grid Coordinates of a Point on a Military Map Using the Grid Reference System
 - D-2 Determine Azimuth Using a Protractor and Compute Back Azimuth
 - E Perform Before Operations Checks and Services on the Commander's Weapon Station (CWS)
 - F-1 Prepare Commander's Weapon Station (CWS) for Operation
 - F-2 Employ a Three-Man Crew
 - F-3 Conduct Direct Fire Adjustment
 - F-1 Prepare a Sketch Range Card
 - G-2 Conduct Target Acquisitionz

ENCLOSURE 1 TO APPENDIX 3
TASK TRAINING AND EVALUATION OUTLINE
TASK A-1

<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
Prepare to Conduct Training			
Subtask 1: Know the four steps for preparing individual training	Given a chart titled STEPS IN PREPARING INDIVIDUAL TRAINING and six placards indicating various training preparation actions	The student will identify, select, and place on the chart, in correct chronological sequence, the four training preparation action placards that pertain to preparing individual training.	BTMS-AC-83-1
Subtask 2: Know the appropriate training devices for subject areas to be trained	Given a chart listing subject areas and placards indicating various training devices	The student will correctly match training device placards with subject areas.	Training Device Lesson Plan Handout

SCORING POINTS: Subtask 1 - 4
Subtask 2 - 5
Total 9

ENCLOSURE 2 TO APPENDIX 3
TASK TRAINING AND EVALUATION OUTLINE
TASK A-2

<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
Conduct Training			
Subtask 1: Know the five standards that performance oriented training includes	Given a chart titled STANDARDS OF PERFORMANCE ORIENTED TRAINING and seven placards indicating various standard statements	The student will identify, select, and place on the chart the five correct standards statement placards.	BTMS-AC-83-1
Subtask 2: Know the chronological sequence of the eight steps of performance oriented training	Given a chart titled EIGHT STEPS OF PERFORMANCE ORIENTED TRAINING and eight placards indicating the eight steps of performance oriented training	The student will place the placards on the chart in the correct chronological sequence.	BTMS-AC-83-1

SCORING POINTS: Subtask 1 - 5
Subtask 2 - 8
Total 13

ENCLOSURE 3 TO APPENDIX 3
TASK TRAINING AND EVALUATION OUTLINE
TASK B-1

<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
Read and Report Radiation Dosages	Given an IM-93 dosemeter and an environment in which nuclear weapons have been used	The student will read and report the dosage shown on the scale of the dosemeter. The reading must be within 20 rads to be acceptable.	FM21-3

SCORING POINTS: 5

ENCLOSURE 4 TO APPENDIX 3
TASK TRAINING AND EVALUATION OUTLINE
TASK B-2

<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
Conduct Partial Decontamination	Given M8 detection paper, an M13 decontamination kit, an outer protective garment with a soiled spot, and an environment in which chemical spray has been used.	The student will correctly perform the following steps: - Use M8 detection paper to determine if the garment is contaminated. (After using the M8 detection paper instructor informs the student that the spot on the garment represents contamination.) - Select a cloth decontaminating bag from the M13 kit. - Crush the dye capsule in the bag. - Knead the dye from the crushed capsule into the compound in the bag. - Rub the cloth bag over the contaminated area. - Recheck the treated area with the M8 detection paper for the presence of contamination.	FM 21-2, FM 21-3

SCORING POINTS: 6

ENCLOSURE 5 TO APPENDIX 3
 TASK TRAINING AND EVALUATION OUTLINE
 TASK C-1

<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
Use an Automated Communications-Electronics Operation Instructions (CEOI)	Given an automated communications-electronics instructions (CEOI) and a designated time period	The student will find in the CEOI and report the following: a. The unit item number b. The unit call sign c. The unit radio net frequency d. A challenge and reply authentication e. The unit item number identifier	FM 21-3

SCORING POINTS: 5

ENCLOSURE 6 TO APPENDIX 3
TASK TRAINING AND EVALUATION OUTLINE
TASK C-2

<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
Use the KTC 1400D Numerical Cipher/Authentication System	Given a KTC 1400D numerical cipher/authentication system, map coordinates to be encoded, encoded numerical information to be decoded, and an authentication challenge for a reply		
Subtask 1: Encode map coordinates		The student will perform the following by using the KTC 1400D: a. Find the line for encryption. b. Encrypt grid zone letters. c. Encrypt grid numbers.	FM 17-19K3
Subtask 2: Decode map coordinates		The student will decrypt grid zone letters and numbers.	FM 17-19K3
Subtask 3: Perform challenge and reply authentication		The student will correctly challenge another station and correctly reply to a challenge from another station.	FM 17-19K3

SCORING POINTS: Subtask 1 - 3
 Subtask 2 - 2
 Subtask 3 - 2
 Total 7

ENCLOSURE 7 TO APPENDIX 3
TASK TRAINING AND EVALUATION OUTLINE
TASK C-3

<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
Encode and Decode Messages Using the KTC 600D Tactical Operations Code	Given a KTC 600D tactical operations code, a plain text message to be encoded, and an encoded message to be decoded		
Subtask 1: Encode messages		The student will correctly encode a plain text message using the KTC 600D.	FM 17-19K3
Subtask 2: Decode messages		The student will correctly decode a coded message using the KTC 600D.	FM 17-19K3

SCORING POINTS: Subtask 1 - 3
Subtask 2 - 3
Total $\frac{6}{6}$

ENCLOSURE 8 TO APPENDIX 3
TASK TRAINING AND EVALUATION OUTLINE
TASK C-4

<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
Enter and Leave a Radio Net	Given an operable AN/VRC-64 radio, call signs for a tank platoon net, and an operating NCS.		
Subtask 1: Enter a radio net		The student will correctly perform the following when entering the platoon net: a. Enter the net in proper sequence. b. Use correct call sign. c. Correctly respond to a challenge. d. Correctly challenge the next station.	ACP 124(C), ACP 125(D), and ACP 126(B)
Subtask 2: Leave a radio net		The student will correctly perform the following when leaving the platoon net: a. Request permission to leave the net. b. Inform the NCS the reason for leaving the net. c. Authenticate upon direction of the NCS prior to leaving the net.	ACP 124(C)

SCORING POINTS: Subtask 1 - 4
Subtask 2 - 3
Total 7

ENCLOSURE 9 TO APPENDIX 3
TASK TRAINING AND EVALUATION OUTLINE
TASK D-1

<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
Determine the Grid Coordinates of a Point on a Military Map Using the Military Grid Reference System	Given a 1:50,000 scale topographic map, a 1:50,000 grid coordinate scale, and a point on the map for which coordinates must be determined		
Subtask 1: Determine six-digit coordinate from a point on a map		Student will correctly perform the following: a. Determine six-digit coordinates for a point on a map within 100 meters tolerance. b. Identify two letter 100,000-meter-square identifier.	FM 21-2
Subtask 2: Determine eight-digit coordinate for a point on a map		Student will correctly perform the following: a. Determine eight-digit coordinates for a point on a map within 50 meters tolerance. b. Identify two letter 100,000-meter-square identifier.	FM 21-2

SCORING POINTS: Subtask 1 - 2
Subtask 2 - 2
Total $\frac{4}{4}$

ENCLOSURE 10 TO APPENDIX 3
TASK TRAINING AND EVALUATION OUTLINE
TASK D-2

<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
Determine Azimuth Using a Protractor and Compute Back Azimuth	Given a standard 1:50,000 scale military map, two known points plotted on the map, a protractor, and a straight edge		
Subtask 1: Determine grid azimuth		The student will determine the grid azimuth in mils and degrees from Point A to Point B within 1° or 20 mils tolerance.	FM 17-19K3
Subtask 2: Determine back azimuth*		The student will determine the back azimuth (Point B to Point A) of a given azimuth (Point A to Point B) to the exact degree and mil.	FM 17-19K3

*Instructor will tell the student the azimuth, in degrees and in mils from Point A to Point B.

SCORING POINTS: Subtask 1 - 2
Subtask 2 - 2
Total $\frac{4}{4}$

ENCLOSURE 11 TO APPENDIX 3
TASK TRAINING AND EVALUATION OUTLINE
TASK E

<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
Perform Before Operations Checks and Services on the Commander's Weapon Station (CWS)	Given a stationary M1 tank with the Vehicle Master Power switch in the ON position, TM 9-2350-255-10, DA Form 2404, and a receiving radio station		
Subtask 1: Check the radio and intercom for reception/transmission		The student will perform the following: a. Check radio transmission and reception with another radio station. b. Check that all crew stations can be heard over the intercom.	TM 9-2350-255-10
Subtask 2: Check portable fire extinguisher at commander's station		The student will check the portable fire extinguisher for the following: a. Pull out pin fully seated. b. Pull out pin secured by a wire seal. c. Inspection tag checked and signed within 30 days.	TM 9-2350-255-10-1
Subtask 3: Record deficiencies found and corrective action taken on DA Form 2404		The student will record on DA Form 2404 all deficiencies noted and indicate on DA Form 2404 deficiencies corrected.	DA Form 2404
SCORING POINTS:			
	Subtask 1 - 3		
	Subtask 2 - 3		
	Subtask 3 - 1		
	Total		7

ENCLOSURE 12 TO APPENDIX 3
TASK TRAINING AND EVALUATION OUTLINE
TASK F-1

<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
Prepare Commander's Weapon Station (CWS) for Operation	Given a stationary M1 tank with the GUN TURRET DRIVE switch on the loader's panel set in the MANUAL position, the spent case ejection guard in the forward (safe) position, the word SAFE showing on the CWS elevation crank, the loader's hatch open, a dismounted caliber .50 M2 HB machinegun, and TM 9-2350-255-10	The student will perform the following: - Power up the CWS and the turret. - Operate the dome light. - Check that the intercom is operational. - Adjust commander's seat to a height that permits the use of commander's weapon sight, the gunner's primary sight (GPS) extension, and the unity periscope with, with the least amount of head movement. - Check that commander's hatch is functional in all directions. - Adjust commander's lower platform to permit eye level with unity periscope and to see 360 degrees. - Correctly install commander's weapon. - Position the knee guard for firing. - Adjust the GPS extension so that no part of the eye or the face is in contact with the sight body or the optics.	TM 9-2350-255-10

ENCLOSURE 13 TO APPENDIX 3
TASK TRAINING AND EVALUATION OUTLINE
TASK F-2

<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
Employ a Three-Man Crew	Given a stationary M1 tank, operating intercom, and a loader casualty that has been evacuated from the tank		
Subtask 1: Organize a three-man crew		The student will direct the gunner to move to the loader's position and assume the duties of a loader.	FM 17-12-1
Subtask 2: Prepare the tank for three-man crew operations		The student will perform the following: - Place GPS magnification level to 10X. - Put fire control mode switch in NORMAL position. - Place thermal imaging system (TIS) in STBY. - Place laser rangefinder into operation (ARMED LAST) - Direct loader (GN) to set turret/gun drive switch to POWERED position. - Set gun select switch to MAIN or COAX. - Select AMMUNITION SELECT switch to proper ammunition.	FM 17-12-1

ENCLOSURE 13 TO APPENDIX 3
TASK TRAINING AND EVALUATION OUTLINE
TASK F-2 (Continued)

<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
Subtask 3: Review modified fire commands		Student will announce the following: a. For battlesight engagements the fire command is BATTLESIGHT - TANK. b. For precision engagements the fire command is LOAD SABOT (or HEAT) - TANK. c. For coax engagements the fire command is COAX - TROOPS. d. Prior to firing the TC will announce ON THE WAY.	FM 17-12-2

SCORING POINTS: Subtask 1 - 2
Subtask 2 - 7
Subtask 3 - 4
Total 13

ENCLOSURE 14 TO APPENDIX 3
TASK TRAINING AND EVALUATION OUTLINE
TASK F-3

<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
Conduct Direct Fire Adjustment	Given a stationary M1 tank and five panels. Each panel will have superimposed upon it a tank target and a tracer round in the vicinity of the target	The student will correctly announce the following:* a. The direct fire observation for each panel display. b. The standard mil adjustment subsequent fire command required to bring the tracer round to the center of mass. (Panel 1) c. The range change techniques of adjustment (with the GN using the GAS and the target initially estimated at 1800 meters) subsequent fire command required to bring the tracer round to the center of mass. (Panel 3) d. The target form technique of adjustment subsequent fire command required to bring the tracer round to the center of mass. (Panel 5)	FM 17-12-1

*The student will view the target and tracer/round on the panels through the GPS extension.

SCORING POINTS: 8

ENCLOSURE 15 TO APPENDIX 3
TASK TRAINING AND EVALUATION OUTLINE
TASK G-1

<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
Prepare a Sketch Range Card	Given a 1:50,000 scale military map, a piece of overlay paper, a list of grid coordinates indicating: the tank's primary firing position, the outer points of the sector boundaries, two target reference points, two indirect fire targets, and the center of sector and a straight edge	The student will perform the following: - Mark the primary firing position on the overlay paper. - Mark the center of sector in the overlay paper. - Extend a double line on the overlay paper from the primary firing position to the left and then to the right sector boundary coordinates. - Mark target reference points on the overlay paper. - Extend a single line on the overlay paper from the primary position to each target reference point. - Measure the distance, in meters, of the double lines and the single lines and enter this information on the double lines and the single lines on the overlay paper. - Mark indirect fire targets on the overlay paper. - Select on the map and then enter on the overlay paper 2 additional target reference points for the sector.	FM 17-12

ENCLOSURE 15 TO APPENDIX 3
 TASK TRAINING AND EVALUATION OUTLINE
 TASK G-1 (Continued)

<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
		i. Extend a single line on the overlay paper from the primary firing position to each new target reference point. j. Measure the distance in meters of the single lines for new target reference points and enter this information on the overlay paper. k. Select on the map and then enter on the overlay paper 2 additional indirect fire targets.	

SCORING POINTS: 11

ENCLOSURE 16 TO APPENDIX 3
TASK TRAINING AND EVALUATION OUTLINE
TASK G-2

<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
Conduct Target Acquisition			
Subtask 1: Acquire targets	Given a sketch which depicts a tank's sector of fire, and terrain features, and a 1:50,000 scale map which includes the sketch area	The student will explain to the instructor the following: - The rapid scan method of observation. - The 50 meter scan method of observation. - Areas where a mounted attack might occur. - Areas where a dismounted attack might occur.	FM 17-12, FM 17-12-1
Subtask 2: Locate targets	Given a sketch which depicts a tank's sector of fire and two targets in the sector. One target is close to an easily recognizable terrain feature and the other is not close to any easily recognizable terrain feature, and a 1:50,000 scale map which includes the sketch area	The student will explain to the instructor the following: - How to locate a target in regards to direction and range when an easily recognizable terrain feature is available. - How to locate a target in regards to direction and range when an easily identifiable terrain feature is not available.	
Subtask 3: Identify targets	Given a chart with three partially camouflaged tanks - 1 enemy, 1 allied, and 1 U.S.	The student will identify the enemy tank, the allied tank and the U.S. tank.	

ENCLOSURE 16 TO APPENDIX 3
TASK TRAINING AND EVALUATION OUTLINE
TASK G-2 (Continued)

<u>TASK</u>	<u>CONDITIONS</u>	<u>STANDARDS</u>	<u>REFERENCES</u>
Subtask 4: Classify multiple threat targets	Given a chart with three threat targets - 1 T72 facing you at 1600 meters, 1 BMP with sagger facing you at 2600 meters, and 1 T72 move away from you, but with its main gun traversed toward you, at 1800 meters	The student will identify the classify one enemy vehicle as MOST DANGEROUS, one enemy vehicle as DANGEROUS, and one enemy vehicle as LEAST DANGEROUS.	
SCORING POINTS:			
	Subtask 1 - 4		
	Subtask 2 - 2		
	Subtask 3 - 3		
	Subtask 4 - 3		
	Total 12		

APPENDIX 4
MSPT TASK ACCURACY AND TIME SCORESHEET

1. Each task accuracy scoresheet is structured to coincide with a student's course participation number and the sequence in which he will perform the tasks, e.g., students 1, 3, 5, and 7 will perform the tasks in a test station sequence of D, C, B, A, G, F, and E and students 2, 4, 6, and 8 will perform the tasks in a test station sequence of E, F, G, A, B, C, and D. Each task accuracy scoresheet, Enclosures 1 and 2, will include: 1) the task statement and if appropriate the subtask statement, 2) the point value of each task or parts of a task, 3) total points earned for each task, and 4) task scoring criteria. The maximum value for task accuracy in the MSPT is 126 points.
2. The time completion scoring formula, Enclosure 3, indicates how to compute point values for the time required to complete the MSPT. The base value X, the time the fastest student completed the test, is worth 24 points. All other student completion times are based upon the base value, e.g., if X is 160 minutes and another student completes the test in 165 minutes the 5 minutes extra time means it took the student 3% more time to complete the test, and by entering the line X + to 5% on the Time Completion Scoring Formula Table, the point value is shown to be 22. The NCOIC cannot enter time completion values in the accuracy scoring sheets until all student times have been recorded, X time determined, and all times exceeding X are computed for point values.
3. The accumulative value of accuracy points and time completion points represent the student's performance score for the MSPT.

ENCLOSURE 1 TO APPENDIX 4
ACCURACY SCORESHEET

Student - 1, 3, 5, or 7

Test Station Sequence - D,C,B,A,G,F,&E

Student Name _____

SSN _____

Task D2 - Determine Azimuth and Compute Back Azimuth a. Determine grid azimuth <table style="width: 100%;"> <tr> <th style="text-align: left;">Points</th> <th style="text-align: center;">GO</th> <th style="text-align: center;">NO GO</th> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> </table> b. Determine back azimuth <table style="width: 100%;"> <tr> <th style="text-align: left;">Points</th> <th style="text-align: center;">GO</th> <th style="text-align: center;">NO GO</th> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> </table> Points 4 Points Earned Scoring Criteria - See Encl D2 to App 3	Points	GO	NO GO	2	☐	☐	Points	GO	NO GO	2	☐	☐	Task C4 - Enter and Leave a Radio Net a. Enter a radio net <table style="width: 100%;"> <tr> <th style="text-align: left;">Points</th> <th style="text-align: center;">GO</th> <th style="text-align: center;">NO GO</th> </tr> <tr> <td style="text-align: center;">4</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> </table> b. Leave a radio net <table style="width: 100%;"> <tr> <th style="text-align: left;">Points</th> <th style="text-align: center;">GO</th> <th style="text-align: center;">NO GO</th> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> </table> Points 7 Points Earned Scoring Criteria - See Encl C4 to App 3	Points	GO	NO GO	4	☐	☐	Points	GO	NO GO	3	☐	☐
Points	GO	NO GO																							
2	☐	☐																							
Points	GO	NO GO																							
2	☐	☐																							
Points	GO	NO GO																							
4	☐	☐																							
Points	GO	NO GO																							
3	☐	☐																							
Task D1 - Determine Grid Coordinates a. Determine 6-digit coordinates <table style="width: 100%;"> <tr> <th style="text-align: left;">Points</th> <th style="text-align: center;">GO</th> <th style="text-align: center;">NO GO</th> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> </table> b. Determine 8-digit coordinates <table style="width: 100%;"> <tr> <th style="text-align: left;">Points</th> <th style="text-align: center;">GO</th> <th style="text-align: center;">NO GO</th> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> </table> Points 4 Points Earned Scoring Criteria - See Encl D1 to App 3	Points	GO	NO GO	2	☐	☐	Points	GO	NO GO	2	☐	☐	Task C3 - Encode and Decode Messages a. Encode messages <table style="width: 100%;"> <tr> <th style="text-align: left;">Points</th> <th style="text-align: center;">GO</th> <th style="text-align: center;">NO GO</th> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> </table> b. Decode messages <table style="width: 100%;"> <tr> <th style="text-align: left;">Points</th> <th style="text-align: center;">GO</th> <th style="text-align: center;">NO GO</th> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> </table> Points 6 Points Earned Scoring Criteria - See Encl C3 to App 3	Points	GO	NO GO	3	☐	☐	Points	GO	NO GO	3	☐	☐
Points	GO	NO GO																							
2	☐	☐																							
Points	GO	NO GO																							
2	☐	☐																							
Points	GO	NO GO																							
3	☐	☐																							
Points	GO	NO GO																							
3	☐	☐																							

Task C2 - Use Numerical Cipher/Authentication System a. Encode map coordinates <table border="0"> <tr> <td>Points</td> <td>GO</td> <td>NO GO</td> </tr> <tr> <td>3</td> <td>☐</td> <td>☐</td> </tr> </table> b. Decode map coordinates <table border="0"> <tr> <td>Points</td> <td>GO</td> <td>NO GO</td> </tr> <tr> <td>2</td> <td>☐</td> <td>☐</td> </tr> </table> c. Perform challenge and reply <table border="0"> <tr> <td>Points</td> <td>GO</td> <td>NO GO</td> </tr> <tr> <td>2</td> <td>☐</td> <td>☐</td> </tr> </table> Points 7 Points Earned ☐ Scoring Criteria - See Encl C2 to App 3	Points	GO	NO GO	3	☐	☐	Points	GO	NO GO	2	☐	☐	Points	GO	NO GO	2	☐	☐	Task B1 - Read and Report Radiation Dosages <table border="0"> <tr> <td>Points</td> <td>GO</td> <td>NO GO</td> </tr> <tr> <td>5</td> <td>☐</td> <td>☐</td> </tr> </table> Points 5 Points Earned ☐ Scoring Criteria - See Encl B1 to App 3 Task A2 - Conduct Training a. Five standards of performance oriented training <table border="0"> <tr> <td>Points</td> <td>GO</td> <td>NO GO</td> </tr> <tr> <td>5</td> <td>☐</td> <td>☐</td> </tr> </table> b. Eight steps of performance oriented training <table border="0"> <tr> <td>Points</td> <td>GO</td> <td>NO GO</td> </tr> <tr> <td>8</td> <td>☐</td> <td>☐</td> </tr> </table> Points 13 Points Earned ☐ Scoring Criteria - See Encl A2 to App 3	Points	GO	NO GO	5	☐	☐	Points	GO	NO GO	5	☐	☐	Points	GO	NO GO	8	☐	☐
Points	GO	NO GO																																			
3	☐	☐																																			
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Task C1 - Use Automated CEOI <table border="0"> <tr> <td>Points</td> <td>GO</td> <td>NO GO</td> </tr> <tr> <td>5</td> <td>☐</td> <td>☐</td> </tr> </table> Points 5 Points Earned ☐ Scoring Criteria - See Encl C1 to App 3	Points	GO	NO GO	5	☐	☐	Task A1 - Prepare to Conduct Training a. Four steps in preparing training <table border="0"> <tr> <td>Points</td> <td>GO</td> <td>NO GO</td> </tr> <tr> <td>4</td> <td>☐</td> <td>☐</td> </tr> </table> b. Training device/training subject relationship <table border="0"> <tr> <td>Points</td> <td>GO</td> <td>NO GO</td> </tr> <tr> <td>5</td> <td>☐</td> <td>☐</td> </tr> </table> Points 9 Points Earned ☐ Scoring Criteria - See Encl A1 to App 3	Points	GO	NO GO	4	☐	☐	Points	GO	NO GO	5	☐	☐																		
Points	GO	NO GO																																			
5	☐	☐																																			
Points	GO	NO GO																																			
4	☐	☐																																			
Points	GO	NO GO																																			
5	☐	☐																																			
Task B2 - Conduct Partial Decontamination <table border="0"> <tr> <td>Points</td> <td>GO</td> <td>NO GO</td> </tr> <tr> <td>6</td> <td>☐</td> <td>☐</td> </tr> </table> Points 6 Points Earned ☐ Scoring Criteria - See Encl B2 to App 3	Points	GO	NO GO	6	☐	☐																															
Points	GO	NO GO																																			
6	☐	☐																																			

Task G2 - Conduct Target Acquisition

a. Acquire targets

Points GO NO GO

4 ☐ ☐

b. Locate targets

Points GO NO GO

2 ☐ ☐

c. Identify targets

Points GO NO GO

3 ☐ ☐

d. Classify targets

Points GO NO GO

3 ☐ ☐

Points 12

Points Earned ☐

Scoring Criteria - See Encl G2 to App 3

Task G1 - Prepare a Sketch Range Card

Points GO NO GO

11 ☐ ☐

Points 11

Points Earned ☐

Scoring Criteria - See Encl G1 to App 3

Task F3 - Conduct Direct Fire Adjustment

Points GO NO GO

8 ☐ ☐

Points 8

Points Earned ☐

Scoring Criteria - See Encl F3 to App 3

Task F2 - Employ a Three-Man Crew

a. Organize a three-man crew

Points GO NO GO

2 ☐ ☐

b. Prepare tank for three-man operation

Points GO NO GO

7 ☐ ☐

c. Review modified fire commands

Points GO NO GO

4 ☐ ☐

Points 13

Points Earned ☐

Scoring Criteria - See Encl F2 to App 3

Task F1 - Prepare CWS for Operation

Points GO NO GO

9 ☐ ☐

Points 9

Points Earned ☐

Scoring Criteria - See Encl F1 to App 3

Task E - Perform Before Operations
Checks and Services on
the CWS

a. Check radio and intercom

Points GO NO GO

3

☐☐

b. Check portable fire extinguisher

Points GO NO GO

3

☐☐

c. Record deficiencies on DA Form
2404

Points GO NO GO

1

☐☐

Points 7

Points Earned

Scoring Criteria - See Encl E to
App 3

SCORING RECAPITULATION

1. Accuracy

	<u>Total Points</u>	<u>Points Earned</u>	<u>Points Missed</u>
Training	22		
NBC	11		
Commo	25		
Land Nav	8		
Maintenance	7		
Tank Gunnery	30		
Tactics	23		
TOTAL	126		

2. Time

Time Started X Time

Time Ended % Beyond x Time

Total Time Points Earned

3. Point Accumulation

ACCURACY + TIME = MSPT POINT TOTAL

ENCLOSURE 2 TO APPENDIX 4
ACCURACY SCORESHEET

Students - 2, 4, 6, and 8

Test Station Sequence E,F,G,A,B,C,&D

Student Name _____

SSN _____

Task E - Perform Before Operations Checks and Services on the CWS a. Check radio and intercom Points GO NO GO 3 ☐ ☐ b. Check portable fire extinguisher Points GO NO GO 3 ☐ ☐ c. Record deficiencies on DA Form 2404 Points GO NO GO 1 ☐ ☐ Points 7 Points Earned Scoring Criteria - See Encl E to App 3	Task F2 - Employ a Three-Man Crew a. Organize a three-man crew Points GO NO GO 2 ☐ ☐ b. Prepare tank for three-man operation Points GO NO GO 7 ☐ ☐ c. Review modified fire commands Points GO NO GO 4 ☐ ☐ Points 13 Points Earned Scoring Criteria - See Encl F2 to App 3
Task F1 - Prepare CWS for Operation Points GO NO GO 9 ☐ ☐ Points 9 Points Earned Scoring Criteria - See Encl F1 to App 3	Task F3 - Conduct Direct Fire Adjustment Points GO NO GO 8 ☐ ☐ Points 8 Points Earned Scoring Criteria - See Encl F3 to App 3

Task G1 - Prepare a Sketch Range Card <table style="width: 100%; border: none;"> <tr> <td style="text-align: right;">Points</td> <td style="text-align: center;">GO</td> <td style="text-align: center;">NO GO</td> </tr> <tr> <td style="text-align: right;">11</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> </table> Points 11 Points Earned ☐ Scoring Criteria - See Encl G1 to App 3	Points	GO	NO GO	11	☐	☐	Task A1 - Prepare to Conduct Training a. Four steps in preparing training <table style="width: 100%; border: none;"> <tr> <td style="text-align: right;">Points</td> <td style="text-align: center;">GO</td> <td style="text-align: center;">NO GO</td> </tr> <tr> <td style="text-align: right;">4</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> </table> b. Training device/training subject relationship <table style="width: 100%; border: none;"> <tr> <td style="text-align: right;">Points</td> <td style="text-align: center;">GO</td> <td style="text-align: center;">NO GO</td> </tr> <tr> <td style="text-align: right;">5</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> </table> Points 9 Points Earned ☐ Scoring Criteria - See Encl A1 to App 3	Points	GO	NO GO	4	☐	☐	Points	GO	NO GO	5	☐	☐																		
Points	GO	NO GO																																			
11	☐	☐																																			
Points	GO	NO GO																																			
4	☐	☐																																			
Points	GO	NO GO																																			
5	☐	☐																																			
Task G2 - Conduct Target Acquisition a. Acquire targets <table style="width: 100%; border: none;"> <tr> <td style="text-align: right;">Points</td> <td style="text-align: center;">GO</td> <td style="text-align: center;">NO GO</td> </tr> <tr> <td style="text-align: right;">4</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> </table> b. Locate Targets <table style="width: 100%; border: none;"> <tr> <td style="text-align: right;">Points</td> <td style="text-align: center;">GO</td> <td style="text-align: center;">NO GO</td> </tr> <tr> <td style="text-align: right;">2</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> </table> c. Identify targets <table style="width: 100%; border: none;"> <tr> <td style="text-align: right;">Points</td> <td style="text-align: center;">GO</td> <td style="text-align: center;">NO GO</td> </tr> <tr> <td style="text-align: right;">3</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> </table> d. Classify targets <table style="width: 100%; border: none;"> <tr> <td style="text-align: right;">Points</td> <td style="text-align: center;">GO</td> <td style="text-align: center;">NO GO</td> </tr> <tr> <td style="text-align: right;">3</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> </table> Points 12 Points Earned ☐ Scoring Criteria - See Encl G2 to App 3	Points	GO	NO GO	4	☐	☐	Points	GO	NO GO	2	☐	☐	Points	GO	NO GO	3	☐	☐	Points	GO	NO GO	3	☐	☐	Task A2 - Conduct Training a. Five standards of performance oriented training <table style="width: 100%; border: none;"> <tr> <td style="text-align: right;">Points</td> <td style="text-align: center;">GO</td> <td style="text-align: center;">NO GO</td> </tr> <tr> <td style="text-align: right;">5</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> </table> b. Eight steps of performance oriented training <table style="width: 100%; border: none;"> <tr> <td style="text-align: right;">Points</td> <td style="text-align: center;">GO</td> <td style="text-align: center;">NO GO</td> </tr> <tr> <td style="text-align: right;">8</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> </table> Points 13 Points Earned ☐ Scoring Criteria - See Encl A2 to App 3	Points	GO	NO GO	5	☐	☐	Points	GO	NO GO	8	☐	☐
Points	GO	NO GO																																			
4	☐	☐																																			
Points	GO	NO GO																																			
2	☐	☐																																			
Points	GO	NO GO																																			
3	☐	☐																																			
Points	GO	NO GO																																			
3	☐	☐																																			
Points	GO	NO GO																																			
5	☐	☐																																			
Points	GO	NO GO																																			
8	☐	☐																																			

Task B1 - Read and Report Radiation Dosages

Points GO NO GO

5

☐☐

Points 5

Points Earned

☐

Scoring Criteria - See Encl B1 to App 3

Task B2 - Conduct Partial Decontamination

Points GO NO GO

6

☐☐

Points 6

Points Earned

☐

Scoring Criteria - See Encl B2 to App 3

Task C1 - Use Automated CEOI

Points GO NO GO

5

☐☐

Points 5

Points Earned

☐

Scoring Criteria - See Encl C1 to App 3

Task C2 - Use Numerical Cipher/Authentication System

a. Encode map coordinates

Points GO NO GO

3

☐☐

b. Decode map coordinates

Points GO NO GO

2

☐☐

c. Perform challenge and reply

Points GO NO GO

2

☐☐

Points 7

Points Earned

☐

Scoring Criteria - See Encl C2 to App 3

Task C3 - Encode and Decode Messages

a. Encode messages

Points GO NO GO

3

☐☐

b. Decode messages

Points GO NO GO

3

☐☐

Points 6

Points Earned

☐

Scoring Criteria - See Encl C3 to App 3

Task C4 - Enter and Leave a
Radio Net

a. Enter a radio net

Points GO NO GO

4 ☐ ☐

b. Leave a radio net

Points GO NO GO

3 ☐ ☐

Points 7

Points Earned ☐

Scoring Criteria - See Encl C4 to
App 3

Task D2 - Determine Grid
Coordinates

a. Determine 6-digit coordinates

Points GO NO GO

2 ☐ ☐

b. Determine 8-digit coordinates

Points GO NO GO

2 ☐ ☐

Points 4

Points Earned ☐

Scoring Criteria - See Encl D1 to
App 3

Task D2 - Determine Azimuth and
Compute Back Azimuth

a. Determine grid azimuth

Points GO NO GO

2 ☐ ☐

b. Determine back azimuth

Points GO NO GO

2 ☐ ☐

Points 4

Points Earned ☐

Scoring Criteria - See Encl D2 to
App 3

SCORING RECAPITULATION

1. Accuracy

	<u>Total Points</u>	<u>Points Earned</u>	<u>Points Missed</u>
Training	22		
NBC	11		
Commo	25		
Land Nav	8		
Maintenance	7		
Tank Gunnery	30		
Tactics	23		
TOTAL	126		

2. Time

Time Started		X Time	
Time Ended		% Beyond x Time	
Total Time		Points Earned	

3. Point Accumulation

ACCURACY		+	TIME		=	MSPT POINT TOTAL

ENCLOSURE 3 TO APPENDIX 4
TIME COMPLETION SCORING FORMULA

1. Time Completion Scoring Formula Table

MSPT COMPLETION TIME	POINTS
X = fastest time	24
X + to 5%	22
X + 5% + to 10%	21
X + 10% + to 15%	20
X + 15% + to 20%	19
X + 20% + to 25%	17
X + 25% + to 30%	16
X + 30% + to 35%	14
X + 35% + to 40%	13
X + 40% + to 45%	11
X + 45% + to 50%	10
X + 50% + to 55%	9
X + 55% + to 60%	8
X + 60% + to 65%	7
X + 65% + to 70%	6
X + 70% + to 75%	5
X + 75% + to 80%	4
X + 80% + to 85%	3
X + 85% + to 90%	2
X + 90% + to 95%	1
X + 95% + to 100%	0

2. Time Completion Scoring Example

- Student 3 completed the MSPT in the shortest time, 160 minutes. X is now 160. Student 3's point total is 24.

- Student 2 completed the MSPT in 180 minutes.
Student 2's point total is 20.

(1) 180 min. (Student 2) 160 min. (Student 3) 20 min.	(2) 160 $\overline{) 20.00}$ 160 400 320 80

- (3) Go to Time Scoring Formula Table. Enter 10% + to 15% line, answer is 20.

- Student 6 completed the MSPT in 165 minutes.
Student 6's point total is 22.

(1) 165 min. (Student 6) 160 min. (Student 3) 5 min.	(2) 160 $\overline{) 5.00}$ 480 20

- (3) Go to Time Scoring Formula Table. Enter X + to 5% line, answer is 22.

*Do not carry division step to fractions of percentage points.

3. After computing the student's earned point total enter the total in the appropriate block at the bottom of the accuracy scoresheet.

APPENDIX 5
MSPT RESOURCE REQUIREMENTS

Resource requirements, personnel, and equipment are indicated below.

a. Personnel

- 1 - NCOIC
- 2 - Release point and start point NCOs
- 3 - Test station scorers
- 1 - FM radio operator

b. Equipment and material

Task A1 Prepare to Conduct Training

- a. 1 chart entitled STEPS IN PREPARING INDIVIDUAL TRAINING

- b. 1 each of the following placards

- GATHER AND PREPARE RESOURCES
- ANNOUNCE TRAINING TO SOLDIERS
- REHEARSE THE TRAINING SESSION
- REVISE THE TRAINING OUTLINE
- GET THE TRAINING OBJECTIVE
- CHECK FOR SKILL DEFICIENCIES

- c. 1 chart entitled TRAINING SUBJECT AREAS with the following subject areas inscribed

- TRAINING
- NBC
- COMMO
- LAND NAV
- MAINTENANCE
- TANK GUNNERY
- TACTICS
- MINE WARFARE
- LEADERSHIP

- d. 1 each of the following placards

- MILES
- UCOFT
- SIMCAT
- TSFO
- LAND NAV VIDEODISCS
- TELFARE
- M55 LASER
- HAND HELD TUTOR
- PYE WATSON
- BATTLESIGHT

Task A2 Conduct Training

- a. 1 chart entitled STANDARDS OF PERFORMANCE ORIENTED TRAINING
- b. 1 each of the following placards
 - TRAINER ADHERES TO STANDARDS
 - ADEQUATE AND APPROPRIATE RESOURCES
 - EIGHT STEPS OF PERFORMANCE ORIENTED TRAINING
 - ON-THE-SPOT CORRECTIONS
 - RECORD AND REPORT RESULTS
 - GATHER AND PREPARE RESOURCES
 - ENCOURAGE APPROPRIATE QUESTIONS
- c. 1 chart entitled EIGHT STEPS OF PERFORMANCE ORIENTED TRAINING
- d. 1 each of the following placards
 - TRAINING STATEMENT
 - CAUTION STATEMENT
 - PRETEST
 - ORIENTATION STATEMENT
 - DEMONSTRATION
 - TASK STEPS
 - PRACTICE
 - PERFORMANCE TEST

Task B1 Read and Report Radiation Dosages

2 TM-93 dosimeters charged to a known level of energy

Task B2 Conduct Partial Decontamination

1 M8 detection paper kit, 1 M13 decontamination kit, and
1 class X fatigue jacket with several 2 inch diameter
sized soiled spots

Task C1 Use an Automated CEOI

2 automated CEOI, a unit designation, and a time period
designation

Task C2 Use Numerical Cipher/Authentication System

2 KTC 1400D Numerical Cipher/Authentication Systems,
a set of map coordinates, encoded numerical information,
and an authentication challenge

Task C3 Encode and Decode Messages

2 KTC 600D Tactical Operation Codes, a plain text
message, and an encoded message

Task C4 Enter and Leave a Radio Net

2 AN/VRC-64 radios, call signs for a platoon net, an operating NCS, and a KTC 1400D

Task D1 Determine Grid Coordinates

1 - 1:50,000 scale topographic map, 1 - 1:50,000 grid coordinate scale, and a point on the map

Task D2 Determine Azimuth Using a Protractor and Compute Back Azimuth

1 - 1:50,000 scale military map, 2 known points plotted on the map, a protractor, and a straight edge

Task E Perform Before Operations Checks and Services on the CWS

1 - M1 tank, TM 9-2350-255-10, DA Form 2404, and a receiving radio station

Task F1 Prepare Commander's Weapon Station CWS for Operation

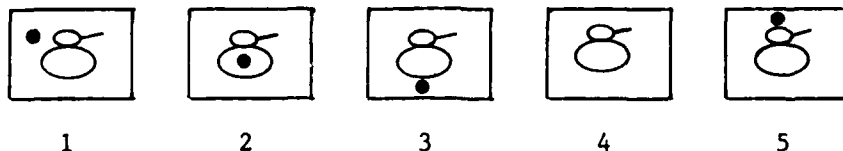
1 - M1 tank, a dismounted caliber .50 machinegun, and a TM 9-2350-255-10

Task F2 Employ a Three-Man Crew

1 - M1 tank

Task F3 Conduct Direct Fire Adjustment

5 panels as shown below



Task G1 Prepare a Sketch Range Card

1 - 1:50,000 scale military map, a piece of overlay paper, a list of grid coordinates indicating: tank's primary position, outer points of sector boundaries, two target reference points, two indirect fire targets, and the center of sector and a straight edge

Task G2 Conduct Target Acquisition

- a. 1 sketch which depicts a tank's sector of fire and terrain features, and a 1:50,000 scale map which includes the sketch area
- b. 1 sketch which depicts a tank's sector of fire and two targets in the sector (1 target close to an easily recognized terrain feature and the other target not close to an easily recognizable terrain feature), and a 1:50,000 scale map which includes the sketch area
- c. 1 chart with three partially camouflaged tanks - 1 enemy, 1 allied, and 1 U.S.
- d. 1 chart with 3 threat targets - 1 T72 facing the viewer at 1600 meters, 1 BMP with Sagger facing toward the viewer at 2600 meters, and 1 T72 moving away but with the main gun traversed toward the viewer, at 1800 meters

ANNEX D

SINGLE TANK TACTICAL EXERCISE (STTX)

Richard E. O'Brien

HumRRO, Fort Knox, Kentucky

May 1985

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ANNEX D
SINGLE TANK TACTICAL EXERCISE (STTX)

GENERAL

1. The Single Tank Tactical Exercise (STTX) is designed to evaluate, in a tactical scenario field environment, the performance of individual procedural and nonprocedural tasks.
2. The scope of the STTX is 41 procedural tasks, 15 nonprocedural tasks, and four non 19K10-40 tasks.
3. The STTX is scheduled after formal training of all procedural and nonprocedural tasks has been completed. The STTX is performed during daylight hours. However, two tasks, select a firing position and target acquisition, should also be practiced during the hours of darkness.
4. The STTX includes five scenarios: 1) Prepare for a Tactical Road March, 2) Conduct a Tactical Road March, 3) Prepare for a Movement to Contact, 4) Conduct a Movement to Contact, and 5) Occupy and Defend a Battle Position. The student tank commander starts the exercise in a rear assembly area where he prepares to participate in a tactical road march. He participates in a tactical road march to a forward assembly area where he prepares to participate in a movement to contact operation. During the movement to contact operation the student is involved in six unpredictable situational actions. When the movement to contact operation is over, the student participates in the occupation and defense of a battle position. Accuracy in task performance is the primary criterion for evaluating student performance. Task procedural deficiencies, which do not affect a student's task response accuracy will be noted by the scorer for the purpose of post STTX feedback to the student.
5. After each STTX scenario, the instructor will provide time for the tank commander to discuss the performance of his crew with other crewmembers. After the discussion the instructor will critique the tank commander's general performance, including his reaction to unforeseen problems, and the responses of crewmembers to his directions.

INSTRUCTOR'S GUIDE

1. The Instructor's Guide is a detailed plan for administering and scoring the STTX. The guide consists of five appendixes: 1) Layout Diagram, 2) Participation Schedule, 3) Task Training and Evaluation Outlines, 4) Accuracy Score Sheets, and 5) Resource Requirements.

2. Layout Diagram (Appendix 1). The layout diagram illustrates how the STTX is conducted. The diagram shows a continuous tactical scenario time line sequence. The scenario begins in a rear assembly area and progresses through a tactical road march, a forward assembly area, a movement to contact operation, and ends with the occupation and defense of a battle position.
3. Participation Schedule (Appendix 2). The schedule indicates the time required to conduct the PLNC with a class of eight students. Students 1 and 2 begin the exercise at 0730 hours and 0830 hours respectively and students 3 and 4 begin the exercise at 1130 hours and 1230 hours respectively. On the second day the schedule is repeated for students 5 and 6 and students 7 and 8.
4. Task Training and Evaluation Outlines (Appendix 3). There are five task training and evaluation outlines, one for each scenario, in the STTX. Each outline includes: 1) the situation which leads to task performance, 2) task statements, 3) the conditions under which the task is performed, 4) accuracy standards, and 5) task references.
5. Accuracy Score Sheets (Appendix 4). There is an accuracy score sheet for each scenario. The score sheet provides: 1) point value of each task, 2) blocks for points earned for each task, 3) a block for total points earned for each scenario, and 4) a block for recapitulation of points earned for the exercise.
6. Resource Requirements (Appendix 5). This appendix indicates personnel, equipment, and facilities required to conduct the STTX.

APPENDIX 1 LAYOUT DIAGRAM

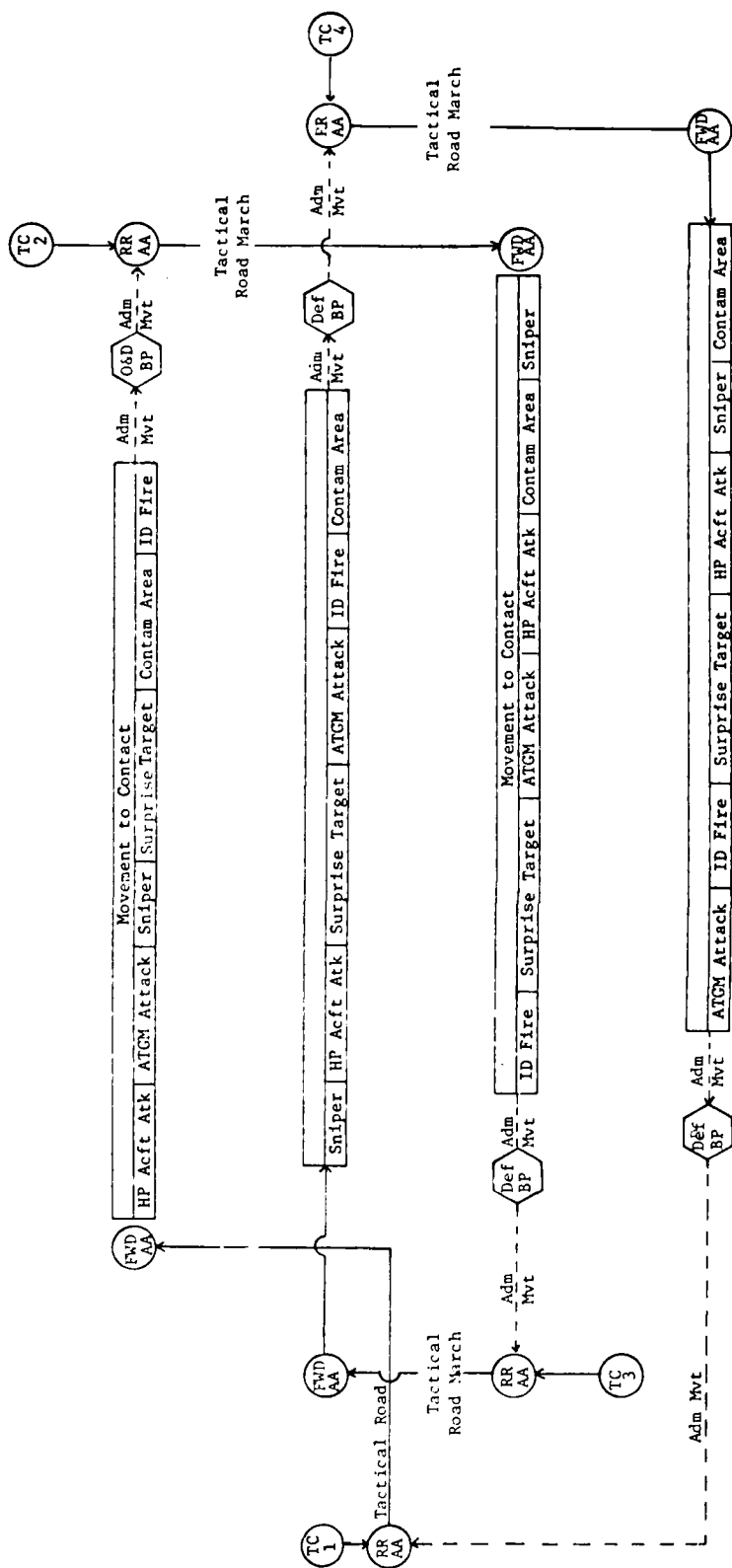
APPENDIX 2 PARTICIPATION SCHEDULE

APPENDIX 3 TASK TRAINING AND EVALUATION OUTLINES

APPENDIX 4 ACCURACY SCORE SHEET

APPENDIX 5 RESOURCE REQUIREMENTS

APPENDIX 1
STTX LAYOUT DIAGRAM



APPENDIX 2
SITX PARTICIPATION SCHEDULE

DAY 1

TC 1 EVENT	Prep for Tac RM	Conduct Tac RM	Prep for Mvt to Cont	Conduct Movement to Contact	Occupy and Defend Battle Position
TIME LINE	0730	0800	0820	0900	1010 1130
TC 2 EVENT	Prep for Tac RM	Conduct Tac RM	Prep for Mvt to Cont	Conduct Movement to Contact	Occupy and Defend Battle Position
TIME LINE	0830	0900	0920	1000	1110 1230
TC 3 EVENT	Prep for Tac RM	Conduct Tac RM	Prep for Mvt to Cont	Conduct Movement to Contact	Occupy and Defend Battle Position
TIME LINE	1300	1330	1350	1430	1540 1700
TC 4 EVENT	Prep for Tac RM	Conduct Tac RM	Prep for Mvt to Cont	Conduct Movement to Contact	Occupy and Defend Battle Position
TIME LINE	1330	1400	1420	1500	1610 1730

DAY 2

TC 5 follow TC 1 schedule	TC 7 follow TC 3 schedule
TC 6 follow TC 2 schedule	TC 8 follow TC 4 schedule

APPENDIX 3
STTX TASK TRAINING AND EVALUATION OUTLINES

1. There are five task training and evaluation outlines, one for each scenario in the STTX, to aid scorers in conducting the STTX. Within each scenario the student will be required to perform several procedural and nonprocedural tasks. In some scenarios a task may be performed more than once and some tasks are performed during more than one scenario. Each outline includes: 1) the situation which leads to task performance, 2) task statements, 3) the conditions under which the task is performed, 4) accuracy standards, and 5) task references.
2. The tasks in the task training and evaluation outlines are shown below.

Scenario 1: PREPARE FOR TACTICAL ROAD MARCH

- Supervise before operations checks and services on an M1 tank
- Perform before operations checks and services on the commander's weapon station (CWS)
- Prepare commander's weapon station (CWS) for operation on an M1 tank
- Set headspace and timing on a caliber .50 M2 HB machinegun
- Perform commander's preventative maintenance prepare-to-fire checks and services on an M1 tank
- Conduct a map reconnaissance
- Use marginal information on a map
- Identify terrain features (natural and man-made) on a map
- Prepare and issue an oral operation order
- Use an automated communications electronics operations instructions (CEOI)
- Use the KTC 1400D numerical cipher/authentication system
- Enter or leave a radio net
- PS. Judge how much one of the conditions deficiencies would interfere with the operation of the tank

- PS. Judge whether one of conditions deficiencies can be corrected within available time and resources
- PS. Estimate the likelihood that one of the conditions deficiencies would prevent the tank from completing its mission.

Scenario 2: CONDUCT TACTICAL ROAD MARCH

- Conduct a tactical road march
- Maintain position in platoon formation (column)
- Conduct target acquisition
- * Identify terrain features (natural and man-made) on a map
- Determine location on the ground by terrain association

Scenario 3: PREPARE FOR MOVEMENT TO CONTACT OPERATION

- Select a firing position
- Supervise after operations checks and services on an M1 tank
- Install/operate hop loop wire communications
- * Use an automated communications electronics operation instruction (CEOI)
- * Use the KTC 1400D numerical cipher/authentication system
- Enter or leave a radio net
- * Conduct a map reconnaissance
- * Use marginal information on a map
- * Identify terrain features (natural and man-made) on a map
- * Prepare and issue an oral operation order
- * Enter a radio net

Scenario 4: CONDUCT MOVEMENT TO CONTACT

- *. Maintain position in platoon formation
- * Conduct target acquisition (4)

- * Determine location on the ground by terrain association (2)
- Engage targets with the caliber .50 M2 HB machinegun (2)
- Direct evasion of an enemy anti-tank guided missile (DRILL)
- Direct main gun engagement on an M1 tank (2)
- Issue a fire command (3)
- Fire an M250 grenade launcher on an M1 tank
- Call for and adjust indirect fire
- Implement mission oriented protective posture (MOPP) (3)
- Initiate unmasking procedures (2)
- D. Decide where the TC and LD will search for targets
- PS. Estimate how much time is available to prevent the enemy from destroying the tank
- PS. Judge how much a smoke screen will protect the tank from enemy direct fire
- D. Decide whether or not to fire smoke grenades
- PS. Compare the lethality of multiple enemy targets
- D. Decide sequence in which to engage multiple targets
- PS. Identify the least powerful weapon or ammunition required to destroy the enemy targets
- D. Choose appropriate main gun ammunition
- PS Judge from battlefield cues the amount and kind of damage inflicted an enemy target
- D. Decide when to stop firing
- ** D. Decide whether or not to close hatches (2)
- ** D. Decide whether to open hatches (2)
 - - React to air attack (DRILL)
- ** - Submit a spot report (SPOTREP) (5)
 - - Direct DV to move out and generate smoke
 - - React to indirect fire (DRILL)

Scenario 5: OCCUPY AND DEFEND BATTLE POSITION

- * Select a firing position
- * Identify terrain features (natural and man-made) on a map
 - Analyze terrain using the five military aspects of terrain
- * Install/operate hot loop wire communications
 - Install/remove the automatic chemical alarm system
- * Supervise after operations checks and services on an M1 tank
- * Conduct target acquisition (3)
- * Determine location on the ground by terrain association
- * Call for and adjust indirect fire
 - Estimate range
 - Recognize electronics countermeasures (ECM) and implement electronics counter-countermeasures (ECCM)
- * Direct main gun engagements on an M1 tank
- * Issue a fire command (2)
 - Employ a three-man crew
- * Implement mission oriented protective posture (MOPP) (2)
 - Prepare/submit NBC-1 report
 - Engage targets with the main gun from the commander's weapon station (CWS) on an M1 tank
 - Prepare vehicle (tank) for a nuclear attack
 - Prepare a situation report (SITREP)
 - Conduct partial decontamination
 - Use the M256 chemical detector kit
- * Initiate unmasking procedures
 - Direct reorganization on the objective
- * PS. Compare the lethality of multiple enemy targets
- * D. Decide sequence in which to engage multiple enemy targets

** PS. Identify the least powerful weapon or ammunition required (2)
to destroy the enemy targets

** D. Choose appropriate main gun ammunition (2)

** PS. Judge from battlefield cues the amount and kind of damage (2)
inflicted upon an enemy target

** D. Decide when to stop firing (2)

• PS. Estimate the ability of remaining crewman to substitute for
another when a crewman is lost due to injury or sickness.

• D. Decide whether or not a crewman must be evacuated due to
injury or sickness

* D. Decide whether or not to close hatches

NOTES: * Task duplicated within STTX
** Task duplicated within scenario
PS Problem solving task
D Decision task
- Non 19K10-40 task
() Task replications within scenario

3. Task types and numbers by scenario are indicated below.

Type Task SCENARIO	PROCEDURAL				NONPROCEDURAL				TOTAL		
	19K10-40		Non- 19K10-40		PROB. SOLVING		DECISION				GRAND TOTAL
	Orig	Dupe	Orig	Dupe	Orig	Dupe	Orig	Dupe	Orig	Dupe	
1	12				3				15		15
2	4	1							4	1	5
3	4	7							4	7	11
4	8	14	4	4	5		7	2	22	20	44
5	12	16			1	5	1	6	14	27	41
TOTAL	40	38	4	4	9	5	8	8	59	55	116

ENCLOSURE 1 TO APPENDIX 3

(PREPARE FOR TACTICAL ROAD MARCH

TASK TRAINING AND EVALUATION OUTLINE

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
You are TC 12, Co A, 37th Armor. The company is in a rear assembly area and you have been alerted by the PL to get your tank ready for a tactical road march. (See Encl. 6 to App. 3. Student will complete tasks listed in the TASKS column.)	Supervise before operations checks and services on an M1 tank.	Given an M1 tank that has been rearmed, refueled, and all communications operational. (Scorer will indicate that the deficiencies is present): - Fuel filler cover pin missing. - Hull access plates missing. - Gunner power control handles. (traverse/elevation) not operational. - GAS eyepiece won't focus.	The student will perform the following: - Assign specific before operations checks and services responsibilities to each crew member. - Monitor crewmember's performance. - Record deficiencies noted on DA Form 2404. - Indicate deficiencies corrected on DA Form 2404. - Report deficiencies not corrected to support maintenance.	TM 9-235--255-10

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	Perform before operations checks and services on the commander's weapon station (CWS). Prepare commander's weapon station (CWS) for operation on an M1 tank.		The student will perform the following: - Check radio transmission and reception. - Check that all crew stations can be heard over the intercom. - Check portable fire extinguisher for - pull out pin fully seated. - pull out pin secured by wire seal. - inspection tag signed within last thirty days. - Record deficiencies noted on DA Form 2404. - Indicate deficiencies corrected on DA Form 2404. - Report deficiencies not corrected to support maintenance. The student will perform the following: - Ensure GUN/TURRET DRIVE switch on LD panel is in MANUAL position. - Ensure spent case ejection guard is in the forward (safe) position, and the word "SAFE" is showing on the CWS elevation crank. - Power up the turret and the CWS. - Operate the dome light. - Check that intercom is operational. - Adjust commander's seat to correct height.	TM 9-2350-255-10 TM 9-2350-255-10

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	Set headspace and timing on a caliber .50 M2 HB machinegun.		g. Check that commander's hatch is functional in three positions. h. Adjust commander's lower platform and upper platform. i. Install commander's weapon. j. Position knee guard down for firing and up when not firing. k. Adjust GPS extension so no part of face or eye is in contact with sight body or optics. The student will perform the following: a. Headspace. With the retracting slide handle pulled back 1/16 inch, the GO end of the headspace gage will enter the T-slot and the NO GO end will not. b. Timing. With the NO-FIRE timing gage between the barrel extension and the trunnion block, the firing pin will not release when the trigger is depressed. When the NO-FIRE timing gage is replaced by the FIRE timing gage, the firing pin will release when the trigger is depressed.	TM 9-1005-213-10

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	• Perform tank commander's preventative maintenance prepare-to-fire checks and services on an M1 tank. • PS. Judge how much the condition deficiency would interfere with the operation of the tank. • PS. Judge whether the condition deficiency can be corrected within available time and resources. • PS. Estimate the likelihood that the condition deficiency would prevent the tank crew from completing its mission.		The student will perform the following: - Ensure the GUN/TURRET DRIVE switch on LD panel is in POWERED position. - Check mounting of machinegun. - Check ammunition storage in ready box. - Boresight the machinegun. - Check commander's panel for secure mounting. - Test panel lights. - Check operation of panel control. - Record deficiencies noted on DA Form 2404. - Indicate deficiencies corrected on DA Form 2404. - Report deficiencies not corrected to support maintenance. Student indicates the degree to which the deficiency will affect the operation of the tank. Student indicates time and resources required to correct the deficiency and time and resources available to correct the deficiency. Student indicates the effect of the deficiency upon the crew's ability to shoot, move, and communicate and whether or not the effect would prevent the crew from completing its mission.	TM 9-2350-255-10 Problem solving lesson plan Problem solving lesson plan Problem solving lesson plan

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The PL assembled the ICs and issued an operation order with a strip map (Encl to Encl 1 to App. 5) for movement to a forward assembly area. (See Encl 1 to App. 5. The PL also indicated that the platoon net would open 30 minutes before the platoon crossed the SP. (See Encl. 6 to App. 3. The student will perform the tasks listed in the TASKS column.)	• Conduct a map reconnaissance.		The student will transcribe the following information from the strip map onto his military map acetate overlay: - Location of current and new assembly areas. - Location of SP, CPs, and RP. - The movement route.	1:50,000 military map and movement order strip map
	• Use marginal information on a map.		The student will determine from symbols in the marginal information on the military map the following: - Type of road the movement route is. - Classification of bridges the movement route crosses. - Impassable areas within 200 meters, left and right, of the movement route.	FM 21-26
	• Identify terrain features (natural and man-made) on a map.		The student will identify the following terrain features along the movement route: - Ambush sites, e.g., bridges, underpasses, cuts, terrain defiles. - Possible enemy firing positions with 3000 meter fields of fire.	FM 21-2

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	• Prepare and issue an oral operation order.		The student will announce the following: - The enemy situation. - The friendly situation (team and platoon). - How the crew mission will be performed. - Priority of fires. - Coordinating instructions. - Logistical support. - Command and signal information. EXAMPLE: TC refers crewmen to map overlay. "Elements of 327 MRD to our front, however, 3d Cav is between us and the enemy. Enemy has nuclear and chemical capability and has been sending about four 2 plane sorties a day over our area. Team A conducts a tactical road march from its present position - here - east along Hy N4 - here - to a forward assembly area - here. 1st Platoon leads the team movement, crosses the SP - here - at _____ hours, in column formation, 100 meter interval, 50 KMPH with 60 KMPH catchup speed, crosses - CPs and the RP - and follows team guides into the forward assembly area. Order of march Tank 11, Tank 12, Tank 13, and Tank 14. Once in the assembly area let Platoon orient NE and from left to right 14, 13, 11, 12. Our mission is to maintain the PL's wingman position throughout	FM 17-19K 4

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	Use an automated communications electronics operations instructions (CEOI)		the movement. Main gun will be oriented to the right front. I'll maintain surveillance in that direction. ID maintain surveillance to left front and left flank, also maintain air guard. Halts SOP. Team trains will be located at _____. PL leads platoon movement. Password and challenge are WHITE/LIGHTENING. Platoon frequency is _____, platoon alternate frequency is _____, team frequency is _____, time is _____. Any questions?" The student will perform the following: - Find the item number of the CEOI extract. - Find TC 12's call sign. - Find a challenge and reply authentication. - Find an item number identifier.	FM 21-3
	Use the KTC/1400D numerical cipher/authentication system.		The student will perform the following: - Encode a plain text message. - Decode an encoded message. - Reply to a challenge to authenticate.	FM 17-19K3

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	Enter or leave a radio net.		The student will perform the following: a. Enter the net in the proper station sequence. b. Correctly respond to an authentication challenge. c. Correctly challenge PL (NCS).	FM 17-19K3, FM 24-1
TOTAL TASKS: 15 (12 original tasks, 3 problem solving tasks).				

ENCLOSURE 2 TO APPENDIX 3
(CONDUCT TACTICAL ROAD MARCH)

TASK TRAINING AND EVALUATION OUTLINE

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The platoon moves out of the assembly area, crosses the SP, moves east along Hy N4, crosses the RP, and follows platoon guide into the forward assembly area. (See Encl. 6 to App. 3. Student will complete tasks listed in the TASK column.)	- Conduct a tactical road march. - Maintain position in platoon formation (column).	Given an M1 tank that has been rearmed, refueled, pre-ops maintenance checks and services completed, all communications operational, and the tank crew participating in a tactical road march.	The student will ensure the following: a. Maintain aerial surveillance by the LD. b. Maintain main gun orientation in assigned sector (right front). c. Maintain ground surveillance in assigned sector (right front). The student will perform the following: a. Recognize the PL's signal to maintain proper position in the platoon formation. or b. Recognize that the DV is not maintaining proper position in the platoon formation.	FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	Conduct target acquisition.		c. Direct the DV to maintain 100 meter interval with the PL's tank. The student will apply the following target acquisition techniques during the movement: - Orient surveillance toward the right front of the movement direction. - Orient LD surveillance toward the left front and left flank of the movement direction.	FM 17-12 and Tank Platoon SOP
	Identify terrain features (natural and man-made) on a map.		The student will identify the following along the route during the movement: - Ambush sites, e.g., bridges, underpasses, cuts, terrain defiles. - Enemy possible firing positions with fields of fire to 3000 meters.	FM 21-2
	Determine location on the ground by terrain association.		The student will determine his location on the ground by associating his location with identifiable terrain features along the route.	FM 21-3
TOTAL TASKS: 5 (4 original tasks, 1 original repeat task)				

ENCLOSURE 3 TO APPENDIX 3
(PREPARE FOR MOVEMENT TO CONTACT OPERATION)
TASK TRAINING AND EVALUATION OUTLINE

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The platoon guide directs TC 12 toward his assigned area in the forward assembly area. The PL arrives at TC 12's position and tells him that a fuel truck is on its way, for his crew to complete post ops maintenance, and to be prepared for a new operations within the next two hours. (See Encl 6 to App. 3. Student will complete tasks listed in the TASKS column.	Select a firing position.	Given an M1 tank that has a full load of ammunition and all communications are operational.	The student will perform the following: a. Direct DV into a temporary firing position. b. Select primary firing position that provides: - Hardstand - Concealment - Hull-down firing without limiting CN's field of fire - Level surface - Coverage of assigned sector of fire - Ease of entering and exiting c. Direct DV into primary firing position.	FM 17-19K3
	Supervise after operations checks and services on an M1 tank.		The student will perform the following: a. Assign specific after operations checks and services responsibilities to each crewmember. b. Monitor crewmember's performance.	TM 9-2350-255-10

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	• Install/operate hot loop wire communications.		c. Record all deficiencies noted on DA Form 2404 d. Indicated deficiencies corrected on DA Form 2404. e. Report deficiencies not corrected to support maintenance. The student will perform the following: a. Prepare WD-1/TT as follows: - Separate WD-1/TT into two separate lines. - Strip back insulation 1 inch from the end of both wires. - Double over each stripped section and twist. - Tape splices to prevent shorting. b. Connect wire to AN-1780/VRC. - Insert one of the twisted ends of the wire into a line post on the AN-1780/VRC. - Insert the other twisted end of the wire into a line post on the AN-1780/VRC. c. Set AN-1780/VRC and intercom control boxes as follows: - AN-VRC/1780 • MAIN PWR switch to NORM • INT ACCENT switch to ON • RADIO TRANS switch to LISTENING SILENCE - Intercom control sets • C2298 and C2297 MONITOR switch to ALL. • DV's C2297 SIG switch to EXT	FM 17-19K3

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The PL assembled the TCs and issued an operation order with a strip map (Encl to Encl 2 to App. 5) for a movement to contact operation. (See Incl 2 to App. 5.) The PL also indicated that the platoon net would open 30 minutes before the platoon crossed the SP. (See Encl 6 to App. 3. The	* Use an automated communications electronics operation instructions (CEOI).		The student will perform the following: - Find the item number of the CEOI extract. - Find TC 12's call sign. - Find a challenge and reply authentication. - Find an item number identifier.	FM 21-3
	* Use the KTC 1400D numerical cipher/authentication system.		The student will perform the following: - Encode a plain text message. - Decode an encoded message. - Reply to a challenge to authenticate.	FM 17-19K3
	* Enter or <u>leave</u> a radio net.		The student will perform the following: - Request permission to leave the net. - Inform the NCS the reason for leaving the net. - Authenticate upon direction from the NCS.	FM 17-19K3, FM24-1
	* Conduct a map reconnaissance.		The student will transcribe the following information from the strip map onto his military map acetate overlay: - Location of the current assembly area and the objective (Hill 609). - Location of the SP, PP, and CPs. - The movement to contact route.	1:50,000 map, an operation order, and an operation overlay

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
student will perform the tasks listed in the TASKS column.)			The student will study the military map to determine the following, along the movement route, from the cavalry screen to the objective: - Defiles - Defile by-passes - Obstacles out to 500 meters left and right of the movement route 3000 meter fields of fire - Possible enemy firing positions - Overwatch positions	
	* Use marginal information on a map.		The student will determine from symbols in the marginal information on the military map the following: - Type of road the movement route is. - Classification of bridges the movement route crosses. - Impassable areas up to 200 meters left and right of the movement route.	FM 21-26
	* Identify terrain features (natural and man-made) on a map.		The student will identify the following terrain features along the movement route: - Ambush sites, e.g., bridges, underpasses, cuts, terrain defiles. - Possible enemy firing positions within fields of fires to 3000 meters.	FM 21-2

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	* Prepare and issue an oral operation order.		The student will announce the following: - The enemy situation - The friendly situation (team and platoon) - The crew mission - How the crew mission will be performed - Priority of fires - Coordinating instructions - Logistical support - Command and signal information EXAMPLE: TC refers crewman to map overlay. "Elements of 327 MRD are still to our front. Mounted recon patrols have been operating between GREEN River - here - and the 3d Cavalry screen - here. Enemy has chemical and nuclear capability and limited air capability. Team A conducts a movement to contact east oriented on Hy N4, seizes Hill 609, and supports following units crossing over GREEN River. 1st Platoon leads the team movement, crosses the SP - here - at _____ hours, in column formation, passes through 3d Cav screen at the passage point and immediately changes to a staggered column formation. Our mission is to maintain the PL's wingman position at all times. Crewmembers be alert for PL's hand and arm signals. LD maintain air guard and left flank ground surveillance. I've checked this	FM 17-19K4

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	* <u>Enter</u> or leave a radio net.		area and this area for possible ambush sites. Also these three areas for possible enemy long range direct fire. Priority targets enemy tanks and anti-tank positions. MOPP Level _____ in effect upon leaving assembly area. Priority of fires initially to first platoon. Team trains to be located vicinity of _____. All logistic items SOP. PL leads platoon. Current CEOI in effect, password and challenge is FOUR/ROSES, platoon frequency is _____, alternate platoon frequency is _____, team frequency is _____, emergency signal to withdraw or break contact is one red star cluster. Time is _____. Any questions?" The student will perform the following: - Enter the net in the proper station sequence. - Correctly respond to an authentication challenge. - Correctly challenge the PL (NCS).	FM 17-19K3, FM 24-1
TOTAL TASKS: 11 (4 original tasks, 7 original repeat tasks)				

ENCLOSURE 4 TO APPENDIX 3

(CONDUCT MOVEMENT TO CONTACT)

TASK TRAINING AND EVALUATION OUTLINE

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The platoon moves out of the assembly area in a column formation, crosses the SP, passes through the PP at the cavalry screen, and is moving west, oriented on Hy N4, in a staggered column formation. (See Encl 6 to App. 3. The Student will perform the tasks listed in the TASKS column.	* Maintain position in platoon formation.		Given an M1 tank that has been refueled, all communications operational, and a signal from the platoon leader to move out on the movement to contact operation. The student will perform the following: - Recognize platoon leader's signals to maintain proper position in the platoon formation. or - Recognize that the DV is not maintaining proper position in the platoon formation. - Direct the DV to maintain a position of not more than 300 meters or less than 100 meters to the left or right of the PL's tank. - Direct the DV to maintain a position of not more than 300 meters or less than 100 meters to the rear of the PL's tank.	FM 17-15 (TEST), Tank Platoon SOP, and team movement order

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The platoon continues moving in a staggered column, east along Hy N4. All of a sudden the driver reports that the engine oil pressure low light is lit. TC 12 directs the driver to move the tank into a defilade position, shut down the engine, and to check the engine oil	* Conduct target acquisition.		NOTE: Lateral and depth intervals apply to staggered column and combat wedge formations. Lateral interval applies only to the line formation and depth interval applies only to the column formation. The student will apply the following target acquisition techniques during the movement: - Orient surveillance during movement toward the right front of the movement direction. - Orient LD surveillance toward the left front and left flank of the movement direction. - Search for possible enemy firing positions.	FM 17-12
	* Determine location on the ground by terrain association.		The student will determine his location on the ground by associating his location with identifiable terrain features along the route.	FM 21-3

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
level. The driver reports the engine oil was low and he had added sufficient oil that the dipstick indicated a full reading. The TC directs the driver to start the engine. The driver does so and reports that the engine oil pressure low light does not light. During the engine oil check the team executive officer stopped to inquire about the problem. After the TC explained the situation the Ex O directed the TC to rejoin his platoon as soon as he could. At this time TC 12 is fifteen minutes behind the 1st Platoon. TC 12 directs the driver to move out and proceed east along Hy N4 at 60 KMPH. After moving about five kilometers Tank 12 is strafed by two enemy high performance aircraft. (See Encl 6 to App. 3. The student will perform the tasks listed in the TASK column.)	- React to air attack (drill) (This is not a task listed in the 19K10-40 master task list.)		The student will perform the following: - Alert the crew by announcing AIR ATTACK and the clock direction of the threat (TWELVE O'CLOCK). - Direct the DV to move half right (or half left), to accelerate to maximum speed, and to seek cover and concealment. - Submit a SPOTREP after action is over.	FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	Engage targets with the caliber .50 M2 HB machinegun on an M1 tank.		d. Submit a SPOTREP after action is over. The student will perform the following: a. Load the machinegun. b. Engage targets within 10 seconds of acquisition. c. Hit or "drive off" enemy aircraft. d. Apply immediate action if stoppage occurs.	FM 17-19K3
	- Submit a spot report (SPOTREP). (This is not a task listed in the 19K10-40 master task list.)		The student will perform the following: a. Submit a spot report (SPOTREP) on the enemy aircraft attack to include: - size - activity - location - unit (omit) - time - equipment b. Include in the report what the TC is doing about the situation. EXAMPLE: "THIS IS G3F06. SPOTREP. TWO MIG21 STRAFING ATTACK AT MB289546, AT 191206 ROMEO, BELIEVED ARMED RECON. CONTINUING MISSION."	FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The enemy planes leave the area so the TC directs the driver to get back on Hy N4 and proceed to rejoin the platoon. As Tank 12 approaches RJ N4-N22 it is fired on by an enemy ATGM. (See Encl 6 to App. 3. The student will perform the tasks listed in the TASKS column.)	* Conduct target acquisition. * D. Decide where TC and LD will search for targets. * Direct evasion of an enemy anti-tank guided missile. (React to ATGM attack) (DRILL) * PS. Estimate how much time is available to prevent the enemy from destroying the tank.		The student will apply the following target acquisition techniques during the movement. - Orient TC surveillance toward the front and right front of the movement direction. - Orient LD surveillance toward the left front and left flank of the movement direction. - Search possible enemy firing positions for targets. The student decides most likely direction of enemy threat and directs surveillance be oriented in those directions. Student considers that the tank is moving alone. The student will perform the following: - Alert the crew with a contact report, e.g., SAGGER-SAGGER-SAGGER-TWO O'CLOCK. - Direct DV to accelerate and to take evasive action. - Direct DV toward full defilade position. - Engage missile launch site with main gun. - Fire smoke grenades. The student knows the missile speed, distance between the missile and the tank, speed of the tank, and distance to	FM 17-12 Decision lesson plan FM 17-19K 1/2 Problem solving lesson plan

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	• PS. Judge how much a smoke screen will protect the tank from enemy direct fire.		defilade and estimates how much time is available to prevent the enemy from destroying the tank. The student knows missile gunner must maintain reticle lay on a target to hit the target. Student judges smoke screen will prevent constant reticle lay on the target and therefore the smoke screen will protect the tank from enemy direct fire.	Problem solving lesson plan
	• D. Decides whether or not to fire smoke grenades.		The student decides whether tank can reach defilade before missile reaches tank. If defilade is too far away smoke grenades are fired. (When in doubt fire smoke grenades.)	Decision lesson plan
	• Direct main gun engagements on an M1 tank.		The student will perform the following: - Acquire and identify the target as a threat. - Lay main gun for deflection on missile launch site. - Issue a fire command.	FM 17-19K3
	• Issue a fire command.		The student will perform the following: - Announce the alert (GUNNER). - Announce the ammunition (HEAT). - Announce target description (MISSILE LAUNCH SITE). - Announce the execution (FIRE). NOTE: Other simultaneous actions will preclude subsequent fire	FM 17-12-1

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	• Fire an M250 grenade launcher on an M1 tank. *- Submit a spot report (SPOTREP). (This is not a task listed in the 19K10-40 master task list.)		commands. GN continues firing 15 meters left and right of suspected missile launch site until smoke, defilade, or TC, CEASE FIRE stops action. The student will perform the following: - Select SALVO 1 and or SALVO 2 modes. - Place smoke between the tank and the missile gunner. - Perform required misfire procedures. The student will perform the following: - Submit a spot report (SPOTREP) on the enemy ATGM attack to include: - size - activity - location - unit (omit) - time - equipment - Include in the report what the TC is doing about the situation. EXAMPLE: "THIS IS G3F06. SPOTREP. ONE ATGM LAUNCHER STATIONARY AT MB289546, AT 191215 ROMEO. FIRED ONE ROUND. IN DEFILADE. CALLING FOR INDIRECT FIRE. WILL DISENGAGE AND CONTINUE MISSION."	FM 17-19K3 FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
Tank 12 has reached a defilade position but the TC is unable to move it into a position to reengage the enemy. TC 12 observes the suspected enemy position with binoculars and sees movement in the area. (See Encl. 6 to App. 3. The student will perform the tasks listed in the TASKS column.)	* Determine a location on the ground by terrain association.		The student will determine his location on the ground and the suspected enemy location on the ground by associating these locations with identifiable terrain features in the area.	FM 21-3
* Call for and adjust indirect fire.			The student will perform the following: - Locate target by grid coordinates. - Determine the direction from his position to the target. - Leave the platoon net. - Change frequency to FDC frequency. - Enter FDC net. - Transmit call for fire to FDC. - Announce observer identification (call sign). - Announce warning order (adjust fire). - Give location of target (grid). - Give description of target (enemy missile launch site). - Give method of engagement (four rounds HE fuze quick, four rounds WP, no adjustment).	FM 17-19K 1/2

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
While the indirect fire was falling on the suspected enemy missile launch site TC 12 directed the driver to move out to the east, parallel to Hy N4, and to generate smoke.	- Direct DV to move out and generate smoke. (This is not a task listed in the 19K10-40 master task list.)		The student will direct the DV to move out and to generate smoke.	TM 9-2350-255-10
As Tank 12 moved east along Hy N4 the TC observed a log obstacle across the road. The TC directed the LD to dismount and to check the obstacle. When the LD was within 50 meters of the obstacle he was fired upon by a sniper from his right front. (See Encl 6 to App. 3. The student will perform the tasks listed in the TASKS column.	* Conduct target acquisition. * Issue a fire command.		The student will search for the sniper's firing position. The student will perform the following: - Announce the alert (CAL .50). - Announce target description (SNIPER). - Announce the execution (ON THE WAY).	FM 17-12 FM 17-12-1
	* Engage targets with the caliber .50 M2 HB machinegun on an M1 tank.		The student will perform the following: - Load the machinegun. - Engage the target within 7 seconds of acquisition. - Hit or suppress enemy target. - Apply immediate action if stoppage occurs.	FM 17-19K3

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	*- Submit a spot report (SPOTREP). (This is not a task listed in the 19K10-40 master task list.)		The student will perform the following: a. Submit a spot report (SPOTREP) on the enemy sniper attack. - size - activity - location - unit - time - equipment b. Include in the report what the TC is doing about the situation. EXAMPLE: "THIS IS G3F06. SPOTREP. ONE SNIPER KIA AT MB289546, AT 191220 ROMEO. BELIEVED PART OF STAY BEHIND PATROL. CONTINUING MISSION."	FM 17-15 (TEST)
Tank 12 continues east on Hy N4. Ahead the TC sees a tight terrain defile filled with abatis. He observes the area with his binoculars but does not detect any activity. To the right front the TC sees a trail. He decides to bypass the defile. AS Tank 12 comes around the edge of the hill during the bypass the TC sees one enemy tank followed by a BMP, at 800 meters range, and coming toward him on Hy N4. (See Encl 6 to App. 3. The student will	* Conduct target acquisition. * PS. Compare the lethality of multiple enemy targets. * D. Decide sequence in which to engage multiple targets. * PS. Identify the least powerful weapon or ammunition required to destroy the enemy targets.		The student will search the area to his front for enemy activity, the extent of the obstacle, and a possible bypass route.	FM 17-12
			The student knows that a T72 moving toward him is more lethal than a BMP following the T72.	Problem solving lesson plan
			The student decides to engage the T72 first.	Decision lesson plan
			The student knows the main gun will be required to destroy the target because of target's armor protection.	Problem solving lesson plan

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
perform the tasks listed in the TASKS column.)	D. Choose appropriate gun ammunition. - PS. Judge from battlefield cues the amount and kind of damage inflicted upon an enemy target. D. Decide when to stop firing. * Direct main gun engagements on an M1 tank. * Issue a fire command.		The student decides to fire SABOT at the T72 and the BMP (surprise targets). The student knows target damage cues, e.g., explosion, smoke, fire no movement, no threat posture, no enemy return fire, surrender gestures. The student decides from battlefield cues or reports from other crewmembers that target has been destroyed. The student will perform the following: - Acquire and identify the targets as threats. - Lay main gun for deflection on most dangerous target. - Issue a fire command. The student will perform the following: - Announce the alert (GUNNER). - Announce the ammunition (BATTLESIGHT). - Announce target description (TANK AND PC - TANK). - Announce the execution (FIRE). - Announce termination of first engagement (TARGET - PC). - Announce the execution (FIRE). - Announce termination of second engagement (TARGET - CEASE FIRE).	Decision lesson plan Problem solving lesson plan Decision lesson plan FM 17-19K3 FM 17-12-1

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
After destroying the two enemy vehicles and reporting the action to the PL the TC directs the DV to move the tank out along By N4. At this time the TC receives the following report from the PL. "NBC-1, CHEMICAL - DELTA - 26 0900 ROMEO, FOXTROT - NB783089, NB784050, NB790025, NB790130, GOLF - ARTILLERY, HOTEL - VAPOR." The TC notes the location of the chemical attack on his map and discovers the	*- Submit a spot report (SPOTREP). (This is not a task listed in the 19K10-40 master task list.)		The student will perform the following: a. Submit a spot report (SPOTREP) on the enemy surprise targets. - size - activity - location - unit - time - equipment b. Include in the report what the TC is doing about the situation. EXAMPLE: "THIS IS G3F06. SPOTREP. ONE T-72 AND ONE BMP DESTROYED AT NB289546, AT 191225 ROMEO. BELIEVED CONDUCTING RECON. CONTINUING MISSION."	FM 17-15 (TEST)
	D. Decides whether or not to close hatches.		The student decides to close the hatches to reduce the risk of chemical contaminants entering the crew compartments during passage over the contaminated area.	Decision lesson plan
	Implement mission oriented protective posture (MOPP).		The student directs crewmembers to implement MOPP Level 4.	FM 21-3

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
contaminated area covers 200 meters of Hy N4 and there are no bypasses around the area. When Tank 12 gets within 200 meters of the contaminated area the TC directs the DV to halt. (See Encl 6 to App. 3. The student will perform the task listed in the TASKS column.)	* D. Decide whether or not to open hatches. * Initiate unmasking procedures.		The student decides to open hatches after checking for chemical agents and getting a negative reading. The student will perform the following: - Direct LD to unmask for 5 minutes. - Direct LD to mask for 10 minutes. - Check LD for chemical symptoms. - Direct crewmembers to unmask.	Decision lesson plan
After passing through the contaminated area the TC directs the DV to halt. The TC checks for chemical agents and gets negative results. (See Encl 6 to App. 3. The student will perform the tasks listed in the TASKS column.)	* Implement mission oriented protective posture (MOPP). * D. Decide whether or not to close hatches.		The student directs crewmembers to implement MOPP Level 2 but to keep their gloves on. The student assumes all enemy indirect fire includes chemical munitions and therefore he orders crewmembers to close the hatches.	FM 21-3 FM 21-3 Decision lesson plan

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
the tank is bracketed by indirect artillery fire. (See Encl 6 to App. 3. The student will perform the tasks listed in the TASKS column.)	- React to indirect fire (drill). (This is not a task listed in the 19K10-40 master task list.)		The student will perform the following: a. Direct crewmembers to implement MOPP Level 4. b. Direct DV to accelerate the tank and maintain original movement direction.	FM 17-15 (TEST)
	*- Submit a spot report (SPOTREP). (This is not a task listed in the 19K10-40 master task list.)		The student will perform the following: a. Submit a spot report (SPOTREP) on the enemy indirect fire. - size - activity - location - unit (omit) - time - equipment b. Include in the report what the TC is doing about the situation.	FM 17-15 (TEST)
After passing through and beyond the enemy indirect fire area the TC directs the DV to halt. The TC checks for chemical agents and gets negative results. (See Encl 6 to App. 3. The	*Initiate unmasking procedures.		EXAMPLE: "THIS IS G3F06. SPOTREP. FOUR ROUNDS ONE FIFTY TWO MM ARTILLERY AT MB289546, AT 191230 ROMEO, BELIEVED UNOBSERVED FIRE. CONTINUING MISSION." The student will perform the following: a. Direct LD to unmask for 5 minutes. b. Direct LD to mask for 10 minutes. c. Check LD for chemical symptoms.	FM 21-3

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
student will perform the tasks listed in the TASKS column.)	* Implement mission oriented protective posture (MOPP). * D. Decides whether or not to open hatches.		d. Direct crewmembers to unmask. - The student directs crewmembers to implement MOPP 2 but to keep their gloves on. - The student decides to open hatches after getting a negative reading from using the M256 chemical detector.	- FM 21-3 - Decision lesson plan
The TC directs the DV to move out and after 5 minutes Tank 12 rejoins the 1st Platoon.				
TOTAL TASKS: 44 (8 original tasks, 14 original repeat tasks, 5 problem solving tasks, 7 decision tasks, 2 decision repeat tasks, 4 non IK10-40 tasks, and 4 non 19K10-40 repeat tasks.				

ENCLOSURE 5 TO APPENDIX 3
(OCCUPY AND DEFEND BATTLE POSITION)
TASK TRAINING AND EVALUATION OUTLINE

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
Team A occupied Hill 609 and reorganized. 30 minutes later the team received a frag order to move south 10 kilometers and to occupy and defend Hill 500. The team commander issued a frag order for the 1st Platoon to move out immediately and occupy and organize Hill 482 as a defensive position.	* Select a firing position.	Given an M1 tank fully rearmed, refueled, and all communications operational.	The student will perform the following: a. Select primary firing position that provides: - Hardstand - Concealment - Hull down firing without limiting GN's field of fire - Level surface - Coverage of assigned sector of fire - Ease of entering and exiting	FM 17-19K3
The 1st Platoon arrives at the base of Hill 482 and moves into a hide position. The PL signals the TCs to dismount and join him just below the crest of the hill. From that vantage point the PL explains how the position will be defended. "We are at the point, Hill 482. 3d Infantry				

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
Platoon is on our right and 2d Tank Platoon is on our left. Our sector of fire right reference point is that bridge and our sector of fire left reference point is that silo. TC 12 you will be on my right, your primary firing position is that area, your sector of fire right boundary is the same as the platoon's right boundary, your sector of fire left boundary reference point is that road junction. (See Encl 3 to App. 5. PL next indicates the primary firing position and sectors of fire for Tanks 11, 13, and 14.) Here are the locations of TRPs and artillery concentrations we'll use. Now priority for setting up the defense is: select primary and alternate firing positions, move tanks into full defilade at primary positions, make sketch range cards and give me a copy, install hot loop. PS set up an OP of two men on that low ridge 1000 meters to our front, and get the chemical	* Identifies terrain features (natural and man-made) on a map. Analyze terrain using the five military aspects of terrain.		b. Direct DV into primary firing position. c. Select alternate firing position that has the same characteristics as the primary firing position. The student will identify the following terrain features within his sector of fire and area of influence: a. Terrain feature where the tank is b. Terrain feature which indicates TC's right and left sector boundaries c. Terrain feature which indicates TC's center of sector d. Obstacles e. Man-made objects The student will indicate the following: a. Areas within the TC's sector of fire which can be observed	FM 21-3 FM 21-3

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
			- center of sector - right and left adjacent vehicles primary firing positions - left sector boundary reference point of right adjacent vehicle - right sector boundary reference point of left adjacent vehicle platoon TRPs - platoon indirect fire concentrations c. Complete the sketch as follows: - Indicate the primary firing position with the  tank symbol. - Extend a double line from the tank symbol to the sector of right boundary reference point and then from the tank symbol to the sector left boundary reference point. - Extend a single line from the tank symbol to each TRP and the  center of sector symbol. - Measure the distance on the map from the tank symbol to the point of destination of each double and single line and enter the appropriate range on each double and single line. - Extend a dashed single line from the right adjacent vehicle symbol  to that vehicle's sector	

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	* Install/operate hot loop wire communications.		left boundary reference point, then extend a dashed single line from the left adjacent vehicle symbol  to that vehicle's sector right boundary reference point. - Add letter and or number designators to platoon TRPs and platoon indirect fire concentrations. - Indicate on the sketch, with temporary symbols, required additional TRPs (+ symbol) and indirect fire concentrations (○ symbol). d. Request approval from the PL of required additional TRPs, and from the FIST indirect fire concentrations. e. Indicate approved and additional TRPs and indirect fire concentrations on the sketch. Remove temporary symbols of TRPs and indirect fire concentrations which were not approved, from the sketch. f. Make a copy of the sketch range card and give it to the PL. The student will perform the following: a. Prepare WD-1/TT as follows: - Separate WD-1/TT into two separate lines. - Strip back insulation 1 inch from the end of both wires.	FM 17-19K3

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	• Install/remove the automatic chemical alarm system.		- Double over each stripped section and twist. - Tape splices to prevent shorting. b. Connect wire to AM-1780/VRC. - Insert wire of one of the twisted ends of the wire into a line post on the AN-1780/VRC. - Insert the other twisted end of the wire into a line post on the AN-1780/VRC. c. Set AN-1780/VRC and intercom control boxes as follows: - AN-1780/VRC • MAIN PWR switch to NORM • INT ACCENT switch to ON • RADIO TRANS switch to LISTENING SILENCE - Intercom control sets • C2298 and C2297 MONITOR switch to ALL • DV's C2297 switch to EXT The student will perform the following: a. Perform power test on M43 detector and M42 alarm unit. - Connect one end WD-1 wire to the terminal on the detector and the other end of the WD-1 wire to the terminal on the alarm. - Remove the plug on top of the air inlet of the detector.	FM 21-3, TC 3-3, TM 3-6665-225-12

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
			- Press zero adjust knob on the detector unit, rotate it fully clockwise and release it. - Rotate vol-battery test knob on alarm unit fully clockwise. - Notify personnel within hearing distance that a test is to be made. - Connect BA 3517/V battery cable to 24 VDC connector on the detector unit. - Listen for a BEEP from the detector unit and alarm unit. Look for flashing RED light on alarm unit. - Switch alarm unit knob pointer to HORN OFF or disconnect field wire from one terminal on detector kit. - Adjust vol-battery test knob for desired audio level. - Press and turn zero adjust knob counterclockwise.	b. Perform air flow test on detector unit handle and snap it on the adapter. - Check that ball in air flow meter floats in correct zone. - Press in zero adjust knob of detector unit and rotate it fully. - Check air flow every 2 minutes after pressing in zero adjust knob. - After 10 minutes of correct air flow press in zero adjust knob of detector unit while

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
			pressing in hand crank and turning hand crank 50 times. - Release hand crank and set zero adjust knob for a meter reading in the BLUE. c. Perform sensitivity test on the detector unit and alarm unit. - Unscrew the cap from the sensitivity bottle. - Disconnect the BA 3527/V battery from the 24 VDC connector. - Switch alarm unit knob pointer to HORN ON or reconnect field wire. - Unscrew air filter plug on the detector unit. Slide out air filter. Squeeze 2 drops of liquid from sensitivity check bottle on the black (top) part of air filter. - Slide air filter into detector unit and screw in air filter plug. - Press and hold zero adjust knob on detector unit, connect BA 3517/V battery to the 24 VDC connector and hold zero adjust knob 5 seconds. - Disconnect BA 3517/V battery from 24 VDC connector on detector unit to stop alarm signals. - Replace the used air filter with a new one.	

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
			- Connect BA 3517/V battery to the 24 VDC connector. - Conduct one last check. Press in and turn zero adjust knob on the detector unit to set the meter reading in the BLUE zone. - After 5 minutes check the meter reading the same way. - Remove air flow meter from adapter and screw it into the handle. - If raining or sleeting unscrew rainshield from handle and snap it on the adapter. - If snowing or below 32°F leave adapter installed. - If above weather conditions do not exist unscrew adapter, snap it onto the rainshield and stow both in the handle. Turn air inlet to open, screw on air inlet cap. d. Position M43 detector unit at site designated by PL or PS. - Ensure site is not less than 150 meters nor more than 400 meters from the position to be protected. - Ensure site is not more than 300 meters from adjacent automatic chemical alarm system. - Ensure site is located upwind from the position to be protected.	

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The crew has completed its preparation for the defense of Hill 482. TC 12 is maintaining surveillance in his sector from a protected open hatch position. The tank is in turret defilade. The TC acquires a ZU-23 anti-aircraft vehicle moving into a kill position at 4000 meters. (The student will perform the tasks listed in the TASKS column.)	* Supervise after operations checks and services on an M1 tank.		NOTE: All pre-ops checks and pre-start checks have been completed prior to this task and the automatic chemical alarm system is functional. The student will perform the following: a. Assign specific after operations checks and services responsibilities to each crew member. b. Monitor crewmember's performance. c. Record all deficiencies noted on DA Form 2404. d. Indicate deficiencies corrected on DA Form 2404. e. Report deficiencies corrected to support maintenance.	TM 9-2350-255-10
	* Conduct target acquisition.		The student will apply the following target acquisition techniques while maintaining surveillance in his sector: a. First scan sector, without optics, alternating right to left and overlapping and extending forward each sweep. b. If no targets are found in initial search repeat the process with binoculars.	FM 17-12

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	* Determine a location on the ground by terrain association. * Call for and adjust indirect fire.		The student will determine the location of the ZU-23 by associating its location with identifiable terrain features. The student will perform the following: - Locate target by shifting from a known point. - Determine direction from his position to the target. - Leave the platoon net. - Change frequency to FDC frequency. - Enter FDC net. - Transmit call for fire to FDC. - Announce observer identification (call sign). - Announce warning order (adjust fire). - Give location of target (in relation to reference point known by observer and FDC). - Give description of target (enemy anti-aircraft weapon). - Give method of engagement (HE fuze quick). - Adjust fire on target. - Spot round as over, short, right, or left. - Make range changes. - Make deviation (deflection) changes. - Transmit corrections to FDC in meters. - Initiate fire for effect. - Report results of fire for effect.	FM 21-3 FM 17-19K 1/2

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	* Estimate range.		h. Leave FDC net. i. Change frequency to platoon frequency. j. Enter platoon net. The student will determine if the first range adjustment should be 400 meters or 800 meters. NOTE: This task performed during adjust fire on target, sub-standard above.	FM 21-2
At this time the enemy implements electronics jamming. (The student will perform the tasks listed in the TASKS column.)	* Recognize electronics counter measures (ECM) and implement electronics counter-counter measures (ECCM).		The student will perform the following: a. Determine if ECM is being employed. - Accidental or unintentional interference * Friendly unit in same frequency * Faulty components in radio set * Bad weather conditions * High-power electric lines * Nearby generator * Ignition noise from vehicles - Intentional interference * Meaconing * Intrusion * Jamming * Interference b. Initiate operator's procedures. - Check equipment ground. - Disconnect antenna.	FM 17-19K3

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
			* If noise persists problem is radio. * If noise diminishes problem from outside. - Identify noise. * Generator set nearby. * Atmospheric conditions. * Vehicle engine nearby. - Move receiver or reorient antenna. - Turn receiver a few kilohertz above or below normal frequency. c. Identify jamming signals: - babbling voice, tone, randomized keyed Morris code, pulse, recorded sounds, gulls, random noise, stepped tones, random pulse, spark, wobbler, rotary. d. Employ anti-jamming measures. - Remain calm. - Continue to operate. - Do not admit being jammed. - Adjust fine tune, gain control, bandwidth control, bandwidth selector, crystal filter. - Increase transmitter power. - Reorient or resite antenna. - Reduce transmission speed. e. If anti-jamming measures are unsuccessful, contact C&E officer and request spare frequency. f. Prepare and submit MLIJI report to team Ex O.	

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The electronics jamming has stopped. The student continues surveillance in his sector and acquires two T72s and one BMP. (See Encl 6 to App. 3. The student will perform the tasks listed in the TASKS column.)	* Conduct target acquisition.		The student will apply the following target acquisition techniques while maintaining surveillance in his sector: - First scan, sector, without optics, alternating right to left and left to right and overlapping and extending forward each sweep. - If no target is found in initial search repeat the process with binoculars.	FM 17-12
* PS. Compare the lethality of multiple enemy targets.			The student knows that a T72 stationary and facing toward him is more lethal than a T72 moving away from him and a BMP at a greater range.	Problem solving lesson plan
* D. Decide sequence in which to engage multiple targets.			The student decides to engage the stationary T72 first.	Decision lesson plan
* PS. Identify the least powerful weapon or ammunition required to destroy the enemy targets.			The student knows the main gun will be required to destroy the targets because of their armor protection.	Problem solving lesson plan
* D. Choose appropriate main gun ammunition.			The student decides to fire SABOT at the T72s and the BMP	Decision lesson plan
* PS. Judge from battlefield cues the amount and kind of damage inflicted upon an enemy target.			The student knows target damage cues, e.g., explosion, smoke, fire, no movement, no threat posture, no enemy return fire, surrender gestures.	Problem solving lesson plan

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	* D. Decides when to stop firing.		The student decides from battle-field cues or reports from other crewmembers that the target has been destroyed.	Decision lesson plan
	* Direct main gun engagements on an M1 tank.		The student will perform the following: a. Acquire and identify the targets as threats. b. Lay main gun for deflection on most dangerous target. c. Issue a fire command.	FM 17-19K3
	* Issue a fire command.		The student will perform the following: a. Announce the alert (GUNNER). b. Announce the ammunition (SABOT). c. Announce target description (TWO TANKS - ONE - PC - STATIONARY TANK). d. Give instructions to DV and GN (DV - MOVE OUT - GN - TAKE OVER). e. Announce the execution (FIRE). f. Announce termination of first engagement and new targets (TARGET - MOVING TANK). g. Announce the execution (FIRE). h. Announce termination of second engagement and new target (TARGET - PC). i. Announce the execution (FIRE). j. Announce termination of third engagement (TARGET - CEASE FIRE). k. Give instructions to DV (DV - BACKUP - DV - STOP).	FM 17-12-1

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The crew destroyed the two T72s and the BMP. At this time the LD reports that his right arm had been struck by the main gun recoil during the last engagement. The TC checked the LD's arm and determined that it was broken. The TC directed the LD to dismount from the tank and report to the medics at the team CP. (The student will perform the tasks listed in the TASKS column.)	Employ a three-man crew.		The student will perform the following: a. Reorganize remaining personnel for three-man crew operation. - Direct GN to move to LD position and assume LD's duties. - Announce to the crew that the GN's position will be vacant. b. Direct and set fire control system for three-man crew operation. - Place MAGNIFICATION lever on GPS to LOX. - Place FIRE CONTROL MODE switch in NORMAL position. - Place thermal imaging system (TIS) in STBY. - Place laser rangefinder in operation. (Manual operation will be in the ARM LAST return.) - Arm laser rangefinder by moving RANGE switch from SAFE to ARM 1ST RTN or ARM LAST RTN. - Check fault symbol "F" in GPS and FIRE CONTROL MALF indicator light on commander's panel by moving laser (RANGE switch to SAFE position. If both indicators stay on conduct computer self test. - Set RANGE switch to either ARM position.	FM 17-12-1, RP 79-14

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
			- Direct LD to set TARGET/GUN DRIVE switch to POWERED position. - Set GUN SELECT switch to MAIN position. - Set AMMUNITION SELECT SWITCH on proper ammunition. - Check that computer has correct battlesight ranges pre-indexed for each type ammunition. c. Review modified fire commands with the crew. - Explain ALERT element. - Explain there is no change in AMMUNITION element. - Explain target DESCRIPTION element is deleted. - Explain RANGE element is deleted. - Explain EXECUTION element is ON THE WAY. - Explain TERMINATION element is CEASE FIRE.	
	* PS. Estimate the ability of a remaining crewman to substitute for another when a crewman is lost due to injury or illness. * D. Decide whether or not a crewman must be evacuated due to injury or illness.		The student indicates his confidence with GN's ability to perform LD duties. The student decides that the LD with a broken arm must be evacuated.	Problem solving lesson plan Decision lesson plan

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
At this time Hill 482 is hit with sixteen rounds of enemy 152mm artillery fire. The automatic chemical alarm sounds and the hot loop goes out. (Student will perform the tasks listed in the TASKS column.)	* D. Decides whether or not to close hatches. * Implements mission oriented protective posture (MOPP). * Prepare/submit NBC-1 report.		The student, upon hearing the automatic chemical alarm, closes the commander's hatch. The student directs crewmembers to implement MOPP Level 4.	Decision lesson plan FM 21-3
As the NBC-1 report is being acknowledged a BMP moves into the TC's sector of fire. (The student will perform the tasks listed in the TASKS column.)	* Conduct target acquisition.		The student will prepare and submit an NBC-1 report as follows: a. date-time group attack began b. location of attack c. means of delivery d. type of burst EXAMPLE: "THIS IS G3F06, NBC-1, CHEMICAL, DELTA - 191300 ROMEO, FOXTROT - NB 783089, GOLF - ARTILLERY, HOTEL - VAPOR." The student will apply the following target acquisition techniques while maintaining surveillance in his sector: a. First scan sector, without optics, alternating right and left to right and overlapping and extending forward each sweep. b. If no targets are found in initial search repeat the process with binoculars	FM 21-3 FM 17-12

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	* PS. Identify the least powerful weapon or ammunition required to destroy the target. * D. Choose appropriate main gun ammunition. * PS. Judge from battlefield cues the amount and kind of damage inflicted upon enemy target * D. Decides when to stop firing. * Engage targets with the main gun from the commander's weapon station (CWS) as an MI task. * Issue fire command.		The student knows the main gun will be required to destroy the target because of the target's armor protection. The student decides to fire HEAT at the BMP, thus saving SABOT for a higher priority long range target. The student knows target damage cues, e.g., explosion, smoke, fire, no-movement, no threat posture, no enemy return fire, surrender gesture. The student decides from battlefield cues or reports from other crewmembers that the target has been destroyed. The student will perform the following: - Acquire and identify the target as a threat. - Issue a fire command. The student will perform the following: - Announce the alert (LOAD). - Announce the ammunition (HEAT). - Give instruction to DV (DV - MOVE OUT - DV - STOP). - Announce the execution (ON THE WAY). - Announce termination of engagement (CEASE FIRE).	Problem solving lesson plan Decision lesson plan Problem solving lesson plan Decision lesson plan FM 17-12-1 FM 17-12-1

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The BMP was destroyed. At this time the TC receives the following STRIKEWARN message. "VICTOR THIS IS VICTOR THREE SEVEN. STRIKEWARN. ALPHA - NOVEMBER ECHO ONE ONE EIGHT, DELTA-261400 ROMEO - 261415 ROMEO, FOXTROT NAL23456, HOTEL - AIR, INDIA - MSD-1-10." (The student will perform the task listed in the TASKS column.)	Prepare vehicle (tank) for nuclear attack. (This task is not in the BNCOC course. It is substituted for the task - prepare for an NBC attack - whose performance measures listed in FM 21-3 are more appropriate for a dismounted or supply unit.)		f. Give instructions to the DV (DV - BACK UP - DV - STOP). The student will perform the following: - Direct the removal of all exterior components which could be damaged by the blast and secure them inside. - Direct antenna be removed and stored inside. - Direct all loose equipment in the tank be secured to avoid equipment damage or crew injury. - Close and lock all hatches and close ballistic shields. - Move tank backwards to full defilade. - Point the gun away from the blast. - Direct DV to lock brakes. Lock turret. - Direct crewmembers to wear helmets. - Direct crewmembers to brace for shock and protect their eyes.	FM 17-19K 1/2
The friendly nuclear blast occurred on schedule. The three-man crew has restored exterior components. The PS has reinstalled the hot loop. At this time the PL requests a	Prepare a situation report (SITREP).		The student will prepare and submit a situation report (SITREP) as follows: - reporting unit - location - activity - personnel losses - ammunition required	Tank Platoon SOP

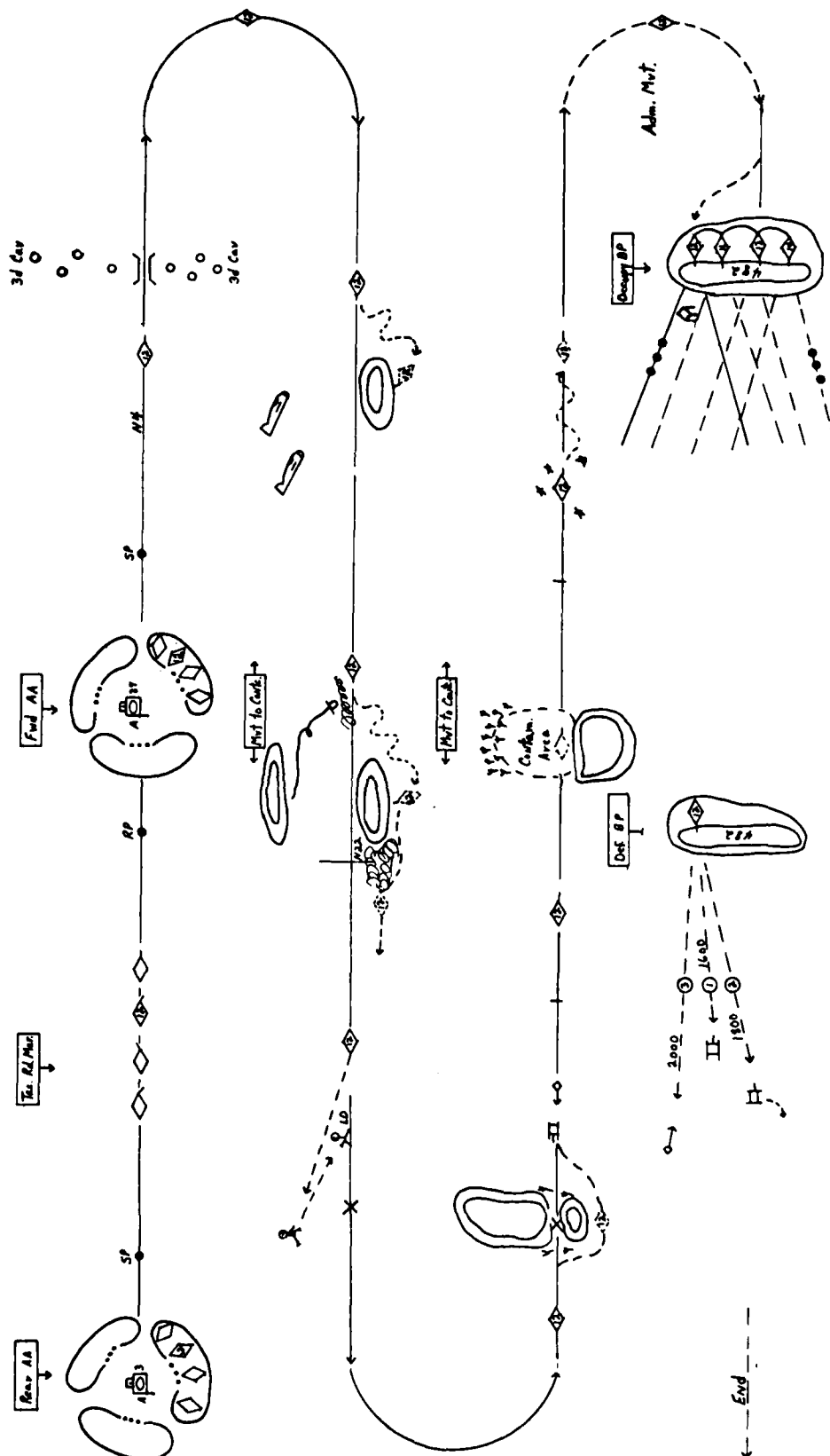
SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
situation report. (The student will perform the task listed in the TASKS column.)			f. PCL required g. equipment required h. remarks EXAMPLE: "THIS IS C3F06. SITREP AS OF 191600 ROMEO. HILL 482. DESTROYED TWO T72S - TWO BMPs - NEGATIVE ENEMY CONTACT - CONTINUING MISSION. LOADER CASUALTY - EVACUATED. EIGHT - SABOT, TWO - HEAT."	
After submitting the SITREP the TC is directed by the PL to move to the rear of Hill 482 and conduct partial decontamination and reorganize. (The student will perform the tasks listed in the TASKS column.)	• Conduct partial decontamination		The student will perform the following: a. Check for chemicals with M8 detection paper. b. Use the M13 kit to decontaminate individual clothing and equipment. c. Use the M11 decon apparatus on hatch openings and external machineguns. d. Use the M256 kit to determine if items are decontaminated.	FM 21-3
	• Use the M256 chemical detector kit.		The student will perform the following: a. Throw away paper between heater and blister spot. b. Check that ampules marked 3, 4, and 5 have liquid inside. c. Pull off tab marked 1. d. Fold over white paper tab marked 2 and rub the top against the tablet. e. Crush all ampules marked 3 with your fingers.	FM 21-3

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	* Initiate unmasking procedures.		f. With test spots lower than the ampules squeeze each ampule 3 so liquid runs onto test spots. g. Swing heater assembly away from blister spot. h. Crush one of two ampules 4. Swing heater over blister test spot. i. Wait 2 minutes, swing heater away from spot, swing hinged protective strip away from spots. j. Put sampler/detector in shady area for 10 minutes. k. Hold sampler/detector by hinged protective strip. Crush last 4 ampules and swing heater over blister test spot. 1. Wait 1 minute. Swing heater away from spot. m. Hold sampler/detector with test spots down. Crush ampules 5. Squeeze ampules to force liquid onto test spots. n. Fold over white paper marked 2 and rub bottom half against the tablet. Compare mark to first mark. o. Turn sampler/detector over and read test results. The student will perform the following: a. Direct GN to unmask for 5 minutes. b. Direct GN to mask for 10 minutes.	FM 21-3

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	* Implement mission oriented protective posture (MOPP). * Direct reorganization on the objective (defensive position).		c. Check GN for chemical symptoms d. Direct crewmembers to unmask. The student directs crewmembers to implement MOPP Level 2 but to keep their gloves on. The student will perform the following: a. Prepare and submit status report (STAREP/SITREP) (Omit, previously submitted). b. Redistribute ammunition within storage compartments. c. Rearm. d. Direct evacuation of wounded/injured personnel (Omit, previously done). e. Direct evacuation of PWs and captured documents and material (Omit, NA). f. Supervise maintenance and emergency repairs. g. Respond to radio check. h. Inventory critical items, e.g., binoculars, compass, night vision goggles, protective masks, etc., and request replacement of missing or damaged items.	FM 21-3 FM 17-19K4
TOTAL TASKS: 41 (12 original tasks, 16 original repeat tasks, 1 problem solving task, 5 problem solving repeat tasks, 1 decision task, and 6 decision repeat tasks)				

ENCLOSURE 6 TO APPENDIX 3

SCENARIO SCHEMATIC



APPENDIX 4
STTX TASK ACCURACY SCORE SHEET

1. There are five task accuracy score sheets, one for each scenario. Each score sheet includes: 1) task statements, 2) points for each task, 3) GO and NO GO blocks for recording points earned or lost by task performance, 4) a block for points earned for each task, and 5) accumulative points for the the scenario. The scoring recapitulation sheet includes for each scenario: 1) scenario title, 2) columns for number of tasks, points for the scenario, and blocks for points earned and lost, and 3) the STTX totals for number of tasks, possible points, and points earned and lost.
2. The scorer initiates the STTX by reading and explaining the first item in the first scenario, and as necessary by indicating to the student the tasks that are to be performed. However, the scorer will not indicate to the student "reaction" tasks that are required as the result of enemy action. The scorer will repeat the process for succeeding actions in the first scenario and the subsequent scenarios. The scorer will ride on the student's tank during the STTX to ensure a comprehensive evaluation of student task performance.
3. The scorer must demonstrate evaluation diversity when administering the STTX. Procedural tasks which require sequential subtask performance will be evaluated objectively using the task standards sequence indicated in the appropriate task training and evaluation outline (TTEO). Procedural tasks which do not require sequential subtask performance will also be evaluated objectively using the task standards in the appropriate TTEO. However, sequence of subtask performance is not a required evaluation criterion. Nonprocedural tasks, e.g., problem solving and decision, will be evaluated subjectively using the task standards in the appropriate TTEO as a guide. Reasonable outcome is the only scoring criterion for evaluating student performance of nonprocedural tasks.
4. The accumulative value of accuracy points represents a student's performance score for the STTX.

**ENCLOSURE 1 TO APPENDIX 4
ACCURACY SCORE SHEET**

Student Name _____ SSN _____

Scenario: PREPARE FOR TACTICAL ROAD MARCH																	
TASK: Supervise Before Operations Checks and Services on an M1 Tank	TASK: Set Headspace and Timing on a Caliber M2 .50 HB Machinegun																
<table style="width: 100%; border: none;"> <tr> <td style="text-align: right; width: 10%;">Points</td> <td style="width: 15%;">GO</td> <td style="width: 15%;">NO GO</td> <td style="width: 15%;">EARNED</td> </tr> <tr> <td style="text-align: right; vertical-align: bottom;">5</td> <td align="center">☐</td> <td align="center">☐</td> <td align="center">☐</td> </tr> </table>	Points	GO	NO GO	EARNED	5	☐	☐	☐	<table style="width: 100%; border: none;"> <tr> <td style="text-align: right; width: 10%;">Points</td> <td style="width: 15%;">GO</td> <td style="width: 15%;">NO GO</td> <td style="width: 15%;">EARNED</td> </tr> <tr> <td style="text-align: right; vertical-align: bottom;">2</td> <td align="center">☐</td> <td align="center">☐</td> <td align="center">☐</td> </tr> </table>	Points	GO	NO GO	EARNED	2	☐	☐	☐
Points	GO	NO GO	EARNED														
5	☐	☐	☐														
Points	GO	NO GO	EARNED														
2	☐	☐	☐														
TASK: Perform Before Operations Checks and Services on Commander's Weapon Station (CWS)	TASK: Perform Tank Commander's Preventive Maintenance Prepare-to-Fire Checks and Services on an M1 Tank																
<table style="width: 100%; border: none;"> <tr> <td style="text-align: right; width: 10%;">Points</td> <td style="width: 15%;">GO</td> <td style="width: 15%;">NO GO</td> <td style="width: 15%;">EARNED</td> </tr> <tr> <td style="text-align: right; vertical-align: bottom;">6</td> <td align="center">☐</td> <td align="center">☐</td> <td align="center">☐</td> </tr> </table>	Points	GO	NO GO	EARNED	6	☐	☐	☐	<table style="width: 100%; border: none;"> <tr> <td style="text-align: right; width: 10%;">Points</td> <td style="width: 15%;">GO</td> <td style="width: 15%;">NO GO</td> <td style="width: 15%;">EARNED</td> </tr> <tr> <td style="text-align: right; vertical-align: bottom;">10</td> <td align="center">☐</td> <td align="center">☐</td> <td align="center">☐</td> </tr> </table>	Points	GO	NO GO	EARNED	10	☐	☐	☐
Points	GO	NO GO	EARNED														
6	☐	☐	☐														
Points	GO	NO GO	EARNED														
10	☐	☐	☐														
TASK: Prepare Commanders' Weapon Station (CWS) for operation on an M1 Tank	TASK: (PS) Judge how much the condition deficiency would interfere with the operation of the tank																
<table style="width: 100%; border: none;"> <tr> <td style="text-align: right; width: 10%;">Points</td> <td style="width: 15%;">GO</td> <td style="width: 15%;">NO GO</td> <td style="width: 15%;">EARNED</td> </tr> <tr> <td style="text-align: right; vertical-align: bottom;">11</td> <td align="center">☐</td> <td align="center">☐</td> <td align="center">☐</td> </tr> </table>	Points	GO	NO GO	EARNED	11	☐	☐	☐	<table style="width: 100%; border: none;"> <tr> <td style="text-align: right; width: 10%;">Points</td> <td style="width: 15%;">GO</td> <td style="width: 15%;">NO GO</td> <td style="width: 15%;">EARNED</td> </tr> <tr> <td style="text-align: right; vertical-align: bottom;">3</td> <td align="center">☐</td> <td align="center">☐</td> <td align="center">☐</td> </tr> </table>	Points	GO	NO GO	EARNED	3	☐	☐	☐
Points	GO	NO GO	EARNED														
11	☐	☐	☐														
Points	GO	NO GO	EARNED														
3	☐	☐	☐														

TASK: (PS) Judge Whether the Condition Deficiency Can Be Corrected Within Available Time and resources. <table style="width: 100%; border: none;"> <tr> <td style="text-align: right;">Points</td> <td style="text-align: center;">GO</td> <td style="text-align: center;">NO GO</td> <td style="text-align: center;">EARNED</td> </tr> <tr> <td style="text-align: right;">3</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☒</td> </tr> </table>	Points	GO	NO GO	EARNED	3	☐	☐	☒	TASK: Prepare and Issue Oral Operation Order <table style="width: 100%; border: none;"> <tr> <td style="text-align: right;">Points</td> <td style="text-align: center;">GO</td> <td style="text-align: center;">NO GO</td> <td style="text-align: center;">EARNED</td> </tr> <tr> <td style="text-align: right;">8</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☒</td> </tr> </table>	Points	GO	NO GO	EARNED	8	☐	☐	☒	
Points	GO	NO GO	EARNED															
3	☐	☐	☒															
Points	GO	NO GO	EARNED															
8	☐	☐	☒															
TASK: (PS) Estimate the likelihood That the Condition Efficiency Will Prevent the Tank Crew from Completing Its Mission. <table style="width: 100%; border: none;"> <tr> <td style="text-align: right;">Points</td> <td style="text-align: center;">GO</td> <td style="text-align: center;">NO GO</td> <td style="text-align: center;">EARNED</td> </tr> <tr> <td style="text-align: right;">3</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☒</td> </tr> </table>	Points	GO	NO GO	EARNED	3	☐	☐	☒	TASK: Use the Automated Communications Electronics Operations Instructions (CEOI) <table style="width: 100%; border: none;"> <tr> <td style="text-align: right;">Points</td> <td style="text-align: center;">GO</td> <td style="text-align: center;">NO GO</td> <td style="text-align: center;">EARNED</td> </tr> <tr> <td style="text-align: right;">4</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☒</td> </tr> </table>	Points	GO	NO GO	EARNED	4	☐	☐	☒	
Points	GO	NO GO	EARNED															
3	☐	☐	☒															
Points	GO	NO GO	EARNED															
4	☐	☐	☒															
TASK: Conduct a Map Reconnaissance <table style="width: 100%; border: none;"> <tr> <td style="text-align: right;">Points</td> <td style="text-align: center;">GO</td> <td style="text-align: center;">NO GO</td> <td style="text-align: center;">EARNED</td> </tr> <tr> <td style="text-align: right;">3</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☒</td> </tr> </table>	Points	GO	NO GO	EARNED	3	☐	☐	☒	TASK: Use the KTC 1400D Numerical Cipher/Authentication System <table style="width: 100%; border: none;"> <tr> <td style="text-align: right;">Points</td> <td style="text-align: center;">GO</td> <td style="text-align: center;">NO GO</td> <td style="text-align: center;">EARNED</td> </tr> <tr> <td style="text-align: right;">3</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☒</td> </tr> </table>	Points	GO	NO GO	EARNED	3	☐	☐	☒	
Points	GO	NO GO	EARNED															
3	☐	☐	☒															
Points	GO	NO GO	EARNED															
3	☐	☐	☒															
TASK: Use Marginal Information on a Map <table style="width: 100%; border: none;"> <tr> <td style="text-align: right;">Points</td> <td style="text-align: center;">GO</td> <td style="text-align: center;">NO GO</td> <td style="text-align: center;">EARNED</td> </tr> <tr> <td style="text-align: right;">3</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☒</td> </tr> </table>	Points	GO	NO GO	EARNED	3	☐	☐	☒	TASK: <u>Leave</u> or Enter a Radio Net <table style="width: 100%; border: none;"> <tr> <td style="text-align: right;">Points</td> <td style="text-align: center;">GO</td> <td style="text-align: center;">NO GO</td> <td style="text-align: center;">EARNED</td> </tr> <tr> <td style="text-align: right;">3</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☒</td> </tr> </table>	Points	GO	NO GO	EARNED	3	☐	☐	☒	
Points	GO	NO GO	EARNED															
3	☐	☐	☒															
Points	GO	NO GO	EARNED															
3	☐	☐	☒															
TASK: Identify Terrain Features (Natural and Man-Made) on a Map <table style="width: 100%; border: none;"> <tr> <td style="text-align: right;">Points</td> <td style="text-align: center;">GO</td> <td style="text-align: center;">NO GO</td> <td style="text-align: center;">EARNED</td> </tr> <tr> <td style="text-align: right;">2</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☒</td> </tr> </table>	Points	GO	NO GO	EARNED	2	☐	☐	☒	RECAPITULATION <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">POINTS</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">POSSIBLE</td> <td style="text-align: center;">EARNED</td> <td style="text-align: center;">LOST</td> </tr> <tr> <td style="text-align: center;"> 69 </td> <td style="text-align: center;">☒</td> <td style="text-align: center;">☐</td> </tr> </table>	POINTS			POSSIBLE	EARNED	LOST	69	☒	☐
Points	GO	NO GO	EARNED															
2	☐	☐	☒															
POINTS																		
POSSIBLE	EARNED	LOST																
69	☒	☐																

ENCLOSURE 2 TO APPENDIX 4
ACCURACY SCORE SHEET

Student Name _____ SSN _____

Scenario: CONDUCT A TACTICAL ROAD MARCH				
TASK: Conduct a Tactical Road March			TASK: Identify Terrain Features (Natural and Man-Made) on a Map	
Points	GO	NO GO	EARNED	
3	☐	☐	☐	
TASK: Maintain Position in Platoon Formation (Column)			TASK: Determine Location on the Ground by Terrain Association	
Points	GO	NO GO	EARNED	
3	☐	☐	☐	
TASK: Conduct Target Acquisition			RECAPITULATION	
Points	GO	NO GO	POINTS	
2	☐	☐	POSSIBLE EARNED LOST	
	☐	☐	11 ☐ ☐	

ENCLOSURE 3 TO APPENDIX 4
ACCURACY SCORE SHEET

Student Name _____ SSN _____

Scenario: PREPARE FOR MOVEMENT TO CONTACT OPERATION			
TASK: Select a Firing Position			
Points	GO	NO GO	EARNED
6	☐	☐	☐
TASK: Supervise After Operations Checks and Services on an M1 Tank			
Points	GO	NO GO	EARNED
5	☐	☐	☐
TASK: Install/Operate Hot Loop Wire Communications			
Points	GO	NO GO	EARNED
3	☐	☐	☐
TASK: Conduct a Map Reconnaissance			
Points	GO	NO GO	EARNED
3	☐	☐	☐
TASK: Use an Automated Communications Electronics Operations Instructions (CEOI)			
Points	GO	NO GO	EARNED
4	☐	☐	☐
TASK: Use the KTC 1400D Numerical Cipher/Authentication System			
Points	GO	NO GO	EARNED
3	☐	☐	☐
TASK: Enter or <u>Leave</u> a Radio Net			
Points	GO	NO GO	EARNED
3	☐	☐	☐
TASK: <u>Enter</u> or Leave a Radio Net			
Points	GO	NO GO	EARNED
3	☐	☐	☐

TASK: Use Marginal Information				RECAPITULATION		
Points	GO	NO GO	EARNED	POINTS		
				POSSIBLE	EARNED	LOST
3	☐	☐	☐	<input type="checkbox" value="43"/>	☐	☐
TASK: Identify Terrain Features						
Points	GO	NO GO	EARNED			
2	☐	☐	☐			
TASK: Prepare and Issue Oral Operation Order						
Points	GO	NO GO	EARNED			
8	☐	☐	☐			

ENCLOSURE 4 TO APPENDIX 4
ACCURACY SCORE SHEET

Student Name _____

SSN _____

Scenario: CONDUCT MOVEMENT TO CONTACT

TASK: Maintain Position in Platoon Formation

Points GO NO GO EARNED

3 ☐ ☐ ☐

TASK: Conduct Target Acquisition

Points GO NO GO EARNED

3 ☐ ☐ ☐

TASK: Determine Location on the Ground by Terrain Association

Points GO NO GO EARNED

1 ☐ ☐ ☐

TASK: React to Air Attack (DRILL)

Points GO NO GO EARNED

4 ☐ ☐ ☐

TASK: Engage Targets with the Caliber .50 M2 HB Machine-gun on an M1 Tank

Points GO NO GO EARNED

4 ☐ ☐ ☐

TASK: Submit a Spot Report (SPOTREP)

Points GO NO GO EARNED

6 ☐ ☐ ☐

TASK: Conduct Target Acquisition

Points GO NO GO EARNED

3 ☐ ☐ ☐

TASK: (D) Decide Where TC and LD Will Search for Targets

Points GO NO GO EARNED

1 ☐ ☐ ☐

TASK: Direct Evasion for Enemy Anti-Tank Guided Missile (DRILL) Points GO NO GO EARNED 5 ☐ ☐ ☐	TASK: Issue a Fire Command Points GO NO GO EARNED 4 ☐ ☐ ☐
TASK: (PS) Estimate How Much Time Is Available to Prevent the Enemy from Destroying the Tank Points GO NO GO EARNED 3 ☐ ☐ ☐	TASK: Fire an M250 Grenade Launcher on an M1 Tank Points GO NO GO EARNED 3 ☐ ☐ ☐
TASK: (PS) Judge How Much a Smoke Screen Will Protect the Tank from Enemy Direct Fire Points GO NO GO EARNED 3 ☐ ☐ ☐	TASK: Submit a Spot Report (SPOTREP) Points GO NO GO EARNED 6 ☐ ☐ ☐
TASK: (D) Decide Whether or Not to Fire Smoke Grenades Points GO NO GO EARNED 3 ☐ ☐ ☐	TASK: Determine Location on the Ground by Terrain Association Points GO NO GO EARNED 1 ☐ ☐ ☐
TASK: Direct Main Gun Engagements on an M1 Tank Points GO NO GO EARNED ☐ ☐ ☐	Task: Call For and Adjust Indirect Fire Points GO NO GO EARNED 10 ☐ ☐ ☐

TASK: Direct DV to Move Out and to Generate Smoke				TASK: (PS) Compare the Lethality of Multiple Enemy Targets			
Points	GO	NO GO	EARNED	Points	GO	NO GO	EARNED
1	☐	☐	☐	3	☐	☐	☐
TASK: Conduct Target Acquisition				TASK: (D) Decide Sequence in Which to Engage Multiple Targets			
Points	GO	NO GO	EARNED	Points	GO	NO GO	EARNED
1	☐	☐	☐	3	☐	☐	☐
TASK: Issue a Fire Command				TASK: (PS) Identify the Least Powerful Weapon or Ammunition Required to Destroy the Enemy Targets			
Points	GO	NO GO	EARNED	Points	GO	NO GO	EARNED
3	☐	☐	☐	3	☐	☐	☐
TASK: Engage Targets with the Caliber .50 M2 HB Machine-gun on an M1 Tank				TASK: (D) Choose Appropriate Main Gun Ammunition			
Points	GO	NO GO	EARNED	Points	GO	NO GO	EARNED
4	☐	☐	☐	3	☐	☐	☐
TASK: Submit a Spot Report (SPOTREP)				TASK: (PS) Judge from Battlefield Cues the Amount and Kind of Damage Inflicted Upon an Enemy Target			
Points	GO	NO GO	EARNED	Points	GO	NO GO	EARNED
7	☐	☐	☐	3	☐	☐	☐
TASK: Conduct Target Acquisition							
Points	GO	NO GO	EARNED				
1	☐	☐	☐				

TASK: (D) Decide When to Stop Firing				TASK: (D) Decide Whether or Not to Open Hatches			
Points	GO	NO GO	EARNED	Points	GO	NO GO	EARNED
3	☐	☐	☐	3	☐	☐	☐
TASK: Direct Main Gun Engagements on an M1 Tank				TASK: Initiate Unmasking Procedures			
Points	GO	NO GO	EARNED	Points	GO	NO GO	EARNED
3	☐	☐	☐	4	☐	☐	☐
TASK: Issue a Fire Command				TASK: Implement Mission Oriented Protective Posture (MOPP)			
Points	GO	NO GO	EARNED	Points	GO	NO GO	EARNED
7	☐	☐	☐	1	☐	☐	☐
TASK: Submit a Spot Report (SPOTREP)				TASK: (D) Decide Whether or Not to Close Hatches			
Points	GO	NO GO	EARNED	Points	GO	NO GO	EARNED
7	☐	☐	☐	3	☐	☐	☐
TASK: (D) Decide Whether or Not to Close Hatches				TASK: React to Indirect Fire (DRILL)			
Points	GO	NO GO	EARNED	Points	GO	NO GO	EARNED
3	☐	☐	☐	2	☐	☐	☐
TASK: Implement Mission Oriented Protective Posture (MOPP)							
Points	GO	NO GO	EARNED				
1	☐	☐	☐				

TASK: Submit a Spot Report (SPOTREP)				TASK: (D) Decide Whether or Not to Open Hatches			
Points	GO	NO GO	EARNED	Points	GO	NO GO	EARNED
6	☐	☐	☒	3	☐	☐	☒
TASK: Initiate Unmasking Procedures				RECAPITULATION			
Points	GO	NO GO	EARNED	POINTS			
4	☐	☐	☒	POSSIBLE	EARNED	LOST	
TASK: Implement Mission Oriented Protective Posture (MOPP)				☐ 150	☒	☐	
Points	GO	NO GO	EARNED				
1	☐	☐	☒				

ENCLOSURE 5 TO APPENDIX 4
ACCURACY SCORE SHEET

Student Name _____ SSN _____

Scenario: OCCUPY AND DEFEND BATTLE POSITION				
TASK: Select a Firing Position				
Points	GO	NO GO	EARNED	
6	☐	☐	☐	
TASK: Prepare a Sketch Range Card				
Points	GO	NO GO	EARNED	
6	☐	☐	☐	
TASK: Identify Terrain Features (Natural and Man-Made) on a Map				
Points	GO	NO GO	EARNED	
5	☐	☐	☐	
TASK: Install/Operate Hot Loop Wire Communications				
Points	GO	NO GO	EARNED	
3	☐	☐	☐	
TASK: Analyze Terrain Using the Five Military Aspects of Terrain				
Points	GO	NO GO	EARNED	
5	☐	☐	☐	
TASK: Install/Remove the Automatic Chemical Alarm System				
Points	GO	NO GO	EARNED	
4	☐	☐	☐	

TASK: Supervise After Operations Checks and Services on an M1 Tank <table border="0"> <tr> <td>Points</td> <td>GO</td> <td>NO GO</td> <td>EARNED</td> </tr> <tr> <td>5</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> </table>	Points	GO	NO GO	EARNED	5	☐	☐	☐	TASK: Recognize Electronics Counter Measures (ECM) and Implement Electronics Counter-Counter Measures (ECCM) <table border="0"> <tr> <td>Points</td> <td>GO</td> <td>NO GO</td> <td>EARNED</td> </tr> <tr> <td>6</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> </table>	Points	GO	NO GO	EARNED	6	☐	☐	☐
Points	GO	NO GO	EARNED														
5	☐	☐	☐														
Points	GO	NO GO	EARNED														
6	☐	☐	☐														
TASK: Conduct Target Acquisition <table border="0"> <tr> <td>Points</td> <td>GO</td> <td>NO GO</td> <td>EARNED</td> </tr> <tr> <td>2</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> </table>	Points	GO	NO GO	EARNED	2	☐	☐	☐	TASK: Conduct Target Acquisition <table border="0"> <tr> <td>Points</td> <td>GO</td> <td>NO GO</td> <td>EARNED</td> </tr> <tr> <td>2</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> </table>	Points	GO	NO GO	EARNED	2	☐	☐	☐
Points	GO	NO GO	EARNED														
2	☐	☐	☐														
Points	GO	NO GO	EARNED														
2	☐	☐	☐														
TASK: Determine a Location on the Ground by Terrain Association <table border="0"> <tr> <td>Points</td> <td>GO</td> <td>NO GO</td> <td>EARNED</td> </tr> <tr> <td>1</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> </table>	Points	GO	NO GO	EARNED	1	☐	☐	☐	TASK: (PS) Compare the Lethality of Multiple Enemy Targets <table border="0"> <tr> <td>Points</td> <td>GO</td> <td>NO GO</td> <td>EARNED</td> </tr> <tr> <td>3</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> </table>	Points	GO	NO GO	EARNED	3	☐	☐	☐
Points	GO	NO GO	EARNED														
1	☐	☐	☐														
Points	GO	NO GO	EARNED														
3	☐	☐	☐														
TASK: Call For and Adjust Indirect Fire <table border="0"> <tr> <td>Points</td> <td>GO</td> <td>NO GO</td> <td>EARNED</td> </tr> <tr> <td>10</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> </table>	Points	GO	NO GO	EARNED	10	☐	☐	☐	TASK: (D) Decide Sequence in Which to Engage Multiple Targets <table border="0"> <tr> <td>Points</td> <td>GO</td> <td>NO GO</td> <td>EARNED</td> </tr> <tr> <td>3</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> </table>	Points	GO	NO GO	EARNED	3	☐	☐	☐
Points	GO	NO GO	EARNED														
10	☐	☐	☐														
Points	GO	NO GO	EARNED														
3	☐	☐	☐														
TASK: Estimate Range <table border="0"> <tr> <td>Points</td> <td>GO</td> <td>NO GO</td> <td>EARNED</td> </tr> <tr> <td>1</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> </table>	Points	GO	NO GO	EARNED	1	☐	☐	☐	TASK: (PS) Identify the Least Powerful Weapon or Ammunition Required to Destroy the Enemy Targets <table border="0"> <tr> <td>Points</td> <td>GO</td> <td>NO GO</td> <td>EARNED</td> </tr> <tr> <td>3</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> </table>	Points	GO	NO GO	EARNED	3	☐	☐	☐
Points	GO	NO GO	EARNED														
1	☐	☐	☐														
Points	GO	NO GO	EARNED														
3	☐	☐	☐														

TASK: (D) Choose Appropriate Main Gun Ammunition

Points	GO	NO GO	EARNED
3	☐	☐	☒

TASK: (PS) Judge from Battlefield Cues the Amount and Kind of Damage Inflicted Upon an Enemy Target

Points	GO	NO GO	EARNED
3	☐	☐	☒

TASK: (D) Decide When to Stop Firing

Points	GO	NO GO	EARNED
3	☐	☐	☒

TASK: Direct Main Gun Engagements on an M1 Tank

Points	GO	NO GO	EARNED
3	☐	☐	☒

TASK: Issue a Fire Command

Points	GO	NO GO	EARNED
11	☐	☐	☒

TASK: Employ a Three-Man Crew

Points	GO	NO GO	EARNED
3	☐	☐	☒

TASK: (PS) Estimate the Ability of a Remaining Crewman to Substitute for Another When a Crewman Is Lost Due to Injury or Sickness

Points	GO	NO GO	EARNED
3	☐	☐	☒

TASK: (D) Decide Whether or Not a Crewman Must Be Evacuated Due to Injury or Illness

Points	GO	NO GO	EARNED
3	☐	☐	☒

TASK: (D) Decide Whether or not to Close Hatches

Points	GO	NO GO	EARNED
3	☐	☐	☒

TASK: Implement Mission Oriented Protective Posture (MOPP)

Points	GO	NO GO	EARNED
1	☐	☐	☒

TASK: Prepare/Submit NBC-1 Report Points GO NO GO EARNED 4 ☐ ☐ ☐	TASK: (D) Decide When to Stop Firing Points GO NO GO EARNED 3 ☐ ☐ ☐
TASK: Conduct Target Acquisition Points GO NO GO EARNED 2 ☐ ☐ ☐	TASK: Engage Targets with the Main Gun from the Commander's Weapon Station (CWS) on an M1 Tank Points GO NO GO EARNED 2 ☐ ☐ ☐
TASK: (PS) Identify the Least Powerful Weapon or Ammunition Required to Destroy the Target Points GO NO GO EARNED 3 ☐ ☐ ☐	TASK: Issue a Fire Command Points GO NO GO EARNED 6 ☐ ☐ ☐
TASK: (D) Choose appropriate Main Gun Ammunition Points GO NO GO EARNED 3 ☐ ☐ ☐	TASK: Prepare Vehicle (Tank) for Nuclear Attack Points GO NO GO EARNED 9 ☐ ☐ ☐
TASK: (PS) Judge from Battlefield Cues the Amount and Kind of Damage Inflicted Upon the Enemy Target Points GO NO GO EARNED 3 ☐ ☐ ☐	TASK: Prepare a Situation Report (SITREP) Points GO NO GO EARNED 8 ☐ ☐ ☐

TASK: Conduct Partial Decontamination				RECAPITULATION		
Points	GO	NO GO	EARNED	POSSIBLE	POINTS EARNED	LOST
4	☐	☐	☒	<input type="checkbox" value="175"/>	☒	☐
TASK: Use the M256 Chemical Detector Kit						
Points	GO	NO GO	EARNED			
14	☐	☐	☒			
TASK: Initiate Unmasking Procedures						
Points	GO	NO GO	EARNED			
4	☐	☐	☒			
TASK: Implement Mission Oriented Protective Posture						
Points	GO	NO GO	EARNED			
1	☐	☐	☒			
TASK: Direct Reorganization on the Objective (Defensive Position)						
Points	GO	NO GO	EARNED			
8	☐	☐	☒			

ENCLOSURE 6 TO APPENDIX 4
STTX SCORING RECAPITULATION

Student Name _____ SSN _____

<u>SCENARIO</u>	<u>TASKS</u>	<u>POINTS</u>	<u>POINTS EARNED</u>	<u>POINTS LOST</u>
Prepare for Tactical Road March	15	69	☐	☐
Conduct a Tactical Road March	5	11	☐	☐
Prepare for Movement to Contact Operation	11	43	☐	☐
Conduct Movement to Contact	44	150	☐	☐
Occupy and Defend Battle Position	41	175	☐	☐
TOTAL	116	448	☒	☐

APPENDIX 5
STTX RESOURCE REQUIREMENTS

Resource requirements, personnel, and equipment are indicated below.

a. Personnel

- 1 - NCOIC
- 2 - scorers
- 1 - ¼ ton driver
- 2 - OPFOR pilots
- 2 - OPFOR TC
- 1 - OPFOR VC
- 3 - OPFOR drivers
- 1 - OPFOR rifleman

b. Equipment and material

- 1 - ¼ ton truck w/radio
- 2 - headset (scorers)
- 2 - HP aircraft
- 2 - OPFOR tanks
- 1 - OPFOR BMP
- 7 - MILES
- 1 - artillery simulator gun
- 1 - written platoon operation order (enclosure 1)
- 1 - written platoon operation order (enclosure 2)
- 2 - automatic chemical alarm systems
- 2 - M256 chemical detection kits
- 2 - M13 decontamination kits
- 2 - M11 decontamination apparatus
- 2 - KTC 1400D numerical cipher/authentication systems
- 2 - KTC 600D tactical operations codes
- 2 - automated communications - electronics operations instructions (CEOI)
- 2 - 50' pieces of WD-1/TT field wire

c. Maneuver area

An area containing two suitable assemble areas, a road between the two assembly areas suitable for conducting a short tactical road march, an area large enough to conduct a movement to contact and large enough to conduct defensive operations (one BP). The terrain may vary from rolling hills to parched, flat desert but must offer definable avenues of approach and permit a concentration of fires; soil must be trafficable.

ENCLOSURE 1 TO APPENDIX 5
Platoon Operations Order

OPERATIONS ORDER: Tactical Road March and Occupy Assembly Area

1. SITUATION

- a. Enemy Forces. Enemy elements of the 327 MRD are to our front, however, the 3d Cavalry is between us and the enemy. The enemy has a nuclear and chemical capability and has been sending about four, two plane sorties per day over our area.
- b. Friendly Forces. Team A will conduct a tactical road march to a forward assembly area, and from there continue further operations, on order. Quartering party personnel from each platoon in Team A have been dispatched to the assembly area and will provide security until the team arrives. Priority of fires to Team A initially.
- c. Attachments and Detachments. None.

2. MISSION

1st Platoon leads the team movement in a tactical road march along Highway N4 and occupies a forward assembly area, vicinity of _____, at _____ hours.

3. EXECUTION

a. Concept of Operations.

- (1) Maneuver. 1st Platoon follows Highway N4 with order of march _____, _____, _____, _____. Road march speed is 50 KMPH; catch-up speed is 60 KMPH maximum. Maintain 100 meter vehicle interval. Remember main gun orientation, air, and ground surveillance as indicated in the tac SOP. At RP follow guide's instructions into assembly area and occupy positions from left to right out of order of march. Once in position orient to the _____.
- (2) Fires. Priority of fires is initially to the 1st Platoon.

b. Coordinating Instructions

- (1) SP is _____, crossing is _____ hours.
- (2) PP is _____.
- (3) At halts assume herringbone, post local security, and maintain air guard.

- (4) Once at the RP and approaching the assembly area, keep moving until fighting positions have been occupied.
- (5) Platoon sergeant establish an OP upon reaching reaching assembly area.
- (6) Establish wire commo between tanks, left to right.
- (7) Report when wire commo established and your area secured.
- (8) Be prepared to move on order.

4. SERVICE SUPPORT

- a. Logistics SOP
- b. Team trains will be located at _____ after occupation of assembly area.

5. COMMAND AND SIGNAL

a. Signal.

- (1) Current CEOI in effect.
- (2) Password and challenge are WHITE/LIGHTNING.
- (3) Platoon frequency is _____. Platoon alternative frequency is _____. Team frequency is _____.

b. Command.

- (1) I will lead the platoon movement.
- (2) Team command group will follow 1st Platoon.

Time is _____. Any questions?

ENCLOSURE 2 TO APPENDIX 5
Platoon Operation Order

OPERATIONS ORDER: Movement to Contact

1. SITUATION

- a. Enemy Forces. Enemy elements of the 327 MRD occupy defensive positions east of GREEN RIVER. Mounted enemy reconnaissance patrols have been operating west of GREEN River, as far west as the 3d Cavalry screen. The enemy has a nuclear and chemical capability and a limited air capability.
- b. Friendly Forces. Team A has the mission of conducting a movement to contact, oriented on Highway N4, and seize Hill 609, and from there support following units crossings over GREEN River. Elements of the Task Force will be on our left and moving parallel to us. The 3d Cavalry will cover our right flank after we move through their screen. Team D will follow us. Priority of fire go to Team A.
- c. Attachments and Detachments. None.

2. MISSION.

1st Platoon conducts a movement to contact at _____ hours, east along Highway N4, prepared to seize Hill 609.

3. EXECUTION

a. Concept of the Operation.

- (1) Maneuver. 1st Platoon leads the team movement, in a column formation, passes through the 3d Cavalry screen at the passage point and immediately changes to a staggered column formation. Initially we will move at maximum allowable speed. Be prepared to change formations as terrain and enemy situation dictates. Once we get in the vicinity of Hill 609 be prepared to participate in a hasty attack in either the assault role or the supporting fire role.
- (2) Fires. Priority of fires within Team A is initially 1st Platoon.

b. Coordinating Instructions.

- (1) SP is _____, crossing is _____ hours.
- (2) Order of march is _____, _____, _____, _____.
- (3) Radio listening silence is in effect until enemy contact.

- (4) TCs be alert for hand and arm signals.
- (5) Priority targets are enemy tanks and anti-tank positions.
- (6) Make sure you are able to provide overwatch fires when needed.
- (7) MOPP Level _____ is in effect.

4. SERVICE SUPPORT

- a. Logistics SOP
- b. Team trains will move behind team D from present position to RJ N4-22.

5. COMMAND AND SIGNAL

a. Signal.

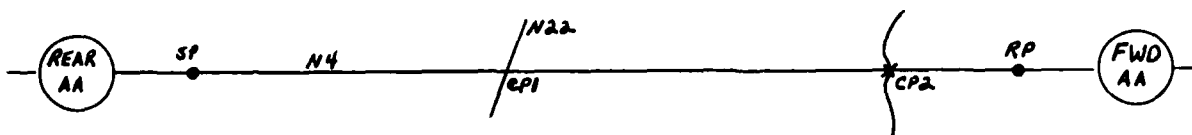
- (1) Current CEOI in effect.
- (2) Password and challenge are FOUR/ROSES.
- (3) Platoon frequency is _____. Alternate platoon frequency is _____. Team frequency is _____.
- (4) Emergency signal to withdraw or break contact is one red star cluster.

b. Command.

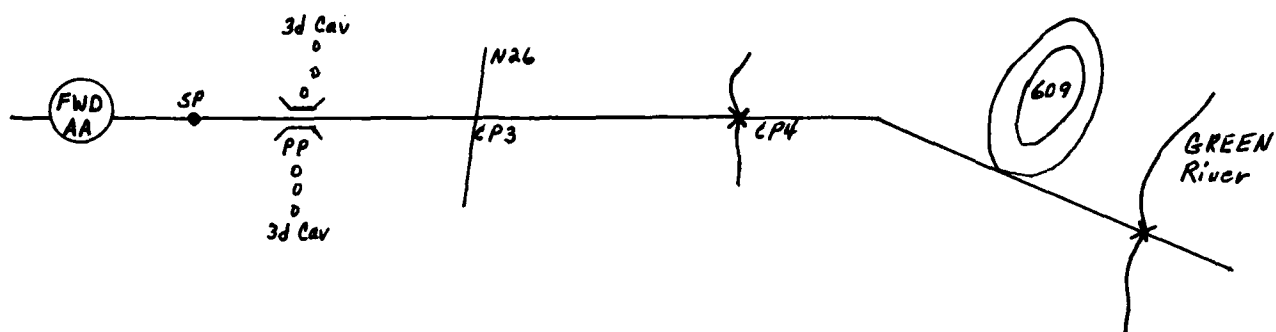
- (1) I will initially lead the platoon.
- (2) Team command group will follow 1st Platoon.

Time is _____. Any questions?

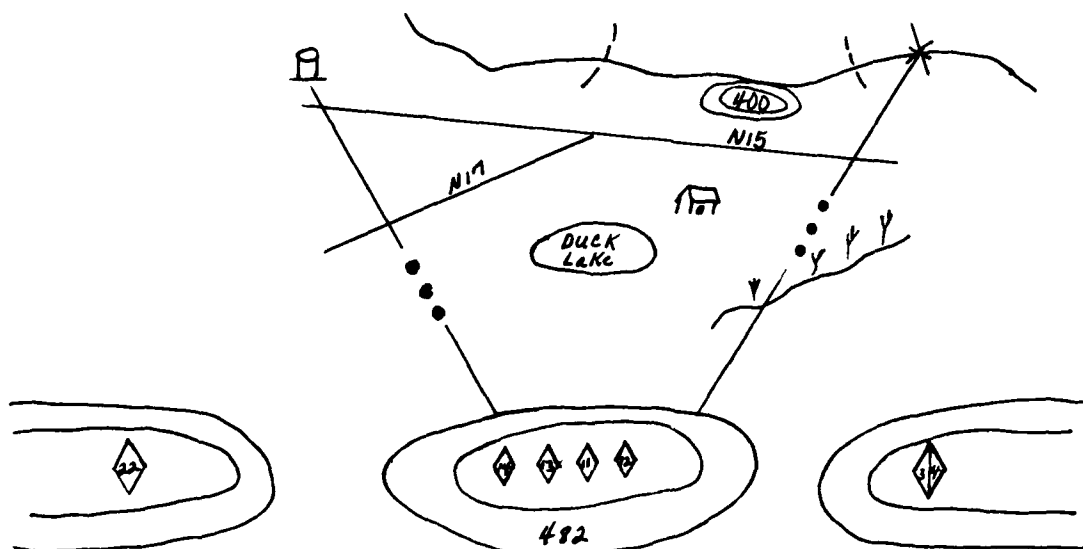
ENCLOSURE TO ENCLOSURE 1 TO APPENDIX 5



ENCLOSURE TO ENCLOSURE 2 TO APPENDIX 5



ENCLOSURE 3 TO APPENDIX 5



ANNEX E

INTRA-PLATOON TACTICAL EXERCISE (I-PTX)

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HumRRO, Fort Knox, Kentucky

May 1985

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ANNEX E
INTRA-PLATOON TACTICAL EXERCISE (I-PTX)

GENERAL

1. The Intra-Platoon Tactical Exercise (I-PTX) is designed to evaluate, in a tactical scenario field environment, the performance of inter-related nonprocedural tasks.
2. The scope of the I-PTX is 171 procedural tasks and 23 nonprocedural tasks. Some tasks are performed more than once in a scenario and some tasks are performed in more than one scenario.
3. The I-PTX includes four scenarios: 1) Assembly Areas and Tactical Road March, 2) Movement to Contact, 3) Hasty Attack, and 4) Occupy and Defend Battle Positions. The student tank commander starts the exercise (as TC 12 or TC 14) in a rear assembly area where he prepares to participate in a tactical road march. He participates in a tactical road march to a forward assembly where he prepares to participate in a movement to contact operation. During the movement to contact operation the student is involved in movement drills, action drills, passage through and around defiles, wingman reaction exercises, platoon reaction exercises, and action on contact. Following the action on contact the student participates in a hasty attack, in either the support by fire role (TC 12 or TC 14) or the assault role (TC 22 or TC 24). After the hasty attack the student (TC 12 or TC 14) participates in a deliberate occupation and defense of a battle position, a withdrawal from the battle position while under heavy pressure, a hasty occupation of a second battle position, and a withdrawal from the battle position while not under pressure. Accuracy in task performance, e.g., sequential subtask performance, correct fire command, etc. is not the primary criterion for evaluating student performance. The primary criteria are: 1) Did the student respond to platoon leader or platoon sergeant orders? 2) Did the student respond to task deficiencies? 3) Did the student provide sufficient and accurate information to the platoon leader and the platoon sergeant? and 4) Did the student command his crew? Task procedural deficiencies, which do not affect a student's task response accuracy will be noted by the scorer for the purpose of post I-PTX feedback to the student.
4. After each I-PTX scenario, the instructor will provide time for tank commanders to discuss crew performance with their crewmembers. Then the platoon leader and platoon sergeant will comment on crew performance. After the discussion the instructor will critique the tank commanders' general performance, their reaction to unforeseen problems, and the responses of crewmembers to their directions.

INSTRUCTOR'S GUIDE

1. The Instructor's Guide is a detailed plan for administering and scoring the I-PTX. The guide consists of five appendixes: 1) Layout Diagram, 2) Participation Schedule, 3) Task Training and Evaluation Outlines, 4) Accuracy Score Sheets, and 5) Resource Requirements.
2. Layout Diagram (Appendix 1). The layout diagram illustrates how the I-PTX is conducted. The diagram shows a continuous tactical scenario time line sequence. The scenario begins in a rear assembly and progresses through a tactical road march, a forward assembly area, a movement to contact operation, a hasty attack, the deliberate occupation and defense of a battle position, and concludes with the withdrawal without pressure from the second battle position. After the exercise students 1 and 2 will participate in a night tactical road march. After midnight students 3 and 4 will participate in a night tactical road march. On the second night the schedule is repeated for students 5 and 6 and 7 and 8.
4. Task Training and Evaluation Outline (Appendix 3). There are four task training and evaluation outlines, one for each scenario in the I-PTX. Each outline includes: 1) the situation which leads to task performance, 2) task statements, 3) the conditions under which the task is performed, 4) accuracy standards, and 5) task references.
5. Accuracy Score Sheets (Appendix 4). There is an accuracy score sheet for each scenario. The score sheet provides: 1) point value of each task, 2) blocks for points earned for each task, 3) a block for total points earned for each scenario, and 4) a block for recapitulation of points earned for the exercise.
6. Resource Requirements (Appendix 5). This appendix indicates personnel, equipment, and facilities required to conduct the I-PTX.

APPENDIX 1 LAYOUT DIAGRAM

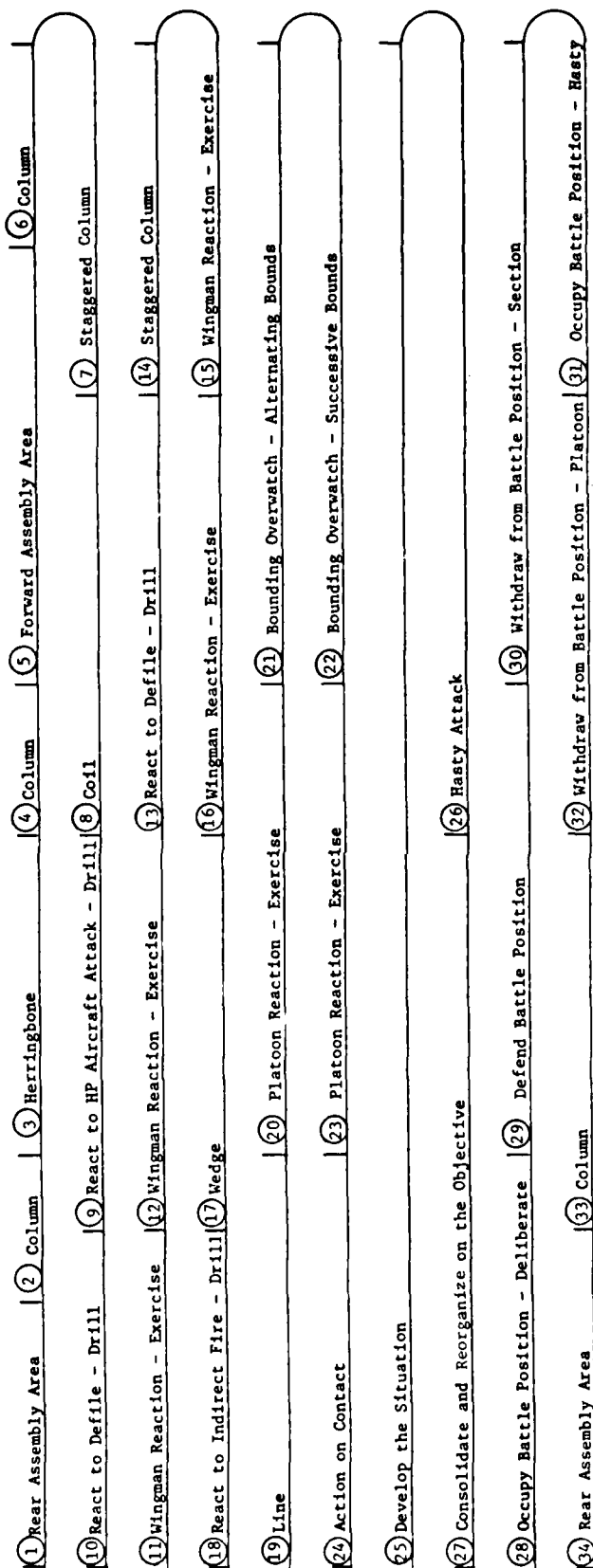
APPENDIX 2 PARTICIPATION SCHEDULE

APPENDIX 3 TASK TRAINING AND EVALUATION OUTLINES

APPENDIX 4 ACCURACY SCORE SHEET

APPENDIX 5 RESOURCE REQUIREMENTS

APPENDIX 1
I-PTX LAYOUT DIAGRAM



APPENDIX 2
I-PTX PARTICIPATION SCHEDULE

DAY 1
Students 1 and 2

EVENT

Rear-AA Tac RM Fwd-AA Mvt to Contact Hasty Atk Occupy BP (Deliberate) Defend BP WD from BP (Section) Occupy BP (Hasty) WD from BP (Platoon) Night Tac RM

TIME LINE

0730 0830 0930 1030 1230 1330 1430 1530 1630 1730 1830 1930

DAY 1
Students 3 and 4

EVENT

Rear-AA Tac RM Fwd-AA Mvt to Contact Hasty Atk Occupy BP (Deliberate) Defend BP WD from BP (Section) Occupy BP (Hasty) WD from BP (Platoon) Night Tac RM

TIME LINE

0830 0930 1030 1130 1330 1430 1530 1630 1730 1830 1930 2030

DAY 2

Students 5 and 6 follow students 1 and 2 Day 1 schedule.

Students 7 and 8 follow students 3 and 4 Day 1 schedule.

APPENDIX 3
I-PTX TASK TRAINING AND EVALUATION OUTLINES

1. There are four task training and evaluation outlines, one for each scenario in the I-PTX, to aid scorers in conducting the I-PTX. Within each scenario the student will be required to perform several procedural and nonprocedural tasks. In some scenarios a task may be performed more than once and some tasks are performed during more than one scenario. Each outline includes: 1) the situation which leads to task performance, 2) task statements, 3) the conditions under which the task is performed, 4) accuracy standards, and 5) task references.
2. The tasks in the task training and evaluation outlines are shown below.

Scenario 1: ASSEMBLY AREAS AND TACTICAL ROAD MARCH

- * Coordinate observation and fields of fire with adjacent vehicle commanders (2)
- * Emplace automatic chemical agent alarm IAW PS instructions (2)
- * Install hot loop wire communications and extend the hot loop to the right adjacent vehicle or the company CP (2)
- * Prepare a sketch range card (2)
- * Prepare and submit a situation report (SITREP) (2)
- * Issue an oral operation order (2)
- ** Direct gunner to break down hot loop wire communications (2)
- ** Enter or leave a radio net (2)
- ** Direct loader to recover automatic chemical agent detector unit (2)
 - Participate in a tactical road march
 - Maintain position in platoon formation (column)
 - Maintain (occupy) position in platoon formation (herringbone)
 - Provide a crewman for the platoon OP team IAW the platoon sergeant's instructions
- * Employ a three-man crew

- Enter or leave a radio net
- Receive fuel truck and top off IAW the platoon sergeant's instructions

Scenario 2: MOVEMENT TO CONTACT

- Move from position in column formation to correct position in staggered column formation
- Maintain position in platoon formation (staggered column)
- Follow the platoon leader or platoon sergeant into the coil formation
- React to high performance (HP) aircraft attack
- ** Move from position in staggered column formation to correct position in line formation (2)
- ** Provide loader IAW the platoon leader's instructions (2)
- * Employ a three-man crew (2)
- Provide overwatch as platoon sergeant's section passes through the ford
- Maintain wingman position when passing through a ford and occupying a defilade position beyond the stream
- Maintain wingman position when passing through a ford and continuing movement along Highway N4
- Direct machinegun engagements on an M1 tank
- * Issue a fire command (10)
- ** Engage targets with the caliber .50 M2 HB machinegun on an M1 (P) tank (3)
- * Move into defilade position
- PS. Judge where to search for targets when conditions make it impossible to maintain surveillance in assigned sector
- PS. Judge whether or not conditions indicate a need to override designated search area
- D. Decide whether or not to override designated search area
- D. Decide where tank commander and loader will search for targets

- Move tank to defilade and remove mines with grappling hook rope attached to front tow hook on the tank
- Maintain wingman position during movement to and occupation of the right shoulder of the defile
- Provide overwatch as the platoon leader's section passes through the defile
- Maintain wingman position when passing through the defile and occupying a defilade position beyond the defile
- Maintain wingman position after moving off of the right shoulder of the defile, while platoon sergeant's section moves to rejoin the platoon leader's section
- Move to correct position in a staggered column formation and maintain that position
- ** Direct evasion of an anti-tank guided missile (3)
- * Direct main gun engagements on an M1 tank (6)
- * PS. Identify the least powerful weapon or ammunition required to destroy the enemy helicopter (4)
- * PS. Choose appropriate main gun ammunition (4)
- * PS. Judge from battlefield cues the amount and kind of damage inflicted upon the enemy target (2)
- * D. Decide when to stop firing (2)
- Fire an M250 grenade launcher on an M1 tank
- PS. Estimate how much time is available to prevent the enemy from destroying the tank
- PS. Judge how much a smoke screen will protect the tank from enemy missile fire
- D. Decide whether or not to fire smoke grenades
- *- Submit a spot report (SPOTREP)
- Maintain wingman position during movement to and occupation of the left shoulder of the defile
- Provide overwatch as platoon sergeant's section bypasses the defile
- Maintain wingman position during bypass of the defile
- Move to and occupy wingman position forward of the defile

- Move into a wedge formation
- Maintain position in wedge formation
- React to indirect fire
- Use chemical agent detector
- * Initiate unmasking procedures
- Move from position in wedge formation to correct position in line formation
- ** Move to overwatch position (4)
- ** Provide overwatch as platoon leader's section moves forward (3)
 - Provide overwatch as platoon sergeant's section moves forward
- ** Maintain wingman position during bounding overwatch (3)
 - Maintain wingman position in overwatch position
- * Conduct target acquisition (12)
- Move from overwatch position to correct position in line formation
- Back off of defilade position and follow platoon sergeant to platoon leader's position
- * Move to alternate firing position

Scenario 3: HASTY ATTACK

- * Relay platoon leader frag order to crewmembers (2)
- Move out in designated attack formation
- * Conduct target acquisition (5)
- * Direct main gun engagements on an M1 tank (5)
- * Issue a fire command (6)
- ** Conduct fire and maneuver within the platoon (2)
 - * Move into a defilade position (2)
- ** Provide covering fire for the advance of the platoon leader's section (2)

- Provide covering fire for the advance of the platoon sergeant's section
- Shift supporting fires
- Accelerate the assault
- Direct main gun and machinegun engagements on an M1 tank
- Maintain wingman position during the assault
- Sweep objective with machinegun fire
- Occupy defilade position in the forward part of the objective
- ** Ensure overlapping surveillance and fields of fire with adjacent vehicle commanders (2)
- * Prepare and submit a situation report (SITREP) (2)
- Reorganize on the objective
- Occupy defilade position oriented toward the east
- Reorganize on the position

Scenario 4: OCCUPY AND DEFEND BATTLE POSITIONS

- * Issue an oral operation order
- Move into a hide position behind the battle position
- * Coordinate observation and fields of fire with adjacent vehicle commanders
- * Prepare a sketch range card
- * Emplace automatic chemical agent alarm IAW platoon sergeant's instructions
- Select alternate firing positions and recon routes between firing positions
- ** Direct movement to primary firing position (2)
- * Install hot loop wire communications and extend the hot loop to the right adjacent vehicle of the team CP
- ** Direct main gun engagements on an M1 tank (4)
- PS. Identify the least powerful weapon or ammunition required to destroy the target

- PS. Choose appropriate main gun ammunition
- ** Issue a fire command (4)
- PS. Judge from battlefield cues the amount and kind of damage inflicted upon the enemy targets
- D. Decide when to stop firing
- * Move to alternate firing position
- Implement MOPP level 4
- * Fire an M250 grenade launcher on an M1 tank
- ** Move off of battle position (3)
- Maintain wingman position after moving off of battle position while platoon sergeant's section moves toward defilade, reverse overwatch
- Occupy reverse overwatch position (2)
- Maintain wingman position after moving off of battle position while platoon leader's section moves toward reverse overwatch position
- * Move into staggered column formation (2)
- * Initiate unmasking procedures
- Identify sector of fire
- Submit a situation report (SITREP)
- Prepare for passage of lines
- Move out and conduct passage of lines

NOTES: * Task duplicated within I-PTX
 ** Task duplicated within scenario
 PS Problem solving task
 D Decision task
 - Non 19K 10-40 task
 () Task replication within scenario

3. Task types and numbers by scenario are indicated below.

TYPE TASK SCENARIO	PROCEDURAL				NONPROCEDURAL				TOTAL		
	19K10-40		NON- 19K10-40		PROB. SOLVING		DECISION		TOTAL		GRAND
	Orig	Dupe	Orig	Dupe	Orig	Dupe	Orig	Dupe	Orig	Dupe	TOTAL
1	18	7							18	7	25
2	40	30	3		7	7	4	1	54	38	92
3*	15	24							15	24	39
4	12	22			3		1		15	23	38
TOTAL	85	83	3		10	7	5	1	102	92	194

*After the lead platoon has taken action on contact and developed the situation, the following platoon, which started the I-PTX thirty minutes later, will close on the lead platoon and participate in the hasty attack in the assault role while the lead platoon provides supporting fire. The hasty attack will then be replicated with the platoon's reversing roles.

ENCLOSURE 1 TO APPENDIX 3
(ASSEMBLY AREAS AND TACTICAL ROAD MARCH)
TASK TRAINING AND EVALUATION OUTLINE

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
You are TC 12 or TC 14, Co A, 37th Armor. The company is in a rear assembly area, the platoon has occupied its assigned positions, and tanks are camouflaged and in primary firing positions. (See Encl 5 to App. 3. Students will complete tasks listed in the TASKS column.)	* Coordinate observation and fields of fire with adjacent vehicle commanders (TC 12 and TC 14).	Given an M1 tank platoon that has been rearmed, refueled, and all pre-operations maintenance checks performed and all communications operational.	The students will perform the following: a. Check with adjacent vehicle commanders to ensure overlapping observation. b. Check with adjacent vehicle commanders to ensure overlapping fields of fire.	FM 17-15 (TEST)
	* Emplace automatic chemical agent alarm IAW PS instructions (TC 12 and TC 14).		The students will perform the following: a. Place detector unit upward, 150 meters from platoon position. b. Connect detector unit to WD-1 wire and take wire to alarm unit to Tank 12 or Tank 14. c. Connect WD-1 wire to alarm unit at Tank 12 or Tank 14.	FM 17-15 (TEST), TC 3-3

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	* Install hot loop wire communications and extend the hot loop to the right adjacent vehicle or the company CP (TC 12 and TC 14). * Prepare a sketch range card (TC 12 and TC 14). * Prepare and submit a situation report (SITREP) (Oral) (TC 12 and TC 14).		The students will perform the following: - Splice WD-1 wire for hot loop. - Connect WD-1 wire splice to AN-1780/VRC. - Take WD-1 wire to the right adjacent vehicle or the company CP. The students will perform the following: - Draw a sketch of the tank's sector of fire. - primary firing position - right and left sector reference point - right and left sector boundaries - center of sector reference point - Indicate on the sketch: - adjacent vehicle locations - PLs TRPs and ID fire concentration points - Coordinate with PL for additional TRPs and ID fire concentrations - Provide PL with a copy of sketch range card. The students will include the following in the situation report: - Personnel situation - Ammunition and POL required - Maintenance support required	FM 17-19K3, FM 17-15 (TEST) FM 17-12, FM 17-15 (TEST) Tank Platoon SOP, FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The PL alerts the TC over the hot loop that the company has received a mechanized infantry platoon, has detached the 3d tank platoon, and the company (team) will be moving out of the assembly area in an hour. TCs are to prepare for movement and standby for a movement order. Twenty minutes later the PL issues an oral movement order. (See Encl 1 to App. 5.) The PL also directs that the platoon net will open in ten minutes and automatic chemical agent alarms will be recovered in twenty minutes. TC 12 and TC 14 complete a quick map reconnaissance and prepare an operation order. (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	* Issue an oral operation order (TC 12 and TC 14).		The students will announce the following: - Enemy situation - Friendly situation (team and platoon) - Crew mission - How crew mission will be performed - Priority of fires - Coordinating instructions - Logistics support - Command and signal information EXAMPLE: TC refers crewman to overlay strip map. "No enemy ground force opposition expected during the movement, however, enemy air has been active in the area. Our team conducts a tactical road march from its present position - here - east along Highway N4 - here - to a forward assembly area - here. 1st Platoon leads the movement, crosses the SP - here - at _____ hours, in column formation, order of march 11, 12, 13, 14, 100 meter interval, 50 KMPH, 60 KMPH catchup speed, crosses CPs and the RP - here - and follows team guides into the forward assembly area. In the assembly area orient northeast, and from left to right 14, 13, 11, 12. Our job during the movement is to maintain the wingman position at all times. Main gun orientation, ground and air surveillance are SOP. Halts	FM 17-19K4

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
			SOP. Team trains will locate at _____. PL leads movement. Pass-word and challenge are ROLLING/MOSS. Platoon frequency is _____. Platoon alternate frequency is _____. Team frequency is _____. Time is _____. Any questions?" The students will direct the GNe to breakdown the hot loop wire communications as soon as the platoon net is open. The students will perform the following: - Enter the net in the proper sequence. - Correctly respond to an authentication challenge. - Correctly challenge the PL (NCS) (TC 14 does not issue a challenge). The students will direct the LDs to recover the automatic chemical agent detector units in sufficient time to prevent confusion when the platoon is ready to depart the assembly area. The students will perform the following: - Ensure LD maintains aerial surveillance. - Maintain main gun orientation in assigned sector (right front).	FM 17-19K3, FM 17-15 (TEST) FM 17-19K3 FM 17-15 (TEST), TC 3-3 FM 17-15 (TEST)
The platoon moves out of the assembly area in a COLUMN formation, crosses the SP, makes an unscheduled halt, and continues the tactical road march to the RP.	* Direct GN to breakdown hot loop wire communications (TC 12 and TC 14). * Enter or leave a radio net (TC 12 and TC 14). * Direct LD to recover automatic chemical agent detector unit (TC 12 and TC 14). * Participate in a tactical road march (TC 12 and TC 14).			

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
(See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	Maintain position in platoon (COLUMN) (TC 12 and TC 14).		c. Maintain ground surveillance in assigned sector (right front).	Tank Platoon SOP
	Maintain (occupy) position in platoon formation (HERRINGBONE) (TC 12 and TC 14).		The students will perform the following: a. Recognize the PL or PS signal to maintain proper position in platoon formation. or b. Recognize that the DV is not maintaining proper position in platoon formation. c. Direct DV to maintain 100 meter interval to the rear of the PL or PS tank. The students will perform the following: a. Recognize the PL or PS signal to "Execute HERRINGBONE." b. Recognize the PL or PS signal to occupy proper position in platoon formation. or c. Recognize that the DV is not occupying the proper position in the platoon formation. d. Direct the DV to occupy a position that: - is off the road.	
				FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The platoon arrives at RP and follows the guide's directions into the forward assembly area. The PL designates areas for the tanks, the TCs select primary firing positions and direct the DVs into the positions. (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	* Coordinate observation and fields of fire with adjacent vehicle commanders (TC 12 and TC 14). * Emplace automatic chemical agent alarm IAW PS instructions (TC 12 and TC 14). * Install hot loop wire communications and extend the hot loop to the right adjacent vehicle or the company CP (TC 12 and TC 14).		- is on the side of the road opposite from the PL and PS. - orients the tank 45° away from the axis of the road. - is at least 100 meters from the PL or PS tank. The students will perform the following: a. Check with adjacent vehicle commanders to ensure overlapping observation. b. Check with adjacent vehicle commanders to ensure overlapping fields of fire. The students will perform the following: a. Place detector unit upwind 150 meters from platoon position. b. Connect detector unit to WD-1 wire and take wire to Tank 12 or Tank 14. c. Connect WD-1 wire to alarm unit at Tank 12 or Tank 14. The students will perform the following: a. Splice WD-1 wire for hot loop. b. Connect WD-1 wire splice to AN-1780/VRC. c. Take WD-1 wire to the right adjacent vehicle or the company CP.	FM 17-15 (TEST) FM 17-15 (TEST), TC 3-3 FM 17-19K3, FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	• Provide one crewman for the platoon OP team IAW PS instructions (TC 12 and TC 14). • Employ a three-man crew (TC 12 and TC 14). • Enter or Leave a radio net (TC 12 and TC 14). • Prepare a sketch range card (TC 12 and TC 14).		The students will provide their LDs to the PS to man the platoon OP. The students will perform the following: a. Direct GN to assume LD duties. b. Direct and set fire control system for three-man crew operation. c. Review modified fire commands with the crew. The students will perform the following: a. TC 12 will challenge the PL (NCS). b. TC 12 acknowledges the PL authentication. c. TC 14 acknowledges the PL message in correct sequence. The students will perform the following: a. Draw a sketch of the tank's sector of fire. b. Indicate on the sketch: - primary firing position - right and left sector reference points - right and left sector boundaries - center of sector reference point - adjacent vehicle locations - PL'S TRPs and ID fire concentration points	FM 17-15 (TEST), Tank Platoon SOP FM 17-12 FM 17-19K3 FM 17-12, FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The PL alerts the TCs over the hot loop to prepare their tanks and crews for operations and to standby for an operation order in twenty minutes. Twenty minutes later the PL assembles the TCs and issues an operation order. (See Encl 2 to App. 5. The PL also directs that the platoon net will open in ten minutes, the OP will close in 15 minutes, and automatic chemical agent	* Prepare and submit a situation report (SITREP) (Oral) (TC 12 and TC 14).		c. Coordinate with PL for additional TRPs and ID fire concentrations. d. Provide PL with a copy of the sketch range card. The students will include the following in the situation report: a. Personnel situation b. POL required c. Maintenance support required (no ammunition required)	Tank Platoon SOP, FM 17-15 (TEST)
	* Receive fuel truck and top off IAW PS instructions (TC 12 and TC 14).		The students will perform the following: a. Direct GN to standby with portable fire extinguisher. b. Direct DV to refuel the tank.	FM 17-15 (TEST),
	* Issue an oral operation order (TC 12 and TC 14).		The students will announce the following: a. Enemy situation b. Friendly situation (team and platoon) c. Crew mission d. How crew mission will be performed e. Priority of fires f. Coordinating instructions g. Logistics support h. Command signal EXAMPLE: TC refers crewman to map overlay, "Elements of the 66th MRD defends the east bank of GREEN River - here - mounted enemy recon patrols have been	FM 17-19K4

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
alarms will be removed in 20 minutes. TC 12 and TC 14 complete a quick map reconnaissance and prepare an operation order. (See Encl 5 to App. 3. The student will complete the tasks listed in the TASKS column.)			seen west of GREEN River - here - and here. The enemy has a chemical and nuclear capability and has been sending armed recon HP aircraft west of GREEN River three or four times a day. Team A conducts a movement to contact east along Highway N4 - here - seizes Hill 609 - here - and supports following units crossing GREEN River. 1st Platoon leads the movement, crosses the SP - here - at _____ hours, in column formation, order of march 11, 12, 13, 14, 100 meters interval, 50 KMPH, 60 KMPH catchup speed, passes through the 3d Cavalry screen at this - passage point, and immediately changes into a staggered column formation. Our mission during the movement is to maintain the vanguard position at all times. Crewmembers be alert for PL or PS hand and arm signals. LD maintain air guard and left flank security. Main gun orientation and ground surveillance SOP by formation. I've checked the route for possible ambush sites - this bridge and this terrain defile - also these areas - are good for long range fire. Priority targets are C & C, tanks, and anti-tank positions. MOPP level _____ in effect upon leaving the assembly area. Priority of fires	

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	* Enter or leave a radio net (TC 12 and TC 14). * Direct GN to breakdown hot loop wire communications (TC 12 and TC 14). * Direct LD to recover automatic chemical agent detector unit (TC 12 and TC 14).		Initially to the 1st Platoon. Team trains will move to RJ. All logistics SOP. Current CEOI in effect, password and challenge are BRAVE/RIFLE, platoon frequency is _____, platoon alternate frequency is _____, team frequency is _____, emergency signal to withdraw or break contact is one red star cluster. Time is _____. Any questions?" The students will perform the following: - Enter the net in the proper station sequence. - Correctly respond to an authentication challenge. - Correctly challenge the PL (NCS) (TC 14 does not issue a challenge). The students will direct the GNs to breakdown the hot loop wire communications as soon as the platoon net is open. The students will direct the LDs to recover the automatic chemical agent detector units in sufficient time to prevent confusion when the platoon is ready to depart the assembly area.	FM 17-19K3 FM 17-19K3, FM 17-15 (TEST) FM 17-15 (TEST), TC 3-3
TOTAL TASKS: 25 (16 original tasks, 9 original repeat tasks)				

ENCLOSURE 2 TO APPENDIX 3

(MOVEMENT TO CONTACT)

TASK TRAINING AND EVALUATION OUTLINE

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The platoon departs the forward assembly in a COLUMN formation, crosses the SP, and moves through the 3d Cavalry passage point. At this time the PL signals "Execute STAGGERED COLUMN." (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	- Move from position in COLUMN formation to correct position in STAGGERED COLUMN formation (TC 12 and TC 14). - Maintain position in platoon formation (STAGGERED COLUMN) (TC 12 and TC 14).	Given an M1 tank platoon that has been refueled, all pre-operations maintenance and pre-fire checks performed, and all communications operational.	The students will perform the following: a. Recognize the PL or PS signal to "Execute STAGGERED COLUMN." b. Direct DV to move to and maintain a position between 100-300 meters to the left rear of the PL or PS tank. The students will perform the following: a. Recognize the PL or PS signal to maintain position in platoon formation. or b. Recognize that the DV is not maintaining proper position in platoon formation. c. Direct the DV to maintain position between 100-300 meters to the left rear of the PL or PS tank.	FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
At this time the team commander orders the PL to halt his platoon off the road and to await further orders. The PL signals "Execute COIL" and moves his tank off of the road. (See Encl 5 to App. 3). The students will complete the tasks listed in the TASKS column.)	Follow PL or PS into the COIL formation (TC 12 and TC 14).		The students will perform the following: a. Direct DV, when the PL or PS halts, to halt the tank between 100-300 meters from the PL or PS tank. b. Search the right flank for a defilade and concealed firing position within 100 meters of the halt position. c. Direct DV into defilade and concealed firing position. d. Direct LD to dismount and make a walk around maintenance check of the tank. e. Maintain ground and air surveillance.	FM 17-15 (TEST)
The PL receives an order from the team commander to move out and continue the mission. The PL signals "Follow Me" and when the platoon is oriented on Highway N4 the PL signals "Execute STAGGERED COLUMN." The platoon is moving in a STAGGERED COLUMN formation when an enemy aircraft starts a strafing run at the platoon from 12 o'clock. (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	React to HP enemy aircraft attack (TC 12 and TC 14).		The students will perform the following: a. Alert the platoon over the radio of the air attack by announcing: "AIR ATTACK - TWELVE O'CLOCK." b. Direct the DV to move half left, to accelerate to maximum speed, and to seek cover and concealment. c. Engage aircraft with machine-guns. (TC and LD engage aircraft without command.)	FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The enemy aircraft makes one strafing pass which results in no damage or casualties to the platoon or the enemy. The PL sends a SPOTREP to the team commander and signals the platoon to "Move Out - Execute STAGGERED COLUMN." The platoon moves out and as it approaches a bridge across stream the PL notices that the bridge is destroyed. The PL directs his DV into a defilade position and signals "Execute LINE." When the platoon is in the line formation the PL directs the LDs of Tank 12 and Tank 14 to dismount, recon the bridge, and look for a ford bypass. The LDs find a ford to the right of the bridge. The PL signals the PS to move his section through the ford and occupy position beyond the stream. When this had been done the PL signals his section to move through the ford.	* Move from position in STAGGERED COLUMN formation to correct position in LINE formation (TC 12 and TC 14). * Provide LD IAW PL instructions (TC 12 and TC 14). * Employ a three-man crew (TC 12 and TC 14). * Provide overwatch as PS section passes through the ford (TC 12). * Maintain wingman position when passing through the ford and occupying defilade position beyond the stream (TC 14).		The students will perform the following: - Recognize the PL or PS signal to "Execute LINE." - Direct the DV to move to a defilade position between 100-300 meters to the left of the PL tank or to the right of the PS tank. The students will each provide their LD to the PL for bridge and stream recon. The students will perform the following: - Direct CN to move to LD's position and assume LD's duties. - Direct and set fire control system for three-man crew operation. - Review modified fire commands with the crew. The student will conduct surveillance of likely enemy firing positions beyond the stream. The student will perform the following: - Direct the DV to back out of the defilade position and to maintain a position of 100-300 meters behind the PS.	FM 17-15 (TEST) FM 17-15 (TEST) FM 17-12 FM 17-15 (TEST) FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
(See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	* Maintain wingman position when passing through the ford and continuing movement along Highway N4 (TC 12).		b. Direct DV to stop for LD when approaching the ford. c. Direct DV to a defilade position beyond the stream and between 100-300 meters to the right of the PS. The student will perform the following: a. Direct the DV to back out of the defilade position and to maintain a position of 100-300 meters behind the PL. b. Direct DV to stop for LD when approaching the ford. c. Direct DV, after passing through the ford, to maintain a position of 100-300 meters to the left rear of the PL.	FM 17-15 (TEST)
The platoon crosses the stream and continues movement in a STAGGERED COLUMN formation. The PL sees an obstacle across the highway and halts the column. At this time the PL section is engaged from the left flank by enemy dismounted troops armed with rifles and machine-guns. About 20 seconds later TC 12 is fired on, from the left rear, by an RPG-16, which misses.	* Direct machinegun engagements on an MI tank (TC 12). (Section engagement exercise) * Issue a fire command (TC 12).		The student will perform the following: a. Acquire and identify the target as a threat. b. Lay main gun for deflection on enemy troops. c. Issue a fire command. The student will perform the following: a. Announce the alert (GUNNER). b. Announce the ammunition (COAX). c. Announce target description (TROOPS). d. Announce the execution (FIRE AND ADJUST).	FM 17-19K3 FM 17-12-1

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The TC engages the dismounted troops with the coax machinegun and the RPG-16 team with the caliber .50 machinegun. (See Encl 5 to App. 3. The student will complete the tasks listed in the TASKS column.)	* Engage targets with the caliber .50 M2 HB machinegun on an M1 tank (TC 12) (Section engagement exercise, continued) * Issue a fire command (TC 12).		The student will perform the following: - Load the gun. - Engage the target within 10 seconds of acquisition. - Hit or suppress enemy target. - Apply immediate action if stoppage occurs.	FM 17-19K3
The platoon destroys the enemy forces at the ambush site. The PL submits a SPOTREP to the team commander and signals the platoon to move out in a STAGGERED COLUMN with the PS section in the lead. Suddenly the PS halts his tank and engages a moving I72 and a moving BMP to his left front. TC 14, unable to see the enemy because of a terrain feature directs his DV into a defilade position to the right of the route. At this time the TC observes	* Move into defilade position (TC 14). * PS. Judge where to search for targets when conditions make it impossible to maintain surveillance assigned sector (TC 14). * PS. Judge whether or not conditions indicate a need to override the designated search area (TC 14). * D. Decide whether or not to override designated search area (TC 14).		The student will perform the following: - Announce the alert (CALIBER FIFTY). - Announce engagement termination (TC COMPLETE). The student will direct the DV into a defilade position to the right of the route. The student knows that if the PS is engaging targets to his left front the platoon's right front sector of surveillance is not being covered. The student knows the terrain feature to his left front severely restricts surveillance in his assigned area. The student decides to override designated search area because of terrain obstructions and PS search area is not covered.	FM 17-12-1 FM 17-15 (TEST) Problem solving lesson plan Problem solving lesson plan Decision lesson plan

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
an enemy sapper with a satchel charge emerge from a spider hole 30 meters to the right rear of the PS tank. (See Encl 5 to App. 3. The student will complete the tasks listed in the TASKS column.)	D. Decide where TC and LD will search for targets (TC 14). * Engage targets with a caliber .50 M2 HB machinegun in an M1 tank (TC 14). (Section engagement exercise) * Issue a fire command (TC 14).		The student decides to search for targets to his right front. The student will perform the following: - Load the gun. - Engage the target within 10 seconds of acquisition. - Hit or suppress enemy target. - Apply immediate action if stoppage occurs. The student will perform the following: - Announce the alert (CALIBER FIFTY). - Announce engagement termination (TC COMPLETE).	Decision lesson plan FM 17-19K3 FM 17-12-1
The PS destroys the enemy vehicles and TC 14 kills the enemy sapper. The PL submits a SPOTREP to the team commander and directs the platoon to move out, in a STAGGERED COLUMN formation, with the PL's section in the lead. Three minutes later the PL sees a terrain defile ahead. The PL directs his DV into a defilade position and	* Move from position in STAGGERED COLUMN formation to covered position in LINE formation (TC 12 and TC 14). * Provide LD IAW PL instructions (TC 12 and TC 14).		The students will perform the following: - Recognize PL's or PS's signal to "Execute LINE." - Direct the DV to move to a defilade position between 100-300 meters to the left of the PL tank on the right of the PS tank. The students will each provide their LD to the PL for defile and bypass recon.	FM 17-15 (TEST) FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
signals "Execute LINE." When the platoon was in a LINE formation the PL directs the LDs of Tank 12 and Tank 14 to dismount, recon the defile, and look for a bypass. The LD's signal that there is no bypass and the defile is mined. The PL directs the LDs to probe for and locate the mines. When this is done the PL directs TC 12 to move his tank to the defile and with the LDs assistance remove the mines with a rope and grappling hook. After the mines were removed the PL signals the PS to move his section onto the right shoulder of the defile. Then the PL moves his section through the defile and the platoon continues its mission in a STAGGERED COLUMN formation. (See Encl 5 to App. 3). The students will complete the tasks listed in the TASKS column.)	* Employ a three-man crew (TC 12 and TC 14). • Move tank to defile and remove mines with grappling hook rope attached to front tow hook on the tank (TC 12).		The students will perform the following: - Direct the GN to move to the LD's position and assume the LD duties. - Direct and set fire control system for three-man crew operation. - Review modified fire commands with the crew. The student will perform the following: - Direct the DV to move the tank to the defile. - Pass grappling hook rope to LD and direct him to tie the rope to a front tow hook on the tank. - Direct the other LD to attach the grappling hook to one of the mines. - Direct LDs to move to a safe location. - Direct DV to back up the tank and pull mine from defile. - Repeat the process until the defile is cleared of mines.	FM 17-12 FM 17-15 (TEST)
	• Maintain wingman position during movement to and occupation of the right shoulder of the defile (TC 14).		The student will perform the following: - Recognize the PS signal to move to the right shoulder of the defile. - Direct DV to back out of the defilade position, follow the PS, and occupy a defilade	FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	- Provide overwatch as the PL section passes through the defile (TC 14). - Maintain wingman position when passing through the defile and occupy defilade position beyond the defile (TC 12).		position between 100-300 meters to the right of the PS. The student will conduct surveillance of likely enemy firing positions beyond the defile. The student will perform the following: - Recognize the PL's signal to move through the defile. - Direct the DV to follow the PL through the defile while maintaining a 100-300 meter interval. - Direct the DV to a defilade position beyond the defile and between 100-300 meters to the left of the PL.	FM 17-15 (TEST) FM 17-15 (TEST)
	Maintain wingman position, after moving off of the right shoulder of the defile, while PS section moves to rejoin the PL section (TC 14).		The student will perform the following: - Recognize the PS signal to move off of the defile shoulder. - Direct DV to back off of the defile shoulder and follow the PS while maintaining a 100-300 meter interval.	FM 17-15 (TEST)
	Move to the correct position in a STAGGERED COLUMN formation and maintain that position (TC 12 and TC 14).		The student will perform the following: Recognize PL or PS signal to "Move Out and Execute STAGGERED COLUMN."	FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The platoon continues to move east, oriented on Highway M4. Ten minutes later the PL acquires two BMPs to his right front and announces "ACTION - RIGHT FRONT" and engages the BMPs. TC 12 looked to the right front but was unable to acquire the enemy vehicles because a tree line obstructs his view. All of a sudden the LD announces "SAGGER - LEFT FRONT." TC 12 looks to the left front and sees an enemy Hind helicopter which had launched a sagger missile. (See Encl 5 to App. 3. The student will perform the tasks listed in the TASKS column.)	* Direct evasion of an anti-tank guided missile (TC 12). * Direct main gun engagements on an M1 tank (TC 12). (Section engagement exercise) * PS. Identify the least powerful weapon or ammunition required to destroy the enemy helicopter (TC 12). * PS. Choose appropriate main gun ammunition (TC 12).		b. Direct DV to move and maintain a position between 100-300 meters to the left rear of the PL or PS tank. The student will perform the following: a. Alert the platoon with a contact report, e.g., "SAGGER - SAGGER - SAGGER - ELEVEN O'CLOCK." b. Direct DV to accelerate and to take evasive action. c. Direct the DV toward a defilade position. d. Engage enemy helicopter with the main gun. e. Fire smoke grenades. The student will perform the following: a. Acquire and identify the target as a threat. b. Lay main gun for deflection on the enemy helicopter. c. Issue a fire command. The student knows the main gun fire control system is the most accurate on the tank and the main gun is the only weapon system that will reach the target. The student decides to fire HEAT at the enemy helicopter because it will destroy the target and near misses will affect the missile gunner's aim.	FM 17-19K 1/2 FM 17-19K3 Problem solving lesson plan Decision lesson plan

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	* Issue a fire command (TC 12).		The student will perform the following: a. Announce the alert (GUNNER). b. Announce the ammunition (HEAT). c. Announce target description (CHOPPER). d. Announce the execution (FIRE). e. Announce termination of the engagement (TARGET - CEASE FIRE).	FM 17-12-1
	* PS. Judge from battlefield cues the amount and kind of damage inflicted upon an enemy target (TC 12).		The student knows target damage cues, e.g., explosion smoke, fire, crash, no threat posture, no enemy return fire, surrender gestures.	Problem solving lesson plan
	* D. Decide when to stop firing (TC 12).		The student decides from battlefield cues or reports from other crewmembers that the target has been destroyed.	Decision lesson plan
	* Fire an M250 grenade launcher on an M1 tank (TC 12).		The student will perform the following: a. Select SALVO 1 or SALVO 2 modes. b. Place smoke between the tank and the missile gunner. c. Perform required misfire procedures.	FM 17-19K3
	* PS. Estimate how much time is available to prevent the enemy from destroying the tank (TC 12).		The student knows the missile speed, distance between the missile and the tank, speed of the tank, and distance to defilade, and estimate of how much time is available to	Problem solving lesson plan

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	* PS. Judge how much a smoke screen will protect the tank from enemy missile fire (TC 12). * D. Decide whether or not to fire smoke grenades (TC 12). *- Submit a spot report (SPOTREP) (TC 12).		prevent the enemy from destroying the tank. The student knows the missile gunner must maintain reticle lay on a target. Student judges smoke screen will prevent constant reticle lay on the target and therefore the smoke screen will protect the tank from enemy missile fire. The student decides whether or not the tank can reach defilade before the missile reaches the tank. If defilade is too far away smoke grenades are fired. (When in doubt fire smoke grenades.) The student will perform the following: a. Submit a spot report (SPOTREP) on the enemy ATGM attack to include: - size - activity - location - unit (omit) - time - equipment b. Include in the report what the TC is doing about the situation. EXAMPLE: : THIS IS G3F06, SPOTREP. ONE HIND HELICOPTER LAUNCHED ATGM FROM NA379412, AT 1015 ROME0.	Problem solving lesson plan Decision lesson plan FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
helicopter which had launched a missile toward the PS's tank. The TC engages the enemy helicopter with the main gun. (See Encl 5 to App. 3. The student will complete the tasks listed in the TASKS column.)	* Direct main gun engagements on an M1 tank (TC 14). (Section engagement exercise) * PS. Identify the least powerful weapon or ammunition required to destroy the enemy helicopter (TC 14). * PS. Choose appropriate main gun ammunition (TC 14). * Issue a fire command (TC 14).		The student will perform the following: - Acquire and identify target as a threat. - Lay main gun for direction on the enemy helicopter. - Issue a fire command. The student knows the main gun fire control system is the most accurate on the tank and the main gun is the only weapon system that will reach the target. The student decides to fire HEAT at the enemy helicopter because it will destroy the target and near misses will affect the missile gunner's aim. The student will perform the following: - Announce the alert (GUNNER). - Announce the ammunition (HEAT). - Announce the description (CHOPPER). - Announce the execution (FIRE). - Announce termination of the engagement (TARGET - CEASE FIRE). The student knows target damage cues, e.g., explosion, smoke, fire, crash, no threat posture, no enemy return fire, surrender gesture.	FM 17-19K3 Problem solving lesson plan Problem solving lesson plan FM 17-12-1 Problem solving

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	* D. Decide when to stop firing (TC 14).		The student decides from battle-field cues or reports from other crewmembers that the target has been destroyed.	Decision lesson plan
	* Submit a spot report (SPOTREP) (TC 14).		The student will perform the following: a. Submit a spot report (SPOTREP) on the enemy ATCM attack to include: - size - activity - location (unit) - time - equipment b. Include in the report what the TC is doing about the situation. EXAMPLE: "THIS IS G3F06. SPOTREP. ONE HIND HELICOPTER LAUNCHED ATGM FROM NA410515, AT 1030 ROME0. ENGAGED AND DESTROYED HELICOPTER. CONTINUING MISSION."	FM 17-15 (TEST)
	* Move to and occupy wingman position forward of defile (TC 14).		The student will direct the DV to move the tank to a defilade position between 100-300 meters to the right rear of the PS.	FM 17-15 (TEST)
The PL submits a spot report to the team commander, signals his section to back off the defile shoulder, and bypasses the defile to the right.	* Move into a WEDGE formation (TC 12 and TC 14).		The students will perform the following: a. Recognize PL or PS signal to move into a WEDGE formation. b. Direct DV to move to a position between 100-300 meters to the right rear of the PL	FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
As the PL passes the PS section he signals "FOLLOW ME" and when the platoon is oriented on Highway N4 signals "Execute WEDGE." The platoon is moving in a wedge when enemy indirect fire impacts around the formation. The PL announces "INDIRECT FIRE - MOPP - FOUR."	Maintain position in WEDGE formation (TC 12 or TC 14).		tank or the left rear of PS tank. The students will perform the following: a. Recognize PL or PS signal to maintain proper position in platoon formation. or b. Recognize that the DV is not maintaining proper position in platoon formation. c. Direct DV to maintain between 100-300 meter interval to the right rear of the PL or to the left rear of the PS.	FM 17-15 (TEST)
After passing through the impact area the PL directs chemical monitoring and when negative results are reported the PL directs unmasking. (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	React to indirect fire (TC 12 and TC 14).		The student will perform the following: a. Direct crewmembers to close hatches. b. Direct crewmembers to implement MOPP Level 4. c. Direct DV to accelerate the tank and maintain original movement direction.	FM 17-15 (TEST)
	Use chemical agent detector (TC 12 and TC 14).		The students will perform the following: a. Use M256 chemical agent detection kit to determine presence of chemical agents. b. Report negative results to PL.	FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The PL submits a spot report to the team commander and the platoon continues on its mission in a WEDGE formation. As the PL's tank comes over the crest of a hill the PL acquires four enemy supply trucks moving away from him along a secondary road to the PL's left front. The PL halts his tank and signals "LINE." When the platoon is in a LINE formation the PL issues a platoon fire command. "RED - CALIBER FIFTY - FOUR TRUCKS - LEFT FRONT - DEPTH - FIRE." (See Encl 5 to App. 4. The students will complete the tasks listed in the TASKS column.)	* Initiate unmasking procedures (TC 12 and TC 14).		The students will perform the following: a. Direct crewmembers to unmask. b. Direct ID's hatch be opened. c. Open TC's hatch.	FM 17-15 (TEST)
	* Move from position in WEDGE formation to correct position in LINE formation (TC 12 and TC 14).		The student will perform the following: a. Recognize the PL's or PS's signal to "Execute LINE." b. Direct DV to move to a position between 100-300 meters to the right of the PL's tank or to the left of the PS's tank.	FM 17-15 (TEST)
	* Engage targets with the caliber .50 M2 HB machinegun on an M1 tank (TC 12 and TC 14). (Platoon engagement exercise)		The students will perform the following: a. Load the gun. b. Engage the target within 10 seconds of acquisition. c. Hit or suppress enemy target. d. Apply immediate action if stoppage occurs.	FM 17-15 (TEST)
	* Issue a fire command (TC 12 and TC 14).		The students will perform the following: a. Announce the alert (CALIBER FIFTY). b. Announce engagement termination (TARGET - CEASE FIRE).	FM 17-12-1
The platoon destroys the enemy trucks, the PL submits a spot report to the team commander,	* Move to overwatch position (TC 14).		The student will perform the following: a. Recognize PS signal to move to an overwatch position.	FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
and the PL signals "MOVE OUT - EXECUTE BOUNDING OVERWATCH - ALTERNATING BOUNDS." The PS section moves into an overwatch posi- tion and the PL section continues movement oriented on Highway N4. (See Encl 5 to App. 3. The student will com- plete the tasks listed in the TASKS column.)	* Provide overwatch as PL section moves forward (TC 14). * Move to overwatch position (TC 12). * Move to overwatch position (TC 12). * Provide overwatch as PS section moves forward (TC 12). * Maintain wingman position during bounding overwatch (TC 14).		b. Direct DV into overwatch position between 100-300 meters left of PS's tank. The student will conduct surveil- lance of likely enemy firing position ahead of the PL's section. The student will perform the following: a. Recognize PL signal to move in bounding overwatch. b. Direct DV to maintain a position between 100-300 meters to the right rear of the PL. The student will perform the following: a. Recognize PL signal to move to an overwatch position. b. Direct DV into overwatch position between 100-300 meters to the right of PL's tank. The student will conduct surveil- lance of likely enemy firing positions ahead of the PS section. The student will perform the following: a. Recognize PS signal to move in bounding overwatch. b. Direct DV to maintain a position between 100-300	FM 17-15 (TEST) FM 17-15 (TEST) FM 17-15 (TEST) FM 17-15 (TEST) FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The PL receives a report from the team commander that heavy dust clouds, five kilometers to the front, had been reported. The PL signals "Execute BOUNDING OVERWATCH - SUCCESSIVE BOUNDS." The PS section remains in an overwatch position and the PL section continues movement until it was approximately 2500 meters ahead of the PS section, then the PL section goes into an overwatch position and the PL signals the PS section to move out and the section moves forward and joins the PL section on the over-	* Maintain wingman position in overwatch position (TC 14).		meters to the left rear of the PS tank. The student will perform the following: - Recognize PS signal to move to an overwatch position. - Direct DV into overwatch position between 100-300 meters to the left of PS tank.	FM 17-15 (TEST)
	* Provide overwatch as PL section moves forward (TC 14).		The student will conduct surveillance of likely enemy firing positions ahead of the PL section.	FM 17-15 (TEST)
	* Maintain wingman position during bounding overwatch (TC 12).		The student will perform the following: - Recognize PL signal to move in bounding overwatch. - Direct DV to maintain a position between 100-300 meters to the right rear of the PL.	FM 17-15 (TEST)
	* Move to overwatch position (TC 12).		The student will perform the following: - Recognize PL signal to move to an overwatch position. - Direct DV into an overwatch position between 100-300 meters to the right of the PL's tank.	FM 17-15 (TEST)
	* Conduct target acquisition (TC 12).		The student will conduct surveillance of likely enemy firing positions forward of the overwatch position.	FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
watch position. The PL section moves out and the process is repeated. (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	* Maintain wingman position during bounding overwatch (TC 14).		The student will perform the following: a. Recognize PS signal to move to an overwatch position. b. Direct DV into an overwatch position between 100-300 meters to the left of the PS tank.	FM 17-15 (TEST)
	* Provide overwatch as PL section moves forward (TC 14).		The student will conduct surveillance of likely enemy firing positions ahead of the PL's section.	FM 17-15 (TEST)
The platoon continues its movement and as it approaches a tree line across Highway N4 the PL acquires four enemy tanks, crossing the platoon's front, at 2000 meters. The PL halts his tank and signals "LINE." When the platoon is in a LINE formation the PL issues a platoon fire command "RED - FRONTAL - FIRE." (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	* Move from overwatch position to correct position in LINE formation (TC 12 and TC 14).		The student will perform the following: a. Recognize the PL or PS signal to "Execute LINE." b. Direct the DV to move to a position between 100-300 meters to the right of the PL tank or to the left of the PS tank.	FM 17-15 (TEST)
	* Direct main gun engagements on an M1 tank (TC 12 and TC 14). (Platoon engagement exercise)		The students will perform the following: a. Acquire and identify the target as a threat. b. Lay main gun for deflection on the enemy tank. c. Issue a fire command.	FM 17-19K3

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The platoon destroys the enemy tanks, the PL submits a spot report to the team commander, and the PL signals "MOVE OUT - BOUNDING OVERWATCH - SUCCESSIVE BOUNDS." The movement continues. The PS section joins the PL section in an overwatch position. The PL section moves and when 1500 meters in front of the PS section the PL tank is fired upon by an enemy ATCM from the left front. The PL acquires the incoming ATCM, announces "SAGGER - SAGGER - SAGGER - ELEVEN O'CLOCK," directs his DV to take evasive action to the right front, seeks defilade, and pops smoke. (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	* Issue a fire command (TC 12 and TC 14).		The students will perform the following: - Remind GN of specific target (TC 12 right tank, TC 14 left tank). - Remind GN to shift fire toward center of target array after destroying initial target.	FM 17-12-1
	* Direct evasion of an anti-tank guided missile (TC 12).		The student will perform the following: - Direct DV to accelerate and take evasive action to the right front. - Direct DV towards defilade position. - Engage enemy ATCM launch site with the main gun. - Fire smoke grenades.	FM 17-19K 1/2
	* Direct main gun engagements on an M1 tank (TC 12).		The student will perform the following: - Acquire and identify the target as a threat. - Lay main gun for deflection on ATCM launch site. - Issue a fire command. The student knows the main gun is the only weapon available which has the range and lethality to destroy the ATCM launch team.	FM 17-19K3
	* PS. Identify least powerful weapon or ammunition required to destroy the ATCM launch team (TC 12).			Problem solving lesson plan
	* PS. Choose appropriate main gun ammunition (TC 12).		The student decides to fire HEAT at the ATCM launch team because it will destroy the target and near misses will affect the missile gunner's aim.	Problem solving lesson plan

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	* Issue a fire command (TC 12).		The student will perform the following: a. Announce the alert (GUNNER). b. Announce the ammunition (HEAT). c. Announce target description (ATCM LAUNCH SITE). d. Announce the execution (FIRE). e. Announce termination of engagement (CEASE FIRE). NOTE: Engagement termination stops when tank reaches turret defilade.	FM 17-12-1
When the PL alerted the platoon of the ATCM attack the PS acquires the ATCM launch site and issues a section fire command "THREE - HEAT - ANTI-TANK LAUNCH SITE - ON MY BURN1 - FIRE."	* Direct main gun engagements on an MI tank (TC 14).		The student will perform the following: a. Acquire and identify the target as a threat. b. Lay main gun for deflection on ATCM launch site. c. Issue a fire command.	FM 17-19K3
When the PL section reaches defilade the PS announces "CEASE FIRE." (See Encl 5 to App. 3. The student will complete the tasks listed in the TASKS column.)	* Issue a fire command (TC 14).		The student will remind the GN to shift rounds ten meters left of and then right of first round impact unless a specific target is seen.	FM 17-12-1
The PL section reaches defilade and the PS section stops firing. The PL observes the enemy ATCM launch site, on Hill 609, through his binoculars and acquires one T72 and	* Back off of defilade position and follow PS to PL position (TC 14).		The student will perform the following: a. Recognize the PS signal to back off of the defilade position and move to the PL location. b. Direct DV to back off of the defilade position.	FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
two BMPs. The PL checks his map and the terrain to his rear but is unable to see a suitable bypass. He submits a spot report to the team commander. The spot report recommended that the platoon support by fire, from the PL's present position while the rest of the team conduct a hasty attack on enemy forces on Hill 609 from Hill 600. The team commander arrives at Hill 522, considers the PL's report, the situation, and the team's mission. He then tells the PL to concentrate his platoon at the PL position, engage targets of opportunity on Hill 609, and await further orders.	* Conduct target acquisition (TC 12 and TC 14). * Direct main gun engagements on an M1 tank (TC 12 and TC 14). * PS. Identify the least powerful weapon or ammunition required to destroy the enemy vehicles (T72 or BMPs) (TC 12 and TC 14). * PS. Choose appropriate main gun ammunition (TC 12 and TC 14). * Issue a fire command (TC 12 and TC 14).		c. Direct DV to accelerate to right front and take evasive action while following the PS. d. Direct DV to generate smoke. e. Direct DV into a defilade position between 100-300 meters to the right of the PS tank. The student will conduct surveillance of Hill 609 for enemy targets. The student will perform the following: a. Acquire and identify targets as threats. b. Lay main gun for deflection on targets on Hill 609. c. Issue a fire command. The student knows the main gun is the only weapon available that can destroy a T72 or a BMP. The students decide to fire SABOT at T72s and HEAT at BMPs because they are the best rounds for these targets. The students will perform the following: a. Preliminary instructions (DRIVER - MOVE OUT - GUNNER - TAKE OVER).	FM 17-15 (TEST) FM 17-19K3 Problem solving lesson plan Problem solving lesson plan FM 17-12-1

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
opportunity on Hill 609. (See Encl 5 to App. 3. The student will complete the tasks listed in the TASKS column.)	Move to alternate firing position (TC 12 and TC 14).		b. Announce the alert (GUNNER). c. Announce the ammunition (SABOT for tank) (HEAT for BMP). d. Announce target description (TANK or PC). e. Announce the execution (FIRE). f. Announce termination of engage- ment (TARGET - CEASE FIRE). g. Concluding instructions (DRIVER - BACK UP - DRIVER - STOP). The student will direct the DV to back off of the firing position after each engagement and move to an alternate firing position.	FM 17-15 (TEST)
TOTAL TASKS: 92 (40 original tasks, 30 original repeat tasks, 3 non-19K10-40 tasks, 7 original problem solving tasks, 7 original problem solving repeat tasks, 4 decision tasks, and 1 original problem solving repeat tasks)				

ENCLOSURE 3 TO APPENDIX 3

(HASTY ATTACK)

TASK TRAINING AND EVALUATION OUTLINE

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The team commander directs the FIRST to smoke Hill 609 and to prepare to support the attack on Hill 609 with indirect fire. Then the team commander issues the following frag order: "BLUE AND WHITE - WHEN YOU SEE ME DEPART HILL 522 MOVE TO AND JOIN ME TO THE REAR OF HILL 600. BLUE ON THE RIGHT." The team commander, 3d Inf. Plat, and 2d Tank Plat moves to the rear of Hill 600 when Hill 609 is smoked. The team commander issued the following frag order: "THERE ARE		Given an M1 tank platoon participating in a hasty attack as either the support by fire element or as part of the assault force element.		

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
ONE T72 AND TWO BMPS ON HILL 609. RED ENGAGING ENEMY NOW. BLUE AND WHITE ASSAULTS HILL 609 ON ORDER - UNITS AHEAD. BLUE BASE AND PRIORITY OF FIRES. RED SUPPORTS BY FIRE ON ORDER - SHIFTS FIRE TO HILL 660 ON ORDER OR GREEN STAR CLUSTER. BLUE AND WHITE MOVE TO LINE - FULL DEFILADE - CREST OF HILL 600 - NOW."	* Relay PL frag order to crewmembers (TC 22 and TC 24).		The students will announce the following: a. Enemy situation b. Friendly situation (team and platoon) c. Crew mission d. How the crew mission will be performed e. Coordinating instructions EXAMPLE: ONE T72 and TWO BMPS ON HILL 609 TO OUR FRONT. RED IS ENGAGING ENEMY NOW. WE MOVE OUT AND ATTACK ENEMY ON HILL 609 (TC 22). LD KEEP AN EYE ON OUR LEFT FLANK (TC 24). DV MAINTAIN LINE WITH BLUE.	FM 17-15 (TEST)
The PL 2d Tank Plat relays the frag order to the TCs and adds: "BE PREPARED TO EXECUTE BOUNDING OVERWATCH. TC 24 MAINTAIN LINE WITH BLUE. TC 22 KEEP AN EYE ON OUR LEFT FLANK." (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	* Relay PL frag order to crewmembers (TC 12 and TC 14).		The students will announce the following: a. Enemy situation	FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
"TCS FOLLOW PLATOON FIRE COMMAND. TC 14 KEEP AN EYE ON OUR RIGHT FLANK." (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.) Team commander orders the attack to begin. The second and third platoons move off Hill 600 and into the attack, first platoon and FIST initiate supporting fires. (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.) The PL 2d Tank Plat signals the platoon to move out in LINE formation. (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	Move out in designated attack formation (TC 22 and TC 24).		b. Friendly situation (team and platoon) c. Crew mission d. How the crew mission will be performed e. Coordinating instructions EXAMPLE: ONE T72 AND TWO RMPS ON HILL 609 TO OUR FRONT. BLUE AND WHITE MOVE OUT FROM HILL 600 TO ATTACK ENEMY ON HILL 609. WE PROVIDE SUPPORTING FIRE FROM PRESENT POSITION ON ORDER. WE SHIFT FIRE TO HILL 660 ON ORDER OR GREEN STAR CLUSTER (TC 14). LD KEEP AN EYE ON OUR RIGHT FLANK."	FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The PL 1st Tank Plat issues a fire command to initiate supporting fires. "RED - HEAT - SUPPORT - HILL 609 - DIRECT FRONT - FOUR - FRONTAL - AT YOUR COMMAND." (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	* Conduct target acquisition (TC 22 and TC 24).		The students will acquire targets during the attack.	FM 17-15 (TEST)
	* Direct main gun engagements on an M1 tank (TC 22 and TC 24).		The students will perform the following: - Acquire and identify targets as threats. - Lay main gun for deflection on targets. - Issue a fire command.	FM 17-19K3
	* Issue a fire command (TC 22 and TC 24).		The students will perform the following: - Announce the alert (GUNNER). - Announce the ammunition (SABOT or HEAT). - Announce target description (what the target is). - Announce the execution (FIRE). - Announce termination of engagement (TARGET - CEASE FIRE).	FM 17-12-1
	* Direct main gun engagements on an M1 tank (TC 12 and TC 14).		The students will perform the following: - Acquire and identify targets as threats. - Lay main gun for deflection on targets. - Issue a fire command.	FM 17-19K3
	* Issue a fire command (TC 12 and TC 14).		The students will perform the following: Remind CN of target location on Hill 609 (TC 12 - center	FM 17-12-1

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The 2d Tank Platoon, half way to the fence line, receives intermittent direct fire from enemy positions on Hill 609. The platoon goes into defilade and the PL signals the PS to cover the PL section as it advances. The section advances 500 meters, goes into defilade, and the PL signals the PS to advance. (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	* Conduct fire and maneuver within the platoon (TC 22). * Conduct target acquisition (TC 22). * Direct main gun engagements on an M1 tank (TC 22). * Issue a fire command (TC 22).		left quarter of target area. TC 14 - right quarter of target area). b. Preliminary instruction (DRIVER - MOVE OUT - GUNNER TAKE OVER). c. Announce control (EACH ROUND - AT MY COMMAND). d. Announce execution (FIRE). The student will perform the following: a. Recognize PL signal to move out under covering fire. b. Direct DV to maintain position between 100-300 meters to the left rear of the PL's tank. The student will acquire targets during the attack. The student will perform the following: a. Acquire and identify targets as threats. b. Lay main gun for deflection on targets. c. Issue a fire command. The student will perform the following: a. Announce the alert (GUNNER).	FM 17-15 (TEST) FM 17-15 (TEST) FM 17-19K3 FM 17-12-1

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	* Move into defilade position (TC 22).		b. Announce the ammunition (SABOT or HEAT). c. Announce target description (what the target is). d. Announce the execution (FIRE). e. Announce termination of engagement (TARGET - CEASE FIRE). The student will perform the following: a. Recognize PL signal to move into defilade. b. Direct DV to move the tank into a defilade position between 100-300 meters to the left rear of the PL tank.	FM 17-15 (TEST)
	* Provide covering fire for advance of PS section (TC 22).		The student will perform the following: a. Recognize the PL signal to provide covering fire. b. Engage targets and possible enemy firing positions.	FM 17-15 (TEST)
	* Provide covering fire for advance of PL section (TC 24).		The student will perform the following: a. Recognize PS signal to provide covering fire. b. Engage targets and possible enemy fire positions.	FM 17-15 (TEST)
	* Conduct fire and maneuver within the platoon (TC 24).		The student will perform the following: a. Recognize the PS signal to move out under covering fire.	FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	* Conduct target acquisition (TC 24). * Direct main gun engagements on an MI tank (TC 24).		b. Direct DV to maintain a position between 100-300 meters to the right rear of the PS tank. The student will acquire target during the attack. The student will perform the following: a. Acquire and identify targets as threats. b. Lay main gun for deflection on targets. c. Issue a fire command.	FM 17-15 (TEST) FM 17-19K3
	* Issue a fire command (TC 24).		The student will perform the following: a. Recognize the PS signal to move into defilade. b. Direct DV to move the tank into a defilade position between 100-300 meters to the right rear of the PS tank.	FM 17-21
	* Move into defilade position (TC 24).		The student will perform the following: a. Recognize PS signal to move into defilade. b. Direct DV to move the tank into a defilade position between 100-300 meters to the right rear of the PS tank.	FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The attacking platoons reached the fence line and tree line. The team commanders orders assault formation and shifting of supporting fires. The PL 1st Tank Plat signals TCs to shift fire to targets of opportunity on Hill 660 and TC 14 to maintain surveillance to the right flank. (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	* Provide covering fire for the advance of the PL section (TC 24).		The student will perform the following: - Recognize PS signal to provide covering fire. - Engage targets and possible enemy firing positions.	FM 17-15 (TEST)
	* Shift supporting fires (TC 12 and TC 14).		The students will perform the following: - Recognize PL or PS signal to shift supporting fires to Hill 660. - Lay gun on assigned sector of Hill 660 (TC 12 - center left quarter of target area, TC 14 - right quarter of target area). - Maintain surveillance of right flank (TC 14).	FM 17-15 (TEST)
	* Conduct target acquisition (TC 12 and TC 14).		The students will acquire targets of opportunity on Hill 660.	FM 17-15 (TEST)
	* Direct main gun engagements on an M1 tank (TC 12 and TC 14).		The students will perform the following: - Acquire and identify targets as threats. - Lay main gun for deflection on targets. - Issue a fire command.	FM 17-19K3

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The PL 2d Tank Platoon signals the platoon to accelerate the assault and seize the left half of Hill 609. He cautions TCs not to overrun the objective, be alert for enemy fire from Hill 660 beyond the objective and for TC 22 to keep an eye on the left flank. (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	* Issue a fire command (TC 12 and TC 14).		The students will perform the following: - Announce the alert (GUNNER). - Announce the ammunition (SABOT or HEAT). - Announce target description (what the target is). - Announce the execution (FIRE). - Announce termination of engagement (TARGET - CEASE FIRE).	FM 17-12-1
	* Accelerate the assault (TC 22 and TC 24).		The students will direct their DVs to increase speed.	FM 17-15 (TEST)
	* Conduct target acquisition (TC 22 and TC 24).		The students will acquire targets during the assault.	FM 17-15 (TEST)
	* Direct main gun and machine-gun engagements on an M1 tank (TC 22 and TC 24).		The students will perform the following: - Acquire and identify targets as threats. - Lay main gun for deflection on targets. - Issue a fire command.	FM 17-19K3
	* Issue a fire command (TC 22 and TC 24).		The students will perform the following: - Announce the alert (GUNNER or LOADER or CALIBER FIFTY). - Announce the ammunition (COAX or SABOT or HEAT). - Announce target description (what the target is). - Announce the execution (FIRE). - Announce termination of the engagement (TARGET - CEASE FIRE).	FM 17-12-1

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The assault on Hill 609 was successful. The team commander issues the following frag order: BLUE AND WHITE COMPLETE CONSOLIDATION. BLUE OCCUPY HILL 660 WITH ONE SQUAD AND ESTABLISH OP. RED ORIENT EAST. ALL UNITS SUBMIT SITREP AND BE PREPARED TO SUPPORT PASSING UNITS. RESUPPLY IN TEN MINUTES. The PL 2d Tank Platoon directs consolidation on the objective, tells TCs to submit SITREPS, to reorganize, and to prepare to receive resupply. (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	Maintain wingman position during the assault (TC 22 and TC 24). - Sweep objective with machinegun fire (TC 22 and TC 24). - Occupy defilade position in forward part of the objective (TC 22 and TC 24).		The students will direct the DV to maintain a position of between 100-300 meters to the left of the PL tank or the right of the PS tank. The students will direct the GN to sweep his sector of the objective with machinegun fire. The students will perform the following: - Recognize PL or PL signal to move into defilade in the forward part of the objective. - Direct DV into defilade between 100-300 meters to the right of the PL tank or to the left of the PS tank.	FM 17-15 (TEST) FM 17-15 (TEST) FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	* Ensure overlapping surveillance and fields of fire with adjacent vehicle commanders (TC 22 and TC 24). * Prepare and submit a situation report (SITREP) (Oral) (TC 22 and TC 24). * Reorganize on the objective (TC 22 and TC 24).		The students will perform the following: - Ensure surveillance and fields of fire sector overlaps with vehicle 32, 3d Inf Plat and PS tank (TC 24). - Ensure surveillance and fields of fire sector overlaps with PL tank (TC 22). The students will perform the following: - Check crew for casualties. - Check DV for POL and maintenance status. - Check LD for ammunition status. - Submit a situation report (SITREP (Oral) to include: - Personnel losses - Ammunition required - POL required - Equipment required - Maintenance required EXAMPLE: "Platoon Sergeant I have no casualties, I need four rounds SABOT, eight rounds HEAT, a thousand rounds coax, and one hundred gallons of fuel. I also need a turret mechanic to look at my power traverse system." The students will perform the following: - Direct DV and LD to receive the fuel truck and refuel the tank.	FM 17-15 (TEST) Tank Platoon SOP FM 17-15

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The PL 1st Tank Platoon directs the TCs to orient their tanks to the east, to submit SITREP, to reorganize, and prepare to receive resupply. (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	* Occupy defilade position oriented to the east (TC 12 and TC 14).		b. Direct CN to assist turret mechanic in repairing power traverse system. c. Direct LD to redistribute main gun ammunition to ready area. d. Direct LD to receive the ammo truck and rearm the tank. e. Reload machineguns. f. Respond to platoon ammo check.	FM 17-15 (TEST)
	* Ensure overlapping surveillance and fields of fire with adjacent vehicle commanders (TC 12 and TC 14).		The students will ensure that surveillance and fields of fire sector overlaps with the PL tank or the PS tank.	FM 17-15 (TEST)
	* Prepare and submit a situation report (SITREP) (Oral) (TC 12 and TC 14).		The students will perform the following: - Check crew for casualties. - Check DV for POL and maintenance status. - Check LD for ammunition status. - Submit a situation report (SITREP) (Oral) to include: - Personnel losses - Ammunition required - POL required - Equipment required - Maintenance required	Tank Platoon SOP

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
	Reorganize on position (TC 12 and TC 14).		EXAMPLE: "Platoon Sergeant I have a driver complaining about a headache, I need six rounds of SABOT, 12 rounds of HEAT, a complete issue of smoke grenades, a thousand rounds of coax and 100 gallons of fuel." The students will perform the following: - Direct DV and LD to receive the fuel truck and refuel the tank. - Direct LD to redistribute main gun ammunition to ready areas. - Direct LD and GN to receive the ammo truck and rearm the tank. - Reload machineguns. - Respond to platoon commo check.	FM 17-15 (TEST)
TOTAL TASKS: 39 (15 original tasks, 24 original repeat tasks)				

ENCLOSURE 4 TO APPENDIX 3
(OCCUPY AND DEFEND BATTLE POSITIONS)
TASK TRAINING AND EVALUATION OUTLINE

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
You are TC 12 or TC 14, Co A, 37th Armor. The company has two tank platoons and one infantry platoon. The team is in a rear assembly resting and reorganizing after an extended period of combat. The PL has just returned from the team CP and announces the team will move out in two hours and conduct a deliberate occupation of a battle position. The PL issues an oral operation order (see Encl 3 to App. 5) and directs the TCs to be ready for pre-operations inspection in an hour and a half. The TCs give instructions to their crewmembers, make a map reconnaissance, and issue an oral operation order. The team moves out of the	Issue an oral operation order (TC 12 and TC 14).	Given an M1 tank platoon that is in a rear assembly area and has completed all preparations for combat operations.	The students will announce the following: a. Enemy situation b. Friendly situation (team and platoon) c. Crew mission d. How the crew mission will be performed e. Priority of fires f. Coordinating instructions g. Logistics support h. Command and signal information EXAMPLE: "The enemy forces operating in our new area are elements of the 9 MRD. For the past two weeks enemy activity has been limited to mounted recon patrols operating within ten kilometers of the battle position we will occupy. Intelligence reports the enemy is concentrating forces and is expected to attack within the next three days. The enemy has a nuclear and chemical capability. Team A occupies and defends BP 31 here - 1st Platoon occupies	FM 17-19K4

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
assembly area on schedule and after passing the RP, the PL signals the platoon to follow him and to move into a hide position. After the tanks are halted the TCs dismount and proceed to the crest of the hill with the PL. (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)			BP 31A - here. 3d Inf Plat will be on our right - here, 2d Tank Plat will be on our left - here, Co C, 37th Armor will be in reserve - here, and the task force scout platoon will be screening our front, along this line. 1st Plat has priority of fires. Our mission is to move with the plat to BP 31A, occupy a firing position on BP 31A, and to participate in the defense of BP 31A. The platoon will move from its present position - here - along this route, in staggered column, to this release point, and go into a hide position, to the rear of BP 31A - here. At the hide position TCs will dismount, accompany the PL to the crest of BP 31A, and plan the defense of the position. If the enemy crosses DUCK Lake stream with nine or more tanks and or BMPs the platoon will be prepared to withdraw to BP 33A - here. Priority of fires - ZSU-52, C and C, tanks, BMPs. Movement to BP 31A commences at _____ hours. Radio listening silence in effect until enemy contact, MOPP level _____ is in effect. Movement off of BP on order only. Logistics SOP except Class V which will be stockpiled to the rear of the BP33A - here. Correct CEOI in effect, password and	

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
			challenge GROUND/HOG, platoon frequency is _____. Platoon alternate frequency is _____. Emer-team frequency is _____. Emergency signal to withdraw, break contact, or move to BP 33A is _____. red star cluster. Time is _____. Any questions?" The students will perform the following: - Recognize PL or PS signal to move into a hide position. - Direct DV to move into a concealed-hull defilade position. - Direct GN to form a three-man crew. - Take map, binoculars, and compass and join PL on crest of battle position.	FM 17-15 (TEST)
The PL and TC arrive at the crest of the BP where the PL designates an area for each tank, tank sectors of fire, TRPs and indirect fire concentration points (see Encl 3 to App. 5). The PL emphasizes that tanks will remain in hide positions until ordered forward. Priority of organizing BP: OP at	Move into a hide position behind the battle position (TC 12 and TC 14).		The students will perform the following: - Check with adjacent vehicle commanders to ensure overlapping observation. - Check with adjacent vehicle commanders to ensure overlapping fields of fire. The students will perform the following: - Draw a sketch of the tank's of fire.	FM 17-15 (TEST) FM 17-12, FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
crest of BP (LDs Tanks 11 and 13), coordination with adjacent vehicle commanders, sketch range cards, hot loop, and chemical alarms. PS selects location for chemical alarms. After the PL had given his instructions and the PS had selected the location for the chemical alarms, the PL returns to the tanks and directed the hot loop be installed and LDs of Tanks 11 and 13 establish an OP at the top of BP 31A. (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	• Emplace automatic chemical agent alarm IAW PS's instructions (TC 12 and TC 14). • Select alternate firing position and recon routes between firing positions (TC 12 and TC 14).		b. Indicate on the sketch: - primary firing position - right and left sector reference points - right and left sector boundary - center of sector reference point - adjacent vehicle locations - PLs TRDs and ID fire concentration points c. Coordinate with PL for additional TRP and ID fire concentrations d. Provide the PL with a copy of the sketch range card. The students will perform the following: - Place detector unit upwind, 150 meters from platoon position. - Connect detector unit to WD-1 wire and take wire to Tank 12 and Tank 14. - Connect WD-1 wire to alarm unit at Tank 12 and Tank 14. The students will perform the following: - Select alternate firing position that: - is level - has hardstand - has cover and concealment - permits direct fire coverage of major mounted avenue of approach into sector of fire.	FM 17-15 (TEST), TC 3-3 FM 17-15 (TEST)

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The TCs complete the defensive preparations and return to their tanks. The OP acquires an enemy recon patrol of three BMPs a thousand meters beyond DUCK Lake Creek. The OP team leader calls in indirect fire and destroys one BMP, the remainder of the enemy platoon scatters. Shortly afterwards fog builds up along DUCK POND Creek. Team CP relays a task force report that enemy vehicles were detected crossing through the road junction beyond the Highway N4 bridge. Indirect fire had been called in but the results are unknown. Team commander orders 1st Plat to occupy turret defilade positions on BP 31A and for one TC to search the platoon sector once every 15 minutes with TIS	* Direct movement to primary firing position (TC 12 and TC 14). * Install hot loop wire communications and extend the hot loop to the right adjacent vehicle or the team CP (TC 12 and TC 14). * Direct main gun engagement on an MI tank (TC 12 and TC 14). * PS. Identify the least powerful weapon or ammunition		- is between 75-100 meters of primary firing position b. Select route between firing positions that: - is easy to recognize - provides cover - is trafficable The students will perform the following: - Direct DV to move to primary firing position. - Direct DV to halt before any part of the tank is exposed above the crest of the battle position. The students will perform the following: - Splice WD-1 wire for hot loop. - Connect WD-1 wire splice to AN-1780/VRC - Take WD-1 wire to the right adjacent vehicle on the team CP. The students will perform the following: - Acquire and identify target as a threat, using the PL reference point. - Lay main gun for deflection on the target. - Issue a fire command. The students know the main gun is the only weapon available that	FM 17-15 (TEST) FM 17-19K3, FM 17-15 (TEST) FM 17-19K3 Problem solving lesson plan

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
during limited visibility. The team commander also directs that upon reaching primary firing positions the hot loop would be reinstalled. The platoon occupies primary firing positions on BP 31A. During a surveillance sweep of the platoon sector the PL detects an unidentified vehicle at TRP 103 and a BMP at TRP 101. The PL sent the following message over the hot loop: "RED ONE FOUR - ENGAGE UNIDENTIFIED VEHICLE TRP ONE ZERO THREE. RED ONE TWO - ENGAGE BMP TRP ONE ZERO ONE." (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	required to destroy the target (TC 12 and TC 14). PS. Choose appropriate main gun ammunition (TC 12 and TC 14).		has the range and lethality to destroy the target. The students decide to fire HEAT because it will destroy the BMP and save SABOT to be used on tanks. TC 14 decides to fire SABOT because the type of vehicle is unknown and SABOT will destroy any vehicle.	
	* Issue a fire command (TC 12 and TC 14).		The students will perform the following: - Preliminary instructions (DRIVER - MOVE OUT - GUNNER TAKE OVER). - Announce the alert (GUNNER). - Announce the ammunition - TC 12 (HEAT) - TC 14 (SABOT) - Announce target description - TC 12 (PC) - TC 14 (UNIDENTIFIED VEHICLE) - Announce the execution (FIRE). - Announce termination of engagement (TARGET - CEASE FIRE). - Concluding instructions (DRIVER - BACK UP - DRIVER - STOP).	FM 17-12-1
	PS. Judge from battlefield cues the amount and kind of damage inflicted upon the enemy targets (TC 12 and TC 14).		The students know target damage cues, e.g., explosion, smoke, fire, no movement, no threat posture, no enemy return fire, surrender gesture.	Problem solving lesson plan

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
At this time enemy indirect fire falls on BP 31A. The PL announces over the hot loop "INDIRECT FIRE - MOPP - FOUR." At the same time the automatic chemical agent alarm rings. (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	D. Decides when to stop firing (TC 12 and TC 14). - Move to alternate firing position (TC 12 and TC 14). - Implement MOPP level 4 (TC 12 and TC 14).		The students decide from battle-field cues or reports from other crewmembers that the target was destroyed. The students will direct the DV to back off of the firing position after the engagement and move to the alternate firing position. The students will perform the following: - Direct LD to close hatch. - Relay PL MOPP level 4 order to crewmen.	Decision lesson plan FM 17-15 (TEST) FM 17-15 (TEST)
The enemy indirect fire is followed by a tank attack. The PL acquires four T72s crossing the ford upstream from DUCK Lake. The PL issues a platoon fire command "RED - SABOT - FOUR TANKS - TRP 103 - DEPTH - FIRE." (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	- Direct main gun engagements on an M1 tank (TC 12 and TC 14). - Issue a fire command (TC 12 and TC 14).		The students will perform the following: - Acquire and identify the target as a threat. - Lay main gun for deflection on the enemy tank. - Issue a fire command. The students will perform the following: - Direct - DRIVER - MOVE OUT - GUNNER - TAKE OVER. - Remind GN of specific target (TC 12 right tank, TC 14 left tank).	FM 17-19K3 FM 17-12-1

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The enemy tank attack is turned back with two tanks destroyed, one damaged, and the other moves behind the house beyond the ford. As TC 12 traverses the main gun back to his sector he acquires four enemy tanks emerging from the fog at TRP 101. The TC issues a spot report. "FOUR ENEMY TANKS AT TRP 101." The PL acknowledges the report and issues a platoon fire command. "RED - SABOT - FOUR TANKS - TRP 101 - FRONTAL - FIRE." (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.) Two enemy tanks were destroyed and the other two went to defilade. At this time enemy indirect fire increases on BMP 31A and an enemy	* Direct main gun engagements on an M1 tank (TC 12 and TC 14). * Issue a fire command (TC 12 and TC 14). * Fire an M250 grenade launcher on an M1 tank (TC 14).		c. Remind GN to shift fire toward center of target array after destroying initial target. d. Direct - DRIVER - MOVE BACK - DRIVER - HALT. The students will perform the following: a. Acquire and identify the target as a threat. b. Lay main gun for deflection on the enemy tank. c. Issue a fire command. The students will perform the following: a. Direct - DRIVER - MOVE OUT - GUNNER - TAKE OVER. b. Remind GN of specific target (TC 12 right tank, TC 14 left tank). c. Remind GN to shift fire toward initial target. d. Direct - DRIVER - MOVE BACK - DRIVER - HALT. The student will perform the following: a. Select SALVO 1 or SALVO 2 modes. b. Place smoke between the tank and the threat.	FM 17-19K3 FM 17-12-1 FM 17-19K3

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
tank company is reported moving from the By N4 road junction toward the bridge over DUCK LAKE Creek. The 3d Inf Platoon on the right reports one M2 destroyed and the 2d Tank Platoon reports one M1 destroyed. The team commander orders the 2d and 3d Platoons to withdraw with the 1st Platoon covering the withdrawal. The two platoons withdrew and moved to BP 33. At this time the team commander directs the 1st Platoon to withdraw, however, the PL acquires two enemy armor vehicles closing rapidly on BP 31A at twelve hundred meters. The PL orders the PS to withdraw one thousand meters and the PL issues a section fire command. "ONE - SABOT - ONE TANK AND ONE PC - RIGHT FRONT - FRONTAL - FIRE." (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	* Move off of battle position (TC 14). * Maintain wingman position, after moving off of battle position, while PS section moves toward defilade, reverse overwatch position (TC 14). * Occupy reverse overwatch position (TC 14). * Direct main gun engagements on an M1 tank (TC 12).		c. Perform required misfire procedures. The student will direct the DV to move off of the battle position. The student will perform the following: - Recognize PS signal to move off of battle position. - Direct DV to back off of battle position and follow the PS while maintaining a 100-300 meter interval to the right of the PS tank. - Maintain main gun orientation toward BP 31A. The student will perform the following: - Direct DV into a defilade position between 100-300 meters to left or right of PS tank. - Traverse main gun toward BP 31A. The student will perform the following: - Acquire and identify the target as a threat. - Lay main gun for deflection on the BMP. - Issue a fire command.	FM 17-15 (TEST) FM 17-15 (TEST) FM 17-15 (TEST) FM 17-19K3

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The two enemy vehicles are destroyed and the PL signals the section to withdraw. The PL section withdraws from BP 31A, passes the PS section and goes into a reverse overwatch position one thousand meters beyond the PS section. As the PS section approaches the PL overwatch position the PL signals "Execute STAGGERED COLUMN." The platoon then moves to BP 33A. (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	* Issue a fire command (TC 12).		The student will perform the following: a. Direct - DRIVER - MOVE OUT - gunner - TAKE OVER. b. Direct - DRIVER - BACK UP - DRIVER - HALT.	FM 17-15 (TEST)
	* Move off of battle position (TC 12).		The student will direct the DV to move off of the battle position.	FM 17-15 (TEST)
	* Maintain wingman position after moving off of battle position, while PL section moves toward reverse overwatch position (TC 12).		The student will perform the following: a. Recognize PL signal to move off of the battle position. b. Direct DV to back off of the battle position and follow the PL while maintaining a 100-300 meter interval with the PL tank. c. Maintain main gun orientation toward BP 31A.	FM 17-15 (TEST)
	* Occupy reverse overwatch position (TC 12).		The student will perform the following: a. Direct DV into a defilade position between 100-300 meters to the left or to the right of the PL tank. b. Traverse main gun toward BP 31A.	FM 17-15 (TEST)
	* Move into STAGGERED COLUMN formation (TC 12 and TC 14).		The students will perform the following: a. Recognize PL signal to "Execute STAGGERED COLUMN."	FM 17-15 (TEST)

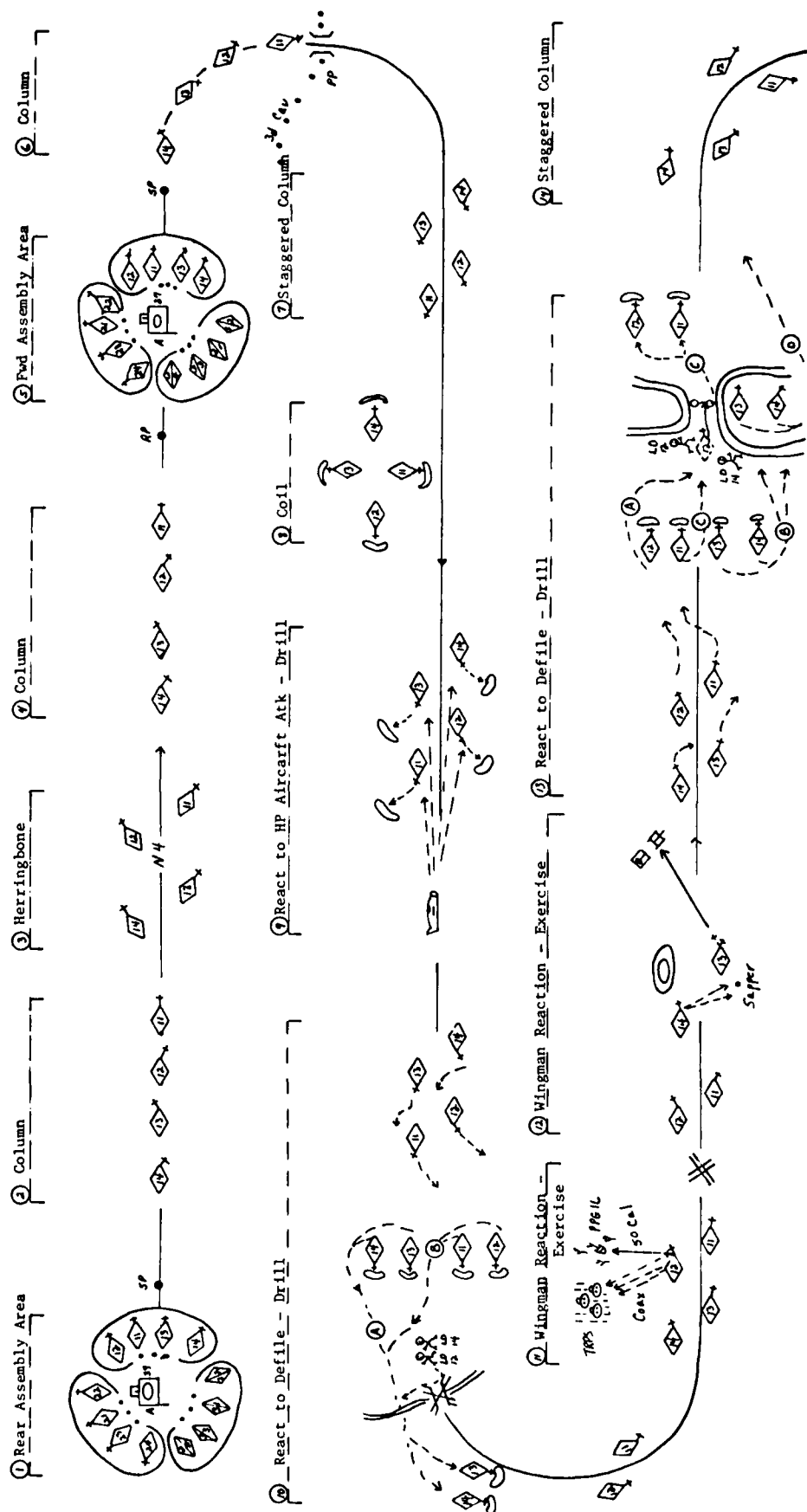
SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The 1st Tank Platoon moves to BP 33A and conducts a hasty occupation of the battle position. The PL orders MOPP level 2, indicates primary firing position areas and sectors of fire, and directs situation reports be submitted. Tank 12 had a jammed main gun elevation system and the caliber .50 and LD machinegun on Tank 14 were destroyed by enemy indirect fire on BP 31A. (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	* Initiate unmasking procedures (TC 12 and TC 14).		b. Direct DV to maintain a position between 100-300 meters to the left rear of the PL or PS tank.	FM 17-15 (TEST)
	* Direct movement to primary firing position (TC 12 and TC 14).		The students will perform the following: - Direct crewmen to unmask. - Direct LD's hatch be opened. - Open TC's hatch. The students will perform the following: - Direct DV to move to primary firing position. - Direct DV to halt before any part of the tank is exposed above the crest of the battle position.	FM 17-15 (TEST)
	* Identify sector of fire (TC 12 and TC 14).		The students will perform the following: - Confirm specific sector of fire with the PL. - Identify sector of fire right and left boundary reference points. - Coordinate overlapping observation and field of fire with adjacent vehicle commanders.	FM 17-15 (TEST)
	* Submit a situation report (SITREP) (TC 12 and TC 14).		The students will perform the following: - Check crew for casualties. - Check DV for POL and maintenance. - Check LD for ammunition status.	Tank Platoon SOP

SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
The PL, 1st Tank Plat, receives the following message from the team commander: "WHITE RECEIVING HEAVY PRESSURE - EXECUTE WITHDRAWAL NOW - MOVE WEST ALONG HIGHWAY N4 AND PASS THROUGH FOURTEEN CAVALRY AT NAI23468." The PL acknowledges the message, signals the platoon to withdraw from BP 33A, and then signals the platoon to Execute STAGGERED COLUMN formation. (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	* Move off of battle position (TC 12 and TC 14). * Move into STAGGERED COLUMN FORMATION (TC 12 and TC 14).		d. Submit a situation report (SITREP) (Oral) to include: - Personnel losses - Ammunition required - POL required - Equipment required - Maintenance required EXAMPLE: TC 12 - "Platoon Sergeant, I need eight rounds of SABOT, four rounds of HEAT, one hundred gallons of fuel, and maintenance support for my jammed main gun elevation mechanism." TC 14 - "Platoon sergeant, I need six rounds of SABOT, four rounds of HEAT, one hundred gallons of fuel, and replacement caliber .50 and loader machineguns." The students will direct their DVs to move off of the battle position. The students will perform the following: a. Recognize the PL's or the PS's signal to move into a STAGGERED COLUMN formation. f. Direct DV to maintain a position between 100-300 meters to the left rear of PL or PS tank.	FM 17-15 (TEST) FM 17-15 (TEST)

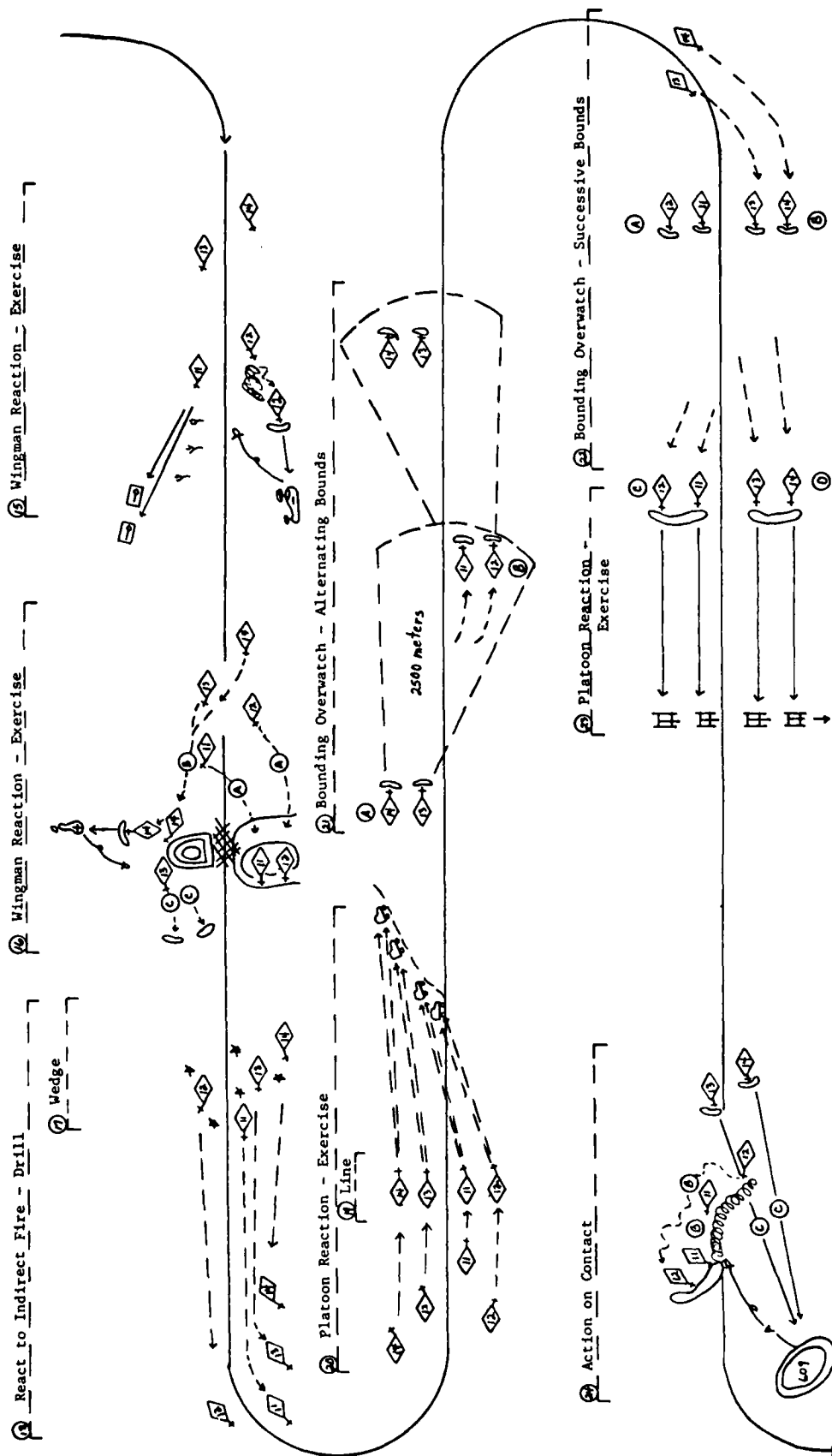
SITUATION	TASKS	CONDITIONS	STANDARDS	REFERENCES
Two kilometers before reaching the 14th Cavalry passage point the PL halts the column, directs main gun be elevated, orange cerise panels be displayed on the front slope of the tanks, and then he signals the platoon to move out in column formation. (See Encl 5 to App. 3. The students will complete the tasks listed in the TASKS column.)	- Prepare for passage of fires (TC 12 and TC 14). - Move out and conduct passage of lines (TC 12 and TC 14).		The students will perform the following: a. Recognize PL or PS signal to halt. b. Direct DV to halt the tank. c. Place cerise panel on front slope of the tank. d. Elevate main gun to maximum. (TC 14 maintains main gun at horizontal and traversed to the rear.) The students will perform the following: a. Recognize PL or PS signal to move out and into a column formation. b. Direct DV to move out. c. Direct DV to maintain between 100-300 meter interval behind the PL or PS tank.	FM 17-15 (TEST) FM 17-15 (TEST)
TOTAL TASKS: 38 (12 original tasks, 22 original repeat tasks, 3 original problem solving tasks, and 1 original decision task)				

ENCLOSURE 5 TO APPENDIX 3

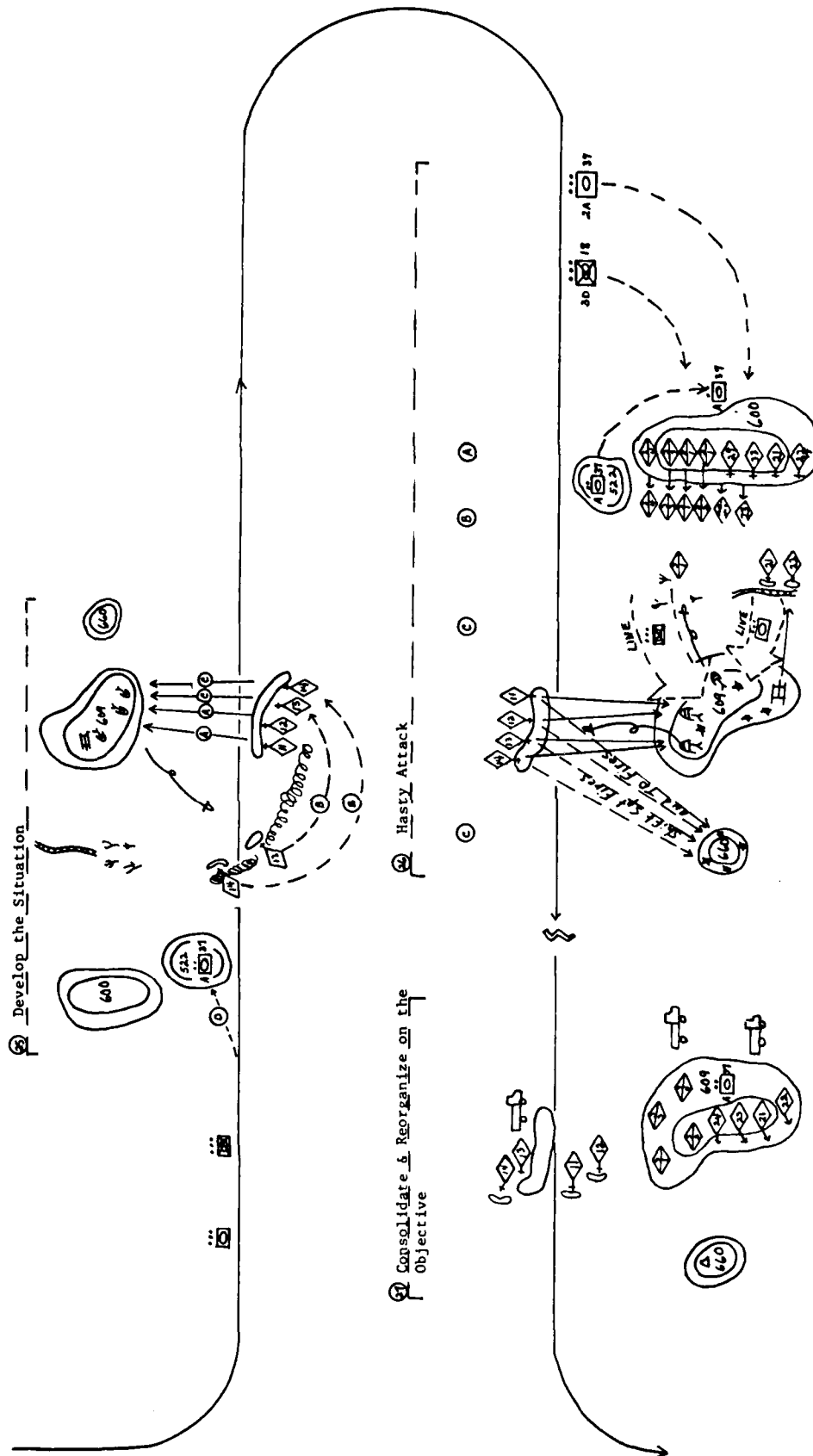
SCENARIO SCHEMATIC



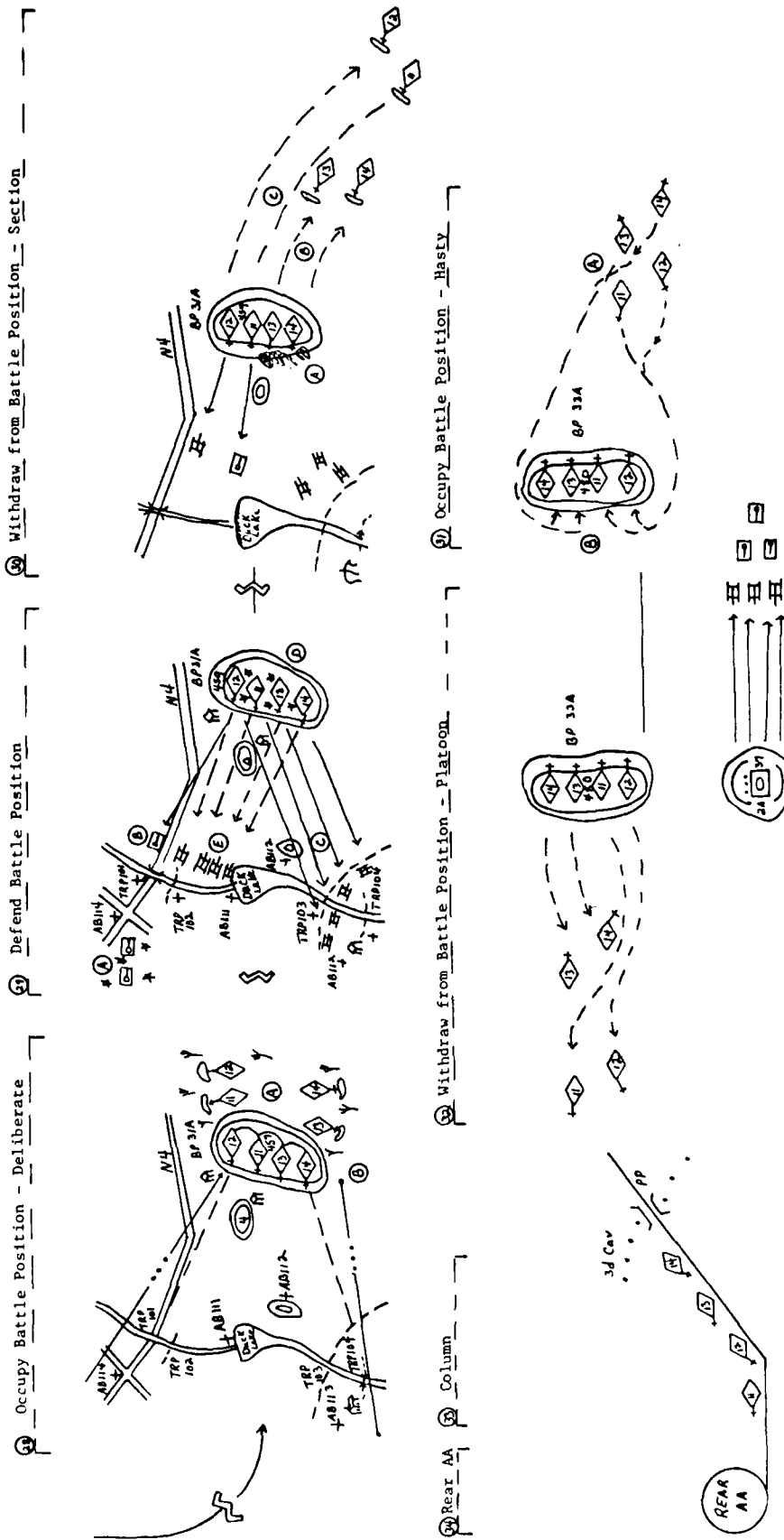
ENCLOSURE 5 TO APPENDIX 3
SCENARIO SCHEMATIC



ENCLOSURE 5 TO APPENDIX 3
SCENARIO SCHEMATIC (Continued)



ENCLOSURE 5 TO APPENDIX 3
SCENARIO SCHEMATIC (Continued)



APPENDIX 4
I-PTX TASK ACCURACY SCORE SHEET

1. There are four task accuracy score sheets, one for each scenario. Each score sheet includes: 1) task statements, 2) points for each task, 3) GO and NO GO blocks for recording points earned or lost by task performance, 4) a block for points earned for each task, and 5) accumulation points for each scenario. The scoring recapitulation sheet includes for each scenario: 1) scenario title, 2) columns for number of tasks, TC number, student number, possible points for each scenario, and blocks for points earned and points lost, and 3) the I-PTX totals for possible points, points earned, and points lost by each student.
2. The scorer initiates the I-PTX by reading and explaining the first item in the first scenario, and as necessary, by indicating to the student the tasks that are to be performed. However, the scorer will not indicate to the student "reaction" tasks that are required as the result of enemy action or orders from the platoon leader or the platoon sergeant. The scorer will repeat the process for succeeding actions in the first scenario and subsequent scenarios. The scorer will ride on the student's tank during the I-PTX to ensure comprehensive evaluation of student task performance.
3. The scorer must demonstrate evaluation diversity when administering the I-PTX. Procedural tasks which require sequential subtask performance will be evaluated objectively using the task standards sequence indicated in the appropriate task training and evaluation outline (TTEO). Procedural tasks which do not require sequential subtask performance will also be evaluated objectively using the task standards in the appropriate TTEO. However, sequence of subtask performance is not a required evaluation criterion. Nonprocedural tasks, e.g., problem solving and decision, will be evaluated subjectively using the task standards in the appropriate TTEO as a guide. Reasonable outcome is the only scoring criterion for evaluating student performance of nonprocedural tasks.
4. The accumulation value of accuracy points represents a student's performance score for the I-PTX.

ENCLOSURE 1 TO APPENDIX 4
ACCURACY SCORE SHEET

Student Name _____ SSN _____

TC 12

TC 14

Scenario: ASSEMBLY AREAS AND TACTICAL ROAD MARCH

TASK: Coordinate observation and fields of fire with adjacent vehicle commanders (TC 12 and TC 14).

Points	GO	NO GO	EARNED
2	☐	☐	☐

TASK: Emplace automatic chemical agent alarm IAW PS instruction (TC 12 and TC 14).

Points	GO	NO GO	EARNED
3	☐	☐	☐

TASK: Install hot loop wire communications and extend the hot loop to the right adjacent vehicle or the company CP (TC 12 and TC 14).

Points	GO	NO GO	EARNED
3	☐	☐	☐

TASK: Prepare a sketch range card (TC 12 and TC 14).

Points	GO	NO GO	EARNED
4	☐	☐	☐

TASK: Prepare and submit a situation report (SITREP) (TC 12 and TC 14).

Points	GO	NO GO	EARNED
3	☐	☐	☐

TASK: Issue an oral operation order (TC 12 and TC 14).

Points	GO	NO GO	EARNED
8	☐	☐	☐

TASK: Direct GN to break hot loop wire communications (TC 12 and TC 14).

Points	GO	NO GO	EARNED
1	☐	☐	☐

TASK: Enter or leave a radio net
(TC 12 and TC 14).

Points	GO	NO GO	EARNED	
3	☐	☐	☒	TC 12
2	☐	☐	☒	TC 14

TASK: Direct LD to recover
automatic chemical agent
detector unit (TC 12 and
TC 14).

Points	GO	NO GO	EARNED
1	☐	☐	☒

TASK: Participate in a tactical
road march (TC 12 and
TC 14).

Points	GO	NO GO	EARNED
3	☐	☐	☒

TASK: Maintain position in pla-
toon formation (TC 12 and
TC 14).

Points	GO	NO GO	EARNED
2	☐	☐	☒

TASK: Maintain (occupy) posi-
tion in platoon formation
(TC 12 and TC 14).

Points	GO	NO GO	EARNED
3	☐	☐	☒

TASK: Coordinate observation and
fields of fire with adja-
cent vehicle commanders

Points	GO	NO GO	EARNED
2	☐	☐	☒

TASK: Emplace automatic chemical
agent alarm IAW PS instruc-
tions (TC 12 and TC 14).

Points	GO	NO GO	EARNED
3	☐	☐	☒

TASK: Install hot loop wire
communications and extend
the hot loop to the right
adjacent vehicle and the
company CP (TC 12 and
TC 14).

Points	GO	NO GO	EARNED
3	☐	☐	☒

TASK: Provide one crewman for the platoon OP team IAW PS instructions (TC 12 and TC 14).				TASK: Prepare and submit a situation report (SITREP) (TC 12 and TC 14).			
Points	GO	NO GO	EARNED	Points	GO	NO GO	EARNED
1	☐	☐	☒	3	☐	☐	☒
-----				-----			
TASK: Employ a three-man crew (TC 12 and TC 14).				TASK: Receive fuel truck and top off IAW PS instructions (TC 12 and TC 14).			
Points	GO	NO GO	EARNED	Points	GO	NO GO	EARNED
3	☐	☐	☒	2	☐	☐	☒
-----				-----			
TASK: Enter or <u>leave</u> a radio net (TC 12 and TC 14).				TASK: Issue an oral operation order (TC 12 and TC 14).			
Points	GO	NO GO	EARNED	Points	GO	NO GO	EARNED
2	☐	☐	☒	8	☐	☐	☒
1							
			TC 14				
-----				-----			
TASK: Prepare a sketch range card (TC 12 and TC 14).				TASK: <u>Enter</u> or leave a radio net (TC 12 and TC 14).			
Points	GO	NO GO	EARNED	Points	GO	NO GO	EARNED
4	☐	☐	☒	3	☐	☐	☒
				2	☐	☐	☒
							TC 14

TASK: Direct GN to breakdown hot loop wire communications (TC 12 and TC 14).				RECAPITULATION		
				POINTS		
Points	GO	NO GO	EARNED	POSSIBLE	EARNED	LOST
1	☐	☐	☒	☐ 72	☒	☐ TC 12
				☐ 69	☒	☐ TC 14

TASK: Direct LD to recover automatic chemical agent detector unit (TC 12 and TC 14).						
Points	GO	NO GO	EARNED			
1	☐	☐	☒			

ENCLOSURE 2 TO APPENDIX 4
ACCURACY SCORE SHEET

Student Name _____ SSN _____

TC 12

TC 14

Scenario: MOVEMENT TO CONTACT

TASK: Move from position in COLUMN formation to correct position in STAGGERED COLUMN formation (TC 12 and TC 14).

Points GO NO GO EARNED

2

☐
☐
☐

TASK: React to HP aircraft attack (TC and TC 14).

Points GO NO GO EARNED

3

☐
☐
☐

TASK: Maintain position in platoon formation (STAGGERED COLUMN) (TC 12 and TC 14).

Points GO NO GO EARNED

2

☐
☐
☐

TASK: Move from position in STAGGERED COLUMN formation to correct position in LINE formation (TC 12 and TC 14).

Points GO NO GO EARNED

2

☐
☐
☐

TASK: FOLLOW THE PL or PS into the COIL formation (TC 12 and TC 14).

Points GO NO GO EARNED

5

☐
☐
☐

TASK: Provide LD IAW PL instructions (TC 12 and TC 14).

Points GO NO GO EARNED

1

☐
☐
☐

TASK: Employ a three-man crew (TC 12 and TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☒	TASK: Direct machinegun engagements on an M1 tank (TC 12). Points GO NO GO EARNED 3 ☐ ☐ ☒ TC 12
TASK: Provide overwatch as PS section passes through the ford (TC 12). Points GO NO GO EARNED 1 ☐ ☐ ☒ TC 12	TASK: Issue a fire command (TC 12). Points GO NO GO EARNED 4 ☐ ☐ ☒ TC 12
TASK: Maintain wingman position when passing through the ford and occupying defilade position beyond the stream (TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☒ TC 14	TASK: Engage targets with the caliber .50 M2 HB machinegun on an M1 tank (TC 12). Points GO NO GO EARNED 4 ☐ ☐ ☒ TC 12
TASK: Maintain wingman position when passing through the ford and continuing movement along Highway N4 (TC 12). Points GO NO GO EARNED 3 ☐ ☐ ☒ TC 12	TASK: Issue a fire command (TC 12). Points GO NO GO EARNED 2 ☐ ☐ ☒ TC 12

TASK: Move into defilade position (TC 14). Points GO NO GO EARNED 1 ☐ ☐ ☒ TC 14	TASK: (D) Decide where TC and LD will search for targets (TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☒ TC 14
TASK: (PS) Judge where to search for targets when conditions make it impossible to maintain surveillance assigned sector (TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☒ TC 14	TASK: Engage targets with a caliber .50 M2 HB machine-gun on an M1 tank (TC 14). Points GO NO GO EARNED 4 ☐ ☐ ☒ TC 14
TASK: (PS) Judge whether or not conditions indicate a need to override designated search area (TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☒ TC 14	TASK: Issue a fire command (TC 14). Points GO NO GO EARNED 2 ☐ ☐ ☒ TC 14
TASK: (D) Decide whether or not to override designated search area (TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☒ TC 14	TASK: Move from position in STAGGERED COLUMN formation to correct position in LINE formation (TC 12 and TC 14). Points GO NO GO EARNED 2 ☐ ☐ ☒

TASK: Provide LD IAW PL instructions (TC 12 and TC 14).

Points GO NO GO EARNED

1 ☐ ☐ ☒

TASK: Employ a three-man crew (TC 12 and TC 14).

Points GO NO GO EARNED

3 ☐ ☐ ☒

TASK: Move tank to defilade and remove mines with grappling hook rope attached to front tow hook on the tank (TC 12).

Points GO NO GO EARNED

6 ☐ ☐ ☒ TC 12

TASK: Maintain wingman position during movement to and occupation of the right shoulder of the defile (TC 14).

Points GO NO GO EARNED

2 ☐ ☐ ☒ TC 14

TASK: Provide overwatch as the PL section passes through the defile (TC 14).

Point GO NO GO EARNED

1 ☐ ☐ ☒ TC 14

TASK: Maintain wingman position when passing through the defile and occupy defilade position beyond the defile (TC 12).

Points GO NO GO EARNED

3 ☐ ☐ ☒ TC 12

TASK: Maintain wingman position after moving off of the right shoulder of the defile, while PS section moves to rejoin the PL section (TC 14).

Points GO NO GO EARNED

2 ☐ ☐ ☒ TC 14

TASK: Move to correct position in a STAGGERED COLUMN formation and maintain that position (TC 12 and TC 14).

Points GO NO GO EARNED

2 ☐ ☐ ☒

TASK: Direct the evasion of an anti-tank guided missile (TC 12).

Points	GO	NO GO	EARNED
5	☐	☐	☒ TC 12

TASK: Direct main gun engagements on an M1 tank (TC 12).

Points	GO	NO GO	EARNED
3	☐	☐	☒ TC 12

TASK: (PS) Identify the least powerful weapon or ammunition required to destroy the enemy helicopter (TC 12).

Points	GO	NO GO	EARNED
3	☐	☐	☒ TC 12

TASK: (PS) Choose appropriate main gun ammunition (TC 12).

Points	GO	NO GO	EARNED
3	☐	☐	☒ TC 12

TASK: Issue a fire command (TC 12).

Points	GO	NO GO	EARNED
5	☐	☐	☒ TC 12

TASK: (PS) Judge from battlefield cues the amount and kind of damage inflicted upon an enemy target (TC 12).

Points	GO	NO GO	EARNED
3	☐	☐	☒ TC 12

TASK: (D) Decide when to stop firing (TC 12).

Points	GO	NO GO	EARNED
3	☐	☐	☒ TC 12

TASK: Fire an M250 grenade launcher on an M1 tank (TC 12).

Points	GO	NO GO	EARNED
3	☐	☐	☒ TC 12

TASK: (PS) Estimate how much time is available to prevent the enemy from destroying the tank (TC 12). Points GO NO GO EARNED 3 ☐ ☐ ☒ TC 12	TASK: Maintain wingman position during movement and occupation of the left shoulder of the defile (TC 12). Points GO NO GO EARNED 2 ☐ ☐ ☒ TC 12
TASK: (PS) Judge how much a smoke screen will protect the tank from enemy missile fire (TC 12). Points GO NO GO EARNED 3 ☐ ☐ ☒ TC 12	TASK: Provide overwatch as PS section bypasses the defile (TC 12). Points GO NO GO EARNED 1 ☐ ☐ ☒ TC 12
TASK: (D) Decide whether or not fire smoke grenades (TC 12). Points GO NO GO EARNED 3 ☐ ☐ ☒ TC 12	TASK: Maintain wingman position during bypass of defile (TC 14). Points GO NO GO EARNED 2 ☐ ☐ ☒ TC 14
TASK: Submit a spot report (SPOTREP) (TC 12). Points GO NO GO EARNED 2 ☐ ☐ ☒ TC 12	TASK: Direct evasion of an anti-tank guided missile (TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☒ TC 14

TASK: Direct main gun engagements on an M1 tank (TC 14).

Points	GO	NO GO	EARNED
3	☐	☐	☒ TC 14

TASK: (PS) Identify the least powerful weapon or ammunition required to destroy the enemy helicopter (TC 14).

Points	GO	NO GO	EARNED
3	☐	☐	☒ TC 14

TASK: (PS) Choose appropriate main gun ammunition (TC 14).

Points	GO	NO GO	EARNED
3	☐	☐	☒ TC 14

TASK: Issue a fire command (TC 14).

Points	GO	NO GO	EARNED
5	☐	☐	☒ TC 14

TASK: (PS) Judge from battlefield cues the amount and kind of damage inflicted upon the enemy target (TC 14).

Points	GO	NO GO	EARNED
3	☐	☐	☒ TC 14

TASK: (D) Decide when to stop firing (TC 14).

Points	GO	NO GO	EARNED
3	☐	☐	☒ TC 14

TASK: Submit a spot report (SPOTREP) (TC 14).

Points	GO	NO GO	EARNED
2	☐	☐	☒ TC 14

TASK: Move to and occupy wingman position forward of defile (TC 14).

Points	GO	NO GO	EARNED
1	☐	☐	☒ TC 14

TASK: Move into a WEDGE formation (TC 12 and TC 14). Points GO NO GO EARNED 2 ☐ ☐ ☐	TASK: Initiate unmasking procedures (TC 12 and TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☐
TASK: Maintain position in WEDGE formation (TC 12 and TC 14). Points GO NO GO EARNED 2 ☐ ☐ ☐	TASK: Move from position in WEDGE formation to correct position in LINE formation (TC 12 and TC 14). Points GO NO GO EARNED 2 ☐ ☐ ☐
TASK: React to indirect fire (TC 12 and TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☐	TASK: Engage targets with the caliber .50 M2 HB machinegun on an M1 tank (TC 12 and TC 14). Points GO NO GO EARNED 4 ☐ ☐ ☐
TASK: Use chemical agent detector (TC 12 and TC 14). Points GO NO GO EARNED 2 ☐ ☐ ☐	TASK: Issue a fire command (TC 12 and TC 14). Points GO NO GO EARNED 2 ☐ ☐ ☐

TASK: Move to overwatch position (TC 14). Points GO NO GO EARNED 2 ☐ ☐ ☒ TC 14	TASK: Provide overwatch as PS section moves forward (TC 12). Points GO NO GO EARNED 1 ☐ ☐ ☒ TC 12
TASK: Provide overwatch as PL section moves forward (TC 14). Points GO NO GO EARNED 1 ☐ ☐ ☒ TC 14	TASK: Maintain wingman position during bounding overwatch (TC 14). Points GO NO GO EARNED 2 ☐ ☐ ☒ TC 14
TASK: Move to overwatch position (TC 12). Points GO NO GO EARNED 2 ☐ ☐ ☒ TC 12	TASK: Maintain wingman position in overwatch position (TC 14). Points GO NO GO EARNED 2 ☐ ☐ ☒ TC 14
TASK: Move to overwatch position (TC 12). Points GO NO GO EARNED 2 ☐ ☐ ☒ TC 12	TASK: Provide overwatch as PL section moves forward Points GO NO GO EARNED 1 ☐ ☐ ☒ TC 14

TASK: Maintain wingman position during bounding overwatch (TC 12). Points GO NO GO EARNED 2 ☐ ☐ ☒ TC 12	TASK: Maintain overwatch position (TC 14). Points GO NO GO EARNED 2 ☐ ☐ ☒ TC 14
TASK: Move to overwatch position (TC 12). Points GO NO GO EARNED 2 ☐ ☐ ☒ TC 12	TASK: Provide overwatch as PL section moves forward (TC 14). Points GO NO GO EARNED 1 ☐ ☐ ☒ TC 14
TASK: Conduct target acquisition (TC 12). Points GO NO GO EARNED 1 ☐ ☐ ☒ TC 12	TASK: Move from overwatch position to correct position in LINE formation (TC 12 and TC 14). Points GO NO GO EARNED 2 ☐ ☐ ☒
TASK: Maintain wingman position during bounding overwatch (TC 14). Points GO NO GO EARNED 2 ☐ ☐ ☒ TC 14	TASK: Direct main gun engagement on an M1 tank (TC 12 and TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☒

TASK: Issue a fire command (TC 12 and TC 14). Points GO NO GO EARNED 2 ☐ ☐ ☒	TASK: (PS) Choose appropriate main gun ammunition (TC 12). Points GO NO GO EARNED 3 ☐ ☐ ☒ TC 12
TASK: Direct evasion of an anti- tank guided missile (TC 12). Points GO NO GO EARNED 4 ☐ ☐ ☒ TC 12	TASK: Issue a fire command (TC 12). Points GO NO GO EARNED 5 ☐ ☐ ☒ TC 12
TASK: Direct main engagement (TC 12) Points GO NO GO EARNED 3 ☐ ☐ ☒ TC 12	TASK: Direct main gun engage- ments on an M1 tank (TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☒ TC 14
TASK: (PS) Identify least power- ful weapon or ammunition required to destroy the ATGM launch team. Points GO NO GO EARNED 3 ☐ ☐ ☒ TC 12	TASK: Issue a fire command (TC 14). Points GO NO GO EARNED 1 ☐ ☐ ☒ TC 14
	TASK: Back off of defile posi- tion and follow PS to PL position (TC 14). Points GO NO GO EARNED 5 ☐ ☐ ☒ TC 14

TASK: Conduct target acquisition (TC 14). Points GO NO GO EARNED 1 ☐ ☐ ☒ TC 14	TASK: Issue a fire command (TC 12 and TC 14). Points GO NO GO EARNED 7 ☐ ☐ ☒									
TASK: Direct main gun engagements on an M1 tank (TC 12 and TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☒	TASK: Move to alternate firing position (TC 12 and TC 14). Points GO NO GO EARNED 1 ☐ ☐ ☒									
TASK: (PS) Identify the least powerful weapon or ammunition required to destroy the enemy vehicle (TC 12 and TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☒	RECAPITULATION POINTS <table style="width: 100%; border: none;"> <tr> <td style="text-align: center; width: 33%;">POSSIBLE</td> <td style="text-align: center; width: 33%;">EARNED</td> <td style="text-align: center; width: 33%;">LOST</td> </tr> <tr> <td style="text-align: center;"> 166 </td> <td style="text-align: center;">☒</td> <td style="text-align: center;">☐ TC 12</td> </tr> <tr> <td style="text-align: center;"> 148 </td> <td style="text-align: center;">☒</td> <td style="text-align: center;">☐ TC 14</td> </tr> </table>	POSSIBLE	EARNED	LOST	166	☒	☐ TC 12	148	☒	☐ TC 14
POSSIBLE	EARNED	LOST								
166	☒	☐ TC 12								
148	☒	☐ TC 14								
TASK: (PS) Choose appropriate main gun ammunition (TC 12 and TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☒										

ENCLOSURE 3 TO APPENDIX 4
ACCURACY SCORE SHEET

Student Name _____ SSN _____

TC 12	TC 14	TC 22	TC 24

Scenario: HASTY ATTACK			
TASK: Relay PL frag order to crewmembers (TC 12 and TC 24).		TASK: Conduct target acquisition (TC 12 and TC 14).	
Points	GO	NO GO	EARNED
5	☐	☐	☒
TASK: Relay PL frag order to crewmembers (TC 12 and TC 14).		TASK: Direct main gun engagements on an M1 tank (TC 22 and TC 24).	
Points	GO	NO GO	EARNED
5	☐	☐	☒
TASK: Move out in designated attack formation (TC 22 and TC 24).		TASK: Issue a fire command (TC 22 and TC 24).	
Points	GO	NO GO	EARNED
2	☐	☐	☒
TASK: Relay PL frag order to crewmembers (TC 12 and TC 24).		TASK: Conduct target acquisition (TC 12 and TC 14).	
Points	GO	NO GO	EARNED
1	☐	☐	☒

TASK: Direct main gun engagements on an M1 tank (TC 12 and TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☒	TASK: Direct main gun engagements on an M1 tank (TC 22). Points GO NO GO EARNED 3 ☐ ☐ ☒ TC 22
TASK: Issue a fire command (TC 12 and 14). Points GO NO GO EARNED 4 ☐ ☐ ☒	TASK: Issue a fire command (TC 22). Points GO NO GO EARNED 5 ☐ ☐ ☒ TC 22
TASK: Conduct fire and maneuver within the platoon (TC 22). Points GO NO GO EARNED 2 ☐ ☐ ☒ TC 22	TASK: Move into a defilade position (TC 22). Points GO NO GO EARNED 2 ☐ ☐ ☒ TC 22
TASK: Conduct target acquisition (TC 22). Points GO NO GO EARNED 1 ☐ ☐ ☒ TC 22	TASK: Provide covering fire for the advance of PS section (TC 22). Points GO NO GO EARNED 2 ☐ ☐ ☒ TC 22

TASK: Provide covering fire for the advance of PL section (TC 24). Points GO NO GO EARNED 2 ☐ ☐ ☒ TC 24	TASK: Issue a fire command (TC 24). Points GO NO GO EARNED 5 ☐ ☐ ☒ TC 24
TASK: Conduct fire and maneuver within the platoon (TC 24). Points GO NO GO EARNED 2 ☐ ☐ ☒ TC 24	TASK: Move into defilade position (TC 24). Points GO NO GO EARNED 2 ☐ ☐ ☒ TC 24
TASK: Conduct target acquisition (TC 24). Points GO NO GO EARNED 1 ☐ ☐ ☒ TC 24	TASK: Provide covering fire for the advance of the PL section (TC 24). Points GO NO GO EARNED 2 ☐ ☐ ☒ TC 24
TASK: Direct main gun engagements on an M1 tank (TC 24). Points GO NO GO EARNED 3 ☐ ☐ ☒ TC 24	TASK: Shift supporting fires (TC 12 and TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☒

TASK: Conduct target acquisition (TC 12 and TC 14). Points GO NO GO EARNED 1 ☐ ☐ ☐	TASK: Conduct target acquisition (TC 22 and TC 24). Points GO NO GO EARNED 1 ☐ ☐ ☐
TASK: Direct main gun engagements on an M1 tank (TC 12 and TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☐	TASK: Direct main gun and machinegun engagements on an M1 tank (TC 22 and TC 24). Points GO NO GO EARNED 3 ☐ ☐ ☐
TASK: Issue a fire command (TC 12 and TC 14). Points GO NO GO EARNED 5 ☐ ☐ ☐	TASK: Issue a fire command (TC 22 and TC 24). Points GO NO GO EARNED 5 ☐ ☐ ☐
TASK: Accelerate the assault (TC 22 and TC 24). Points GO NO GO EARNED 1 ☐ ☐ ☐	TASK: Maintain wingman position during the assault (TC 22 and TC 24). Points GO NO GO EARNED 1 ☐ ☐ ☐

TASK: Sweep objective with machinegun fire (TC 22 and TC 24). Points GO NO GO EARNED 1 ☐ ☐ ☒	TASK: Reorganize on the objective (TC 22 and TC 24). Points GO NO GO EARNED 6 ☐ ☐ ☒
TASK: Occupy defilade position in forward part of the objective (TC 22 and TC 24). Points GO NO GO EARNED 2 ☐ ☐ ☒	TASK: Occupy defilade position oriented to the east (TC 12 and TC 14). Points GO NO GO EARNED 1 ☐ ☐ ☒
TASK: Ensure overlapping surveillance and fields of fire with adjacent vehicle commanders (TC 22 and TC 24). Points GO NO GO EARNED 1 ☐ ☐ ☒	TASK: Ensure overlapping surveillance and fields of fire with adjacent vehicle commanders (TC 12 and TC 14). Points GO NO GO EARNED 1 ☐ ☐ ☒
TASK: Prepare and submit a situation report (SITREP) (Oral) (TC 22 and TC 24). Points GO NO GO EARNED 4 ☐ ☐ ☒	TASK: Prepare and submit a situation report (SITREP) (Oral) (TC 12 and TC 14). Points GO NO GO EARNED 4 ☐ ☐ ☒

TASK: Reorganize on position
(TC 12 and TC 14).

Points	GO	NO GO	EARNED
5	☐	☐	☒

RECAPITULATION

POINTS

POSSIBLE	EARNED	LOST
☐ 35	☐	☐ TC 12
☐ 35	☐	☐ TC 14
☐ 56	☐	☐ TC 22
☐ 58	☐	☐ TC 24

ENCLOSURE 4 TO APPENDIX 4
ACCURACY SCORE SHEET

Student Name _____ SSN _____

TC 12

TC 14

Scenario: OCCUPY AND DEFEND BATTLE POSITIONS

TASK: Issue an oral operation order (TC 12 and TC 14).

Points	GO	NO GO	EARNED
8	☐	☐	☐

TASK: Prepare a sketch range card (TC 12 and TC 14).

Points	GO	NO GO	EARNED
4	☐	☐	☐

TASK: Move into a hide position behind the battle position (TC 12 and TC 14).

Points	GO	NO GO	EARNED
4	☐	☐	☐

TASK: Emplace automatic chemical agent alarm IAW PS instructions (TC 12 and TC 14).

Points	GO	NO GO	EARNED
3	☐	☐	☐

TASK: Coordinate observation and fields of fire with adjacent vehicle commanders (TC 12 and TC 14).

Points	GO	NO GO	EARNED
2	☐	☐	☐

TASK: Select alternate firing position and recon routes between firing positions (TC 12 and TC 14).

Points	GO	NO GO	EARNED
2	☐	☐	☐

TASK: Direct movement to primary firing position (TC 12 and TC 14). Points GO NO GO EARNED 2 ☐ ☐ ☐	TASK: (PS) Choose appropriate main gun ammunition (TC 12 and TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☐
TASK: Install hot loop wire communications and extend the hot loop to the right adjacent vehicle or the team CP (TC 12 and TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☐	TASK: Issue a fire command (TC 12 and TC 14). Points GO NO GO EARNED 7 ☐ ☐ ☐
TASK: Direct main gun engagements on an M1 tank (TC 12 and TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☐	TASK: (PS) Judge from battle-field cues the amount and kind of damage inflicted upon the enemy targets (TC 12 and TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☐
TASK: (PS) Identify the least powerful weapon or ammunition required to destroy the target (TC 12 and TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☐	TASK: (D) Decide when to stop firing (TC 12 and TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☐

TASK: Move to alternate firing position (TC 12 and TC 14).

Points GO NO GO EARNED

1

☐☐☐

TASK: Implement MOPP level 4 (TC 12 and TC 14).

Points GO NO GO EARNED

2

☐☐☐

TASK: Direct main gun engagements on an M1 tank (TC 12 and TC 14).

Points GO NO GO EARNED

3

☐☐☐

TASK: Issue a fire command (TC 12 and TC 14).

Points GO NO GO EARNED

4

☐☐☐

TASK: Direct main gun engagements on an M1 tank (TC 12 and TC 14).

Points GO NO GO EARNED

3

☐☐☐

TASK: Fire an M250 grenade launcher on an M1 tank (TC 14)

Points GO NO GO EARNED

3

☐☐☐

TC 14

TASK: Issue a fire command (TC 12 and TC 14).

Points GO NO GO EARNED

4

☐☐☐

TASK: Move off of battle position (TC 14).

Points GO NO GO EARNED

1

☐☐☐

TC 14

TASK: Maintain wingman position after moving off of battle position, while PS section moves toward defilade, reverse overwatch (TC 14).

Points	GO	NO GO	EARNED
3	☐	☐	☒ TC 14

TASK: Occupy reverse overwatch position (TC 14).

Points	GO	NO GO	EARNED
2	☐	☐	☒ TC 14

TASK: Direct main gun engagements on an M1 tank (TC 12).

Points	GO	NO GO	EARNED
3	☐	☐	☒ TC 12

TASK: Issue a fire command (TC 12).

Points	GO	NO GO	EARNED
2	☐	☐	☒ TC 12

TASK: Move off of battle position (TC 12).

Points	GO	NO GO	EARNED
1	☐	☐	☒ TC 12

TASK: Maintain wingman position, after moving off of battle position, while PL section moves toward reverse overwatch position (TC 12).

Points	GO	NO GO	EARNED
3	☐	☐	☒ TC 12

TASK: Occupy reverse overwatch position (TC 12).

Points	GO	NO GO	EARNED
2	☐	☐	☒ TC 12

TASK: Move into STAGGERED COLUMN formation (TC 12 and TC 14).

Points	GO	NO GO	EARNED
2	☐	☐	☒

TASK: Initiate unmasking procedures (TC 12 and TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☐	TASK: Move off of battle position (TC 12 and TC 14). Points GO NO GO EARNED 1 ☐ ☐ ☐
TASK: Direct movement to primary firing position (TC 12 and TC 14). Points GO NO GO EARNED 2 ☐ ☐ ☐	TASK: Move into STAGGERED COLUMN formation (TC 12 and TC 14). Points GO NO GO EARNED 2 ☐ ☐ ☐
TASK: Identify sector of fire (TC 12 and TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☐	TASK: Prepare for passage of lines (TC 12 and TC 14). Points GO NO GO EARNED 4 ☐ ☐ ☐
TASK: Submit a situation report (SITREP) (TC 12 and TC 14). Points GO NO GO EARNED 4 ☐ ☐ ☐	TASK: Move out and conduct passage of lines (TC 12 and TC 14). Points GO NO GO EARNED 3 ☐ ☐ ☐

RECAPITULATION		
POINTS		
POSSIBLE	EARNED	LOST
☐ 102	☐	☐ TC 12
☐ 100	☐	☐ TC 14

ENCLOSURE 5 TO APPENDIX 4
I-PTX SCORING RECAPITULATION

Student Name _____ SSN _____

<u>SCENARIO</u>	<u>TASKS</u>	<u>TC NUMBER</u>	<u>STUDENT NUMBER</u>	<u>POSSIBLE POINTS</u>	<u>POINTS EARNED</u>	<u>POINTS LOST</u>
Assembly Areas and Tactical Road March	25	12 (1)	1	72		
		14 (1)	2	69		
		22 (2)	3	72		
		24 (2)	4	69		
Movement to Contact	92	12 (1)	1	166		
		14 (1)	2	148		
		22 (2)	3	166		
		24 (2)	4	148		
Hasty Attack	39	12* (1)	1	35		
		14* (1)	2	35		
		22** (2)	3	56		
		24** (2)	4	58		
		12** (2)	1	56		
		14** (2)	2	58		
		22* (1)	3	35		
		24* (1)	4	35		
Occupy and Defend Battle Positions	38	12 (1)	1	102		
		14 (1)	2	100		
		22 (2)	3	102		
		24 (2)	4	100		

NOTE: (1) 1st Platoon
 (2) 2d Platoon
 *(1) 1st Platoon, support by fire element
 **(2) 2d Platoon, assault force element
 *(1) 1st Platoon, assault force element
 *(2) 2d Platoon, support by fire element

SCORING POINTS BY STUDENT

<u>STUDENT</u>	<u>POINTS</u>	<u>POINTS EARNED</u>	<u>POINTS LOST</u>
1	431		
2	410		
3	431		
4	410		

APPENDIX 5
I-PTX RESOURCE REQUIREMENTS

Resource requirements, personnel, and equipment are indicated below.

a. Personnel

- 2 - NCOICs
- 4 - scorers
- 2 - $\frac{1}{2}$ ton drivers
- 2 - OPFOR pilots
- 2 - OPFOR TC
- 2 - OPFOR VC
- 4 - OPFOR drivers
- 3 - OPFOR riflemen

b. Equipment and material

- 2 - $\frac{1}{2}$ ton trucks w/radio
- 4 - headsets (scorers)
- 1 - HP aircraft
- 1 - helicopter
- 2 - OPFOR tanks
- 2 - OPFOR BMPs
- 12 - miles
- 2 - artillery simulator guns
- 1 - written operation order (enclosure 1)
- 1 - written operation order (enclosure 2)
- 1 - written operation order (enclosure 3)
- 4 - automatic chemical agent alarm systems
- 4 - M13 decontamination kits
- 4 - M11 decontamination apparatus
- 4 - KTC 1400D numerical cipher/authentication systems
- 4 - KTC 600D tactical operation codes
- 4 - automated communications-electronics operations instructions (CEOI)
- 2 - 50' lengths of $\frac{1}{2}$ " rope w/grappling hook attached
- 8 - dummy anti-tank mines
- 4 - simulated truck targets
- 4 - pop-up simulated tank targets

c. Maneuver area

An area containing two suitable assembly areas, a road between the two assembly areas suitable for conducting a short tactical road march, an area large enough to conduct a movement to contact, a hasty attack, and large enough to conduct defensive operations (two BPs, in depth). The terrain may vary from rolling hills to packed, flat desert but must offer definable avenues of approach and permit a concentration of fires; soil must be trafficable.

ENCLOSURE 1 TO APPENDIX 5

OPERATIONS ORDERS: Assembly Areas and Tactical Road March

1. SITUATION

- a. Enemy Forces. There are no enemy forces expected in our area of movement, however, enemy air has been active in the area, and the enemy has a nuclear and chemical capability.
- b. Friendly Forces. Team A will conduct a tactical road march to a forward assembly area, and from there continue further operations, on order. Quartering party personnel from each platoon in Team A have been dispatched to the assembly area and will provide security until the team arrives. Priority of fires to Team A initially.
- c. Attachments and Detachments. None.

2. MISSION

1st Platoon leads the team movement in a tactical road march along Highway N4 and occupies a forward assembly area, vicinity _____ at _____ hours.

3. EXECUTION

a. Conduct of Operations.

(1) Maneuver. 1st Platoon follows Highway N4 with order of march 11, 12, 13, 14. Road march speed is 50 KMPH, catch-up speed is 60 KMPH maximum. Maintain 100 meter vehicle interval. Remember main gun orientation, air and ground surveillance as indicated in the tac SOP. At RP follow guide's instructions into assembly area and occupy positions from left to right out of order of march. Once in position orient to the northeast.

(2) Fires. Priority of fires is initially to the 1st Platoon.

b. Coordinating Instructions.

(1) SP is _____, crossing is _____ hours.

(2) PP is _____.

(3) At halts assume herringbone, post local security, and maintain air guard.

- (4) Once at the RP and approaching the assembly area, keep moving until fighting positions are occupied.
- (5) Platoon sergeant establish an OP upon reaching the assembly area.
- (6) Establish wire commo between tanks, left to right.
- (7) Report when wire commo is established and your area secured.
- (8) Be prepared to move on order.

4. SERVICE SUPPORT

- a. Logistics SOP.
- b. Team trains will be located at _____ after occupation of the assembly area.

5. COMMAND AND SIGNAL

a. Signal.

- (1) Current CEOI In effect.
- (2) Password and challenge are ROLLING/MOSS.
- (3) Platoon frequency is _____, platoon alternate frequency is _____. Team frequency is _____.

b. Command.

- (1) I will lead the platoon movement.
- (2) Team command group will follow 1st Platoon.

Time is _____. Any questions?

ENCLOSURE 2 TO APPENDIX 5

OPERATIONS ORDER: Movement to Contact

1. SITUATION

- a. Enemy Forces. Enemy elements of the 66 MRD defend the east bank of GREEN River. Mounted enemy reconnaissance patrols have been operating west of GREEN River. The enemy has a nuclear and chemical capability and have been sending armed reconnaissance high performance aircraft west of GREEN River three or four times each day.
- b. Friendly Forces. Team A conducts a movement to contact east along Highway N4, seizes Hill 609, and from there supports following units crossings over GREEN River. Elements of the Task Force will be on our left and moving parallel to us. 3d Cavalry will cover our right flank after we move through their screen. Team D will follow Team A. Priority of fires initially to Team A.
- c. Attachments and Detachments. None.

2. MISSION

1st Platoon conducts a movement to contact at _____ hours, east along Highway N4, prepared to seize Hill 609.

3. EXECUTION

a. Concept of Operations.

- (1) Maneuver. 1st Platoon leads the team movement, in a column formation, passes through the 3d Cavalry screen at the passage point and immediately changes into a staggered column formation. Initially we will move at maximum allowable speed. Be prepared to change formations as terrain and enemy situation dictates. Once we get in the vicinity of Hill 609 be prepared to participate in a hasty attack in either the assault role or the supporting fire role.
- (2) Fires. Priority of fires within Team A is initially the 1st Platoon.

b. Coordinating Instructions.

- (1) SP is _____, crossing is _____ hours.
- (2) Order of march is 11, 12, 13, 14.

- (3) Radio listening silence is in effect until enemy control.
- (4) TCs be alert for hand and arm signals.
- (5) Priority targets are C&C, enemy tanks, and anti-tank positions.
- (6) Make sure you can provide overwatch fires when needed.
- (7) Possible enemy ambush sites along the route are here _____ and here _____.
- (8) MOPP level 2 is in effect upon leaving the assembly area.

4. SERVICE SUPPORT

- a. Logistics SOP.
- b. Team trains will move behind Team D from present position to RJ _____.

5. COMMAND AND SIGNAL

a. Signal.

- (1) Current CEOI in effect.
- (2) Password and challenge are BRAVE/RIFLE.
- (3) Platoon frequency is _____, platoon alternate frequency is _____. Team frequency is _____.
- (4) Emergency signal to withdraw or break contact is one red star cluster.

b. Command.

- (1) I will initially lead the platoon.
- (2) Team A command group will follow 1st Platoon.

Time is _____. Any questions?

ENCLOSURE 3 TO APPENDIX 5

OPERATION ORDER: Occupy and Defend Battle Position

1. SITUATION

a. Enemy Forces.

- (1) Enemy forces in the area have been identified as elements of the 9 MRD.
- (2) For the past two weeks enemy activity has been limited to mounted reconnaissance patrols operating within ten kilometers of the battle position Team A will initially defend.
- (3) Intelligence reports the enemy is concentrating forces and is expected to attack within the next 72 hours. The enemy has a nuclear and chemical capability.

b. Friendly Forces.

- (1) Team A occupies and defends BP 31 at _____ hours.
- (2) To the left of us on BP 31B will be the 2d Tank Platoon and to the right of us on BP 31C will be the 3d Infantry Platoon.
- (3) To the rear, at _____, will be Company C, 37th Armor, the Task Force reserve.
- (4) To our front, from _____ to _____, is the Task Force scout platoon is conducting screening operations.
- (5) Priority of fires initially to the scout platoon and then Team A.

c. Attachments and Detachments. None.

2. MISSION

1st Platoon initially occupies and defends platoon BP 31A, NLT _____ hours and orients toward DUCK Lake; prepares to move to and occupy BP 33A on order, and prepares to counterattack on order.

3. EXECUTION

a. Concept of Operations.

(1) Maneuver. 1st Platoon moves by staggered column from present position along Highway N4 to occupy and defend Plat BP 31A, orienting on DUCK Lake. The scout platoon, screening in front of the BP, will hand over the battle to us and the rest of the team once they've established enemy contact. Following enemy contact the scouts will withdraw and screen the task force's right flank. Between the RP and the rear of the BP the platoon will go into a hide position. TCs will dismount and accompany me to the crest of BP 31A and plan the defense of the position. If the enemy crosses DUCK Lake stream with nine or more tanks and or BMPs the platoon will prepare to withdraw to subsequent BP 33A. Priority of targets: ZSU-52, C&C, tanks, and BMPs.

(2) Fires. Scout platoon, Team A, 1st Platoon within Team A.

b. Coordinating Instructions.

(1) Movement to BP 31A begins at _____ hours, cross SP at _____ hours.

(2) Radio listening silence in effect until enemy contact.

(3) MOPP level 2 in effect upon crossing SP.

(4) Movement to subsequent BP on my order only.

4. SERVICE SUPPORT

a. Logistics SOP.

b. Class V pre-stocked to rear of BP 33A.

c. Team trains and maintenance support located vicinity of _____ after occupation of BP 31.

5. COMMAND AND SIGNAL

a. Signal.

(1) Current CEOI in effect.

(2) Current password and challenge are GROUND/HOG.

(3) Platoon frequency is _____, platoon alternate frequency is
_____. Team frequency is _____.

(4) Emergency signal to withdraw, break contact, or move to BP
33A is one red star cluster.

Time is _____. Any questions?

ANNEX F

SAMPLE LESSON PLAN

ANALYZE TERRAIN USING THE FIVE MILITARY ASPECTS OF TERRAIN

Eugene H. Drucker
Richard E. O'Brien

HumRRO, Fort Knox, Kentucky

May 1985

ANNEX F
ANALYZE TERRAIN USING THE FIVE MILITARY ASPECTS OF TERRAIN
(TASK NO. 071-331-0820)

LESSON PLAN

TYPE

Conference/Demonstration/Practical Exercise

TIME ALLOTTED

Classroom: Two (2) hours

Field: Six (6) hours

COURSE PRESENTED TO

BNCOC 19K30

NONPROCEDURAL TASKS

a. Problem Solving Tasks

- (1) Identify Likely Enemy Locations
- (2) Judge Whether or Not Terrain Features Will Interfere with the Tank's Line of Sight to Enemy Targets
- (3) Judge Adequacy of Concealment from Enemy Observation
- (4) Judge Adequacy of Cover from Direct Enemy Fire
- (5) Identify Likely Avenues of Approach

b. Decision Making Tasks

- (1) Select Covered Position
- (2) Decide How to Negotiate an Obstacle

c. Interactive Tasks

- (1) Transmit Information on the Presence of Obstacles
- (2) Transmit Information on Terrain Characteristics

PROCEDURAL TASK CROSSWALK

- a. Identify Terrain Features (Natural and Man-Made) on a Map
- b. Orient a Map to the Ground by Terrain Association
- c. Determine Location on the Ground by Terrain Association
- d. Use Marginal Information on a Map
- e. Conduct a Map Reconnaissance

TOOLS, EQUIPMENT, AND MATERIALS

- a. Pen or pencil
- b. Grease pencils
- c. Notebook
- d. Two 1:50,000 connected military map sheets, covered with acetate, per student
- e. Five $\frac{1}{4}$ ton trucks for field practical exercise (1 for primary instructor, 4 for students and AIs)
- f. Two M1 tanks for field practical exercise
- g. One pair binoculars per student
- h. Overhead projector
- i. Advance Sheet (App 3)

PERSONNEL

- a. Primary instructor
- b. One assistant instructor (classroom), four assistant instructors (field exercise)

INSTRUCTIONAL AIDS

- a. Slides (App 1)
- b. Photos (App 2)

REFERENCES

- a. FM 30-5 (App 3, pages B1-B5)
- b. Tec Lesson (35-071-0127-F, Analyze Weather and Terrain)

ANALYZE TERRAIN USING THE FIVE MILITARY ASPECTS OF TERRAIN
(TASK 071-331-0820)

1. INTRODUCTION

a. Reason: As a tank commander, you will discover that analyzing terrain is a very important part of your job. The route you take or the position you occupy is determined by analyzing the terrain in the area. Proper analysis of the five military aspects of terrain enables you to choose the proper route or position thus creating a greater chance for mission accomplishment. In addition, you will use the results of the analysis to make important decisions that will increase the likelihood that you will destroy the enemy while increasing your chance of survival.

b. Objective: Given a tactical mission that involves a specific route or location on the ground, you must analyze the route or location in terms of the five military aspects of terrain (observation and fire, concealment and cover, obstacles, key terrain, and avenues of approach). You must use the results of the analysis during movement along a route or to select a position and to be prepared in the event of enemy opposition.

c. Procedures: During this class you will receive an explanation/demonstration on the five military aspects of terrain, on how to analyze terrain when preparing for offensive and defensive operations, and on the relationship of certain problem solving, decision making, and interactive tasks with terrain analysis. Following this phase of instruction you will be given an opportunity, first in the classroom and then in the field, to practice terrain analysis.

2. EXPLANATION/DEMONSTRATION/APPLICATION

NOTE: While explaining and demonstrating the five military aspects of terrain, the primary instructor will use the overhead projector so that the students will be able to see what he is talking about.

a. Procedural Task--Analyze Terrain Using the Five Military Aspects of Terrain. This task consists of the following five components.

(1) Observation and Fire

(a) Observation requires terrain that permits you to locate the enemy either visually or through surveillance devices. The best observation is generally obtained from the highest terrain feature in the area. The effects of visibility on observation are analyzed with weather rather than terrain, because visibility varies with weather, whereas observation varies with terrain.

NOTE: Show Slide 1. (Instructor points out terrain features which provide good observation.)

(b) Fire encompasses the influence of the terrain on the effectiveness of direct and indirect fire weapons. Indirect fires are affected primarily by terrain conditions within the target area, whereas, direct fires are primarily affected by terrain conditions between the weapon and the target.

(c) You must identify terrain features within your area of operations that afford you or the enemy favorable observation and fire. You must consider them in your subsequent analysis of concealment and cover, key terrain, and avenues of approach.

NOTE: Show Slides 2 and 3. (Instructor points out terrain which provides long range fields of fire and explains "dead space" within fields of fire. Instructor also points out areas which provide the enemy with favorable observation and fields of fire.)

(2) Concealment and Cover

(a) Concealment is protection from observation; cover is protection from the effects of fire. As a tank commander, you must determine the concealment and cover available to your tank and the enemy.

NOTE: Show Slide 4. (Instructor points out a concealed tank and a tank with cover and explains the difference between concealment and cover.)

(b) Concealment may be provided by terrain features, vegetation (such as woods, underbrush, or cultivated vegetation), or any other feature that denies observation. Concealment does not necessarily provide cover.

NOTE: Show Slide 5. (Instructor points out two concealed tanks and a third tank concealed from ground observation but not from aerial observation. Instructor explains the vulnerability of the third tank.)

NOTE: Show Slide 6. (Instructor points out, from the perspective of several enemy observation locations, the concealed tanks and explains how a tank is concealed from one perspective but not necessarily from other perspectives.)

(c) Cover may be provided by terrain features or man-made features. Features that provide cover from direct fire may not protect against the effects of indirect fire. Most terrain features that provide cover also provide concealment from ground observation but not necessarily from aerial observation.

NOTE: Show Slide 7. (Instructor explains how cover protects tanks from direct fire but not necessarily from indirect fire.)

(3) Obstacles

(a) An obstacle is a natural or artificial feature that stops or impedes military movement.

(b) Consideration of obstacles is influenced by the mission.

(c) An obstacle may be an advantage or a disadvantage and must be considered on its own merits, in view of a specific mission. For example, obstacles perpendicular to the direction of attack favor the defender by slowing or canalizing the attacker. Obstacles parallel to the direction of attack may assist in protecting the flank of an attacking force.

NOTE: Show Slide 8. (Instructor points out natural and man-made obstacles and explains how obstacles impede mounted and dismounted movement.)

NOTE: Show Slide 9. (Instructor points out obstacles which are perpendicular and parallel to the direction of an attack and explains how perpendicular obstacles favor the defender, whereas, parallel obstacles may favor the attacker.)

(4) Key Terrain Features

(a) A key terrain feature is any point or area whose seizure or control affords a marked advantage to either force. "Seizure" means physical occupation of the terrain by a force, whereas, "control" may or may not include physical occupation (e.g., the key terrain or the approaches to the key terrain may be controlled by fire.

(b) The selection of key terrain varies with the level of command, the type of unit, and the mission of the unit.

NOTE: Show Slide 10. (Instructor explains the definition of the term "key terrain" and points out key terrain features in front of a defensive position.)

(5) Avenues of Approach

(a) An avenue of approach is a route for a force of a particular size to reach an objective or key terrain. To be an avenue of approach, a route must be wide enough for the deployment of the size force that will be traveling on it.

(b) The analysis of an avenue of approach is based on the following considerations:

1 Observation and Fire (The avenue of approach provides favorable observation and fire for the force moving on it.)

2 Concealment and Cover (The avenue of approach provides favorable conditions of concealment and cover. This consideration is frequently in conflict with the preceding one.)

3 Obstacles (The avenue of approach avoids obstacles that are perpendicular to the direction of advance and whenever practical takes advantage of those that are parallel to the direction of advance.)

4 Use of Key Terrain (The avenue of approach leads to key terrain.)

5 Adequate Maneuver Space (The avenue of approach is wide enough for the deployment of the force that will be traveling on it.)

6 Ease of movement (The avenue of approach allows the advancing force to maximize its movement capability.)

NOTE: Show Slide 11. (Instructor points out and explains mounted and dismounted avenues of approach leading to a defensive position.)

NOTE: Show Slide 12. (Instructor points out and explains mounted avenues of approach leading to an objective.)

b. Terrain Analysis Relative to Offensive and Defensive Operations. During the preparation and conduct of offensive operations, you the tank commander must analyze terrain from a different perspective than you do during the preparation and conduct of defensive operations. For offensive operations you consider the enemy to be primarily defensive oriented whereas for defensive operations you consider the enemy to be primarily offensive oriented.

(1) Offensive Operations. During these operations you consider areas along the route of advance or the avenue of approach which the enemy is most likely to cover with fire. The more obvious of these areas are defiles and long range fields of fire. You also consider concealed and covered routes, and obstacles which would impede your progress.

NOTE: Show Slide 13. (Instructor points out defiles and areas with long range fields of fire along a route being used for a movement to contact operation. He also points out areas with concealment and cover and explains how to use these terrain features when negotiating vulnerable areas along the route.)

NOTE: Show Slide 14. (Instructor points out avenues of approach leading to an objective and explains the terrain advantages and disadvantages of each avenue of approach.)

(2) Defensive Operations. When planning the defense of a position you are primarily concerned about the terrain within your sector of fire and secondly the terrain within adjacent sectors of fire. Within these sectors you must identify and classify credible routes (avenues of approach) the enemy must follow to physically drive you from your position. Remember, different types of enemy forces attack over different types of avenues of approach, e.g., dismounted troops attack over concealed (forests, underbrush, etc.) avenues of approach whereas mounted troops attack over more open avenues of approach. Although this terrain analysis focuses on enemy avenues of approach, you must also consider concealment and cover, fields of fire, obstacles, and key terrain within these avenues of approach.

NOTE: Show Slide 15. (Instructor points out avenues of approach leading to a defensive position, fields of fire covering the avenues of approach, key terrain, and obstacles which would impede enemy movement.)

When assigned an area on a defensive position the tank commander must determine which firing position, in the area, will provide the best direct fire coverage of the most credible enemy avenue of approach. To do this you must check the line of sight coverage of the avenue of approach from different perspectives, e.g., the center and flanks of the assigned area. You must identify "dead spots" where line of sight is obstructed by terrain features. (Dead spots are covered by relocating the tank or indirect fire.) To complete the terrain analysis of your own position you must consider concealment, cover, and trafficability between firing positions, and movement off of the defensive position.

NOTE: Show Slide 16. (Instructor explains that within a designated defensive area there are different perspectives of fields of fire covering a sector of fire. The instructor points out the advantages and disadvantages of the field of fire from the left edge of the defensive area.)

NOTE: Show Slide 17. (Instructor points out the advantages and disadvantages of the field of fire from the center of the defensive area.)

NOTE: Show Slide 18. (Instructor points out the advantages and disadvantages of the field of fire from the right edge of the defensive area.)

c. Nonprocedural Tasks--Problem Solving, Decision Making, and Interactive. There are many nonprocedural tasks that you, the tank commander, must consider when analyzing the five military aspects of terrain. Some examples are:

(1) PROBLEM: Identify Likely Enemy Locations (Analyze Terrain for Observation). The enemy also uses the five military aspects of terrain to choose the route he will take or the position he will occupy. For this reason, you must concentrate your search for the enemy in those areas in which he is most likely to be located. The most likely locations are those which provide (a) concealment, (b) cover, (c) a suitable hardstand for track vehicles, (d) easy entry and exit, and (e) long range observation, and are within range of your location.

NOTE: Show Slide 19. (Instructor explains how to solve the problem of identifying likely enemy locations.)

(2) PROBLEM: Judge Whether or Not Terrain Features Will Interfere with the Tank's Line of Sight to Enemy Targets (Analyze Terrain for Fire). The enemy may appear at several different locations. For this reason, you must select a position that will provide you with line of sight to as many likely enemy locations as possible. To select such a position, you must judge whether or not terrain features between your position and the different likely enemy locations would interfere with line of sight. Suitable positions (a) allow maximum depression of the main gun without exposing the tank to likely enemy firing positions, and

(b) allow the main gun to be traversed across the assigned sector without interfering with reticle lay or the flight of the projectile.

NOTE: Show Slide 20. (Instructor explains how to judge whether or not terrain features will interfere with the tank's line of sight to enemy targets.)

(3) PROBLEM: Judge Adequacy of Concealment from Enemy Observation (Analyze Terrain for Concealment). The survival of your tank may depend on how well it is hidden when it is in range of enemy observation, and particularly when it is in range of enemy tank-defeating weapons. For this reason, you must be able to judge how well it is concealed from observers at likely enemy locations. In essence, you must judge how well the tank is hidden from both ground and aerial observation. To be satisfactorily concealed, the tank must blend in with the terrain and must not reveal straight lines, right angles, or circular configurations.

NOTE: Return to and show Slides 5 and 6. (Instructor explains how to solve the problem of determining the adequacy of concealment from enemy observation.)

(4) PROBLEM: Judge Adequacy of Cover from Direct Enemy Fire (Analyze Terrain for Cover). The survival of your tank may depend on how well it is protected against direct enemy fire. For this reason, you must be able to judge the adequacy of cover from tank-defeating weapons at likely enemy locations. To be adequately covered, the tank must be in a defilade position, preferably a turret defilade position. Generally, if you can hit an enemy target from your position, it is sufficient to say that the enemy can hit you.

(5) DECISION: Select Covered Position (Analyze Terrain for Cover). Once you have judged the adequacy of cover provided by different positions, you must select a position in order to protect the tank from enemy fire. While adequacy of cover is an important factor in selecting a position, it may not be the only factor. If you have little time in which to seek cover, the distance to the covered position must be taken into account as well as the trafficability of the route. Also, if you have to fire from the position, the position must be suitable for both hull and turret defilade.

NOTE: Return to and show Slide 7. (Instructor explains how to judge the adequacy of cover from direct enemy fire and how to decide on the selection of a covered position.)

(6) INTERACTIVE: Transmit Information on the Presence of Obstacles (Analyze Terrain Obstacle). When an obstacle to tank movement is sighted, this information should be communicated to other tank commanders in the platoon. This will alert other tank commanders to find an alternative route or, if an alternate route is not available, to alert them to the presence of the obstacle so that the tanks are not damaged. To report an obstacle, alert the platoon by announcing the type of obstacle and the direction to the obstacle, e.g., "Anti-Tank Ditch - Eleven O'Clock."

(7) DECISION: How to Negotiate an Obstacle (Analyze Terrain Obstacle). Sometimes an obstacle cannot be readily avoided and must be negotiated in order to successfully complete the mission. It is the responsibility of the tank commander to decide how to negotiate the obstacle. You must consider speed (whether to move slow or fast), and special preparation or equipment (e.g., fording equipment).

NOTE: Show Slide 21. (Instructor explains when and why information about obstacles must be reported and considerations for negotiating an obstacle.)

(8) INTERACTIVE: Transmit Information on Terrain Characteristics (Analyze Terrain). When you are examining terrain to determine its suitability to serve as an avenue of approach, you may discover a terrain feature such as a ford or a ditch that may help or hinder the movement of other tanks in the platoon. In a defensive situation, the existence of a terrain feature may be important since it may help determine what avenue of approach the enemy is likely to take or to avoid. If you identify a terrain feature that may have an important impact on the mission, report its locations to the platoon leader.

NOTE: Show Slide 22. (Instructor explains when and why information about terrain characteristics must be reported.)

(9) PROBLEM: Identify Likely Avenues of Approach (Analyze Avenues of Approach). During offensive operations, the tank commander will have to identify avenues of approach in order to decide how to reach the objective. During defensive operations, he will have to identify avenues of approach that are available to the enemy in order to defend against an attack from these locations. The tank commander must consider concealment, trafficability, cover for firing, width, and (in the defense) whether the enemy is mounted or dismounted.

NOTE: Return to and show Slide 11. (Instructor explains how to solve the problem of identifying likely avenues of approach.)

d. Practical Exercise

(1) Classroom. Each student will be given a set of aerial low oblique terrain color photos, three transparent plastic covers for placing over the photos, and a grease pencil for marking various aspects of terrain on the transparent plastic covers. Each student will also have a 1:50,000 military map which includes the terrain shown in the photos. Students may crosscheck between the photos and the map for orientation and terrain analysis.

(a) Photos 1, 2, and 3. These photos show a well defined route which you are oriented on during a movement to contact operation. Identify and mark on the plastic cover obstacles, defiles, and possible enemy long range field of fire (1500-3000 meters). Also identify and mark concealed or covered routes which would permit safe passage across vulnerable areas along the route.

(b) Photos 4 and 5. These photos were taken from an OP overlooking terrain leading to a designated objective. Identify and mark on the plastic cover mounted avenues of approach to the objective. Also indicate, along each avenue of approach obstacles that would slow the advance, and areas which provide concealment and cover from an enemy force on the objective. When the analysis is completed, classify each avenue of approach as MOST SUITABLE, SUITABLE, or LEAST SUITABLE.

(c) Photos 6, 7, and 8. These photos were taken from a defensive position overlooking terrain leading toward the position. Identify and mark on the plastic cover mounted and dismounted enemy avenues of approach leading to the position. Classify each enemy avenue of approach as MOST DANGEROUS, DANGEROUS, or LEAST DANGEROUS. Also indicate in the area in front of the position obstacles which would impede enemy movement, areas which would provide concealment for the enemy during the attack, and key terrain. Lastly, select a primary firing position which maximizes direct fire coverage of the most dangerous avenue of approach. Note any dead space in the sector of fire of the selected firing position.

NOTE: After each requirement is completed the instructor will ask students to discuss their analysis. The instructor will then critique the student's performance.

(2) Field. For this exercise students will be organized into teams of two. Each team, with an assistant instructor, will move across terrain while simulating movement to contact, attack, and defend battle position tactical operations. The students, analyzing the terrain independently of each other, will ride in the front of a $\frac{1}{4}$ ton truck, the AI will ride in the rear. Each student will have a pair of binoculars and appropriate 1:50,000 scale military maps covered with acetate. The sequence of events for each team is (a) depart start point and move along a designated route to an OP, (b) from the OP observe terrain leading to a designated objective and then follow a selected avenue of approach to the objective, (c) move administratively from the objective to the rear of a designated battle position, (d) dismount, move to the top of the position and analyze the terrain forward of the position, and (e) mount the tank at the rear of the battle position, move it into the selected primary firing position, and confirm, with the tank's fire control system, direct fire coverage of the most dangerous enemy avenue of approach leading to the position. During each phase of the exercise students may move to locations from which they could observe, from the enemy's perspective, friendly force locations during the tactical operations.

(a) During movement along the route identify and mark on the map acetate obstacles, defiles, and possible enemy firing positions with long range fields of fire (1500-300 meters). Also identify and mark concealed or covered routes that would permit safe passage across vulnerable areas along the route.

(b) From the OP analyze the terrain leading to the objective. Identify and mark on the map acetate mounted avenues of approach, key terrain short of the objective that an attacking force must seize or

control, and areas along the avenues of approach that provide concealment and cover for the attacking forces. Finally, classify each avenue of approach as MOST SUITABLE, SUITABLE, or LEAST SUITABLE. (At this time students will move from the OP, along the MOST SUITABLE avenue of approach, to the objective.

(c) Dismount from the $\frac{1}{2}$ ton truck at the rear of the battle position, move to the top of the position, and from there analyze the terrain in front of the position. Identify and mark on the map acetate mounted and dismounted enemy avenues of approach leading to the position. Classify each enemy avenue of approach as MOST DANGEROUS, DANGEROUS, or LEAST DANGEROUS. Also indicate in the area in front of the position obstacles which would impede enemy movement, areas which would provide concealment for the enemy during an attack, and key terrain. Finally, select a primary firing position which maximizes direct fire coverage of the most dangerous avenue of approach. Note any dead spaces in the sector of fire of the selected firing position.

(d) Mount the tank at the rear of the battle position and move it into the selected primary firing position. From the position confirm, with the tank's fire control system, direct fire coverage of the most dangerous enemy avenue of approach leading to the battle position.

NOTE: After each phase of the exercise is completed the instructor will ask students to discuss their terrain analysis. The instructor will then critique the student's performance.

3. EVALUATION

a. Evaluation will be based on student performance during the two practical exercises.

(1) Classroom. After each student has completed marking various aspects of terrain on the transparent plastic cover on each photo, examine the markings to determine whether or not the student has correctly indicated the following:

(a) Photos 1-3

- 1 Obstacles to movement.
- 2 Defiles.
- 3 Possible enemy long range fields of fire.
- 4 Covered routes.
- 5 Concealed routes.

(b) Photos 4-5

- 1 Mounted avenues of approach to the objective.
- 2 Obstacles that would slow the advance.
- 3 Areas that provide concealment and cover from an enemy force on the objective.
- 4 Most suitable, suitable, and least suitable avenues of approach.

(c) Photos 6-8

- 1 Mounted and dismounted enemy avenues of approach leading to the defensive position.
- 2 Most dangerous, dangerous, and least dangerous enemy avenues of approach.
- 3 Obstacles that would impede enemy movement.
- 4 Areas that would provide firing positions for the enemy during an attack.
- 5 Locations of temporary firing positions for the enemy during an attack.
- 6 Key terrain in front of the defensive position.
- 7 Primary firing position that maximizes direct fire coverage of the most dangerous avenue of approach.

(2) Field. After each student has completed a phase of the field exercise, examine the marked maps to determine whether or not the student has indicated the following:

(a) Movement to OP

- 1 Obstacles.
- 2 Defiles
- 3 Possible enemy fire positions with long range fields of fire.
- 4 Concealed routes.
- 5 Covered routes.

(b) OP

- 1 Mounted avenues of approach leading to the objective.

2 Key terrain short of the objective that an attacking force must seize or control to reach the objective.

3 Areas along the avenue of approach that provide concealment and cover from forces on the objective.

4 Most suitable, suitable, and least suitable avenues of approach.

(c) Battle Position

1 Mounted and dismounted enemy avenues of approach.

2 Most dangerous, dangerous, and least dangerous enemy avenues of approach.

3 Obstacles that would impede enemy movement.

4 Areas that would provide concealment for the enemy during an attack.

5 Key terrain in front of the position.

6 Firing position that maximizes direct fire coverage of the most dangerous avenue of approach.

(d) Primary Firing Position

1 Direct fire coverage of the most dangerous enemy avenue of approach.

b. Critique the student's performance after each activity. Inform the student what he did right and what he did wrong. For each action that the student performed wrong, tell the student how he can improve his performance. Provide students additional opportunities to practice each task until mastery is demonstrated.

APPENDIX 1
GENERAL DESCRIPTION OF SLIDES

- Slide 1. Terrain scene with features that provide good observation.
- Slide 2. Terrain scene with good fields of fire and "dead spaces" in some fields of fire.
- Slide 3. Terrain scene with good observation and good fields of fire.
- Slide 4. Terrain scene showing a concealed tank and a tank with cover.
- Slide 5. Terrain scene showing three tanks concealed from ground observation, with one of the tanks not concealed from aerial observation.
- Slide 6. Terrain scene, from different enemy ground observation perspectives, showing one tank concealed and one tank partially concealed.
- Slide 7. Terrain scene showing a tank with cover provided by terrain and a second tank with cover and under an indirect fire attack.
- Slide 8. Terrain scene showing natural and man-made obstacles.
- Slide 9. Terrain scene showing obstacles which are perpendicular and parallel to the direction of an attack.
- Slide 10. Terrain scene showing a defensive position and key terrain features in front of the position.
- Slide 11. Terrain scene showing mounted and dismounted avenues of approach leading to a defensive position.
- Slide 12. Terrain scene showing mounted avenues of approach leading to an objective.
- Slide 13. Terrain scene along a defined route showing defiles, long range fields of fire, concealment and cover.
- Slide 14. Terrain scene showing mounted avenues of approach leading to an objective.
- Slide 15. Terrain scene showing mounted and dismounted avenues of approach leading to a defensive position, fields of fire covering the avenues of approach, key terrain features and obstacles in front of the defensive position.
- Slide 16. Terrain scene showing the field of fire from the left edge of a defensive position.

- Slide 17. Terrain scene showing the field of fire from the center of a defensive position.
- Slide 18. Terrain scene showing the field of fire from the right edge of a defensive position.
- Slide 19. Terrain scene showing likely enemy locations.
- Slide 20. Terrain scene showing a tank defensive position and its sector of fire and dead spaces in the sector of fire.
- Slide 21. Terrain scene showing obstacles which might be detected only by a tank commander.
- Slide 22. Terrain scene showing terrain characteristics which should be reported by a tank commander.

APPENDIX 2
GENERAL DESCRIPTION OF PHOTOS

Photos 1, 2, and 3. Color photos of terrain showing a well defined route with defiles, obstacles, long range fields of fire, concealment, and cover.

Photos 4 and 5. Color photos of terrain showing an objective and mounted avenues of approach with obstacles, concealment, cover, and key terrain.

Photos 6, 7, and 8. Color photos of terrain showing a defensive position and mounted and dismounted avenues of approach with obstacles, concealment, cover, temporary firing positions, and key terrain.

APPENDIX 3
ANALYZE TERRAIN USING THE FIVE MILITARY ASPECTS OF TERRAIN
(TASK NO. 071-331-0820)

ADVANCE SHEET

1. OBJECTIVE: Given a tactical mission that involves a specific route or location on the ground or map, as a tank commander you must:

a. Analyze the route or location in terms of the five military aspects of terrain (observation and fire, concealment and cover, obstacles, key terrain, and avenues of approach).

b. Identify likely enemy locations.

c. Judge whether or not terrain features will interfere with the tank's line of sight to enemy targets.

d. Judge adequacy of concealment from enemy observation.

e. Judge the adequacy of cover from direct enemy fire.

f. Select covered positions.

g. Transmit information on the presence of obstacles.

h. Decide how to negotiate an obstacle.

i. Transmit information on terrain characteristics.

j. Identify likely avenues of approach.

2. HOMEWORK ASSIGNMENT:

None

3. ISSUED WITH THIS ADVANCE SHEET:

None

4. SPECIAL INSTRUCTIONS:

None

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