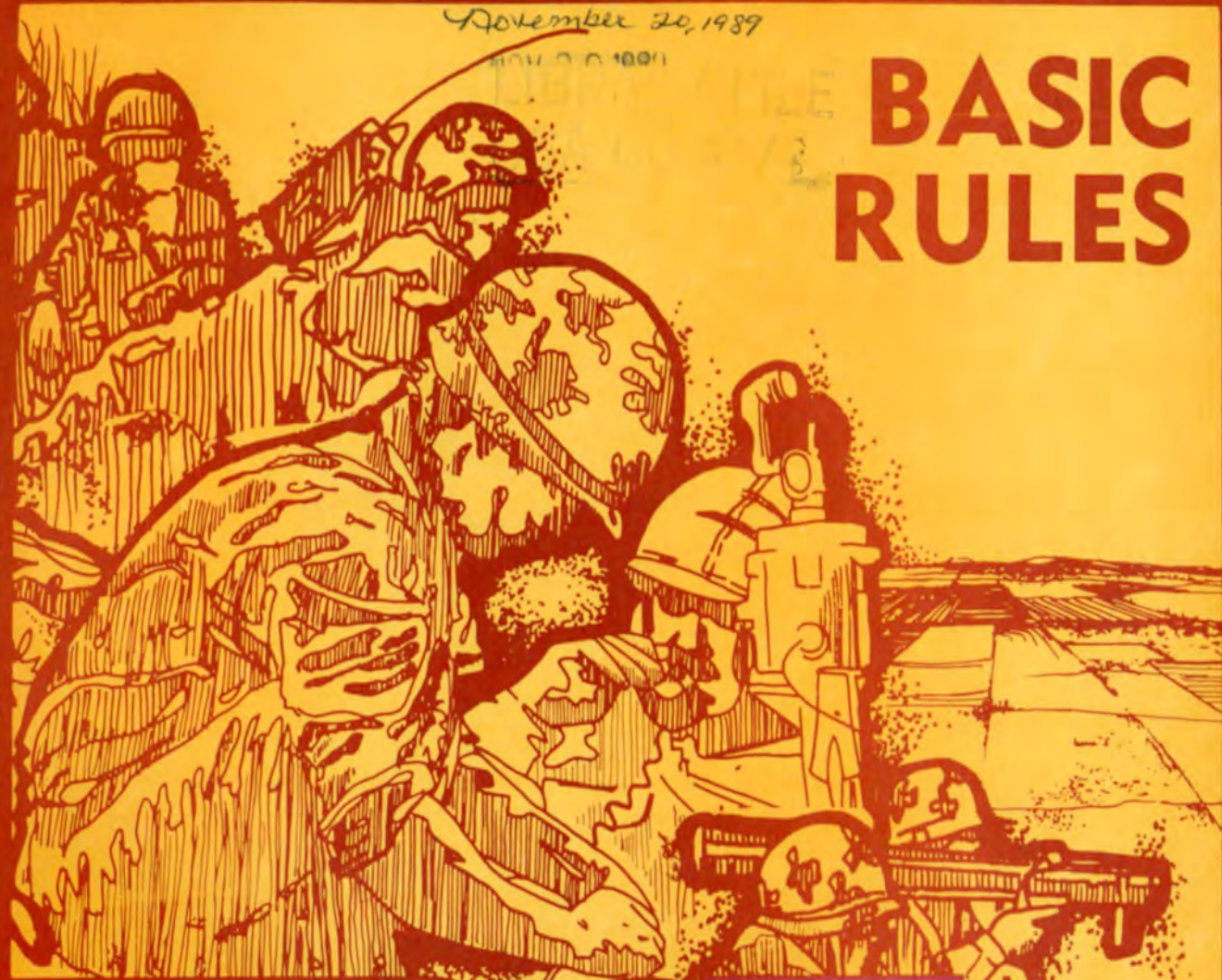


November 20, 1989

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BASIC RULES



FIRST BATTLE

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BASIC RULES

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This booklet is a component part of GTA 71-2-3, **FIRST BATTLE**. Comments and recommendations should be submitted to USACATRADE, ATTN: ATZLTDA-DS (FB), Fort Leavenworth, Kansas 66027.

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INTRODUCTION

section 1

GENERAL

The **FIRST BATTLE** simulation system is designed to exercise division commanders and staffs in the control and coordination of combined arms operations. The system is a flexible training tool that can ultimately be applied to any scenario, level of control, or mode of play. **FIRST BATTLE** has undergone extensive field evaluation and incorporates a variety of supplemental and optional features for user adaptation.

The three modes of play are conducive to a progressive training program so that once the Open Mode is mastered along with the *Basic Rules*, optional rules and supplements may be applied to the more sophisticated modes of play—the Closed Mode and the Command Post Exercise.

In the Open Mode, the *Basic Rules* are used to stress the commander's and operations officer's roles in fighting the battle. When this method is used, the commanders of the opposing forces have free access to the battle board. The Open Mode of play is suited for controller training, mini-map exercises, tactical seminars and other exercises where simulation is desired at the least possible cost in personnel and equipment.

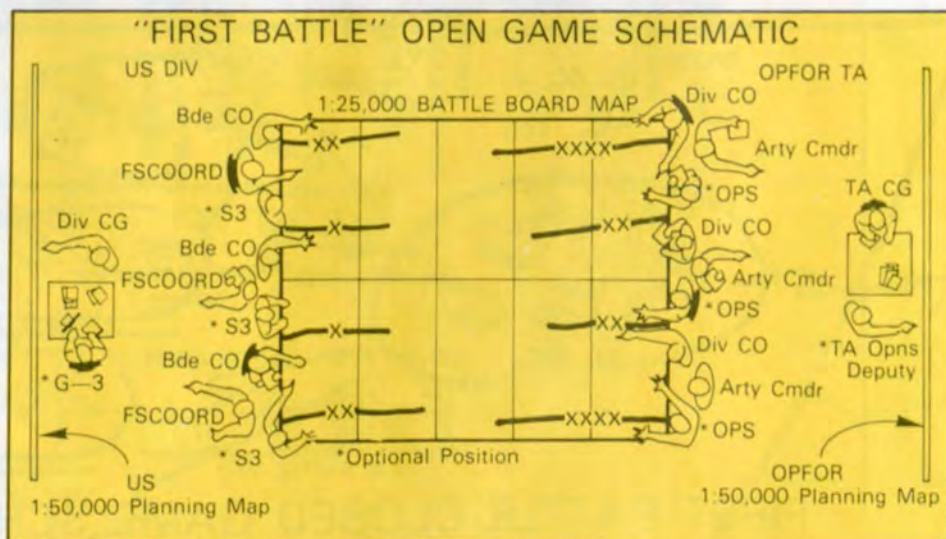


Figure 1. OPEN MODE.

The Closed Mode may be played in a classroom or large garrison area. Additional optional rules and supplements may be applied as numbers of player/controller personnel are added to exercise other functional staff areas. *Commanders and staffs do not have access to the control board and decisions are based on tactical message play generated by battle board simulation of combat action.*

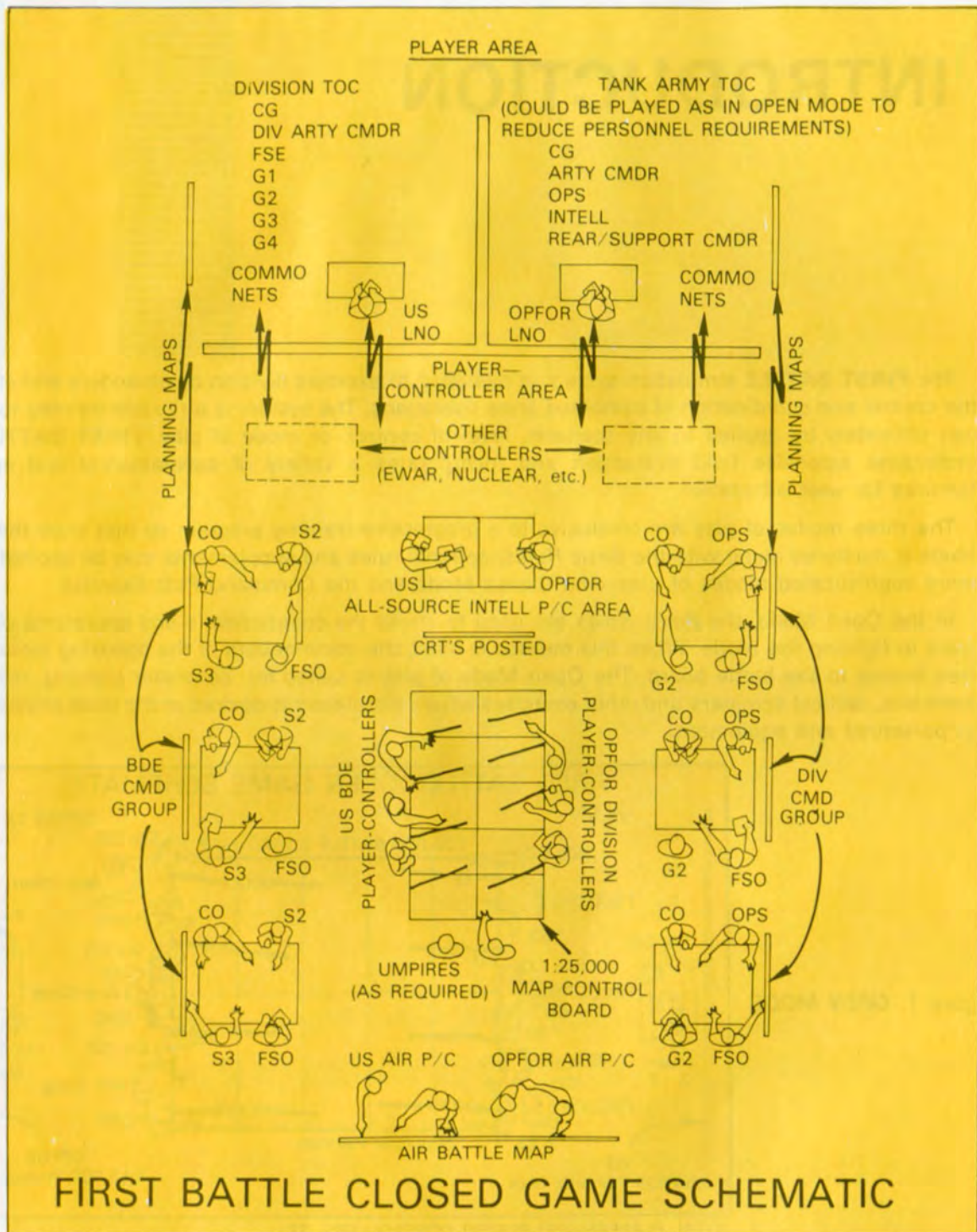


Figure 2. CLOSED MODE.

The CPX Mode is an expansion of the Closed Mode. Tactical communications can be linked from a central control facility to the tactical operation centers desired to be exercised. Shown below is a representation of a single echelon CPX in which Brigade player/controllers represent subordinate Battalions at the Central Control Facility Battle Boards and report tactically to the Division TOC in the field.

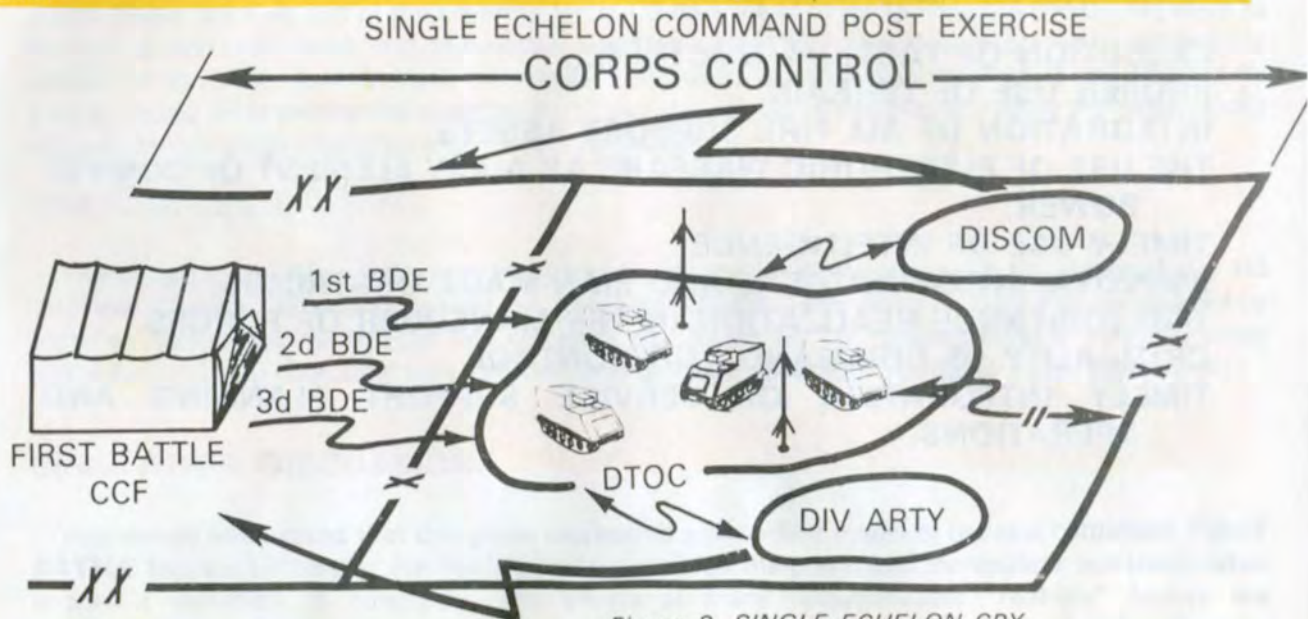


Figure 3. SINGLE ECHELON CPX.

In the multi-echelon representation shown below, Battalion player/controllers represent subordinate companies at the Central Control Facility Battle Boards and report tactically to the Brigade TOCs in the field. Brigade TOCs in turn report to the Division TOC at a field location.

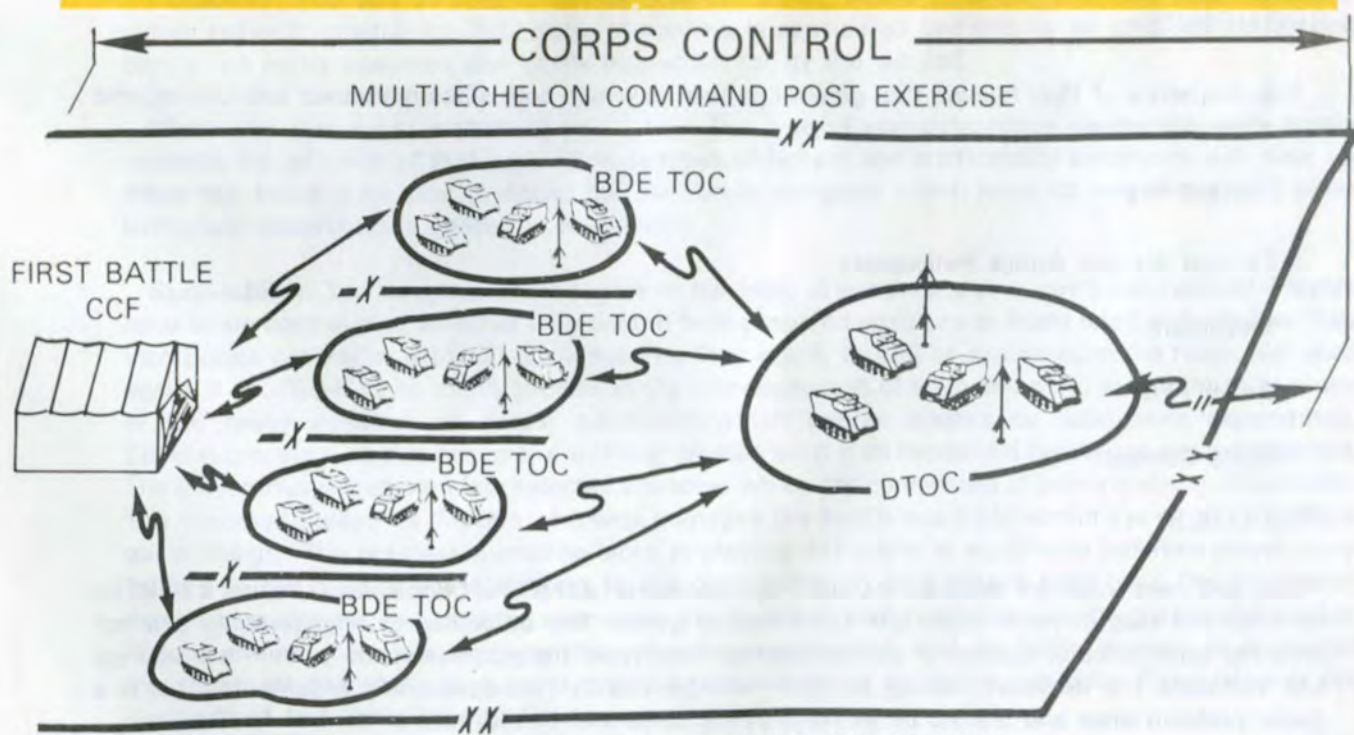


Figure 4. MULTI-ECHELON CPX.

TRAINING OBJECTIVES

The overall objective of the **FIRST BATTLE** simulation system is to assist units in preparing for the Army Training and Evaluation Program (ARTEP) without troops (ARTEP 100—2). Its major value is in the recognition of the necessity for exacting teamwork in the control and coordination of combined arms operations. Specifically, it emphasizes:

EXECUTION OF TACTICAL DOCTRINE.

PROPER USE OF TERRAIN.

INTEGRATION OF ALL FIRE SUPPORT ASSETS.

THE USE OF ELECTRONIC WARFARE AS A KEY ELEMENT OF COMBAT POWER.

TIMELY USE OF INTELLIGENCE.

EMPLOYMENT OF NATURAL AND MAN-MADE OBSTACLES.

TIME/DISTANCE REALIZATION IN THE MANEUVER OF FORCES.

CRITICALITY OF COMMAND AND CONTROL.

TIMELY INTEGRATION OF SERVICE SUPPORT PLANNING AND OPERATIONS.

WAR GAME SEQUENCE AND CHARACTERISTICS

SEQUENCE

The Sequence of Play follows this general pattern in which both sides maneuver and use organic and supporting fires:

Indirect Fire

Tactical Air and Attack Helicopters

Movement

Direct Fire

Close Combat

DISPUTES

Disputes over rules are resolved mutually by opponents or the Chief Controller/Umpire. It must be remembered that in most cases the rules should govern the outcomes of engagements and not personal experience or opinion of the opponents. Otherwise, the purpose of the game—to challenge and stimulate the decision making process—will be lost in time-consuming arguments. This is a major problem area and should be avoided by all personnel in the central control facility.

EXECUTION

Execution of tactical doctrine is not difficult to portray for US or OPFOR. It must be remembered, however, that what is intended or desired by tactical doctrine can be demolished by an opponent following his "own" doctrine. For example, OPFOR doctrine indicates that regimental forces in the attack will usually bypass small pockets of resistance. On the US side, the "small pocket" represents a tank heavy team as part of the covering force. US doctrine calls for causing the OPFOR regiment to be held up and attrited as long as possible. Doctrine cannot be successfully executed by either force unless all the other combat power multipliers are used to advantage. Realism is not attained by simply saying what the tactical doctrine is . . . *use the appropriate tactics and apply the rules—don't attempt to use gamesmanship and "fake" the tactics.*

BASIC RULES DESIGN

The design of the Basic Rules, the Instructional Set and Kit Scenario, are for the portrayal of a US Armored Division defending against an attacking OPFOR Tank Army. Units are represented by battalion size forces for OPFOR and company size forces for US. Modifications of rules for other scenarios, e.g., US attacking with OPFOR defending are covered in Optional Rules (Section III).

SIMULATION DISCUSSION

You should understand that this game represents a simplified model of the real battlefield. **FIRST BATTLE** focuses on certain mechanical variables which the player can manipulate, but treats other important variables as constants. The effects of many unquantifiable "real-life" factors are incorporated into the roll of the die. This simulation procedure is a training vehicle and should not be construed as a true representation of how the battle would go, but how it *might* go. As a player or player/controller on either side, you will have control over the following battlefield variables:

Firepower. You will be able to decide when to shoot, where to shoot, and how often to shoot, within realistic constraints. Your state of training is considered uniform for all units and small-unit tactics are partly assumed and partly accounted for by the die roll.

Maneuver. You must maneuver your units. The type of unit determines its mobility and is thus constant for all units of that type. Various types of terrain and trafficability conditions will have an affect but there is no way to depict the platoon or company which loses its way and all the other battlefield uncertainties related to maneuver.

Survivability. You have a certain degree of flexibility in enhancing your unit's survivability. Players have some control over whether they defend from prepared positions or hasty ones and whether they incorporate natural or artificial obstacles into their plans, as will be explained in the rules. But once again, it is difficult to be totally precise in the representation of such effects in a simulation because of the many variables in actual situations which cannot always be adequately represented. Simulations such as this are useful training devices even if all battlefield details are not represented. The player must focus on a few selected variables which are considered of prime training importance. The successful player is the one who best manages the assets available within the structures of the game design. The greatest stumbling block to playing this game is arguments between player/controllers at the playing board relating to the representation of company level play. The simulation design accounts for and smooths over many small unit combat resolutions by the design of the rules. The course of play, the large number of units represented, and the large number of controlled iterations, all contribute to a more realistic representation at higher echelons. The system is not designed to simulate platoon and company level tactics.

GAME EQUIPMENT

Simulation is conducted on a 1:25,000 scale battle board (Figure 5) which is constructed of durable polyester. The ten 2' x 3' sections may be easily taped together to provide a horizontal playing surface. Each side is provided with standard 1:50,000 tactical maps for planning purposes.

It is recognized that units may have difficulty in obtaining 1:25,000 map sheets for use in exercising scenarios other than that provided in the **FIRST BATTLE** kit. Therefore, the counters provided with the kit may be used with either a 1:25,000 or a 1:50,000 map sheet.

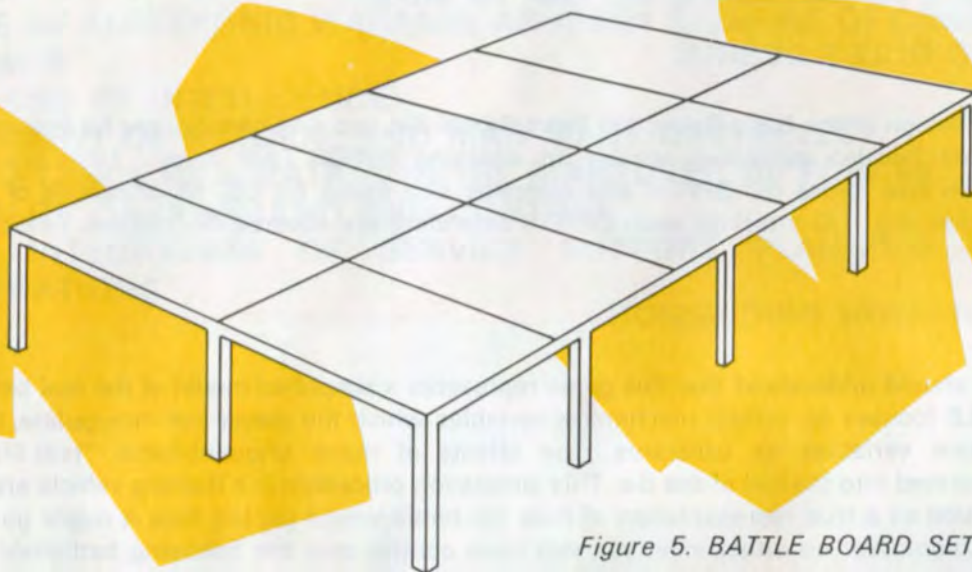


Figure 5. BATTLE BOARD SET-UP.

Units are represented by unit symbol counters (extracted from counter booklets) which are mounted in small clips to form the "L shape." The lowest level maneuver unit for the US force is normally the company team. (Certain US force platoon-size units are represented and include helicopter, engineer, etc.). OPFOR use battalion counters. Each unit counter provides certain information as indicated below:

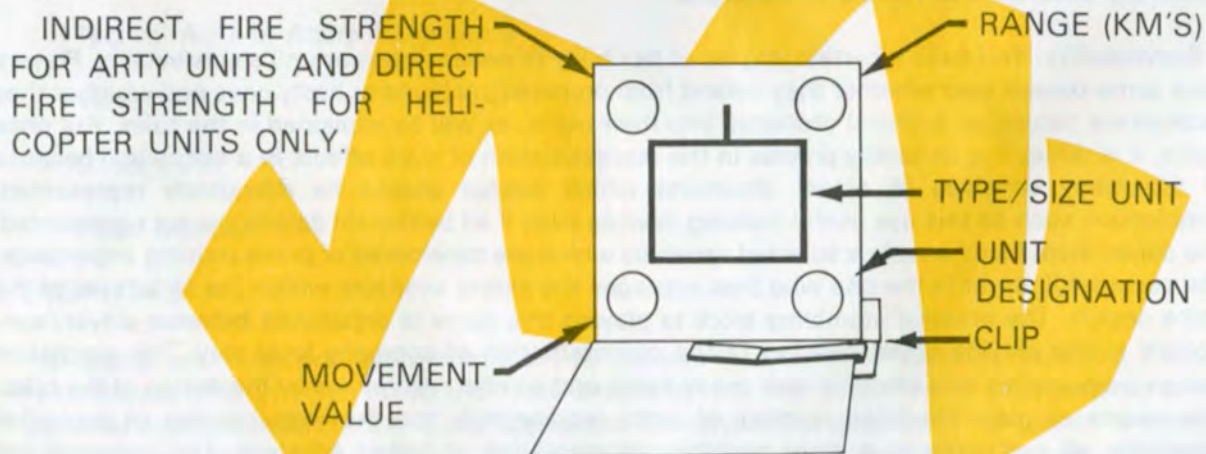


Figure 6. UNIT COUNTER.

Tally sheets reflect the close combat and direct fire strengths of like units. These may differ as their task organizations differ. In the **FIRST BATTLE** scenario most US company-sized elements are combined arms teams. OPFOR battalion-size elements reflect normal reinforcements within regiments as they might be found in attack formations. Player/controllers will be issued a unit tally sheet for each US company or separate platoon and for each OPFOR battalion. The tally sheet will specify the internal composition of the unit and will provide the basis for the assignment of combat strengths and combat losses.

[illegible]

Figure 8. TALLY SHEETS.

GENERAL CONDUCT OF PLAY

FIRST BATTLE is a two-sided simulation or "war game." Each side maneuvers its forces on the battle board seeking to destroy enemy units or gain or retain a specific terrain objective. Each side moves its units and executes attacks on the enemy within a 30-minute game turn. To move from one grid square to another, each unit expends a portion of its movement allowance. When combat occurs, unit strengths are computed. Losses indicated on the Combat Results Tables are deducted from unit tally sheets. With each loss, the CCS and DFS are adjusted. Each 30-minute game turn represents 30-minutes of battle time or "real time."

This battle simulation is conducted in interactive game turns. There is no requirement for distinct OPFOR Phase or US Phase during the 30-minute turn. This means that actions will occur as they most likely would in combat. For example, when you come under attack, you react; you do something about it as it happens. This is how a game turn might go:

- **OPFOR SHOOTS PREP FIRES**
- **US SHOOTS COUNTERFIRE**
- **OPFOR UNITS MOVE**
- **US OBSERVES OPFOR MOVEMENT AND ENGAGES WITH ARTILLERY**
- **US INITIATES DIRECT FIRE ENGAGEMENTS**
- **OPFOR RETURNS FIRE AND CONTINUES TO MOVE**
- **OPFOR INITIATES CLOSE COMBAT**
- **US DEFENDS OR DELAYS/WITHDRAWS**

During the 30-minute game turn, air strikes or attack helicopters may be employed at anytime.

TYPICAL CONFLICT RESOLUTION 30 MINUTE TURN = 30 MIN OF COMBAT

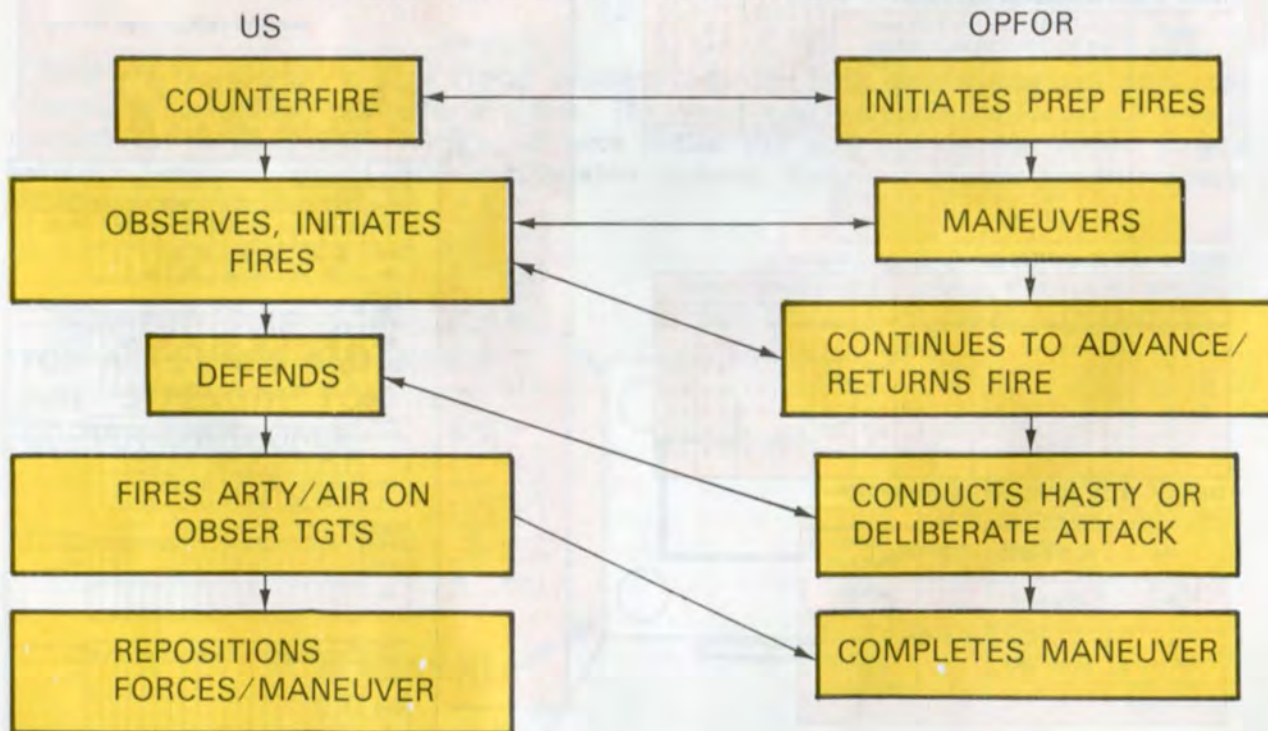


Figure 9. TYPICAL CONFLICT RESOLUTION.

Factors that limit what you can do during a game turn are time, unit capabilities and your tactical decisions. The sequence is not as important as the fact that you must choose *when* to employ various weapons systems. The use of these systems is only limited by the number of times you may shoot or move during a turn. This is specified by the *Basic Rules*.

Since many combat actions occur simultaneously on the battlefield, it will be necessary to sort the process of simulation into some manageable segments.

- **THE ATTACKER SHOULD BEGIN PLAY.**
- **RESOLVE COMBAT ACTIONS FOR EACH ATTACKING REGIMENT, IN ZONE, (OPFOR VS US) UNTIL BOTH SIDES HAVE EXHAUSTED THEIR CAPABILITIES FOR A SINGLE TURN. TAKE EACH REGIMENTAL ZONE SEQUENTIALLY IN A TURN.**
- **VARY THE SEQUENCE PER TURN; FOR EXAMPLE: NORTH, CENTER, SOUTH THEN CENTER, SOUTH, NORTH, ETC.**
- **ONCE BOTH SIDES HAVE COMPLETED ALL DESIRED COMBAT ACTION, THE GAME TURN IS OVER.**

TRAINING

The first step of the training process is to study and understand the *Basic Rules* (Section II). Once this is accomplished, participants should be briefed on the use of the **FIRST BATTLE** system and undergo training with the Instructional Set. Upon completion of instructional set training, participants should then set up the battle board for 8—10 hours of play in the Open Mode. The entire process will probably go like this:

STUDY OF BASIC RULES	1-2 HOURS
RECEIVE BRIEFING	1 HOUR
INSTRUCTIONAL SET TRAINING	2-3 HOURS
SET UP FOR OPEN MODE PLAY	2 HOURS
OPEN MODE PLAY	8—10 HOURS
	14—18 HOURS

INSTRUCTIONAL SET

The Instructional Set is designed to reinforce learning and comprehension of the *Basic Rules*. There are 10 sets of Instructional Battle Boards in the kit which can accommodate 20—40 player/controllers for each training session. During the training session, player/controllers use an instructional television tape along with battle maps, unit counters, movement and Combat Results Tables, and unit tally sheets. By following the actions and explanations on the TV tape, player/controllers are able to complete the majority of movements and assessment routines as specified in the *Basic Rules*.

OPEN MODE PLAY

As part of controller training, the Open Mode uses the **FIRST BATTLE** kit scenario. A US armored division in defense, fights against an attack by an OPFOR Tank Army. This scenario is set in the Fulda Gap area and depicts the defensive nature of land combat as it might occur.

DEFINITION OF PARTICIPANTS BY TYPE ROLES (These definitions apply to all modes of play):

PLAYERS (P):

These are the individuals being exercised such as the division command group and division staff. Their roles are played as they would be in any real situation. They need not be familiar with simulation procedures except during Open Mode Play.

PLAYER/CONTROLLERS (PC):

These are the individuals who provide the interface or link between the simulation and the players. They are *players* in the sense that they are part of either the US or OPFOR side and must exercise tactical judgment and respond to tactical decisions that support their side. They are *controllers* in that they must translate tactical decisions into simulation procedures and must be governed by the rules of play for movement, and the conduct of all types of engagements. The assessment of results and activity simulated is reported accurately to the player headquarters. For example, a Battalion Player/Controller cell at the Battle Board represents all subordinate units of the Battalion, i.e., company commanders. As players, orders are received from Brigades in the field. As controllers moves are made and rules interpreted, generating tactical message traffic back to the Brigade TOC.

CONTROLLERS (C):

These individuals are neutral and are charged with specific functions relating to the simulation. They can be designated as battle board umpires (U) in order to make final decisions on interpretations of rules between US and OPFOR Player/Controllers. Decisions by controllers are final.

Personnel requirements. The schematic at Figure 1 depicts Player, Controllers, and Player/Controller positions in an exercise in which Brigade Player/Controllers represent Battalions on the Control Board. Selection for these positions should be based on expected roles during future CPXs.

US:

1. DIVISION COMMANDER (P)
2. G3 (P, OPTIONAL POSITION)
3. THREE BRIGADE COMMANDERS (PC)
4. THREE BRIGADE S3S (PC, OPTIONAL POSITION)
5. THREE BRIGADE FSOS (PC)

OPFOR:

1. TANK ARMY COMMANDER (P)
2. TANK ARMY OPERATIONS OFFICER (P, OPTIONAL POSITION)
3. THREE DIVISION COMMANDERS (PC, FIRST ECHELON FORCES ONLY)
4. THREE DIVISION OPERATIONS OFFICERS (PC, OPTIONAL POSITION)
5. THREE ARTILLERY COMMANDERS (PC)

CONTROLLER(S):

One (others may be added if the number to be trained exceeds 20). (See Figure 1)

Organizing the battle board.

CONTROL MEASURES (regimental and brigade boundaries as a minimum) will be placed on the battle board in accordance with the OPFOR and US Scenario Guides.

MAN-MADE OBSTACLES, PREPLANNED AIRSTRIKES and FIRE SUPPORT PLANS (targets) are recorded on planning maps prior to placing unit counters on the battle board. These targets and obstacle locations are visually checked as the simulation proceeds in order to assess losses on the opponent. Obviously, if targets and obstacle locations are placed directly on the battle board, opponents will sometimes tend to avoid them.

UNIT COUNTERS (maneuver and artillery units only—no headquarters counters) will be placed on the battle board with US forces no closer than three grid squares from the international border and the OPFOR no closer than three grid squares.

START SIMULATION, when the planning maps and battle board are posted and unit counters are in position with tally sheets arranged. Begin with the attacking force initiating its preparatory fires. The clock is started and continues to run until conclusion of the exercise.

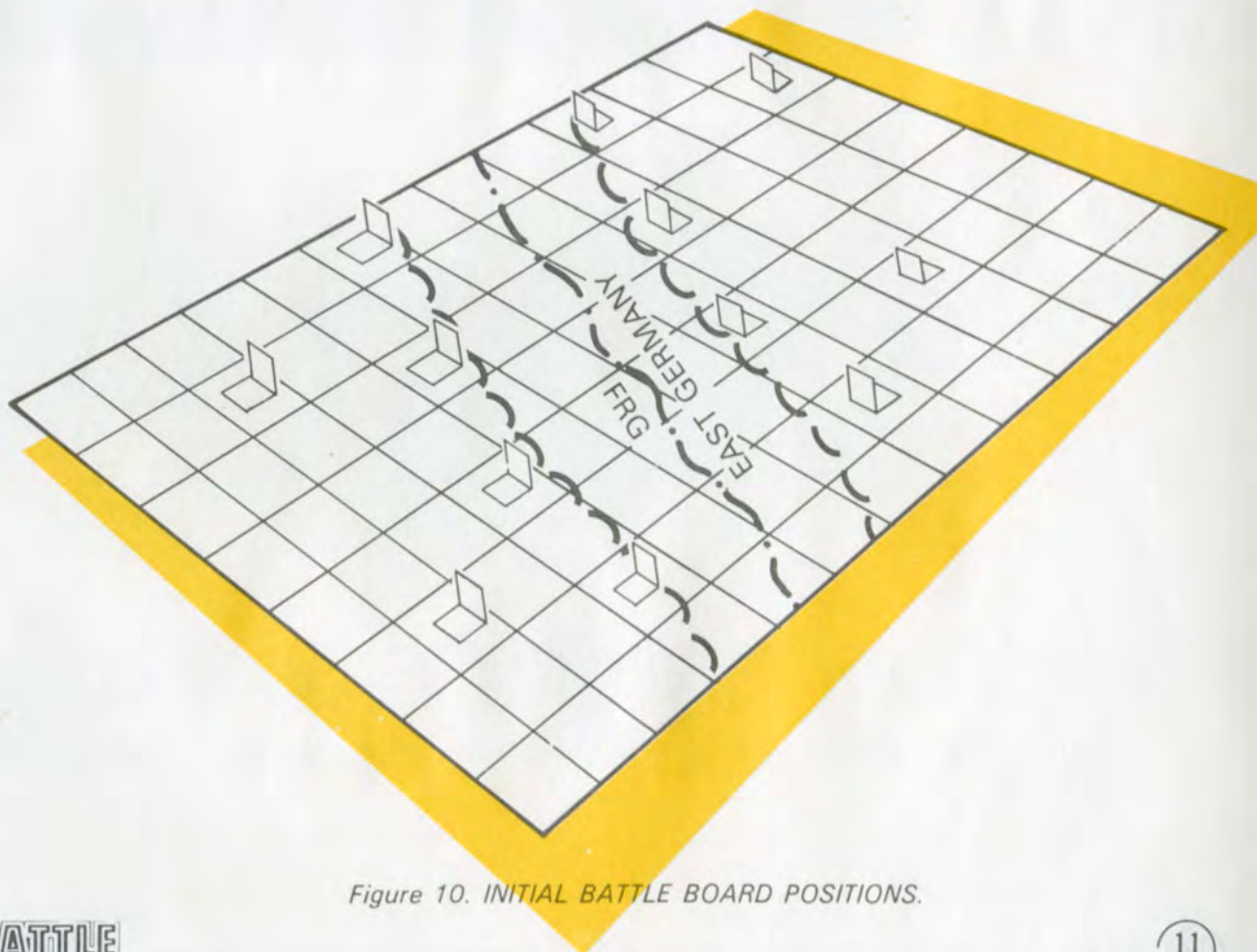


Figure 10. INITIAL BATTLE BOARD POSITIONS.

BASIC RULES

section 2

GENERAL

These rules simulate battle and simplify some rather complex engagements that could actually occur. Since **FIRST BATTLE** is, of necessity, a low resolution game, company-level play is least realistically represented, but realism increases as unit size increases. Once you have applied the rules in practice they will seem simple. You will be required to use your judgment and military experience in interpreting and applying the rules to the many varied situations which will arise. A set of rules that accounts for all situations would be too complex to be useful as a training vehicle.

KEY CONCEPTS

COMBAT STRENGTHS OF UNITS

Close Combat Strength (CCS) of units is determined by examining the task organizations and the capabilities of a unit's weapon systems. Since close combat, by definition, occurs at ranges of 1,000 meters or closer (an adjacent grid square), all weapons systems must be considered. For purposes of this simulation, it was determined that the M-60 tank equals the T-62 tank at 1000 meters or less. At these ranges, the mechanized infantry squad is judged roughly equivalent to a tank when company and battalion mortars are included as supporting fires. Likewise, battalion mortars are included for OPFOR. Therefore, one Close Combat Strength (CCS) point represents a tank or mechanized infantry squad "slice," (or its equivalent), including the supporting organic indirect fire capabilities of company/battalion for US and battalion/regiment for OPFOR. CCS is used to enter the Close Combat Results Table for opponents who are 1000 meters apart.

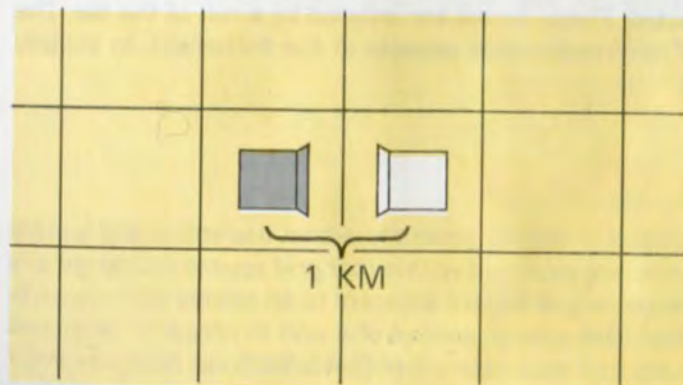


Figure 11. CLOSE COMBAT.

Measurements are made from center-to-center of grids for attacker and defender for range and line of sight. For the purposes of game play, whenever an opposing force is in an adjacent grid, CCS rules apply. Additionally, spotting and acquiring (see *d* below) are automatic. The assumption that each unit is uniformly distributed throughout the grid in which the unit counter is located accounts for this automatic acquisition when units are in adjacent grids.

Direct Fire Strength (DFS) of units is determined by examining the task organization and the capabilities of a unit's long range direct fire weapons systems. In this simulation, direct fire engagement ranges are in excess of 1000 meters.

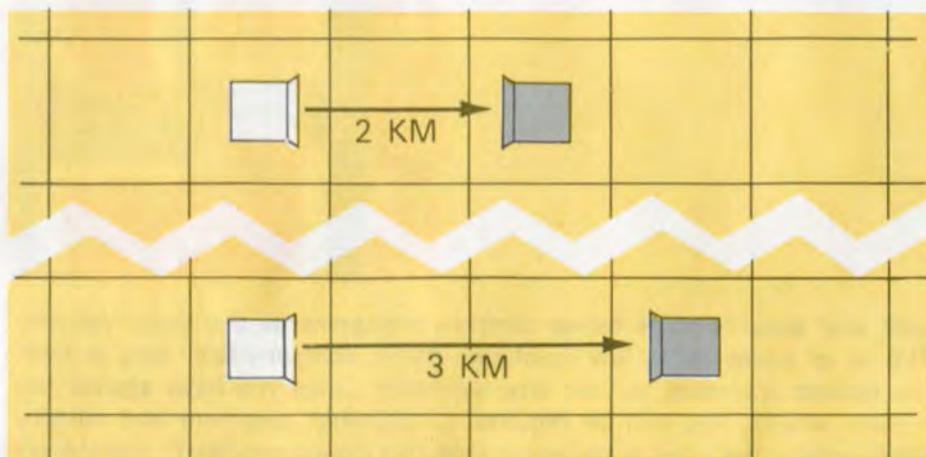


Figure 12. DIRECT FIRE.

At these ranges, the M—60 tank is rated better than the T—62 tanks with a ratio of equivalence of two M—60s equal to three T—62s. The same ratio applies to TOW and Sagger missiles. (These comparisons are based on the best scientific data available and some estimates about the unquantifiables involved.) For the purposes of game play, when an opposing force is within three grid squares, DFS can be applied provided the target force can be acquired by the majority of the firing unit's weapon systems. DFS is used to enter the Direct Fire Combat Results Tables.

Combat Strengths of artillery, helicopters, and high performance aircraft are based on the unit's ability to deliver firepower *on target*. This value, then, reflects both researched data and the **FIRST BATTLE** designer's judgment.

COMBAT RESULTS TABLES (CRTS)

Tables for the various types of combat are based upon the effectiveness of the weapons systems employed and vulnerability of both the target and the attacker. The air combat tables also reflect the employment of air defense systems by both sides. These tables are entered by a roll of the die. The die roll simulates all of the unquantifiable or non-measurable aspects of the battlefield, to include chance.

ZONES OF CONTROL

Combat units occupy hasty or prepared defensive positions generally within the entire grid square in which they are located. *It is assumed that units are deployed within that grid square to engage any unit in any adjacent grid square.* Any unit entering a grid square adjacent to an enemy unit is said to be entering the defending unit's zone of control. The zone of control of a unit in *prepared* defensive positions is also assumed to contain the outposts and local security of that unit. Thus, *from any point*

within its zone of control, a defender in a prepared position may spot targets from artillery or air strikes as the enemy approaches. The attacker entering this zone of control is automatically committed to close combat if the defender elects to defend.

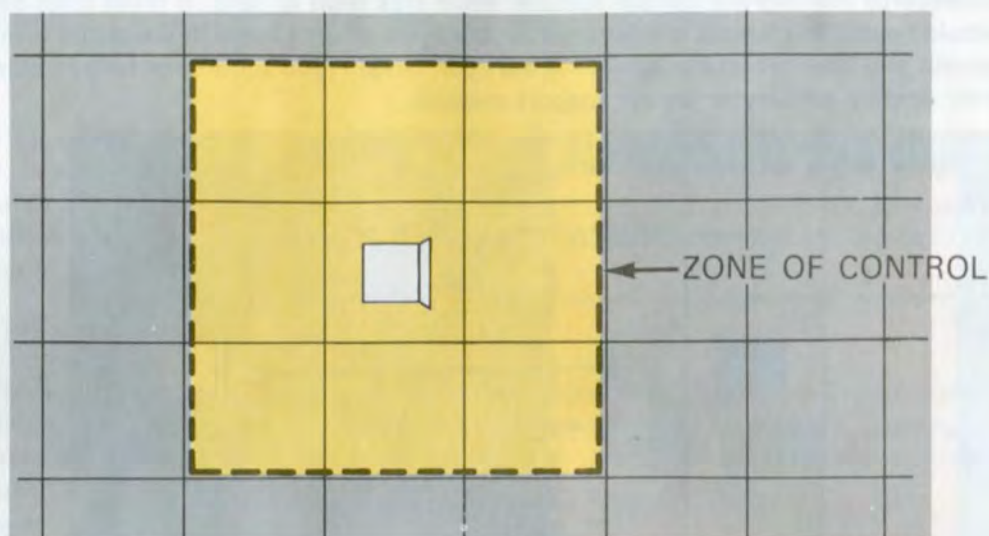


Figure 13. ZONE OF CONTROL.

SPOTTING AND ACQUIRING

The spotting and acquiring of targets during game play is one of the more difficult aspects of the simulation because it relies heavily on interpretation and judgment. Every player-controller should insure that he fully understands these terms and how they apply. When differences between opposing player-controllers cannot be resolved, the umpire/controller may have to be called in for a decision. Do not confuse "acquiring" with target acquisition for counterfire.

Spotting is used in conjunction with indirect and other supporting fire (tactical air and attack helicopter) on targets of opportunity. For the purpose of this game, a "spotter" is allowed a maximum observation range of 3000 meters during daylight and 2000 meters at night, provided he has line-of-sight.

Spotting range is measured from the center of the spotting unit's grid to the center of the target unit's grid.

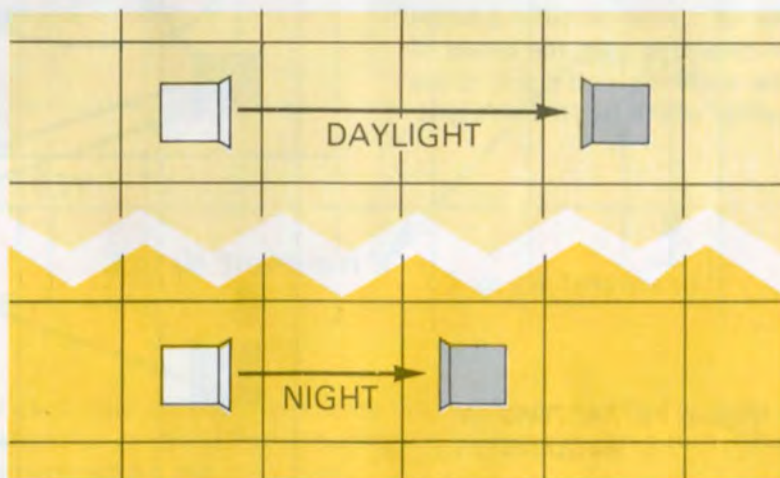


Figure 14. LINE-OF-SIGHT.

A unit defending from prepared positions may spot (observe) targets from any adjacent grid square. Units not in prepared positions spot only from the grid square in which their unit is located. In either case, spotting is allowed from anywhere within these grids from the "higher" terrain features—not necessarily the highest terrain feature. From this high ground, it must then be determined if one would have line-of-sight to the target (in the open or on a road). If the target is not masked by higher terrain and is either on a road or in some open terrain (grid square not fully forested), then the spotter may employ artillery or an air support mission.

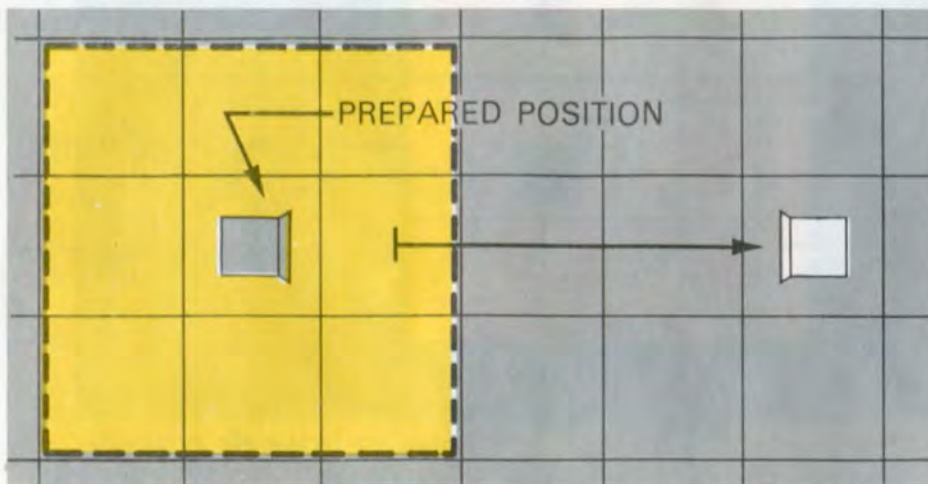


Figure 15. PREPARED POSITIONS.

Acquiring is used in conjunction with direct fire missions at ranges of 2000 to 3000 meters (2 to 3 grid square separation between counters). In this case, we are referring only to the grid square in which the acquiring unit is located (be it a prepared or unprepared position). We then determine whether or not the majority of weapon systems would be able to engage the target unit. There are primarily two conditions that would restrict a unit from being acquired. The first would be the presence of higher terrain between units which would mask the target unit from the majority of firing unit's weapons systems. The second would be when the predominant terrain in the grid square of the target unit is forest or built-up areas and the unit is not on a road. Acquiring range is measured from the center of the acquiring unit's grid to the center of the target unit's grid.

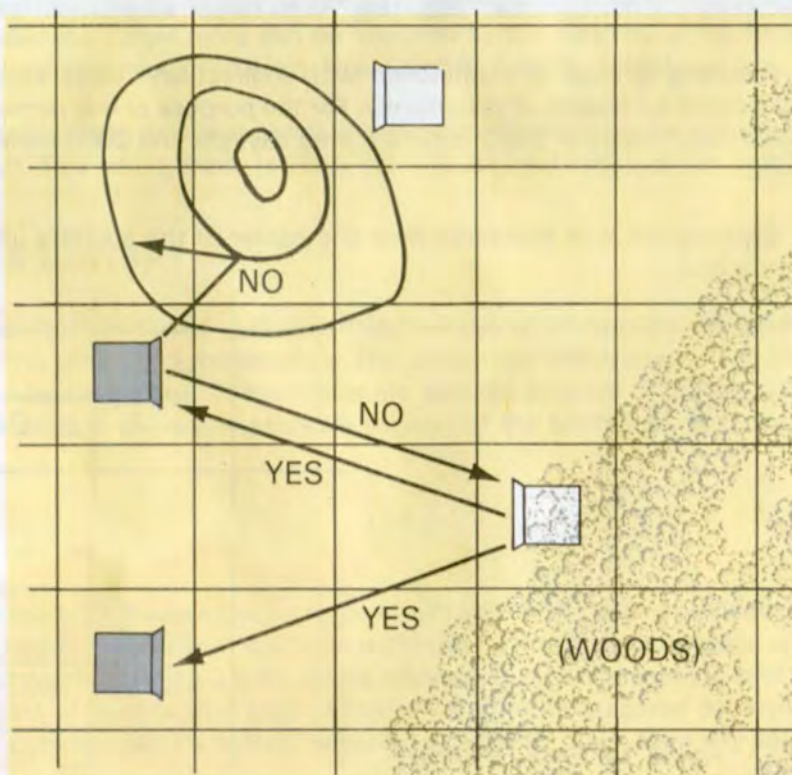


Figure 16. FACTORS IN ACQUISITION.

Spotting and acquiring is applied when:

- Line-of-sight exists to a target unit within range.
- The unit has revealed its location by firing or movement (blank face of counter is no longer facing the opponent).

ACQUISITION

Target acquisition for counterfire may be applied only against opponent artillery units after they have fired a mission. Probability of acquisition depends on number of missions fired, and whether or not the unit moves after it fires. Counterfire missions may be fired only by in-range units, otherwise other fire support means must be directed against the target. Acquisition of OPFOR artillery may be nullified by firing chaff.

UNIT CAPABILITIES

Unit Capabilities for Simulation are expressed in Movement Value (MV), Direct and Close Combat Strength (DFS and CCS) for maneuver units; and Indirect Fire Strength (IFS) for artillery. Figures 18 (Table 9) and 19 (Table 9A)) reflect those capabilities as found in the **FIRST BATTLE** scenario and those that may be used for expanded play.

MOVEMENT

Movement and Movement Value (MV) takes into consideration east-west, north-south and diagonal movement, in any combination for each grid traversed by the unit (counter). Sample moves are as follows:

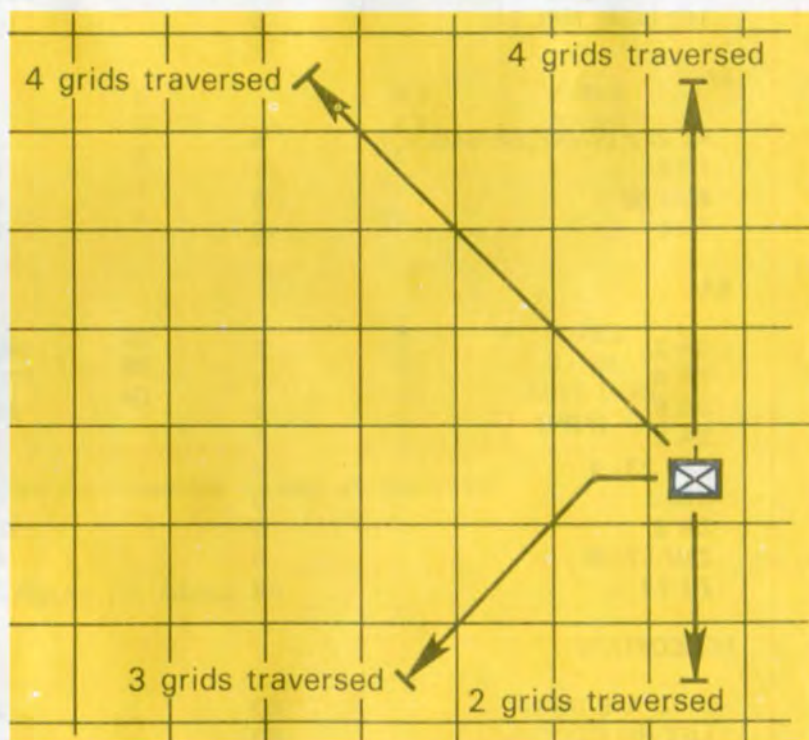


Figure 17. MOVEMENT.

The movement value assigned to each type counter represents the maximum number of grids a unit may traverse (as modified by terrain or combat effects) during the 30-minute game turn. After completing a game turn, full MV is restored for the next turn.

OPFOR UNIT CAPABILITIES FOR SIMULATIONS

TYPE UNIT	MOVEMENT VALUE (KM)*	MAX EFF RNG (KM)	DFS	IFS
<i>MANEUVER</i>				
RECON BN	8	3	1 PER T-72	
RECON CO	8	3	2 PER (3)	
TANK BN	6	3	T-62	
MTZ BN	6	3	2 PER (3)	
ABN BN	6/2 (M/D)	3	BMP'S W	
DISMOUNTED	2	3	/SAGGER	
<i>ARTY</i>				
122 (SP) BN	6	15	.5/TUBE	15
122 (W) MRL BN	5	20	—	20
152 (SP) BN	6	17	.5/TUBE	16
130 (TOW) BN	5	27	.5/TUBE	14
FROG BN (HE)	4	60	—	40
SCUD BN (HE)	4	280	—	80
140 (ABN) MRL BN	5	10	—	12
<i>AT</i>				
AT 2/3 (SWATTER/SAGGER)	6	3		
T-10	5	1		
ASU 85	6	1		
T-12	5	1		
<i>AAA</i>				
SA 2	5	40	—	
SA 4	5	70	—	
SA 6	5	35	—	
SA 9	6	7	—	
ZSU 23—4	6	3	.5/SYS	
S60	5	6	.5/SYS	
SA 8	5	15	—	
ZSU 57—2	6	4	.5/SYS	
ZU 23	5	2.5	.5/SYS	
<i>HELICOPTERS</i>				
HIND A/B (ATK)	60	3	2/HEL	
LIFT HELICOPTER	60	—	—	

*Movement capability over *clear terrain*. Actual capability will vary with type terrain.

Figure 18. TABLE 9.

US UNIT CAPABILITIES FOR SIMULATIONS

TYPE UNIT	MOVEMENT VALUE (KM)*	MAX EFF RG (KM)	DFS	IFS
MANEUVER				
CAV/RECON	8	3	1 PER TANK. OR TOW SYSTEM	
TANK CO	6	3		
MECH CO	6	3		
LIGHT INF	2	3		
DISMOUNTED	2	3		
ARTY				
105 (TOW) BTY	5	11	.5/TUBE	4
155 (TOW) BTRY	5	14	.5/TUBE	6
155 (SP) BTRY	6	18	.5/TUBE	6
8" (SP) BTRY	6	17	.5/TUBE	8
8" (SP) BTRY (M110A1)	6	22	.5/TUBE	8
175 (SP) BTRY	6	32	—	5
LANCE BTRY	4	110	—	40
ADA				
VULCAN (TOW)	5	1.2	.5/SYS	
VULCAN (SP)	6	1.2	.5/SYS	
CHAPARRAL (SP)	6	E	—	
HAWK	5	40	—	
NIKE-HERCULES	4	140	—	
HELICOPTERS				
ATK (AH1-S)	60	3	2/HEL	
ATK (AH1-G)	60	3	1/HEL	
LIFT HELICOPTERS	60	—	(SOFT TGTS ONLY) —	

*Movement capability over *clear terrain*. Actual capability will vary with type terrain.

Figure 19. TABLE 9A.

CLOSE COMBAT STRENGTH

Stacking represents the addition of combat strength to maneuver units for close combat *only* and is accomplished by reinforcement or by combining units. OPFOR may reinforce and stack no more than two battalions provided the battalion being reinforced is at or below 70% combat strength (CCS points). They must reoccupy separate grids following the close combat. US forces may not stack except when optional rules are being applied (see Section III).

RESULTS

Analysis of results gained from playing **FIRST BATTLE** should not be used as a sole determining factor to alter existing plans. The system is designed for *training* and the level of resolution of combat action does not lend itself to detailed analytical data.

MANEUVER RULES

MOVEMENT RATE

Each side may move any or all of its units during the game turn. This movement rate is shown on the counter by its assigned movement value (MV), which is appropriately reduced by the trafficability of the terrain, obstacles, and combat actions. Open cross-country rate for tracked vehicles is 1 MV per grid entered. Movement through forested and built-up grids by such units is reduced to the rate of 3 MV per grid. Forests and built-up areas do not generally impede dismounted units.

DISTANCE

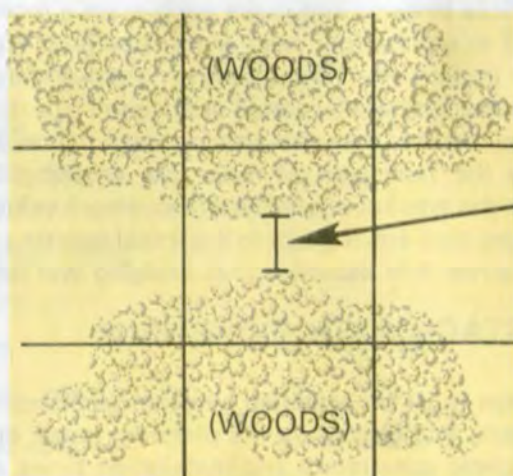
The movement value in the lower left hand corner of the counter determines the distance (in grid squares) a unit may move during one game turn. It represents the average cross country speed for a particular type of unit in kilometers per half-hour. The actual distance a unit may travel is determined by the type and trafficability of terrain, any man-made or natural obstacles it encounters and any combat actions the unit enters.

TERRAIN TRAFFICABILITY

(See Figures 22 (Table 1) & 23 (Table 1A): Terrain Effects on Movement) Confusion may arise when several types of terrain exist in one grid square. In order to determine which type of terrain is dominant, the following rules apply:

Entry rule. The terrain that predominates the grid governs the movement value expended to enter that grid. Judgment must be used in interpreting the movement value applicable in each case. Generally, the less restrictive terrain should govern in a "close call."

The Clear Path Rule. In order to cross a grid at the open cross-country rate, units in an approach march or withdrawal configuration require a minimum width path of open country in order to pass unimpeded. This minimum width path of open country is 300m for OPFOR battalions and 150m for US tank or mechanized companies at its narrowest point. Units must traverse the path to the next grid as they would a road. A minor obstacle in the patch, such as a narrow hedgerow or marshy area next to a stream will create an additional 1 MV penalty (player judgment call). Units *may not* enter an enemy unit's zone of control by employing the clear path rule. They must apply the terrain effect which governs in the preponderance of the grid (entry rule) because it is assumed that they would know of the enemy unit's proximity and thus not allow themselves to be canalized.

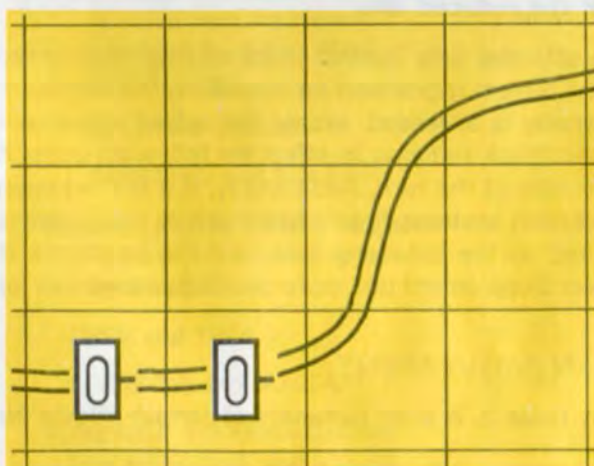


CLEARANCE REQUIRED:

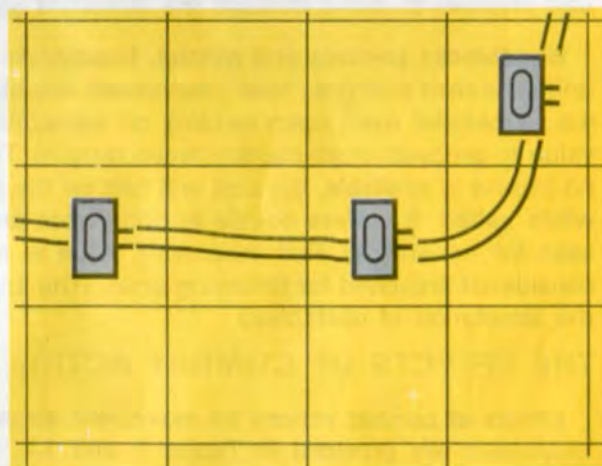
150M FOR US COMPANIES
300M FOR OPFOR BATTALIONS

Figure 20. CLEAR PATH RULE.

The highway rule. Units may facilitate their movement by using highways or other improved roads. Such roads include the solid red, "candy stripe," or solid white (two solid black lines) on most map sheets. Traveling on such roads requires only $\frac{1}{2}$ movement value per grid square. While applying such a bonus, no more than about 20 vehicles can normally be expected to be in a 1,000 meter stretch of road. Since US tank and mechanized companies have about 20 vehicles, they require approximately 1,000 meters of column length distance per unit, while OPFOR battalions require 2,000 meters of column length per unit. Therefore, one grid interval must be maintained between OPFOR battalions using road movement rates while US company counters may occupy adjacent grids.



US



OPFOR

Figure 21. HIGHWAY MOVEMENT.

If you are following a road which passes through a small portion or corner of a grid square, it still costs you a full grid square movement value. As in the clear path rule, no unit may enter an enemy unit's zone of control on a road using the road bonus. The terrain which predominates in that grid effects movement into that grid.

Built-up area movement rule. If a highway passes through a built-up grid not controlled by an enemy unit, this grid may be traversed by a unit at 1 movement value per grid as opposed to the 3 movement values per grid normally required of mounted units.

Water obstacles. Fordable and unfordable streams and rivers each exact a movement value toll in addition to the movement value required to enter either open or forested grids (Table 1 summarizes these). Unfordable water obstacles differ in their effect depending on whether they are crossed while opposed or unopposed. If the crossing site can either be spotted or acquired by a defending unit and if that unit engages the crossing unit by any means, then the attacker must halt at the site and expend the additional movement value during the next turn to make the crossing. If the crossing is unopposed, then the unit merely expends the amount of additional movement value required to cross. In both cases, units which use the crossing sites subsequent to the initial crossing are not required to expend the additional movement value since it is assumed that bridging will be in place.

EFFECTS OF MAN-MADE OBSTACLES ON MOVEMENT.

Blown bridges. All bridges to be blown must be specified by each opponent. A record of blown bridges should be specified by the scenario and plotted on the planning maps; bridges to be blown during play must be executed using logistic constraints and installation times as specified in the order(s) and Scenario Guide. When a unit encounters a blown bridge, it must halt; and it loses any remaining movement value. Additionally, if a unit halted for a river crossing is engaged by either direct fire (DFS), close combat (CCS), artillery (IFS), attack helicopter, or tactical air, the attrition on the target unit is doubled.

Minefields. An attacking unit that encounters a minefield must halt for the remainder of the game turn and suffer double attrition from any weapon systems fired at it (direct fire, indirect fire, tactical air, or attack helicopters). Other unit counters may pass around the halted unit. The halted unit may proceed through the minefield the following turn at $\frac{1}{2}$ movement value with full movement value restored for subsequent turns; or, he may also bypass the minefield the following turn, at normal movement rate. The minefield is considered breached and ineffective for any following units if the unit chooses to move through the minefield grid at the reduced rate.

Roadblocks (craters and abatis). Roadblocks are effective only against units moving their entire unit on a road (using a "road" movement value). If the terrain is practical for bypassing the roadblock (i.e., a parallel road, open terrain), no additional penalty is assessed, except the added movement value to proceed cross-country (open terrain). The roadblock remains in effect for following units. If no bypass is available, the unit will halt for the remainder of the turn. Additionally, if it is fired upon while halted, it suffers double attrition from any weapon systems fired upon it (as in the previous case for minefields). Full movement value is restored in the following turn and the roadblock is considered breached for following units. (The Engineer Supplement has more detailed procedures for the simulation of obstacles.)

THE EFFECTS OF COMBAT ACTIONS ON MOVEMENT.

Effects of combat actions on movement appear in Table 2. A brief summary of terrain effects on movement are provided in Tables 1 and 1A.

NOTE: Table numbers in this document correspond to those appearing on the FIRST BATTLE Instructional Map.

TERRAIN EFFECTS ON MOVEMENT—MOUNTED

TERRAIN	COST IN MV PER GRID		REMARKS
	DAY	NIGHT	
OPEN and TRAILS	1	2	When MV cost exceeds assigned MV on counter. MV may be applied to subsequent turns.
FOREST	3	6	
BUILT-UP	3	6	
IMPROVED ROADS	½	1	Roads cannot be used to enter zones of control.
IMPROVED ROADS through BUILT-UP AREAS	1	2	
STEEP SLOPES (over 30%)			Determined by map inspection and player/controller judgment.
OPEN 30%—50%	3	6	
OPEN over 50%	IMPASSABLE		
FORESTED 30%—40%	5	10	
FORESTED over 40%	IMPASSABLE		
UNFORDABLE WATER OBSTACLES			
MARSHES and WETLANDS	IMPASSABLE		
STREAMS and RIVERS CROSSABLE w/AVLB type equipment (Unopposed by either direct or indirect fires)			See Engineer Supplement Rules for bridging/crossing routes for unfordable water obstacles that exceed the capabilities of AVLB type equipment.
OPEN and TRAILS	3	6	
FORESTED and BUILT-UP	5	10	
STREAMS and RIVERS CROSSABLE w/AVLB type equipment (Opposed by either direct or indirect fires)	HALT-CROSS NEXT TURN		
OPEN and TRAILS	4	7	
FORESTED and BUILT-UP	6	11	
FORDABLE STREAMS—Unopposed (any other solid blue line on map sheet)			
OPEN and TRAILS	2	4	
FORESTED and BUILT-UP	4	8	
FORDABLE STREAM—Opposed (any other solid blue line on map sheet)			

Figure 22. TABLE 1.

TERRAIN	COST IN MV PER GRID		REMARKS
	DAY	NIGHT	
OPEN and TRAILS	3	5	Cannot cross stream or climb steep slopes.
FORESTED and BUILT-UP	5	9	
WHEELED VEHICLES and TOWED WPNS			
TRAILS	1	2	
FOREST and BUILT-UP	3	6	
ROADS	½	1	Once encountered, may be crossed in subsequent turns.
ROADS through BUILT-UP	1	2	
OPEN	2	5	
MAN MADE OBSTACLES	HALT or BY-PASS (BASIC RULES ONLY)		

Figure 22. TABLE 1 (CONT'D)

TERRAIN EFFECTS ON MOVEMENT—DISMOUNTED

TERRAIN	COST IN MV PER GRID		REMARKS
	DAY	NIGHT	
Tactical Approach March			
OPEN	1	1	
FOREST	1	2	
BUILT-UP	2	4	This equates to 1 grid every second turn for night movement.
IMPROVED ROADS	1	1	
IMPROVED ROADS through BUILT-UP AREAS	2	4	This equates to 1 grid every second turn for night movement.
STEEP SLOPES (over 40%)			
OPEN and TRAILS	2	3	
FORESTED	3	5	This equates to 1 grid every second turn for night movement.
UNFORDABLE WATER OBSTACLE: (Unopposed by direct or indirect fire)			
OPEN and TRAILS	2	3	
FORESTED and BUILT-UP (Opposed by direct or indirect fire)	3	5	This equates to 1 grid every second turn for night movement.
OPEN and TRAILS	3	4	
FORESTED and BUILT-UP	4	6	
FORDABLE STREAMS	No addl cost		
TOE WHEELED VEHICLES	Limited to movement rate of dismounted elements.		Assumes bridging or fording.
MANMADE OBSTACLES (minefields only)	1	1	
AIRMOBILE MOVEMENT			See airmobility rules and Table 9.

Figure 23. TABLE 1A.

COMBAT EFFECTS ON MOVEMENT

ACTION	EFFECT ON MOVEMENT
RETURN DIRECT FIRE	HALT UNTIL NEXT TURN
UNSUCCESSFUL ATTACK	WITHDRAW 2 GRIDS (LOSE ½ OF MV NEXT TURN)
UNSUCCESSFUL DEFENSE	WITHDRAW 2 GRIDS (LOSE ½ OF MV NEXT TURN)
DEFENDER DECLINES CLOSE ASSAULT	WITHDRAW UP TO (OPT) FULL VALUE OF MV AT TIME OF DECLINATION

Figure 24. TABLE 2.

MOVEMENT BY WHEELED/TOWED WEAPONS.

Units with wheeled or towed vehicles may move at the same road movement rate as tracked vehicles, but may only move in open country at 2 MV/grid. They cannot cross streams or climb steep slopes (over 40%-determined by map inspection) while going cross-country. Wheeled sub-elements of dismounted units move at the same rate as the parent unit.

MOVEMENT OF DISMOUNTED UNITS.

Infantry and light infantry type units have a basic movement value of 2. Table 1A specifies the terrain effects on movement of such units. In some cases, such units may not be able to move a full grid square in one turn. An example would be a night tactical approach march through a built-up area which would cost 4 MVs. In such cases, the unit can advance one grid only every other turn. This simulates the movement of only ½ km per turn by this unit. The same would apply to night river crossings or night movement over difficult terrain.

TRUCK MOVEMENT OF DISMOUNTED UNITS.

Infantry and Light Infantry type units may be moved behind the lines of contact by truck convoy. Lift capability must be allocated to brigades from division in terms of "company lifts" based on truck units available to the division, either from organic or corps resources. These "company lifts" can be represented by counters similar to unit counters, they are given a MV of 10 which appears in the lower left hand corner of the counter and must be moved about the simulated battlefield as any other units by observing the wheeled vehicle movement restrictions. Such counters must be stationary one turn during loading and off-loading of troops. When an infantry or light infantry unit is mounted on trucks the combat unit's counter is stacked onto the truck unit counter. If a truck unit carrying troops is engaged by indirect fires, direct fires, or any type of aerial fires combat results are doubled and personnel aboard trucks are casualties (see Admin Supplement for more detail). Any unit being transported by a truck unit while it is thus attacked, must proceed dismounted or wait 2 turns before continuing aboard the remaining vehicles.

AIRMOBILE MOVEMENT OF DISMOUNTED UNITS.

Infantry and light infantry type units may be moved about the battlefield by assault or assault support helicopter assets. A very simple simulation procedure is provided here. The division is provided a number of assault helicopter companies and assault support helicopter platoons appropriate to its organic, attached or support capability. These units are reflected by appropriate counters with MVs and have no combat strength. Such a unit can fly 60 KMs straight line distance in one turn (30 min). In order to pick up a unit it must expend 20 MV in that turn. The transported unit counter is simply stacked on the helicopter unit counter. The pickup zone must not be contested by either direct or indirect fires. If it is, the mission will be aborted. If the destination is another location behind US lines, and if OPFOR units are not overflowed in the process, (flying from one side to another of an OPFOR salient would require the measurement of an off-set path around it) then no casualty assessment is made. If the flight path crosses OPFOR lines, then casualties are assessed by a simple die roll (see Table 10). Only straight line distances are measured, but it is assumed that helicopter units would fly best routes between points. The start point of any mission flight path must be at a helicopter staging area (or FARRP) and must end there within two turns for refueling. The refueling process takes one complete turn during which time the units must remain stationary. Assault support helicopter assets may only be used to transport combat units behind US lines.

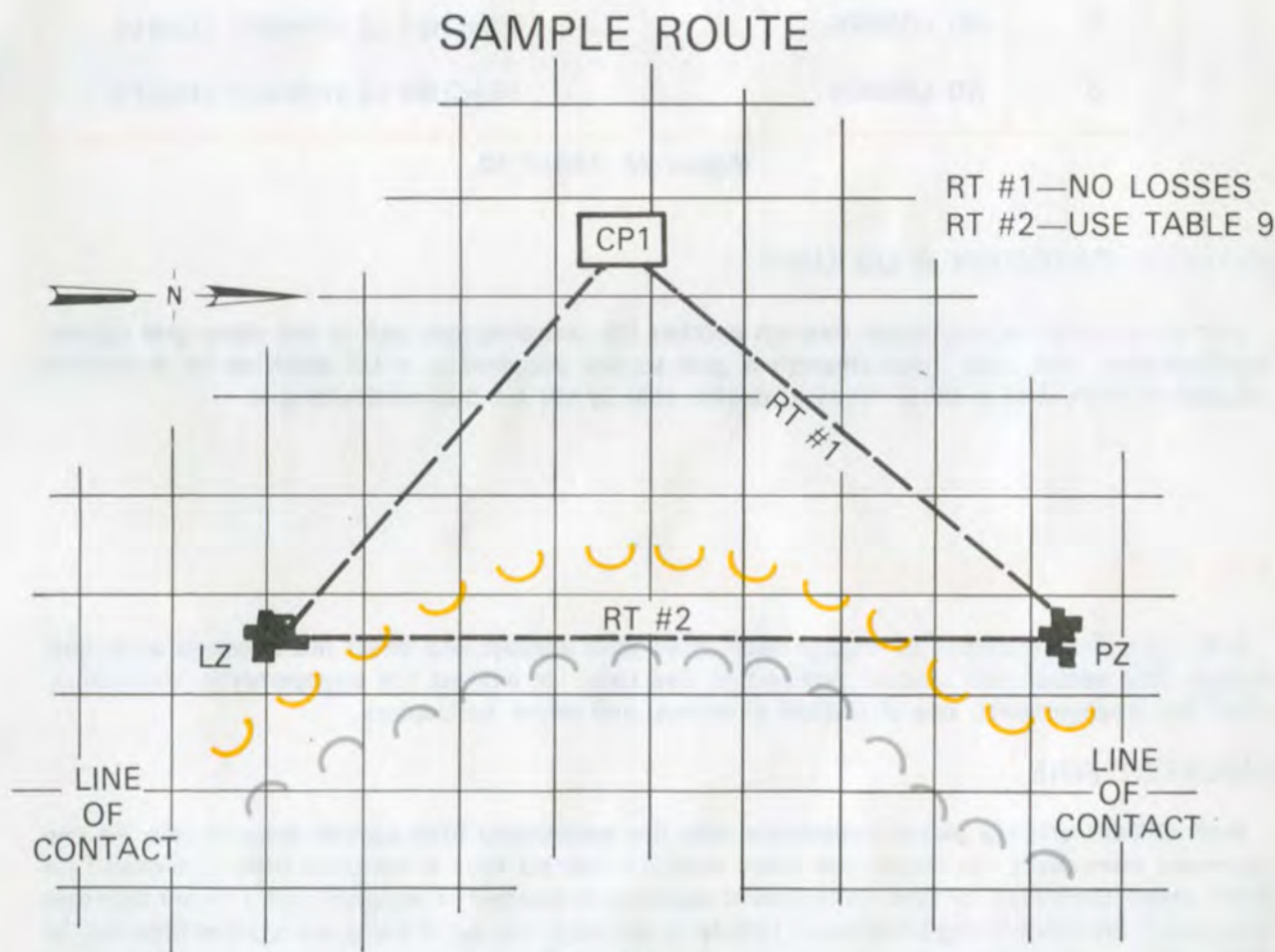


Figure 25. SAMPLE ROUTE.

HELICOPTER ASSAULT RESULTS TABLE

MISSION RESULTS

DIE ROLL	HELICOPTER UNIT	TRANSPORTED UNIT
1	LOSS OF HELICOPTER UNIT	LOSS OF TRANSPORTED UNIT.
2	LOSS OF HELICOPTER UNIT	RETURNED TO PZ WITH 40% LOSSES ASSESSED IN CCS PTS.
3	HELICOPTER UNIT MAY BE USED ONLY ONE MORE TIME FOR ASSAULT BEHIND OPFOR LINES.	REACHES LZ WITH 30% LOSSES ASSESSED IN CCS PTS.
4	HELICOPTER UNIT MAY BE USED ONLY ONE MORE TIME PER ASSAULT BEHIND OPFOR LINES.	REACHES LZ WITH 10% LOSSES ASSESSED IN CCS PTS.
5	NO LOSSES	REACHES LZ WITHOUT LOSSES.
6	NO LOSSES	REACHES LZ WITHOUT LOSSES.

Figure 26. TABLE 10.

MOVING THROUGH A US UNIT.

Company size units may move through another US company size unit in the same grid square. Battalion size units may move through a grid square occupied by a US battalion for a planned passage of lines, and at other times at double cost in MV for that particular grid.

FIRE ENGAGEMENT RULES

Both players may choose to engage each other with indirect and direct fire weapons as targets appear. This section will discuss procedures and rules for indirect fire engagements, counterfire, direct fire engagements, use of tactical airstrikes, and attack helicopters.

INDIRECT FIRE.

Both OPFOR and US player/controllers may fire preplanned fires against deep targets. As one opponent maneuvers his forces, the other may use indirect fires to simulate final protective fires (FPF), preparatory fires, or fires on targets of opportunity (spotted or acquired units). Either side may fire counterfire when firing batteries or battalions are acquired. All of the above types of fires may be fired within a single game turn as long as mission capability (number of missions allocated) is not exceeded.

Indirect Fire by artillery units represents observed, on-call and scheduled fires. It may be close support against maneuver units, counterfire, priority targets, (final protective fires (FPF)), an artillery preparation, or a rolling barrage. Artillery preparations and rolling barrages must be scheduled prior to game play, and before the opponent has placed his units (counters) on the game board. The prep could then be fired as the attacking forces cross the line of departure and the rolling barrage when the attacker reaches what he believes to be the forward edge of the battle area (FEBA). Artillery preparations and rolling barrages may be cancelled at any time. Preparations, preplanned fires, priority targets and final protective fires should always be a part of Close Combat strength when artillery missions are available (see Close Combat Rules).

Preplanned fires or scheduled fires may not be shifted unless they are observed (within spotting range).

Mission Capability and Movement. Fires are allocated per turn and degrade the ability of firing units to move as specified in the table below. One mission per game turn may be preplanned, preparatory, a priority target or FPF at double IFS per firing unit.

ARTILLERY MISSION CAPABILITY/MOVEMENT ALLOWANCE

UNIT TYPE	MISSIONS	% OF MOVEMENT VALUE REMAINING
*MRL, SCUD, FROG, LANCE	2	0
	1	1/2
SP ARTY (ALL)	3	0
	2	1/3
	1	2/3
TOWED ARTY (Must shoot or move in a turn)	2	0
	1	0

*MRL, SCUD, FROG, and LANCE units have the capability shown per turn; however, these type units must be limited by total number of missions per day due to ammunition available.

Figure 27. TABLE 11.

Resolution of Indirect Fire on Maneuver Units.

TARGET MUST BE WITHIN SPOTTING RANGE (with the exception of preplanned or scheduled fires) and within range of firing unit.

DETERMINE INDIRECT FIRE STRENGTH of firing unit.

ENTER THE INDIRECT FIRE COMBAT RESULTS TABLE (Table 3) under "Firing on Maneuver Units," in appropriate column for IFS of firing unit. *Example:* A 155 battery has an IFS of 6, so enter the 6—10 column.

ROLL THE DIE. *Example:* A die roll of "5" for a 155 battery firing on a target will produce a loss of 2. If the mission had been an FPF, priority target, prep, or preplanned the IFS would have been doubled to 12; and with the same die roll of 5, the losses would have been 3.

TABLE - 3 INDIRECT FIRE CRT

Strength of Firing Unit	Firing on Maneuver Units (Losses to Soft Target, First, Then 1 of 20 Hard)					Firing Counter-Fire (Losses in IFS Points)				
	1-5	6-10	11-15	16-20	21+	1-5	6-10	11-15	16-20	21+
DIE ROLL										
1	0	0	1	2	2	0	0	0	0	1
2	0	0	1	2	3	0	0	0	1	2
3	0	1	2	2	3	0	0	1	2	2
4	1	1	2	3	4	0	1	1	2	3
5	1	2	3	3	4	1	1	2	3	4
6	1	2	3	4	5	1	1	2	3	5

NOTE: This table is applicable to a "pure" indirect mission, either against maneuver units or as counter-fire. Combat losses are assessed against the target unit based upon the IFS of the firing unit(s) and the die roll. Results are applied to "soft" targets first, until 20 soft targets have been lost. When 20 soft targets are lost, one tank may be attrited. As artillery continues to attack target units (counters) with only tanks remaining—total the losses obtained from the combat results table until you have 20—then strike off one tank from the tally sheet. From this point, the process starts over again. *This table is not applicable to indirect fire used in conjunction with close combat (see Table 5).*

Figure 28. TABLE 3.

Firing Counter-Fire.

ARTILLERY MUST BE IN RANGE of opposing firing battery or battalion target.

ENTER TABLE 8—Target Acquisition for Counter-Fire. *Example:* If the target fires and does not move, and the die roll is "2," the target is acquired.

TABLE-8
TARGET ACQUISITION
FOR COUNTERFIRE

NOTE: If there had been no acquisition, there would be no counter-fire opportunity on the target until it fired again.

ARTILLERY UNIT	MOVEMENT DATA	DIE ROLL	RESULTS
FIRES ONE MISSION	NO MOVEMENT	1-2	ACQUIRED
		3-6	NOT ACQUIRED
FIRES ONE MISSION	MOVEMENT	1	ACQUIRED
		2-6	NOT ACQUIRED
FIRES TWO OR MORE MISSIONS FROM SAME POSITION	NO MOVEMENT	1-5	ACQUIRED
		6	NOT ACQUIRED

Figure 29. TABLE 8.

ENTER THE INDIRECT FIRE COMBAT RESULTS TABLE (Table 3), under "Firing Counter-Fire" with the IFS of the unit that will shoot the counter-fire mission. *Example:* An 8-inch battery has an IFS of 8, so enter the 6—10 column.

ROLL THE DIE. *Example:* A die roll of "4" for an 8-inch battery on an artillery unit will produce a loss of one Indirect Fire Strength point on the target unit.

TABLE - 3 INDIRECT FIRE CRT

Strength of Firing Unit	Firing on Maneuver Units (Losses to Soft Target, First, Then 1 of 20 Hard)					Firing Counter-Fire (Losses in IFS Points)				
	1-5	6-10	11-15	16-20	21+	1-5	6-10	11-15	16-20	21+
1	0	0	1	2	2	0	0	0	0	1
2	0	0	1	2	3	0	0	0	1	2
3	0	1	2	2	3	0	0	1	2	2
4	1	1	2	3	4	0	1	1	2	3
5	1	2	3	3	4	1	1	2	3	4
6	1	2	3	4	5	1	1	2	3	5

*NOTE: When firing on CS or CSS Units use the right side of this chart.

Target Acquisition for Counter-Fire and OPFOR Use of Chaff. Exclusive use of chaff by OPFOR will nullify target acquisition (Table 8). The use of chaff is restricted to *two missions per OPFOR Division per turn*. A chaff mission counts against normal mission allocation per game turn. Chaff is fired as a battalion mission and will mask one other firing battalion. The restriction on use of chaff accounts for special ammunition constraints for OPFOR units.

Artillery prep and rolling barrage procedures. The combat strength of artillery units (IFS), is doubled when firing these missions due to the increased number of rounds fired and the duration of the fire. This can be followed by a rolling barrage in subsequent turns. Targeting information must be based either upon information supplied in the scenario or upon a map inspection. The player controller employing these fires may not observe the positioning of the defender's counters and then use those grids as targets. Only one artillery mission per counter per turn may be used to fire a prep or rolling barrage. Prep fires should always accompany close combat and will be part of the attacker's close combat strength.

Final Protective Fires are planned in advance of game play and should be employed in close combat wherever it takes place. They may be fired as "priority targets" if no FPF has been planned. Again, the IFS of firing units is doubled.

Artillery effectiveness against prepared positions. The effect of artillery fire is reduced considerably when used against units in well prepared positions or in hasty positions, or in built-up areas and forests. When a position doubles the defensive strength of a unit, its vulnerability (losses) to artillery fires are halved and any half points are rounded down. Occupation of prepared positions by artillery units does not affect its IFS or losses. This is already factored in the CRT and IFS for each unit.

Combat strengths of artillery units. The basis for assigning combat strengths to artillery units is a comparison of the US 155mm, self-propelled (SP) howitzer (M109) with all other types of units. This howitzer battery is assigned an Indirect Fire strength of six (one for each howitzer) and all other units are compared to this. Considered in the comparison were accuracy, dispersion effects of rounds on various types of targets encountered on the battlefield, rates of fire, responsiveness, and command and control procedures including communications and targeting equipment. The unit's IFS is applied for each mission fired. Losses to artillery units are expressed by reducing the IFS. They are removed from play when the IFS has been reduced to 40% of the beginning value for US units or 30% of the beginning value for OPFOR units. The Table 12 depicts typical IFS and values at which firing units are eliminated from play:

TYPICAL IFS & VALUES

		IFS	(REMOVED FROM PLAY—IFS)
US BATTERIES	155mm Howitzer (SP)	6	2
	8-inch Howitzer (SP)	8	3
	175mm gun (SP)	5	2
OPFOR BATTALIONS	122mm Howitzer (SP)	15	4
	152mm Howitzer (SP)	16	4
	122mm MRL (WH)	20	6
	130mm gun (TOW)	14	4

NOTE: Units are ineffective when they reach a certain percentage of starting combat strength (IFS) as in the case of 3 and 6 above; for OPFOR—30%, US—40% (always round down). (See Optional Rules for a more detailed treatment.)

Figure 30. TABLE 12.

Smoke is considered in visibility, spotting, acquiring, etc., in all weapon systems effects in the combat results tables. See Section III.

Sheridans (M551) are considered as "soft" targets; the same applies to other thin skin armored vehicles, e.g., PT—76, BMP, BDM, BRDM, APC, etc.

DIRECT FIRE (DF).

Either side may initiate a direct fire engagement. Direct fire engagements are limited to two per unit (counter) per turn; one of these engagements may be close combat (which includes close assault). The number of DF engagements will be reduced depending on movement. Normally, the defender initiates the engagement. If a moving unit is engaged, it may elect to continue moving or it may stop and return fire. A unit electing to return fire must stop for the remainder of the turn. A moving unit may be fired upon no more than twice by the same unit and may only be fired at once in each grid square by that same unit each time.

Direct fire is the engagement of targets up to the maximum range of a unit's weapons, providing that targets can be acquired over the intervening terrain.

To engage a target by direct fire, a firing unit must be able to trace a straight line, unobstructed by terrain, from the center of the grid square occupied by the target.

Units which voluntarily move at ½ movement value may conduct one direct fire engagement during the turn. This includes returning defending fire or initiating direct fire.

When a unit enters a grid in which it is acquired and fired upon, the opponent must immediately announce that he is engaging by direct fire and specify the type of target (tanks or "soft targets"); if he fails to specify the type target any losses from the target will be assessed right to left, top to bottom, from the tally sheet. The owner of the target unit must then announce whether he is returning fire or continuing to move.

If the target unit wishes to continue moving:

THE FIRER SUMS HIS COMBAT STRENGTH (DFS), refers to the "move/returns fire" (left side) portion of the DF CRT (Table 4) and determines the losses suffered by the target unit and any losses which he may suffer from the return fire.

THE TARGET UNIT CONTINUES MOVING if he has sufficient MV.

THE FIRER DETERMINES whether the target can be engaged by DF in its new location. If so, he may again engage the target by DF, under the "moves/returns fire" portion of the CRT. No unit may engage by DF more than twice per turn. Can the target now return fire? Yes. If the target has not used its full MV.

EXAMPLE:

- OPFOR tank battalion moves into DF range of US tank company (3km).
- US announces DF engagement and specifies tanks as targets.
- OPFOR elects to continue movement at full MV.
- Enter left side of Table 4, "Unit continues to Move/Returns Fire," in 16—20 column (since DFS of tank company is 17).
- A die roll of "4" produces 3 losses (tanks) for the OPFOR tank battalion.

NOTE: OPFOR must be allowed to continue moving prior to the second DF engagement by the firing unit; however, the OPFOR unit could be engaged while in the same grid square by *other* units in range, LOS.

- OPFOR moves into next grid square.
- US initiates final DF engagement and again specifies tanks as targets.
- Again enters left side of Table 4 in 16—20 column.
- A die roll of "1" produces one additional loss (tank) for the OPFOR Battalion.
- OPFOR completes movement.

TABLE - 4 DIRECT FIRE CRT

DFS of Firing Unit		Unit Continues to Move/Returns Fire					Target Unit Stops—Returns Fire Target Losses/Defending Unit Losses				
		1-5	6-10	11-15	16-20	21+	1-5	6-10	11-15	16-20	21+
DIE ROLL	1	0	0	1	1	2	0/0	0/0	1/0	2/0	3/1
	2	0	0	1	2	3	0/0	1/0	2/0	3/1	3/2
	3	0	1	2	2	3	1/0	2/0	3/1	3/2	4/2
	4	1	1	2	3	4/1	2/0	2/1	3/1	4/2	5/2
	5	1	2	3	4/1	4/1	2/1	3/1	4/2	5/3	6/3
	6	2	3	4/1	4/1	5/2	3/1	4/2	5/3	6/3	6/4

*NOTE: This table applies to direct fire engagements at two to three kilometers. It is used against a target that may continue to move or stop to return fire (for more accurate fire). Results are based upon the direct fire strength of the initiating unit (usually the defender) and the die roll; and, may be applied against either hard or soft targets, as specified by the firer (right to left on tally sheets). Any time the left side of the DF CRT is used, return fire *does not count* against the moving unit's number of DF engagements per turn. The return fire capability should be used for only those weapon systems that have stabilized turrets (M60A3s, T-62s, etc.).

Figure 31. TABLE 4.

If the target unit chooses to stop and return fire:

THE FIRER SUMS DFS and refers to the right side of "return fire" portion of the DF CRT (Table 4) to determine losses for the engagement.

THE UNIT WHICH STOPS to return fire must remain stationary for the remainder of the turn and has no more DF capability if he has moved at all during the game turn.

EXAMPLE:

- OPFOR tank battalion moves into DF range of US tank company.
- US announces DF engagement and specifies tanks as the target.
- OPFOR elects to stop and return fire.
- Enter right side of Table 4, "Target Unit Stops—Returns Fire" in 16—20 column since the US tank company has a DFS of 17.
- A die roll of "3" produces 3 losses (tanks) for OPFOR and 2 losses for US.
- The OPFOR tank battalion may not initiate a DF engagement or move for the remainder of the turn.
- The US tank company may initiate one additional DF engagement (right side of Table 4) or pull off position at $\frac{1}{2}$ MV.

Direct fire against units in prepared positions results in $\frac{1}{2}$ of the losses as shown on the CRT (round down).

Summary of DF Rules. Basically, units may initiate only two direct fire engagements without moving, in any one game turn. Variations may be employed at the option of the player/controller. The defender may delay by firing once at an attacker and withdrawing at half of his movement value, or may fire twice at the attacker and remain in position. The attacker may not initiate fire at a defender unless the defending unit has been spotted before the firing takes place. The attacking unit may, in this case, initiate two DF missions against the defender but may not move. If the target unit is stationary (in a defensive position) the right side of the CRT is used. Additionally, if the target unit has used two direct fire engagements, firing unit losses are zero, since the target unit has expended his firing capability. (The unit initiating fire becomes the defender for purposes of reading results from the DF CRT). As defined previously, the attacker may be fired upon twice while on the move and, if within range of the defender, conduct close combat the following turn. In other words, close combat is postponed until the defending unit's firing capability has been restored. This accounts for the dispersion effect of fires on the attacking unit and the coordination required to mount an effective assault. The attacker may elect to stop and return firing during these engagements but must remain stationary for the remainder of the game turn. When the attacker elects to stop and return fire, he may return fire only once in that turn even though he may be fired at by all defending units in range. The attacker may also initiate one DF engagement against the defender and proceed at $\frac{1}{2}$ MV.

ATTACKER IN A TURN MAY:

- Move, return fire on the move,* and stop to return fire if he has not used all MV.
- Move, return fire on the move,* complete movement to use maximum movement value.
- Initiate two DF fire engagements—no movement.
- Move, return fire on the move,* and conduct close combat.
- Move and choose not to fire.
- Initiate one DF engagement and move at $\frac{1}{2}$ MV.

DEFENDER IN A TURN MAY:

- Move and choose not to fire.
- Initiate one DF engagement and defend against the close assault in the same game turn.
- Initiate two DF engagements and defend against close assault the following turn.
- Initiate two DF engagements and remain in position.
- Initiate one DF engagement and execute a delay by moving $\frac{1}{2}$ MV (minimum of 2 KM).

*NOTE: Only weapons systems with stabilized turrets may return fire on the move, i.e., M60 A—2, M60 A—3, T—62, etc.

TACTICAL AIR.

Immediate airstrikes may be employed by either side at any time during the game turn. Such airstrikes may be employed only against targets that have been spotted. The High Performance (TAC AIR) CRT (Table 6) are used to determine the effects of each mission. Each major command receives a number of tactical air strike sorties to allocate during the game (specified in the scenario). A tactical air strike is defined for game purposes as a two-aircraft flight (two sorties). Tactical air strikes will be employed by the following procedures:

The US division commander/the OPFOR Army commander will allocate air strikes to brigade commanders (US) or division commanders (OPFOR) for use in a specific game turn. Allocation will be made at least one game turn in advance (i.e., immediate air strikes allocated in one turn will arrive on

station for employment in the next turn). If, after arriving on station, the target has moved, the aircraft are allowed to search out to 3 grid squares. If the target cannot be found within a 3000M radius of the target grid, the mission is aborted.

Brigade/division commanders may apply air strikes to any spotted targets and OPFOR artillery positions that have revealed their firing positions to counterbattery radar or other acquisition means.

More than one air strike, if available, may be applied in succession to the same target.

EXAMPLE:

- OPFOR battalion has CCS of 25.
- Enter 21—25 column of Table 6.
- Die roll of "1" produces a loss of 4 CCS points on OPFOR battalion.

If an Artillery unit is hit by an air strike, results are in Indirect Fire Strength points.

TABLE 6 HIGH PERFORMANCE (TAC AIR) CRT

TARGET STRENGTH		Effects on US/OPFOR Tgts in CCS or IFS Points (Used Only Without Supplemental Rules)					
		0-5	6-10	11-15	16-20	21-25	26+
DIE ROLL	1	0/0	1/8	1/1	2/2	3/4	4/5
	2	0/0	0/0	2/2	3/3	4/4	5/5
	3	1/0	1/1	0/0	4/0	5/5	6/6
	4	1/2	2/2	3/0	0/0	5/6	6/6
	5	2/2	3/4	4/4	5/5	0/0	6/6
	6	3/3	4/4	5/5	6/6	6/0	0/0

NOTE: Results are applied for each two-aircraft mission. Losses are assessed to target units based upon target unit strength and die roll. Losses are applied to both "hard" and "soft" targets (right to left, both rows on tally sheets). Zero results indicate an aborted mission due to ADA, weather, etc.

Figure 32. TABLE 6.

Air strike effectiveness against targets in built-up areas, forests, and prepared positions is reduced by halving the loss reading of the CRT (round down). (See Tactical Air/Air Defense Supplemental Rules for more detailed treatment.)

ATTACK HELICOPTERS:

Armed helicopters may be employed at any time during the game if they are available. As with other maneuver units, attack helicopters may move their full allowed movement rate or trade off a portion in order to fire. In any case, they must return to the FARRP to rearm and refuel within 3 game turns. In other words, they may be airborne only 1½ hours (3 turns). Attack helicopters have the following options:

ATTACK HELICOPTER OPTIONS

OPTION	TURN 1	TURN 2	TURN 3	TURN 4	TURN 5
1	Move up to ½ MV; arrive at target & engage once at normal effectiveness	Return to FAARP	At FAARP	Available	
2	Move up to ½ MV; arrive at target & engage once at normal effectiveness	Engage once at normal effectiveness	Return to FAARP	At FAARP	Available
3	Move at over ½ to full MV; arrive "on station" and loiter (no engagement)	Engage once at *double target loss	Return to FAARP	At FAARP	Available
4	Move up to ½ MV; arrive "on station" and loiter (no engagement)	Engage twice at *double target loss	Return to FAARP	At FAARP	Available

*Note: Helicopter losses, in DFS points, are *not* doubled.

Figure 33. TABLE 13.

Helicopters armed with the TOW may fire direct up to 3 kilometers, provided targets can be acquired on roads or in open areas (not a fully forested grid square).

Attack helicopter results calculations: Table 7. The attack helicopter CRT reflects losses inflicted by helicopters and attrition suffered by helicopter units from ADA (e.g., a 4/1 result indicates that the target unit is attrited by 4 close combat strength points, and the attacking helicopter unit is attrited by 1 direct fire strength point). Since attack helicopters are assigned 2 DFS per helicopter, a loss of 1 DFS point indicates damage. The helicopter may still fly and engage; however, the loss of 1 additional DFS point will cause loss of the helicopter. (See Tactical Air/Air Defense Supplemental Rules for expanded play.)

TABLE - 7 ATK HELICOPTERS CRT (Tgt Loss/Helicopter DFS Loss)

HELICOPTER DF STRENGTH		TGT CCS STRENGTH LESS THAN 25						TGT CCS STRENGTH 25 OR MORE					
		1-3	4-6	7-9	10-12	13-15	16+	1-3	4-6	7-9	10-12	13-15	16+
DIE ROLL	1	0/0	0/0	1/0	2/1	3/1	0/0	1/0	2/1	2/1	3/1	4/1	5/1
	2	0/1	1/1	2/1	3/1	3/2	4/1	1/0	2/1	2/1	4/2	4/2	5/2
	3	1/0	1/1	2/1	3/2	4/1	5/1	1/2	3/2	4/3	5/3	6/3	7/3
	4	1/1	2/1	2/0	4/1	5/1	5/2	2/2	3/3	4/3	6/4	7/4	8/3
	5	1/0	2/1	3/1	5/2	5/2	6/2	2/2	3/3	4/3	6/4	7/4	8/3
	6	2/1	2/0	3/2	5/1	5/2	6/3	2/3	3/3	5/3	6/4	8/4	8/4

NOTE: This table is applicable to an independent attack helicopter engagement where losses are applied to both the target unit and the helicopter unit. The difference in tables is dependent upon the combat strength of the *target unit*. Losses to target units are both "hard" and "soft" targets (right to left on tally sheet—both rows).

Figure 34. TABLE 7.

EXAMPLE (OPTION 3):

- US uses full movement value allowance to target in turn 1 and loiters without engaging.
- US engages with attack helicopter platoon in turn 2.
- Target CCS is 41.
- Enter right side of Table 7 when target strength is 25 or more.
- Enter 13—15 column since an attack helicopter platoon has DFS of 14.
- A die roll of "1" gives a reading of 4/1. (Since the unit has "loitered" and selected good firing positions, the results are doubled against the target unit.)
- 8 losses against the target and 1 DFS point lost in the attack helicopter platoon.
- Attack helicopters return to FARRP in turn 3.

CLOSE COMBAT RULES

Close combat occurs whenever the defender chooses to remain in position and engage the enemy at ranges 1000 meters or less. This does not imply that a unit accepting close combat is being decisively engaged and thus loses his ability to maneuver. If the attacking player enters a grid adjacent to a defending unit, it is in the defending unit's "zone of control" and *must* engage that unit in close combat unless the defending unit elects to withdraw. Both sides normally suffer heavier casualties and one or the other side will be compelled to yield ground. The following rules only apply to maneuver units. If an attacking maneuver unit enters the zone of control of a nonmaneuver unit, for example an artillery battery, then the artillery battery is ruled ineffective and taken out of play. If detailed Admin and Logistics play is desired, tally sheets are prepared for all units and attrition by weapon's system, support vehicles and squad equivalents is calculated based on the close combat CRT.

PROCEDURES:

Units which move into a grid square adjacent to an OPFOR unit must halt and conduct close combat. More than one unit may be used in close combat; however, each attacking unit must be located in the zone of control of the defender. Defending units must declare intent to withdraw as attacking units enter the zone of control if they wish to avoid close combat. The unit declining close combat, in effect, makes his movement immediately. This unit must move at least two grid squares. If a defending unit accepts close combat in a particular turn, and subsequently expends his combat power prior to the attacker actually engaging in close combat, the defender must engage in close combat the following turn when his combat power is restored.

STRENGTH DETERMINATION:

All attacking units that enter the defender's zone of control will participate in the close combat. All defending units which have attacking units in their zone(s) of control must be attacked. This rule is governed by the intention of the attacker.

EXAMPLE: If the OPFOR commander decides to close assault a single company team position he may do so. Note the overlapping zones of control. US may not add the CCS of the unit at D2 to the CCS of the unit at D1. The unit at D2 may, however, conduct a DF engagement on in-range OPFOR units *prior* to close combat. The OPFOR commander (his option) may choose to conduct two close assaults by splitting his regiment so that the OPFOR battalion at A3 would attack the US mech company at D2.



Figure 35. ATTACKING HINTS.

Defending units may prepare successive or alternate positions for later occupation. The defender must identify such positions and record their location during preparation for play. The scenario determines the number of positions a unit prepares before play begins, (see US Scenario Guide). These positions will double the CCS of the unit occupying them.

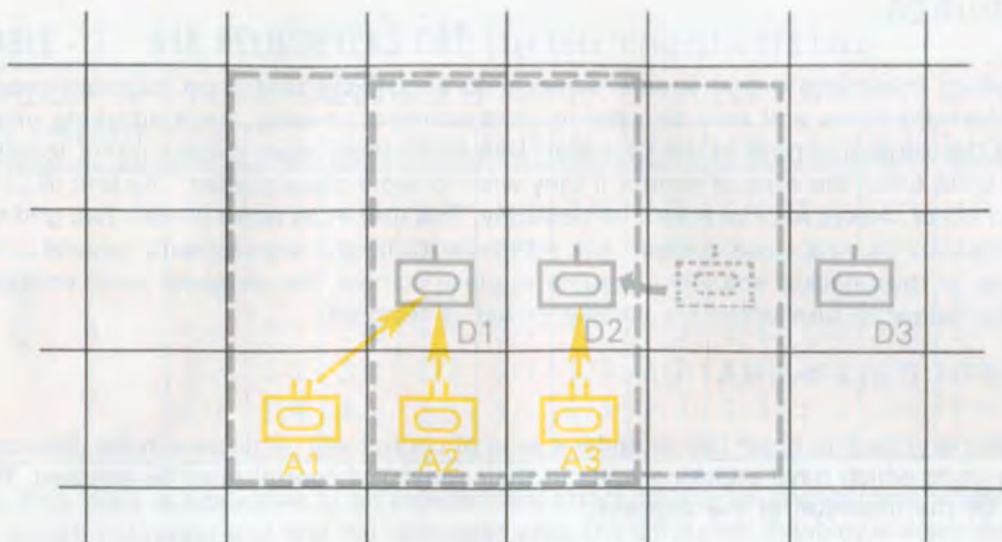


Figure 36. CLOSE COMBAT.

In the above illustration, the OPFOR Commander may conduct close combat against two US companies. (He could have chosen to close assault only the US tank company at D1 with all three battalions, and the US mech company at D2 would be allowed only DF fires prior to close combat.) Since the tank battalion at A3 is engaging the company at D2 in close combat, the CCS of both companies will be totaled separately with supporting artillery for two close combat engagements.

The combat strengths of each defending unit, including artillery, are added into a single defensive value for each close combat engagement. All attacking units participating in the close assault, including artillery, are also combined into a single combat factor. Keep in mind that the Close Combat CRT includes all types of combat that occurs within 1000 meters range, and not necessarily just the final assault to seize an objective.

Defending units may be assisted by FPF from in-range allied artillery unit. The FPF value of an artillery unit is its doubled combat strength (IFS). However, FPFs can only be used for prepared positions (initial or successive). They cannot be used for units in forests or built-up areas who have "attained" prepared position status. For those units which are in hasty positions or have "attained" prepared position status, priority targets may be fired. This will double IFS. FPF or priority target strengths are then added to defensive strength before the computation of combat ratios. When attacking units are supported by artillery in close combat, their IFS is doubled and added to the combat strength of the attacking unit(s) for the computation of ratios. The purpose of this rule is to recognize the increased firepower available from artillery units in direct support. General support, general support reinforcing or reinforcing artillery fires are not doubled unless they are in the fact capable of and do fire FPFs for the units in contact.

Occupation of prepared positions double CCS points. (Real time construction of prepared positions is a minimum of 8 hours.) Hasty positions may achieve prepared position status as discussed below.

Defending maneuver units who have been in their present, hasty, positions for three complete turns without engaging a target reduce vulnerability to all types of weapons systems by $\frac{1}{2}$. Forests and built-up areas also provide sufficient cover and concealment to halve their vulnerability to all types of weapons systems. *Regardless of possible combinations, no defending unit will be allowed triple CCS, or will be able to take 1/3 losses as a result of combat engagements.*

Reinforcement of the attack. OPFOR doctrine calls for the reinforcement of first echelon battalions by the second echelon or reserve battalion, at the option of the attacker, during the conduct of close combat. This may occur *only* when the first echelon battalion is at 70% strength or below. The procedure is as follows: The reinforcing battalion counter is placed on the first echelon battalion counter in the zone of control of the defending unit, provided the reinforcing battalion can move to that location. No more than two battalions may be stacked. Thus, the CCS of the reinforcing unit is added to that of the first-echelon unit. Any attrition resulting must be distributed equally among the units. If the attrition cannot be evenly divided, the first echelon unit will be depleted the greater amount. After the attack, the unit must again occupy separate grid squares.

Attackers CCS is doubled for close combat. This accounts for the ability of the attacker to choose the time and place to maximize his combat power. Attackers that wish to conduct close combat from grid squares containing mines or emplaced obstacles must halt for one complete turn before conducting close combat. During this halt the defender may engage twice using the Direct Fire CRT with the results doubled. This is an exception to the rule that states a unit may not be fired at twice by the same unit while stationary in the same grid. (Note: this rule is not used when playing the Engineer Supplement.) For meeting engagements or hasty attacks that may occur in the covering force area, attackers CCS is *not* doubled.

RESOLUTION OF CLOSE COMBAT:

(See Table 5: Close Combat CRT for all close assault combat).

Results of close combat are determined by a single die roll for each grid square in which a unit is defending.

The **total attacker's strength**, including supporting artillery, is computed as a ratio against the total defender's strength, also including artillery. The die roll result is indexed in the CRT, and the result is a combat strength attrition (e.g., a 3/6 indicates three CCS points lost by the attacker and 6 points lost by the defender). The following is a sample calculation of two attacking battalions supported by three battalions of artillery, against one company defending supported by two batteries of artillery.

ATTACKER		DEFENDER	
Battalion 1 (CCS)	45	Company (CCS)	15
Battalion 2 (CCS)	<u>48</u>	(doubled for prepared	
	93	positions)	<u>X2</u>
(doubled for attack)	<u>X2</u>	Subtotal	30
Subtotal	186	Spt btry #1 FPF (IFS)	6
		(doubled for FPF)	<u>X2</u>
Spt Arty Battalion #1 (IFS)	16	Subtotal	12
Spt Arty Battalion #2 (IFS)	15	Spt btry #2 on/call (IFS)	<u>6</u>
Spt Arty Battalion #3 (IFS)	<u>14</u>	Subtotal	18
Subtotal	45	Total:	48
(doubled for supporting			
close assault	<u>X2</u>		
Subtotal	90		
Total:	276		
Attacker to defender ratio is: 276:48 or 5.25:1.			

Figure 37. SAMPLE ATTACKER TO DEFENDER RATIO.

Enter the column on Close Combat CRT headed 5:1 to 5.99:1 with the resulting die roll. If a "2" is rolled, the attacking units lose 2 CCS points (1 to one battalion and 1 to the other). The defending unit loses 5 CCS points. In the final step, the attacking units withdraw a minimum of two grid squares (note that because a 2 was rolled, this was an unsuccessful attack).

The Close Combat CRT indicates whether the attack was successful or unsuccessful. If the attack is successful, the defending units are required to withdraw at least two grid squares immediately and may move up to half its movement value. It may not move again until the next turn. Successful assaulting units must occupy the grid square formerly defended with one of the assaulting units for one complete turn following close combat. If unsuccessful, assaulting units must withdraw two grid squares immediately. Such retreated units may move only half its movement value during the next turn.

TABLE - 5 CLOSE COMBAT CRT

ATKR to DFNDR Strength Ratios	1-4 to 1-3.01	1-3 to 1-2.01	1-2 to 1-1.01	1-1 to 1.99-1	2-1 to 2.99-1	3-1 to 3.99-1	4-1 to 4.99-1	5-1 to 5.99-1	6-1 to 6.99-1	7-1 or Better
DIE ROLL										
1	1/0	1/0	6/3	5/1	5/3	4/3	3/4	3/5	3/6	2/6
2	2/0	2/0	2/1	3/1	3/2	4/4	3/5	2/5	3/3	3/6
3	3/0	3/0	3/1	4/1	3/3	3/4	2/5	3/5	2/5	1/5
4	4/0	4/1	4/2	4/2	3/4	2/4	3/5	2/5	2/6	0/4
5	5/1	4/2	4/3	4/3	4/5	3/4	2/4	2/5	1/5	0/5
6	6/2	6/3	5/3	3/2	3/3	2/3	1/3	1/4	0/4	0/6
UNSUCCESSFUL ATTACK				SUCCESSFUL ATTACK						

NOTE: In addition to allocating combat losses to both the attacker and defender, the roll of the die also determines whether the attack was successful or unsuccessful, per the solid "ladder" line. Ratios are determined by comparing total attacker strength to total defender strength and then applying this ratio to the appropriate column. Results are applied to both "hard" and "soft" targets.

Figure 38. TABLE 5.

TALLY SHEETS.

KEY: ☐ TANK & CREW

APC

APC W/TOW

APC SCOUT

DES DIRECT FIRE STRENGTH

CCS CLOSE COMBAT STRENGTH

ARTILLERY UNITS IN SUPPORT

8/1-760 (155 SP)

C/1-760 (155 SP)

A/2.769 (8IN SP)

OTHER UNITS IN SUPPORT

ATK HELICOPTER PLATOON

CLOSE AIR SUPPORT MISSIONS

TALLY SHEET INSTRUCTIONS

DFS--NUMBER OF COLUMNS WHICH CONTAIN
⊗ OR ⊠ SYMBOLS

CCS—NUMBER OF SYMBOLS REMAINING (TOW
COUNTS 1/4 VALUE).

CASUALTY ASSESSMENT PROCEDURES

DF—DEDUCT FROM RIGHT TO LEFT BY SPECIFIED CATEGORY [I.E., ATK HELICOPTER PLATOON EITHER 11 OR 0 AT FIRER'S CHOICE].

CCS-DEDUCT FROM TOP TO BOTTOM AND
RIGHT TO LEFT

IF—DEDUCT FROM BOTTOM ROW UNTIL
DEPLETED, THEN TOP ROW (BASED
UPON ATTRITION OF 1 PER 20 TANKS)

INSTRUCTIONAL SET

BLUE TROOP LIST AND TALLY SHEET

MECH TEAM — TK HVY [A/1-68 MECH]									BEGINNING DFS 12 CCS 15											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
TANKS	□	□	□		□	□	□	□		□	□	□								
TOWS APC'S		◇		◇					◇			◇								

MECH TEAM — MECH HVY (B/1-68 MECH)										BEGINNING DFS 11 CCS 16										
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
TANKS	□		□		□		□		□											
TOWS APC'S	◇	◇		◇	◇		◇		◇		◇	◇								

ARMORED CAVALRY TROOP (A/1-25 CAV)											BEGINNING DFS 18 CCS 21									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
TANKS	□		□		□	□		□		□	□		□		□	□	□	□		
TOWS APC'S		◇		◇			◇		◇			◇		◇						

NOTE: 81mm & 4.2in MORTAR STRENGTH IS FACTORED INTO CCS OF UNITS

Figure 39. SAMPLE TALLY SHEET.

- # BATTLE

UNIT EFFECTIVENESS.

When OPFOR units are depleted to less than 30 percent or US units are depleted to less than 40 percent of their original CCS, their remaining combat value must be removed and the unit symbol recorded as destroyed and removed from the gameboard. (See *Optional Rules* for more detailed treatment.)

AIR DEFENSE WEAPONS EFFECTS.

Air defense weapons effects are already incorporated into the CRT results for tactical air strikes and attack helicopters. (See *Air Battle Supplement* for more detailed simulation.)

INTELLIGENCE PLAY.

This discussion covers only those aspects of intelligence play required for Open Mode play. Additional rules and requirements can be found in the *Intelligence Supplement* and *Optional Rules*. These rules may be expanded for Closed Mode or CPX play.

The requirements for spotting were outlined at the beginning of Section II. When a unit is spotted (by shooting or moving) the counter is flipped up to reveal the type unit (diagram). Although the unit identification is revealed, e.g., "1-3 Tank Battalion," only the fact that it is a tank battalion may be reported at ranges greater than 1,000 meters. Once the attacking counter enters the zone of control and participates in close combat, specific unit ID may be made. Obviously when a unit (counter) cannot be spotted, the blank side of the counter will face the opponent. The exception to this is for artillery counters which are flipped and turned per mission.

Dummy counters (blanks) may be placed on the battle boards to deceive the opposing player. However, dummy counters must be removed when they are spotted.

SUMMARY

Insure that you understand these Basic Rules and Section I of the booklet. You will have the opportunity to reinforce your knowledge with the use of the Instructional Set and the TV tape.

The Basic Rules are designed to give you the fundamental rules to be applied to an Open Mode Exercise as part of controller training. Do not study the Optional Rules until you have completed training with the Basic Rules. Section IV provides some abbreviated rules and guidelines that should provide a good summary and review of the Basic Rules. Section V provides a discussion of the tally sheets included in **FIRST BATTLE**.

OPTIONAL RULES

section 3

GENERAL

The Optional Rules increase resolution and capabilities of the system and are designed for more sophisticated play. They may be used with any or all of the Supplements to **FIRST BATTLE**. A word of caution—DO NOT attempt to use any of these rules until you have mastered the Basic Rules. You must be able to operate in *less* than 30 minute game turns with the *Basic Rules* before using the *Optional Rules*. The rules described in this section will increase the number of assessment routines and increase the time it takes to complete a game turn. Therefore, you must be proficient with all manipulations in order to maintain the 30 minute actual time simulation.

ARTILLERY IN A DIRECT FIRE ROLE AND SMOKE

DF ARTILLERY

Artillery may be used in a DF role when an attacking OPFOR unit is within DF range or enters the zone of control of the artillery counter. Each tube with a DF capability may count as .5 CCS/DFS points. The Direct Fire CRT (Table 4) or Close Combat CRT (Table 5) will be used. Losses to the artillery unit will be a direct reading from either table but will be in Indirect Fire Strength points. (Vulcan and other DF capable air defense weapon systems may be awarded .5 DFS/CCS per firing unit.)

EXAMPLE:

A US 155 (SP) battery has an IFS of 6 and a DFS of 3. It engages a target beyond 1000 meters which stops to return fire. Enter the right side of Table 4 in the 1-5 column. A die roll of "6" produces 3 losses on the target and 1 IFS lost by the 155 (SP) battery. The US battery displaces. It now has an IFS of 5 (5 tubes) and a DFS/CCS of 2.5 or 2 (round down).

TABLE - 4 DIRECT FIRE CRT

DFS of Firing Unit	Unit Continues to Move/Returns Fire					Target Unit Stops—Returns Fire (Target Losses/Defending Unit Losses)				
	1-5	6-10	11-15	16-20	21+	1-5	6-10	11-15	16-20	21+
4	1	1	2	3	4	2/1	2/1	3/1	4/1	5/2
5	1	2	3	4/1	4/1	2/1	3/1	4/2	5/3	6/3
6	2	3	4/1	4/1	5/2	3/1	4/2	5/3	6/3	6/4

Figure 40. TABLE 4.

In the example above, the artillery unit could have been used in a DF role in close combat, and its CCS points of 3 used alone or as part of a total Close Combat Strength. If the attack was successful (in any case) the artillery counter would then be assumed to be overrun and destroyed; and, removed from play.

SMOKE

Smoke is considered in visibility and all weapon system effects in the CRTs. Use of smoke for special operations may be ruled on by the senior controller. The following represents an optional mode of employment:

Artillery units may shoot one smoke mission, but no other types of missions, in a single turn.

Smoke coverage remains for one turn to preclude spotting unless refired in subsequent turns.

1 grid = 1 battery smoke mission
3 grids = 1 battalion smoke mission

DIRECT FIRE AND FLANK SHOTS.

A flank shot must reflect proper execution of tactics and should be *ruled on by the Battle Board Umpire*. Execution of a flank shot simulates the best possible use of terrain, movement, and ability to direct the majority of a unit's weapon systems against a target. Accordingly, flank shots by maneuver units will double the attrition on a target, and permit the simulation of battle areas, battle positions and "kill zones." Flank shots by attack helicopters, artillery, etc. will be handled as normal missions—attrition will not be doubled.

UNIT EFFECTIVENESS AND RECONSTITUTION.

In addition to the stacking rule for OPFOR battalions, the following may be applied for either side when units reach 30% (OPFOR) and 40% (US):

LIKE UNITS

Units may join with like units provided that they combine combat strength in the same location and real time movement values (MV) are used.

PULLING UNITS

Units may be pulled back off line, using real time movement, to the rear where they are reconstituted at a rate of 5% applied each 6 hours (20% for a 24 hour period).

COMMANDERS

Commanders may pull units off line prior to reaching 30 or 40 percent in order to reconstitute combat strength.

NOTE: *Reconstitution rate for US is used only when the Logistics Supplement is not being used.*

RECONNAISSANCE UNIT PLAY.

The play of reconnaissance units is not included in the basic rules since they make play a little more complex for the beginner, but they aid greatly in adding realism. If reconnaissance units are played, the following rules should apply to Air Cavalry troops, Armored Cavalry troops, US reconnaissance platoons, and OPFOR reconnaissance companies and battalions. These units operate over widely dispersed frontages.

GROUND RECONNAISSANCE UNITS.

The grids in which these counters are employed mark only the center of mass of the unit. The zones of control of these units extend *two* grids out from the grid in which the marker is located, *if the units have been stationary one turn*. When reconnaissance units are moving, their zones of control are the adjacent grids only, as with any other type of units. Whichever zone of control applies, normal or extended, *a reconnaissance unit can spot exposed or moving targets from any point within its zone of control* out to 3000 meters line-of-sight. Within its zone of control, *a recon unit can spot concealed positions, locate minefields and other obstacles* (but it cannot clear them without assistance), and can either report its findings or call in indirect fires. Reconnaissance units may be attacked by fires only if the unit (counter) can be spotted. But defending units can become engaged in close combat if the attacker enters the adjacent grid, as with other types of maneuver units. In *all* ways *not* specified above, reconnaissance units behave as other maneuver units.

AIR CAVALRY UNITS.

The simulation of air cavalry units is difficult because of the varied modes of operation in use, the transitional nature of air cavalry doctrine and the prospect of TOE changes. Thus, the procedure outlined here should be considered a start point for local modification. Air cavalry units employ teams of scouts and attack helicopters to survey wide areas. They can gather detailed intelligence from areas which they overfly—their overflight zone—and can gather general, less detailed, intelligence on any activity they can spot from their overflight zone. The overflight zone in this simulation procedure is 3 grids wide and 15 grids long. The unit counter is in the center of mass of this zone. This zone can be represented by a gridded piece of acetate with the air cav troop symbol in its center. This piece of acetate also includes a representation of that unit's observation zone, in which it can spot targets. Any grid which is even partially included in this zone is considered under observation regardless of line-of-sight. Within its over-flight zone an air cavalry unit can gather intelligence on emplaced obstacles and within its observation zone can spot targets for artillery, attack helicopters, or intelligence purposes. Employed in this fashion, the air cavalry troop is not subject to attrition in this simulation.

Some air cavalry unit TOEs now include an attack helicopter platoon. If such a unit is to be represented, then that platoon can be employed as any other attack helicopter platoon and can then be played with an attack helicopter platoon counter available in the game set. The air cavalry troop represented in this simulation is assumed to be able to maintain its operations on a sustained basis during daylight hours. It can move its overflight zone 10 km every turn if it so desires.

COUNTERATTACK WITH US FORCES.

This may be facilitated with the following procedures. It should be noted that an offensive scenario may be simulated using these rules. Ideally, a US offensive scenario would incorporate the use of battalion counters for US and company counters for OPFOR. However, experience during field evaluation of **FIRST BATTLE** has indicated that the use of company size counters for US will suffice. This has provided flexibility to switch from defensive to offensive scenarios during command post exercises without having to increase the number of player/controllers for the OPFOR to handle an inordinate number of company size counters and multiple engagements. Further, exercise time was not used to prepare additional counters or replace existing counters on the Battle Boards.

COUNTERATTACK

When US has a tactically sound opportunity to conduct a counterattack against OPFOR units, the offensive/defensive roles of both are essentially reversed. (Controller/umpire arbitrates on soundness if disputed.)

FORCE STRUCTURE:

- OPFOR battalion counters are assumed to occupy two grids instead of one; OPFOR choice of location. CCS is computed for half the battalion (one grid attacked by US) only. The remaining half may engage with direct fire only as US moves, if OPFOR has not expended his DF capability, and all other DF rules apply. The half battalion being close assaulted may also use DF again against the counterattacking US unit.

NOTE: OPFOR units must assume a defensive posture when counterattacked by US. In so doing, OPFOR must reposition its battalion counters so that there is a minimum of 1 grid separation between units.

- If the OPFOR battalion defense is successful, the unit remains in position for the remainder of the turn in which the close assault was conducted and for one additional turn. OPFOR may then resume the offensive, if tactically sound, as a full battalion occupying one grid.
- If the attack on OPFOR was successful, the US battalion occupies one of the grids vacated by OPFOR, (attackers choice) and OPFOR must withdraw two grids. All units of the OPFOR battalion must withdraw to adjacent grids.
- The US force may stack four companies plus reinforcements (and combined or reformed units), as does OPFOR in an attack role. The US force must have sufficient movement value to occupy the grid vacated by OPFOR, if successful. If not, the attack (close combat) is assessed the next game turn.
- If US is successful, he occupies the grid in the same turn and remains in the stacked configuration until a defensive mission is again announced.
- If US is unsuccessful, he must withdraw two grids, regardless of previous movement values used.

GENERAL:

- The US force must announce at the beginning of the turn his intent to counterattack. If approved by the battle board controller, US executes his attack at the beginning of the turn as does OPFOR while attacking. (Essentially, roles of attacker and defender are reversed. CRTs are read with US as attacker, and OPFOR as defender.)
- Multiple battalion counterattacks are resolved one at a time and the actions between attacker and defender are kept as discrete as possible. Capabilities of units for each turn cannot be exceeded.
- When questions arise, the player-controllers should use the normal OPFOR rules applied to US units, and vice-versa. Controllers should assist in each of these type engagements and rulings made are final.
- When units of either side are stacked in one grid, losses are applied equally to all units in the grid.

HEADQUARTERS ATTRITION.

If it is desired to play headquarters of maneuver and combat support units, these optional rules will expand play. This may be used with or without the Electronic Warfare Supplement, and should *not* be used with the Logistics Supplement.

PREPARATION OF TALLY SHEETS

Unit headquarters are represented on the optional tally sheets in the soft target row. Personnel in the headquarters are indicated by a circle (○) representing 10 personnel and associated weapons (squad equivalent). When using the Admin Supplement headquarters units are attrited by crossing out squad equivalents in the normal manner, one for each combat strength point lost. The number of personnel casualties are then determined using appropriate tables from the Admin Supplement.

PROCEDURE.

For all engagements except Close Combat: (See Table 14).

Die Roll	Damage/ Disruption	Effect on HQs	Effect on Subordinate Units	Remarks
1-3	Light	Lose 1/2 MV next turn	Lose 1/2 MV next turn	No cumulative effect.
4-5	Medium	Lose 1/2 MV next 2 turns	Lose 1/2 MV next 2 turns	Cumulative ef- fect if attacked next two turns and die roll is "4" or "5" for those two turns; last roll would have ef- fect of a roll of "6"; has re- stored 2 turns following at- tack.
6	Total	Lose all MV Counter re- moved from play	Lose all MV next turn; 1/2 MV following turn; 1/3 off combat strength (DFS, CCS, IFS) next turn.	Headquarters restored 2 turns following attack.

For Close Combat—maneuver unit in "zone of control".

1-2	Light	Lose 1/2 MV next turn	Lose 1/2 MV next turn	No cumulative effect.
3-6	Total	Lose all MV Counter re- moved from play.	Lose all MV next turn; 1/2 MV following turn; 1/3 off combat strength (DFS, CCS, IFS) next turn.	Headquarters restored 2 turns following attack.

Figure 41. TABLE 14.

Assessment of Personnel and Equipment Losses may be simulated using Table 15. Levels of personnel and vehicles must be known prior to game play for each type of headquarters represented.

HEADQUARTERS, PERSONNEL AND EQUIPMENT LOSSES

DIE ROLL

1	Multiply .07 x number of personnel and vehicles in headquarters.
2	" .06 " " " "
3	" .05 " " " "
4	" .04 " " " "
5	" .03 " " " "
6	" .02 " " " "

*Note: Do not use this table if the Admin Supplementary Rules are being used.

Figure 42. TABLE 15.

ABBREVIATED RULES AND GUIDELINES



SPOTTING/ACQUIRING

- Spotting and acquiring require line-of sight within 3,000 meters and OPFOR in suitable terrain.
- When measuring grid squares diagonally, or other than straight North-South or East-West measurements, measure 3,000 meters from center of grid square to center of grid square for spotting and acquiring. (A helpful tool is a 3" × 5" card cut to 3,000 meter map scale.)
- Movement of units is counted by grid squares, whether diagonally or N-S, E-W.
- Units in prepared positions may spot from any adjacent grid square.

INDIRECT FIRE

- Towed artillery may either shoot or move in a turn—not both.
- A scheduled initial prep, FPF, rolling barrage, or priority target have double IFS.
- FPF is applicable to prepared positions only and not positions that have attained "prepared position status" (i.e., in towns, forests, or remained in place three turns without engagement).

DIRECT FIRE

- Direct fire engagements are conducted at two to three kilometers, provided the target can be acquired. Limit: 2 per unit/turn (limited by movement); one may be close combat.
- A unit in direct fire range can be fired upon by as many units that can acquire the unit as it continues to move. If it stops to return accurate fire, it forfeits the remainder of the movement value for that turn.

CLOSE COMBAT

- Close combat is mandatory when an opponent maneuvers into an adjacent grid square, unless the defender declines to accept an assault and withdraws.
- When counting grids for maneuver, counters may move diagonally, from grid to grid. Any diagonal movement is measured the same as from east to west or from north to south. Obviously, measurements on the diagonal are more distant than E-W or N-S. For this low resolution system, however, where grids (1000m increments) are counted, the difference between diagonal or straight movement is not taken into account for each move. The difference is included into the overall average.
- An attacking unit may have to "pay the price" from direct fire as they maneuver into an adjacent grid square. However, once the close combat has been resolved, the unit that must withdraw will not be fired upon by direct fire as he moves back (withdraw without further losses).
- If a maneuver unit moves into a grid square adjacent to an opposing artillery unit, the artillery unit is considered destroyed and eliminated from play.
- An obstacle, once passed (either river or man-made) has no effect on subsequent units.

AIR

- Attack helicopter and tactical air missions are computed separately. They can be used against units in a grid square adjacent to a unit defending against close combat but their strengths cannot be included when compiling CCS.
- Tactical air must be scheduled prior to game play as "pre-plans", but may be committed during play "as immediates" against spotted targets (can be applied to any unit within a radius of 3 kilometers from target grid requested).

COMBAT RESOLUTION

- The effects of engagements by any weapon system are halved if the defender is in a prepared position or a hasty position in forest/built-up area, or, he has been in a hasty position for at least three consecutive turns without firing or moving or OPFOR contact.
- Combat losses are doubled when attacking, by any means, a unit which has encountered an obstacle (including unfordable river).
- Prepared position status means doubling CCS and halving the effects of indirect fire and direct fire engagements, attack helicopters and airstrikes.

● Combat Strengths:

In computing close combat strength (CCS), both sides should add supporting artillery (IFS). Multiple maneuver units may also be involved in close combat (provided they all maneuver into the zone of control). In this case, the "assault" would wait until all attacking units are in position. (NOTE: At this time the defender may choose to withdraw.)

Combat power for close combat will be declared by opposing players at the same time; thereafter it will not be changed.

A first-echelon battalion attrited below 70 percent of its CCS may be reinforced by only one second-echelon or reserve battalion for a close assault (i.e., stacking).

Ineffective units are those at less than 40 percent of their CCS or IFS for the US, less than 30 percent CCS or IFS for OPFOR.

● Tally Sheets:

In working with tally sheets, be aware that losses are compiled against two types of targets, "hard" targets (tanks) and "soft" targets (personnel carriers). Sheridans, PT 76s, BMPs, BRDMs, etc. are soft targets.

In the case of a close combat, a tactical air attack, and an attack helicopter mission, combat losses are assessed against both hard and soft targets—on the tally sheet, from right to left, top to bottom.

In the case of a direct fire engagement (and return fire), combat losses are assessed against either hard or soft targets—as designated by the firer.

In the case of an independent artillery mission, losses are assessed against soft targets first—from right to left on the bottom row of the tally sheets; when 20 soft targets have been destroyed, you may attrit one tank. This means, you must get 20 cumulative CCS points before a tank is a loss, then the process starts over again. When attritting pure tank units use the same type process. Once you have a cumulative total of 20 CCS points by artillery fire, strike off one tank.

In the case of US targets, note that a TOW weapons system counts as one-half value for CCS.

● Optional Tally Sheets are designed to expand play.

Optional Form (All Units).

This tally sheet will handle any company size unit or headquarters and should only be used with the Logistics Supplement. Provisions are added to handle consumption of POL, ammunition expenditures, and losses of vehicles, weapons and equipment other than major maneuver weapon systems. Units may cover these tally sheets with acetate to make booklets for brigades or battalions. Examples and instructions are found in Section V.

Optional Tally Sheets for OPFOR forces are in the same configuration as in the kit scenario except that blanks are furnished to allow the user to "personalize" the OPFOR for any scenario. Examples are found in Section V.

Light infantry units may be played using the optional tally sheet. Combat points are allocated based on squad equivalents and indicated on the tally sheet by a circle (one point per squad equivalent) in the soft target row. Tows are also indicated on the sheet in the normal manner. Units are then attrited in the standard manner, right to left, top to bottom. Once attrition data has been noted on the tally sheet, the operations NCO will inform the Admin Player/Controller, who will then translate combat points lost into personnel losses by grade and MOS (see Admin Supplement Rules).

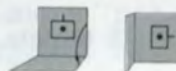
MISCELLANEOUS

- The air cavalry troop will be played as a normal maneuver unit, except that its combat power will be recorded on the counter and it will only be used for direct fire engagements. Rearm and refueling requirements have been incorporated into its beginning combat strength and the troop will be authorized one direct fire engagement per turn. It can also be maneuvered to spot targets for indirect engagements.
- Sometimes it becomes difficult to keep track of the status of your unit counters (i.e., which have moved? which have fired?). Therefore, the following techniques are recommended.

When a unit counter has finished his movement for a turn (and all combat engagements), turn the counter over like a tent.



When an artillery unit has fired one mission, flip the counter up to reveal unit identification. After it has fired its second mission for that turn, turn it on its side.



When the last mission is complete turn the counter over like a tent.



TALLY SHEETS




section 5

GENERAL






This section provides illustrations of OPFOR and US tally sheets for *optional* play. Sample OPFOR tally sheets are included for primary OPFOR maneuver elements and should suffice for most scenarios. Blank OPFOR tally sheets are provided in the kit so that the OPFOR can be tasked organized as desired. (The sample OPFOR tally sheets can be used as guides for completing the blank tally sheets.)

US tally sheets for optional play use a somewhat different format than those for OPFOR because they (US tally sheets) must be compatible with the simulation of administration and logistics functions. The detail with which the US tally sheets are prepared will vary with the scope of the exercise and the admin/log play. For example, if it is desired to "track" only the maneuver units and the major weapons systems (tanks, TOWs and APCs), then the tally sheets will be fairly simple, similar to those provided for in the **FIRST BATTLE** "kit scenario." On the other hand, if it is desired to simulate and track the combat support and combat service support units and their associated equipment, then the tally sheets become inherently more complex in order to portray the various items of equipment available in those units.

Detailed instructions for the preparation of tally sheets are found on the *Annotated Tally Sheet* folder included with the kit. These instructions will not be repeated here; however, a few sample US and OPFOR tally sheets are included as examples with appropriate explanatory notes.

Maneuver unit tally sheets similar to those used for the kit scenario employ a simple legend for tanks (), TOWs () and APCs (). Tally sheets prepared for combat service support units will require some sort of legend or similar system to identify vehicles or major items of equipment. The system employed on the sample US tally sheets uses a *non-standard legend*. Users are encouraged to develop other legends or similar systems if desired to support their own needs or requirements.

The non-standard legend used in the sample US tally sheets is as follows:

-  Tank/Armored Recovery Vehicle
-  Other tracked vehicles
-  SP Artillery
-  trucks/Wheeled Vehicles
-  Dismounted Personnel (squad equivalent)

DIRECT FIRE STRENGTH (DFS):

CLOSE COMBAT STRENGTH (CCS).

Sum the tanks, one-half the TOWs and the greater of either APCs or squad equivalents. For CSS or other rear area units, you may use *one-half* the number of squad equivalents. (If the weapons organic to the 10 man squad equivalent do not reasonably equate to one-half of an infantry squad slice of combat power, the player/controller may subsequently raise or lower this proportion.) A squad equivalent is assumed to be that number of soldiers, with associated weapons, equivalent to the combat strength of an infantry squad. For purposes of preparing tally sheets for CCS and other rear area units, a squad equivalent is assumed to be 10 soldiers.

OPFOR TALLY SHEET

TANK (-) (RES) REGT MTR DIV

1st Bn (FIRST ECHELON)

COMBAT STRENGTH	DFS 21								CCS 31																									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	
TANKS	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H													
BMP'S																																		

2nd Bn (FIRST ECHELON)

COMBAT STRENGTH	DFS 33								CCS 50																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
TANKS	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
BMP'S																																	

3rd Bn (SECOND ECHELON)

COMBAT STRENGTH	DFS							CCS																											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33		
TANKS																																			
	(DETACHED TO 1 ST ECH REGTS)																																		
BMP'S																																			

(DETACHED TO 1ST ECH REGTS)

4th Bn (RES)

COMBAT STRENGTH	DFS								CCS																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
TANKS																																	
	(DETACHED TO 1 ST ECH REGTS)																																
BMP'S																																	

(DETACHED TO 1ST ECH REGTS)

RECON CO

COMBAT STRENGTH		DFS 2								CCS 3																								
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
PT 76s																																		
BRDMS		◆	◆																															

OPFOR TALLY SHEET

CO
1st Bn (FIRST ECHELON)

RECON BN REGT MRD DIV

COMBAT STRENGTH	DFS 4				CCS 7																																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33				
TANKS	H	H																																			
	H																																				
BMP'S	5	5	5	5																																	

CO
2nd Bn (FIRST ECHELON)

COMBAT STRENGTH	DFS 4					CCS 7																																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33					
TANKS	H	H																																				
BMP'S	3	5	5	5																																		

CO
3rd Bn (SECOND ECHELON)

COMBAT STRENGTH	DFS 4				CCS 7																																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33				
TANKS	H	H																																			
BMP'S	5	5	5	5																																	

4th Bn (RES)

COMBAT STRENGTH	DFS				CCS																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33			
TANKS																																				
BMP'S																																				

RECON CO

COMBAT STRENGTH	DFS				CCS																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33			
PT 76s																																				
BRDMS																																				

OPFOR TALLY SHEET

TANK (1ST ECH REINF) REGT TANK DIV

1st Bn (FIRST ECHELON)

COMBAT STRENGTH	DFS 27									CCS 41																												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33					
TANKS			H	H	H	H	H	H			H	H	H	H	H	H			H	H	H	H	H	H	H	H	H											
			H		H		H	H			H		H	H	H	H			H		H	H	H		H	H	H											
BMP'S	◆ ◆	◆							◆ ◆	◆							◆ ◆	◆										◆										

2nd Bn (FIRST ECHELON)

COMBAT STRENGTH	DFS 27										CCS 41																										
TANKS	H	H	H	H	H			H	H	H	H	H	H	H	H			H	H	H	H	H	H														
BMP'S							◇	◇								◇	◇			◇			◇	◇													

3rd Bn (SECOND ECHELON)

COMBAT STRENGTH	DFS 14														CCS 21																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33		
TANKS	H	H	H	H	H	H	H	H	H	H	H	H	H	H																					
	H	H	H	H	H	H	H	H	H	H	H	H	H	H																					
BMP'S																																			

4th Bn (RES)

COMBAT STRENGTH	DFS 14										CCS 21																										
TANKS			H	H	H	H	H		H	H																											
BMP'S	◇	◇						◇	◇			◇	◇	◇																							

RECON CO

COMBAT STRENGTH		DFS 2										CCS 3																										
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33				
PT 76s																																						
BRDMS		2	5																																			
		9																																				

OPFOR TALLY SHEET

TANK (2^o ECH) REGT TANK DIV

1st Bn (FIRST ECHELON)

COMBAT STRENGTH	DFS 21										CCS 31																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
TANKS	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H												
BMP'S																																	

2nd Bn (FIRST ECHELON)

COMBAT STRENGTH	DFS 21										CCS 31																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
TANKS	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H													
BMP'S																																	

3rd Bn (SECOND ECHELON)

COMBAT STRENGTH	DFS 21										CCS 31																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
TANKS	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H													
BMP'S																																	

4th Bn (RES)

COMBAT STRENGTH	DFS										CCS																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
TANKS																																	
BMP'S																																	

RECON CO

COMBAT STRENGTH	DFS 2										CCS 3																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
PT 76s																																	
BRDMS	◇	◇																															

REGT TANK DIV

[illegible]

21	22	23	24	25	26	27	28	29	30	31	32	33
H	H	H	H									
H	H	H										
			⬆									

100

[illegible]

A horizontal number line with 10 equal intervals, labeled from 0 to 10.

[illegible][illegible]

SAMPLE US TALLY SHEETS (OPTIONAL)

The sample tally sheets presented here are examples of tally sheets prepared for light infantry, combat support and combat service support units. They are based on current MTOE's w/changes.

COMPANY TEAM TALLY SHEET

UNIT DESIGNATION LT INF CO

*CURRENT
CLOSE CBT STRENGTH %

DFS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CCS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
SOFT TANKS (HARD) TOWS																							
VEHICLES MECH (SOFT)																							
HEADQUARTERS & SUPPORT (SOFT)																							
PERSONNEL	0	0	0	0		0	0	0	0		0	0		0	0	0	0	0	0				

UNIT IS INEFFECTIVE AT 40%

UNIT OPTIONAL INFORMATION FOR CPX SIMULATION

	DESIGNATION	# VEHICLES/PERSONNEL
1. UNITS ATTACHED (OPCON, ETC):	_____	_____
2. UNITS DETACHED (OPCON, ETC):	_____	_____
*3. DIRECT FIRE ENGAGEMENTS THIS TURN:	_____	LAST TURN: _____
*4. CLOSE COMBAT ENGAGEMENT THIS TURN:	_____	LAST TURN: _____
*5. KILOMETERS MOVED THIS TURN:	_____	LAST TURN: _____

*NOTE: USE THE ABOVE OPTIONAL INFORMATION TO COMPLETE THE BATTLE BOARD WORKSHEET FOR TRANSMITTAL TO THE LOGISTICS PLAYER/CONTROLLER. FORWARD EQUIPMENT ASSET CARDS FOR ALL VEHICLES HIT TO THE ADMIN P/C AT THE END OF EACH TURN.

FIRST BATTLE, OPTIONAL FORM 1 (29) C
GTA 71-2-3

COMPANY TEAM TALLY SHEET

UNIT DESIGNATION MECH DIV HHC

*CURRENT
CLOSE CBT STRENGTH %

DFS <u>NONE</u>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CCS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
TANKS (HARD)																							
MECH (SOFT) & VEHICLES	□	□	□	◇	□	□	□	□	□	□	□	◇	□	□									
HEADQUARTERS & SUPPORT (SOFT)	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□					
PERSONNEL	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○					

UNIT IS INEFFECTIVE AT 40%

UNIT OPTIONAL INFORMATION FOR CPX SIMULATION

	DESIGNATION	# VEHICLES/PERSONNEL
1. UNITS ATTACHED (OPCON, ETC):	_____	_____
2. UNITS DETACHED (OPCON, ETC):	_____	_____
*3. DIRECT FIRE ENGAGEMENTS THIS TURN: _____ LAST TURN: _____		
*4. CLOSE COMBAT ENGAGEMENT THIS TURN: _____ LAST TURN: _____		
*5. KILOMETERS MOVED THIS TURN: _____ LAST TURN: _____		
<p>*NOTE: USE THE ABOVE OPTIONAL INFORMATION TO COMPLETE THE BATTLE BOARD WORKSHEET FOR TRANSMITTAL TO THE LOGISTICS PLAYER/CONTROLLER. FORWARD EQUIPMENT ASSET CARDS FOR ALL VEHICLES HIT TO THE ADMIN P/C AT THE END OF EACH TURN.</p>		

FIRST BATTLE, OPTIONAL FORM 1 (29) C
GTA 71-2-3

COMPANY TEAM TALLY SHEET

UNIT DESIGNATION BRIDGE CO

*CURRENT

CLOSE CBT STRENGTH %

DFS NONE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CCS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
TANKS (HARD)																							
VEHICLES MECH (SOFT)	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
HEADQUARTERS & SUPPORT (SOFT)																							
PERSONNEL	○	○	○	○	○		○	○	○	○	○		○	○	○	○	○		○	○	○	○	○

UNIT IS INEFFECTIVE AT 40%

UNIT OPTIONAL INFORMATION FOR CPX SIMULATION

	DESIGNATION	# VEHICLES/PERSONNEL
1. UNITS ATTACHED (OPCON, ETC):	_____	_____
2. UNITS DETACHED (OPCON, ETC):	_____	_____
*3. DIRECT FIRE ENGAGEMENTS THIS TURN:	_____	LAST TURN: _____
*4. CLOSE COMBAT ENGAGEMENT THIS TURN:	_____	LAST TURN: _____
*5. KILOMETERS MOVED THIS TURN:	_____	LAST TURN: _____
<p>*NOTE: USE THE ABOVE OPTIONAL INFORMATION TO COMPLETE THE BATTLE BOARD WORKSHEET FOR TRANSMITTAL TO THE LOGISTICS PLAYER/CONTROLLER. FORWARD EQUIPMENT ASSET CARDS FOR ALL VEHICLES HIT TO THE ADMIN P/C AT THE END OF EACH TURN.</p>		

FIRST BATTLE, OPTIONAL FORM 1 (29) C
GTA 71-2-3

BATTLE

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GTA 71-2-3

COMPANY TEAM TALLY SHEET

UNIT DESIGNATION MP CO

*CURRENT
CLOSE CBT STRENGTH %

DFS NONE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CCS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
TANKS (HARD)																							
VEHICLES MECH (SOFT)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
VEHICLES HEADQUARTERS & (SOFT)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐			
SUPPORT (SOFT)																							
PERSONNEL	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				

UNIT IS INEFFECTIVE AT 40%

UNIT OPTIONAL INFORMATION FOR CPX SIMULATION

	DESIGNATION	# VEHICLES/PERSONNEL
1. UNITS ATTACHED (OPCON, ETC):	_____	_____
2. UNITS DETACHED (OPCON, ETC):	_____	_____
*3. DIRECT FIRE ENGAGEMENTS THIS TURN:	_____	LAST TURN: _____
*4. CLOSE COMBAT ENGAGEMENT THIS TURN:	_____	LAST TURN: _____
*5. KILOMETERS MOVED THIS TURN:	_____	LAST TURN: _____
<p>*NOTE: USE THE ABOVE OPTIONAL INFORMATION TO COMPLETE THE BATTLE BOARD WORKSHEET FOR TRANSMITTAL TO THE LOGISTICS PLAYER/CONTROLLER. FORWARD EQUIPMENT ASSET CARDS FOR ALL VEHICLES HIT TO THE ADMIN P/C AT THE END OF EACH TURN.</p>		

FIRST BATTLE, OPTIONAL FORM 1 (29) C
GTA 71-2-3

COMPANY TEAM TALLY SHEET

UNIT DESIGNATION MED CO

*CURRENT
CLOSE CBT STRENGTH %

DFS NONE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CCS	1	2	3	④	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
TANKS (HARD)																							
VEHICLES MECH (SOFT)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐													
VEHICLES HEADQUARTERS & SUPPORT (SOFT)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐													
PERSONNEL	○	○	○	○	○	○	○	○	○														

UNIT IS INEFFECTIVE AT 40%

UNIT OPTIONAL INFORMATION FOR CPX SIMULATION

	DESIGNATION	# VEHICLES/PERSONNEL
1. UNITS ATTACHED (OPCON, ETC):	_____	_____
2. UNITS DETACHED (OPCON, ETC):	_____	_____
*3. DIRECT FIRE ENGAGEMENTS THIS TURN:	_____	LAST TURN: _____
*4. CLOSE COMBAT ENGAGEMENT THIS TURN:	_____	LAST TURN: _____
*5. KILOMETERS MOVED THIS TURN:	_____	LAST TURN: _____

*NOTE: USE THE ABOVE OPTIONAL INFORMATION TO COMPLETE THE BATTLE BOARD WORKSHEET FOR TRANSMITTAL TO THE LOGISTICS PLAYER/CONTROLLER. FORWARD EQUIPMENT ASSET CARDS FOR ALL VEHICLES HIT TO THE ADMIN P/C AT THE END OF EACH TURN.

FIRST BATTLE, OPTIONAL FORM 1 (29) C
GTA 71-2-3

BATTLE

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COMPANY TEAM TALLY SHEET

UNIT DESIGNATION 1MTCO S&T BN

*CURRENT
CLOSE CBT STRENGTH %

DFS NONE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CCS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
SOFT TANKS (HARD) VEHICLES	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5				
SOFT MECH (SOFT)	3	4	3	4	3	4	3	4	3	4	3	4	3	4	3	4	3	4	3				
VEHICLES HEADQUARTERS & SUPPORT (SOFT)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
PERSONNEL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

UNIT IS INEFFECTIVE AT 40% NOTE: MULTI VEHICLES SHOWN AS 5, 2 ETC

UNIT OPTIONAL INFORMATION FOR CPX SIMULATION

	DESIGNATION	# VEHICLES/PERSONNEL
1. UNITS ATTACHED (OPCON, ETC):		
2. UNITS DETACHED (OPCON, ETC):		
*3. DIRECT FIRE ENGAGEMENTS THIS TURN:		LAST TURN: _____
*4. CLOSE COMBAT ENGAGEMENT THIS TURN:		LAST TURN: _____
*5. KILOMETERS MOVED THIS TURN:		LAST TURN: _____
<p>*NOTE: USE THE ABOVE OPTIONAL INFORMATION TO COMPLETE THE BATTLE BOARD WORKSHEET FOR TRANSMITTAL TO THE LOGISTICS PLAYER/CONTROLLER. FORWARD EQUIPMENT ASSET CARDS FOR ALL VEHICLES HIT TO THE ADMIN P/C AT THE END OF EACH TURN.</p>		

FIRST BATTLE, OPTIONAL FORM 1 (29) C
GTA 71-2-3

COMPANY TEAM TALLY SHEET

UNIT DESIGNATION DISCOM HHC

*CURRENT
CLOSE CBT STRENGTH %

DFS NONE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CCS	1	2	3	(4)	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
TANKS (HARD)																							
MECH (SOFT)																							
HEADQUARTERS & SUPPORT (SOFT)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐								
PERSONNEL	○	○	○	○	○	○	○	○	○														

UNIT IS INEFFECTIVE AT 40%

UNIT OPTIONAL INFORMATION FOR CPX SIMULATION

	DESIGNATION	# VEHICLES/PERSONNEL
1. UNITS ATTACHED (OPCON, ETC):	_____	_____
2. UNITS DETACHED (OPCON, ETC):	_____	_____
*3. DIRECT FIRE ENGAGEMENTS THIS TURN:	_____	LAST TURN: _____
*4. CLOSE COMBAT ENGAGEMENT THIS TURN:	_____	LAST TURN: _____
*5. KILOMETERS MOVED THIS TURN:	_____	LAST TURN: _____
<p>*NOTE: USE THE ABOVE OPTIONAL INFORMATION TO COMPLETE THE BATTLE BOARD WORKSHEET FOR TRANSMITTAL TO THE LOGISTICS PLAYER/CONTROLLER. FORWARD EQUIPMENT ASSET CARDS FOR ALL VEHICLES HIT TO THE ADMIN P/C AT THE END OF EACH TURN.</p>		

FIRST BATTLE, OPTIONAL FORM 1 (29) C
GTA 71-2-3

COMPANY TEAM TALLY SHEET

UNIT DESIGNATION FWD SPT MAINT CO*CURRENT
CLOSE CBT STRENGTH %

DFS <u>NONE</u>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CCS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
ARMD REC TANKS (HARD) VEHICLES								<input type="checkbox"/>															
VEHICLES MECH (SOFT)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
HEADQUARTERS & SUPPORT (SOFT)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>								
PERSONNEL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							

UNIT IS INEFFECTIVE AT 40%

UNIT OPTIONAL INFORMATION FOR CPX SIMULATION

	DESIGNATION	# VEHICLES/PERSONNEL
1. UNITS ATTACHED (OPCON, ETC):	_____	_____
2. UNITS DETACHED (OPCON, ETC):	_____	_____
*3. DIRECT FIRE ENGAGEMENTS THIS TURN:	_____	LAST TURN: _____
*4. CLOSE COMBAT ENGAGEMENT THIS TURN:	_____	LAST TURN: _____
*5. KILOMETERS MOVED THIS TURN:	_____	LAST TURN: _____
<p>*NOTE: USE THE ABOVE OPTIONAL INFORMATION TO COMPLETE THE BATTLE BOARD WORKSHEET FOR TRANSMITTAL TO THE LOGISTICS PLAYER/CONTROLLER. FORWARD EQUIPMENT ASSET CARDS FOR ALL VEHICLES HIT TO THE ADMIN P/C AT THE END OF EACH TURN.</p>		

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