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Research Product 79-5

Small Combat Arms Unit Leader Training Techniques:

Rules of Play for Infantry Field Opposition Exercise

Engagement Simulation Technical Area

January 1979

U.S. ARMY RESEARCH INSTITUTE for the BEHAVIORAL and SOCIAL SCIENCES

U. S. ARMY RESEARCH INSTITUTE
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JOSEPH ZEIDNER
Technical Director

WILLIAM L. HAUSER
Colonel, US Army
Commander

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The objective of this project was to develop and evaluate simulation techniques for training small unit leaders which would provide maximum tactical decision-making training while minimizing the unnecessary, and often wasteful, participation of lower level troops. The fundamental approach of this research effort has been to take some of the basic instructional principles underlying engagement simulation and to develop abstractions of field exercises for leader training.

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It was found, however, that for the benefits of this training to be fully realized, leaders had to have an opportunity to learn to work with their NCOs and then to practice what they had learned in the field both with and without troops. A variation of the basic game simulation was developed which would permit the unit leader team (platoon and squad leaders) to work together on the game board as they would during an actual engagement.

Concurrently with the development of the multiperson infantry mapboard game, the development of a field training technique that would further focus on leader/subordinate interaction processes was explored. A small unit leader field opposition exercise involving only key leader personnel (without troop support) on each side was developed. The rationale for the development of the exercise was that it would provide training for leader/group interaction processes in a way that the mapboard games did not and could not.

Current Army doctrine emphasizes the importance of the integration of mechanized infantry, armor, and anti-armor elements in conducting successful tactical operations against a deployed enemy. Therefore, a combined arms mapboard game that would provide junior officers with the opportunity to become familiar with the nature of these combined arms operations was also developed.

The products of this research have been: (1) an infantry squad/platoon level game for two-player or multiplayer use; (2) an infantry squad/platoon level field opposition exercise; and (3) a combined arms platoon/company level mapboard game. This report contains documentation on the infantry squad/platoon level field opposition exercise. Separate reports document the other two training techniques. ARI Research Report 1219 summarizes the research activities conducted in the development of these research products.

Research Product

SMALL COMBAT ARMS UNIT LEADER TRAINING TECHNIQUES: RULES OF PLAY FOR INFANTRY FIELD OPPOSITION EXERCISE

Edgar L. Shriver, Glenn R. Griffin,
David L. Hannaman, and Donald R. Jones
Kinton, Inc.

Robert T. Root, Team Leader

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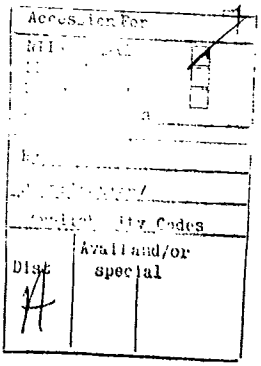

Submitted By:
Frank J. Harris, Chief
Engagement Simulation Technical Area

Approved By:

A. H. Birnbaum, Acting Director
ORGANIZATIONS AND SYSTEMS
RESEARCH LABORATORY

U.S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES
5001 Eisenhower Avenue, Alexandria, Virginia 22333

Office, Deputy Chief of Staff for Personnel
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Tactical Skill Acquisition & Retention

FOREWORD

The US Army Training and Doctrine Command (TRADOC) has identified small unit tactical engagement simulation training as one of its highest behavioral science research priorities. Research initiated by the US Army Research Institute for the Behavioral and Social Sciences (ARI) in 1972 has led to the development of a family of tactical engagement simulation training techniques, including Squad Combat Operations Exercises (Simulation) (SCOPES) and REALTRAIN.

Early in this research program it became evident that special tactical training techniques were necessary for training the leaders of small combat arms units. Often field exercises requiring full units were found to provide training mainly for officer and senior NCO personnel and to provide little effective training for lower level troops. This led to the development of tactical training techniques specifically directed at the training of small unit leaders. The first techniques developed were a board game and a field opposition exercise involving only leader personnel (using engagement simulation procedures) for infantry squads and platoons.

Army doctrine emphasizes the importance of the integration of mechanized infantry, armor, and anti-armor elements into a combined arms force. Therefore, a combined arms mapboard game that would provide officers with the opportunity to become familiar with the nature of these combined arms operations was also developed.

This research was part of a larger research program designed to improve tactical training in units. The entire program has been responsive to the requirements of RDTE Project 2Q763743A773 and, at its inception, the Combat Arms Training Board (CATB) which is now the TRADOC System Manager for Tactical Engagement Simulation (TSM-TES) of the TRADOC Training Support Center. The research reported here augments board game developments accomplished by the Combined Arms Training Developments Agency, Fort Leavenworth, Kansas.

JOSEPH ZEIDNER
Technical Director

INTRODUCTION

Armywide introduction of SCOPES and REALTRAIN engagement simulation as tactical training techniques provided the Army methods for tactically training small infantry, armor, and anti-armor units under conditions approaching those of real combat. In engagement simulation tactical training exercises, platoon, squad, or combined arms team size units can engage in free play exercises, actively opposing forces that have been given a conflicting mission in order to insure contact between the two forces.

The simulated combat environment provided by SCOPES and REALTRAIN places on the small unit leader many of the heavy behavioral demands of actual combat. Leaders must make decisions quickly regarding events that are occuring in real time as a joint function of the actions being taken by both sides. Individual tactical skills that must be learned by the small unit leader include: anticipation of enemy actions, planning concerted actions against the enemy, placing personnel in locations most likely to give them an advantage over the enemy, planning for use of the most effective weapons in a given situation, command and control, and contingency planning as more information about enemy and friendly actions is received. Simulation of combat provides a series of specific situations for small unit leaders to learn what are and what are not effective tactical behaviors.

Even during the initial development of the first engagement simulation techniques by a joint ARI, TRADOC and contractor team, it became evident that the training of small unit leaders required special research attention.

While earlier REALTRAIN developments provided effective and motivating tactical training for troops, research was needed to develop related techniques for unit leaders in the maneuver arms. Often field exercises requiring full units provide training only for officer and senior NCO personnel and may be counterproductive in terms of lower level troop training and motivation.

The objective of this research project was to develop and evaluate simulation techniques for training small unit leaders which would provide maximum tactical decision-making training while minimizing the unnecessary, and often wasteful, participation of lower level troops.

The fundamental approach of this research effort has been to take some of the basic instructional principles underlying the REALTRAIN method and to develop abstractions of field exercises for leader training.

Initial efforts led to the development of a mapboard game. The concept of "board games" has a great deal of intuitive appeal:

o They may be used to simulate (to varying degrees of abstraction) "real world" situations.

o They minimize the requirement for equipment resources.

o They minimize the requirement for "expensive" personnel resources.

o They may be reproduced relatively inexpensively.

o They may be used as part of formal training or informally during a soldier's free time, if he so desires.

o "Games" are inherently motivating because of their competitive aspects and the interpersonal interactions involved.

The "board game" initially developed was a two-sided, free-play map exercise for teaching infantry tactics to small unit leaders at the platoon level. As originally conceived, junior leaders could play the game to develop tactical skills which they would subsequently apply during REALTRAIN exercises with troops.

Preliminary tests of this gaming technique showed it to have value in providing infantry officers an opportunity to practice tactics in response to realistic, real-time demands of combat situations. It was found, however, that for the benefits of this training to be fully realized, leaders had to have an opportunity to learn to work with their NCOs and then to practice what they had learned in the field both with and without troops. Therefore, a variation of the basic game simulation was developed which permitted the unit leader team (platoon and squad leaders) to work together on the game board as they would during an actual engagement.

Concurrently with the development of the multiperson infantry mapboard game, the development of a field training technique that would further focus on leader/subordinate interaction processes was explored. A small unit leader field opposition exercise involving only key leader personnel (without troop support) on each side was developed. The rationale for the development of the exercise was that it would provide training for leader/group interaction processes in a way that the mapboard games did not and could not. It was recognized, however, that the conduct of the field opposition exercise would be somewhat more expensive in terms of time and resources than would either of the two mapboard games, although less expensive than full-scale engagement simulation exercises.

Current Army doctrine emphasizes the importance of the integration of mechanized infantry, armor, and anti-armor elements in conducting successful tactical operations against a deployed enemy. Therefore, a combined arms mapboard game was also developed that would provide junior officers with the opportunity to become familiar with the nature of these combined arms operations.

The products of this research have been: (1) an infantry squad/platoon level game for two-player or multiplayer use; (2) an infantry squad/platoon level field opposition exercise; and (3) a combined arms platoon/company level mapboard game. This report contains documentation on the infantry squad/platoon level field opposition exercise. Separate reports document the other two training techniques. ARI Research Report 1219 summarizes the research activities conducted in the development of these research products.

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BACKGROUND

A series of field exercises have been developed to enhance the training of junior leaders in the tactical employment of indirect fire, with emphasis on navigation, communications, and control of subordinate personnel in a combat-like opposition environment. The intent of this effort is the development of training vehicles having relatively high fidelity but requiring a minimum of personnel and equipment resources. These exercises will provide an environment wherein junior leaders can practice many of the skills necessary to achieve success in platoon and company battle operations.

The Infantry FOX (Field Opposition Exercise) originally represented a translation of the EFFTRAIN TOX — Tactical Opposition (Infantry Map Game) Exercise — to a field environment utilizing the principles of engagement simulation. However, the FOX can stand alone as an entity apart from the EFFTRAIN training model. Personnel with previous experience in engagement simulation (Scopes TC-7-2) should adapt easily to the concepts of the Infantry FOX.

The procedures associated with this documentation cover the conduct of a field opposition activity (FOX) involving an Infantry attack force versus an Infantry defense force, utilizing normal TO&E weapons and equipments and indirect fire support.

FOX I and II each utilize 15 individuals, FOX III, 24 individuals, to perform the attack, defense, and control roles. The simulation is intended to allow the interaction of two forces in opposition where tactical employment of infantry personnel and weapons systems, including indirect fire and the execution of tactical concepts play a major role in mission accomplishment.

1.0 WHAT IS FOX?

FOX (Field Opposition Exercise) is a series of training exercises for junior leaders. The exercises provide practice in many battle skills, including navigation, communications, and control of subordinate personnel.

FOX moves the EFFTRAIN TOX Infantry map game to the field. Preferably, FOX participants should first undergo TOX game training. However, FOX may be used alone as a training vehicle.

2.0 HOW IS FOX CONDUCTED?

The exercise is conducted in a training lane 1,000-1,500 meters long and 125-150 meters wide. The lane is marked at 50-meter intervals along the length of the lane. These points generally correspond with 6- or 8-digit grid coordinates on a 1:25,000 military map of the area. Simulated indirect fire can be placed in this area, accurate to 25/50 meters.

On this "lane", 15-24 men assume control, attack, and defense roles. Two opposing infantry forces are represented, with a junior officer leading each side. Each has normal TO&E and indirect fire support, and the defense is supplied with markers to indicate parapet foxhole positions. A "meeting engagement" or movement-to-contact mission is given the attack leader. The defense is given a sector of 500-600 meters in which to prepare a defense. The defense mission is to prevent enemy penetration of sufficient strength through the defense sector to consolidate its objective.

The exercise is coordinated by seven controllers. They help deliver simulated direct and indirect fire and assess casualties. They also decide when victory conditions obtain, and conduct an after-action review.

3.0 HOW MANY FOXes ARE THERE?

There are three levels of FOX, all enabling the development of tactical skills and the use of direct and indirect fire. Each level uses a 7-man control team. In each the ratio of attack to defense is 3:1. The three levels are increasingly complex. FOX I and II each use a total of 15 personnel; FOX III requires 24 individuals.

FOX I and II were developed to use relatively few personnel[1] in a small-scale tactical exercise. FOX I uses four men in the attack and four in the defense. To maintain the 3:1 ratio, the attack force has 12 "lives" to share while the defenders represent one man each. M-16 rifles, blanks, and indirect fire are used. "Casualties" from M-16 and indirect fire are assessed. A "dead" attacker may be assigned another "life" by the platoon leader until 12 lives have been used; after eight casualties, each succeeding casualty will reduce the attack force by one actual man.

FOX II uses the same number of men as FOX I, but each of the four attackers is allocated a 6 power scope for mounting on the M-16 rifle. Each attacker is also allocated three camouflage helmet covers. As personnel become casualties they must mount a new camouflage cover. The platoon leader can allocate the "lives" as he wishes. For example, if one attack participant becomes a casualty three times, the platoon leader can give the individual one of his own "lives" (camouflage cover) to maintain his 4-man force. After eight casualties, each succeeding casualty will reduce the attack force by one actual man. Casualties may result through the effective use of M-16 rifles, AP mines, hand grenades, and indirect fire.

FOX III uses more men, always in the ratio of 3:1. In this exercise each attacker has only one "life" to lose. Thus, FOX III provides a more realistic situation

[1]The number of personnel specified is considered the optimum amount. FOX exercises can be conducted with fewer personnel, as described in Annex A.

than FOX I or II. Control, coordination, tactical planning, and communications become more important.

The same FOX lane can be used for all levels.

4.0 THE FOX KIT

4.1 The Terrain

The training area is referred to as the FOX lane. The lane should be 1,000-1,500 meters in length and 100-150 meters in width. Any type of terrain may be used. However, a heavily wooded area with rolling hills is preferred — one unsuitable for combined arms and mechanized equipments, simulating infantry fighting conditions. The FOX lane should be bounded on one side by a fairly straight road. This makes it easy to mark (Annex B, 1.0). Area 1:25,000 maps should be obtained for use during the exercise. (For an example of a suitable FOX lane, see Table 4.)

4.2 The Participants

Fifteen participants are required for FOX I and II. These are divided into three teams:

- Attack Team - 1 platoon leader, 3 NCOs; total of 12 "lives"
- Defense Team - 1 platoon leader, 3 NCOs; total of 4 "lives"
- Control Team - 5 direct fire controllers (3 attack, 2 defense)
  2 indirect fire controllers (attack and defense)

It is suggested that the platoon leaders use their own NCOs to enhance the benefits of the FOX training.

The optimum number of participants is 24 for FOX III. The defense team and control unit are as above. The attack team numbers one platoon leader and 11 enlisted personnel. Each participant represents one man only and has only one "life."

The number of personnel in attack and defense may be increased or decreased for any FOX level. The 3:1 ratio should remain constant. For example, there could be three defenders, three attackers or nine attack "lives", and six controllers. (This is the minimum for an exercise; see Annex A.)

If more than one FOX is conducted, roles are reversed for the primary participants. The attack becomes the defense for the next exercise. In FOX III only the four primary participants of the attack force (platoon leader and three NCOs) become defense. The remaining eight attack participants continue in the attack role with the new team.

A checklist of the activities of the OIC, direct and indirect fire controllers, and participants is at Annex C.

4.2.1 Junior Leaders

The defense leader is responsible for planning the defense. He places foxhole markers, mines, etc. and leads his team during action.

The attack leader is responsible for planning the attack and leading his team during action. He reassigns "lives" as needed.

Each leader attempts to carry out his attack or defense mission successfully by the tactical utilization of his personnel, weapon, and equipment resources.

The defender who can position ' ghting elements" forward of the primary defense position, to observe and detect the location of the advancing enemy for

neutralization by indirect fire, gains an advantage. The attacker who can avoid enemy indirect fire and can pinpoint the location of the primary defensive positions for neutralization by indirect fire gains an advantage.

4.2.2 Direct Fire Controllers

Direct fire controllers travel with their teams. Like football referees they are impartial, administrative, and noncombatant. They arbitrate direct fire and assess casualties. They check the terrain before play to avoid tripping mines themselves. They may call for "time out" if necessary. They conduct the after-action review.

Direct fire controllers are the key to the successful conduct of a FOX exercise. Good controllers (sharp, responsible, aggressive individuals) will greatly enhance the value of the training exercise. One of the direct fire controllers should be an officer (OIC) who is in charge of the training exercise.

In a unit the CO or XO should perform the OIC role. This will enable better preparation of platoon leaders to perform in combat or assume command positions. The role enables the CO to know his men, their strengths and weaknesses, and provides an opportunity to plan for needed remedial training.

4.2.3 Indirect Fire Controllers

Indirect fire controllers deliver indirect fire on request. They patrol the boundary of the lane and are constantly on call (Annex B, 2.0). If a direct fire controller is not available, indirect fire controllers will assess casualties. Indirect fire controllers must be sharp, aggressive individuals. They should be drawn from the company weapons platoon.

5.0 EQUIPMENT

5.1 Weapons Simulation

The sounds and effects of direct fire and indirect weapons systems are simulated in FOX exercises. Table 1 provides a summary of the various cues and their meaning.

5.2 Equipment and Munitions

A list of equipment necessary to conduct the various FOX exercises is presented in Table 2 (A and B). It is broken down by FOX team elements. Substitutes may be necessary. For example, two additional radios can be used if TA-1 sets are not available. Whistle boobytraps may be substituted for flash bangs, etc.

6.0 ADVANCE PLANNING

6.1 Scheduling of FOX Exercises

Initially, the three levels of FOX may be used in sequence. However, each training OIC should tailor the FOX sequence of exercises according to training requirements, available training time, and personnel. For example, with limited participant availability the series of exercises will be limited to FOX I and FOX II. If junior leaders already possess good indirect fire skills, the training OIC may elect to omit FOX I and go directly to the FOX II or FOX III exercises. Once the initial series of activities is completed, many training managers will prefer to conduct FOX III exercises only.

Table 1

FOX ENGAGEMENT SIMULATION CUES

• Hand Grenade Body and Hand Grenade Fuse	=	Hand Grenade
• Artillery Simulator [a]	=	Utilized to simulate 105 rounds 1 round = Bat 1 (6 rounds) 2 rounds = Bat 2 (12 rounds)
• Hand Grenade Simulator [a]	=	Utilized to simulate 107, 81 rounds 1 round = Section 2 (6 rounds 81), (8 rounds 107) 2 rounds = Section 4 (12 rounds 81),(16 rounds 107)
• Flash bang boobytrap (Alternative--whistle boobytrap)	=	Simulates detonating AP mines
• Flares - red/green	=	Utilized as signal devices only
• HG smokes - red/green	=	Utilized as signal devices only
• M16 and 5.56 rounds	=	M-16 fire
• Foxhole Position Markers	=	Placed to indicate the location of defensive positions. These are implaced and marked by the defense leader to indication position type and cover.
• HC Smoke	=	Utilized to simulate 105, 107, 81 marking round

[a] An alternative to Artillery Simulator or Hand Grenade Simulators: Though Artillery Simulators and Hand Grenade Simulators are preferred because they provide both a sound and a visual cue, they are expensive and in short supply. If unobtainable, the use of Marine air horns is recommended. Each blast on the horn indicates 1 round--6 rounds=6 blasts on the horn, etc. The horns can be obtained at Marine supply house and are cheap compared to simulators. They do not provide as suitable a cue in that their audible range in a wooded environment probably will not exceed 500 meters in the best of conditions. Second, they provide no visible blast cue. The horn itself will cost from $8-12. Air power supply cans cost from $2-3. (One horn can will provide hundreds of blasts.)

A second alternative combines the use of simulators and air horns. For example, detonate 1 simulator and provide 6 blasts on the horn = 6 impacting rounds.

Table 2A

EQUIPMENTS PER EXERCISE

Equipment Item	Direct Fire Controllers	Indirect Fire Controllers	Attack Team	Defense Team	TOTALS FOX I	FOX II	FOX III[d]
1. PRC-77	5	2	3	1	11	11	12
2. TA-1 sets [a]				2	2	2	2
3. Commo wire (WD-1)				2 rolls	2 rolls	2 rolls	2 rolls
4. M-16 6X scope (Scopes TC-7-2) Blank adaptor			FOX I--4 ea. (optional) FOX II--4 ea. FOX III-12 ea.	FOX I--4 ea. (optional) FOX II--4 ea. FOX III--4 ea.	8 each (opt.)	8 each	16 each
5. M-16 ammo magazine			FOX I,II--8 FOX III--24	FOX I,II,III--8	16	16	32
6. Compass	5	2	2	2	11	11	11
7. Defense Position Marker Parapet foxhole Parapet foxhole/overhead cover				 2 4	 2 4	 2 4	 2 4
8. 1:50,000 map of TA			1	1	2	2	2
9. Controller Clipboard Form	Table 5 (5)	Table 4 (2)			7	7	8
10. Clipboard	5	2			7	7	8
11. 3x5 card white		30			30	30	30
12. Assorted camo cover numbers [b]			FOX I--0 FOX II--12 FOX III--12	FOX I--0 FOX II,III--4	0	16	16
13. Impact stapler		1			1	1	1
14. Engineer tape (orange or yellow)		2 rolls			2	2	2
15. Grease pencil	5	2			7	7	8
16. Marine air horn [c] and cannister		2			2	2	2

[a] Utilization of 2 PRC-77s instead of TA-1s speeds defense set-up, eliminates need for WD-1 commo wire.

[b] 30 different numbered camo covers required to prevent participant personnel from becoming familiar with the numbers.

[c] For simulation of indirect fire if Artillery Simulators are unavailable.

[d] Additional PRC-77, Clipboard, and Controller Forms are for the NCS controller in FOX III only.

Table 28

MUNITIONS PER EXERCISE

Ammunitions	Indirect Fire Controllers	Attack Team	Defense Team	TOTALS FOX I	FOX II	FOX III
Item and DODAC Number						
Flash bang boobytrap [e] 1370 L598			FOX I--0 FOX II,III--5	0	5	5
Training hand Grenade 1320 G811 Hand grenade fuse F1320 G878		FOX I--0 FOX II--4 ea. FOX III--12 ea.	FOX I--0 FOX II,III--4 ea.	0	8	16
HC smoke Yellow 1330 G945 Red 1330 G950		FOX I--0 FOX II,III--5 red	FOX I--0 FOX II,III--5 yellow	0	10	10
5.56 blank round 1305 A080		FOX I,II--120 rds. FOX III--500 rds.	FOX I,II,III--120 rds.	240 rds.	240 rds.	620 rds.
Artillery simulator [f] M-115A2 1370 L594 or HG simulator M-116A1 1370 L601	30			30	30	30
Training Claymore mine 1345 K144			5	5	5	5
HC Smoke 1330 G930 [f] [g]	10			10	10	10

[e] For use with Claymore mines. If unavailable use whistle boobytrap simulators (1370 L600).

[f] If marine horns are being used to simulate indirect fire, neither artillery simulators, hand grenade simulators, nor smoke HC are required

[g] Used as marking round.

Suggested Initial Sequence

	Morning	Afternoon
Day 1	FOX I	FOX I
Day 2	FOX II	FOX II
Day 3	FOX III	FOX III

Once leaders and participants are familiar with the concept of the FOX, more exercises can be conducted per day. An alternative schedule based on a company-size unit (3 FOX missions per day) is at Annex D.

6.2 FOX Informative Briefing

Prior to the conduct of the exercises (preferably the day before) the OIC should provide an instructional briefing to all participants. Allow two hours for this activity. Controller and participant roles should be assigned. Participants should be told to review indirect fire request procedures. Controllers should be tasked to read the appropriate FOX documentation. Casualty assessment rules and procedures for the FOX exercises should be reviewed in detail. Conduct the briefing in the early morning so that there will be time to solve any problem areas which become evident.

6.3 Activity Timetable

The defense will need 1-2 hours to plan its defense. Controllers will need 2-3 hours' preparation. The conduct of each FOX will take 1-2 hours. To make the best use of time, two FOX exercises are planned for each day, if possible.

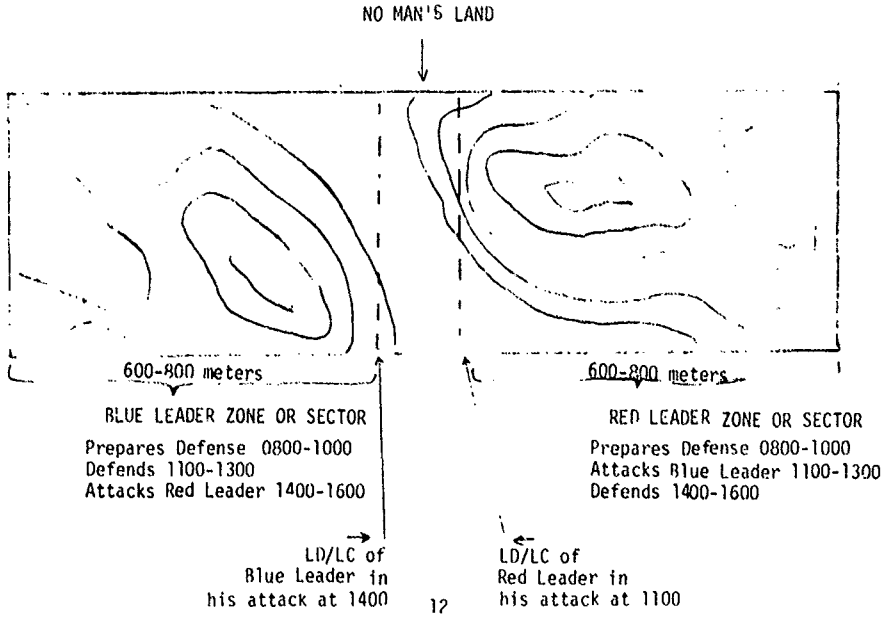
Table 3 is an economy (minimum) exercise schedule. Equipment and ammunition are provided for both exercises at one time. The same FOX lane is used for both exercises. It is marked out once only for the two exercises by controller personnel.

Table 3

ECONOMY EXERCISE SCHEDULE

TIME	BLUE LEADER	RED LEADER	CONTROL FORCES
0800-1000	Prepare defense	Prepare defense	Mark lane/Get organized
1000-1100	Preparation of defense	Planning for attack	Check out defense/attack plans, final planning/coordination
Exercise 1 1100-1300	Execute defense plan	Execute Attack plan	Control FOX Conduct After Action Review
1300-1400	Planning/preparation for attack - Lunch on site [a/]	Final Preparation of defense - Lunch on site	Check out defense/attack plan Redistribute ammo, final planning/coordination
Exercise 2 1400-1600	Execute attack	Execute Defense	Control FOX Conduct After Action Review

[a/] C-Rations are a "must" to save time.



Blue Leader defends in the morning, Red Leader in the afternoon. Both leaders are given their attack and defense mission orders for both exercises in the morning. They are given defense resources, equipment, munitions, zone, and boundaries for both exercises at the same time. Leaders then go to opposite ends of the FOX lanes to develop their defense plans in secret. Both leaders place their foxhole markers and mines. Red Leader plans his attack between 1000-1100. Exercise 1 is conducted between 1100-1300 hours. Red Leader then occupies his defense while Blue Leader plans his attack between 1300-1400. Exercise 2 is conducted between 1400-1600 hours.

In FOX III, eight of the participants will be members of both attack teams. Thus, preparation for the defense is made only by the leaders and their two squad leaders (NCOs). The eight who will play subordinate roles for both leaders in the attack are scheduled to arrive in the training area after the initial planning period. They participate only in attack plans. These eight participants must not see or obtain either leader's defensive plan. As insurance, each attack line of departure/line of contact (LD/LC) should begin from the "no man's land" between the defensive zone sectors (Table 3).

C-rations or sack lunches should be issued for the noon meal. This allows for flexibility in the schedule.

6.4 Requisition of Equipment, Munitions, Radio Frequencies

The OIC or Chief Controller must requisition equipment and munitions listed in Table 2 in advance. He must request three radio frequencies (attack, defense, and control). He should also request an alternate frequency for emergency back-up.

It is critical that radios (PRC-77) be in working order. These should be carefully checked before the exercise begins. Planning to include one spare radio and two spare accessory kits would be very wise.

6.5 Selection of FOX Lane

A suitable FOX lane should be chosen in advance of the exercise (reference paragraph 4.1).

6.6 Preparation of Controller Maps and Clipboards

Area maps on a 1:25,000 scale should be obtained. The FOX lane should be identified and marked off with gridline tick marks at 50-meter intervals. These ticks indicate lane markers. They are used for pinpointing the location of indirect fire requests. Transfer from the map to the actual FOX lane is easy to accomplish. Tables 4 (A and B) and 5 (A and B) show marked map clipboard examples; also see Annex B for appropriately marked maps. These maps should be prepared in advance, but for controller use only. FOX participants should be provided with unmarked 1:50,000 maps of the training area.

6.7 Assignment of Controller Roles

Controllers should be selected in advance of the exercise. They should have time to become familiar with the FOX lane and their responsibilities. These individuals are critical to the success of the exercise. They must be concerned, intelligent, aggressive, and positively motivated. They need not be of high rank!

7.0 FOX DAY - STAGE 1: PREPARATION

All controller personnel should refer to Annex B for detailed instructions on lane marking, fire impacting, etc.

Table 4A

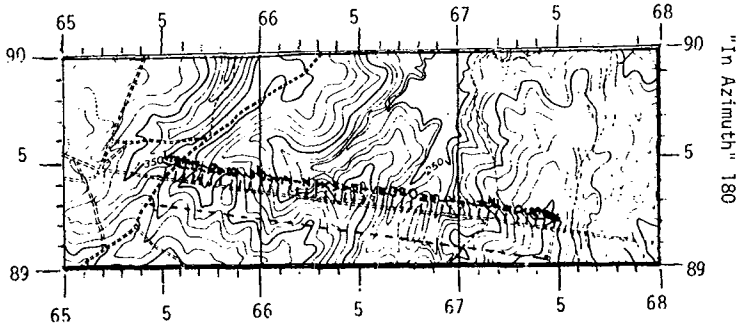
INDIRECT FIRE CONTROLLER CLIPBOARD

Radio Frequency

Blue _____

Red _____

Control _____



(Lane utilized at Ft. Bragg, North Carolina)

ATTACK INDIRECT FIRE

Impact Location	Fuse Type	#Rounds 105/107	#Rnds 81	Casualty Att.	Casualty Def.

DEFENSE INDIRECT FIRE

Impact Location	Fuse Type	#Rounds 105/107	#Rnds 81	Casualty Att.	Casualty Def.

INDIRECT FIRE CASUALTY ASSESSMENT

VT = Air Burst
PD = Point Detonating
DE = Delay Mine Action

Number of rounds--Battery OR Mortar Section	6			12			18			24			30		
Fuse Type	VT	PD	DE	VT	PD	DE	VT	PD	DE	VT	PD	DE	VT	PD	DE
	Casualty Percentage														
Cover: Open/Foxholes, no overhead cvr	30	25	15	60	50	30	90	75	45	100	100	60	100	100	75
Foxholes, no overhead cover	20	15	05	40	30	10	60	45	15	80	60	20	100	75	25
Foxholes with overhead cover	00	15	05	00	30	10	10	45	15	10	60	20	15	75	25

Table 4B

Number Men in the Impact Casualty Area (45 meters 81; 75 meters 105, 107)

Casualty Percentage	1	2	3	4	5	6	7	8	9	10
05	0	0	0	0	0	1	1	1	1	1
10	0	0	1	1	1	1	1	1	1	1
15	0	1	1	1	1	1	1	1	2	2
20	0	1	1	1	1	1	2	2	2	2
25	0	1	1	1	1	2	2	2	2	3
30	1	1	1	1	2	2	2	3	3	3
45	1	1	2	2	2	3	3	4	4	5
50	1	1	2	2	3	3	4	4	5	5
60	1	1	2	3	3	4	4	5	6	6
75	1	2	2	3	4	5	5	6	7	8
90	1	2	3	4	5	6	7	7	8	9
100	1	2	3	4	5	6	7	8	9	10

Casualties

Indirect Fire Casualty Assessment Example:

12 rounds of VT fuse 81 mm mortar have fallen within 30 meters of 3 men in the open. By the chart (other side) 60% of the men are casualties. Referring to the chart above, 60%, 3 men = 2 casualties.

Table 5 A 7

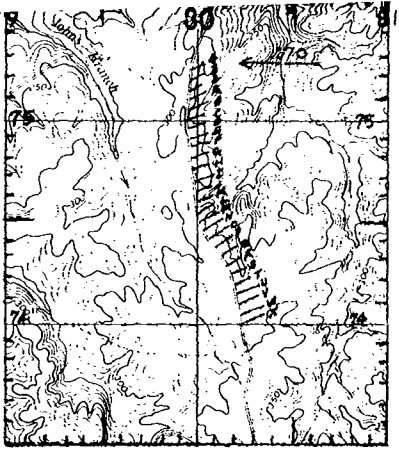
DIRECT FIRE CONTROLLER
CLIPBOARD

Radio Frequency

Blue _____

Red _____

Control _____



INDIRECT FIRE CASUALTY ASSESSMENT

VT = Air Burst
PD = Point Detonating
DE = Delay Mine Action

Number of Rounds--Battery OR Mortar Section	6			12			18			24			30		
Fuse Type	VT	PD	DE	VT	PD	DE	VT	PD	DE	VT	PD	DE	VT	PD	DE
	Casualty Percentage														
Cover — Open	30	25	15	60	50	30	90	75	45	100	100	60	100	100	75
Foxholes, No overhead cover	20	15	05	40	30	10	60	45	15	80	60	20	100	75	25
Foxholes w/overhead cvr	00	15	05	00	30	10	10	45	15	10	60	20	15	75	25

CASUALTY #	FIRER # & WEAPON	TIME	CONFIRMED?	CAUSE OR ACTION COMMENT

PARTICIPANT CAMOUFLAGE NUMBERS (fold under)

DEFENDER

ATTACKER

Table 5B

Number Men in the Impact Casualty Area (45 meters 81; 75 meters 105, 107)

Casualty Percentage	1	2	3	4	5	6	7	8	9	10
05	0	0	0	0	0	1	1	1	1	1
10	0	0	1	1	1	1	1	1	1	1
15	0	1	1	1	1	1	1	1	2	2
20	0	1	1	1	1	1	2	2	2	2
25	0	1	1	1	1	2	2	2	2	3
30	1	1	1	1	2	2	2	3	3	3
45	1	1	2	2	2	3	3	4	4	5
50	1	1	2	2	3	3	4	4	5	5
60	1	1	2	3	3	4	4	5	6	6
75	1	2	2	3	4	5	5	6	7	8
90	1	2	3	4	5	6	7	7	8	9
100	1	2	3	4	5	6	7	8	9	10

Casualties

Indirect Fire Casualty Assessment Example:

12 rounds of VT fuse 81-mm mortar have fallen within 30 meters of 3 men in the open. By the chart (other side) 60% of the men are casualties. Referring to the chart above, 60%, 3 men = 2 casualties.

7.1 Lane Marking

The OIC or Chief Controller is responsible for the lane marking operation. He should delegate the mission to the two indirect fire controllers. He must then make sure that it has been correctly completed.

Mark one lane boundary (preferably the road or trail boundary) in 50-meter intervals according to the prepared FOX lane on a 1:25,000 map. Next, mark the opposite lane boundary with engineer tape placed on trees at eye level at 25-50 meter intervals. This will enable controllers to keep opposition forces within the lane boundaries. Specific directions for marking the lane and impacting indirect fire are in Annex B, paragraph 1.0.

This operation may be completed any time prior to the start of the exercise.

7.2 The Chief Controller

The OIC or Chief Controller is totally responsible for the conduct of the FOX activity. He should present an informative briefing for participants the day before the field problem is conducted and he is also responsible for providing a FOX briefing prior to each exercise. He should delegate some FOX tasks to supporting direct fire controller personnel (7.3, 7.7), but he should conduct the FOX briefing (7.4) and provide Mission Orders (7.5) himself. The overall activities of the OIC are itemized at Annex C.

7.3 Equipment and Munitions

Check the radios.

Divide the FOX exercise equipment and munitions according to Table 2. Distribute the equipment to attack, defense, and controller elements. Equipment

allocation is dependent on the type and number of FOX activities being conducted. If two exercises are being conducted (6.3), defensive equipment is distributed in the morning. Attack equipment is distributed at mid-morning or in the afternoon.

7.4 Daily Participant FOX Briefing

Brief participant personnel in the field each day on the conduct of the FOX exercises. This should take 15–20 minutes and should provide a general understanding of the activity. Specific information on the procedures for requesting indirect fire, use of foxhole position markers, casualty assessment, schedule of activities, and controller roles should be repeated, even though these procedures have been discussed prior to the FOX activity (6.2).

7.5 Mission Orders

Plan verbal attack and defense mission orders similar to the examples in Table 6. Give these orally to the attack and defense leaders as a FRAG order at the end of the FOX briefing (7.4). Give the orders out of listening range of the opposing force element. When the FRAG order is completed, instruct each leader to plan his attack and defense strategy. Assign each element a call sign (Blue Force or Red Force). Instruct each leader that he must brief controllers on his planned mission strategy just before the FOX exercises begin.

7.5.1 Indirect Fire Allocations, Radio Frequencies, and Call Signs

The Mission Order should provide indirect fire allocations and specify radio frequencies. Either 105 or 107 (4.2) or 81 indirect fire rounds may be allocated. A normal allocation consists of 60–80 rounds for each opposition force. It is suggested that initial FOX exercises use only 81-mm mortars.

Table 6

SAMPLE ATTACK/DEFENSE MISSION ORDERS

Attack and defense mission orders should be administered vocally as FRAG orders in conjunction with a map of the TA. *Coordinate reference points associated with these sample orders were taken from the FOX Lane map depicted at Table 4. Times are from the schedule in Table 3.* The blanks should be filled in and the mission orders administered to each team. An attack and defense order will be prepared for each team if two exercises are being conducted on a given day (6.3).

ATTACK ORDER

Situation — "Company" is participating in an offensive maneuver to secure primary and secondary objectives to be utilized as LZs if needed in the conduct of the battalion advance.

Mission — 1st and 2d Platoons will secure the primary objective. Your force will proceed on the extreme right flank of the Company Advance at 1100 (time) to secure the secondary LZ vicinity 658 893 (landmark or 6-digit coordinate). While advancing to your objective, you are to neutralize any enemy resistance encountered. Your LD/LC is (landmark or 6-digit coordinate) 664 892 or V. Company and Battalion indirect fire resources available on request (60 rounds 81)

Command & Signal — Current CEOI "in effect". Your radio frequency is 32 80. Your call sign is "Blue Force". Call sign for indirect fire is "Blue Fire Control".

DEFENSE ORDER

Situation — "Company" is in a defensive position vicinity of Pine Knot Creek. Company forces have suffered substantial losses and reinforcements are not expected. Enemy forces have been advancing slowly South to North. Expect attack from the South by enemy ground forces at any time after 1100 hours (time).

(continued)

Table 6 (cont'd)

Mission	2d platoon defends on your right, 3d platoon defends on your left. Your force defends at 1100 (time) between vicinity of 558 893 or 8 (landmark or 6 digit coordinate) and the 665 892 or T (landmark or 6 digit coordinate). Left boundary is road/trail. Right boundary is (marked). Indirect fire support available on request (60 rounds 81).
Command & Signal	Current CEOI "in effect". Your radio frequency is 30 50. Your call sign is "Red Force". Call sign for indirect fire is "Red Fire Control".

Three radio frequencies are normally utilized in the conduct of FOX exercises. For example:

Blue Force frequency	32.80
Red Force frequency	30.50
Direct Fire Controller frequency	36.30
Indirect Fire Controller frequency	32.80 Blue, 30.50 Red

Example call signs for opposition elements and controllers are provided below.

Blue Force	(Officer leader)
Blue 1, 2, etc.	Subordinates
Blue Fire Control	Blue Indirect Fire Controller
Red Force	(Officer leader)
Red 1, 2, etc.	Subordinates
Red Fire Control	Red Indirect Fire Controller

Control: Blue Control 1, Blue Control 2 (Blue Force)

Red Control 3, Red Control 4 (Red Force)

7.6 Use of Defense Position Markers

Defense Position Markers are employed where defense leaders would use parapet foxholes with overhead cover or parapet fighting positions. The four red markers represent positions with overhead cover, and the two yellow markers represent fighting positions without overhead cover. Junior leaders can thus become familiar with the advantages of covered positions as protection from indirect fire. No time and effort are spent in actually making foxholes on the FOX lane.

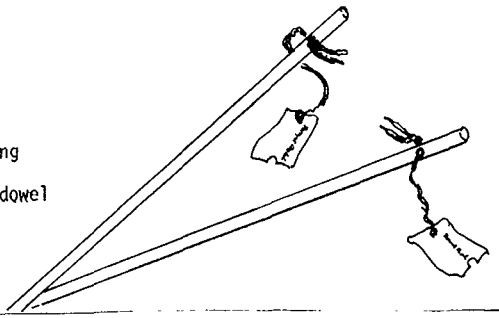
Since there are very few personnel on a FOX defense team, the positions must be boldly marked to present an appropriate cue to the opposition. This is one area in which FOX departs from reality. The limited protection offered by the markers is another departure. They shield against indirect fire and grenades but not from rifles. (No cover is actually present to give the defender increased protection from having his camouflage number identified.) This loss in realism is justified by the time saved through using the defense position markers.

The markers are placed in the ground at the location of each defense foxhole position. If plenty of concealment is available, the marker may be placed low to the ground. This simulates a heavily camouflaged, well-concealed bunker position. If the positions are placed in open terrain, the markers should be made more visible. The final position of the foxhole marker is determined by the defense direct fire controller.

Individuals who desire to use the cover afforded by these positions must stay within a 1-meter radius to the sides and rear of the marker. Personnel who exceed this radius will be considered out of the bunker and are no longer allowed the added protection provided by the position against grenades and indirect fire.

Defense Position Markers are 3x5 cards attached to wooden dowels. Red cards = positions with overhead cover; yellow or white cards = positions without overhead cover (parapet foxhole positions). In FOX I, II, III the defense is allowed four red markers and two yellow markers. Examples of Defense Position Markers follow. These must be produced in sufficient quantity prior to the conduct of FOX exercises. If there are two exercises per day, make 12 markers!

1/2 inch dowel-36" long
3X5 card
1/4 inch hole top of dowel
6"piece of string



7.7 Distribution of Equipment and Participant Movement to Defense Zones

After the briefing, equipment and munitions are distributed to the opposition leaders. This distribution includes Defense Position Markers. As quickly as possible each leader and his defense subordinates must move to their assigned defensive zone. They develop their defense between 0800-1000 hours per Table 3 (p. 12).

If a FOX II or III is being conducted, distribute camouflage covers to participants at this time, four to defenders, 12 to attackers. Make sure that the cover numbers are not compromised by the opposition team. The OIC should record the numbers on the Direct Fire Controller forms (Table 5, pgs. 17 & 18). Fold the section of the form under to avoid number compromise during problem play.

7.8 Direct Fire and Indirect Fire Controller Preparation

The OIC must discuss control procedures with the direct fire and indirect fire controllers. It is essential that all controllers know and understand these procedures.

Distribute the Controller Clipboard, Direct and Indirect Fire Controller Form. The OIC should indicate to the controllers that some will be defense controllers, some offense. He also indicates that he too is a direct fire controller. The OIC reviews

in detail the casualty assessment procedures for both direct and indirect fire. These are specified at paragraphs 8.6, 8.7, 8.8, and 8.9 and Table 8 (pgs. 37-43).

Each direct fire controller should understand and be prepared to execute his attack or defense controller role, as described below.

The defensive controllers, after becoming acquainted with the defense plan and set-up (7.11), position themselves initially with the forward defensive elements (7.12). The controller(s) selects a position close to but behind the forward element where he can observe without exposing himself.

As the offensive force initiates its attack, each attack controller must position himself just behind the point element. It is the forward attack elements that will be involved in the initial action. Walk in the point element's footsteps if possible. This is to make certain that participants, not controllers, activate trip wires, etc. The controller must be as tactical as the participants. If participants crawl or run, the controllers must do likewise. The importance of the controller remaining as tactical as the participants cannot be overemphasized. Participants will soon give up trying to move tactically if they feel that it serves no purpose. Imagine the attitude of a soldier who crawls 100 meters to close with an enemy position, only to learn he was pinpointed through the carelessness of the controller.

As the attack force begins to deploy, controllers must be very careful to insure that each forward element is covered by a controller. An initial control plan can be formulated based on the leader's order (7.12), but as the plan changes, flexibility must be exercised. In FOX II/III, a controller should memorize the helmet numbers

of the element he is accompanying. This will assist him in insuring that he is constantly in a position to support each man. It will also speed up his reaction time if a camouflage number is identified.

While the control net should be kept clear for transmissions concerning casualties, it may be used by controllers to make adjustments in their coverage. If individuals scatter and it is difficult for the controller to see them, he may call another controller for help. Controllers should refer to participants' numbers in these transmissions so that it is perfectly clear the responsibility for a given individual has passed from one controller to another.

Once contact is made, the individual controller must move aggressively to stay with the individuals of his element who are the most likely to make contact with the enemy. He must watch closely for the emplacement of mines and boobytraps in his area and anticipate the effects of that type of activity.

The most important concern at this time is to identify casualties as quickly as possible. Hits should be transmitted and confirmed in 5 to 10 seconds to speed casualty assessment. It is not necessary to receive a casualty transmission over the radio. If you are with 21, for example, and you hear his number called, declare him a casualty immediately and confirm the casualty as described in paragraph 8.4.

As the attacking force closes with the defending force, grenades may be used by both sides. When the forward defensive elements are neutralized or withdraw to their main positions, the defensive controllers must pull back quickly to provide control for both the withdrawing elements and the individuals at the primary defense positions. It is crucial that each man remaining in the action be observed by one of the

controllers. The defensive controller should also know the relative location of each offensive controller so that he can tell them when grenades are being thrown in the direction of the men they are covering. These transmissions should be as brief as possible. At this point the defensive controllers may actually be able to assess offensive casualties and should do so if they are closer to the action.

The indirect fire controllers must be reminded that it is their responsibility to assess casualties when direct fire controllers are not present.

In the placement of incoming rounds indirect fire controllers will occasionally activate trip wire AP mines, signals. While this is to be avoided if possible, participants should be made aware in the After-Action Review that actual incoming rounds would have activated some of these devices.

Most of all, it is essential to keep the problem moving and realistic. Controllers do not provide leaders with intelligence. The controller must try to conceal himself from the opposing force at all times to prevent giving away the location of the element he is covering, yet he must constantly be in a position to observe the action. This demands that the controller operate more "tactically" than the unit he is with. He must be alert and aggressive to insure every casualty is promptly and accurately identified. His most important goal is to effectively cover his element without compromising their location.

It is recommended that controllers be experienced enough to identify critical actions and events that occur in the situation, so they can be brought to the attention of the participants later, in the After-Action Review.

Finally, controllers must not give advice or critique a participant or leader before or during an exercise. The time for advice and/or a critique is during the After-Action Review (paragraph 9.0).

7.9 Evaluation of the Indirect Fire Controllers' Understanding of Indirect Fire Procedures

It is essential to evaluate the indirect fire controllers' understanding of their mission. This can best be done by a trial run. A direct fire controller moves to a specific location in the lane. He requests a fire mission from first Blue and then Red indirect fire controllers. He utilizes normal fire request procedures, described in Annex B. He provides a mission of opportunity, using grid coordinates. He gives a subsequent adjustment (e.g., direction 80° magnetic, left 50, add 50). The rounds should be impacted within 50 meters of the requested position within three minutes for the mission of opportunity, and one minute for the subsequent fire adjustment.[1] The controller should critique each indirect fire controller at the conclusion of the trial mission. If the standards above are not met, increased practice for the indirect fire controllers must be provided.

7.10 Inspection of the Defense Positions

While Red and Blue Leaders plan their operations, the direct and indirect fire controllers walk the FOX lane. They familiarize themselves with the terrain, the land boundaries, and the indirect fire markers. They inspect defense positions and mark them on the controller clipboard map. All controllers should know the

[1] Begin timing the mission at the completion of your mission request or adjustment.

location of forward defense elements: OPs, ambushes, and especially trip-wired devices (early warning, AP mines, etc.) to avoid detonating them during the exercise. Ask the defense leader to provide a guided tour of the defense so you can avoid trip-wired devices and save time.

7.11 Review of Attack/Defense Mission Plans and Controller Placement

The control team should review the attack and defense plans with each opposition leader separately. At this time controllers should review their control roles and call signs. Two direct fire controllers usually become defense controllers. They remain near the defense position. The remaining direct fire controllers (including the chief controller or OIC) usually advance with the attack forces.

The indirect fire controllers position themselves along the marked road boundary to carry out requested fire missions. Where possible, indirect fire controllers use a vehicle (quarter ton) to insure prompt delivery of fire mission requests. This also provides indirect fire controllers with an AN/VRC 46, as well as their PRC-77 radios. With the AN/VRC 46 the indirect fire controllers can monitor the Direct Fire Control Net. Be certain to keep the volume low to avoid giving participants inappropriate action cues. In this way they can monitor controllers, as well as the opposition forces.

The chief controller or OIC makes the final decision on the placement of direct and indirect fire controllers. For example, an attack leader may intend to conduct a single axis massed attack. The defense force may develop a defense with three OP/LP forward elements. Then the chief controller might allocate three direct fire controllers to defense forces, and two direct fire controllers to the offense. Normal controller

positions at the start of a FOX operation (three attack/two defense controllers) are depicted at Table 7.

All direct fire controllers operate on the same frequency during the FOX activity. Direct fire controllers monitor the control frequency continually so that controller elements can coordinate their actions effectively. Controllers must be careful that these radio transmissions are not overheard by playing personnel, as they may provide inappropriate cues (an unfair advantage) to the playing participant.

7.12 Indirect Fire Controller and Direct Fire Controller Coordination

One indirect fire controller monitors the attack frequency. The other monitors the defense frequency. The controllers assume the role of an FDC for the attack/defense leaders. When indirect fires are impacted, the indirect fire controller comes up quickly on the control frequency. He indicates to the direct fire controllers the number of rounds and fuse type. To expedite this action the PRC-77 control frequency should be "preset". A fallback alternative is to indicate in a loud voice the number of rounds and fuse type.

It is the primary responsibility of the direct fire controllers to assess casualties. When direct fire controllers are not present, the indirect fire controller must perform this function. Casualty assessment procedures are at paragraph 8.6.

8.0 FOX DAY - STAGE 2: CONDUCT OF FOX ACTIVITY

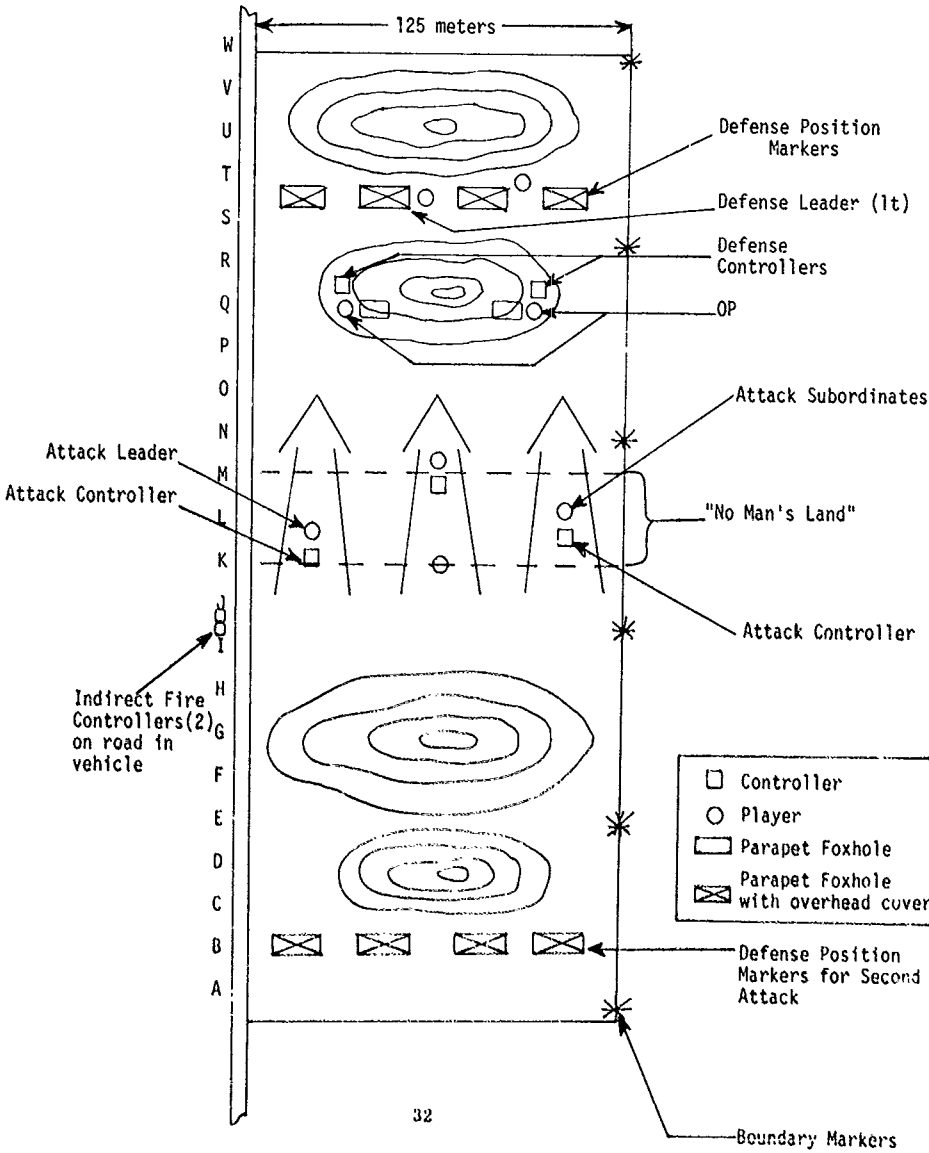
8.1 Controller Actions

Controllers move into position with their assigned force or along the FOX lane. The chief controller indicates the start of the activity over the control net. FOX action

Table 7

EXAMPLE OF CONTROLLER PLACEMENT

(not to scale)



then proceeds in real time. The major responsibilities in the control of the exercise are discussed in detail below.

8.2 FOX "Time Out"

Any controller may request "time out" from the chief controller. He does this if events occur that will offset the training benefits of the FOX activity. Examples of appropriate "time out" reasons include:

- o Radio communication problems between controllers and/or indirect fire controllers and leader individuals. Radio commo problems between leaders and subordinate personnel are not a sufficient cause for delay.
- o Casualty assessment of forces, if long delays are encountered.
- o When a controller must move from one position to another to provide control.
- o When controllers "lose" a participant.
- o To extinguish a fire in the exercise lane.

During "time out" no indirect fire request is accepted by indirect fire control personnel. No movement is allowed to participants. The chief controller calls "time out" to all controllers and participants on the appropriate frequencies. Intermissions may be necessary at times, but they disrupt the flow of the problem and are to be avoided if possible.

8.3 Controller Communication

Offense and defense direct fire controllers must inform one another of all offensive and defensive activity. This is achieved through periodic radio communications. The direct fire controller with a defensive OP contacts his opposite number

with the offensive element advancing toward him. The following types of information are exchanged to facilitate FOX control:

- o Size of elements, i.e., the size of the advancing offensive element (1-2 men), size of defensive OP element (1 man)
- o Route of advance the advancing offensive element is using
- o Location of the OP position, AP mines, etc. This enables direct fire controllers to anticipate contact between opposing forces.

Such radio communications are necessary, but the control net should not be cluttered with unnecessary transmissions. Transmissions should be kept short and only pertinent information transmitted. Controllers should not permit offense and defense participants to overhear controller radio transmissions, which might provide them with improper cues.

8.4 Reporting and Recording Casualties

The OIC or chief controller maintains a count of the casualties suffered by both forces. Use of the direct fire clipboard form facilitates this process (Table 5). It allows the controllers to make an objective decision regarding the termination of an exercise. If properly maintained, it is also highly useful in the conduct of the After-Action Review (9.0).

In effect, the direct fire controllers indicate casualties over the control radio net. Example: "1 man killed by indirect fire" (FOX I) or "23 killed by 46" (FOX II, III). The OIC monitors the radio net and attempts to record the action for use in the After-Action Review. These radio transmissions should be kept short and simple, as in "31 by hand grenade". It is important to confirm casualties in the FOX II, FOX III. The radio transmission "23 by 46", and the subsequent message

"23 confirmed" indicata to all concerned that number 23 has in fact been located and declared a casualty. In the FOX III an additional controller should be used with a radio to form an NCS as described in TC 7-2.

8.5 Utilization of Indirect Fire in the FOX Activity

In all of the FOX exercises the direct and indirect fire controllers are like football referees--administrative noncombatants who control problem play but do not directly participate in the tactical exercise. Direct fire controllers make certain that participants do not attempt to evade the indirect fire controllers on sight.

The procedures for use and request of indirect fire are similar for FOX I, II, and III. Indirect fire requests are normally made to indirect fire controller personnel by leader player participants. If the leader has been neutralized, any individual with a functioning radio may transmit a request. The indirect fire controller has the responsibility of impacting indirect fires and subsequent adjustments as indicated in Annex B. All controller personnel, however, must be well versed in these procedures. The chief controller must be certain that all control personnel are acquainted with both direct and indirect fire controller duties.

An indirect fire controller accepts indirect fire requests from any individual with a functioning radio. The indirect fire controller uses the map on his clipboard (Table 4, pgs. 15-16--marked with indirect fire marker symbols and grid tick marks). He first plots the impact location per grid coordinate or registration adjustment request. He then translates the impact point to an indirect fire marker along the road boundary. He moves to the appropriate marker and into the lane (always 0^{o}, 90^{o}, 180^{o}, or 270^{o}--see Annex B). Once at the correct location, he carries out the fire mission by

detonation of an artillery or hand grenade simulator to simulate 105 or 4.2 or 81 fires, or a hand grenade smoke (HC) to simulate a marking round.[1] If artillery or hand grenade simulators are not available, a Marine air horn is utilized.

- For every 6 rounds requested in an indirect fire mission, one artillery or hand grenade simulator is detonated at the location requested. When a spotting or smoke round is requested, the controller ignites one HC hand grenade smoke at the location requested, and expects an adjustment request. No casualties are assessed for spotting rounds. A mission will not be held "on command" for more than 10 play minutes. When marine horns are used to simulate fire, a horn blast is provided for each impacting round.

- The indirect fire controller records each mission request, impact location, impact time, number of rounds, and fuse type on the controller form.

- Indirect fire requests are not accepted from a team that has used up its allotment. The indirect fire controller keeps an up-to-date count of remaining rounds for his force.

After completing a fire mission, the indirect fire controller comes up on the direct fire controller frequency and indicates the number and fuse type of impacting rounds. (Example: 81, 12 rounds, VT, or 107, 1 round, WP). Once artillery is impacted, direct fire controller personnel must clear their frequency until the information is transmitted. Normal communication traffic then resumes.

The indirect fire controller should expect an adjustment to each fire mission. He should stand by for subsequent adjustments and direction information from the participant leaders. Those adjustments are completed as indicated in Annex B. The indirect fire controller must not accept incorrect adjustments, such as "Move over

[1] In dense wooded environments an artillery or hand grenade simulator may have to be detonated to provide the proper cue of a marking round.

next to the old dead tree and throw the next round." Upon the indication "Mission completed", or at his own discretion, the indirect fire controller moves back to the road boundary. He then prepares for subsequent fire mission requests.

Occasionally a fire mission will be requested which is out of bounds of the marked training area. When this occurs, the indirect fire controller will indicate "Requested Mission is out of the boundary area--recompute your data and retransmit."

8.6 Indirect Fire Casualty Assessment - FOX I, II, III

Only 105, 107, or 81 rounds shall be simulated during FOX. Any individual within a radius of 45 meters of 81, or 75 meters of 107 or 105 fires will be considered in the casualty assessment.

After determining the number of impacting rounds, the controller establishes the number of casualties. This depends on the number and type of impacting rounds, fuse type, and cover conditions of personnel (see Table 4, pgs. 15-16). For example, 1 man in the open is within 40 meters of the impact location of an 81 indirect fire mission, 6 rounds, VT fuse. According to the controller clipboard form (Table 4, pgs. 15-16), the casualty percentage is 30 percent. A casualty percentage conversion table is on the back of the Controller Clipboard table. To determine the number of resulting casualties, simply index the number of men within the impact area of the rounds and the appropriate percentage. In this case 30%, 1 man = 1 casualty. If 3 men were caught in the open by 12 rounds 81, VT (60%, 3 men), 2 casualties would result. Note that VT fuse has little effect on positions with overhead cover.

8.7 FOX I Indirect and Direct Fire Casualty Assessment

FOX I exercises leaders in the use and effect of indirect fire under realistic conditions. A field environment with poor visibility is provided. In making indirect fire requests, map reading and use of a topographic map are exercised.

Casualties are assessed for indirect (8.6) and direct fire. M-16s with 5.56 blanks provide "contact" cues and direct fire action. When controllers are certain that M-16 fire would be effective, they assess direct fire casualties.

In FOX I the 4 attackers have a total of 12 "lives" to expend. The 4 defenders have only 4 "lives" in accomplishing their mission objective. As attacking personnel are neutralized by indirect fire and direct fire, the direct fire controllers maintain a simple count. Each leader is kept informed of his casualties. When only 4 attackers are left to continue the attack mission, each subsequent neutralization is final and attack participants are taken out of the problem.

When more than 4 lives remain, neutralized individuals must move to the rear 30/50 meters. They may then continue their attack. Information gained during their initial forward movement may be used once their rear movement is completed.

The rear movement requirement symbolizes disruption and confusion. It fulfills the need to delay and suppress forces as a result of fire and casualties.

8.8 FOX II Indirect and Direct Fire Casualty Assessment

FOX II exercise increases use of direct as well as indirect fire. Indirect fire casualties are assessed according to paragraph 8.6. Direct fire casualties are geared to the use of M-16s with 6X scopes, AP mines, hand grenades, etc. Participants wear numbered camouflage covers (as in SCOPES Engagement Simulation Activities,

TC-7-2), each individual in the attack being equipped with three covers. These are "stacked" on helmets to enable a rapid change of camouflage covers when an attacker is neutralized. Casualty assessment parameters for indirect fire, AP mines, grenades, rifles, etc. are summarized in Table 8. These are similar or identical to Scopes Engagement Simulation Activities (TC-7-2).

NOTE: Camouflage covers do not require change when participants are neutralized by indirect fire or any direct fire weapon (AP mines, grenades) where the camouflage number is not compromised.

In all cases where individuals are neutralized they must move 30/50 meters to the rear. They may then, if appropriate, continue the attack (8.7). An individual neutralized by M-16 fire must remove his helmet and move to the rear. He then changes his camouflage cover while out of danger of detection. This may require rearward movement of more than 50 meters. A neutralized individual in transit to the rear cannot be neutralized. He is a non-person until he places his new camouflage cover on his head. Any trip device activated by a neutralized individual moving to the rear is ignored. However, any information a man gains during neutralization can be utilized once he completes movement to the rear. The movement to the rear depicts the disruption, confusion, and/or suppression effects of direct and indirect fires on an attacking force.

In FOX II and III, one leader wears brown camouflage covers, the other leader utilizes green camouflage covers.

Table 8

SUMMARY CASUALTY ASSESSMENT PARAMETERS

Indirect Fire - FOX I, II, III

105 - Casualty area - 75 meter radius from point of impact
107 - Casualty area - 75 meter radius from point of impact
81 - Casualty area - 45 meter radius from point of impact

Comments: See Controller Table 4,5 for examples of casualty assessment procedures.
In FOX I,II, casualties move to rear 30-50 meters.
In FOX III, casualty dies in place.

Direct Fire Weapons	FOX I	FOX II	FOX III
M-16/5.56 Blank Rounds	Subjective evaluation by controllers. Casualty moves to rear 30-50 meters.	To achieve a kill, an individual must correctly identify the number on an opposing man's helmet and fire a blank round. This can be accomplished at short ranges without the scope, using the "quick fire" method of firing. At longer ranges, a proper sight picture through the scope is essential. Transmission of the numbers identified and the assessment of casualties is carried out by controllers operating on separate radio nets. When a participant engages a target and identifies a number he turns his head and calls out the number. The controller first checks a list of numbers for the opposing unit to insure it is a valid number. If no such number is in the problem, he tells the firer he "missed". Frequently, a participant will not have a good sight picture	As in II but when assessed a casualty, the individual takes off his helmet and lie down in place. He is not permitted to move or participate further

(cont'd)

Table 8 (cont'd)

Direct Fire Weapons	FOX I	FOX II	FOX III
M-16/5.56 Blank Rounds (cont'd)		and may mistake one of the digits. (For example, he identifies 25 as 26.) If the number is valid the controller will transmit the number of the individual engaging the target as well as the number identified. No call signs are used in order to speed up the reporting procedure and to keep the net as free as possible. (For example: "49 kills 26.") The controller with the opposing force then informs number 26 that he is a casualty. The individual removes his helmet, moves 30-50 meters to the rear, takes off compromised number,and continues in action. (See also paragraph 8.7)	
Hand Grenade and Fuse		• Any participant without cover within five paces of a grenade when it explodes is declared a casualty. This requires a subjective judgment from the controller. He must decide, based on his knowledge and experience, whether the individual would have been hit. For example, if a man were standing, he could have received shrapnel at a range greater than five paces. Alternately, if behind a large rock or tree, he may be protected from the blast. If declared a casualty, the participant must remove his helmet, move 30-50 meters to the rear, and continue problem. See also paragraph 8.7.	As in II, but wh declared a casual participant takes his helmet, lies in place, and is permitted to move participate furth

(cont'd)

Table 8 (cont'd)

Direct Fire Weapons	FOX I	FOX II	FOX III
Hand Grenade and Fuse (cont'd)		• Personnel in defensive positions--the grenade must land in the simulated foxhole position--a radius of 1 meter to the rear and side of the position marker.	
M-18A1 AP mine/Flash Bang Simulator (Note: The M-18A1 may be set up in either command or trip mode. Flash bang simulator must be placed right next to M-18A1 training mine.		• Front of mine--an arc of 60° extending 50 meters to the front. • Rear of mine--an arc of 60° extending 16 meters to the rear Comments: All controllers should be familiar with locations of all Claymores prior to the start of the situation. This allows them to monitor the employment of the weapons and determine simulated casualties. A Claymore improperly aimed will produce no more or less casualties than one properly placed. If a man is inside the previously determined casualty radius when the blast occurs and is not in a covered position, he becomes a casualty. The proper transmission by the controller is "61 hit by Claymore." In the after-action review, the individual to be credited for employing the weapon can be identified. • If declared a casualty, the participant must remove his helmet, move 30-50 meters to the rear, and continue problem. See also paragraph 8.7.	As in FOX II, but when declared a casualty, participant takes off his helmet, lies down in place, and is not permitted to move or participate further.

8.9 FOX III Indirect and Direct Fire Casualty Assessment

The FOX III activity is essentially a Scopes exercise as described in TC-7-2. It is more complex than that described in the TC because indirect fire resources are available for both attack and defense forces.

Indirect fire casualty assessment is carried out per paragraph 8.6. Direct fire casualty assessment is conducted per TC-7-2 and Table 8.

In FOX III each individual has only one life. When any individual is neutralized he can no longer participate in the on-going exercise. This includes the leader.

8.10 FOX Victory Conditions

FOX exercises continue until there is no doubt as to the outcome. Controllers are cautioned that the battle need not be conducted to the neutralization of the last man. General categories of battle outcomes are presented as follows:

Defense Win	Attack Win
o Destruction of attack force (less than 4 survivors)	o Destruction of the defending force with the survival of at least 4 attackers.
OR	OR
o Retreat of attack force.	o Penetration and/or bypass of the defensive force with the survival of 5/6 attackers.

As a general rule, the attacking force should withdraw when it is reduced to 3 men. However, it is important to note that even the last attacker or defender can turn the tide of battle with his use of indirect fire. The OIC makes the final decision on problem termination.

Outcomes where both sides are virtually destroyed are considered a tie.

9.0 FOX DAY - STAGE 3: AFTER-ACTION REVIEW (AAR)

At the conclusion of each FOX, an After-Action Review must be conducted by all participants. The normal sequence of this review follows:

- Once the FOX is concluded, all player participants and controllers assemble at a convenient location (defensive position). The chief controller first discusses the action with the controllers only. This helps to make the full review precise. The controllers' debriefing should take no longer than 10 minutes. The chief controller then leads all participants in an After-Action Review (AAR).

- The chief controller initiates the AAR by diagramming the lane and the defensive positions (on the ground or on a chalkboard). The chief controller then asks each leader to describe his tactical plan.

- What actually happened during the exercise is then reviewed by the players and the controllers. This is done by discussing the major occurrences in sequence from the OIC controller form. Alternative actions and potential outcomes are reviewed to reveal better tactics, i.e., "What else could you have done, and what might have the outcome been?"

  The entire sequence of events is covered with emphasis on the participants providing the information. Starting with the first casualty, the individual making the kill is required to explain why he was able to do so. The next casualty is then discussed in a similar manner. Most of the lessons learned by leaders and soldiers will be clearly evident. If this is not the case, then the information provided by the opposing force will hammer home individual mistakes. One soldier telling another exactly how he was detected and engaged is a lesson not easily forgotten.

  The role of the trainer conducting the AAR is to draw out teaching points from the participants. All individuals who observed a particular action should indicate what they saw. When an individual understands his mistakes, he should be asked how he feels it can best be corrected.

- The pros and cons of the tactics and indirect fire missions employed by each player are also discussed.

A major reason exists for involving all participants in the After-Action Review: As the discussion progresses, soldiers will be reminded time and again how critical

each individual's contribution is to the overall unit effort. Often in these situations a single event will occur that changes the tide of battle, such as a Claymore detonated too early, a leader lost, or an order misunderstood. The individual learns clearly that doing his best in every situation will make a difference in determining success or failure for his unit.

Upon completion of the situations, it is essential to evaluate the progress of the unit in order to make sound decisions concerning future training. You should begin by reviewing the situations with the training cadre and the controllers for each element. Obtaining reports from the cadre not only will give you better data from which to make a general assessment of your unit as a whole, but will make it possible to identify individual differences and take appropriate action.

The AAR is an important part of the effectiveness of this training technique. It is the chief controller's responsibility to lead the review. He facilitates the exchange of information, and promotes discussion by posing appropriate questions, e.g., "Why did you take this action instead of that?" Without his overall picture of the FOX, the review has a tendency to be too brief. A lot of information that should be exchanged by the players is easily overlooked. The AAR must be considered as an integral part of the exercise. It must be conducted as seriously as the actual playing of the FOX exercise.

The chief controller should be aware of a potentially serious pitfall in his conduct of the AAR. He must remember that success (mission accomplishment) is not always the result of good tactical planning and execution. Likewise, failure (heavy casualties)

is not always the result of poor tactical planning and execution. Initial training exercises are characterized by mistakes on both sides. At this stage Blue casualties may occur because Blue is ineffective. Later, with higher levels of training, Blue casualties will occur because Red is effective. It is possible, then, for the results in a given situation to be attributed to either good execution by one force, poor execution by the other, or a combination of the two. The effectiveness of the AAR depends on recognizing these distinctions.

There are other reasons why mission accomplishment is an imperfect criterion for evaluating tactical decisions. For example, the leader of a unit quickly deploys his force across a large open area to occupy key terrain. This excellent position allows him to defeat the opposing force. During the AAR, the chief controller could reinforce the leader's decision and the unit's aggressive movement. However, the risk that accompanied the decision must be discussed. The unit probably sacrificed security to increase speed. In the example situation the decision resulted in success. With different terrain or against another enemy, the unit might have been destroyed crossing the open area.

A good AAR should make all participants aware that there are no solutions that always work. Every decision involves trade-offs. The goal in training is to provide leaders with an understanding of these risks and a knowledge of what has been successful (or unsuccessful) in similar situations.

ANNEX A

MINIMUM FOX PARTICIPANTS AND EQUIPMENT REQUIREMENTS

A minimum of 12 participants is required for FOX I and FOX II. These are divided into three teams:

- Attack Team - 1 platoon leader, 2 NCOs; total of 9 "lives"
- Defense Team - 1 platoon leader, 2 NCOs; total of 3 "lives"
- Control Team - 4 direct fire controllers (2 attack, 2 defense)
  2 indirect fire controllers (attack and defense)

It is suggested that the platoon leaders use their own NCOs to enhance the benefits of the FOX training.

A minimum of 18 participants is required for FOX III. The defense team and control unit are as specified above. The attack team numbers 1 platoon leader and 8 enlisted personnel. Each attack and defense participant represents one man only and has only one life. Except for the reductions in personnel and equipment, the minimum FOX exercises are conducted just as described in the Rules of Play for Infantry FOX. Equipment requirements for the reduced number of participants follow.

EQUIPMENT PER MINIMUM EXERCISE

Equipment Item	Direct Fire Controllers	Indirect Fire Controllers	Attack Team	Defense Team	TOTALS FOX I	FOX II	FOX
1. PRC-77	4	2	3	1	10	10	1
2. TA-1 sets[a]				2	2	2	2
3. Commo Wire (WD-1)				2 rolls	2 rolls	2 rolls	2 r
4. M-16 6X Scope (Scopes TC-7-2) Blank adaptor			FOX I--3 ea. (optional) FOX II--3 ea. FOX III--3 ea.	FOX I--3 ea. (optional) FOX II--3 ea. FOX III--3 ea.	6 each (opt.)	6 each	6 ea
5. M-16 ammo magazine			FOX I,II--6 FOX III--24	FOX I,II,III--6	12	12	3
6. Compass	4	2	2	2	10	10	1
7. Defense Position Marker Parapet foxhole Parapet foxhole/overhead cover				 2 3	 2 3	 2 3	
8. 1:50,000 map of TA			1	1	2	2	
9. Controller Clipboard Form	Table 5 (4)	Table 4 (2)			6	6	
10. Clipboard	4	2			6	6	
11. 3x5 card, white		30			30	30	3
12. Assorted camo cover numbers[b]			FOX I--0 FOX II--9 FOX III--9	FOX I--0 FOX II,III--3	0	12	1
13. Impact stapler		1			1	1	
14. Engineer tape (orange or yellow)		2 rolls			2	2	
15. Grease pencil	4	2			6	6	
16. Marine air horns and cannister[c]		2			2	2	

[a] Utilization of 2 PRC-77s instead of TA-1s speeds defense set-up, eliminates need for WD-1 commo wire.

[b] 30 different numbered camo covers required to prevent participant personnel from becoming familiar with the numb

[c] For utilization to simulate indirect fire if artillery simulators are not available.

MUNITIONS PER MINIMUM EXERCISE

Ammunitions	Indirect Fire Controllers	Attack Team	Defense Team	TOTALS FOX I	FOX II	FOX I
Item and DODAC Number						
Flash bang boobytraps [d] 1370 L598			FOX I--0 FOX II,III--5	0	5	5
Training hand grenades 1320 G811 Hand grenade fuses F1320 G878		FOX I--0 FOX II--3 ea. FOX II.--9 ea.	FOX I--0 FOX II,III--3 ea.	0	6	12
HC smoke Yellow 1330 G945 Red 1330 G950		FOX I--0 FOX II,III--5 red	FOX I--0 FOX II,III--5 yellow	0	10	10
5.56 blank rounds 1305 A080		FOX I,II--120 rds. FOX III--500 rds.	FOX I,II,III-- 120 rds.	240 rds.	240 rds.	620
Artillery simulators [e] M-115A2 1370 L594 or HG simulators M-116A1 1370 L601	30			30	30	30
Training Claymore mine 1345 K144			5	5	5	5
HC smoke 1330 G930 [e][f]	10			10	10	10

[d] For use with Claymore mines. If unavailable use whistle boobytrap simulators (1370 L600).

[e] If Marine horns are being used to simulate indirect fire, neither artillery simulators, hand grenade simulators, nor smoke HC are required.

[f] Used as marking round.

ANNEX B

LANE MARKING AND INDIRECT FIRE IMPACT PROCEDURES

1.0 Marking Lane

A physical boundary (a road or trail) should lie along the entire flank of the FOX lane. This will insure maximum effectiveness of indirect fire delivery. The physical boundary should be marked every 50 meters with an "alpha" or number character. The first 50-meter marker will be marked "A", the second marked "B", etc. (Figure B-1). The marker can be a stake driven into the ground or a 4x5 card stapled to a tree (preferred). A 50-meter metal or plastic tape should be used for marking off the boundary lane.

These markers must coincide with the prepared controller map of the FOX training lane (Table 4). It is important to begin the markers from a known point, i.e., an easily identifiable point on the controller map and on the ground. Examples are crossroads or the point where a stream crosses the boundary trail. Figure B-1 is an example of a lane marked in this manner.

The lane may be marked so that the 50-meter increments coincide with actual 50-meter grid increments on a scale map. The 50-meter increments are plotted on a map. The distances are measured on the map surface and then the actual map distances are paced on the ground.[1] The markers on the ground will coincide with 50-meter map increments, but may be more than 50 meters apart on the ground

[1]These map distances are straight line parameters and do not take into account elevations. In pacing these distances on the ground, necessary elevation adjustments must be estimated and taken into account.

because of the features of the terrain, i.e., hills, valleys, curving boundary road or trail, etc. Figure B-2 is an example of a lane with markers placed to coincide with 50-meter grid increments. Figure B-2 offers a very slight advantage: fire mission requests based on 6- or 8-digit coordinates will have a corresponding lane marker which indirect fire controllers can use.

2.0 Requesting Indirect Fires

Procedures are listed at Figure B-3,

Figure B-1

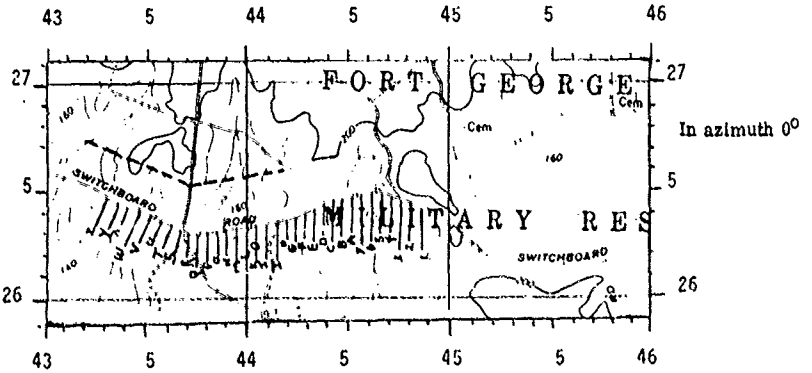
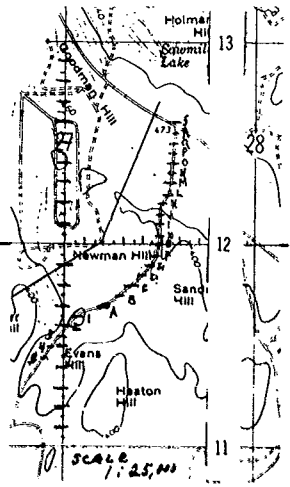


Figure B-2



in azimuth 270°

Blowup Scale
100 M = 2 CM
50 M = 1 CM

(Actual Lane utilized at Ft. Lewis, Wash)

Figure B-3

INDIRECT FIRE REQUEST PROCEDURE

REQUEST ELEMENT	EXAMPLE	WHEN OMITTED
a. Identification	"Fire Control, this is Red Leader"	Never
b. Warning	"Fire Mission, Battery 2 or (12 rounds)"	Never
c. Target Location and Direction		Never
Coordinates	Grid 712684 direction 63° (magnetic) or 107 mils	
From registration	From Target AF 1000 "Direction 63° add 500 left 100"	
From last concentration	"Direction 63° add 500 left 100"	
d. Target Description	"Troops in Open"	In registration
e. Method of Engagement	"Danger close; VT [a/] HE, in effect	Area mission
f. Method of Control	"Will adjust" or "At my command"	Never

[a/] Note some unit SOPs require indirect fire support to be placed 200 meters farther away from the impact request point on the OT azimuth upon receiving the notification "danger close".

3.0 Impacting Indirect Fires

The two indirect fire controllers impact indirect fire during the conduct of FOX. They serve both attack and defense impartially. The chief controller should give each force only one registration point. This requires each participant to utilize his map and compass in the request for indirect fires (missions of opportunity) and thus serves to increase map-reading proficiency. The defense should be allowed to plan and register "final protective fires". These registrations are acknowledged by moving an artillery thrower to the requested position. A spotting round is then detonated at that location if desired. Adjustments are allowed, if necessary. An individual requesting fire can then request missions from his registration or by using 6-digit coordinates. The indirect fire controller simply plots the impact location of the attack or defense request on his clipboard map, which indicates in detail the lane parameters and the lane markers.

- o Indirect fire controllers mark the lanes.
- o They practice moving to various positions and throwing the artillery simulators prior to any engagement.
- o Indirect fire controllers must also assess casualties whenever appropriate.

4.0 Throwing Indirect Fires

Two indirect fire controller "throwers" are employed in the FOX lane. One is responsible for impacting attack missions, the other for defense missions. EXAMPLE: A mission is requested for coordinates 2725 1175. These coordinates are

marked with a + in Figure B-2. The indirect fire controller has a map of the lane with the indirect fire markers plotted in a manner similar to that shown in Figures B-1 and B-2.

The IDF controller:

(1) Plots the impact location and moves to the appropriate marker (B).

(2) From that point, moves "in" 50 meters on the "in azimuth" (270°).

(3) Once at the location, impacts the fires.

(4) Provides direct fire controller with information on number and type (including fuse type) of rounds.

(5) Assesses casualties, if appropriate.

The azimuth at which the thrower is to move "in" will be determined prior to the FOX exercise. The azimuth will always be parallel to a grid: i.e., North (0°), East (90°), South (180°), or West (270°). In the example shown in Figure B-2, the artillery thrower moves 50 meters into the lane on a 270° azimuth, or due West. Regardless of which marker the indirect fire controller is moving from, the "in" azimuth will always be 270° in this example.

All indirect fire controllers need to be equipped with a compass and sufficient supply of simulators or a Marine air horn. A clipboard and form as shown in Table 4 (pgs. 15-16) are also required.

IMPORTANT: The artillery thrower will always announce the artillery type, fuse type, and number of rounds via voice or radio to the direct fire controllers. The indirect fire controller should preset the radio to the controller frequency to enable rapid accomplishment of this task.

5.0 Adjusting Fire Mission

Initial rounds can be adjusted in two ways, as follow:

(1) The indirect fire controller orients himself along the observer target line (the same OT line given in the fire request). Subsequent adjustments can be completed easily, as follow: Add 50, left 50 = 50 meters forward on the OT azimuth (55^{O}) and 50 meters left (at a right angle) to the OT azimuth (Figure B-4).

(2) The indirect fire controller can plot the location of the adjustment using an appropriate scale and a compass or a GTA. The indirect fire controller calculates the straight line azimuth and distance to the impact location and directs himself accordingly. In Figure B-4 this would be "add 75 meters on an azimuth of 10^{O}".

Unless the adjustments are quite large, both procedures take about equal time to complete. When adjustments are large (over 100 meters), the second alternative may be faster. Controllers will not perform adjustments until they have been given a direction (OT line).

6.0 Indirect Fire Controller Movement Along the FOX Boundary Line

When possible, indirect fire controllers should use a ¼-ton vehicle with an AN/VRC 46/7 radio. This expedites their movement and the impact of indirect fire. Using the radio on the ¼-ton vehicle, the controllers should monitor the control frequency. They can additionally fill the role of a net control station (recording casualties, etc.) as in a Scopes exercise (TC-7-2). Alternatives to a ¼-ton vehicle are bicycles, motorbikes, and foot travel. When using the AN/VRC 46 radio on the control frequency, make certain the volume is sufficiently low so that the participants in the lane cannot hear controller conversations.

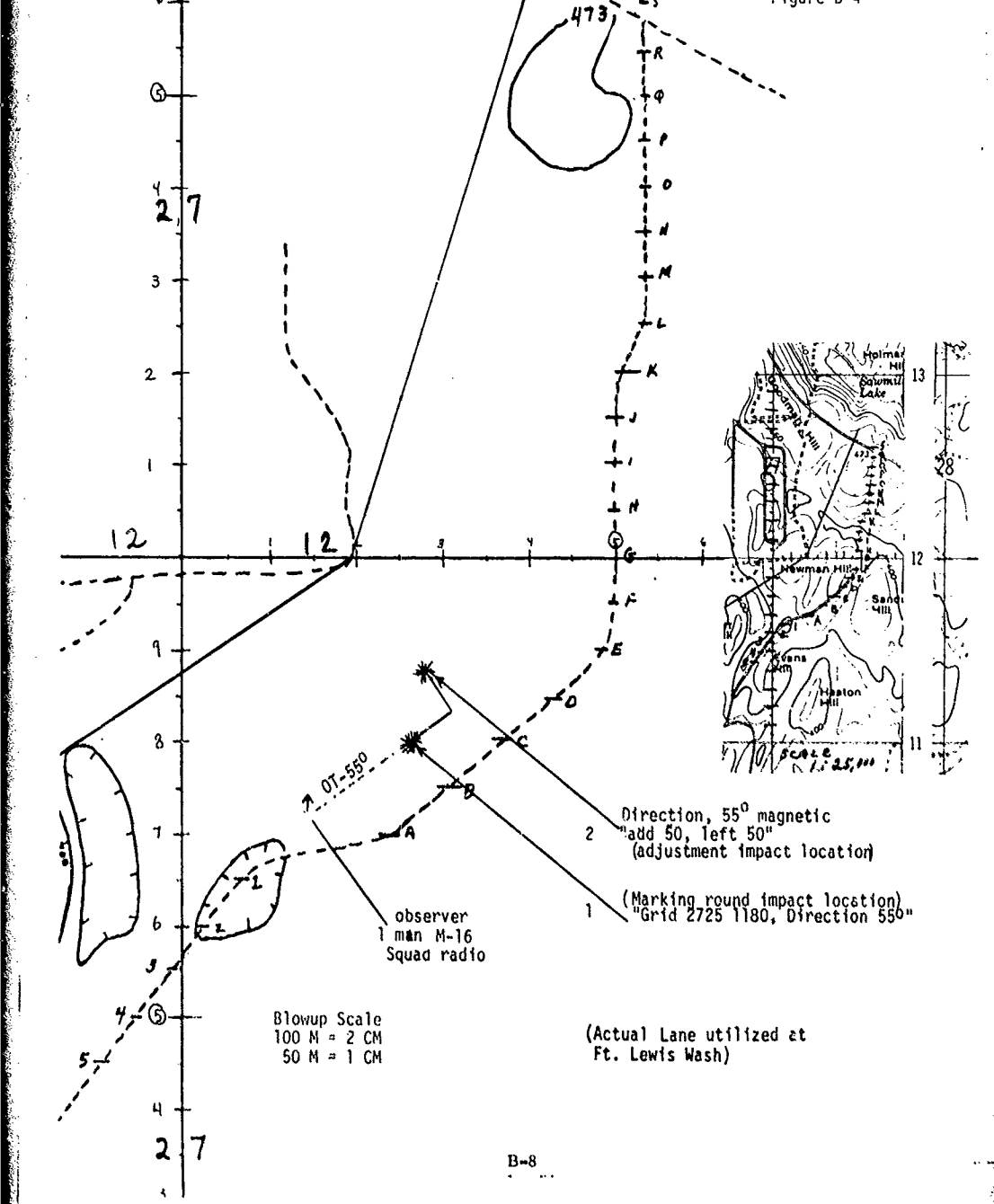


Figure B-4
473
R
Q
P
O
N
M
L
K
J
I
H
G
F
E
D
C
B
A
12
12
2 7
2 7
OT-550
Direction, 55° magnetic
2 "add 50, left 50"
(adjustment impact location)
(Marking round impact location)
1 "Grid 2725 1180, Direction 550"
observer
1 man M-16
Squad radio
Blowup Scale
100 M = 2 CM
50 M = 1 CM
(Actual Lane utilized at
Ft. Lewis Wash)
Holmar Hill
Salmon Lake
Newman Hill
Sand Hill
Evans Hill
Haston Hill
13
12
11
Scale 1:25,000

7.0 Hand Off of Fire Missions

Participant leaders may request a fire mission at one location and then request a severe adjustment, e.g., add 600 meters. The controller may then hand off the fire mission to the second controller. He contacts the opposite controller on the appropriate frequency. Then both change to an alternate frequency to transfer the control of the impact location of the mission.

8.0 "Check-Fire" Requests

Participants will sometimes request a fire mission and then moments later request a change or cancellation of the requested fires. Indirect fire controllers will not accept these check fire requests once they have entered the lane, or once an adjustment to rounds just impacted has been initiated.

9.0 Indirect Fire, Participant Radio Communications

The indirect fire controllers communicate with the participants as if they (controllers) were an FDC. Upon receipt of a mission they will quickly read back the request, ask for additional elements of the fire request (if needed), and indicate "Mission Working". Once a controller moves into the lane or initiates an adjustment to previously impacted fires he will indicate "Shot Out". Check fire requests (C.F.) will not be accepted after the "Shot Out" command has been announced. Just prior to impacting requested rounds, the indirect fire controller will indicate "SPLASH".

ANNEX C

OIC CONTROLLER/PARTICIPANT CHECKLIST

Part I - Activities Prior to FOX

	Activity	Days Prior	Responsibility & Participant Group(s) OIC	D.F. Controller	I.F. Controller	Leader/ NCOs
1.	Study FOX documentation	10 days	✓			
2.	Determine FOX series (6.1)		✓			
3.	Requisition, secure munitions and equipments (Table 2) (6.4) *Make Defense Position Markers*	10-30 days depending on Post SOP	✓			
4.	Secure 1:25,000 maps of training area	5 days	✓			
5.	Select training lane (4.1)	5 days	✓			
6.	Develop Controller Clipboard Forms (6.6) • Mark appropriate area of 1:25,000 map • Secure to Tables 4,5; make copies	5 days	✓			
7.	Obtain radio frequencies (6.4)	5 days	✓			
8.	Advise participant personnel of activity and preliminary briefing	5 days	✓	✓	✓	✓
9.	Conduct preliminary briefing	1 (early morning)	✓	✓	✓	✓
10.	Provide controllers a copy of FOX documentation	1		✓	✓	
11.	Prepare Mission Orders (7.5)	1	✓			

Part II - Activities in Field - Conduct of FOX

(Activities listed in order of occurrence)

	Activity	Responsibility & Participant Group(s) OIC	D.F. Controller	I.F. Controller	Leader/ NCOs
1.	Assign one direct fire controller to inventory arms, equipment and break out amounts for day's activities (7.3) (Table 2)	✓	✓		
2.	Task indirect fire controllers to mark lane (Annex B) (this activity can be completed prior to field day 1)	✓		✓	

Part II (cont'd)

Activity	Responsibility & Participant Group(s) OIC	D.F. Controller	I.F. Controller	Leader/ NCOs
3. Assign a direct fire controller to check out the radio equipment	✓	✓		
4. Provide general FOX briefing to participants (Day's Activity, etc.) (7.4) • Review Casualty Assessment, Indirect Fire Procedures	✓			✓
5. Provide verbal Mission Orders to leaders (7.5) • Indirect Fire Allocations • Radio Frequencies • Call Signs	✓			✓
6. Distribute equipments to leaders, arrange for their prompt movement to defensive zones--distribute camouflage covers if FOX II,III (NLT 0830)	✓	✓		✓
7. Prepare and brief direct fire controllers (7.8)	✓	✓	✓ if available[1]	
8. Check lane boundaries, indirect fire markers	✓			
9. Evaluate indirect fire controllers' understanding of indirect fire procedures	✓		✓	
10. Task indirect fire controllers to contact their respective leader *(via radio)* and arrange for one Target Registration and FPF if required	✓		✓	✓
11. Review the defense plan with defender leader and develop defensive control plan with defense controllers--leave defense controllers at defense position (7.10, 7.11) (Table 7)	✓	✓	✓	✓
12. Move attack controllers to attack LD/LC. Review attack plan with attack leader. Develop attack control plan. Confer with defensive controllers on attack plan *via radio*. Conduct last-minute commo checks.	✓	✓	✓	✓
13. Initiate Problem--make certain that all participants understand the problem has been initiated.	✓	✓	✓	✓
14. During Problem--monitor control net, record battle activity events, assess casualties, resolve controller/participant problems. (8.3, 8.4, 8.5, 8.6, 8.7, 8.8, 8.9) (Table 8)	✓	✓	✓	✓
15. Terminate Problem (8.10)	✓	✓		
16. Conduct After Action Review (9.0)	✓	✓	✓	✓

If two or more activities per day, repeat Steps 10-16.

[1] See ? under Part II.

ANNEX D

EXAMPLE: COMPANY SERIES OF FOX EXERCISES
(FOX II, III - 3 exercises per day)

Personnel:

OIC = Company officer or XO, serves as Chief Controller

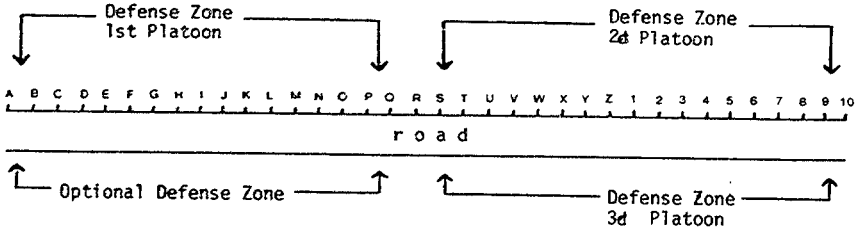
FOX II - 1st, 2d, 3d Platoon--1 LT, 3 NCOs each. Weapons Platoon, 2 indirect fire controllers.

FOX III - As per FOX II; and 1st, 2d and 3d Platoons provide 3 men each: 8 attackers, 1 NCS controller.

TIME	1st PLATOON	2d PLATOON	3d PLATOON	WEAPONS PLATOON[1]
0800-1000	Plans/develops defense	Plans/develops defense	Plans/develops defense	Prepares to provide indirec fire support
1000-1100	Prepares to control 1st problem	Plans attack	Finalizes defense	
1100-1200	Controls 1st problem	Attacks 3d Platoon	Defends	Provides indirect fire supp
1200-1300	Finalizes defense	Prepares to control 2d problem	Plans attack	
1300-1400	Defends	Controls 2d problem	Attacks 1st Platoon	Provides indirect fire supp
1400-1500	Plans attack	Finalizes defense	Prepares to control 3d problem	
1500-1600	Attacks 2d Platoon	Defends	Controls 3d problem	Provides indirect fire supp

[1]Optional: May provide an FO to each leader--when a given platoon leader controls, his FO serves as 6th direct fire controller. The weapons platoon may also set up one or two FDC(s). Instead of orders to the guns they give directions to the indirect fire controllers.

This schedule should not be attempted unless participant personnel have previous first-hand FOX experience--see paragraph 6.1.



ROTATE DEFENSE ZONES ON SUCCESSIVE DAYS FOR VARIETY!