

MECHWAR 2

STANDARD RULES

for the games

RED STAR/WHITE STAR

SUEZ TO GOLAN

Copyright © 1979, Simulations Publications, Inc., New York, N.Y., 10010

1.0 INTRODUCTION

2.0 HOW TO PLAY THE GAME

3.0 GAME EQUIPMENT

- 3.1 The Game Map
- 3.2 Game Charts and Tables
- 3.3 The Playing Pieces
- 3.4 Definition of Terms
- 3.5 Game Scale

4.0 SEQUENCE OF PLAY

- 4.1 Sequence Outline

5.0 COMMAND

- 5.1 The Bound Command
- 5.2 The Overwatch Command
- 5.3 The Bounding Overwatch Command
- 5.4 The Withdrawal Command
- 5.5 The Rally Command
- 5.6 Regrouping

6.0 MOVEMENT

- 6.1 Movement Inhibitions and Prohibitions
- 6.2 Vehicle Movement
- 6.3 Infantry Movement
- 6.4 Stacking
- 6.5 Dispersed Formation
- 6.6 Column Formation
- 6.7 Infantry Fatigue and Resting
- 6.8 Dummies
- 6.9 Terrain Effects Chart

7.0 OBSERVATION

- 7.1 Observation Range
- 7.2 Height Effects on Observation
- 7.3 Observation Procedure

8.0 DIRECT FIRE COMBAT

- 8.1 Restrictions on Fire
- 8.2 Opportunity Fire
- 8.3 Overwatch Fire
- 8.4 Final Fire
- 8.5 Withdrawal Fire
- 8.6 Suppression
- 8.7 Silhouetting (Optional Rule)

9.0 AUTOMATIC WEAPONS FIRE

- 9.1 How to Attack with an Infantry Unit
- 9.2 How to Attack with a Vehicular Unit
- 9.3 Automatic Weapons Combat Results Table
- 9.4 Explanation of Modified Combat Results
- 9.5 Co-Axial Machineguns (Optional Rule)

10.0 MAIN GUN FIRE

- 10.1 How to Fire on an Enemy Vehicular Unit
- 10.2 How to Fire on an Enemy Infantry Unit
- 10.3 Main Gun/ATGM Combat Results Table
- 10.4 Explanation of Modified Combat Results
- 10.5 Main Gun Range Attenuation Tables

11.0 ATGM FIRE

- 11.1 Restrictions on ATGM Fire
- 11.2 Sequencing ATGM Fire
- 11.3 ATGM Attack Strength Table
- 11.4 Personnel Anti-Tank Weapons

12.0 LOSS MODIFICATION

- 12.1 Vehicle Loss Modification
- 12.2 Infantry Loss Modification
- 12.3 Loss Modifier Chart
- 12.4 Troop Quality (Optional Rule)
- 12.5 Loss Modification For Moving

13.0 CLOSE ASSAULT

- 13.1 Entering Close Assault
- 13.2 Close Assault Combat
- 13.3 Withdrawal Fire

14.0 INDIRECT FIRE

- 14.1 Requesting Fire
- 14.2 Determining Scatter
- 14.3 Indirect Fire Combat
- 14.4 Restrictions on the Use of Indirect Fire
- 14.5 Indirect Fire Against Moving Units
- 14.6 On Map Artillery Units
- 14.7 On-Call Targets
- 14.8 Environmental Effects of Artillery (Optional)

15.0 DEFILADE

- 15.1 Indicating Defilade
- 15.2 Effects of Defilade on Direct Fire
- 15.3 Effects of Defilade on Indirect Fire and Close Assault
- 15.4 Effects of Defilade on Movement

16.0 SMOKE

- 16.1 Effect of Smoke
- 16.2 Smoke Removal
- 16.3 Smoke Effects on Lasers
- 16.4 Smoke Restrictions
- 16.5 Vehicle Smoke (Optional)

17.0 TRANSPORT AND MOUNTED COMBAT

- 17.1 Transport
- 17.2 Mounted Combat

18.0 MORALE

- 18.1 Morale Checks
- 18.2 Morale Table
- 18.3 Morale State 1
- 18.4 Morale State 2
- 18.5 Morale State 3
- 18.6 Rallying Companies
- 18.7 Battalion Headquarters (HQ)
- 18.8 Rallying Headquarters
- 18.9 HQ Table

19.0 MINEFIELDS

- 19.1 Placement of Mines
- 19.2 Entering and Exiting Minefields
- 19.3 Resolving Minefield Attacks
- 19.4 Breached Minefields
- 19.5 Mine Plows

20.0 AIRCRAFT, HELICOPTERS AND AIR DEFENSE

- 20.1 Aircraft Movement and Combat
- 20.2 The Bombing Strike

20.3 The Strafing Strike

- 20.4 Air-Surface-Missiles (ASMs)
- 20.5 Helicopter Movement and Combat
- 20.6 Aircraft Observation
- 20.7 Air Defense Systems
- 20.8 Air Unit Loss Modification
- 20.9 Helicopter Transport

21.0 SHORT HALT**22.0 AMMUNITION DEPLETION****23.0 NIGHT**

- 23.1 Units With No Night Equipment
- 23.2 Searchlights
- 23.3 Passive Observation
- 23.4 Artillery Illumination (Starshell)
- 23.5 Observing Units Which Fire

24.0 RIVER CROSSING

- 24.1 Ferries
- 24.2 Fixed Bridges
- 24.3 Bridging Vehicles
- 24.4 Amphibious Movement
- 24.5 Snorkeling

25.0 POSITIONS OF ADVANTAGE**26.0 ELECTRONIC WARFARE**

- 26.1 Radio Direction Finding
- 26.2 Jamming Units
- 26.3 Effects of Jamming
- 26.4 The Effects of Jammers on Companies
- 26.5 Other Effects of Jamming
- 26.6 Circumvention of Jamming Effects — Telephones
- 26.7 Circumvention of Jamming Effects — Short Range Radio
- 26.8 Circumvention of Jamming Effects — Visual Signals
- 26.9 Circumvention of Jamming Effects — Messengers

27.0 AMBUSH

- 27.1 How Ambush Works
- 27.2 Restrictions on Ambush

28.0 CAMOUFLAGE**29.0 ENGINEERS**

- 29.1 Engineer Squads
- 29.2 Bridges and Ferries
- 29.3 Town Clearing and Defending
- 29.4 Abatis
- 29.5 Bridge Demolition
- 29.6 Bridging Minefields

30.0 FIRE AND MOVE

[1.0] INTRODUCTION

Mech War 2 is a tactical level simulation of modern ground combat. It is composed of two separate games: *Red Star/White Star*, which presents hypothetical confrontations between NATO and Soviet troops in the near future; and *Suez to Golan*, featuring actual battles from the October War of 1973 and possible future encounters. The *Standard Rules Booklet* provides those rules common to both versions, while the *Exclusive Rules Booklets* provide the scenarios and any additional information required for each individual game.

SPI expects to update *Red Star/White Star* annually by incorporating the latest military developments in weaponry, doctrine and organization in inexpensive kits. In order to make this updating process as accurate as possible, SPI welcomes unclassified information sent in by Players regarding the various aspects of the military situation in Europe. Weapons performances and TO&Es are particularly important. Players are encouraged to forward suggestions relevant to the rules of play, ideas for the next edition, and reports on the progress of games played. SPI is particularly interested in which scenario was played (especially good ones may be included in future editions) and advice to Players. Please do not write these reports on the same page as a rules question. Send reports to:

MECHWAR UPDATE
Simulations Publications, Inc.
257 Park Avenue South
New York, New York 10010

[2.0] HOW TO PLAY THE GAME

The game is played in *Game-Turns*, each of which is divided into a number of *Phases*. *Mech War 2* is basically a two-Player game. During each Game-Turn, a Player may move and attack (fire) with his units. This is done by moving the individual units through the hexgrid and by using their various weapon systems. In order to make the play of the game more realistic, Players are also required to plan ahead for their future actions (in a very general way) by issuing set commands to their units. As units take losses, it is possible that their morale may suffer, forcing them to temporarily withdraw from combat. The advanced rules provide for the effects of such complicating elements as helicopters, night, weather, and so forth. Victory in each game is determined by accumulating more *Victory Points* than one's opponent and/or by fulfilling certain stated Victory Conditions.

Modern warfare is a complex subject, and the rules to *Mech War 2* are thus also complex, especially when compared to much simpler games (such as *Monopoly*, for example). We have tried to keep the rules as short as possible while ensuring their clarity and thoroughness. Basically, the rules are written within a special and highly organized system:

1. Each separate topic is presented as an individual major *Section*, numbered consecutively from 1.0. Further divisions within the Sections are made by *Primary Cases*, which contain rules clarifying one aspect of a Section as a whole (e.g., 5.1, The Bound Command); and by *Secondary Cases*, which are the individual rules themselves (e.g., 5.11).

2. Most rules are presented with the accompanying *General Rule* and *Procedure* descriptions which describe the general subject and concept of the rules that will follow. (Further information can

also be found in the *Designer's Notes* section at the end of the Standard Rules.)

3. The rules Sections are presented in a rough sequence of play, placing each Section in the order that the Player would be likely to encounter the particular topic while learning the game.

4. The rules are divided into three main parts. Basically, Sections 1.0 through 18.0 deal with the Standard Rules, Sections 19.0 through 28.0 with the Advanced Rules, and Sections 101.0 and beyond with the Exclusive Rules and the Scenarios.

5. **Terminology:** The rules use a specific jargon — gamespeak. If confusion arises from unfamiliar terms, Players should consult the Definition of Terms (Case 3.5).

6. As a last note, Players should not be frightened off or be ill at ease with the "legalistic" wording of the rules. Players should not feel compelled to let the rules "play the game for them." If a dispute arises, a compromise should be sought. After all, *Mech War 2* is designed to provide a realistic simulation of modern ground combat in an enjoyable game format, not as an exercise in constitutional law. Players are strongly encouraged to make modifications they feel will improve the game (and are mutually acceptable to each Player).

[3.0] GAME EQUIPMENT

[3.1] THE GAME MAP

[3.11] The game map shows those geographical areas and features required for play. A hexagonal grid is printed on the game map to regulate the movement and location of the playing pieces on the map. Each hex is given a four digit number. The first two digits of the number identify a specific hex column (running vertically, north to south); the last two digits identify a specific zig-zag hex row (running horizontally, west to east). When referred to in the rules, each hex number is preceded by a letter-code identifying which map section that hex is in.

[3.12] Each game consists of two separate map sections. These are:

Red Star/White Star: Map section A (European open terrain) and map section B (European closed terrain).

Suez to Golan: Map section C (Sinai) and map section D (Golan Heights).

[3.2] GAME CHARTS AND TABLES

Various visual aids are provided with the game to simplify and illustrate certain game functions. The use of these graphic aids is explained in the appropriate rules Sections.

[3.3] THE PLAYING PIECES

There are 800 playing pieces in each game of *Mech War 2*. About half of these are *informational counters*. Informational counters include Strength markers, Artillery Impact markers, Suppressed markers, etc. All of these counters indicate the current status of a given unit or hex. The actual units in the game — the vehicle and infantry platoons, air units, headquarters units, etc. — are represented by *organizational counters*. These counters contain certain information regarding the designation, target profile, armor class, and movement allowance for vehicular units, and the designations and automatic weapons strength for infantry units. Many additional values for each unit are provided on the Players' *Unit Data Sheets*.

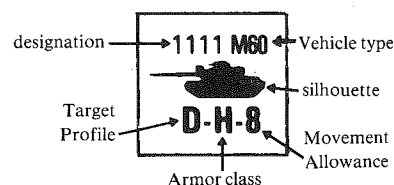
[3.31] There are two types of organizational counters: *combat units* and *non-combat units*. Combat units are represented, for play purposes, by two counters: the unit's particular organizational counter and a combat strength counter, which is always placed *under* the organizational counter and represents the actual strength of that unit at a given time. This strength is measured in the number of vehicles for vehicular units and in the number of steps for infantry units. The combat strength counter may be changed as the unit takes combat losses or regroups. Regardless of a unit's current strength, its weapon systems never change, although they may run out of ammunition.

[3.32] The strength of a vehicular unit varies from one to five vehicles, infantry units from one to three steps.

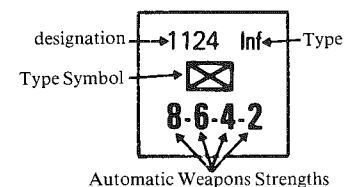
[3.33] Most organizational counters are printed on only one side, allowing them to be placed "face-down" and hidden on the map until observed by the Enemy Player.

[3.34] Sample Units:

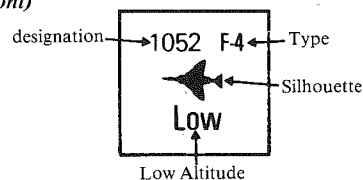
Vehicle Unit



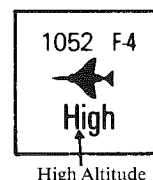
Infantry Unit



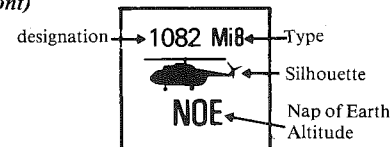
Aircraft Unit (Front)



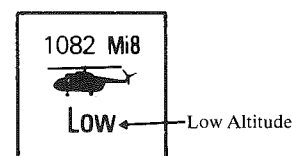
(Back)



Helicopter Unit (Front)



(Back)



Neutral Markers

Front		Back
	Combat Strength Markers	
	Combat Strength Markers	
	Defilade	
	In Column	
	Bridge	
	Breached Minefield	
	Possible Minefield	
	Possible Minefield	
	Ferry	
	Engaged	
	Game-Turn	
	Current Phase	

Front
(on-target):

Soviet/Arab Markers

	Light Howitzer Battalion	
	Medium Howitzer Battalion	
	Light Howitzer Battery	

Front (on-target):

	Heavy Howitzer Battery
	Super-Heavy Howitzer Battery
	Light Howitzer Section
	Engineer Squad
	PMP Bridging Platoon
	TPP Bridging Platoon

NATO/Israeli Markers

	Medium Howitzer Battalion
	Light Howitzer Battalion
	Heavy Howitzer Battery
	Medium Howitzer Battery
	Light Howitzer Battery
	Heavy Howitzer Section
	Medium Howitzer Section
	Light Howitzer Section
	Medium Mortar Section

Back (off-target):

	Heavy Howitzer Battery
	Super-Heavy Howitzer Battery
	Light Howitzer Section
	Engineer Squad
	Light Howitzer Section
	Battalion Smoke
	Battery Smoke
	Section Smoke
	Medium Mortar Starshell
	Light Howitzer Starshell
	Medium Howitzer Starshell
	Heavy Howitzer Battery
	Medium Howitzer Battery
	Light Howitzer Battery
	Heavy Howitzer Section
	Medium Howitzer Section
	Light Howitzer Section
	Medium Mortar Section

Common Markers

	Battalion Smoke	
	Battery Smoke	
	Section Smoke	
	Medium Mortar Starshell	
	Light Howitzer Starshell	
	Medium Howitzer Starshell	

[3.4] DEFINITION OF TERMS

Abatis. A defensive obstacle formed by felled trees.

Aircraft. Any fixed-wing airplane in the game (i.e., not a helicopter).

Air Unit. Term used to describe both aircraft and helicopters in the game.

APC (Armored Personnel Carrier). A vehicular unit capable of transporting Friendly infantry units (also known as an AFV).

Armor Class. A classification of each vehicular unit according to its vulnerability to fire. All vehicular units are defined as either *hard*, *protected*, or *light* targets.

Close Assault. The procedure by which opposing units in the same hex resolve *Direct Fire Combat*.

Company Status. Any condition that mutually applies to all platoons of a given company.

Contamination. The after-effects of a successful nuclear or chemical fire mission on a given area of the map.

Defilade. The status of a unit which has followed a certain procedure to increase its defensive abilities.

Delivery System. A means of delivering ordnance or munitions to a target, usually referring to systems which are capable of delivering a wide variety of types of munitions. Artillery, mortars, aircraft, and helicopters may all be classed as delivery systems.

Direct Fire. Any type of attack which is directed at a specific defending Enemy unit and requires a valid *Line of Sight*.

Engaged. Describes opposing units which end a *Movement Phase* in the same hex.

Independent Command. Any unit treated as if it were a separate company.

Indirect Fire. Any type of attack which is directed at a specific hex and does not require a valid *Line of Sight*.

Line of Sight. The method by which units determine whether or not they can see one another's hexes.

Load. Each delivery system is loaded with a specific type of munitions: HE (High Explosive), Smoke, Starshell, various types of Chemicals, or various sizes of Nuclear Warheads (in some Scenarios). The Load is assumed to be HE unless otherwise noted on the Player's *Artillery Plot Sheet*. A delivery system may only deliver the type of munitions with which it is loaded.

Load Time. The number of Game-Turns which must pass between the arrival of orders to load a delivery system with a certain type of munitions and the first delivery of those munitions to a target.

Movement Allowance. The mobility of a unit in terms of *Movement Points*. Basically, a unit expends one or more Movement Points to enter each hexagon on the map.

Phasing Player. The Player who is assigned the current Phase in the Game-Turn (e.g., the first Player is the Phasing Player during the First Player Indirect Fire Phase).

Platoon Status. Any condition that applies to a given platoon in the game.

Plot Time. The number of Game-Turns which must pass between the arrival of orders giving the plot of target coordinates for a delivery system and the delivery of those munitions to the target plotted. Plot Time and Load Time may run simultaneously.

Reinforcements. Units which do not begin the game in play, but instead appear at some scheduled time during the play of the game.

Scenario. An organized description of Orders of Battle, deployments, Victory Conditions, and special rules that Players use to play a certain version of the game.

Special Rule. A rule in effect only during certain Scenarios, and/or only during certain Game-Turns of a game.

Step. A portion of the total strength of an infantry unit which is lost due to combat. When a unit is out of Steps, it has been completely eliminated and is removed from the game.

Suppression. The result of direct or indirect fire that may reduce the movement and/or combat abilities of affected units. Suppressed vehicles are "buttoned up;" suppressed infantry has "hit the dirt."

Target Profile. A rating of each vehicular unit according to how easy it is to "hit" with direct fire. This is based on the actual height of each type of vehicle, the slope of its armor, and other pertinent characteristics.

Weapon System. Any method by which Friendly units attack (fire at) Enemy units. Basically, Weapon Systems fall into five main categories:

Air Defense. The method by which ground units attack Enemy aircraft and helicopters.

Anti-Tank Guided Missiles (ATGM).

Weapons that are either vehicle-mounted or carried by infantry and used to attack Enemy vehicle units.

Automatic Weapons. Infantry small arms fire, as well as the fire of the external and co-axial machineguns of vehicular units.

Main Gun. Represents the conventional armament of most vehicular units as well as that of recoilless rifles and anti-tank guns. Although primarily intended to attack Enemy vehicular units, they may attack Enemy infantry units as well.

Personnel Anti-tank. Additional weapons that are used by infantry units to attack Enemy vehicular units.

Observation Range. The maximum length (in hexes) of the Line of Sight of a Friendly unit to successfully observe an Enemy unit. This range varies with the type and status of the Enemy unit, as well as with terrain and weather conditions.

Victory Point. The method by which victory is measured; the "value" of accomplishing certain Victory Conditions.

[3.5] GAME SCALE

Each hexagon on the map represents 200 meters of actual terrain. Each Game-Turn represents five minutes of real time.

[4.0] SEQUENCE OF PLAY

Each game or scenario of *Mech War 2* is composed of Game-Turns during which Players move their units and engage in combat strictly according to the following Sequence of Play. This sequence is repeated, Game-Turn by Game-Turn, until the end of the Scenario being played.

[4.1] SEQUENCE OUTLINE

A. FIRST PLAYER INDIRECT FIRE PHASE

1. Plot Segment: The first Player (as designated in the Scenario) plots his air strikes and artillery fire missions. These may or may not be delayed a certain number of Game-Turns, depending on the circumstances.

2. Marker Removal Segment: All Friendly Smoke Artillery Impact and Starshell markers are removed from the map. All Suppression markers are removed from units belonging to the second Player.

3. Resolution Segment: Any artillery fire missions that the first Player has plotted to arrive in the present Game-Turn have their accuracy resolved; all plotted aircraft movement and combat is carried out. All indirect fire combat called for by these attacks is resolved; all Smoke and Starshell markers are placed as required. The second Player may fire air defense systems at the first Player's aircraft.

4. Rally Segment: The first Player may attempt to rally those of his units with rally commands.

B. SECOND PLAYER COMMAND PHASE

The second Player (as designated in the Scenario) plots commands for each of his units on a company by company basis. These commands will be carried out in the appropriate Phases and may be changed only at the beginning of the next Friendly Command Phase.

C. FIRST PLAYER MOVEMENT PHASE

1. Movement Segment: The first Player may move any or all of his units, according to their company commands. As the Player moves a unit, hex by hex, across the map, it may be attacked by any artillery impact or mine hex it enters. In addition, the second Player may interrupt this movement at any point and attack the moving unit with opportunity fire from one of his units. After this attack has been resolved, the first Player may attack the firing Enemy unit with one of his units, or "pass" (choose not to attack). The second Player may then attack either the moving unit or one of the first Player's units that fired with another of his

units, or likewise pass. After both Players have passed, the moving unit may then resume its movement, possibly triggering more opportunity fire as it does so. This pattern continues until all of the units of the first Player have completed their movement.

2. Final Fire Segment: Any units of either Player (with an overwatch command) that did not fire in the preceding Movement Segment may now do so. This fire is resolved in the alternating manner already described. Final fire is resolved in an order determined by rounds of priority. Within each priority, the Phasing Player has the first chance to fire. Players alternate in firing the same priority class or passing until both Players have passed, whereupon the Phasing Player may commence final fire of the next lower priority. At any point in the Final Fire Segment, so long as it is his turn to fire, a Player may fire a unit with higher priority than the currently scheduled one. Thus, the Friendly Player may have a tank with an overwatch command and ability fire its main gun (Priority 2). Seeing no good targets while Priority 2 is scheduled, he chooses not to fire the tank's main gun. Later in the Final Fire Segment, an Enemy APC opens up with short halt automatic weapons fire (Priority 4), thus exposing itself to observation by the tank. Since it is now the Friendly Player's turn, he may fire the Priority 2 tank main gun at the Enemy APC; then it is the Enemy Player's turn. If the Enemy Player passes or has no more units able to fire of the current or higher priority, the Friendly Player may continue firing with various units until he, too, passes; then play proceeds to the next lower priority. When both Players have passed the lowest priority, the Final Fire Segment is ended. The order of priorities is:

1. Automatic Weapons Final Fire
2. Main Gun Final Fire
3. ATGM Final Fire
4. Automatic Weapons Short Halt and Fire-and-Move Final Fire
5. Main Gun Short Halt and Fire-and-Move Final Fire
6. ATGM Short Halt and Fire-and-Move Final Fire

Notes: Players using the optional Positions of Advantage rules (Section 25.0) will modify this Final Fire Sequence of Play accordingly.

3. Close Assault Segment: All units in the same hex with Enemy units resolve up to three "rounds" of close assault combat (see Section 13.0).

D. SECOND PLAYER INDIRECT FIRE PHASE

The second Player now carries out his air and artillery plotting and attacks, in the same manner as the first Player in Phase A. The first Player may fire air defense systems at second-Player aircraft.

E. FIRST PLAYER COMMAND PHASE

The first Player now plots commands for each of his units, in the same manner as the second Player in Phase B.

F. SECOND PLAYER MOVEMENT PHASE

The second Player now carries out the movement of his units in the same manner as the first Player in Phase C.

G. SECOND PLAYER COMMAND PHASE

The second Player now repeats Phase B.

H. FIRST PLAYER MOVEMENT PHASE

The first Player now repeats Phase C.

J. FIRST PLAYER COMMAND PHASE

The first Player now repeats Phase E.

K. SECOND PLAYER MOVEMENT PHASE

The second Player now repeats Phase F.

L. RECORD PHASE

The Game-Turn marker is advanced one space on the Game-Turn Record Track, signalling the end of one Game-Turn and the start of the next. Various other functions may take place during the Record Phase in certain Scenarios.

[5.0] COMMAND

GENERAL RULE:

In order to function in combat, units must be part of an *effective command system*. Platoon leaders can see only a small part of the battle in which they are engaged, and their actions must be guided and coordinated by their company headquarters. Each company headquarters relies in turn on some higher level of command (battalion/brigade/division). In this game, this higher level of command is represented by the Player himself.

PROCEDURE:

During each Command Phase, a Player must issue specific commands (orders) to all of his units in the game, on a company-by-company basis. There are five commands that may be given: *Bound*, *Overwatch*, *Bounding Overwatch*, *Withdraw*, and *Rally*.

Each company is given one command, which remains in effect until the beginning of the next Friendly Command Phase. All commands are written down by each Player on a separate sheet of paper, known as the *Command Plot*. Command Plots are assigned secretly and are normally revealed only at the end of the Game-Turn. **Note:** If the Players trust one another — and have good memories — they can simply make a mental note of each of their companies' commands, and thus eliminate the need to write commands down.

CASES:

[5.1] THE BOUND COMMAND

When issued a Bound Command, all platoons on the company must either leave the hex they currently occupy during the next Friendly Movement Phase, or remain in that hex and undergo a change in status (Case 5.13).

[5.11] When fulfilling a Bound Command, each unit of the company may be moved as the owning Player desires. The units may expend either part or all of their Movement Allowance, and may be moved in any direction or combination of directions.

[5.12] Units that fulfill a Bound Command by movement must end the Movement Phase in a hex other than the one in which they began the Phase.

[5.13] Units may also fulfill a Bound Command by remaining in place and undergoing a "change in status." Such status changes include:

- A. Entering column formation, see Case 6.6.
- B. Entering defilade (for vehicular units) or leaving defilade (for infantry units); see Section 15.0.
- C. Undergoing snorkeling or amphibious operations; see Section 24.0.
- D. Embarking or disembarking from Friendly APC units; see Section 17.0.

[5.14] Units with a Bound Command that undergo a change in status may also move if they have sufficient Movement Points to do so. However, if they choose to do so they are also subject to Case 5.12.

[5.15] Units with Bound Commands may also initiate or withdraw from close assault combat.

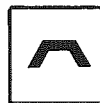
[5.16] Engineer units performing engineer functions with a Bound Command are not required to move.

[5.2] THE OVERWATCH COMMAND

When issued an Overwatch Command, all platoons of the company must remain stationary in the hex(es) they currently occupy.

[5.21] Units given Overwatch Commands are the only units that may engage in normal direct fire (see Bounding Overwatch for that command's effects in terms of Overwatch).

[5.22] Units given an Overwatch Command may initiate fire on moving Enemy units, or in response to the fire of Enemy units, or in the Final Fire Segment of the Movement Phase.



[5.23] Units fulfilling an Overwatch Command may enter defilade in the hexes they currently occupy (see Section 15.0) or change the facing of Vehicle Defilade markers. This has no effect on their ability to use direct fire.

[5.24] APC units fulfilling an Overwatch Command may be mounted by Friendly infantry units in the hex they currently occupy. Infantry units fulfilling an Overwatch Command may dismount from APCs in the hex they currently occupy (see Section 17.0).

[5.25] Units with Overwatch Commands may engage in close assault initiated by Enemy units or continue a close assault initiated in a previous Game-Turn.

[5.3] THE BOUNDING OVERWATCH COMMAND

This command combines elements of both the Bound and the Overwatch Commands. When issued a Bounding Overwatch Command, one or more platoons of the company must fulfill a Bound Command, while the remainder of the company (i.e., at least one platoon) must fulfill an Overwatch Command.

[5.31] The exact units within a company that are to fulfill either "part" of the Bounding Overwatch Command is not determined in advance. Instead, the Player is free to determine which units will Bound and which will Overwatch at any time throughout the Phases starting with the current Command Phase and ending in the next Friendly Movement Phase.

[5.32] For obvious reasons, companies that consist of a single unit may not be issued a Bounding Overwatch Command.

[5.33] Only certain nationalities may use the Bounding Overwatch Command. This is noted in the Exclusive Rules Booklets.

[5.4] THE WITHDRAW COMMAND

Withdraw and Rally are the only commands that may be given to companies that, due to combat losses, are currently in Morale State 3 (see 18.0). When given a Withdraw Command, all units of the company are under the same restrictions as for a Bound Command, except that units may choose to remain in their hex (that is, to do nothing). If moving, they need not move in any particular direction. However, once given a Withdraw Command, a company may be issued no further commands other than Withdrawal and/or Rally until the company has reduced its Morale Level to zero (see Case 5.5). Units with Withdraw Commands may not initiate close assault unless their observation range is zero; if involved in close assault they must withdraw as soon as possible.

[5.5] THE RALLY COMMAND

When the platoons of a company take losses, there is a chance that their morale may begin to suffer (see Section 18.0). Companies may restore their morale through the Rally Command. This command and the Withdraw Command are the only commands which may be issued to companies that are currently in Morale State 3. When given a Rally Command, no units of the company may expend any Movement Points, fire any of their weapons systems, initiate close assault, or undergo a change in status. Once given a Rally Command, a company may not be issued any other type of command except for further Withdraw or Rally orders. This restriction continues until the company has restored its Morale State to zero.

[5.6] REGROUPING

Two or more platoons that have taken losses in combat may combine into a single platoon by regrouping. This may be done by any units with a Bound Command that have begun a Friendly Movement Phase stacked in the same hex. Regrouping costs the units involved their entire Movement Allowance for that Phase. At the end of the Phase, only one "combined" platoon remains in the hex; the other counters are removed from the map.

[5.61] Only platoons of the same company may Regroup.

[5.62] Only platoons of the exact same type (e.g., all M60A1, all infantry) may Regroup.

[5.63] Platoons may Regroup only up to a strength (in vehicles or steps) less than or equal to their original strength at the start of the Scenario.

[5.64] The combined platoon formed by Regrouping has all facets of its platoon status determined by the Enemy Player. He may apply any status that was true of at least one of the component platoons to the new one. For example, if a Suppressed platoon Regrouped with a platoon that was not Suppressed, the Enemy Player could choose to have the newly formed platoon Suppressed.

[5.65] Regrouping has no effect on any company status for the newly formed platoon. It "inherits" all company status from its component platoons.

[6.0] MOVEMENT

GENERAL RULE:

During the two Friendly Movement Phases of the Game-Turn, a Player must move his units in accordance with the commands given to each company in the preceding Friendly Command Phase. During the Movement Segment of each Movement Phase, a unit may move as many or as few hexes as desired as long as its Movement Allowance is not exceeded. During the course of a Friendly unit's movement, the Enemy Player may fire opportunity fire at the moving unit with any of his units that were issued an Overwatch Command. At this point, the moving unit must stop as the fire is executed. The Phasing Player may fire overwatch fire at the unit which is executing opportunity fire; thus large exchanges of fire could develop over the movement of one unit. Once all fires have been announced, they are resolved in the order of priority dictated in the rules for Overwatch Fire (Case 8.3). Once all fires have been resolved, the moving unit (if it has survived) may finish its movement, possibly triggering more opportunity fire.

PROCEDURE:

Each unit (or stack of units) is moved individually, tracing its path of movement through the hexgrid.

The order in which Friendly companies move is determined by the Enemy Player. Movement is calculated in terms of *Movement Points*. Basically, each unit expends a minimum of one Movement Point of its Movement Allowance for each hex it enters. The actual cost for a unit to enter a hex (or cross a hexside) varies according to the type of unit and the terrain involved. The effects of terrain on movement are listed on the Terrain Effects Chart (6.9).

Players' Note: The Enemy Player determines the order in which companies move, since all such movement is really simultaneous. This allows the Enemy Player to choose which Enemy movement he would like to "see" first, and thus be more likely to fire at (because a given weapons system may fire only once per Phase). In practice, however, this procedure need be followed only when Enemy and Friendly units are actually "in contact" and likely to exchange overwatch fire with one another.

CASES:

[6.1] MOVEMENT INHIBITIONS AND PROHIBITIONS

[6.11] A unit may not expend more Movement Points than its total Movement Allowance in any one Movement Segment. A unit may not "save" unexpended Movement Points for use in a later Movement Segment, nor may unused Movement Points be transferred from unit to unit.

[6.12] Units may be moved only during a Friendly Movement Segment. Although there may be some movement as a result of close assault (due to a withdrawal), this is not considered movement *per se* and does not require the use of Movement Points.

[6.13] Units are normally moved individually hex-by-hex across the map. However, units which begin a Movement Phase stacked in the same hex and are stacked in the same hex at the end of that Movement Segment must be moved together (see Case 6.4).

Player's Note: This procedure is used so that units that spend an entire Friendly Movement Phase together pay the appropriate penalty (on the Loss Modification Tables) when defending against Enemy opportunity fire.

[6.14] There are certain doctrinal restrictions placed on the ways in which the platoons of a company may move. These vary by nationality and are listed in the Exclusive Rules booklets.

[6.15] Once moved off the map, units may not move onto the map.

[6.2] VEHICLE MOVEMENT

The movement of vehicles is affected by formations they are required to enter while in some types of terrain. Such units must enter Dispersed Formation (see Case 6.5) when moving into heavy woods or town hexes; they must enter Column Formation (see Case 6.6) to gain the movement benefits for road and trail hexes and to cross bridges. Vehicle units (with Bound Commands) may always move one hex per Friendly Movement Segment by spending their entire Movement Allowance doing so.

[6.3] INFANTRY MOVEMENT

Men on foot (dismounted or "leg" infantry) move a great deal more slowly than vehicles. For this reason, infantry units may either be mounted (transported by Friendly APCs) or dismounted (on foot).

[6.31] All dismounted infantry units have a Movement Allowance of 1 (however, see Cases 6.32 and 6.33). Mounted infantry units have no Movement Allowance, but are instead treated like the

vehicular units that are transporting them (see Section 17.0).

[6.32] Leg infantry units may voluntarily double their Movement Allowance (to 2) through a procedure known as *double-time*. In order for a unit to double-time, the owning Player simply declares that the unit is doing so. After completing its movement for that Segment, the unit is *fatigued* (see Case 6.7).

[6.33] Leg infantry units may voluntarily triple their Movement Allowance (to 3) through a procedure known as *charge*. In order for a unit to charge, the owning Player simply declares that the unit is doing so. After completing its movement for that Segment, the unit is *fatigued* (see Case 6.7).

[6.34] Leg infantry units must pay one additional Movement Point when moving from a hex at a lower height level to a hex at a higher height level (however, see Case 6.6). There is no additional cost for a unit to move in the reverse direction (i.e., downhill). **Note:** This means that infantry units must become fatigued when moving uphill and not using a road or trail.

[6.35] Infantry units (with Bound Commands) may enter a hex only if they have sufficient Movement Points to do so.

[6.36] Infantry units may always move one hex by *charging*, even if they would not ordinarily have the Movement Points to enter a hex.

[6.4] STACKING

There may *never* be more than three Friendly units of the same type (vehicle or infantry) in a hex at the end of any Segment.

[6.41] The stacking limit applies *only at the end of each Segment*. A Player may have any number of Friendly units move through a hex during a Segment, so long as the stacking limit is met at the end of the Segment.

[6.42] Stacking has no effect on a unit's ability to make fire attacks. For the effects of stacking, on close assault, see Case 13.1.

[6.43] Stacking increases a unit's vulnerability to fire by altering the die roll on the appropriate Loss Modification Tables (see Cases 12.1 and 12.2). However, when resolving combat during a Friendly Movement Segment, of those Friendly units that are moving, only units "moving together" (see 6.45) are considered to be stacked.

[6.44] Stacked units are each attacked separately by any indirect fire in the hex (see Case 14.3).

[6.45] Units that begin and end a given Movement Segment stacked together must be moved together as a stack (if they are to be moved at all). This is important, as it will have an effect on the results of any opportunity fire on the moving units.

[6.46] When transporting infantry, the APC unit counter is placed on top of its passenger infantry unit (see Section 17.0). For purposes of stacking, a vehicle transporting a passenger unit is treated as if it were a single vehicular unit.

[6.47] There is no Movement Point cost to stack or unstack units except when such action represents infantry mounting or dismounting from vehicles (see Case 17.1).

[6.48] Friendly units that end a Segment in a hex in excess of the stacking limit are immediately eliminated. The owning Player has the choice of which unit(s) in the hex to eliminate.

[6.49] Headquarters units never count for stacking purposes.

[6.5] DISPERSED FORMATION

Vehicular units that enter any heavy woods or town hex are automatically placed in Dispersed Formation.

[6.51] Dispersed units may not observe (see Section 7.0) into any adjacent heavy woods or town hex. However, they may observe into all other hexes normally.

[6.52] There is no cost for a unit to enter or leave Dispersed Formation. Vehicular units remain dispersed so long as they occupy a heavy woods or town hex and immediately revert to normal after leaving such a hex. There is no limit to the number of times a unit may change formation during a given Segment.

[6.53] Dismounted infantry units never enter Dispersed Formation.

[6.54] Vehicular units in Column Formation automatically leave Column Formation and enter Dispersed Formation when they enter any heavy woods or town hex and they are not moving on a road or trail.

[6.6] COLUMN FORMATION

In order to gain the movement benefits of roads and trails, units must enter Column Formation. When a unit in Column moves so that its path coincides with the path of a road or trail, the unit pays only the cost for moving along that road or trail, regardless of the other terrain in the hex, or (for leg infantry) any changes in height level.

[6.61] Vehicular units may enter Column Formation by remaining stationary in a hex for one complete Friendly Movement Segment. The unit must have a Bound Command. Units may enter Column Formation in any hex (place an "In Column" marker on the unit).

[6.62] Vehicular units may leave Column Formation during any Movement Phase. This may be done, first, during any Friendly Movement Segment, at no cost and with any command. A unit may also leave Column Formation during an Enemy Movement Phase, also at no cost, and with any command. However, a unit that does so *cannot* use opportunity fire during that Segment.

[6.63] Infantry units may enter Column Formation at no cost, but only with a Bound Command. They may leave Column in the same manner as vehicular units (see Case 6.62). Infantry units that are Suppressed due to combat results automatically leave Column Formation.

[6.64] Column Formation has no effect on stacking limits.

[6.65] Units must automatically leave Column Formation when they are involved in a close assault (see Section 13.0). This is not done, however, until the unit either withdraws from the hex or one Phase of close assault has been completed.

[6.66] Units in Column Formation may not enter defilade.

[6.67] While in Column Formation, a unit's fire strength is affected as follows: vehicular units are treated as "1-vehicle units" when resolving all fire attacks; infantry units are treated as one-step units.

[6.68] Column Formation increases a unit's vulnerability to Enemy attacks by altering the die roll on the appropriate Loss Modification Tables (see Cases 12.1 and 12.2).

[6.69] Vehicular units reduced to a strength of one vehicle are automatically considered to be in Column Formation, but only for movement purposes. Such units do not have their die rolls altered for being in Column when defending against direct fire attacks. However, this does not apply to one-step infantry units; they must enter Column Formation normally.

Player's Note: When a number of Friendly units are moving "together" (whether stacked or not) in

Column Formation (e.g., in a long line on the same road or trail), it is usually necessary to place an "In Column" marker only on the unit at the head of the column. (This is a method for reducing the number of "In Column" markers on the map.)

[6.7] INFANTRY FATIGUE AND RESTING

While dismounted infantry normally move at a slow rate of speed, they are capable of short bursts of much faster action (see Double-Time and Charge, Cases 6.32 and 6.33). When units perform charge or double-time, they become fatigued, but may recover from that fatigue by resting.

[6.71] When units without a fatigue level perform one Segment of double-time, the units have a *Fatigue 1* status noted on their unit status sheet.

[6.72] Units at *Fatigue Level 1* may not charge. In all other respects they are treated as normal infantry units (however, see Case 6.73).

[6.73] When units at *Fatigue Level 1* perform one Segment of double-time, the units have *Fatigue 2* status noted on their unit status sheet.

[6.74] When units without a Fatigue Level perform one Segment of charge, the units have *Fatigue 2* status noted on their unit status sheet.

[6.75] Units at *Fatigue 2* may not move or expend Movement Points for any purpose. In all other respects they are treated as normal infantry units.

[6.76] Infantry units may reduce their *Fatigue Level* by resting. Resting consists of spending one Friendly Movement Segment in a hex, without expending any Movement Points. The resting units may receive any command and may fire normally. For each Segment that a unit rests, its *Fatigue Level* is reduced by one Level (i.e., from *Fatigue 2* to *Fatigue 1*, or from *Fatigue 1* to no fatigue).

[6.77] The effects of double-time and charge (in producing fatigue) and resting (in reducing fatigue) occur at the end of the Movement Segment.

[6.78] There is no limit to the number of times that a unit may become fatigued and/or recover by resting.

[6.79] Units being mounted and/or transported by Friendly APC units may also rest in that Segment, provided the infantry units themselves did not expend any Movement Points. Units may not rest in hexes containing Enemy units.

[6.8] DUMMIES

Dummies are meaningless counters employed as though they were real units, so that the Enemy Player will never know whether or not a particular unspotted Enemy unit is real. The number of Dummies available to each Player is listed in the Scenario instructions. Where there are insufficient blank counters available, counters not used in the current Scenario may be employed as Dummies. Thus, if the only NATO forces in the Scenario were British, American units may serve as Dummies; if no airborne units are in the Soviet Order of Battle for a given Scenario, these may be employed as Dummies, etc.

[6.81] Dummies are moved and positioned on the map like normal units. They do not require commands, but may be used as the Player sees fit, in order to best confuse the opposing Player.

[6.82] Dummy units are removed whenever they are observed (spotted) by Enemy units. They may also be removed voluntarily by the owning Player (see Case 6.83).

[6.83] The owning Player may re-deploy any or all of his Dummy units during any Friendly Movement Segment. This is done by physically remov-

ing the Dummy counter(s) from the map and then simply placing them in a hex containing unspotted Friendly ground units.

[6.84] Dummy units may not attempt to observe Enemy units. When a Dummy unit is the target of an Enemy spotting attempt, the owning Player may decide whether the unit is to be considered infantry or vehicle when determining the results (see Section 7.0).

[6.85] Dummy units may not be used to determine the scatter of Friendly artillery fire missions (see Case 14.2).

[6.9] TERRAIN EFFECTS CHART

(see separate sheet)

[7.0] OBSERVATION

GENERAL RULE:

Before a unit can fire at a target in the game — as in actual combat — it must first be established that the firing unit can observe the target. The ability of a unit to observe a target is determined by range, nature of the target (i.e., whether it is infantry or vehicle), attitude of the target (i.e., moving, stationary, or firing), weather conditions and the nature of the terrain between the observing unit and the target. Once the attacking unit is determined to be in observation range of the target, it must be determined that the Line of Sight (LOS) between the attacking unit and the target is not blocked (see Case 7.2).

CASES:

[7.1] OBSERVATION RANGE

All units are initially deployed face-down so that only the owning Player knows what they are. They are turned face-up, and may be fired at, only when observed (spotted) by Enemy units. Units may become liable to observation at different distances (observation ranges) from the Enemy, depending upon the weather, illumination, type of unit, motion or lack thereof, or upon actions such as firing. Once observed, a unit may remain observed or it may become unspotted once more. Observation is always by specific Enemy units; it is never general.

[7.11] If a face-down unit fires direct fire at an Enemy unit, it is automatically observed by any Enemy unit with an un-blocked Line of Sight and which is within maximum observation range, and is turned face-up for at least the remainder of the current Movement Phase. If a face-down unit moves and it is within the regular observation range for that type of unit with an un-blocked Line of Sight, it may be observed by that unit and turned face-up. If a face-down unit neither moves nor fires, it remains face-down and unobserved until an Enemy unit comes within regular observation range of it, demonstrates an un-blocked Line of Sight, and demands observation. Regular observation range is always based on the type of unit, motion status, terrain, etc., of the unit which the Enemy is attempting to spot; it is never based on the type of unit, motion status, terrain, etc., of the Enemy unit which is attempting to make the observation. Just because unit A is within regular observation range of unit B does not mean that B is within regular observation range of unit A.

[7.12] Once observed (face-up), a unit remains observed by the unit which spotted it for as long as it remains in that unit's Line of Sight and within focused observation range (see Case 7.19). When a unit has exposed itself (become observed) because it has made a direct fire attack, it remains observed by all units within maximum observation range having an un-blocked Line of Sight for the remainder of the current Phase. Once that Phase is

over, the unit remains observed by all Enemy units within focused observation range having unblocked Line of Sight. If an observed unit can move out of the Line of Sight or observation range of all Enemy units, it may be turned face-down (unobserved) until such time as it is again observed by an Enemy unit.

[7.13] For purposes of determining observation range, whenever a Friendly unit moves through two or more different types of terrain that is within the LOS of an Enemy unit — including the hexes in which the unit begins and ends its movement — determine the Enemy unit's ability to observe that unit based on the terrain type passed through that best affords a chance for observation.

[7.14] Dummy units may never attempt to sight Enemy units.

[7.15] Units are not required to attempt to sight a given Enemy unit. The owning Player may voluntarily withhold any such sighting attempts, and thus hope to mislead the Enemy Player that a real unit is in fact a Dummy.

[7.16] The length (in hexes) of a unit's Line of Sight may never exceed the maximum range of observation given on the Observation Chart. While this range is normally unlimited, it may be reduced due to certain weather conditions.

[7.17] Day Clear Weather Observation Range Table (see separate sheet)

[7.18] For purposes of determining the observation range, a unit is moving if it:

- A. is moving from hex to hex;
- B. is withdrawing from close assault;
- C. is entering defilade under an overwatch; command;
- D. is mounting or dismounting;
- E. is an engineer unit performing engineer functions;
- F. (during an Enemy Movement Phase) was moving (as defined in this Case) during the previous Friendly Movement Phase and currently has a Bound or Bounding Overwatch command.

[7.19] The focused observation range is equal to twice the maximum regular observation range for the type of unit (vehicle or infantry), motion status (moving or stationary), and terrain concerned. Thus, under regular observation procedures, a Friendly stationary vehicle which is unobserved may be spotted by an Enemy unit moving into a hex 15 hexes away, by day and in clear weather, provided that there is an un-blocked Line of Sight. Once observed, the Friendly unit remains observed by the Enemy unit which spotted it as long as the Enemy unit maintains an un-blocked Line of Sight and is within 30 hexes of the Friendly unit. If the regular observation range is zero, the focused observation range is 1.

[7.2] HEIGHT EFFECTS ON OBSERVATION

The terrain features printed on the maps represent physical characteristics typical of battlefields in Central Europe/Middle East, including contour (height) variations. Once a LOS has been established between two units, it is still necessary to determine whether the LOS is valid or invalid (blocked by contour changes).

[7.21] The *Height Level* of a unit is determined by the *color* or the hex it occupies (see the Terrain Effects Chart, 6.9). Each separate Height Level represents a 20 meter change in elevation.

[7.22] One Height Level (20 meters) must be added to the Height Level of any light woods, heavy woods, smoke, or town hex, for purposes of blocking terrain. (This is because the trees/buildings/smoke in the hex is assumed to be about 60 feet tall.)

[7.3] OBSERVATION PROCEDURE

1. Determine if the sighting unit is within observation range of the unit it is trying to observe (see Case 7.1).

2. Determine the Line of Sight between the sighting unit and the unit it is trying to observe. This is accomplished by visualizing a perfectly straight line drawn from the center of the hex occupied by the sighting unit to the center of the hex occupied by the unit being observed. If the Players find this difficult, they should hold a ruler over the map, aligning it between the centers of the two hexes.

3. Determine if the Line of Sight is blocked (preventing observation) or clear (permitting observation). Once the Line of Sight between the two units is established, the Players must determine if any of the hexes traversed by this LOS contains blocking terrain. There are *five* types of blocking terrain: *elevated hexes*, *heavy woods hexes*, *light woods hexes*, *town hexes*, and *smoke hexes*. Any hex which contains blocking terrain may interrupt the LOS, allowing a unit to see into the specific (blocking) hex, but preventing observation beyond that hex along the LOS. Whether blocking terrain actually interrupts or blocks the LOS depends upon the elevation of *both* the sighting unit and the unit it is attempting to observe. How to determine if the LOS between two units is blocked is explained in the following Cases (7.31 through 7.35).

[7.31] If the two units occupy hexes which are at the same level of elevation, either unit may observe the other unless the Line of Sight traverses (goes through) any hex which is on a higher elevation than either of the two units.

MAP A

Units in hexes 3113 and 3119 (both at Height Level 0) may not trace a Line of Sight to one another because hex 3116 is higher (Height Level 1).

MAP C

Units in hexes 2912 and 3113 (both at Height Level 0) may not trace a Line of Sight to one another because hex 3012 is higher (Height Level 1).

[7.32] If the two units occupy hexes on different levels of elevation, the Line of Sight is automatically blocked if it crosses any hex which is on a higher elevation than both of the observing units. If the LOS is not blocked by higher terrain, use the Height/Line of Sight Display to determine if intervening terrain blocks the Line of Sight. This is performed as follows:

- (1) Locate the elevation of the *higher* unit on the zero distance line.
- (2) Determine the range in hexes to the lower unit, and then on that line locate the height of that unit.
- (3) Connect the two points with a straight edge (a transparent plastic rule is ideal). Now locate the height and distance of any suspected obstacle. If the obstacle is *higher* than the Line of Sight at the point of intersection, then the LOS is blocked. If the Line of Sight exactly intersects the obstacle, or passes over it, then the LOS is not blocked. If there is any doubt, or should the Players prefer, they may resort to the Line of Sight Algorithm (see Case 7.34) instead.

[7.33] Town, woods, and smoke hexes *add one level* to the height of a hex when calculating blocking height, *but not sighting/firing position*.

[7.34] Players may also determine the Line of Sight by using the basic *algorithm* (mathematical expression of the Line of Sight). It is expected that this will be used only to check the occasional "close call" on the Height Level/Line of Sight Display. The result of the algorithmic method is

governing. Under the algorithmic procedure, a clear Line of Sight exists only if

$$\frac{H}{D} \quad \text{is equal to or greater than} \quad \frac{h - 1.5}{d}$$

whereby

H = Height (in meters) of higher position minus height of lower position.

D = Distance (in meters) from higher position to lower position.

h = Height (in meters) of potential obstacle minus height of lower position.

d = Distance (in meters) from potential obstacle to lower position.

Note: Each height level represents a vertical distance of 20 meters. Each hex represents a horizontal distance of 200 meters.

Map A: A unit in hex 3716 (Height Level 4) attempts to trace a LOS to a unit in hex 2108 (Height Level 0). The only potential obstacle — the light woods hex in 2912 (Height Level 1) — does *not* block the LOS. If, however, the lower unit were to move to hex 2711 the LOS between the two units *would* be blocked.

Map C: A unit in hex 4217 (Height Level 2) attempts to trace a LOS to a unit in hex 4223 (Height Level 0). The only potential obstacle — the Height Level 1 hex at 4219 — does *not* block the LOS. If, however, the lower unit were to move to hex 4220, the LOS between the two units *would* be blocked.

[7.35] **Line of Sight Gauge**
(see separate sheet)

[8.0] DIRECT FIRE COMBAT

COMMENTARY:

For the most part, individual units have a number of different "weapon systems." For example, the BMP (the most advanced Soviet APC) is equipped with a machinegun (automatic weapons), a conventional 73mm gun (a medium main gun), and a Sagger (an ATGM). Unless prohibited by information given on its data sheet, a unit may fire each of its weapons systems (at the same or at different targets) in a given Phase.

Do not become confused by the different types of direct fire. They are (1) *Opportunity Fire*, in which Friendly units fire at Enemy units as the latter move; (2) *Overwatch Fire*, in which Friendly units fire at Enemy units immediately after those Enemy units themselves have fired; (3) *Final Fire*, in which Friendly and Enemy units (that have not already fired in the current Phase) exchange fire; and (4) *Withdrawal Fire*, which occurs only during close assaults.

CASES:

[8.1] RESTRICTIONS ON FIRE

[8.11] Only units with an Overwatch Command may use direct fire. **Exceptions:** See Sections 13.0 21.0, and 30.0.

[8.12] A unit may never fire the same weapons system more than once in the same Phase, unless involved in a close assault (see Section 13.0), or unless the unit is using an air defense system to fire at Enemy aircraft (see Section 20.0).

[8.13] All direct fire is resolved in alternating fashion. First a unit of one Player fires a weapons system, then a unit of the other Player fires a

weapons system. This procedure continues until all units have carried out the desired direct fire.

[8.14] A given unit may be attacked any number of times in the same Phase.

[8.15] All units make separate attacks, which are announced and resolved on an individual basis.

[8.16] Combat is not considered to be simultaneous. With the exception of certain types of overwatch fire (see Case 8.33), the results of each fire combat are applied before any additional combat takes place.

[8.17] If a Player states an attack, he must carry out that attack. He is responsible for calculating the chances of success beforehand. If he states an attack which is then found to make no sense, it is still considered to have been executed. In effect, the firing units have wasted their fire.

[8.18] A unit may only fire at an Enemy unit if it can see the Enemy unit. This may be determined in one of three ways.

A. The unit attempting to fire can by itself spot the Enemy unit, having an un-blocked Line of Sight and being within the regular observation range for the type of unit (vehicle or infantry), motion status (moving or stationary), and terrain concerned.

B. The Enemy unit has revealed itself by firing any of its weapons systems, there is an un-blocked Line of Sight, and the Enemy unit is within the maximum observation range (unlimited during daylight and clear weather, otherwise variable).

C. The Enemy unit has been spotted by a Friendly unit other than the one which is attempting to fire on it, the Friendly unit which is attempting to fire on it has an un-blocked Line of Sight, and the Enemy unit is within the focused observation range (see Case 7.19) of the unit which is attempting to fire on it.

[8.2] OPPORTUNITY FIRE

[8.21] Opportunity fire (for all weapons systems) is performed during the Enemy Movement Segment. It may only be used against moving Enemy units.

[8.22] There is no limit to the number of targets a particular unit may fire at during different times during the Movement Phase, *so long as none of the unit's weapons systems fire more than once*.

[8.23] A unit with an Overwatch Command may withhold its fire and is never forced to attack a given target. It may pass up one possible target in the hope that a better target will later show itself. However, a Phasing Player is never forced to "take back" the movement (or part of the movement) or a unit in order to allow an Enemy unit to attack. **Example:** If a U.S. M60 unit moves into and then out of the Line of Sight of a Soviet T72 platoon, and the Soviet Player elects to withhold his fire and wait for another target, he may not afterwards change his mind and have the T72 platoon fire "retroactively" at the M60 unit.

[8.24] If a Friendly ATGM system fires at a moving Enemy unit, all Enemy overwatch fire on the firing unit by automatic weapons and main gun systems (only) occurs *before* the result of the original attack is determined. (This is due to the fact that the missile of the ATGM system takes a much greater time to reach its target than a comparable gun system.)

[8.25] Opportunity fire is always resolved in the hex that the moving unit has entered. **Exception:** See Case 8.26.

[8.26] Units entering defilade may be attacked by opportunity fire. This fire is resolved before the defending unit enters defilade. The defending unit would be treated as a moving unit on the Loss Modifications Tables.

[8.3] OVERWATCH FIRE

Overwatch fire is the only type of direct fire during a Movement Segment that may be directed against non-moving Enemy units. Furthermore, it may only be directed at Enemy units that have previously fired during the Segment.

[8.31] Any unit with an Overwatch Command may perform overwatch fire.

[8.32] All Friendly overwatch fire is resolved immediately after the fire of the Enemy target unit is resolved. **Exception:** See Case 8.33.

[8.33] If the target Enemy unit is using an ATGM system, then all Friendly overwatch fire on that unit by main gun systems and automatic weapons (only) is resolved first.

[8.34] There is no limit to the number of different targets a given unit may fire at during different times of the Movement Segment, so long as none of the unit's weapons systems fires more than once.

[8.4] FINAL FIRE

Final fire (for all weapons systems) is carried out during the Final Fire Segment of each Movement Phase.

[8.41] Only weapons systems which did not fire in the preceding Movement Segment may use final fire.

[8.42] Units may fire at any Enemy unit to which they may currently trace a Line of Sight and which is visible to them.

[8.43] All final fire is resolved in alternating fashion. Weapons systems have priority of fire in the order given in the Sequence of Play (4.0).

[8.5] WITHDRAWAL FIRE

Withdrawal fire is a special form of direct fire that only occurs when a Friendly unit leaves an Enemy-occupied hex as a result of close assault (see Section 13.0).

[8.6] SUPPRESSION

As a result of direct and/or indirect fire, combat units may become suppressed. Once suppressed, units remain so until the following Enemy Indirect Fire Phase. Suppression has the effects listed in the following Cases.

[8.61] Suppressed vehicular units:

A. May not fire any of their externally controlled weapons systems.

B. May not mount or dismount infantry.

C. Receive a die adjustment on the appropriate Loss Modifications Tables when attacking (see Section 12.0).

[8.62] Suppressed infantry units:

A. Automatically enter defilade in the hex they are in.

B. May not move. Infantry units may remove their Suppression during any Friendly Movement Segment by taking an immediate *one-step loss*. If the Suppression occurred as a result of opportunity fire, this option may be taken at once (before the unit enters defilade due to condition A, allowing the unit to continue its movement. If this occurs, the unit must check morale as usual for a loss of one step. **Note:** If the Suppression is due to a step-loss combat result, the removal of this Suppression results in an additional one-step loss.

C. Receive a die roll adjustment on the Loss Modifications Tables when attacking (see Section 12.0).

[8.7] SILHOUETTING (Optional Rule)

Under certain circumstances, vehicular units may be considered "silhouetted against the sky" and

thus be more vulnerable to direct fire combat. In either version of *Mech War 2*, all vehicular units are considered to be silhouetted if they are in any clear hex at height level 4.

[8.71] Only vehicular units may be silhouetted. Dismounted infantry units may *never* be silhouetted.

[8.72] Defilade (or any other unit status) has no effect on whether a vehicular unit is silhouetted or not.

[8.73] Units may not be silhouetted during new moon or overcast conditions at night. Otherwise weather, day, or night conditions have no effect on silhouetting. **Note:** These silhouetting rules are modified when playing *Suez to Golan*.

[9.0] AUTOMATIC WEAPONS FIRE

GENERAL RULE:

Automatic weapons represent the fire of machineguns, rifles, and grenade launchers. The procedures used to resolve automatic weapons fire will vary, depending on the types of attacking and defending units involved. The automatic weapons strength (at various ranges) of infantry units is printed on the counters themselves, although it may be reduced due to losses. The ability of vehicular units to fire automatic weapons is listed on the unit's Data Sheet; each separate MG (machinegun) listed on the Data Sheet represents a *separate* automatic weapons system. Infantry automatic weapons systems have a maximum range of five hexes. Vehicle automatic weapons systems have a maximum range of 10 hexes.

CASES:

[9.1] HOW TO ATTACK WITH AN INFANTRY UNIT

Fire Routine:

1. Determine the firing unit's automatic weapons strength at the range (in hexes) between the firing unit (exclusive) to the defending unit (inclusive). This is printed on the counter. **Note:** This strength is reduced by one-third for each step that the infantry unit loses (round fractions down); it is never reduced below zero.

2. The attacking Player should roll two dice and consult the Automatic Weapons Combat Results Table (9.3). Cross-index the die roll with the firing unit's attack strength to obtain a combat result.

3. Regardless of the results of this attack, the defending Player now rolls one die and consults the appropriate Loss Modification Table (depending on whether the defending unit is infantry or vehicle; see Section 12.0).

[9.2] HOW TO ATTACK WITH A VEHICULAR UNIT

Fire Routine:

1. Determine the number of vehicles in the firing unit.

2. Cross-index the number of vehicles in the unit with the range in hexes between the firing unit (exclusive) and the defending unit (inclusive) on the Vehicle Automatic Weapons Strength Chart (9.21). The indicated number is the firing unit's attack strength for the attack.

3. The attacking Player now rolls two dice and cross-indexes the dice roll with the appropriate column on the Automatic Weapons Combat Results Table to obtain a combat result.

4. Regardless of the results of Step 3, the defending Player now rolls one die and consults the appropriate Loss Modification Table (depending on whether the defending unit is vehicle or infantry).

[9.21] Vehicle Automatic Weapons Strength Chart (see separate sheet)

[9.3] AUTOMATIC WEAPONS COMBAT RESULTS TABLE (see separate sheet)

[9.4] EXPLANATION OF MODIFIED COMBAT RESULTS

Automatic Weapons and Indirect Fire:

The following Case explains how each combat result is actually applied to the defending unit. Note that these are modified combat results: the defending Player must first take the original combat result and consult the Loss Modification rules (see Section 12.0).

All Defending Units:

— = No effect (the attack has failed)

The Defending Unit is Infantry:

S = Suppressed. The defending unit is Suppressed (place a Suppressed marker on the unit). If the unit was already Suppressed, it remains in that state and suffers an *additional* one-step loss.

1,2,3 = The defending unit loses the number of steps indicated and is Suppressed (if the unit was already Suppressed, it loses the number of steps indicated and remains Suppressed). Place a Suppressed marker on the unit and adjust the unit's strength counter accordingly.

The Defending Unit Is a Light Target Class Vehicle:

S = Suppressed. The defending unit is Suppressed. If the unit was already Suppressed, there is *no* additional effect.

1,2,3,4,5 = The defending unit loses the number of vehicles indicated and is Suppressed. Place a Suppressed marker on the unit and adjust the unit's strength counter accordingly. If the unit was already Suppressed, it loses the indicated number of vehicles and remains Suppressed.

The Defending Unit Is a Protected Target Class Vehicle:

S = Suppressed. The defending unit is Suppressed. If the unit was already Suppressed, there is *no* additional effect.

1 = Same result as Suppressed.

2,3,4,5 = The defending unit loses one less than the number of vehicles indicated and is Suppressed. Place a Suppressed marker on the unit and adjust the unit's strength counter accordingly. If the unit was already Suppressed, it loses the indicated number of vehicles and remains Suppressed.

The Defending Unit Is a Hard Target Class Vehicle:

S,1,2,3,4,5 = Suppressed. The defending unit is Suppressed (place a Suppressed marker on the unit). If the unit was already Suppressed, there is *no* additional effect.

Note: Against FROGS and SCUDs, each vehicle should be treated as if its armor were one class less (e.g., hard vehicles are treated as Protected). Vehicles are never reduced below "light" armor class, however.

[9.5] CO-AXIAL MACHINEGUNS (Optional Rule)

Certain vehicles have an additional automatic weapons system, their co-axial machinegun. This is noted on the unit's Data Sheet. This weapon system is treated in all respects like the normal automatic weapons strength of the vehicle unit, with the exception that the system *may not* fire in the same Phase as the unit's main gun. (If both automatic weapons systems of the same vehicle fire at the same defending unit, two separate attacks are made.)

[10.0] MAIN GUN FIRE

GENERAL RULE:

This represents the fire of various vehicle and infantry main guns. Such guns may be *heavy* or *medium* caliber. This is listed on the unit's Data Sheet.

CASES:

[10.1] HOW TO FIRE ON AN ENEMY VEHICULAR UNIT

Fire Routine:

1. Determine the caliber of the main gun of the firing unit (either heavy or medium)

2. For a heavy main gun, determine its type of *fire control* and the *target profile* of the defending unit. Then consult the Heavy Main Attack Strength Table. Cross-index the range in hexes between the firing unit (exclusive) to the target unit (inclusive) with the target profile of the defending unit. (Make sure to use the sub-column corresponding to the fire control of the attacking unit.) The number indicated is the firing unit's attack strength for the attack. (Go on to step 4.)

3. If the gun is a medium main gun, it has no fire control system. Instead, determine its *firing class* (either 1, 2, or 3) and the *target profile* of the defending unit. Then consult the Medium Main Gun Attack Strength Table. Cross-index the range in hexes between the firing unit (exclusive) and the target unit (inclusive) with the target profile of the defending unit. (Make sure to use the sub-column corresponding to the class of the firing unit.) The number indicated is the firing unit's attack strength for the attack.

4. Determine the number of vehicles (or steps) in the firing unit. Cross-index this line on the Main Gun/ATGM Combat Results Table with the firing unit's attack strength. This will determine which column (labeled A through V) on the Table to use.

5. The attacking Player now rolls two dice and cross-indexes the die roll with the appropriate column on the Combat Results Table.

6. Regardless of the results of step 5, the defending Player now rolls one die and consults the Vehicle Loss Modification Table (12.11) to determine the actual results of the attack. This final result is applied immediately (see Section 12.0).

[10.2] HOW TO FIRE ON AN ENEMY INFANTRY UNIT

This fire represents main guns firing High Explosive (HE) shell. Its maximum range is 5 hexes.

[10.21] Procedure

1. Determine the caliber of the main gun of the firing unit. Cross-index the caliber of the main gun with the number of vehicles in the firing unit on the Main Gun Anti-Infantry Attack Strength Table (10.22). The indicated number is the attack strength for the attack. The attack is then resolved on the Automatic Weapons Combat Results Table (9.3).

2. The attacking Player now rolls two dice. Cross-index the dice roll with the firing unit's attack strength.

3. Regardless of the results of step 2, the defending Player now rolls one die and consults the Infantry Loss Modification Table (12.2) to determine the actual results of this attack. This final result is applied immediately.

[10.22] Main Gun Anti-Infantry Attack Strength Table (see separate sheet)

[10.3] MAIN GUN/ATGM ANTI-VEHICLE COMBAT RESULTS TABLE (see separate sheet)

[10.4] EXPLANATION OF MODIFIED COMBAT RESULTS

The following Case explains how each combat result is actually applied to the defending unit. Note that these are modified combat results: the defending Player must first take the original combat result and consult the Loss Modification rules (Section 12.0).

All Defending Units:

— = No effect (the attack has failed)

1,2,3,4,5 = The defending unit loses the number of vehicles indicated and is Suppressed. Place a Suppressed marker on the unit and adjust the unit's strength counter accordingly.

[10.5] MAIN GUN RANGE ATTENUATION TABLES

[10.51] Heavy Main Gun Attack Strength Table (see separate sheet)

[10.52] Medium Main Gun Attack Strength Table (see separate sheet)

[11.0] ATGM FIRE

GENERAL RULE:

This represents the fire of various anti-tank guided missiles (ATGM). The performance of such weapons varies greatly from system to system; the specific type of ATGM with which a unit is equipped is listed on the unit's Data Sheet. ATGM weapons systems may only attack vehicular units; they may never attack dismounted infantry units.

PROCEDURE:

Fire Routine:

1. Determine the specific type of ATGM (e.g., Sagger, TOW) used by the firing unit. This is listed on the unit's Data Sheet and may be modified by Scenario instructions.

2. Determine the range in hexes between the firing unit (exclusive) and the defending unit (inclusive).

3. Cross-index the range with the ATGM system of the firing unit on the ATGM Attack Strength Table (11.3). The number indicated is the firing unit's attack strength for the attack.

4. Determine the number of vehicles (or steps) in the firing unit. Cross-index this line on the Main Gun/ATGM Combat Results Table with the firing unit's attack strength. This will determine which column (labeled A through V) on the Table to use.

5. The attacking Player now rolls two dice and cross-indexes the dice roll with the appropriate column on the Combat Results Table.

6. Regardless of the results of step 5, the defending Player now rolls one die and consults the Vehicle Loss Modification Table (12.11) to determine the actual results of the attack. This final result is applied immediately (see Section 12.0).

CASES:

[11.1] RESTRICTIONS ON ATGM FIRE

[11.11] When calculating the range in hexes between the firing unit and the defending unit, Players must determine if the Line of Fire goes through a river hexside and/or a lake hex. If it does so, then all hexes on the "far" side of the river hexside or lake hex count as double when determining the range. There is no additional effect for crossing more than one such water obstacle.

[11.12] The ATGM weapons systems of vehicle units (only) are subject to damage due to indirect fire (see Case 14.34).

[11.13] The ability of mounted infantry units to fire their ATGM systems depends on the type of APC transporting the infantry (see Section 17.0).

[11.14] ATGM weapons systems may fire only at vehicle units. They *may not* fire at dismounted infantry units. However, ATGMs may eliminate mounted infantry units by eliminating the vehicles they are riding in.

[11.2] SEQUENCING ATGM FIRE

Due to the fact that ATGM missiles have a relatively long time of flight (up to 30 seconds), their fire is not considered to be simultaneous with automatic weapons and main gun fire. Therefore, when resolving Friendly overwatch fire on firing Enemy units using an ATGM system, all Friendly overwatch fire by automatic weapons and main gun systems on that Enemy unit is resolved first before the Enemy fire itself is resolved. Thus the originally firing ATGM unit could have its strength reduced (or totally eliminated) before it got to resolve its fire. **Note:** The fire of Friendly ATGM systems performing overwatch fire on Enemy ATGM firing units is resolved normally, since the time in flight of the missiles cancels each other's out.

[11.3] ATGM ATTACK STRENGTH TABLE

(see separate sheet)

[11.4] PERSONNEL ANTI-TANK WEAPONS

These represent a variety of short-range weapons used by infantry units against vehicles. (These are listed on the unit's Data Sheet.) These weapons systems may be used only against vehicles; they may not attack dismounted infantry units. Their fire is resolved as described in the following Case.

Procedure:

1. Determine the type of anti-tank weapon carried by the firing unit (**R**, **B**, or **A**).

2. Cross-index the range in hexes from the firing unit (exclusive) to the target unit (inclusive) with the appropriate weapons system on the Personnel Anti-Tank Range Attenuation Table. The indicated number is the firing unit's attack strength for the attack.

3. Determine the number of steps in the firing unit. Cross-index this line on the Main Gun/ATGM Combat Results Table with the firing unit's attack strength. This will determine which column (labeled A through V) on the Table to use.

4. The attacking Player now rolls two dice and cross-indexes the dice roll on the appropriate column on the Combat Results Table.

5. Regardless of the results of step 5, the defending Player now rolls one die and consults the Vehicle Loss Modification Table (12.11) to determine the actual results of the attack. This final result is applied immediately.

[11.41] Personnel Anti-Tank Attack Strength Table (see separate sheet)

[12.0] LOSS MODIFICATION

GENERAL RULE:

Loss Modification is the means whereby combat results obtained by the attacking Player (see Sections 8.0, 9.0, 10.0, and 11.0) are altered. This alteration is due to a variety of factors, such as terrain, target attitude, crew quality, etc. Loss Modification *must be carried out regardless* of the result of the original attack (even if the result was No Effect). **Note:** An original attack must actually

have been made. That is, the firing unit must have had an attack strength of at least zero.

PROCEDURE:

After the attacking Player has obtained a combat result, the defending Player must total his *Loss Modifiers*. This is performed by referring to the Loss Modifier Chart (12.3) while the defending Player checks for (a) troop quality of firing unit, (b) target unit type, (c) firing unit type, and (d) defender's terrain. Each of these modifiers is listed as an addition or subtraction from the defending Player's upcoming Loss Modification die roll (they are all cumulative). When a final number to be added or subtracted has been determined, the defending Player should roll a single die and consult the Vehicle Loss Modification Table (if the target is a vehicle) or the Infantry Loss Modification Table (if the target is infantry). This die roll is modified by the Loss Modifiers determined by the Player and is read as described in the following Cases.

CASES:

[12.1] VEHICLE LOSS MODIFICATION

Procedure:

After totaling the appropriate Loss Modifiers and adding them to or subtracting them from his die roll, the defending Player should cross-index the modified die roll with the target class of the defending unit on the Vehicle Loss Modification Table. The indicated change in the combat result is applied immediately.

[12.11] Vehicle Loss Modification Table (see separate sheet)

[12.12] Explanation of Vehicle Loss Modification Table

— = No effect (the original combat result is applied)

—1, —2, —3 = Reduce the number of vehicles eliminated in the original combat result by the indicated number. If no vehicles were originally lost (e.g., the combat result was Suppression or zero), then the defending unit is *not affected* by that combat.

+1, +2, +3 = Increase the number of vehicles due to be eliminated because of the original combat result by the indicated number.

[12.13] If more than one unit of the same armor class and target profile are stacked together, the modified combat result calls for more vehicles to be lost than are contained in the target unit, and a second or third unit of the same armor class and target profile as the original target unit are also visible to the firing unit, the losses which cannot be absorbed by the original target unit must be taken by the second such unit. If there are three units of the same armor class and target profile visible to the firing unit, the firing Player may choose which of the other two units will absorb losses beyond the capacity of the original target unit to absorb. If, in this case, the second unit is also eliminated without all losses having been absorbed, the third such unit must suffer the unabsorbed losses. In no case, however, may a unit of a different armor class or target profile be called upon to absorb a loss due to direct fire on another unit. **Optional:** Players may modify this rule prior to the game. For example, losses can be taken by other units in the hex if they are equally or less armored than the original target unit and are of equal or worse target profile. (This modification is less realistic than the standard rule.)

[12.2] INFANTRY LOSS MODIFICATION PROCEDURE

After totaling the appropriate Loss Modifiers and adding or subtracting them from his die roll, the

defending Player should cross-index this modified die roll with the column on the Infantry Loss Modification Table. (Only one column is needed, because all infantry units have the same target class.) The indicated change in the original combat result is applied immediately.

[12.21] Infantry Loss Modification Table (see separate sheet)

[12.22] Explanation of Infantry Loss Modification Table

— = NO EFFECT (The original combat result is applied)

—1 = If the original combat result is 1 or greater, reduce the result by 1 and suppress the affected unit. If no steps were originally Lost (i.e., the combat result was Suppression or no effect), then the defending unit is completely *unaffected* by this particular combat.

+1 = Increase the number of steps due to be eliminated in the original combat result by 1. If the original combat result was Suppression, then the defending unit loses 1 step. If the original combat result was *no effect*, then the defending unit is Suppressed.

[12.3] LOSS MODIFIER CHART (see separate sheet)

[12.4] TROOP QUALITY (Optional Rule)

An additional modifier to all direct fire attacks may also be made due to overall troop quality. This is a measure of the general level of training and experience of the soldiers that make up a given unit. In each scenario the instructions will list the troop quality rating to be used by each Player.

[12.41] When using the troop quality rules, the appropriate die roll adjustment must be made from the Loss Modification Tables for all direct fire attacks (see Case 12.3). **Note:** Only the troop quality of the firing unit is considered.

[12.42] Troop quality affects *only* direct fire attacks; it has *no effect* on any form of indirect fire. The troop quality of the *defending* unit has no effect on the combat.

[12.5] LOSS MODIFICATION FOR MOVING

[12.51] There is a modification of —2 on the loss modification die roll if the target unit is moving. This modification applies to units which are:

- Attacked by opportunity fire while moving from hex to hex;
- Attacked during the Final Fire Segment after having moved in that Phase from hex to hex, not short halting;
- Withdrawing from close assault;
- Fired upon at the beginning of close assault under Case 13.12;
- Attacked by opportunity fire while entering defilade under an Overwatch command;
- Attacked during the Final Fire Segment of the enemy movement Phase, if the current command and the previous command were both "Bound" or "Bounding Overwatch" and the unit did move from hex to hex during the previous friendly movement Phase, and the unit is not short-halt designated.

[12.52] There is no loss modification for a target unit which is:

- Mounting or dismounting without moving from hex to hex;
- Involved in close assault rounds of fire (exceptions: see Case 12.51 c. and d.);

- Attacked by Overwatch fire after performing short halt fire;
- Attacked during the Final Fire Segment while short-halt designated;
- An Infantry or motorcycle unit which is either suppressed or in defilade, even if otherwise covered by Case 12.51;
- Not moving.

[13.0] CLOSE ASSAULT

GENERAL RULE:

During a Friendly Movement Segment a Player may move a unit (or units) into a hex containing an Enemy unit (or units). This is known as *close assault*. The moving units must stop in the hex being assaulted, and *they must resolve combat* during the Close Assault Segment of that Phase. Close assault fire-and-move, and short halt are the *only* procedures by which units with non-overwatch commands may fire their weapon systems, and close assault is the only instance in which weapons systems may fire more than once per Phase.

PROCEDURE:

Like a sort of boxing match, close assault is divided into three *rounds*. Each round is composed of:

- Non-phasing Player Fire Impulse
- Phasing Player Fire Impulse

During each Segment all of the Friendly Player's units involved in the close assault may fire their appropriate weapon systems at any Enemy units in the same hex. This fire is resolved in the usual manner. ATGM weapon systems may not fire during a close assault, as they may not fire at 0 hex range.

At the beginning of the close assault segment, Players must determine whether the units in the hex being assaulted are eligible to fire at the units moving into the hex under Case 13.12; if they meet the criteria specified in that Case, such fire is immediately resolved. Players then proceed to the first round of close assault fire. Each round begins with the Non-phasing Player Fire Impulse. During this Impulse, the non-phasing Player may have some or all of his units fire at one or more of the Enemy units in that same hex. When this fire is completed, and resolved, play moves to the Phasing Player Fire Impulse; the phasing Player may have some or all of his units fire at one or more of the Enemy units in that same hex. This completes one round. The next round begins with the Non-phasing Player Fire Impulse, etc., until three rounds have been completed. There is one other procedure for close assault fire, Withdrawal Fire; this is covered in Case 13.3.

CASES:

[13.1] ENTERING CLOSE ASSAULT

[13.11] The assaulting Player may move one or more units into a hex, as he desires. The assaulting units may have begun the Movement Segment in the same or different hexes.

[13.12] At the beginning of the Close Assault Phase, but before commencing the first round of close assault, engaged defending units in the assaulted hex (with an overwatch command) may fire each of their weapon systems (under the normal restrictions) once at any assaulting units in the hex. This fire is resolved at 0 hex range.

[13.2] CLOSE ASSAULT COMBAT

All Close Assault combat is resolved in the same manner as normal combat, unless specified otherwise, but at close assault (0 hex) range. Fire alter-

nates between Players; that is, all of the units of one Player may fire, then all of the units of the other Player may fire, etc.

[13.21] The non-phasing Player is the first Player to fire during each round of combat. There are three rounds of close assault combat per Close Assault Segment; each round consists of one fire impulse for each Player. Fire under Case 13.12 and Case 13.3 is outside of these three rounds.

[13.22] During each impulse, and during fire under Cases 13.12 and 13.3, each vehicular unit may fire one weapon system, and each infantry unit may fire its automatic weapons as well as one other weapons system. Each unit's fire is resolved separately.

[13.23] All units in a hex which is undergoing close assault are considered to be engaged. Place an engaged marker on the hex. The "engaged" marker is removed as soon as only one Player has units in the hex.

[13.24] Friendly engaged units may only fire their weapon systems at Enemy engaged units that occupy the same hex that the Friendly engaged units occupy.

[13.25] Units outside of the hex may not carry out direct fire attacks on engaged units. However, all indirect fire attacks continue to be resolved normally.

[13.26] Units may not move through a hex containing engaged units, although they may move into such a hex under certain circumstances (see Case 13.27).

[13.27] When units begin a Movement Phase engaged, the Phasing Player may, within the stacking restrictions (which apply only in the context of one Player's units) bring other Friendly units into the hex as reinforcements, under Bound Commands. Engaged Enemy units may not fire at these additional units under Case 13.12.

[13.28] Before units begin a Close Assault Round, the owning Players may give new Commands to the engaged units before anything else is done in the Close Assault Round. This is the only time, other than following a change in morale state, when commands may be given outside of the Command Phase. If part of a company is engaged, and part is not engaged, the engaged and non-engaged units may be given separate commands; this is the only instance when this is possible, other than Bounding Overwatch. Since these commands are assumed to originate locally, their issuance is not subject to jamming.

[13.29] If a unit has an Overwatch Command, it is obligated to remain in the assaulted hex upon conclusion of the Round. If a unit has a Bound Command, it is obligated to withdraw from the hex upon conclusion of the Round. If both Players, following the round, retain units in the hex, and both are in Overwatch Command, play proceeds to the next Round, unless the just-concluded Round was the third Round, in which case the Movement Phase is ended. If both Players' units have Bound Commands, the Phasing Player withdraws first, but he is not subject to withdrawal fire from Enemy units in Bound Command; if his withdrawal blocks all allowable exit hexes for the non-Phasing Player, the non-Phasing units may remain in the hex despite the Bound Command. If there are Friendly units with Bound Command and Enemy units with Overwatch Command, the Friendly units with Bound Command must exit the hex and are subject to withdrawal fire. Note that suppressed infantry will take a step loss by withdrawing. If a unit withdraws, it remains in Bound Command until the next Friendly Command Phase. Withdraw Commands are treated the same as Bound Commands for engaged units.

[13.3] WITHDRAWAL FIRE

Engaged units with Overwatch Commands may not withdraw from close assault. Engaged units with Bound Commands must withdraw from the hex at the end of the Round of close assault combat. All Friendly units of the same type (infantry or vehicle) must withdraw from a given hex at the same time. If such units are unable to withdraw, see Case 13.37.

[13.31] Withdrawing units may be placed in any adjacent hex not occupied by Enemy units. However, units may not withdraw into lake hexes, across river, ferry or bridge hexesides, in excess of the stacking limits, or into hexes from which Enemy units moved into close assault during that Movement Phase.

[13.32] All withdrawing units of the same type (vehicle or infantry) must be placed in the same hex.

[13.33] Dismounted infantry units that withdraw have their Fatigue level *immediately* increased by 1. **Note:** This means that infantry units already at Level 2 Fatigue may not withdraw.

[13.34] All of the previously engaged units of the non-withdrawing Player in Overwatch Command may immediately fire withdrawal fire at the withdrawing units (separately, with each of their weapons systems). This fire is resolved at 1 hex range.

[13.35] Units in Morale State 2 or 3 may not engage in close assault (see Case 18.42).

[13.36] Withdrawing units *do* receive the die modification for movement on the Loss Modification Table.

[13.37] If an engaged unit with a Bound Command is unable to withdraw due to the restrictions in this Case, its morale level automatically increases by 1 at the end of the Close Assault Segment.

[14.0] INDIRECT FIRE

Indirect fire is the method by which artillery, mortars, missiles and rocket launchers attack. *These weapons fire only once per Game-Turn and do not require a valid Line of Sight.* There are two types of indirect fire weapons: missiles (honest john, lance, SCUD or FROG) and conventional artillery (mortars, howitzers, multiple rocket launchers, self-propelled guns). Because they are "area" weapons, all indirect fire attacks a specific hex rather than an individual unit. The use of indirect fire weapons may require a certain amount of advance planning and the accuracy of artillery fire is determined by the ability of other Friendly units to spot (observe) registration fire in the target hex. Indirect fire units may be either deployed on the map or off-map, as specified in the scenario.

Sample Indirect Fire Plot

Caliber of Firing Unit	Pattern of Fire	ID of Firing Unit	dist from map (EU)	on-map range
120 LHmor	S	1061	on	2-28
120 LHmor	S	1022	on	2-28
LH	S	SP74	on	76
122 LH	Bn	1	10e	66
122 LH	Bn	2	10e	66
130 MH	Btty		30	all
FROG	Bn		60s	all
SU19				

S = section; Bn = battalion; Btty = battery; GT = Game-Turn; LHmor = Light Howitzer on CRT (mortar); e = eastern mapedge; s = southern mapedge; S = Smoke; St = Starshell; NPG =

PROCEDURE (Fire Plot):

Each time a unit uses indirect fire it must have a *fire plot*. Fire plots are assigned secretly and remain so unless questioned by the opposing Player. To plot a fire mission, the Player must list on a piece of paper:

- (1) The identification of the firing unit (by caliber)
- (2) The intended target hex number (this would be the "apex" hex of a battery pattern (see Case 14.14) or the "central" hex of the battalion impact pattern (see Case 14.14).
- (3) The type of indirect fire being requested (either starshell smoke or HE) and its pattern (battalion, battery or section)
- (4) If necessary, the Game-Turn in which the fire is due to impact on the map.

Player's Note: The Players must construct their own *Fire Plot Sheet*. We suggest that each Player prepare a form similar to the one illustrated below.

PROCEDURE (Application of Fire):

After a Player writes a fire order for off-map artillery, there is a delay of one Game-Turn before he can apply that fire on the map. (There is no delay for on-map artillery). When the Friendly Resolution Segment of the Indirect Fire Phase of the correct Game-Turn occurs, the firing Player takes the following steps to apply his plotted fire to the map:

- (1) He announces that he has indirect fire plotted to arrive.
- (2) He then announces what his target hexes are for each caliber and pattern.
- (3) Having determined the target hex, he then follows the procedure for determining Scatter (14.2) to determine exactly where the fire will impact.
- (4) Having determined the exact impact hex, he places the appropriate impact marker on the hex. If the type of fire requested was smoke (see Section 16.0), the procedure ends here. If not, the Player proceeds to step 5.
- (5) The Player proceeds to attack all the units in the impact hex (whether Enemy or Friendly) using the correct Artillery Combat Results Table.

CASES:

[14.1] REQUESTING FIRE

When a Player writes a fire mission he is requesting fire. The number of fire missions that a Player may request at any one time depends on the number of indirect fire units he has available. An indirect fire unit may only fire one mission at a time. If, for example, the U.S. Player had only one 81mm mortar unit available, he could only request one fire mission at that time. A scenario may provide that a battalion may be broken down at the owning Player's option into three battery fire units or a battery may be broken down into three section fire units. These may be recombined and broken down by the owning Player any number of times.

GT4	GT5	GT6
S: A1024		
St: A1025		
B1003		
B1015	B0816	B0814
NPG: A0510	NPG: B1223	NPG: A0515
NPS: A0505	load HE	loading HE
loading nuke	5kt	5kt B0426
strafe/ASM	bomb A1408	

non-persistent Gas (EU); NPS = non-persistent spray (EU); HE = high explosive (hex with no ordinance indicated is also HE); kt = kiloton (EU); ASM = air-surface missiles; A# = hex number on map A; B# = hex number on map B; ID = identification number (where there is more than one type); (EU) = Mech War Europe only.

[14.11] Artillery units are assumed to repeat their current fire mission until they are assigned a new fire mission (see Case 14.25). If a Player does not wish an artillery unit to fire, he should simply write *No Fire* on the unit's fire plot.

[14.12] Indirect fire may only be requested during the Plot Segment of a Friendly Indirect Fire Phase (see the Sequence of Play).

[14.13] At the beginning of certain scenarios, Players can "pre-plot" fire missions so that the fire arrives on Game-Turn 1. This will be listed in the scenario.

[14.14] When requesting artillery fire, Players must specify the *pattern of fire*. *Battalion Patterns* impact in the target hex and all adjacent hexes equally. *Battery Patterns* impact in a "triangle" of three adjacent hexes, of which the "apex" is the target hex; the other two impact hexes are on the side away from the map edge from which the fire is coming (see scenario). *Section Patterns* impact only in the individual target hex. The types of patterns which may be requested are listed in the scenario instructions.

[14.15] Players should note that there is no way to "shift" artillery fire from hex to hex other than by plotting a fire mission for the new target hex.

[14.2] DETERMINING SCATTER

When fire is due to impact on the map, the firing Player *must* determine how accurate that fire will be.

[14.21] The Player states what his plotted target hex is. If the firing unit is conventional artillery, he then determines which of his (Friendly) units on the map has the *shortest* Line of Sight to the target hex. This determines what column will be used on the Conventional Artillery Scatter Table (14.27). If no unit has a Line of Sight to the target hex, the Player uses the 61+ column. If the firing unit is a FROG or missile, then the observation of Friendly units is not considered; the Player automatically rolls one die for Scatter on the indicated column of the Missile Scatter Table.

[14.22] The firing Player rolls two dice and consults the proper column on the Artillery Scatter Tables. This determines whether the fire is on target, Scattered in the plotted target hex, or Scattered in some other and more distant hex (see Case 14.26). If the firing unit is conventional artillery, the Player then places the appropriate impact

marker in the *actual* (post-scatter) target hex, corresponding to the pattern, caliber and accuracy of the fire. If the firing unit is a missile or FROG then no marker is placed. Instead, the Phasing Player should *immediately* resolve any indirect fire attacks on all units in the impact pattern (see Case 14.33).

[14.23] The Player repeats the Scatter routine for each of his firing units, until the accuracy of all such fire has been resolved.

[14.24] After the Player has placed all his impact markers on the map, he then resolves indirect fire attacks on each of the units in each of the impact hexes.

[14.25] When a conventional artillery unit repeats an immediately preceeding (observed) fire mission, and the plotted target hex as well as the actual (scattered) target hex are still being observed by a Friendly unit, then the accuracy for that fire mission is resolved on the *Fire For Effect* column of the Scatter Table. FROG units may *never* fire for effect. When guided missiles Fire For Effect, there is a die modification of -2 on the Missile Scatter Table.

[14.26] There are four possible results from any Scatter die roll. If the fire is on target or Scattered in the target hex, the Player simply places the impact marker (with the appropriate side face-up) in the plotted target hex. For all other results the following procedures are used:

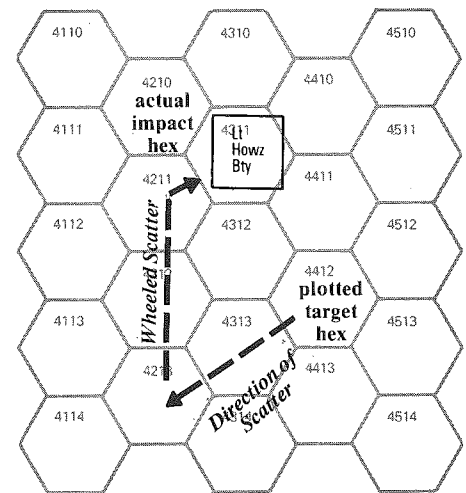
SCATTERED ONE HEX:

The Player rolls one die and consults the Scatter Diagram to determine the exact direction of fire. The impact marker is placed (with its *Scattered* side up) in the indicated hex.

SCATTER 2, 3 OR MORE HEXES:

The Player rolls one die and consults the Scatter Diagram to determine the direction of Scatter. He then places the impact marker in the indicated hex, but in the hex which is the correct number of hexes away from the plotted target hex (either 2, 3 or more). The Player then makes a second die roll and "wheels" the impact marker in a clockwise direction one hex for each number in the die roll, staying the same distance away from the plotted impact hex. (E.g., 2 equals two hexes). The impact marker is then placed (with its *Scattered* side up) in the indicated hex.

[14.27] *Artillery Scatter Table* (see separate sheet)



Example of Scatter:

The plotted target hex for a section pattern of conventional artillery was 4412, but the artillery fire has scattered two hexes (on an S-2 result). The owning Player rolls one die and receives a result of 5. This indicates that the direction of scatter is towards hex 4213. The Player then again rolls one die in order to determine the actual impact hex of the fire. A die roll of 3 indicates that the artillery fire must be wheeled three hexes (i.e., through hexes 4212 and 4211, and into 4311). Hex 4311 is the actual impact hex of the artillery fire.

[14.28] *Missile/Rocket Scatter Table* (see separate sheet)

[14.3] INDIRECT FIRE COMBAT

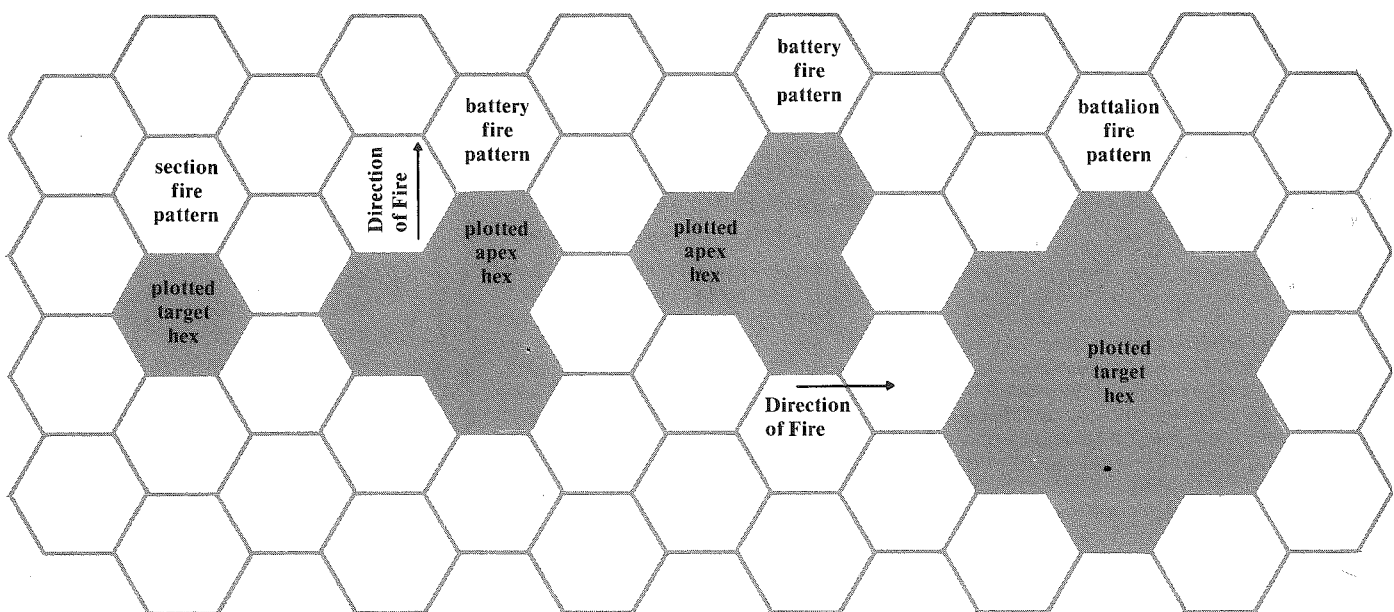
The effect of indirect fire on both vehicular and infantry units in each impact hex is reflected on the Indirect Fire Combat Results Tables (14.31 and 14.32). Depending on the results of Scatter the fire will either be *On-Target* or *Scattered*. There is a separate Combat Results Table for each of these two states.

[14.31] *On-Target CRT* (see separate sheet)

[14.32] *Off-Target CRT* (see separate sheet)

[14.33] The firing Player should roll two dice for each unit in each impact hex (it makes no difference whether they are Enemy or Friendly). He

PATTERNS OF FIRE EXAMPLE



Shaded hex(es) are impact hex(es) of pattern.

should then cross-index the die roll with the correct column corresponding to the caliber of the firing unit. If the defending unit is infantry, the owning Player *immediately* rolls one die and consults the Infantry Loss Modification Table (12.2) for any alterations in combat results; these Modified results are then applied. No Modified Combat Results Table is used for vehicles defending against indirect fire. **Note:** Only those modifiers marked with an * (or specifically noted) are used when modifying the results of indirect fire combat.

[14.34] Indirect Fire Combat Results are the same as for the Automatic Weapons Combat Results Table (9.4). However, a result of 2 or 3 against a vehicular unit mounting an ATGM system also results in an ATGM kill (note this fact on the unit's status sheet). The unit's ATGM systems have been destroyed and may no longer fire. (This result is in addition to the normal combat results against the unit).

[14.4] RESTRICTIONS ON THE USE OF INDIRECT FIRE

[14.41] A Player may request fire on any hex on the map, within the range of the firing unit. Off-map artillery has unlimited range in most scenarios, but in two-map and EW Jamming scenarios their range and hypothetical distance from a map edge is given in the scenario. The ranges of on-map artillery units is noted on their data sheet entries.

[14.42] Any Friendly unit (except dummies, of course) may spot for indirect fire during the Scatter routine.

[14.5] INDIRECT FIRE AGAINST MOVING UNITS

Impact markers from conventional artillery fire missions remain on the map from the resolution of the Indirect Fire Phase in which they are placed until the Marker Removal Segment of the next Friendly Indirect Fire Phase. If a unit moves into an impact hex, the moving unit is immediately attacked by the indirect fire. This is not true of the indirect fire of missiles. Missile fire missions attack only those units in a hex at the moment the impact is resolved. They have no effect on units that may later enter the hex.

[14.6] ON MAP ARTILLERY UNITS

Certain units are equipped with mortar or self-propelled howitzer weapons systems and function as on-map artillery.

[14.61] All on-map artillery units are treated as 1 vehicle (or step) units. If they take losses they are completely *eliminated* and removed from the game. (Exception: see Case 14.68).

[14.62] On-map artillery units must have an Overwatch Command while performing (or plotted to perform) a fire mission.

[14.63] On-map artillery units have certain minimum and maximum ranges. (Those are listed on the unit's data sheet). On-map artillery units may not perform a fire mission in any hex that is closer to the firing unit than its minimum range would allow, or further than its maximum range.

[14.64] The caliber of each on-map artillery unit is listed on the unit's data sheet.

[14.65] Should the need arise, on map artillery units may serve as their own observers when determining Scatter for a fire mission.

[14.66] Certain on-map artillery units may use direct as well as indirect fire; this is noted on the unit data sheet.

[14.67] The delay time for on-map artillery is 0. (No Game-Turn).

[14.68] The Soviet SP74 unit may only use Indirect Fire when it is at full (3 vehicle) strength. However, the unit may continue to use Direct Fire even when reduced to 2 or 1 vehicle strength.

[14.7] ON-CALL TARGETS

Before the start of each game, each Player may choose three hexes (anywhere on the map) as on-call targets, unless restricted by scenario instructions. When requesting a fire mission on any hex within five hexes (inclusive) of such a hex, the delay time for indirect fire is reduced by one Game-Turn. **Note:** This may reduce the delay time to zero (i.e., the impact of the fire is resolved in the same Phase as it is plotted). Nuclear artillery may also take advantage of on-call targets.

[14.8] ENVIRONMENTAL EFFECTS OF ARTILLERY (Optional)

[14.81] An artillery result of 2 or more on a town hex will produce *Town Devastation* in that hex. This must be noted on a separate sheet of paper.

[14.82] An artillery result of 2 or more in a heavy woods hex or 3 or more in a light woods hex will produce *Abatis*. Place an Abatis marker on the hex.

[14.83] An artillery result of 3 in a hex will destroy any bridges over its hexsides.

[14.84] All environmental artillery effects are cumulative from Game-Turn to Game-Turn. That is, two Indirect Fire results of "1" equal a result of "2" and so on.

[15.0] DEFILADE

GENERAL RULE:

Units may improve their defensive abilities by entering *defilade*. For vehicles, this means positioning the body of each vehicle so that it is protected by some obstacle with only the turret exposed and vulnerable. For infantry, defilade means going prone behind whatever cover is available. Since very minor terrain features are suitable for this purpose — trees, small hills and depressions, buildings, etc. — units may enter defilade in any hex.

PROCEDURE:

The cost in Movement Points for a vehicle unit to enter defilade varies with the terrain in the hex the unit occupies. A vehicle unit enters defilade simply by expending Movement Points for that purpose. There is no cost for infantry units to enter defilade (but see Case 15.42). **Note:** Vehicle units may always enter defilade by spending an *entire* Friendly Movement Segment in a hex (with a Bound or Overwatch Command), even if the unit would not ordinarily have the Movement Points to do so. Units may not fire in a Segment in which they entered defilade, even if they have an Overwatch Command, but they may fire in the Final Fire Segment of that Movement Phase.

[15.1] INDICATING DEFILADE

[15.11] When a vehicular unit enters defilade, a defilade marker must be placed on top of the unit. *This marker must be faced towards a specific hexside, but entirely at the owning Player's option.* (See example below).

[15.12] Each vehicular unit in a hex is treated separately. They may position their defilade markers in the same or different directions, as the owning Player desires.

[15.13] Infantry units in defilade receive a defensive advantage from all directions. It is thus unnecessary to position the defilade marker in any particular way when dealing with infantry units. However, it is still required that a Player face the defilade markers for unobserved infantry units, so that the Enemy Player will not know whether the unit is vehicle or infantry.

[15.14] Vehicular units may not enter defilade in a hex containing Enemy ground units.

[15.15] Infantry units in hexes containing Enemy ground units may enter defilade normally.

[15.2] EFFECTS OF DEFILADE ON DIRECT FIRE

[15.21] If a vehicle unit in defilade is the target of a direct fire attack, and the Line of Fire goes through one of the unit's defilade hexsides, then there is a die roll adjustment made on the Vehicle Loss Modification Table (12.1) when resolving the results of the attack. (The extent of this adjustment will vary with the target profile of the defending unit). (But see also 15.23).

[15.22] If an infantry unit in defilade is the target of a direct fire attack, the Line of Fire must, by definition, go through one of the unit's defilade hexsides. Thus, infantry units in defilade always receive the indicated die roll adjustment on the Infantry Loss Modification Table. (But see also Case 15.23).

[15.23] If the firing unit is two or more Height Levels above a defending vehicle unit, then no adjustment is made on the Loss Modification Tables for the effects of defilade. Defending infantry units, however, would receive the normal die roll adjustment.

[15.24] No adjustment for defilade is ever made for a defending vehicle unit when the firing unit is an aircraft at high altitude or is a helicopter in the same hex. Defending infantry units, however, would receive the normal die roll adjustment.

[15.3] EFFECTS OF DEFILADE ON INDIRECT FIRE AND CLOSE ASSAULT

[15.31] If an infantry unit in defilade is the target of an indirect fire or close assault attack, it always receives the indicated die roll adjustment on the Modified Combat Results Table.

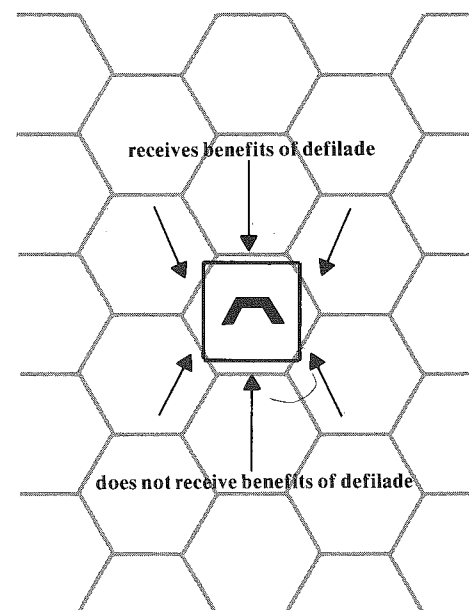
[15.32] Vehicular units in defilade receive no benefit from being in defilade when defending against an indirect fire or close assault attack.

[15.4] EFFECTS OF DEFILADE ON MOVEMENT

[15.41] There is no cost for a vehicle to leave defilade.

EXAMPLE OF DEFILADE

Note: Infantry units would always receive the benefit of defilade, regardless of the direction of the Line of Fire.



[15.42] There is a cost of one *additional* Movement Point for an infantry unit to leave defilade.

[15.43] There is *never* any additional cost for a unit (whether Enemy or Friendly) to enter a hex containing a unit in defilade.

[15.44] All defilade markers are immediately removed when the unit in defilade either leaves the hex or is eliminated.

[16.0] SMOKE

Most conventional artillery units are capable of firing smoke instead of their normal high explosive (HE) shell. FROGs and missiles are not capable of firing smoke. However, not all artillery units are equipped with smoke munitions. The scenario instructions will list which units are smoke-capable for that scenario.

PROCEDURE:

When plotting a fire mission, the Player notes *SMOKE* (or just *S*) on his Indirect Fire Plot. The mission is thereafter executed as normal, except that the Player places a Friendly smoke marker in the impact hex and no indirect fire combat is resolved. It does not matter whether the fire is on target or Scattered (the effect is the same). Likewise, the caliber of the firing unit makes no difference (a smoke hex is a smoke hex, regardless). **Note:** Smoke missions must be ordered in the same patterns as normal fire missions. There is no load time for smoke, nor load time for HE following smoke.

CASES:

[16.1] EFFECT OF SMOKE

When present in a hex, smoke acts to block the Line of Sight like other forms of blocking terrain.

[16.11] Units can see into a smoke hex as if it were a light woods hex. However, units in a smoke hex may not see or fire into hexes other than their own (close assault) and adjacent hexes.

[16.12] Units in a smoke hex subtract 2 from all die rolls on the Modified Combat Results Table when defending against direct fire of any kind.

[16.13] Smoke is considered to extend up indefinitely, into all Height Levels.

[16.14] All units must expend one *additional* Movement Points to enter a smoke hex.

[16.15] There is no additional effect for additional smoke impacting into a hex. Multiple smoke markers are always combined and treated as one.

[16.16] Helicopters at NOE may not enter a smoke hex. Helicopters at Low may enter such hexes normally, however.

[16.2] SMOKE REMOVAL

During the Marker Removal Segment of each Friendly Indirect Fire Phase, all Friendly smoke hexes on the map are immediately removed.

[16.3] SMOKE EFFECTS ON LASERS

If a unit in a smoke hex is being fired at by a unit using laser fire control, then the firing unit must use its secondary fire control system when determining the attack strength for the attack. **Note:** The defending unit would also receive the normal Loss Modification for being in a smoke hex.

[16.4] SMOKE RESTRICTIONS

Smoke may not be used in blizzards or during moderate or heavy wind conditions. Smoke may be used at night.

[16.5] VEHICLE SMOKE (Optional)

Certain vehicular units (see Unit Data Sheet) are capable of producing smoke.

[16.51] A smoke marker (section pattern) is placed in the hex occupied by the vehicle which is producing smoke.

[16.52] Smoke may be produced under any command.

[16.53] Vehicle smoke is produced during the Friendly Movement Phase, and may be produced in any or all hexes occupied by or transited by the smoke-producing unit in that Movement Phase.

[16.54] No vehicular unit may produce smoke in more than 4 Movement Phases. Whenever a vehicular unit produces smoke, this must be noted on the Unit Status Sheet.

[16.55] Stationary vehicles producing smoke are treated as moving vehicles for purpose of observation *only*.

[16.56] Vehicle smoke is considered to extend up only 1 Height Level. (If necessary, note which smoke is vehicle on a separate piece of paper).

[17.0] TRANSPORT AND MOUNTED COMBAT

GENERAL RULE:

Infantry units may be carried (transported) in Friendly armored personnel carriers (APCs) or armored fighting vehicles (AFVs). While mounted, infantry units may fire any of their weapons systems, although with reduced effectiveness. Engineer units are treated as infantry under this section.

CASES:

[17.1] TRANSPORT

Transport is a specialized form of movement which allows a vehicular unit to carry a certain amount of infantry units. It is the only time (other than stacked units) that a Player is allowed to move more than one unit at a time. Transport requires *two separate* operations: *mounting* and *dismounting*. Mounting represents an infantry unit boarding a Friendly vehicle. Dismounting is just the opposite. While being carried by a vehicle, the infantry unit is said to be mounted.

[17.11] There is a cost of one Movement Point to the infantry unit and two Movement Points to the vehicular unit to mount or dismount. To mount, the Player places the vehicular unit on top of the infantry unit. To dismount, he places the vehicular unit underneath the infantry unit. Transporting simply involves the Player moving the vehicular unit with its passengers underneath as one, just as though the Player were moving the vehicle alone. In other words, the mounted units just ride along with the transport units.

Note: Players may remove mounted infantry counters from the map if their location with a particular vehicular unit is noted on the Unit Status Sheet.

[17.12] Transported and transporting units must mount and dismount in the same hex. However, both units may have begun or ended the Phase in different hexes. (That is, they may continue moving before and/or after the mounting/dismounting operation).

[17.13] Each vehicle of an APC/AFV unit may transport one step worth of an infantry unit. Thus, for example, a three-vehicle platoon of APCs could carry a full strength (3 step) infantry unit.

[17.14] When a transporting vehicle is eliminated due to combat, any infantry (*i.e.*, one step) that is carrying is also eliminated. All other combat results have no effect on mounted infantry units.

No Loss Modification die roll would be made for the mounted infantry unit in such a case.

[17.15] A Player may voluntarily eliminate steps from a Friendly infantry unit so that it may be transported by a given APC/AFV unit. If using the morale rules, the Player need not check morale for the company when doing so, but all subsequent morale checks would include those eliminated units (see Section 15.0).

[17.16] If there is "extra space" in an APC/AFV unit (for example, if a 3-vehicle APC unit were transporting a 1-step infantry unit), the infantry unit would not be affected by the loss of vehicles until the extra space was eliminated.

[17.17] While mounted, infantry units may be issued any command that they could ordinarily be given. The two units (carrying vehicle and transported infantry) need not have the same command.

[17.18] Any infantry unit which dismounts and fires during the same phase is considered to be engaging in short halt fire, regardless of whether it is in a bound command with short halt designation or whether it is in an overwatch command.

[17.2] MOUNTED COMBAT

Mounted combat represents the direct fire abilities of infantry while they are being transported in Friendly vehicular units. All such units (APCs/AFVs) have their "mounted combat class" included on their data sheet. They may be either *hatch* or *mixed* (hatch and port). This class determines the ability of infantry units to fire their weapon systems while mounted in the vehicle (see Case 17.21).

[17.21] **Mounted Combat Matrix**
(see separate sheet)

[17.22] Certain ATGM systems may not be fired by mounted infantry units. This is listed on the infantry unit's data sheet.

[17.23] When halving the automatic weapons strength of mounted infantry units, fractions are rounded down.

[17.24] Mounted infantry units may not fire ATGM weapons unless both vehicle and infantry are in Overwatch Command or Bound Command with short halt designation.

[18.0] MORALE

GENERAL RULE:

Companies and battalions can sustain only a certain amount of casualties before they are no longer able to function effectively as a fighting force, and must pause to regroup and Rally. The basic "unit" in the game for morale purposes is the company, usually composed of three platoons. Each time a platoon of a given company suffers any casualties (losing either vehicles or steps), the company as a whole must check morale. If company losses become too severe, the morale problems may begin to spread, affecting other companies within the battalion, and eventually battalions within the brigade. Companies have their morale expressed by entering one of three *Morale States*. Battalion and brigade/regiment headquarters have their morale difficulties expressed by becoming *broken*. The current morale status of all units is recorded on the unit's status sheet.

PROCEDURE:

Immediately after the combat results are applied, the defending Player must roll two dice and consult the Morale Table (18.2). The Player should determine the total number of vehicles (or steps) lost so far in the game by the company in question. Read across on the line corresponding to the

number of vehicles (or steps) with which the company began the game (round down to the nearest number on the table). This will determine what column to use on the Morale Table. Shift one column to the right for each "additional" vehicle or step (other than the first one) lost in *that particular combat* (e.g., if the adjusted combat result was 2, shift one column to the right). Cross-index the die roll with the correct column to locate the indicated result. This result is immediately applied to all units in the company, and is marked on the Player's unit status sheet. **Note:** Players may agree before starting play to keep morale status and morale die rolls secret.

CASES:

[18.1] MORALE CHECKS

[18.11] Companies check morale only after the loss of one or more of their vehicles or steps. No morale check is required due to Suppression results.

[18.12] Battalion headquarters must check morale at the end of any Phase in which one-half or more of the companies under their command are in Morale State 3.

[18.13] Brigade/regiment headquarters must check morale at the beginning of the Rally Segment of any Friendly Indirect Fire Phase in which they attempt to Rally one of the battalion headquarters under their command (see Case 18.8).

[18.14] The effects of a morale check do not take effect until the end of the current Phase.

[18.15] Units whose current commands have become invalid due to a morale check must immediately be given some valid command by the owning Player; this new command always takes effect *immediately*.

[18.2] MORALE TABLE (see separate sheet)

[18.21] Explanation of Morale Results

- = NO EFFECT. The company's Morale State is *unchanged*.

1 = All units of the company have their Morale State *increased* by 1.

2 = All units of the company have their Morale State *increased* by 2.

Note: All morale results are cumulative, up to a *maximum* of Morale State 3.

[18.3] MORALE STATE 1

Morale State 1 has no effect other than to prepare units to enter Morale States 2 and 3 after further morale checks. (In other words, the morale of the company is becoming shaky, but has not yet broken.)

[18.4] MORALE STATE 2

[18.41] Units in Morale State 2 may not be given a Bound Command. If they wish to move, they must do so by a Withdrawn Command (see Case 5.4).

[18.42] A unit in Morale State 2 or 3 which is in close assault must withdraw into an adjacent hex after the first round of close assault combat (see Case 13.35). If the unit(s) is unable to withdraw, *it is immediately and completely eliminated*. Withdrawal is mandatory for dismounted infantry units in town hexes only if there is an adjacent town hex not occupied by Enemy units.

[18.43] Units in Morale State 2 may still be given an Overwatch Command and may continue to fire normally.

[18.44] Companies in Morale State 2 or 3 cannot be given Bounding Overwatch Commands.

[18.5] MORALE STATE 3

[18.51] Like units in Morale State 2, units in Morale State 3 may not be given a Bound Com-

mand. (See Cases 18.41 and 18.42).

[18.52] Units in Morale State 3 may not be given an Overwatch Command, and may not fire any of their weapons systems.

[18.6] RALLYING COMPANIES

Companies may attempt to reduce (improve) their Morale States through the procedure known as Rallying; this involves battalion HQs.

During each Friendly Indirect Fire Phase the Phasing Player may attempt to Rally those companies which have had a Rally Command assigned to them in the two immediately preceding Friendly Command Phases. For each company the Player wishes to Rally, he rolls one die. If the die roll is less than or equal to the value of the battalion HQ to which the company belongs (see Case 18.7), then the company has successfully Rallied and its Morale State is immediately reduced by 1. Any other result and the Morale State of the company is *unaffected*.

[18.61] Companies may not attempt to Rally if their battalion HQ is currently broken (see Case 18.7).

[18.62] Companies may not attempt to Rally if any unit of that company has lost any vehicles (or steps) during the preceding complete Game-Turn (11 consecutive Phases).

[18.63] A company may only attempt to Rally once in a given Friendly Indirect Fire Phase.

[18.64] If all units of the Rallying company are currently adjacent to or stacked with their battalion or brigade/regiment HQ, subtract two from the Rally die roll. Such companies are also exempt from Case 18.62, and may attempt to rally in any Friendly Indirect Fire Phase, regardless of current command.

[18.65] There is no limit to the number of times during the game that a unit may enter a certain Morale State, Rally, and enter that Morale State again.

[18.66] Independent command units are treated as companies under Case 18.6. Independent command units which are attached to Brigade/Regiment HQ rather than to a Battalion HQ are, like other independent command units, not usually subject to morale deterioration, but if they must be rallied, they are rallied by the Brigade/Regiment HQ to which they are attached. In such a case the Brigade/Regiment HQ acts just like a Battalion HQ in rallying the unit.

[18.67] If battalion HQ is Suppressed, add 2 to the Rally die roll.

[18.68] Once a company has been successfully rallied to Morale State 0, the number of vehicles/steps in the company at that time is noted on the unit status sheet. All further morale checks for that company are based on the company strength at the time it was last rallied to Morale State 1 or better, but with a column shift of 2 to the right on the Morale Table.

[18.69] Any company reduced below $\frac{1}{3}$ of its original strength is prohibited from Rallying.

[18.7] BATTALION HEADQUARTERS (HQ)

[18.71] Before the start of the game, each Player must roll the die once for each of his battalions. Each die roll determines the value of one of the Player's battalion HQs.

[18.72] The value of the battalion headquarters determines the ability of that battalion to successfully Rally all of its companies. (See Case 18.6).

[18.73] At the end of any Phase in which one-half or more of the companies of a battalion are in Morale State 3, the headquarters of that battalion must check its own morale. The owning Player

should immediately roll one die. If the die roll is less than or equal to the value of the battalion HQ then that HQ has successfully passed its morale check and does not suffer any ill effects. However, if the die roll is greater than the headquarters' value, then the HQ's morale is considered to be *broken*. All companies of a broken battalion immediately enter Morale State 3, and they may not attempt to Rally until the battalion HQ itself has successfully Rallied. (See Case 18.8).

[18.74] Once a battalion HQ has successfully passed its morale check due to combat losses, it need not check morale for this reason again for the remainder of the game. However, such a HQ unit may still be broken due to the Morale State of its brigade/regt./headquarters (see Case 18.8).

[18.75] Subtract 2 from the die roll of the battalion HQ if that HQ is currently stacked with or adjacent to its brigade/regt. headquarters.

[18.76] The battalion HQ is treated as a 1 vehicle platoon. If the battalion HQ unit is eliminated due to combat, it is *immediately* replaced. The owning Player should repeat the initial procedure for determining the HQ's value, but this time use a battalion HQ's rating 4 columns to the right of the initial rating given in the scenario. If this would cause the Player to shift to a column "off the table," then no die roll is made and the battalion HQ is replaced but the companies of that battalion may no longer Rally. This procedure continues each time the battalion HQ is eliminated, with cumulative shifts of 4 columns on the table each time. When the battalion HQ is replaced, the unit may be placed on any unit of that battalion, at the owning Player's choice.

[18.8] RALLYING HEADQUARTERS

Before the start of the game, each Player must roll the die once for each of his brigade/regiment headquarters, in order to determine their value, unless there is no Friendly brigade/regiment HQ present in the scenario.

Broken battalion HQs may attempt to Rally during the Rally Segment of any Friendly Indirect Fire Phase in which they are stacked in the same hex or adjacent to their brigade/regiment HQ. The owning Player, however, must first have his brigade/regiment HQ check its morale by rolling one die. If the number rolled is less than or equal to the value of the brigade/regiment HQ then that HQ has successfully passed its morale check and the battalion HQ is considered Rallied. If the die roll is greater than the value of the brigade/regiment HQ's value, then the brigade/regiment HQ's morale is considered *broken* and all battalion HQs of that brigade/regiment must immediately check morale.

[18.81] Broken brigade/regiment headquarters may attempt to Rally themselves in any Friendly Indirect Fire Phase. The owning Player should roll one die. If the number rolled is less than or equal to the HQ's value, then the brigade has Rallied itself and is returned to normal. If the die roll is greater than the HQ's value then the unit remains broken.

[18.82] If no brigade HQ is present in a scenario, broken battalion headquarters may attempt to Rally themselves using the same procedure as brigade/regiment HQs given in Case 18.81. However, 2 is subtracted from all die rolls when using this procedure. Battalion HQ's whose chance of Rallying is 0 or less may not Rally.

[18.83] There is no limit to the number of times that brigade/regiment and battalion headquarters may become broken, Rally, and become broken again.

[18.84] If a broken brigade/regiment or battalion HQ is eliminated due to combat, then its replacement is also considered to be broken.

[18.85] Brigade/regiment and battalion HQs may attempt to Rally only if both HQ's are in Overwatch or Rally Command. Enemy direct or indirect fire has no effect on the abilities of these units to Rally, unless they are Suppressed (see Case 18.87).

[18.86] If a brigade/regiment HQ is eliminated, it is immediately replaced in the same manner as an eliminated battalion headquarters (see Case 18.76). The replacement HQ may be placed with any battalion HQs of its brigade/regiment.

[18.87] If brigade/regiment HQ is Suppressed, 2 is added to the Rally die roll when Rallying a battalion HQ or when Rallying itself.

[18.88] Broken HQ units may only be given Withdraw and Rally Commands.

[18.9] HQ TABLE

(see separate sheet)

[18.91] How To Use the Headquarters Table

Each Player's initial battalion and brigade rating is listed in the scenario rules. The Player should roll one die for each of his headquarters units and locate the number rolled under the correct column on the Headquarters Table. He should then read across on that line to determine the headquarter's value.

ADVANCED RULES

[19.0] MINEFIELDS

GENERAL RULE:

In certain scenarios, a Player is allowed to deploy minefields in order to inflict losses on and impede the progress of Enemy units. There are three types of minefields: *Hasty*, *Defensive*, and *Barrier*, corresponding to the density and effectiveness of the mines within the hex.

CASES:

[19.1] PLACEMENT OF MINES

The scenario instructions will state which Player (if any) has minefields to deploy, and will indicate the number and type available. Before the start of the game the owning Player may place these minefields as he desires. The Player may also deploy the indicated number of dummy minefields on the map in order to mislead his opponent.

[19.11] When deploying minefield counters, the Player must write down on a separate piece of paper the type of minefield being placed in each hex.

[19.12] Minefields may not be placed in lake hexes. They may be placed in any other hex on the map.

[19.13] No more than one minefield counter may ever be deployed in a given hex.

[19.14] Once placed, minefield counters remain in the hex for the entire game. There is no way to completely remove a minefield, although they may be *breached* (see Case 19.4).

[19.2] ENTERING AND EXITING MINEFIELDS

The first time a ground unit enters a minefield hex, the minefield counter is flipped over to reveal whether the minefield is real or dummy. However, if the ground unit is a dummy the dummy is removed instead, and the minefield composition remains secret.

[19.21] If the minefield is a dummy, the counter is immediately removed from the map, and the unit which entered the hex may freely continue its movement.

[19.22] If the minefield is real, and the entering unit is a vehicle, the Player who placed the minefield must immediately resolve an attack on the moving unit (see Case 19.3). After this attack is resolved, the defending unit may continue its movement.

[19.23] There is never any additional cost for vehicles to enter or leave a minefield hex. However, all vehicle units that enter such hexes will be attacked by the minefield, unless the minefield is *breached* (see Case 19.4).

[19.24] When an infantry unit enters a real minefield, the owning Player must decide whether to proceed boldly or cautiously with the infantry unit through the minefield. Note the decision on the unit status sheet, or improvise a marker to note it.

[19.25] When an infantry unit proceeds boldly through a minefield, it is attacked by the minefield immediately after the decision to move boldly is made (see Case 19.3). After this attack is resolved, the infantry unit may continue its movement, or remain in the minefield hex without being further attacked.

[19.26] There is no additional cost for boldly moving infantry to enter or leave a minefield hex.

[19.27] When an infantry unit proceeds cautiously through a minefield, it is not attacked by the minefield. Instead, the infantry unit is delayed by the minefield. If the minefield is artillery-delivered, the infantry unit must remain in the hex in Bound Command for an additional Friendly Movement Phase; if it is Hasty, for two additional Movement Phases; if it is Defensive, for three additional Movement Phases; if it is Barrier, for four additional Movement Phases. Players must keep track of Movement Phases spent in the minefield hex on the unit status sheet or a separate piece of paper. The infantry unit may leave the minefield, having been delayed as required, in any direction.

[19.28] Once an infantry unit has chosen Cautious Movement, it may change to Bold Movement at the beginning of any subsequent Friendly Movement Phase in which it is still in the minefield hex. In such a case, the unit is immediately attacked by the minefield, and may, having survived the attack, exit it immediately.

[19.3] RESOLVING MINEFIELD ATTACKS

When resolving each minefield attack, the Player who placed the minefield should roll two dice and consult the appropriate Minefield Combat Results Table, depending on whether the defending unit is vehicle or infantry. If the defending unit is infantry, cross-index the die roll with the type of minefield in the hex. The number indicated is the number of steps lost by the infantry unit. If the defending unit is vehicle, determine whether the defending unit is a tank or not (this information is listed on the unit's data sheet). This will determine which line to use under the *type of minefield* column. Cross-index the die roll with the appropriate line. The number indicated is the number of vehicles lost by the defending unit.

[19.31] No Loss Modification die roll is ever made for units undergoing minefield attacks. Terrain, target attitude, *etc.* have no effect on minefields attacks.

[19.32] Each unit that enters a minefield hex is attacked separately by the minefield. The only exception to this is for mounted infantry and mounted engineer units; they suffer the same com-

bat result as the vehicle unit which is transporting them.

[19.33] Vehicle units that remain in a minefield hex at the end of a Friendly Movement Phase are also attacked by the minefield, as if they had just entered the hex. This attack is resolved after all final fire for the Phase has been carried out.

[19.34] Minefields will attack all vehicle and bold infantry units that enter (or remain in) their hex. (**Exception:** see Case 19.4). This is true regardless of whether the units are Enemy or Friendly.

[19.35] Minefields are never "used up." They continue to make an unlimited number of attacks throughout the play of the game.

[19.36] **Anti-Infantry Minefield Combat Results Table**
(see separate sheet)

[19.37] **Anti-Vehicle Minefield Combat Results Table**
(see separate sheet)

[19.4] BREACHED MINEFIELDS

Players may partially negate the effects of minefield hexes by *breaching* the minefield hex. This may be done either by vehicles equipped with *mine plows* (see Case 19.5) or by engineer units (see Case 29.6). In either case, units may enter breached minefields in column formation without being attacked by them.

[19.41] Vehicular units must pay an *additional* cost of four Movement Points when entering a breached minefield hex.

[19.42] There is no additional cost for an infantry unit to enter a breached minefield hex.

[19.43] Units in column formation may remain in a breached minefield hex without being attacked by it.

[19.44] Units may still choose to move "normally" (*i.e.*, not in column and/or without paying any required additional Movement Point Cost) through breached minefield hexes, but would be attacked by the minefield for doing so.

[19.5] MINE PLOWS

Certain vehicular units may breach minefields through the use of *mine plows*. The availability of mine plows is listed in the scenario instructions.

Vehicular units equipped with mine plows may enter minefield hexes without being attacked by them. The unit must be in column formation and must end the Movement Phase in the hex. At the end of the Phase the minefield counter is removed from the map and is replaced by a breached minefield counter.

[19.51] After breaching a minefield, there is a chance that the vehicular unit's mine plow has been destroyed. At the end of a Phase in which a minefield is breached, the breaching Player must roll one die and consult the Mine Plow Damage Table. If the indicated number is rolled, the mine plow is immediately destroyed. Destroyed mineplows may not be used for the rest of the game. If no mineplows remain in the unit, that unit must exit the minefield by the same hexside it entered or be attacked by the minefield. **Note:** Only Soviet ROD units have more than one mineplow per platoon.

[19.52] **Mine Plow Damage Table**
(see separate sheet)

[20.0] AIRCRAFT, HELICOPTERS, AND AIR DEFENSE

GENERAL RULE:

Ground attack aircraft and helicopters have come to play an increasing role on the modern battlefield. In *Mech War 2* such units have an *Unlimited Movement Allowance*, and do not pay terrain costs. However, they must still trace a contiguous path of hexes to their destination. Like ground units, aircraft and helicopters have numerous weapon systems, and may both attack and be attacked by Enemy units.

CASES:

[20.1] AIRCRAFT MOVEMENT AND COMBAT

Like indirect fire, the use of aircraft must be plotted *in advance* during a Friendly Indirect Fire Phase (the numbers and types of aircraft available to a player will be listed in the scenario rules). All aircraft attack by performing an *Air Strike*. All aircraft plots must be made *three* Game-Turns in advance. There are three types of air strikes, depending on the weapons systems carried by the aircraft = *bombing*, *strafing* and *air-to-surface* missile. Aircraft appear on the map only on Game-Turns they are plotted to perform strikes. These plots must be written on a separate piece of paper, and list the following information:

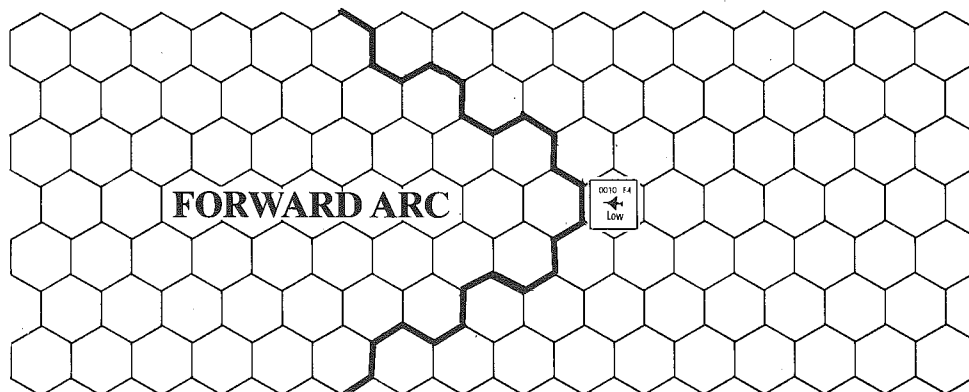
- (A) The type involved
- (B) The Game-Turn in which the strike will occur
- (C) If the strike is to be a bombing strike, the target hex of that strike.

[20.11] The exact combination of weapons systems available varies from aircraft to aircraft, and is listed in the Exclusive Rules booklet. The method by which strikes are carried out is described in Cases 20.2, 20.3 and 20.4.

[20.12] All aircraft movement takes place during the Friendly Indirect Fire Phase in which the aircraft are plotted to arrive. The aircraft may appear on any hex of the mapedge, but if appearing at a mapedge for which off-map Enemy air defenses are listed in the scenario, it must first be attacked by those defenses. Aircraft must enter the map one unit at a time and are not permanently displayed on the map. They must exit the map after completing their movement and combat. After this has been done, another air unit (if one is plotted) may enter the game.

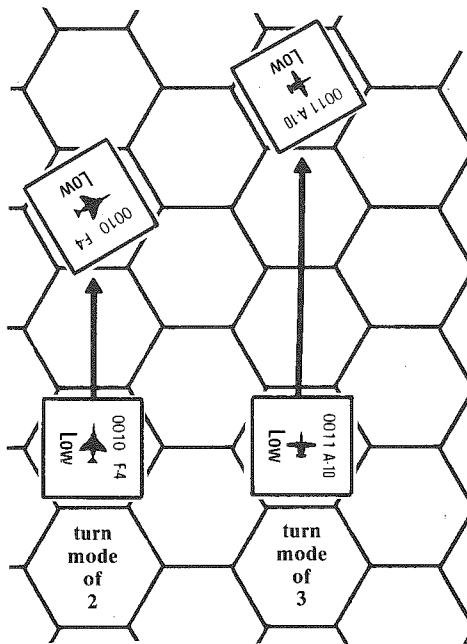
[20.13] While on the map, aircraft *must* be at either *high* or *low* altitude. Aircraft may switch freely between the two (flip the counter over to its appropriate side). Altitude affects an aircraft's Line of Sight and observation, as well as its defensive and offensive capabilities.

AIRCRAFT ARC EXAMPLE



[20.14] Aircraft using strafing or air-to-surface missiles may only attack units which they have sighted during that Phase. *Such aircraft may only attempt to sight and/or attack units currently in their "forward arc"* (see Case 20.6).

[20.15] When aircraft move on the map they must travel a certain number of hexes straight forward before turning one hexside to the right or left. This is the aircraft's "turn mode" and is listed on the unit's data sheet. Aircraft may not turn more than one hexside in any hex.



[20.16] After performing their strikes, all aircraft must exit the map. They may do so from any mapedge, but may be attacked by off map air defense systems when doing so.

[20.17] No commands (other than the required strike plot) are ever issued to aircraft. They are not subject to morale effects.

[20.18] Aircraft performing strafing and/or using air-surface-missiles may attack any number of times in the same Phase, until their ammunition is depleted. However, aircraft may only fire a given weapon system once in a given hex. If they wish to repeat an attack they must "circle around" and try again. Such aircraft are subject to Enemy fire while doing so (see Case 20.7).

[20.19] Aircraft may neither close assault, nor be close assaulted.

[20.2] THE BOMBING STRIKE

To perform a bombing strike, the aircraft must move by any route of hexes, to the plotted target hex. As soon as the aircraft enters this hex, all

ground units in that hex are immediately attacked on the indicated column of the On-Target Artillery Combat Results Table. (This is listed on the air unit's data sheet). Bombing strikes are never Scattered.

[20.21] While moving to and/or from the target hex, the aircraft may also conduct strafing strikes against Enemy units (see Case 20.3). A given aircraft may only perform one bombing strike per game.

[20.22] **Smart Bombs:** Aircraft equipped with smart bombs (those that can be directed to the target after release) need not actually enter the target hex to make their attack. Instead, they may "drop their bombs" in any hex within 10 hexes of the plotted target hex so long as the target hex is currently in the aircraft's forward arc. The ground units in the target hex are attacked as normal. Aircraft using smart bombs must do so from high altitude.

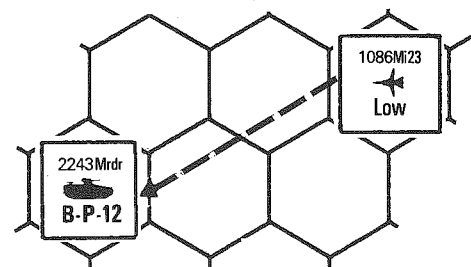
[20.23] Aircraft equipped with smart bombs may attempt to destroy bridges and ferries by conducting a bombing strike on one of the bridge or ferry hexes. The strike is conducted normally, with the exception that a separate die roll is made when resolving the results of the air strike. If a combat result of 2 or 3 is obtained on the appropriate column of the On-Target Artillery Combat Results Table (14.31), then the bridge or ferry is considered to be destroyed. Any other result has no effect.

[20.24] (Optional Rule) In scenarios using the U.S. Marines, the Players may agree to designate the Marines as equipped with Radar Assisted Bombing Forward Air Control (RABFAC). RABFAC allows fixed-wing air units to launch bombing or strafing attacks at hexes within focused observation range for moving vehicles of a designated Marine LVTP7 unit, provided that there is an unblocked line of sight from the LVTP7 to the target hex; in rain, fog, or falling snow (but not blizzard) conditions. The F4 air unit, which is the only NATO air unit in *Mech War '80* which should be present in Marine scenarios, resolves bombing attacks on the Medium Howitzer column of the Artillery CRT, resolves strafing strikes against vehicles on the H column of the Main Gun CRT, and resolves strafing strikes against infantry on the 5 column of the Automatic Weapons CRT, when using RABFAC. Designation of the RABFAC LVTP7 must be done by the U.S. Player before the start of play; this designation may only be changed to another LVTP7 if the two vehicles are in the same hex.

[20.3] THE STRAFING STRIKE

PROCEDURE:

Strafing represents a special form of direct fire. To perform a strafing strike, the aircraft may attack any ground unit exactly three hexes from the "front" of the aircraft, as indicated in the diagram below. All vehicle units are attacked on the indicated column on the Main Gun/ATGM Combat Results Table (10.3). All infantry units are attacked on the indicated column on the Automatic Weapons Combat Results Table (9.3). (This information is listed on the aircraft's data sheet.)



[20.31] Aircraft may only perform strafing strikes at low altitude.

[20.4] AIR-SURFACE-MISSILES (ASMS)

Aircraft may also attack Enemy vehicular units with air-to-surface missiles (ASMs). Dismounted infantry units may not be attacked with ASMs.

All ASMS are considered to have unlimited range, and may be fired at any Enemy vehicle unit within the Line of Sight and observation range of the firing aircraft (see Case 20.6). All ASMS attack using the S column of the Main Gun/ATGM Column of the Main Gun/ATGM Combat Results Table (10.3).

[20.41] Aircraft may fire ASMS from either high or low altitude.

[20.5] HELICOPTER MOVEMENT AND COMBAT

Like aircraft, helicopters have an unlimited Movement Allowance. In most other respects, however, helicopters are treated as normal ground units. These are two types of helicopters: *attack* helicopters and *transport* helicopters. The former are used to attack Enemy ground units, while the latter may pick up and transport Friendly infantry units. Helicopters observe Enemy units in the exact same manner as ground units. They are assumed to be observed by any Enemy units who can trace a Line of Sight to them.

[20.51] Helicopter units move only during Friendly Movement Phases, and must be given commands during Command Phases. Each helicopter unit is treated as a separate company for this purpose. Helicopters use their various weapon systems to conduct normal direct fire attacks on Enemy units. Attack helicopters will be equipped with ATGM, medium main gun, or rocket Pod weapon systems, while transport helicopters have no weapons systems.

[20.52] Helicopters must be at either low or nap of earth (NOE) altitude, they may switch freely between the two (flip the counter over to its appropriate side). Altitude affects a helicopter's Line of Sight and observation as well as its defensive capabilities.

[20.53] Helicopters at low altitude are assumed to fly two Height Levels above all blocking terrain in the hex; their Line of Sight is judged accordingly (see Case 7.1). Helicopters at NOE altitude are assumed to fly at the same Height Level as all blocking terrain in the hex. Their Line of Sight is judged accordingly (see Case 7.1).

[20.54] Helicopters with Bound Commands may always use short halt fire at the end of their movement for any Indirect Fire Phase.

[20.55] Helicopters remain on the map at all times during the game, and may only move when given a Bound Command. They may move freely in any direction, and have no "turn mode."

[20.56] Helicopters may not enter defilade and never suffer any morale effects.

[20.57] Helicopter units at NOE are attacked as normal ground units by all forms of indirect fire. Any result of S, 1, 2 or 3 destroys the helicopter (although the loss could be modified; see Case 20.8).

[20.58] Helicopters do not count for stacking purposes. No more than one helicopter may end any Phase in a given hex.

[20.59] Helicopter units may neither close assault, nor be close assaulted.

[20.6] AIRCRAFT OBSERVATION

Fixed-wing aircraft do not observe (sight) Enemy units in the same manner as either ground units or

helicopters. Instead, they observe by "acquiring" individual Enemy units, on a unit-by-unit basis.

PROCEDURE:

As an aircraft unit moves across the map, the Phasing Player may choose an Enemy ground unit and attempt to acquire it. In order to do so, the aircraft must have the target unit continuously in its forward arc while the aircraft moves a *minimum* of five hexes. Once this has been done, the Phasing Player rolls one die. If the die roll is greater than the Loss Modification Value of the terrain in the hex occupied by the Enemy unit (see Section 12.0 for the Loss Modification Value of terrain), then the unit has been acquired by the aircraft. If not, the unit has not been acquired.

[20.61] Aircraft may only attack acquired units, even if the Enemy units are currently being observed by Friendly ground units. Once acquired, units remain so for the remainder of the Phase. (If necessary, make a note on paper as to which units have been acquired by which aircraft).

[20.62] When aircraft successfully acquire face down units, these units are not flipped over. Instead, the acquiring Player is told only whether the unit is infantry or a vehicle. If the unit is a vehicle, he is also told the target profile of the unit. If the unit is a dummy, the Player is informed of this fact and the dummy is removed from the map.

[20.63] A given aircraft may attempt to acquire a unit more than once, simply by starting the 5-hex "acquisition cycle" all over again.

[20.64] Aircraft may not attempt to acquire targets more than 15 hexes away from them. Only aircraft at high altitude may attempt to acquire targets; aircraft at low altitude may never do so (although they may attack previously acquired targets).

[20.65] Ground units which fire any of their air defense systems are automatically acquired by any Enemy aircraft within 15 hexes of them, provided that the aircraft is at high altitude.

[20.66] Aircraft may not acquire units in any type of fog hex.

[20.67] All ground units on the map are always assumed to have a valid Line of Sight to any aircraft at high altitude.

[20.68] In order to observe aircraft at low altitude, ground units must trace a valid Line of Sight to them (remembering that the aircraft are considered to be at Height Level 6).

[20.69] Weather conditions have no effect on the ability of air defense systems marked with an * on the Tracking Range Chart (20.73) to trace a Line of Sight. (These units have radar fire control systems).

[20.7] AIR DEFENSE SYSTEMS

With one exception (that of indirect fire attacking helicopters at NOE), air units may only be attacked by air defense systems. (These are various types of missile and gun systems and listed on the unit's data sheet). Many ground units have one or more air defense systems. All gun air defense systems may fire at each Enemy aircraft (during the opposing Player's Indirect Fire Phase) once for every 5 hexes the aircraft moves within the unit's tracking range. Missile systems may fire at each Enemy aircraft once for every 15 hexes the aircraft moves within the unit's tracking range. Helicopters are attacked like "normal" units. That is, they may be attacked by a given air defense weapon system only once per Movement Phase, and do not have to be "tracked" by air defense systems in order to be fired on.

(1) Determine if the target air unit has moved the required number of hexes within the firing unit's tracking range.

(2) Consult the Air Defense Range Attenuation Chart (20.78). Cross-index the range in hexes between the firing unit (exclusive) to the defending unit (inclusive) with the firing weapon system. The number indicated is the firing unit's strength for the attack. This strength may vary, depending on the altitude of the target aircraft.

(3) The attacking Player should roll one die and consult the Ground-To-Air Combat Results Table (20.75). Determine the number of vehicles (or steps) in the firing unit, and the altitude, defense class and status of the target unit, and modify this die roll accordingly (see the Ground-To-Air Die Roll Modification Chart 20.77).

(4) Cross index the modified die roll with the attack strength of the firing unit. If the defending unit is hit, the defending Player must roll one die and consult the Air Unit Loss Modification Procedure (20.8).

[20.71] Ground units must have a Line of Sight to the defending unit in order to attack. In addition, units in heavy woods hexes may not fire their air defense systems.

[20.72] Only units with Overwatch Commands may fire their air defense systems.

[20.73] **Tracking Range Chart**
(see separate sheet)

[20.74] **Ground-To-Air Combat Results Table**
(see separate sheet)

[20.75] **Explanation of Ground-To-Air Combat Results Table**

H = HIT. Defending air unit has been hit; the defending Player must roll one die and consult the Air Unit Loss Modification Table (20.8).

* = NO EFFECT. The attack has failed.

[20.76] **Die Roll Modification Chart**
(see separate sheet)

[20.77] **Air Defense Combat Strength Chart**
(see separate sheet)

[20.78] Missile 3 and Missile 4 weapon systems may not be used at night or in medium or heavy fog, or rain or blizzard weather conditions.

[20.8] AIR UNIT LOSS MODIFICATION

When an air unit has received a *hit* result on the Air-To-Ground Combat Results Table, the defending Player must roll one die. If the die roll is less than or equal to the Loss Modification number of the defending air unit, then the aircraft has survived, and is not affected by the attack. If the die roll is higher than the Loss Modification number then the air unit is eliminated. (Immediately remove it from the game). Note that the loss modification number will vary, depending on whether the air unit was hit by an Enemy missile or gun system. Air units that take (and survive) three or more hits in the same Phase may no longer conduct attacks of any kind, nor observe Enemy units. No Victory Points are awarded for such air units (unless they are shot down before they can leave the game), or unless the scenario specifies otherwise.

[20.9] HELICOPTER TRANSPORT

Transport helicopters function in a manner similar to armored personnel carriers (see Section 17.0). Transport helicopters with a Bound Command may mount, transport, and dismount Friendly infantry platoons, ATGM teams, or engineer squads. The number of such platoons is listed in the unit's data sheet.

[20.91] Mounting or dismounting operations have no effect on the movement abilities of helicopter units; that is, they may continue to move normally after embarking or disembarking.

their passengers. However, in any given Phase a helicopter unit is limited to *either* mounting or dismounting operations; it may not do both. Moreover, a given helicopter unit may not perform its mounting or dismounting operations in more than one hex in any given Phase. There is a cost of one Movement Point to the infantry unit to mount or dismount. To mount, the Player places the helicopter unit under the infantry unit. To dismount, he places the infantry unit underneath the helicopter unit. Transporting simply involves the Player moving the helicopter unit with its "passengers" underneath as one, just as though the Player were moving the helicopter alone. In other words, the mounted units just ride along with the helicopter units.

[20.92] Helicopter units may only mount or dismount infantry units while at NOE altitude. Units may not mount or dismount in heavy woods hexes or hexes occupied by Enemy units.

[20.93] Units must mount and dismount while in the same hex, although the infantry unit may begin or end the Phase in a different hex.

[20.94] When a transport helicopter is eliminated due to combat, any infantry that it is carrying is also eliminated. No Loss Modification die roll would be made for the mounted infantry unit in such a case.

[20.95] While mounted in helicopters, infantry units may only be issued Bound or Withdraw Commands. The two units (carrying helicopter and transported infantry) need not have the same command.

[20.96] Only transport helicopters may carry infantry units; attack helicopters may never do so.

[20.97] The number of platoons of infantry which may be carried by a transport helicopter unit is listed on the unit's data sheet. For purposes of helicopter transport capacity, one infantry platoon is equivalent to two engineer squads or two ATGM teams. Transport capacity may be distributed among these different types of infantry; thus an Mi8 Soviet helicopter could carry one platoon of infantry, an ATGM team, and an engineer squad all at once, being rated at two platoons' worth of transport capacity.

[20.98] In a nuclear environment, a helicopter unit may be designated as "on the ground" if it does not move during a Game-Turn, by placing a deflade marker on top of the helicopter unit. This status is lost as soon as the helicopter unit is moved, or it may be removed during any Movement Phase by the owning Player; such designation is not a command and is not plotted during a Command Phase, nor is it affected by jamming. The only effect of being "on the ground" is that a nuclear burst will attack the helicopter unit on the Anti-Infantry Nuclear CRT (see Case 107.61) rather than on the Anti-Helicopter Nuclear CRT (see Case 107.64).

[21.0] SHORT HALT

GENERAL RULE:

By using short halt, vehicle units may both move and fire in the same Friendly Movement Phase.

PROCEDURE:

Vehicular units with a Bound Command may perform short halt by expending no more than one half of their Movement Allowance (fractions rounded down) during a Friendly Movement Segment. After completing the unit's movement, the owning Player should place a short halt marker on the unit.

Short
Halt

[21.11] Units performing short halt may fire during the Final Fire Segment of the Phase in which they have moved. However, such units do so after all units without short halt or fire-and-move designations have completed their direct fire (see the Sequence of Play, Section 4.0).

[21.12] Units performing short halt are not considered to be moving when defending against direct fire attacks during the Final Fire Segment.

[21.13] Friendly units defending against direct fire attacks by Enemy units performing short halt receive a modification of -3 on their Loss Modification die rolls (see Section 12.0).

[21.14] Short halt is not a command, and need not be plotted in advance. Players may choose to have units with a Bound Command perform short halt entirely at their own option.

[21.15] Helicopter units with a Bound Command may always use short halt, should they desire to do so. Since they have unlimited movement, they may continue to move normally while doing so.

[21.16] Dismounted infantry units may not perform short halt; but see Case 17.18.

[22.0] AMMUNITION DEPLETION

GENERAL RULE:

Because units can only carry a limited amount of ammunition into battle, they must guard against the possibility of running out at crucial moments. To simulate this fact, most weapon systems at the start of the game are assigned an *Ammunition Level*, either 3, 2, 1 or 0. 3 is the *maximum* level of ammunition available. 2, and 1 indicate reduced amounts. 0 indicates the unit is out of ammunition for that weapon system, and may no longer fire.

PROCEDURE:

Each time a unit fires a weapon system, the owning Player must roll one die. If the die roll is less than or equal to the ammunition depletion number listed for that system, then the unit's Ammunition Level is reduced by 1. Any other result and the Ammunition Level is *not affected*.

[22.11] Weapon systems without an ammo depletion number do not suffer ammunition depletion (i.e., they never run out of ammunition).

[22.12] There is no way for units to receive more ammunition.

[22.13] The ammunition level has *no effect* on the resolution of combat (except, of course, by prohibiting a weapon from firing in the first place).

[22.14] The ammunition depletion rules should be used whenever air units (see Section 20.0) are included in the game.

[23.0] NIGHT

GENERAL RULE:

Most armies are placing more emphasis on their night-fighting abilities. The main effect of night is to reduce visibility. To overcome this, a variety of searchlights and night vision devices have been developed. The scenario instructions will list whether it is night, and also provide information on the natural level of light (phase of the moon). Players should note that units attempting to observe at night still require a valid Line of Sight (see Section 7.0).

CASES:

[23.1] UNITS WITH NO NIGHT EQUIPMENT

The observation range of units without any special night equipment is determined by the amount of natural light available, according to the current phase of the moon (see Case 23.11).

[23.11] Night Observation Chart (see separate sheet)

[23.12] Vehicular units moving at night ordinarily have their Movement Allowance reduced by one-third (round fractions down). Infantry units may not move more than two hexes per Friendly Movement Phase at night.

[23.13] Vehicular units which have been stripped of external systems have their movement allowance reduced by two-thirds (round fractions down).

[23.2] SEARCHLIGHTS

Units equipped with searchlights may increase their observation range at night. These searchlights may be either infrared (IR) or whitelight (WL).

[23.21] Searchlights are normally considered to be "off" (not in use) and are only turned "on" (come into use) at the owning Player's option. This decision is made individually, on a unit by unit basis, and is not announced to the Enemy Player. The owning Player may choose to turn the searchlight on or off at any time during the Game-Turn. (He need not record his intention of doing so on the unit's company command plot.) If the searchlight is on for any portion of a Phase it is considered to remain on until the end of that Phase.

[23.22] Units using IR searchlights have an Observation Range of five hexes in all directions and observe all Enemy units within this range as if it were day, by using the Day Observation Table (see Case 7.1). Other Friendly units with passive IR may also observe all Enemy units (within five hexes of them) which are seen by the "first" Friendly unit's IR searchlight, also as if it were day, by using the Day Observation Table.

[23.23] In addition to normal blocking terrain (including smoke), IR searchlights are blocked by any type of fog hexes. Additionally, they may not be used in rain, falling snow, or blizzard weather conditions.

[23.24] Units using IR searchlights are themselves liable to be observed by Enemy units using *passive* infrared devices (see Case 23.3).

[23.25] Units using WL searchlights have an observation range of seven hexes in all directions and observe all Enemy units within this range as if it were day, by using the Day Observation Table (see Case 7.1). Other Friendly units may also observe Enemy units which are seen by the first Friendly unit's WL searchlight, provided they are within daytime observation range and Line of Sight.

[23.26] Units using WL searchlights may automatically "fix" one hex within their observation range and LOS in their searchlights. All units (both Enemy and Friendly) in such a hex have their observation range reduced to 1 (they're blinded by the glare); they may not fire at or "fix" any unit, including the one which is "fixing" them, if that unit is more than 1 hex away.

[23.27] In addition to normal blocking terrain, WL searchlights are blocked by any type of fog hex. WL searchlights may not be used in rain, falling snow, or blizzard weather conditions.

[23.28] Units using WL searchlights are automatically observed by any Enemy unit which can

trace a valid Line of Sight to the unit. The only exception to this would be units currently fixed by WL searchlights; they would still have an observation range of 1.

[23.29] Night devices are not subject to separate damage by automatic weapons fire.

[23.3] PASSIVE OBSERVATION

There are two types of passive observation devices: *passive infrared* (IR), and *ambient light*. Both systems are assumed to be "on" and functioning at all times. Unless otherwise stated, all units (whether vehicle or infantry) are assumed to be equipped with passive IR; units are equipped with ambient light systems only where noted. IR periscope is the same as passive IR for game purposes.

[23.31] All units may automatically observe any Enemy unit to which they can trace a Line of Sight, provided that that Enemy unit is currently using an IR searchlight, using passive IR.

[23.32] In addition to normal blocking terrain, passive IR is blocked by any type of fog hex. Additionally, passive IR may not be used in rain, falling snow, or blizzard weather conditions.

[23.33] Units equipped with ambient light devices use the ambient light columns on the Night Observation Table (23.11). Such units may also use other visual aids normally.

[23.4] ARTILLERY ILLUMINATION (Starshell)

Instead of firing HE or smoke, certain artillery units may also fire illumination rounds (starshell). Each scenario specifies which units are starshell-equipped. This fact must be noted in advance on the Player's indirect fire plot, when requesting the fire. There is no load time required for starshell or for HE following starshell.

[23.41] All artillery units, regardless of usual HE pattern fired, fire starshell in section impact patterns. (Illumination extends beyond the impact hex as described in Case 23.43).

[23.42] The arrival and Scatter of illumination rounds is resolved in the same manner as smoke shell (see Section 14.0). After resolving any Scatter the owning Player should place the appropriate starshell marker in the indicated hex. note that most starshell fire missions will be unobserved and thus subject to a high degree of Scatter.

[23.43] All starshell impact hexes immediately provide a "light pattern" of illumination. The size of this illumination varies with the caliber of the firing unit:

Caliber of Firing Unit	Area of Light Pattern
<i>Light mortar, light howitzer</i>	impact hex and two adjacent hexes in all directions
<i>Medium mortar</i>	impact hex and three adjacent hexes in all directions
<i>Medium howitzer</i>	impact hex and four adjacent hexes in all directions.

Note: No other calibers of artillery may fire illumination rounds.

[23.44] There is no delay when plotting the Indirect Fire of illumination rounds. Such fire will impact on the map in the same Phase as it is plotted.

[23.45] Enemy units within a light pattern may be observed as if it were day. Those units within a light pattern may only observe Enemy units that either:

(A) are themselves in a light pattern (either the same pattern or a different one).

(B) are within the observation range of the Friendly unit's WL or IR searchlight; or

(C) have fired any of their weapon systems in the current phase.

[23.46] Starshell has no effect in fog, rain, falling snow, blizzard, or in smoke hexes.

[23.47] Starshell rounds may not be plotted for target hexes which are outside of the Line of Sight of a Friendly unit. All starshell Scatter, however, is resolved on the 61+ line of the Artillery Scatter Table.

[23.5] OBSERVING UNITS WHICH FIRE

Enemy units which fired one or more of their weapon systems are automatically observed by any Friendly units which can trace a valid Line of Sight to them (see Section 7.0), subject to weather restrictions on the maximum observation range, during the Phase in which they have fired; thereafter they are observed only if they are within normal or focused observation range.

[24.0] RIVER CROSSING

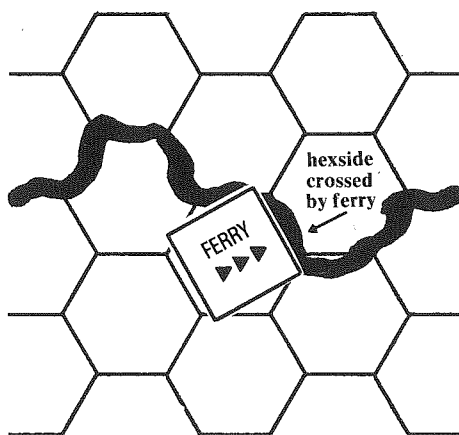
GENERAL RULE:

Units may cross river hexsides by using either bridges, ferries, amphibious movement or snorkeling.

CASES:

[24.1] FERRIES

The location of ferries will be listed on the scenario instructions. Each ferry consists of a counter, placed adjacent to a specific river hexside. (See diagram below). Friendly units may use the ferry to cross the river hexside by spending one complete Friendly Movement Phase for small and medium rivers or *two complete consecutive* Friendly Movement Phases for large rivers doing so.



[24.11] Only one unit may cross a ferry in a given Phase. **Note:** An infantry unit mounted in an APC counts as a total of one unit for purposes of this rule.

[24.12] Units must be in column formation in order to use ferries.

[24.13] Ferries also require the presence of Friendly engineer units in order to operate. (See Case 29.2).

[24.14] Ferries always begin the game in place, and may not be moved. They are automatically destroyed (remove the counter from the map) if an Enemy ground unit enters any ferry hex.

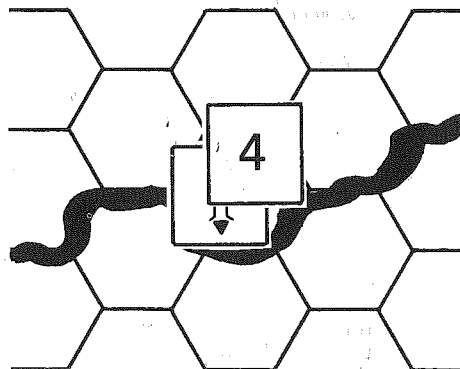
[24.2] FIXED BRIDGES

The location of fixed bridges is listed in the scenario instructions, and they are placed on the map before the start of the game. All bridges are classed in one of five categories (0 through 4). This is indicated by placing the appropriate strength marker underneath the bridge counter to indicate its class. Do not place any strength marker under the bridge counter for 0 class (foot) bridges. Only vehicle units with a bridge value less than or equal to the class of the bridge may use that bridge. (This information is listed on the unit's data sheet). **Note:** Dismounted infantry may use any (non-destroyed) bridge, regardless of its class.

[24.21] Units must be in column formation to use bridges.

[24.22] No more than three units (of any type) may cross a bridge during the same Phase. Infantry units mounted in APCs count as a total of one unit for purposes of this rule. There is an *additional* cost of two Movement Points for a vehicle unit to cross a bridge hexside.

[24.23] Class 1-4 bridges may be destroyed by engineers (see Case 29.5), bombing strikes by aircraft using smart bombs (see Case 20.2), or artillery (see Case 14.73). Class 0 bridges may be destroyed by any unit in a hex adjacent to the bridge.



[24.3] BRIDGING UNITS

In addition to fixed bridges, Players may also attempt to emplace mobile bridges across river hexsides through the use of bridging units. In all cases the bridging unit must *first* move adjacent to the river to be crossed, and then spend a certain number of Friendly Movement Phases in the hex with a Bound Command. Each bridging unit is considered to carry three "sections" of bridge. It costs a bridging unit three sections to bridge a large river, two sections to bridge a medium river, and one section to bridge a small river. Thus, for example, a bridging unit could place one bridge over a large river hexside or three bridges over small river hexsides. The number of bridge sections carried by a bridging unit must be noted on the unit status sheet. The amount of time necessary to emplace a bridge will vary with the bridging unit and the size of the river involved:

Type of River	Type of Bridging Unit		
	AVLB/ MTU55	TPP	PMP
<i>Small</i>	2	6	2
<i>Medium</i>	2	12	4
<i>Large</i>	2*	16	8

Number = Number of consecutive Friendly Movement Phases required to emplace the bridge.

* = AVLB units may only emplace bridges across large river hexsides if the hexside already contains a previously destroyed fixed bridge.

[24.31] When bridging units have completed their bridging operations, the owning Player should place a bridge counter in the hex adjacent to the river hexside.

[24.32] PMP and TPP units also require Friendly engineer units in order to complete their bridging operations. (See Case 29.2).

[24.33] All bridging units are treated as 3-vehicle platoons. If they lose a vehicle due to combat they immediately lose 1 bridge section.

[24.34] Bridging units may not enter heavy woods hexes, light woods hexes, or rough 3 hexes, except on roads.

[24.35] All mobile bridges are class 4 bridges.

[24.36] Once emplaced, mobile bridges may not be moved.

[24.37] After placing a mobile bridge across a hexside, the bridging unit may move normally.

[24.4] AMPHIBIOUS MOVEMENT

[24.41] Units with amphibious designation on their unit data sheets may cross river and lake hexsides freely. Units must have a Bound Command to use Amphibious Movement.

[24.42] Units other than LVTP-7 cross river hexsides by spending one complete Friendly Movement Phase for this purpose (at the end of the Phase move the counter from one side of the river to the other). If the unit is observed, the owning Player must announce the fact of Amphibious Movement.

[24.43] Units other than LVTP-7 cross lakes by spending one complete Friendly Movement Phase in each lake hex.

[24.44] LVTP-7 units cross river hexsides by expending 3 Movement Points in addition to the terrain cost of the hex entered. If fired upon while in the hex entered via the river hexside, the LVTP7 is considered to be in amphibious movement for loss modification purposes.

[24.45] LVTP-7 units cross lakes at a cost of 3 Movement Points per lake hex.

[24.5] SNORKELING

Certain non-amphibious vehicles (see unit data sheet) may freely cross small or medium river hexsides by snorkeling. Vehicles may begin the game prepared for snorkeling, and have this fact noted on their unit status sheet.

[24.51] Snorkeled vehicles may cross river hexsides as if they were amphibious (see Case 26.3). After crossing the river they may lose their snorkel status, and again function as normal units, or retain snorkel status, at the owning Player's option; this must be noted on the unit's status sheet.

[24.52] While snorkeled, units may not be given Overwatch Commands or perform short halt, and are more vulnerable to Enemy direct fire attacks. Snorkeled units may not enter light or heavy woods hexes (except on roads), and must move in column formation.

[24.53] Snorkeled units that receive any effect other than "no result" from any form of indirect fire immediately and permanently lose their snorkel status.

[24.54] At the beginning of any Friendly Movement Phase, the owning Player may change the status of any snorkeled units to unsnorkeled, or normal. Once this is done, such a unit may never again be designated as snorkeled. A change from snorkeled status must be noted on the unit status sheet.

[24.55] Units may not change status from normal to snorkeled while on map; snorkeled units must be set up or arrive as reinforcements in that status.

[25.0] POSITIONS OF ADVANTAGE

GENERAL RULE:

During the Final Fire Segment of each Movement Phase, units with Overwatch Commands (and those performing short halt or fire-and-move) engage in alternating final fire. The following rules provide for a more realistic sequencing of this fire, based on the actual positions of the units relative to each other on the map, within the priorities outlined in Case 4.1C(2).

PROCEDURE:

Within each round of priority during the Final Fire Segment of a Movement Phase, all firing units have their final fire sequenced according to the following priorities:

(A) Height Level

All firing units in hexes at Height Level 4 may resolve their final fire combat before units on any other Height Level may do so. After this has been done, all units on Height Level 3 resolve their fire, and so on.

(B) Defilade

Of those units on the same Height Level, all units in defilade may resolve their fire first.

(C) Terrain

Those units on the same Height Level and in defilade may resolve their fire in priority according to the terrain in the hex occupied by each firing unit:

- (1) heavy woods hex
- (2) town hexes
- (3) rough 3 hexes
- (4) light woods hexes
- (5) rough 1 hexes
- (6) rough 2 hexes
- (7) clear hexes

After all units in defilade at a certain Height Level have resolved their final fire, or passed, all units not in defilade at that Height Level may resolve their fire, according to the priority of terrain given in (C) above. After this has been done, Players may move on to resolve the final fire of units on the next highest Height Level.

This procedure continues until all units on the map have resolved their final fire.

[25.1] RULES OF USE

[25.11] If Enemy and Friendly units have an equal priority for fire at the start of a round of final fire, that unit belonging to the Phasing Player fires first. Thereafter, Enemy and Friendly units with an equal priority alternate their fire in the usual manner.

[25.12] If more than one Friendly unit has an equal priority for fire, the owning Player chooses which of his units is to fire first.

[25.13] Regardless of the priorities listed in this rules section, units must still resolve their final fire within the order of rounds of priority listed in the Sequence of Play (see Case 4.1C(2)).

[25.14] When it is his turn to fire or pass in the alternating sequence of final fire, a Player may always substitute a fire of higher priority for one of the priority currently scheduled. Thus, if Main Guns on height level 2 in defilade are currently scheduled, and it is his turn, a Player may always commence fire with a previously passed-over Main Gun on Height Level 3 not in defilade.

[26.0] ELECTRONIC WARFARE

GENERAL RULE:

Modern armies depend on reliable communications nets in order to function. These nets are

vulnerable to Enemy interference, either in the form of jamming (blocking radio transmissions, as by generating electronic "noise" on all frequencies) or radio direction finding (determining the location of Enemy headquarters, artillery units, and anti-aircraft units with search radars from the amount and nature of their radio or radar traffic). Jammers are found in *Red Star/White Star* only.

Note: The use of jammers by Players is optional. The effects of jamming are indeed devastating, especially with regard to commands, morale, and artillery; however, most effects can be circumvented by careful planning. Players who choose to use the jamming rules will find that they increase playing time and record-keeping, in return providing a feel for one of the most important elements of modern combat. For the most complete simulation of the effects of jamming on the tactical battlefield, a multiplayer game is required; then one can easily see why a Player would gladly sacrifice an entire company to destroy an Enemy jammer unit.

CASES:

[26.1] RADIO DIRECTION FINDING

The ability of a Player to conduct radio direction finding is listed in the scenario instructions. If a Player has such a capability, during each Record Phase he may attempt to locate one on-map Enemy HQ, jammer, artillery unit or air defense system (air defense systems using search radar only) for each RDF-equipped HQ present on the map.

PROCEDURE:

If a Player is conducting radio direction finding (RDF) he must announce which unit he is attempting to locate (*i.e.*, 3rd battalion HQ, 4.2" unit number 10xx, *etc.*) and roll one die for that unit. This is done *before* rolling for jammer breakdown. If the number rolled is equal to or less than the radio detection value of the unit whose location is being sought, then the unit has been located and the owning Player must immediately announce a hex within one hex of that unit. If the die roll is greater than the radio detection value of the unit sought, no information is revealed.

[26.11] The radio detection value of units in the game varies by type and nationality, and is listed for each Player in the Exclusive Rules booklet.

[26.12] Units located by RDF are not considered to be observed for Enemy direct or indirect fire, unless this would ordinarily be the case. Radio detection has no effect on units already spotted through the normal observation procedures.

[26.13] Line of Sight, weather and the maximum range of observation have no effect on RDF.

[26.14] On-map artillery units that have fired in their previous Indirect Fire Phase have their radio detection value increased by 1.

[26.15] Friendly RDF may not be used on Game-Turns when Friendly jamming is in effect. **Exception:** Enemy jamming and air defense units may be located while Friendly jamming is in effect.

[26.16] Enemy jammers may not be located by RDF unless they are operating successfully. HQ and artillery units may not be located through RDF if radio silence is being voluntarily observed by the Enemy Player's units. The effects of radio silence are in all respects the same as successful Enemy jamming (see Case 26.4). Radio silence must have been maintained throughout the current Game-Turn to prevent radio direction finding. The fact of radio silence must be announced.

[26.17] Air defense units do not observe radio silence; when located by RDF, the exact hex in which they are positioned must be announced,

rather than in any adjacent hex. Note that air defense units may be located by RDF only if they have a radio detection value assigned to them in the Exclusive Rules booklet. Air defense units may turn off their search radar to avoid RDF; to do so the search radar must have been turned off throughout the current Game-Turn, and the turning off or on of the specific air defense unit's search radar must be announced (air defense search radar is considered on unless an announcement is made that it is off.) "Off" status must be noted in the Player's status sheet. Air defense units whose search radar is turned off may not fire. The command to turn search radar on or off must be given during a Friendly Command Phase.

[26.18] A HQ unit may perform RDF only while on Overwatch Command.

[26.19] RDF equipment may be transferred from one HQ unit to another during any Friendly Movement Phase in which the HQ units are in the same or adjacent hexes; this must be noted on the unit status sheet. A HQ unit already bearing RDF equipment may not receive RDF equipment from another HQ. If a HQ unit bearing RDF equipment is eliminated, the RDF equipment is also eliminated. A scenario may also specify that a unit other than a HQ bears RDF equipment, particularly if there is no HQ unit in the scenario.

[26.2] JAMMING UNITS

[26.21] Electronic jamming is conducted by jamming units; the presence of jammers is determined in the scenario.

[26.22] Jammers are considered to be 1-vehicle units. All jammers have Independent Command and are not subject to Morale states.

[26.23] Jammers are subject to two commands which are unique to them: *Assemble* and *Disassemble*. A jammer may not be given a Bound Command unless it previously had a Bound or Overwatch Command, or had a Disassemble Command through four previous Friendly Command Phases. A jammer may not be given an Overwatch Command unless it previously had an Overwatch Command or had an Assemble Command through six previous Friendly Command Phases. Jammers may not be given a Bounding Overwatch Command and, not being subject to morale, are not given Withdraw or Rally Commands. Jammers set up at the beginning of play may be given any command prior to the first Friendly Movement Phase.

[26.24] A jammer may only move on a Bound Command. A jammer must have an Overwatch Command in order to jam.

[26.25] In order to commence jamming, a jammer on an Overwatch Command must get its gear to work. At any time during a Friendly Movement Phase, the owning Player may announce an attempt to commence jamming. He rolls one die following the announcement. For a NATO jamming unit, the jammer works on a roll of 1-3; on a roll of 4-6 it fails to work. For a Soviet jamming unit, the jammer works on a roll of 1-4; on a roll of 5-6 it fails to work.

[26.26] Once a jammer has again *failed* to work, the owning Player may not attempt to commence jamming with that jammer for *two full* Game-Turns.

[26.27] Once a jammer has commenced jamming, it is subject to breakdown. During the Record Phase the owning Player rolls one die for each jamming unit currently jamming. A Soviet jammer breaks down on a die roll of 1; a NATO jammer breaks down on a die roll of 1 or 2. Once a jammer has broken down, the owning Player may not attempt to commence jamming again with that

jammer until the next Friendly Movement Phase following *two full* Game-Turns of non-operation.

[26.3] EFFECTS OF JAMMING

[26.31] The effective range of a jammer covers all of the *Mech War 2* maps, and extends off-map for 100 hexes in all directions.

[26.32] The operation of jammers, either Friendly or Enemy, does not interfere with each other. Two Friendly jammers in operation have the same effect as one.

[26.33] Friendly jamming does not affect Friendly units.

[26.4] THE EFFECTS OF JAMMERS ON COMPANIES

[26.41] A jammed company has no communications with battalion HQ. Jammed companies or Independent Command units may only be issued one of the following commands, at the owning Player's option: (1) Overwatch; (2) Withdrawal; (3) a repeat of that company's previous command, regardless of what that command was. Players should note that companies may only be given these commands if they would ordinarily be able to so receive them. Jammed companies may, however, receive commands during close assault (see Case 13.28).

[26.42] Jammed companies may not Rally.

[26.43] Jammed companies may not change CP status except under the provisions of Case 106.34.

[26.44] Jammed companies may not be given visual discipline orders except during dazzle effects.

[26.45] Jammed companies suffer a column shift, when rolling for morale changes, of 1 to the right (Soviet) or 2 to the right (NATO).

[26.46] Jammed companies with ambush designation must, if able, fire upon the *first* Enemy unit to enter the ambush hex; they may not fire at any other hex unless fired upon; if fired upon the ambush designation is dissolved. An ambush-designated company may have standing orders to dissolve its ambush-designation in the event of Enemy jamming; if so, this must be noted on the unit status sheet.

[26.5] OTHER EFFECTS OF JAMMING

[26.51] Jammed Indirect Fire Units may not receive load orders or fire plots. On-map indirect fire units may be given Bound orders, unlike companies, but may only fire at hexes which are visible to the indirect fire unit at the time. Indirect fire units may, of course, continue to execute orders and plots previously received but designated for specific Game-Turns. Thus, a Player may plot indirect fire in advance as a precaution against Enemy jamming, or may instruct indirect fire units to continue firing at their most recently received target plots until new plots are received, etc.

[26.52] Jammed indirect fire and aircraft units must follow previously received written plot orders designating the Game-Turn, target hex, pattern and munitions to be fired. If no such orders exist, the unit does nothing.

[26.53] Jammed artillery units are usually not able to receive registration reports from forward observers, thus, all jammed artillery Scatter is resolved using the 61+ column on the Artillery Scatter Table. Exceptions are as follows:

- (A) An on-map indirect fire unit may observe its own registration fire, see Case 14.65;
- (B) If a previous fire was observed (*i.e.*, not jammed), and the indirect fire unit repeats that fire pattern on the same target hex (fire for effect, see Case 14.25) while jammed, the subsequent jammed "fire for effect" is resolved on the 0-20 column of the artillery Scatter Table.

[26.54] Jammed helicopters may not mount units for transport without first spending one Friendly Movement Phase in or adjacent to a hex containing a HQ superior to the unit to be transported. This effect may not be circumvented.

[26.55] The targets of Swatter ATGMs and smart bombs benefit from a Loss Modification of -1 while Friendly jamming is in effect. If a bridge or ferry is the target, a special die roll is made after a 2 or 3 has been obtained on the CRT. If a 1 is rolled, the bridge or ferry is not destroyed (see Case 20.23). This effect may not be circumvented.

[26.56] Air units may not be given load orders or bombing missions while Enemy jamming is in effect; this effect may not be circumvented.

[26.57] A Friendly unit which has been spotted by one Enemy unit is not considered to be spotted by other Enemy units unless the other Enemy units are either themselves able to spot the Friendly unit (regular observation) or are in communication with at least one spotting unit via telephone, short-range radio, or visual signals (focused observation, see Case 8.18).

[26.6] CIRCUMVENTION OF JAMMING EFFECTS — TELEPHONES

Given the devastating effects of Enemy jamming, modern armies have established several ways of overcoming its effects. The most complete replacement for the radio is telephone communication.

[26.61] If only Friendly units occupy a town, and no hex of that town is burning or devastated, those Friendly units are considered to be in telephone communication with each other.

[26.62] A scenario may provide for certain hexes to be connected by buried field telephone; this would be true only for well-prepared sites. The buried telephone line runs in a straight line between the centers of the connected hexes. Any unit occupying a hex with a field telephone is considered to be in telephone communication with any unit which is also in a hex with a field telephone connected to the first unit.

[26.63] A buried field telephone line is automatically cut if any nuclear device is detonated in a hex through which the line passes. Buried field telephone lines are also cut by a 3 result on the artillery CRT. Any Enemy engineer unit may also cut a buried field telephone line by spending an *entire* Movement Phase in a Bound Command in a hex through which the line passes.

[26.64] A scenario may also specify that above-ground field telephone lines exist between certain hexes. In addition, an engineer squad may string an above-ground field telephone line while dismounted or mounted, in any hex entered by it in a Bound Command. Such lines may cross rivers only via bridges. No engineer squad may lay more than 20 hexes of telephone wire in any game. The Players must keep track of such lines. Any Friendly unit in a hex containing such a line is assumed to be in telephone communications with any other unit occupying a hex with a line connected to the first unit.

[26.65] Above-ground field telephone lines may be severed as in Case 26.63. In addition, any Enemy unit automatically severs a line by entering the hex it passes through; any Friendly vehicle unit of bridge rating 3 or higher automatically severs a line by entering the hex it passes through, unless moving on a road in column. A severed above-ground field telephone line may be repaired by a Friendly engineer squad remaining in the severed hex for two Friendly Movement Phases in a Bound Command.

[26.66] Suppressed units may not communicate via telephone.

[26.67] Units with Bound or Withdraw Commands may not communicate via telephone. Only units with Overwatch or Rally Commands may communicate via telephone. In the case of a company with a Bounding Overwatch Command, only the platoon with Overwatch designation may communicate via telephone.

[26.68] Units with telephone communications are exempt from all effects of jamming with respect to those other units with which they are communicating. Thus:

(A) Any platoon of a company (other than one which has Independent Command) is in communication with the headquarters of its battalion, the company may receive any order which it could have received without jamming; it may be Rallied; change CP status; be given visual discipline orders; does not suffer the effects of Case 26.45 or Case 26.46.

(B) A mortar or howitzer unit which is in communication with the headquarters to which it is attached (or with the most prevalent type of vehicle in the case of units under battalion size in a scenario) may receive fire plots and load orders as it would without jamming.

(C) If a mortar or howitzer unit is in telephone communication with any unit which is subordinate (either directly or indirectly) to the headquarters to which the mortar or howitzer unit is attached, that unit may act as artillery spotter and hence avoid the effects of Case 26.53). (See Case 26.71).

(D) Units which are in telephone communication may relay messages which they receive visually or via short-range radio.

[26.7] CIRCUMVENTION OF JAMMING EFFECTS — SHORT RANGE RADIO

[26.71] Any unit which is stacked with or adjacent to another unit or 2 hexes away from that unit is considered to be in communication with that unit via short-range radio. Such communication cancels the effects of jamming in the same manner as telephone communications. (See Case 26.68). Short-range radio may serve as a link in relay, but no unit other than a HQ may relay more than one order or message per Phase, and no more than four units may act as short-range radio relay stations for any particular message or order. The types of messages which may be relayed by short-range radio include orders from battalion HQ to companies or independent-command units, fire plots, load orders, "observed enemy" reports (for focused spotting, see Case 7.12), and, in multi-player gaming, messages between units representing the Players. Artillery registration reports may also be relayed by short-range radio; in such a situation, Case 26.53 does not apply, and the column on the Artillery Scatter Table is dependent on the distance from the unit which begins the short-range radio relay chain to the target hex. The unit serving as artillery registration observer, however, must be subordinate (either directly or indirectly) to the headquarters to which the indirect fire unit is attached.

[26.72] Short-range radio will not function if either unit is within 5 hexes of an operating Enemy jammer. It is up to the Enemy Player to announce that short-range radio is disturbed for any unit if he wishes to do so and his operating jammer is within 5 hexes (inclusive) of the affected unit(s).

[26.73] Companies may not be Rallied via a short-range radio relay link; companies may only be Rallied if their short-range radio link to battalion HQ is direct and without need for relay.

[26.74] If all platoons of a jammed company with ambush designation are within short-range radio communication with each other, either directly or via relay link, the company is exempt from the application of Case 26.46.

[26.75] Short-range radio communication is considered to take place whenever needed in the Game-Turn sequence.

[26.8] CIRCUMVENTION OF JAMMING EFFECTS — VISUAL SIGNALS

[26.81] Visual signals may be passed from one unit to another, provided that the sender is Unsuppressed and the recipient is in observation range. The recipient may act simultaneously as a sender in a relay system.

[26.82] Visual signals may be transmitted by hand by all units. The observation range for hand signals is the same as the observation range for moving infantry.

[26.83] HQ units, mortars, howitzers, jammers, air defense units, engineers, vehicles in scout or recon detachments/companies/battalions (including U.S. armored and air cavalry), and all Soviet and German vehicles are capable of sending communications via signal flag or light while in Overwatch, or Rally Commands, provided they are not suppressed. Signal flags are used by day only; the observation range for signal flags is the same as that for moving vehicles. Signal lights are used by night only; the observation range for signal lights is the daytime observation range for moving vehicles under the same weather conditions, but with a maximum of 30 hexes. Signal lights may not be used by any unit in a starshell pattern or which is fixed by a whitelight searchlight. The scenario instructions may designate additional NATO vehicles to be equipped with signal equipment.

[26.84] Units in communication by visual signal are exempt from the effects of jamming in the same manner as those in communication via telephone (see Case 26.68), except that they may not be Rallied if their only communications link to their HQ is a visual signal, and artillery remains subject to unobserved Scatter (see Case 26.53).

[26.85] (Optional rule) Units sending visual signals are automatically spotted by any Enemy unit with a Line of Sight who is in transmission range of the signal. **Exception:** At night, the Enemy unit must be in a hex through which a straight line passes between the sender and the immediate recipient of the message. It is the duty of the signalling Player to inform the Enemy Player of such spotting situations. When a unit is spotted under this case, during daytime, the unit is flipped over and remains spotted until the end of the next Friendly Movement Phase; if in focused observation range, it remains spotted thereafter. When a unit is spotted under this case at night, the unit is not flipped over. Instead, the owning Player simply informs the Enemy Player that a signaling unit is present, and does not tell him anything further about the unit. **Exception:** if the Friendly unit is within focused observation range of the Enemy unit intercepting the light signal, the Friendly unit is fully spotted by the intercepting Enemy unit and must be flipped over. If the intercepting Enemy unit is in Overwatch Command, it may immediately fire once at the signaling unit; this "interception opportunity" fire may even take place during a Friendly indirect fire or Friendly Command Phase, but in such a case there is no further fire in that Phase. The Enemy unit which fires at the Friendly signaling unit under this Case must (if previously unspotted) be flipped over at the beginning of the next Movement Phase, whether Friendly or Enemy, and is considered to have fired in that Movement Phase.

[26.86] (Optional rule) For purposes of communicating via signal flag or light, hexes containing "high observatories" are considered to contain a tall structure extending 3 Height Levels above the terrain. Hexes containing "low observatories" are considered to contain a tall structure extending 2 Height Levels above the terrain. All other town hexes extend one Height Level above the terrain for this purpose. Units may not take advantage of this case to send or to receive unless they are: HQs, mortars, howitzers, infantry, engineers, reconnaissance units or jammers; they must be in Overwatch or Rally Command and Unsuppressed. A unit may use this case to send a visual signal even if the recipient may not use this case to receive, so long as there is an unblocked Line of Sight from one to the other. Likewise a unit which must transmit from ground level (*i.e.*, a Soviet tank platoon) may have its signal received by a mortar unit which is able to have a signalman in the tall structure.

[26.87] Off-map artillery units are considered to have signalmen at Height Level 3 in all hexes in a hypothetical hexrow which is as many hexes from the mapedge as is specified in the scenario for the location of the artillery. Such units may always receive visual signals of all kinds if within range. Artillery units more than 50 hexes away from the signal are out of range even if the range is otherwise described as "unlimited" (as with daytime clear weather).

[26.88] HQ units may transmit or receive visual signals from any hex adjacent to the one in which they are located as well as from or in the hex which they occupy. Brigade and regiment HQs may also transmit or receive visual signals from any hex two hexes from their actual location.

[26.89] Visual signal communication is considered to take place whenever needed in the Game-Turn sequence.

[26.9] CIRCUMVENTION OF JAMMING EFFECTS — MESSENGERS

Messengers are another way of communicating during Enemy jamming, but they have the disadvantage of not being practically instantaneous. Thus messages often are delayed beyond the Phase in which they are sent.

[26.91] Units on the map may always carry messages. Vehicles expend 1 Movement Point to either pick up or drop off a message. Messengers may carry any number of orders or messages and may deliver them to different destinations. A message may be transferred from one messenger unit to another, provided that both units are in the same hex, but the second messenger unit may not move with the message during the same Phase in which it received the message.

[26.92] Helicopter units may carry messages from one hex to one other hex during any Friendly Movement Phase; to do so they must be at nap of earth in both pickup and delivery hexes.

[26.93] Each HQ unit is equipped with motorcycle messengers. If Players wish to improvise counters for these motorcycles, they are 1-vehicle units having the same values as a Soviet motorcycle; regiment HQ has 4 of them and brigade HQ has 3. Ordinarily, however, they are not represented on the map. A scenario may provide for motorcycles attached to battalion HQ late in the war. The procedure for using "off-map" motorcycle messengers is contained in Case 26.94.

[26.94] When using "off-map" motorcycle messengers, the Player, at the time the message is

sent, calculates the number of Movement Points required for a motorcycle to travel under current weather conditions, without passing within five hexes of an Enemy unit, to the current location of the destination unit. Dividing this figure by the motorcycle's Movement Allowance, he obtains the number of Friendly Movement Phases required for the motorcycle to arrive at its destination hex. Movement of the destination unit after the calculation is made has no bearing on the time of arrival of the message. These "off-map" motorcycles always arrive and are never affected by units on or off the map; if sent to "off-map" locations, their return must also be calculated.

[26.95] The procedure for sending a messenger is this: During a Friendly Command Phase, the Player writes down the message on an index card or slip of paper, together with its sender and destination and delivery vehicle. The message arrives at the destination unit in the next Friendly Command Phase following the Friendly Movement phase of arrival of the messenger.

[26.96] Messengers may carry orders to companies (which may be effectively received by any platoon of the company, provided it is not under independent Command), orders to change CP status, and target plots and load orders to artillery. Messengers may not be used to Rally units or to circumvent the effects of jamming on artillery Scatter (see Case 26.53).

[26.97] Motorcycle messengers moving to off-map artillery units must exit the map via a road or trail and are assumed to remain on that road or trail, at the same Height Level (in fog scenarios) as their exit hex; their destination is the same as the signalman described in Case 26.85.

[27.0] AMBUSH

GENERAL RULE:

Ambush is a special Command that may only be issued to certain companies before the start of the game. This will be listed in the scenario instructions.

PROCEDURE:

Companies assigned an Ambush Command may select any one hex within their Line of Sight as the "ambush hex." The location of this hex must be written down by the owning Player next to the command plot for that company before the start of the game. Units with an Ambush Command may only fire at Enemy units in the ambush hex or any hex adjacent to it (within the Line of Sight and observation range of the firing unit).

CASES:

[27.1] HOW AMBUSH WORKS

[27.11] Units with Ambush Commands using opportunity or overwatch fire have the fire of all their weapon systems resolved before any overwatching Enemy unit may fire. (This includes the ATGM systems of ambushing units).

[27.12] Units with Ambush Commands using final fire always have their fire resolved first during each round in the Final Fire Segment. (This is an exception to any normal priorities due to positions of advantage.)

[27.13] Companies may maintain their Ambush Command only so long as all units of that company remain unspotted. At the end of any Phase in which a unit of that company has been spotted (for whatever reason), the company loses its Ambush Command and is assumed to have an Overwatch Command.

[27.14] Units with Ambush Commands must roll for morale as normal due to any losses caused by indirect fire. The company may maintain its Ambush Command so long as it does not enter Morale State 3.

[27.15] Units with Ambush Commands are not required to fire at Enemy units adjacent to the ambush hex. They may choose to withhold their fire, at the owning Player's option. However, if any one of the ambushing units fires, then all ambushing units assigned to the ambush hex must also fire (if they are physically able to do so).

[27.16] The owning Player may change the command of the companies with Ambush Commands during any Friendly Command Phase, within the restrictions for normal companies. Once this is done however, the company may never be issued another Ambush Command.

[27.2] RESTRICTIONS ON AMBUSH

[27.21] Units may not use any form of indirect fire while assigned an Ambush Command.

[27.22] The owning Player may not change the location of a company ambush hex during the play of the game.

[28.0] CAMOUFLAGE

GENERAL RULE:

Friendly units may make it more difficult for Enemy units to observe them through the use of camouflage. In some scenarios, units may begin the game in camouflage. When a unit is camouflaged this fact must be written down on the unit status sheet.

PROCEDURE:

Whenever a camouflaged unit would ordinarily be observed by an Enemy unit, the owning Player may roll one die and consult the Camouflage Observation Chart. If the number is less than or equal to the camouflage value indicated for a unit in the appropriate type of terrain, then the unit is not observed.

[28.11] Only one die roll need be made for the effects of camouflage in a given Phase. If the unit is not observed, then it will remain so for the entire Phase (unless it moves, fires, or becomes involved in a close assault) regardless of the number of Enemy units that might ordinarily attempt to observe it in that Phase.

[28.12] Camouflaged units are automatically observed if they fire any of their weapon systems, move from the hex they currently occupy or become involved in a close assault.

[28.13] Once a camouflaged unit is observed it is no longer considered to be camouflaged.

[28.14] Camouflaged units that leave the hex they currently occupy are no longer considered to be camouflaged.

[28.15] **Camouflage Observation Table**
(see separate sheet)

[28.16] The camouflage value of all camouflaged units is increased by 2 during night conditions, and by 1 during fog, rain, falling snow, blizzard.

[28.17] Camouflaged units may not use IR or WL searchlights. (See Case 23.2).

[29.0] ENGINEERS

GENERAL RULE:

Engineer units are used to maintain Friendly ferry points, construct and destroy bridges, construct abatis, breach minefields, and aid Friendly units performing close assault in town hexes.

[29.1] ENGINEER SQUADS

Engineer squads are one-step infantry units. When stacked in the same hex with a Friendly dismounted infantry unit, they are considered to be "part" of the infantry unit and may not be attacked separately. They may be eliminated *only after all* Friendly infantry units in the hex have been eliminated.

[29.11] Engineer squads do not count for stacking purposes.

[29.12] One engineer unit may be transported "for free" by a friendly APC. (That is, they do not take up any "space"). However, if two or three squads are being transported by the same APC unit, then they are assumed to take up the same amount of space as a normal infantry unit. No more than three engineer squads may be transported in a given APC unit at any one time.

[29.13] The values for engineer squads are listed on the Player's data sheets.

[29.14] The close assault strength of engineer squads is used only if the squads are alone in a hex, or are in a town hex (see Case 29.3).

[29.15] Engineer squads may not perform any of their engineering functions while Suppressed in defile, mounted in APCs (**Exception:** see Case 26.64), engaged in close assault, or in CP 3.

[29.16] Engineer squads may only perform their engineering functions while they have a Bound Command; this is considered to be a "change in status," and the units need not be moved during their Friendly Movement Phase.

[29.2] BRIDGES AND FERRIES

[29.21] In order for TPP and PMP bridging units to construct their bridges, they must be stacked in the same hex with a *minimum* of three Friendly engineer squads. After the required number of Phases have been spent in the hex, the engineer units may exit the hex if they desire, leaving the newly constructed bridge intact.

[29.22] Ferry points may only be used so long as a total of *at least three* Friendly engineer squads are in either (or both) of the ferry hexes.

[29.3] TOWN CLEARING AND DEFENDING

[29.31] Dismounted infantry units stacked with Friendly engineer squads have plus 2 (+2) added to all of the defender's die rolls on the Loss Modification Tables when engaging in close assault in town hexes. The close assault strength of the engineer unit is added to that of one of the infantry units. There is no additional effect for having more than one engineer squad in the hex.

[29.32] Dismounted infantry units accompanied by Friendly engineer squads have -2 added to all of their defending die rolls on the Loss Modification Table when defending against close assault in town hexes. There is no additional effect for having more than one engineer squad in the hex.



[29.4] ABATIS

Engineer units in a light or heavy woods hex may construct abatis (an anti-vehicle obstacle) by spending *twelve consecutive, complete* Game-Turns in the hex with a Bound Command.

[29.41] While engaged in construction, the engineer units may not be attacked by any form of direct fire. If this occurs the attempt is abandoned and must begin from scratch.

[29.42] Vehicle units entering a light woods hex containing abatis may not move any further in that Movement Phase.

[29.43] Vehicle units may not enter a heavy woods hex containing abatis.

[29.44] Abatis affects all vehicle units equally, regardless of whether they are Enemy or Friendly.

[29.45] Abatis has no effect on dismounted infantry movement.

[29.46] An engineer unit may remove abatis by spending one complete Game-Turn in the hex with a Bound Command. The unit may not be the target for any direct fire attacks during this period.

[29.5] BRIDGE DEMOLITION

[29.51] Engineer units may prepare bridges for demolition by spending *three consecutive, complete* Game-Turns in a hex adjacent to the bridge hexside with a Bound Command. The units may not be the target of any direct fire attacks during this period.

Once prepared, the bridge may be destroyed by any Friendly engineer unit adjacent to the bridge hexside. This may be done at any time during the Game-Turn. If units are crossing the bridge at the time of demolition, they are not affected — they are simply prevented from crossing the bridge.

[29.52] Scenario instructions may also provide for bridges already prepared for demolition.

[29.53] A bridge which has been prepared for demolition may be made unprepared for demolition by an Enemy engineer unit spending two consecutive complete Game-Turns in a hex adjacent to the bridge hexside with a Bound Command, not having been the target of any direct fire attacks during this period.

[29.54] During the Rally Segment of the Enemy Indirect Fire Phase, Enemy units may attempt to remove the preparation for demolition of a bridge made by Friendly engineers (or provided by the scenario at the start of play). In order to attempt this, the Enemy unit must have been unsuppressed and in Overwatch in a hex adjacent to the bridge hexside throughout the previous Game-Turn (*i.e.*, since the previous Enemy Indirect Fire Phase). Each such Enemy unit may roll a die once during the Rally Segment. Should the die roll result in a "1", the bridge is considered no longer prepared for demolition. If any other result is obtained, the bridge remains prepared for demolition. A unit may repeatedly attempt to change the preparation of a bridge for demolition, as long as it continues Game-Turn after Game-Turn to meet the criteria outlined in this Case.

[29.6] BREACHING MINEFIELDS

Engineer squads may breach minefield hexes by spending a certain number of complete Friendly Movement Phases in the hex. The number of Phases required varies with the type of minefield being breached:

Type	Engineer Movement Phases Required
<i>Artillery-delivered</i>	1
<i>Hasty</i>	2
<i>Defensive</i>	3
<i>Barrier</i>	6

[29.61] While engaged in breaching operations, engineer squads are not attacked by the minefield, either for entering or remaining in the hex.

[29.62] If two or more engineer squads are engaged in breaching the same minefield hex, each one may contribute one Engineer Movement Phase to the breaching attempt.

[29.63] Players must keep track of the number of Engineer Movement Phases completed for each minefield hex on a separate sheet of paper or by using number markers.

[30.0] FIRE-AND-MOVE

GENERAL RULE:

By using fire and move, vehicle units may fire in the Enemy Movement Phase and move in the subsequent Friendly Movement Phase.

PROCEDURE:

Vehicle units with a Bound Command may be designated for "fire-and-move" during the Command Phase; this is noted on the unit status sheet. Such units may fire during the Final Fire Segment of the Enemy Movement Phase which follows the Command Phase in which the designation was given. In the subsequent Friendly Movement Phase, such units must move at least one hex, but may not expend more than one half of their Movement Allowance (round fractions down) unless this is necessary to move one hex.

[30.11] Units designated for fire-and-move may fire during the Final Fire Segment of the Enemy Movement Phase. However, such units do so after all units without short-halt or fire-and-move designations have completed their direct fire (see the Sequence of Play, Section 4.0).

[30.12] Units performing fire-and-move are not considered to be moving when defending against direct fire attacks during the Final Fire Segment of the Enemy Movement Phase. They are considered to be moving when defending against direct fire attacks during the Final Fire Segment of the Friendly Movement Phase.

[30.13] Friendly units defending against direct fire attacks by Enemy units performing fire-and-move receive a modification of -2 on their Loss Modification die rolls (see Section 12.0).

[30.14] Fire-and-move is not a Command, but it must be plotted in advance. When one or two platoons of a company with a bounding Overwatch order is to perform fire-and-move, the platoon so designated must be noted on the unit command sheet.

[30.15] Helicopter units with a Bound Command may always use fire-and-move, should they desire to do so. Since they have unlimited movement, they may continue to move normally while doing so.

[30.16] Dismounted infantry units may not perform fire-and-move.

DESIGNER'S NOTES

Mech War 2 is designed as a regiment/battalion level simulation. The maneuver elements are platoons, but the intent of the game is combined arms battalion teams. The systems in the game are designed to allow players total freedom as per tactics, but the game systems can severely cripple improper tactics when opposed by the correct ones. Unsupported armor units will find dislodging enemy infantry from towns or dense woods a costly operation. Bounding without having overwatch units will lead to cavalry charge massacres while inflicting little damage on the enemy. The list goes on and on — only extensive play and proper doctrine will yield good results.

Major problems confronting me while designing this game were portraying defilade, and the difference between NATO model tanks versus Soviet tanks when in defilade. The defilade problem was solved by Redmond and myself. We felt that within every 200 meters of space (one hex), there would be contained some form of defilade. Therefore, by expending movement points and placing a marker, a unit can improve its position anywhere on the map — without the artificial "points of defense" under the old defilade hexside system.

The second problem was handled by the combat system. The two key variables to armor combat are: How large is the target?; and, What kind of range finding system is the firing unit using? Currently, all MBT's (main battle tanks) possess main guns with similar characteristics. Granted, various guns are better than other guns, but the gross differences are negligible for the scale and time frame of *Mech War 2*. Another problem that had to be taken into consideration was how to make each individual combat resolution as simple as possible, so that players could perform several in a short period of time. This boils down to a combat system based on the profile of the target unit, the range finding system of the firing unit, and the distance between the two units. This yields a strength, which when referenced with the actual number of tanks firing, gives a column on the basic Combat Results Table. After determining the number of hits, such subtleties such as defilade, crew quality, and a host of others are then accounted for. It is here that the difference between NATO and Soviet tanks in defilade is seen as NATO tanks gain a better defilade advantage.

Another major design consideration was: How to make it a truly combined arms game? Before *Mech War 2*, a tactical game was either an armor game with infantry tacked on or an infantry game with armor tacked on. Infantry in *Mech War 2* is as essential as the armor and, ultimately, the proper use of infantry will separate the winners from the losers.

The Morale rules are significant to the play of the game. As a unit's morale state increases, its tactical flexibility suffers. I was totally against writing rules to specify a unit's action after its morale had crumbled. There are always tricks that Players, who are into that sort of thing, can use since rules cannot always cover all the weird situations. The rules, as they now stand, are elegant and for this reason deserve mention. Morale State 1 has no effect except that the unit is near its breakpoint. Morale State 2 will essentially not effect a defender immediately as long as the effected units do not move. If a unit moves in Morale State 2 it is locked into a bound order until rallied. You can advance with units in Morale State 2, but if the enemy is there you cannot shoot back. While this may seem unrealistic, the intent is for the owning Player to rally those units — not send them into the maw of the enemy. Morale State 3 is another way of saying "which way to the rear." A unit must automatically bound until it is rallied.

The optional or advanced rules are designed both for realism and showing the players the wide spectrum of possibilities inherent on the modern battlefield. The advanced rules slow down play considerably, especially if a game is played with all or most of them. Special mention is appropriate here. The original air system was conceived by myself but ultimately the final design was done by Tom Walczyk who used my data but fully developed the system. The EW rules were totally revamped by Stephen Donaldson (Donny). Mine were fairly elegant but Donny wanted more realism (he was originally in NATO communications). In addition the Nuclear and Chemical rules are totally Donny's design. I especially like the nuclear rules which, for the first time to my knowledge, properly show the effects of tactical nuclear weapons on this level of combat.

In summation, *Mech War 2* is a very complex game with reams of information available for the student of modern warfare. The game has gotten some good reviews from those in the trade. With a good working knowledge of what is effective, a player with a copy of *Mech War 2* can truly come to understand the combined arms concept of the modern battlefield.

DESIGN CREDITS

Game Design: Mark Herman

Development: Thomas Walczyk, Stephen Donaldson

Physical Systems and Graphics: Redmond A. Simonsen

Technical Assistance: Darryl Garrett, First Lieutenant

Holdridge, David Isby, Major Donald Mack, Major D.C.

MacCaskill, Jack Moore, Captain Thomas Pratuch,

Yadin Roman, William Tallin

Rules Editing: Joseph Balkoski

Testing: John Kallaughner, Edward Curran, Daniel Dennis,

Mark Edwards, Andy Eiler, Thomas Farnsworth, Gary

Gillette, Carey Gister, Brian Gister, Marty Goldberger,

Richard Hammer, Tony Haug, Steve Heffler, Howard

Herman, Ralph Ovalle, Frank Radford, Dave Richards,

Durvis Roberts, Stephen Schrader, Abe Taylor,

Jack Walsh

Production: Orhan Agis, Robert A. Degni, Kate Higgins,

Ted Koller, Manfred F. Milkuhn, Bob Ryer

by Charles Kamps Jr.

The cornerstone of all Soviet tactical doctrine is the offensive. Historically, since 1918, it has taken pride of place over other tactical concepts as the best method of repelling invasions of the Soviet Union. Today, the Soviets' offensive doctrine rests on four principles regarded as key to its success: surprise; massing of superior firepower; high speed maneuver; and the theory of the 24-hour continuous battle. Surprise is achieved by short periods of preparation for attack and last minute massing of attack units. Camouflage and deception are instrumental on the tactical level to assure secrecy of plans, especially when nuclear strikes are to precede the attack. Firepower superiority is to be achieved at the point of breakthrough by massing conventional or nuclear artillery *fires* and not by actual gun concentration as in WW II. In keeping with surprise, prep fires are to be short but intense. While priority targets are designated by higher headquarters, each commander from regiment on up has organic artillery with which to affect the battle. Maneuver speed is achieved by pressing tank and motorized rifle units ahead at full speed into breakthrough points, using engineers to maintain momentum in the face of obstacles. Frontline units continue the offensive day and night in all weather until expended, at which time fresh formations pass through the first echelon to continue the attack.

MECHANIZED WARFARE in the 1980's



Dealing with the Anti-tank Threat

The recent dramatic increase in the effectiveness of anti-tank weapons, in which the Soviets have played a leading role, has caused some concern in such a tank-oriented army. Expecting to face numerous Western anti-tank weapons in any attack, Soviet planners have developed three counter-measures to overcome them: the nuclear option; the artillery option; and the maneuver option. According to the Soviets, the threat of nuclear weapons employment will force NATO to disperse its forces to the extent that high concentrations of anti-tank weapons, enough to stop a Soviet breakthrough, will be impossible without the risk of presenting a nuclear target. Should tactical nuclear weapons (TNW) actually be employed, they will create radioactive areas in the path of advance which would preclude the employment of infantry-manned anti-tank weapons by NATO. Conversely, Soviet troops could remain mounted and pass through the danger zones unimpaired. Under the artillery option, massive suppression fires from Soviet guns would keep Western anti-tank gunners out of the picture in critical breakthrough areas. To this end, the Soviets have introduced armored self-propelled (SP) guns into their forward units which are capable of keeping pace with a mechanized assault. Tactics suggested by advocates of the maneuver option stress a more fluid and high speed offensive by mechanized troops. They propose rear area raids by small groups of BMP fighting vehicles to confound enemy defenses in conjunction with airborne and airmobile forces. These low-density operations could prevent effective NATO concentration in an area of attack.

Trading Casualties for Speed Soviet attack doctrine for mechanized and tank forces emphasizes speed and shock effect rather than the concept of *fire and maneuver* at the small unit level. They therefore accept heavy losses and isolated units as normal conditions of warfare. They do not employ large flank guard forces in offensive operations, but rely on speed of advance. In order to maintain the pace of the advance, Soviet doctrine calls for attack from the line of march and rapid deployment into battle order when necessary to overcome stubborn resistance. To further facilitate forward movement, units are trimmed to a minimum of logistical "tail" and carry six days worth of necessary supplies to reduce dependence on rear echelon services during the initial stages of combat.

Types of Offensive Action

The Soviets recognize three major types of offensive action: the meeting engagement (including advance to contact); the breakthrough; and the pursuit. The Soviets believe that the *meeting engagement*, essentially a surprise encounter for both sides, will be common in fluid battles and in nuclear combat. Their tactics call for a hasty attack from the line of march, characterized by swift and aggressive maneuver. In this way they hope to overwhelm an equally unprepared enemy force without taking time to coordinate attacking units or extensive fire support.

The *breakthrough* is a deliberate attack against a well defined enemy line of resistance. Its aim is to strike into enemy rear areas rather than to consolidate on terrain objectives. The breakthrough utilizes firepower and mass to create a gap for pursuing forces to pour through. Once the enemy main line of resistance is overcome, further combat is characterized by series of meeting engagements.

The *pursuit* is not only a form of offensive action, it is a Soviet principle of war. Pursuit plans are drawn up prior to an attack and are initiated upon breakthrough by regimental commanders.

The aim of the pursuit is to complete the destruction of enemy forces, not just follow them. During the pursuit, considerable latitude in operational control and artillery employment devolves upon the regimental commanders until the operation is terminated on order of Army or Front headquarters.

Types of Maneuver The Soviets employ five basic forms of maneuver in the attack: the *single envelopment*; the *double envelopment*; the *penetration*; and at Army and Front level the *multiple penetration* and the *pincers*. The *single envelopment* is used to pin the enemy against an obstacle by encirclement. The attack force breaks through a weakly defended area and drives deep into the enemy rear. A supporting attack may be launched by followup forces to take advantage of the disrupted defense line, or it may precede the main attack as a strong diversion. The *double envelopment* is considered the most decisive form of attack. Where the Soviets mass a preponderance of forces, they may be expected to use the double envelopment to entrap and destroy enemy forces. Supporting attacks may lure enemy forces to the supposed point of attack in preparation for the double envelopment, which will subsequently pocket the defenders or force them into nuclear strike kill zones. In the *penetration*, the Soviets mass combat power on a narrow front to break through an over-extended defense line while simultaneous feints deceive the enemy as to the real point of concentration. Once a gap is created the enemy is defeated in detail as his freedom of maneuver has been lost to the pinning "feints".

Artillery Support Artillery support for the offense consists of preparatory fires and fires in support. Prep fires destroy or disrupt enemy defensive positions and command centers, and are ideally based on thorough reconnaissance. Nuclear fires, when employed, would precede a brief 20 minute conventional preparation. In a nonnuclear environment, prep fires may last from 40 minutes to 1 hour. When the assault begins, support fires carry the leading elements through the enemy defenses using prearranged concentrations. During this phase the artillery remains under centralized control but is available to respond to direct requests from units for "on call" fire missions. As the attack presses on, continuous support is provided by the forward displacement of batteries. No more than one-third of the supporting artillery is moved at any one time. When the enemy's artillery positions have been overrun and the pursuit phase begins, artillery control is decentralized to the regimental commanders for more flexible exploitation.

Primary Maneuver Unit: The Regiment The primary building block of the Soviet division, and also the smallest unit capable of sustained independent action, is the motorized rifle regiment. Its mission in the attack is to penetrate as far as enemy direct support artillery positions and then exploit and pursue as necessary. It will normally attack in two *echelons*, the first consisting of 2 motorized rifle battalions reinforced by 2 tank companies from the regimental tank battalion; and the second consisting of one motorized rifle battalion which may or may not be reinforced with the remaining tank company. The second echelon usually follows the first at a distance of 3 to 6 kilometers and may be used to: reinforce the first echelon; outflank enemy positions; mop up bypassed pockets of resistance; or meet counterattacks threatening the regiment's flanks. As part of a secondary attack, the regiment may occupy a front of 10 to 15 kilometers. When operating as part of the main effort it has a front of 5 to 8 kilometers, and actually attacks on a 4 kilometer wide zone.

The regiment may execute a movement to contact independently or as part of a division ad-

vance. As part of a divisional movement, it may be assigned two or more routes and usually deploys one battalion as an advanced guard. In the attack, the regimental first echelon jumps off from covered positions and leaves security in the hands of the anti-tank reserve held at regiment. Enemy hedgehogs are bypassed and screened by the first echelon. If a weak spot is found, the second echelon will be deployed immediately to surround and destroy committed enemy forces. The regimental commander may also concentrate his tank battalion and use it to race ahead of retreating enemy columns to cut them off. Fire support is provided by organic mortars and regimental 122mm battery as well as by *regimental artillery groups* of direct support units formed from division and army assets.

Times to Deploy the Regiment An advancing regiment can be expected to launch a hasty attack with one battalion within one hour of the time its reconnaissance elements encounter significant opposition. The assault battalion will take up positions under cover as close as possible to the enemy — preferably within 1½ kilometers. As supporting artillery fires commence, the battalion will engage with tank weapons and *Sagger* and 73mm fire from BMPs. Artillery prep fires, including smoke and nonpersistent gas, may total 2,000 rounds delivered in 10 to 20 minutes. The battalion will assault through the smoke, infantry remaining mounted, and attempt to overrun the enemy.

Deliberate Attack Should the hasty attack fail, the regiment will probably dig in and pin the enemy while a second echelon regiment mounts a deliberate attack. The regiment in contact will locate enemy obstacles and anti-tank weapons for the assault forces. A 15 to 30 minute artillery preparation will attempt to neutralize the defense while the assaulting regiment and engineers move forward. When they are within 100 meters of the enemy positions, fires will shift to deeper targets. Tanks always lead the assault, firing on the move. Should a significant target arise, a whole platoon or company of tanks may engage it in mass from the short halt (4 to 8 seconds). Artillery will attempt to suppress anti-tank defenses, but should it fail, the infantry may dismount far forward and close assault the AT positions. The BMPs follow the infantry to provide support, but the tanks will continue on at high speed, leading to a dangerous gap between the two arms. In rare instances fire and maneuver may be utilized, but never below the company level. When possible, deliberate attacks will take place at night. Under conditions of darkness, infantry may lead the attack in preference to armor. Artillery prep fires would be kept to a minimum to enhance surprise. To reduce confusion, column formations are utilized and maneuver is kept simple. Often second echelon units will only pass through the assault elements at the approach of daylight.

Use of the Tank Regiment The motorized rifle division's tank regiment is usually employed as a second echelon unit to exploit breakthroughs. By virtue of its heavy armor protection, the tank regiment is particularly useful in following up nuclear strikes by rapid advance through contaminated areas. As an exploitation unit it sets the pace of pursuit and can envelop enemy flanks at high speed. It would be used in the first echelon only when conditions highly favorable to armor employment are present, or when nuclear fires are anticipated.

The Motorized Rifle Battalion The motorized rifle battalion usually attacks with its companies in a geometric formation: line; inverted wedge; wedge; or column. Most often it will employ 2 companies (reinforced by 2 platoons of tanks) on line in a first echelon, and retain the third company and remaining tank platoon in the second echelon

(inverted wedge). Engineers and anti-tank weapons may be attached from regiment and division. As part of a main effort the battalion will attack on a front of 1000 to 1,500 meters; while making a secondary attack it can occupy 1,700 to 2,300 meters. The second echelon will follow the first at a distance of 800 meters.

Company Level Tactics Companies assault with platoons abreast on a front of 500 to 800 meters, with attached tank platoons leading. Each platoon attacks on line over a front of 150 to 250 meters. The organic battalion mortars support from positions 400 meters behind the leading companies, while battalion anti-tank assets prepare to support threatened flanks. Attacks are conducted mounted, with infantry firing through vehicle weapon ports. Infantry dismounts only as companies and only when necessary to silence anti-tank defenses. Captured positions are not consolidated, but passed through quickly with little reorganization. Should the battle go as planned, the Soviets expect to penetrate 12 to 15 kilometers in the first 6 to 12 hours after attacking a prepared defense, and thereafter maintain an advance of 3 to 4 kilometers per hour.

Pursuit The pursuit phase, following the breakthrough, employs second echelon tank units to maintain direct pressure on the retreating enemy while other tanks race ahead on parallel routes to strike the enemy in the flanks and cut off his avenue of withdrawal. They may be aided by airmobile troops who take advantage of the defender's disorganization by infiltrating into rear areas to seize key bridges and choke points.

Defects in Soviet Offensive Doctrine

There are several marked disadvantages to Soviet attack doctrine:

1. Units are most often employed in geometric formations for control, and seldom revert to fire and maneuver even when resistance is encountered.
2. For speed, the Soviets prefer attack from the line of march, and will not delay a hasty attack to wait for proper artillery support.
3. In order to maintain momentum, they will accept high losses and bypass potentially dangerous enemy concentrations.
4. During movement to contact, inadequate reconnaissance may lead to incorrect deployment due to faulty appreciation of the terrain and enemy situation.
5. Short of a deliberate attack, artillery preparation may be ineffective as concentrations are of short duration, many enemy positions may not have been pinpointed, and no more than two-thirds of the guns within range will be ready for action.

Experience with Soviet Doctrine The Soviet Union's client states in the Middle East adhere to its offensive doctrine but in practice fall far short of its ideal. In 1973 the Syrians demonstrated that using Soviet tactics straight from the book without the benefits of good tank country, imagination, or obscured enemy observation can be tantamount to suicide. On the Sinai front it can be seriously asserted that Soviet doctrine was not actually employed by the Egyptians. Except for the Suez Canal crossing, the Egyptians did not use Soviet tactics of breakthrough and pursuit in their cautious advance. The most logical explanation for this is that their political objectives could be secured without a great advance. In fact, the Egyptians developed their own tactics specifically to deal with the Israelis. Their offensive consisted of an essentially infantry paced assault, initially, backed up by tanks and artillery. The original operation took place under an umbrella of surface-to-air missiles and was screened forward by hundreds of man-carried Sagger anti-tank missiles. In later stages of "tank" warfare, the Egyptians

discovered that their unsupported armored vehicles fared no better against Israeli tanks than the Israeli tanks had against Egyptian Saggars.

The American Approach

On the other side of the battlefield, most of the U.S. Army's recent attack doctrine stems directly from Israeli experience gained during the October 1973 War. The cornerstone of the fighting system, however, is traditionally American — always substitute firepower for manpower whenever possible. The Army's use of this doctrine reached its logical conclusion in Vietnam, where a division commander could call upon perhaps 18 battalions of field artillery plus helicopter gunships, tac air, and naval gunfire support. Thus the Army, unwilling to close like the Marines, became adept at blowing away jungle, huts, water buffalo, the odd civilian, and occasionally the enemy — if he stuck around to watch the fireworks. In carrying on this tradition, American commanders are now instructed to rely on artillery fire support to provide most of the "shock" effect in an attacking situation, especially since it is unlikely that most commanders will have anything like a 6 to 1 superiority that Army doctrine calls for in the attack, even locally.

Basic US Maneuver Unit The basic building block of the US division is the Battalion task force. It is formed by taking a mechanized or armored battalion and substituting the opposite type company for one of its own. After such a swap the participating armored battalion would control 2 tank companies and a mech company while the mechanized battalion would retain 2 mech companies and gain 1 tank company. Under the new Division Restructuring Study (DRS), battalions and companies are smaller than they were previously. Now combined arms coordination will be the province of the battalion commander and not the company commander, who under the larger unit system could control a *team* of tank and infantry platoons. Companies will henceforth fight as pure units.

US Command Control American doctrine calls for brigade and battalion commanders to "direct the battle" by assigning objectives, coordinating fire, and supervising their subordinate units. The battalion CO will personally tailor his combined arms team to the mission and integrate the effects of infantry, artillery, tanks, attack helicopters, tac air, engineers, air defense assets, and electronic warfare. Captains, commanding companies, are to "fight the battle" and will be primarily concerned with technical aspects of cover, concealment, suppression, and teamwork within their units. Control and distribution of fire from all organic and supporting weapons systems is considered critical at battalion and company level since American forces expect to fight outnumbered and must, of necessity, make every shot count. Commanders are now expected to operate as the Soviets do, from armored vehicles far forward, instead of from comparatively extravagant command posts, as was the practice previously.

US Doctrine and the Next War

In a European scenario, the US Army does not anticipate many favorable opportunities for offensive action. Recognizing the risks of attacking when outnumbered, Army doctrinal literature advises that a commander "should only attack if he expects the eventual outcome to result in decisively greater enemy losses than his own, or result in the capture of objectives crucial to the outcome of the larger battle." The Army's general guidance for the offense stresses many of the same points as Soviet attack doctrine: suppression of enemy defensive fires; shock — through speed, surprise, and violence; reinforcement of success; disruption

of the enemy's rear; and relentless pursuit. There are subtle differences however, such as the special emphasis placed on suppression of enemy air defense weapons because of the US reliance on tactical air support.

American doctrine stresses that the primary offensive weapon is the tank, and therefore all other elements of the combined arms force must be employed to support its advance. In addition to the normal supporting arms, this includes the extensive utilization of attack helicopters to guard open flanks, provide quick reinforcement, deepen penetrations, and sweep around enemy flanks.

US and Soviet Doctrinal Differences Within the various forms of offensive combat there is a great divergence between the Soviet and American positions. During movement to contact, US Army doctrine emphasizes meeting the enemy with the least force possible in order to avoid casualties. Forward motion, while nominally "aggressive", is actually a fairly cautious process. It is achieved by the "overwatch" system — new rhetoric for movement by bounds. Overwatch is *usually* accomplished within the platoon, and consists of the element always being covered while in motion by another *overwatching* element which is supposed to bail it out by direct fire in case of enemy contact. After contact is made, commanders are encouraged to allow no let up in momentum to occur, but launch a hasty attack. Contrary to the Soviet hasty attack, US units are to utilize as much firepower as can possibly be brought to bear, including aircraft and helicopters, to *develop* the situation. The hasty attack should ideally fix the enemy's forward elements with firepower while finding gaps or weak spots and exploiting open flanks. Deliberate attacks differ only by the scale of prior preparation. Like the Soviet breakthrough, they aim to penetrate on a narrow front and drive deep into the enemy's rear. Exploitation is supposed to be conducted by previously uncommitted forces, but in a European environment these are likely to be hard to come by. In contrast to the Soviet echelon system, US commanders will have few reserves to work with, and will only be able to withhold such forces as may be necessary to insure a bit of flexibility and continued momentum.

A battalion task force will ideally advance on two routes, with two companies leading and one in reserve. The object of the battalion's attack will be to break through the Soviet defensive line by isolating and destroying several strongpoints, opening a gap for exploitation. The task force will attempt to deal with one company strongpoint at a time by using smoke and artillery fires to isolate it from supporting positions. At the same time the task force advances using covering terrain to avoid enemy fire, and then closes on its objective by fire and maneuver. Thorough reconnaissance is depended upon to find the path of least resistance to the objective. After one strongpoint has been overrun and consolidated, others may be taken similarly but from the rear. Depending upon the degree of defensive preparation, the task force may be divided into two or three elements. The assault team, built around an infantry platoon reinforced by engineers, penetrates the strongpoint. The support force, including tanks, infantry, engineers, and TOW missiles, provides overwatching fires along with battalion mortars. Should significant obstacles, such as minefields, be present, there may also be a breaching force to open paths for the assault team. A task force reserve, consisting primarily of tanks, may be available to exploit or to mop up the strongpoint. This reserve is usually part of the support force initially.

US Artillery Support The leading company will usually have immediate artillery support in the form of a "dedicated battery" of six or eight 155mm howitzers. The battery and the company

are in constant communications with each other. This system provides instant response to calls for suppression of enemy ATGMs, sacrificing a little accuracy to gain speed and volume of fire in a critical situation. Artillery support is very flexible, with the battalion commander having access to a wide variety of options. Depending upon the division's priorities, the battalion may be supported by one battalion of 32 155mm howitzers in direct support, or by the entire Division Artillery of 96 155mm and 12 8-inch howitzers plus additional guns in general support from the attached Field Artillery Group from Corps. This would be the exception, however, as artillery support will be at a premium and any single unit could not expect heavy support for more than a brief period. Attack helicopters and tac air would also be available on a strict priority basis.

US Offensive Techniques American attack doctrine continues to stress careful prior reconnaissance to pinpoint enemy weapons even though the time for such activities may often not be available on a fluid battlefield. Such a reconnaissance, properly executed, would give the attacking commander valuable information for use in tailoring his forces and maximizing use of terrain. The essence of the commander's scheme of maneuver embodies six points: use of covered approaches to close with the enemy; mounted movement as far forward as the situation and terrain allow; rapid crossing of open areas; maneuver to the rear of enemy strongpoints; advance by fire and maneuver; and penetration on a narrow front. With the primary emphasis on terrain movement, geometric formations are never employed. Upon arrival on the objective, the enemy position or a prominent terrain feature, the attacking unit consolidates. Consolidation involves reorganization and resupply in a defensive posture while preparing to continue the attack or repel a counterattack.

The Israeli Connection In the Middle East, the Israeli Defense Force pioneered many of the small unit tactics which are now being adopted by the US Army. In the initial stages of the 1973 War, the IDF attacked Arab units with pure tank formations supported by aircraft. The resulting losses, suffered at the hands of Arab anti-tank and anti-air missiles, caused the Israelis to resurrect a combined arms doctrine. Field artillery took on the new role of *suppression* of ATGMs and, when close enough, SAMs. Mech infantry regained importance and no longer ate the dust of the tanks, but advanced with or ahead of them to add suppressive fires. Within the armored forces, specific techniques were developed to deal with the Soviet-made ATGMs. One is to designate a tank in each platoon as "Sagger watch". This vehicle overwatches the platoon and warns of incoming ATGMs. While the platoon takes evasive action, the "Sagger watch" tank brings fire on the ATGM gunner's approximate position. As the Sagger is difficult to control, the gunner is the weak link in the system. If he can be distracted there is a good chance that he will lose effective control or overcorrect the flight path and the missile will crash. Evasive tactics include dodging behind covering terrain, steering an erratic path, or turning hard just before missile impact. The Sagger's slow time of flight to a maximum range of 3,000 meters (27 seconds) is sufficient to employ evasion or fire or both.

Soviet Defensive Operations

The Soviets consider the defensive to be only a temporary situation during which their forces regroup for continued offensive action. Nevertheless, they have a highly developed defensive doctrine based primarily on anti-tank tactics. A deliberate defense consists of defense "belts" of self-sufficient, mutually supported battalion areas which are backed up by mortar, tank, and artillery

elements. Each has an associated obstacle belt or minefield to canalize attacking forces into anti-tank kill zones.

The Security Zone The attacker first encounters the Soviet *security zone*. This consists of reconnaissance and delay forces which are deployed on a scale of 1 battalion per 8-12 kilometers of front. The security zone is usually manned by second echelon motorized rifle regiments which may take positions up to 25 kilometers ahead of the main force when not in contact with the enemy. The regiment, in turn, deploys combat outposts consisting of its second echelon units along the edge of the security zone. The main task of the security force is to identify and delay enemy thrusts.

The Main Defense Belt The *main defense belt* is behind the security zone and usually located along the line of a natural obstacle. It may be up to 15 kilometers deep and is manned by first echelon motorized rifle units. A *second defense belt*, usually consisting of prepared but unmanned positions, is sited 8 to 10 kilometers behind the main belt. It serves as a command, reserve, and artillery area, and becomes a fall-back position for the main belt forces should a penetration occur. The *third defense belt* is a further 8 to 10 kilometers back, and consists of army level counterattack forces. As emphasis is on anti-tank defense in depth, major armor avenues of approach are reinforced by division and army assets which may permit a concentration of up to 25 gun or missile systems per thousand meters of front.

Defensive Techniques On regimental and lower levels, Soviet commanders are taught to adhere to the following principles: 1st echelon units defend their positions even if bypassed; enemy tanks are to be considered the highest priority targets; obstacles and fire plans must be mutually supporting to canalize the attacking forces; and both tank and anti-tank reserves are to be maintained in all second echelons to block penetrations and initiate counterattacks. At higher levels, commanders are primarily involved with the offensive aspects of reserve deployment and counterstroke. Artillery supports the defense through fire plans formulated at the highest artillery headquarters on the scene. Control is centralized, and fire missions are allocated according to the following priorities: 1. counterbattery strikes (especially against nuclear capable units); 2. neutralization of enemy headquarters; 3. interdiction of enemy columns; 4. interference with enemy deployment; 5. final defense fires in support of units in contact; 6. destruction of penetrating enemy units; 7. prep fires for counterattacks; 8. covering fires for obstacles or gaps between friendly units; 9. contamination of terrain by chemical munitions; 10. smoke obscuration of enemy OPs; and 11. night illumination.

Regimental Offensive Organization A first echelon motorized rifle regiment defends a front 10 to 15 kilometers wide and 8 to 10 kilometers deep. It deploys 2 battalions in its first echelon and one in the second. The regimental tank battalion is usually massed for a counterattack, but may have some elements detached to support strongpoints. The regimental artillery group may consist of up to 4 battalions including division assets and multiple rocket launchers. The regimental CP, anti-tank reserve, and counterattack force are located in the second echelon. Attacking enemy units are quickly engaged by indirect fire from mortars and artillery, followed by anti-tank weapons at maximum range. Any penetrations are blocked by the second echelon and local counterattacks are mounted. Should the regimental sector be penetrated, the divisional tank regiment would execute a further counterattack in coordination with the divisional artillery group. The tank regiment remains dispersed until the time of attack to avoid

becoming a lucrative nuclear target.

Types of Defense The defense may be conducted in one of two ways — mobile (hasty) or area. A true mobile defense can rarely be employed below division level. It depends on massed fires, including nuclear fires, to destroy the enemy. Units are generally dispersed and ready to resume an offensive posture on order. The more typical area defense emphasizes digging in with engineer assistance. Units maintain enough dispersion to avoid nuclear destruction while remaining within supporting range of each other. A motorized rifle battalion will always use some variation of the area defense. Typically it will defend a zone 5,000 to 7,500 meters wide by 4,000 meters deep. It will guard armor avenues of approach and ensure that its fire overlaps into the areas of adjacent battalions. First echelon rifle companies employ two platoons each in front line strong points and establish a second line about 450 meters to the rear with the remaining platoon. The battalion's remaining company constitutes a second echelon about one kilometer further back. When time permits, extensive obstacles are prepared and wire communication lines are laid.

Withdrawal Should defending forces find it necessary to withdraw as part of a general retrograde movement, a motorized rifle regiment will usually be assigned as a divisional covering force. The division will break off during night while the covering force executes a counterattack, which may be supported by nuclear or conventional fires. While the division retires to the next defense line, the covering force executes a delay on intermediate defense lines to slow the attacker.

US Defensive Doctrine

On the operational level, US defensive doctrine for Europe can best be described as extremely risky. Major Soviet thrusts are to be blunted by a heavy covering force of armored cavalry supported by extra maneuver battalions and artillery, and stopped by massing every available "uncommitted" battalion on a division front in a 10-12 kilometer wide zone. The theory is that 6-8 battalions can stop a 20-25 battalion Soviet first echelon attack on a narrow front. This, of course, leaves the division commander with weak flanks, no appreciable reserves, and on the receiving end of 70-100 Soviet guns per kilometer of attack frontage with his tightly packed defending battalions. As long as they are not outnumbered by more than 3 to 1 (5 to 1 on favorable terrain), US planners are confident that they can defeat a Soviet assault with such deployments. This asks a great deal of the division commander, who must make the critical decision to concentrate on the basis of information which may be less than complete, and in any event places his command in peril of being surrounded, or targeted for nuclear weapons.

Defensive Zones US defensive doctrine recognizes three organizational areas: the covering force area, the main battle area, and the rear area. The covering force of reinforced armored cavalry deploys as far ahead of the main force as possible. It has four primary missions: 1. identify the main enemy strength and axis of advance by forcing him to deploy; 2. deceive the enemy as to the location of the main force; 3. force the enemy to displace his air defense umbrella prior to encountering the main force; and 4. trade space for time to allow the main force to deploy and prepare defensive positions. US commanders hope that the covering force will be able to attrite the Soviets down to the desired 3 to 1 proportion that they desire. It will attempt to do this by drawing the attacking forces away from their forward air defenses and artillery support, and in turn subject them to US artillery, tac air, and attack helicopters.

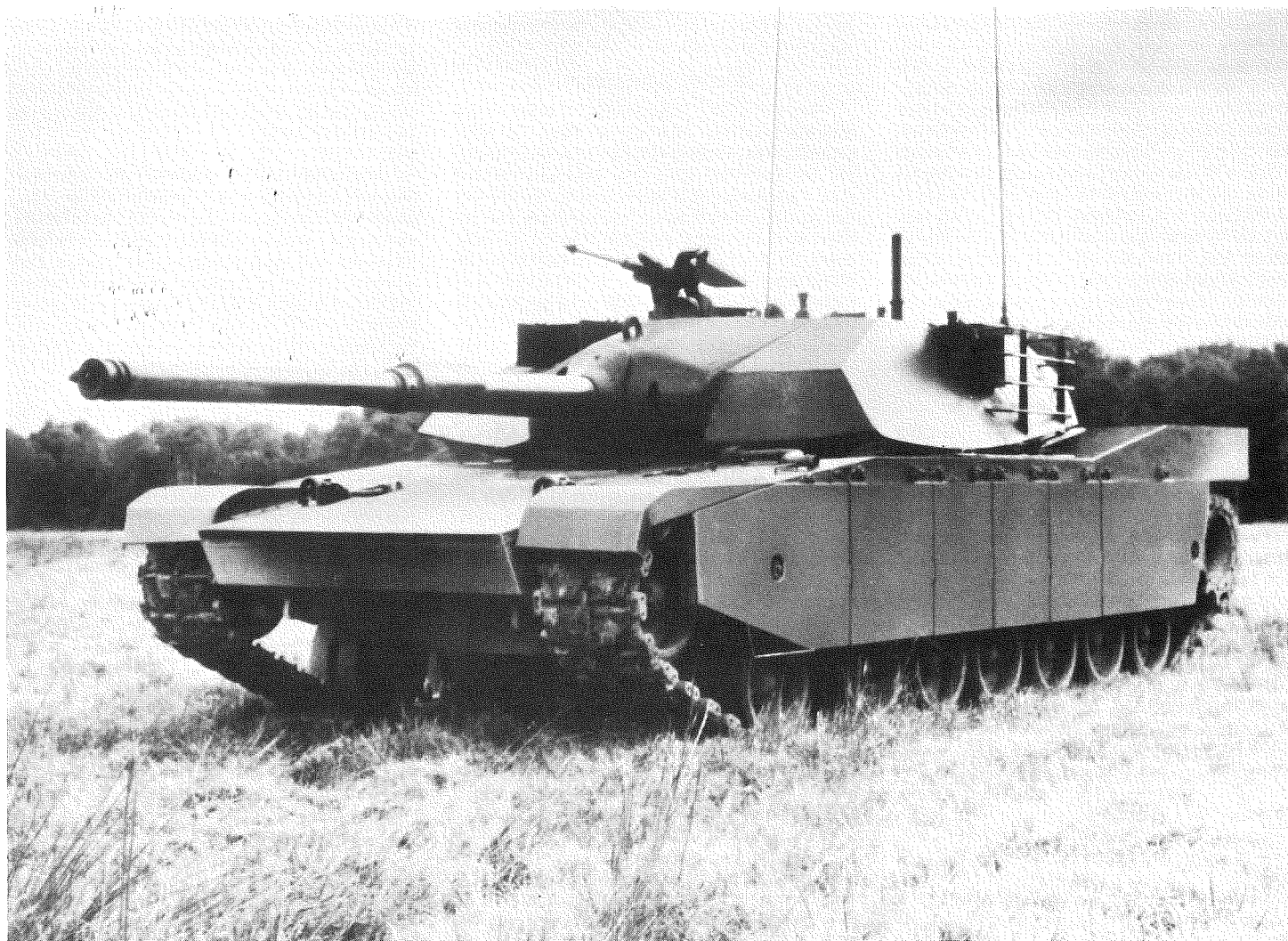
The Main Battle Area The main battle area is where an "elastic" defense is to be conducted, with tanks and ATGMs opening fire at maximum range to further attrite the enemy before the closes. Counterattacks in the main battle area are to consist of placing units to the flank or rear of the enemy advanced elements to destroy them by long range fire. Sweeping counterstrokes designed to paralyze rear echelon and headquarters units are *not* envisioned. For defense of the rear area, US doctrine places emphasis on air cavalry units acting as fire brigades, and increased training of service units in self defense roles.

Battle Positions Brigade and battalion commanders direct the defense by choosing "battle positions", usually on key terrain, from which their units may defend, support, block, or attack depending on the situation. Battle positions are manned by anything from a platoon to a full battalion, and are temporary in nature. They are not intended to be strongpoints as such, but simply positions which maximize the capabilities of organic weapons. Colonels are expected to coordinate artillery fires to engage the enemy at the earliest possible opportunity. They further have responsibility for the employment of attached helicopters which may either take the enemy under direct fire, or land dismounted ATGM teams at vulnerable points. As the battle develops, these commanders direct the support of tac air, and cross reinforce their mech and armored battalions as the situation and terrain dictate.

Company Level Defense Company commanders see that each weapon is sited to provide maximum coverage with minimum vulnerability. Company COs are charged with conducting a forward defense which combines many elements of an ambush. Cover, concealment, and "firing first" are primary considerations. Tanks and ATGMs are considered the backbone of the defense. On the lower levels (company and battalion), a typical defensive action is expected to open with battalion scouts directing laser guided artillery projectiles onto Soviet vehicles at long range. Priority targets would be BRDM Sagger vehicles and BMP infantry assault vehicles, as their onboard ATGMs pose the most destructive long range threat. As the Soviets penetrated natural and man-made obstacles, the US force would retire to secondary battle positions after extracting maximum losses with TOW ATGMs and tank guns. Using overwatch and smoke, companies would back into their new positions and attempt hasty resupply and medical evacuation. When it became available, tac air would be integrated into the battalion fire plan in the later stages of the engagement. To temporarily delay the Soviet second echelon, the battalion commander would call on division assets to deliver "instantaneous" minefields by field artillery (155mm with either 36 anti-personnel or 9 anti-tank mines per round) or helicopter (160 mines per aircraft, capable of placing a field 20 x 300 meters at 80 to 90 knots). As the enemy advanced toward the main battle position,

attack helicopters would be vectored into their flanks to deliver TOW ATGM fire at ranges up to 3,750 meters. Under ideal conditions, the Soviets would suffer tremendous losses, and their attack would falter and fail. The key phrase here is "under ideal conditions". Realistically, other internal and external factors will blur the scenario considerably. Currently, US combat engineers do not have sufficient earth moving equipment to provide adequate obstacles and dig fighting positions. Similarly, long range engagement of the Soviets can be nullified by a smoke barrage on US positions, further weakening the defense. During most of the year in Germany a natural "smoke" in the form of fog will also degrade long range weapons (Summer — 4 days average 3.2 hours per day; Fall — 30 days average 5 hours per day; Winter — 33 days average 6 hours per day; and Spring — 11 days average 3.6 hours per day). Soviet first and second echelon attacks may be timed closely, which with the "24 hour battle" will leave US forces little time to reorganize and reprovision. Soviet electronic warfare assets may jam the critical radio links between battalion and company, destroying effective coordination. US battalions will lack equipment which some commanders deem necessary to fight in a high intensity environment such as: tracked combat support vehicles and heavy vehicle retrievers; adequate smoke munitions; an infantry fighting vehicle with at least 30mm armament (since the cancellation of the unsatisfactory MICV); and facilities for

US Army XM-1 tank prototype



chemical decontamination. Of course the availability of tac air, helicopters, and artillery support will also modify the equation for better or worse. In addition to attacking under conditions of reduced visibility with chemical and electronic support, the Soviets can be counted on to employ engineers in the forward echelons to breach obstacles and tank ditches in 30 to 60 minutes, and simple minefields in zero to 30 minutes — depending on their willingness to accept casualties. Finally, attack helicopters, which will be unable to operate using nap-of-the-earth tactics in fog, will be prime targets for Soviet direct support artillery when they can employ terrain flying.

US Withdrawal. US retrograde operations closely parallel those of the Soviets. A covering force is left in contact to demonstrate while the main body breaks for the next defense line. US doctrine places more emphasis on special units to conduct the delay and economy of force missions, however. Armored cavalry and helicopters are generally depended upon to mask the main body during a withdrawal if enemy pressure is not sufficient to pin maneuver battalions in the line.

Special Operations

Both East and West plan on extensive use of air assets to alert the ground picture through tactical air strikes, airmobile and airborne operations, and helicopter gunship support. Soviet ground attack aircraft, including the MIG-21 and MIG-23, can deliver nuclear ordnance as well as conventional bomb and rocket loads. The more recent SU-19 has the capability to underfly Western air search radar and make deep penetrations with a very low flight profile. US military leaders expect that the Soviets will be able to achieve local air superiority where desired in spite of the qualitative inferiority of their high performance aircraft. Helicopter gunship support is provided by the MI-24 attack and assault helicopter. It can be armed with radio guided Swatter ATGMs as well as rocket pods and 23mm cannons. The MI-24 can also carry 8 fully equipped troops for air assault missions. While airmobile operations are normally conducted with regular motorized rifle troops or paratroopers, it is rumored that the Soviets may be training some specialist formations for the air assault role. Both airmobile and airborne operations are geared to support of advancing armored columns. Most battalion-sized missions would have limited objectives, such as cutting enemy lines of retreat or capturing strategic bridges. Battalions may be dropped up to 160 kilometers behind enemy lines, and regiments up to 320. Airborne units have organic heavy mortar artillery and multiple rocket launchers as well as Sagger ATGMs and BMD infantry assault vehicles — essentially scaled down BMPs.

Air Support The US Army maintains that it cannot win the land battle without the aid of the Air Force. USAF high performance aircraft are expected to: win the air superiority battle (F-15); provide reconnaissance (RF-4C); and conduct battlefield interdiction (F-111). Close air support is to be provided by the new A-10 ground attack aircraft, which is estimated to have a 33% kill probability per pass against a stationary tank. The A-10 is considered to have a 13% hit vulnerability per pass against tanks without including the possible presence of SA 7 or 9 missile systems or the ZSU-23-4 SP AA gun system. US close air support is to be directed by a FAC (Forward Air Controller) who is in visual sighting distance of the target or at a battalion CP. The Israelis noted from recent experience, however, that ground FAC directed missions have become the exception rather than the rule in close air support. In any event, the Air Force will have a variety of ordnance with which to engage Soviet ground forces, the most impressive being the Maverick guided weapon (carried on

F-4, A-10, & F-5) which has a 90% hit capability and a standoff range of 20 kilometers.

Attack Helicopters By 1982 the US Army will have 1,050 Cobra attack helicopters armed with the TOW ATGM. The Cobra is a tested and proven system which has been upgraded and improved. It can carry up to 8 TOW missiles, or a combination of TOW and 2.75 inch rockets. Its chin turret mounts a 7.62mm mini-gun and a 40mm grenade launcher. In the 80s it will be replaced by the Advanced Attack Helicopter (AAH) which will mount 12-16 Hellfire terminal guided ATGMs with 8,000 meters range, and a new 30mm automatic cannon. The US Army has led the world in attack and assault helicopter tactics since the Viet Nam War. Although the same air superiority situation will not prevail in Europe, current doctrine has come into line with the expected anti-air threat. Every mech infantry battalion is capable of dismounting troops for airmobile operations, which may take the form of rear area raids, economy of force operations, or emergency reinforcement of critical areas. Perhaps the greatest single handicap to helicopter operations in Germany will be the weather. Ceilings of less than 200 feet and visibility of less than 1 mile will greatly restrict the ability of the attack helicopter to maneuver and engage targets.

Electronic Warfare In recent years, the capabilities of the Electronic Warfare community have increased impressively. During the next European war, the various aspects of "EW" will have an even greater impact on fighting and command control than they demonstrated in 1973 in the Middle East. These aspects or sub-fields include: Electronic Warfare Support Measures (ESM — essentially signal intelligence); Electronic Countermeasures (ECM — jamming and deception); and Electronic Counter — Countermeasures (ECCM — signal security).

Soviet Equipment

Soviet EW equipment, while less sophisticated than that of the West, is more powerful and available in larger numbers. During the October 1973 War, the Egyptians utilized Soviet equipment and techniques to bring effective artillery fire on Israeli headquarters and artillery units by radio direction finding. In most cases, artillery could be brought to bear in matter of minutes. The Soviets, in all probability even more proficient, should be able to target Western transmitters in less than 5 to 10 minutes. Using active jamming, the Soviets intend to neutralize entire brigade and battalion radio nets during critical operations, thus denying US commanders their primary means of control. On the other hand, the Soviets place less reliance on radio communications than Western armies. At the tactical level more use is made of visual signals, including pyrotechnics. Extensive utilization of phased attack plans and motorcycle messengers also reduces the need for radio traffic. Most Soviet transmitters are continuous wave — that is they broadcast Morse Code — which operates better through jamming than FM voice radios in use in Western countries.

US Equipment

While present US ECM capabilities do not measure up to Soviet standards, a new family of equipment should be available in the mid-1980s to deal with the problem effectively. American ESM is generally of a high caliber, and is counted on to give US commanders as much tactical information as could be reasonably expected from the generally quiet Soviets. ECCM is quite a problem in the US Army. Every tactical vehicle has one or more voice radios, and naturally people use them. The result is that Soviet ESM assets have a fairly easy time identifying US nets and picking up useful intelligence information. The use of *secure voice*

(i.e. scrambler) equipment down to company commander level eliminates some of the problem at the expense of range and reliability of communications, but additionally reveals the importance of the stations with such capabilities.

Nukes and Gas In a future European tactical environment, one must consider the effects of NBC (Nuclear, Biological, Chemical) Warfare. Biological operations may be discarded on the grounds that their effects could ultimately damage the home country of the perpetrator as much as that of the victim. Chemical operations, on the other hand, will certainly be an important part of any conventional or nuclear Soviet plan. Current Soviet doctrine places emphasis on bulk dissemination of toxic chemical agents by aircraft and cannon or rocket munitions. They will employ *persistent* agents to contaminate obstacles on routes used by enemy forces for advances or retreats, with special emphasis on preventing enemy escape from pursuing Soviet units. These concentrations may last from 8 to 12 hours with favorable weather conditions. Aside from the obvious toxic effects of nerve or blister agents, the Soviets hope to achieve casualties through exhaustion and heat stress due to the necessity for exposed troops to wear masks and protective clothing for prolonged periods. Most Western soldiers, excepting the West Germans and the British, are not trained to fight in an NBC environment. Conversely, Soviet units accept NBC conditions as the *normal* tactical situation, and adjust their training accordingly. Soviet tanks and APCs employ gas overpressure systems which allow the occupants to traverse contaminated areas without masks or special clothing, to arrive at their destination in a fresh condition. Defensively, the Soviets employ chemical land mines to insure that an attacker must undergo the additional fatigue of assaulting masked and suited for gas. At each echelon of command, Soviet chemical decontamination assets are capable of processing units rapidly and in mass.

US Chemical Capabilities US offensive chemical capability is very small by Soviet standards. It is limited to so-called *binary munitions*, in which the various chemical components are separated and inert during normal storage, but combine in flight to produce a toxic agent before the shell explodes. It would be some time before any appreciable chemical capability would be in the hands of US commanders in war time. Defensively the situation is nearly as bad. The US Army's Chemical Corps, near extinction five years ago, has been revived due to the vast amounts of NBC detection and protection equipment found on captured Soviet Egyptian vehicles in 1973. Alive to the fact that the Soviets take NBC seriously, the US Army is now issuing chemical protective clothing as well as gas masks. This clothing, rather crude but economical, resembles the normal fatigue uniform, but is impregnated with a chemical neutralizing agent and a preservative coating. Giving some protection against vapors and aerosols, the outfit is reduced in effectiveness by oil, grease, or sunlight, and must be re-impregnated after each chemical attack. Decontamination units, formerly all reserve companies, are now being formed on an experimental basis in the regular army, although on a scale much lower than in the Soviet forces. It is difficult to appreciate the strain of operating in an NBC environment until one actually dons a gas mask and then attempts a normally simple task such as sighting a rifle or talking on a radio.

Soviet Nukes Enough tactical nuclear weapons (TNW) exist in Europe to potentially target every combatant battalion or even company in the theater. Soviet TNW are generally large (over 20 kilotons) and "dirty" with respect to

fallout. They are considered weapons of *mass* destruction by the Soviets, who place political restraints on their initial employment. Once the nuclear balloon goes up, however, the Soviets consider no holds barred as far as TNWs are concerned. Most Soviet delivery systems for TNW are either missiles or aircraft, but evidence suggests that some of their larger artillery pieces may also be nuclear capable. During nuclear war, the Soviets may employ TNW as the primary means of destruction on the battlefield. In a large scale offensive, their priorities for nuclear strikes would be: 1) destruction of enemy nuclear delivery means; 2) prep fires; 3) reduction of enemy pockets; 4) neutralization of enemy counterattacks; 5) destruction of enemy reserves and troop concentrations. Their forces are to exploit nuclear strikes by passing through contaminated areas in armored vehicles.

U.S. Nukes The US has long believed in the *surgical strike* principle of TNW equipment. This concept envisions small yield weapons being employed to knock out headquarters or critical logistics centers, and block defiles by tree blowdown. To keep fallout and collateral (civilian) damage to a minimum, air bursts in the low kiloton or sub-kiloton range were favored. The development of the enhanced radiation (ER) warhead, the so-called "neutron bomb", has not altered the basic doctrine. The difference is that the ER warhead achieves target effect by intense radiation instead of blast. The weapon is very economical against tank type targets (the prime Soviet threat) while relatively less destructive toward nearby civilian dwellings in the vicinity of the blast. For example, a 1 kiloton ER warhead has about the same radius of effect as a 10 kiloton fission warhead for incapacitating tank crews — 700 meters. The fission warhead, however, will cause urban destruction out to 1,200 meters while the ER warhead will do so only to a distance of 400 meters. The ER warhead will be available to the US Army through the Lance missile and the 8" SP howitzer. In spite of this technological breakthrough, the West has yet to develop an aggressive doctrine for employment of TNW with conventional ground forces, or to train troops seriously for nuclear combat.

Urban Areas

One area of increasing importance in highly urbanized Europe is "MOBA" (Military Operations in Built-Up Areas). In contrast to the comparative neglect of MOBA by the West, the Soviets have thoroughly studied its special problems over the past 15 years, and altered their training programs accordingly. Some of the prominent peculiarities of MOBA include: 1) tactical advantage passes to manpower intensive armies; 2) long range

weapons will be restricted to less than 500 meters normally; 3) command control is hampered by degraded radio communications; 4) higher than normal ammunition expenditure will cause logistics bottlenecks; and 5) civilian refugees can be expected to magnify command and coordination problems.

Soviet City Fighting The Soviets expect to encounter at least one *city* on each axis of advance every 50 kilometers. Although they would prefer to bypass these in order to maintain the speed of their advance, they realize that this might not always be possible. During the first two months of 1945, the Soviets had to take over 300 towns and cities from the Germans by direct assault. There is no reason to suppose that they will have an easier task next time. Aside from the development of specialized training areas for city combat, the Soviets have also laid down specific task organizations for units attacking urban or fortified localities. A motorized rifle regiment with a city assault mission would be assigned a sector about 1500 meters wide. Its reinforcing elements would include: 3 battalions of artillery and heavy mortars; 2 tank companies; 1-3 batteries of SP guns; and 1 combat engineer battalion reinforced with mine-clearing tanks. The regiment would attack in two or three echelons, each composed of a motorized rifle assault battalion reinforced with: 2 artillery batteries; 1 SP gun battery; and 1 engineer company. The battalion would assault on a front of 750 meters with 2 or 3 assault groups, each deployed on a 200-300 meter front. Each assault group is composed of a motorized rifle company supported by: 1 field artillery battery (employing direct fire); 1 or 2 tank platoons; 1 engineer sapper platoon; and assorted chemical and flame thrower detachments.

Soviet Engineers in the Streets Engineers play an important part in the Soviet concept of MOBA. Commanders rely on engineer reconnaissance to provide information on enemy positions and optimal approach routes. Once the battle is joined, engineers on foot are expected to advance with the infantry to clear obstacles by demolition and also support attacks with flame. As city fighting breaks up into localized battles over various strongpoints, engineers prepare weapons positions and defenses for Soviet forces. In the event of isolation during the battle, troops are under standing orders to defend in place unless directed to withdraw. As street fighting of this kind — essentially unchanged since World War II — is demoralizing and apt to cost heavy casualties, assault formations receive special attention from political officers and are liable to be leavened with ardent communists.

US Street Fighting The US Army, in its latest doctrinal literature, recognizes that it is not well

versed in MOBA, but can no longer ignore the problem. The rapidly expanding urban areas of Europe leave a forward defense very little room to operate. Consequently, the Army is rethinking MOBA, chiefly along defensive lines. Higher commanders are faced with the dilemma of defending politically important areas of cultural and historical significance which most certainly would be destroyed if held. Smaller villages, which dot the German landscape every 2 to 4 kilometers do not pose the same problem. In fact they are well suited to serve as battle positions for defending troops as they are sited along lines of transportation, and generally have good fields of fire extending around them. Future US plans include extensive use of airmobile troops in urban defense, and wider city fighting training for all units along the lines of that conducted by the Army's Berlin Brigade.

Soviet River Crossing

One further special operation which deserves particular attention is the river crossing. In Germany the Soviets can expect to meet water barriers 10 to 20 meters wide every 10 kilometers, 20 to 100 meters wide every 50 kilometers, and more than 100 meters wide every 100 to 200 kilometers. In preparation for this they have taken pains to insure that rivers will not be major impediments to their advance. All Soviet APCs are amphibious, and tanks carry snorkel gear which allows them to deep ford in up to 5.5 meters of water. In addition to regimental engineer assets, each division has an engineer battalion capable of laying a ribbon pontoon bridge 119 meters long in 20 minutes, and enough amphibian ferries to transport an entire motorized rifle battalion in one lift. Under favorable conditions the Soviets will send airmobile troops through a disorganized enemy to seize bridges intact. Normally however, they will employ engineer recon teams ahead of a division to check the water obstacle for defenses, mines, fordability, bank slope, and access. The engineers will identify and prepare 4 to 8 crossing points which the division will utilize simultaneously. Prior to crossing operations, tac air will interdict the planned bridgehead area, and artillery will fire suppression missions against enemy forces in the area. At each crossing point, a motorized rifle battalion will "swim" to the far bank in APCs under cover of smoke and direct fire from supporting tanks. Once the opposite shore has been secured, subsequent waves of deep fording tanks and pontoon bridges would be deployed. Should the crossing be unopposed, the division could be across in as little as 3 hours during daylight. Opposed crossings, generally commencing at dusk could take a division 6 to 8 hours to complete. ■■

MECHWAR 2

SUEZ TO

GOLAN

EXCLUSIVE RULES

Copyright © 1979, Simulations Publications, Inc., New York, N.Y., 10010

200.0 INTRODUCTION

201.0 SPECIAL TERRAIN FEATURES

- 201.1 The Game Maps
- 201.2 Sinai Special Terrain
- 201.3 Suez Canal
- 201.4 Golan Special Terrain Features

202.0 SPECIAL UNITS

- 202.1 Arab Commandos
- 202.2 Israeli Mortar Carriers
- 202.3 Aircraft Weapons Loads
- 202.4 Radio Detection Values
- 202.5 Arab ATGM Squads

203.0 WEATHER

- 203.1 Fog (*map D only*)
- 203.2 Mud and Rain (*map D only*)
- 203.3 Wind
- 203.4 Weather Effects Chart
- 203.5 Advanced Observation Range Table

204.0 INDEPENDENT COMMAND

- 204.1 General Information

205.0 DOCTRINE

- 205.1 Arab Doctrine
- 205.2 Israeli Doctrine

206.0 SCENARIO FORMAT

- 206.1 Scenario Information
- 206.2 Player Deployments
- 206.3 Victory Points
- 206.4 Starting Sequence
- 206.5 Special Rules
- 206.6 Reinforcements

207.0 ORDERS OF BATTLE

208.0 SINAI SCENARIOS

- 208.1 Egyptain Expansion of the Bridgehead: 7 October 1973
- 208.2 Israeli Counterattack: 8 October 1973
- 208.3 Egyptian Breakthrough: 9 October 1973
- 208.4 Egyptian Column Attack: 14 October 1973
- 208.5 Operation Gazelle: 16 October 1973
- 208.6 The Chinese Farm: 17 October 1973
- 208.7 Expansion of the Israeli Bridgehead: 18 October 1973

209.0 GOLAN SCENARIOS

- 209.1 Night Attack on the Purple Line: 6 October 1973
- 209.2 Night Meeting Engagement: 6 October 1973
- 209.3 Battle on the Yehudia Road: 7 October 1973
- 209.4 Deepest Syrian Penetration: 8 October 1973
- 209.5 Israeli Counterattack: 8 October 1973
- 209.6 Israeli Counterattack: 9 October 1973

210.0 SCENARIO DESIGN












- 210.1 Scenario Information
- 210.2 Player Deployments
- 210.3 Engineers
- 210.4 Off-Map Artillery
- 210.5 Air Support
- 210.6 Commandos
- 210.7 Radio Detection
- 210.8 Victory Conditions
- 210.9 Present and Future Scenarios

[200.0] INTRODUCTION















In its full version, *Suez to Golan* can be a very complex and rather slow-moving game. For this reason, it is not intended that all of the Advanced rules be in use all of the time. Instead, Players should initially learn the game by using some of the smaller scenarios and then gradually introduce those with more units and Advanced rules into play. Some of the Advanced rules, such as positions of advantage, require little in the way of additional time and effort; others, such as the air rules, require a great deal more. Players must use their own discretion when deciding the scope of the Scenario to be played, and are always encouraged to make up their own scenarios. In fact, it is a good idea to start off just by pushing a few platoons or battalions around on the map, in order to get the "feel" of the game.

















SUMMARY OF UNIT TYPES

ISRAELI

Front:		Back:
1112 M60  D-H-8	<i>M60A1</i> main battle tank Platoon	
1111 Cent  C-H-8	<i>Centurion</i> main battle tank Platoon	
1431 M113  A-P-11	<i>M113</i> armored personnel carrier Platoon	
1014 81  A-P-11	81mm Mortar Platoon	
1031 Recce  A-L-15	reconnaissance platoon	
1022 AT  A-L-15	jeep-mounted ATGM platoon	
1234 Inf  8-6-4-2	mechanized infantry platoon	
1432 Inf  9-7-4-1	paratroop infantry Platoon	
1042 Gar  6-4-2-1	Garrison infantry Platoon	
1000 Bde  A-H-11	Brigade Headquarters unit	
1300 Bn  A-H-11	Battalion Headquarters unit	

ARABS

<i>Front:</i>	
1051 A4  Low	<i>A-4 Skyhawk</i> ground attack aircraft (1 Flight)
1053 Mir  Low	<i>Mirage</i> fighter-bomber (1 Flight)
1052 F4  Low	<i>F-4 Phantom</i> fighter-bomber (1 Flight)
	dummy unit
ARABS	
<i>Front:</i>	
1313 T55  B-H-8	<i>T55</i> main battle tank Platoon
1122 T62  B-H-8	<i>T62</i> main battle tank Platoon
2511BT50  B-P-7	<i>BTR-50</i> armored personnel carrier Platoon
2511BMP  A-P-9	<i>BMP</i> armored fighting vehicle Platoon
2612BT60  B-P-13	<i>BTR-60</i> armored personnel carrier Platoon
1012PT76  A-P-7	<i>PT-76</i> light tank Platoon
1013 BR-1  A-L-15	<i>BRDM-1</i> reconnaissance Platoon
2012BR-2  A-L-15	<i>BRDM-2</i> ATGM Platoon
1021 ZSU  B-L-7	<i>ZSU 23/24</i> self-propelled anti-aircraft Platoon
2041 82  B-P-7	82mm Mortar Platoon
2051 120 B-P-7	120mm Mortar Platoon

Back:	Front:		Back:
1051 A4  High	2061 T12  A-L-8	T-12 anti-tank gun Platoon	
1053 Mir  High	0018 Cmd  3-2-1-0	commando squad	
1052 F4  High	2031 ATG  1-0-0-0	ATGM squad	
	1000 Bde  A-H-11	Brigade Headquarters unit	
Back:	1400 Bn  A-H-11	Battalion Headquarters unit	
	0032Mi21  Low	MiG-21 <i>Fishbed</i> multi-role fighter (1 Flight)	0032Mi21  High
	0022 Mi8  NOE	Mi-8 <i>Hip</i> transport helicopter (1 Section)	0022 Mi8  Low
	0032Mi19  Low	Mi-19 multi-role fighter (1 Flight)	0032Mi19  High
		dummy unit	
	2411 Inf  4-2-1-0	Egyptian infantry Platoon	
	2611 Inf  3-2-1-0	Syrian infantry Platoon	

[201.0] SPECIAL TERRAIN FEATURES

[201.1] THE GAME MAPS

The *Suez to Golan* maps were developed from actual Middle Eastern terrain. The geographical features and place names shown on the map are real places, but in some cases their relationship to one another has been altered to provide as wide a range of terrain as possible. Map C depicts a portion of the Suez Canal and surrounding area in the Sinai; Map D does the same for the Golan Heights. Both maps have the following special features and rules.

[201.11] Fortification Hexes

Dismounted infantry units in a fortification hex receive a –5 roll adjustment on the Infantry Loss Modification Table when defending against all attacks. Infantry units may not enter defilade

in such a hex, and, if close assaulted by Enemy infantry units, only the Friendly infantry units "originally" in the hex receive the benefits of the fortification. Fortifications have no effect on vehicles and do not block the Line of Sight. Engineer squads treat fortification hexes as town hexes for purposes of defending and clearing (see Case 29.3). No more than 3 vehicles (in up to 3 vehicular units) may end a Phase in a fortification hex.

[201.12] Firing Ramp Hexes

Vehicles in firing ramp hexes are automatically considered to be in defilade when defending against direct fire attacks whose Line of Fire goes through the ramp hexside. Vehicular units in firing ramp hexes are never considered Silhouetted by Enemy units whose line of fire goes through the ramp hexside.

[201.13] Silhouetting

Vehicular units at Height Level 1, 2, or 3 are considered to be Silhouetted (see Case 8.7) if the Enemy line of fire does not eventually go through a hex at a Height Level higher than the defending unit. (See example below).

[201.2] SINAI SPECIAL TERRAIN

The following special terrain features are found *only* on map C.

[201.21] Escarpment Hexsides

Vehicular units *cannot* cross escarpment hexsides. Such hexsides do not block the Line of Sight and have no other effects.

[201.22] Trench Hexes

Dismounted infantry units in trench hexes are automatically considered to be in defilade and *do not* pay the additional one Movement Point to leave this status. Such units may move directly from trench hex to trench hex and remain in defilade while doing so. Trench hexes have no effect on vehicular units and do not block the Line of Sight.

[201.23] Railway Embankment Hexsides

Vehicular units in hexes adjacent to railway embankment hexsides are automatically considered to be in defilade when defending against direct fire attacks whose line of fire goes through the em-

bankment hexside. Such hexsides do not block the Line of Sight and have no other effects.

[201.24] Bar-Lev Hexes

Bar-Lev hexes are treated the same as fortifications (see Case 201.12) except that each Bar-Lev hex is also considered to contain a firing ramp. No more than 6 vehicles (in up to 3 vehicular units) may end a Phase in a Bar-Lev hex.

[201.25] Sweetwater Canal

The Sweetwater Canal is treated in all respects as a small river.

[201.26] Clear Terrain

Vehicular units may not enter defilade in any clear terrain hex on map C. Infantry units may enter defilade in such hexes normally.

[201.27] The Canal Escarpment

The canal escarpment is the line of escarpment hexes running along the east bank of the Suez Canal. These hexsides are treated in the same manner as normal escarpments, with the exception that they may be "cleared" by engineer squads. The procedure for this is the same as for clearing barrier minefield hexes (see Case 29.6). After spending the required six consecutive Friendly Movement Phases in any hex in the 1400 column, place a "breached minefield" marker in the hex. This indicates that all escarpment hexsides in (adjacent to) the hex have been cleared, and are thereafter treated as normal clear terrain hexsides.

[201.28] Khatifs

There are two Khatifs on the map, Khatif Makhazin and Khatif el Khief. Vehicular units may never begin a game deployed on a Khatif (*i.e.*, hexes 4214-4217, and 4924-4926).

[201.3] SUEZ CANAL

The Suez Canal is a special terrain feature. The following rules apply to all canal hexes.

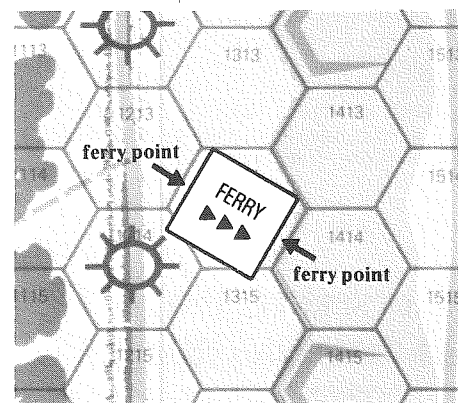
[201.31] Non-amphibious units may never enter a canal hex.

[201.32] Amphibious units (only) may enter canal hexes by spending one *complete* Movement Phase with a Bound Command.

[201.33] While in a canal hex, amphibious units may only be given a Bound (or Withdrawal) Command. They may not fire any of their weapon systems. When attacked, such units defend normally, as if they were in a clear terrain hex. For rather obvious reasons, units may not enter defilade while in a canal hex. They may not be in column formation.

[201.34] Canal hexes do not block the Line of Sight and are considered to be at Height Level 0.

[201.35] Units may not enter Canal hexes by snorkeling. Bridges and ferries may not be constructed across the canal during the game, but may be deployed in some scenarios before the start of the game. The ferry points for ferries across the canal are indicated by placing a ferry marker in the appropriate Canal hex.



[201.36] Indirect fire impacting on a canal hex is resolved normally.

[201.4] GOLAN SPECIAL TERRAIN FEATURES

The following special terrain features are found *only* on map D.

[201.41] Prohibited Hexes and Hexsides:

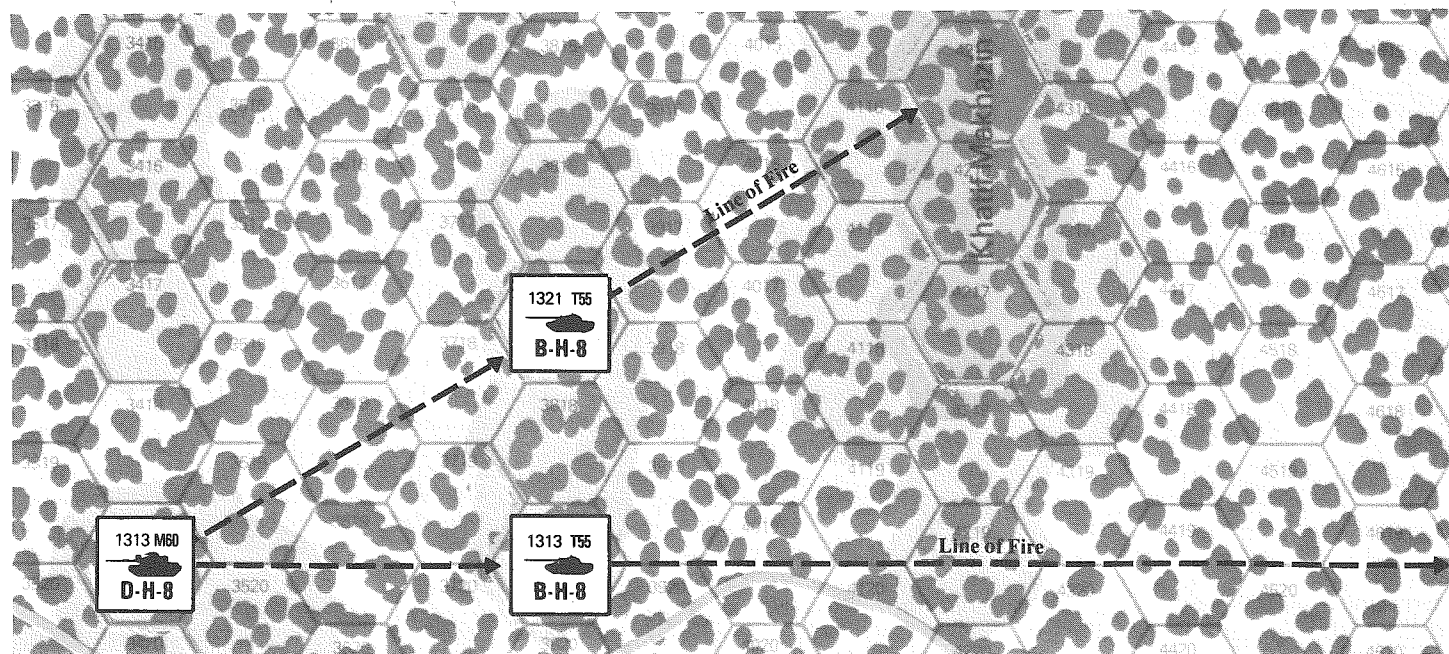
No ground units may enter prohibited hexes or cross prohibited hexsides. They do not block Line of Sight and have no other effects.

Silhouetting Example

The T55 unit in hex 3819 is silhouetted for all Direct Fire attacks from the M60 unit in hex 3419.

The T55 unit in hex 3817 is *not* silhouetted, because the M60's Line of Fire eventually goes through a hex at a higher Height Level (*i.e.*, 4215).

----- = Line of Fire



[201.42] Anti-Tank Ditch Hexsides:

Vehicular units may not cross anti-tank ditch hexsides. These hexsides may be bridged in the same manner as a small river (see Section 24.0). The anti-tank ditch does not block Line of Sight (see also Case 201.43).

[201.43] Anti-Infantry Minefield:

The anti-tank ditch is considered to contain a defensive minefield. These are mines within the anti-tank ditch itself. This minefield will attempt to attack all infantry units that cross any unbridged anti-tank ditch hexside. (They are automatically considered to be using Bold Movement — see Case 19.2). This attack is resolved in the hex the moving unit enters. This anti-infantry minefield may be cleared (like a normal defensive minefield) by any engineer squads adjacent to the hexside.

[201.44] Because the Golan Heights consists of a series of hills and escarpments rising sharply from the valley of the Jordan River there are two different 0 Height Levels on the map. The first represents the Jordan Valley (*i.e.*, the 0100-0800 hex columns), and the second, the Golan Heights themselves (*i.e.*, from each column 0900 and eastwards).

[202.0] SPECIAL UNITS**[202.1] ARAB COMMANDOS**

Arab commandos are one-step infantry units. They use the following special rules.

[202.11] When attacking Enemy vehicular units with any of their personnel anti-tank weapons, commando units are treated as a three-step unit.

[202.12] The availability of commando units is listed in the scenario instructions. Commando units must be deployed secretly by the Arab Player before the start of the game. Their counters are not placed on the map; instead, the Player records the location of each of these units on a separate piece of paper. Commando units are considered to be observed and are placed on the map only when they (A) fire any of their weapon systems; (B) move from their initial deployment hex; or (C) have an Enemy unit enter the hex that they occupy.

[202.13] In all other respects, commando units are treated as normal infantry units.

[202.2] ISRAELI MORTAR CARRIERS

All Israeli mortar carriers (see Section 200.0) are treated as "P" armor class vehicles when defending against direct fire attacks, and "L" armor class vehicles when defending against all forms of indirect fire.

[202.3] AIRCRAFT WEAPONS LOADS

All aircraft are assumed to be able to carry out strafing strikes. In addition, each aircraft unit may be equipped with one of the following weapon systems. The exact weapon system carried is either specified in the scenario instructions or (if not specified), left up to the option of the owning Player:

(A) Conventional bombs

(B) Smart bombs (Israeli Player only, in any scenario after 10/14/73).

(C) Conventional air-to-surface missiles

(D) Maverick air-to-surface missiles (Israeli Player only, and only in scenarios after 10/14/73).

* If conventional ASMs are carried, the Israeli Player should use the ASM ammo depletion number to the left of the "/" on the aircraft's data sheet; if Maverick ASMs are carried, use the ASM ammo depletion number to the right of the "/".

[202.4] RADIO DETECTION VALUES

Israeli Radio detection values are as follows: Brigade HQ: 4, Battalion HQ: 2, On-map artillery units: 4.

[202.5] ARAB ATGM SQUADS

Arab ATGM Squads are one-step infantry units. When attacking Enemy vehicular units with their personnel anti-tank weapons, they are treated as a three-step unit.

[203.0] WEATHER

The weather during almost all of October 1973 was clear and dry, and thus favorable to military operations. This might not have been the case, however, during other seasons of the year. All historical scenarios assume that the weather is clear and dry, with a light wind. For Players who wish to design their own scenarios and experiment with different effects of weather, we present the following rules. Basically, all adverse weather conditions serve to reduce the movement abilities and observation range of units.

[203.1] FOG (*Map D Only*)

The fog represented in the game simulates the general fog use conditions sometimes experienced in the Golan Heights. There are three "types" of fog: *Light*, *Medium*, and *Heavy*. Fog always extends through all Height Levels on the "plateau" (*i.e.*, east of the 0900 hex column, exclusive) and has no effect on lower Height Levels (*i.e.*, the Jordan Valley).

[203.2] MUD AND RAIN (*Map D Only*)

Mud serves to slow the movement and rain reduces the observation range of units.

[203.3] WIND

There are four possible wind conditions: *Calm*, *Light*, *Moderate*, and *Heavy*. The only effect of wind is on smoke (see Case 16.4).

[203.4] WEATHER EFFECTS CHART

(see separate sheet)

[203.5] ADVANCED OBSERVATION RANGE TABLE

(see separate sheet)

[204.0] INDEPENDENT COMMAND**GENERAL RULE:**

The Standard Rules assume that all units are allocated to some particular company, and thus receive commands (and all other company assets) on a company basis. Some units, however, operate under Independent Command and use the following rules. These units vary by nationality, and are listed below.

[204.1] GENERAL INFORMATION

[204.11] Units with Independent Command are treated in all respects as separate companies and must be issued separate commands (and other company status) during the play of the game.

[204.12] Units with Independent Command are never affected by morale, and do not enter Morale States.

[204.13] The following Arab units always have Independent Command: 82mm, 120mm, PT-76, ATGM, BRDM, T-12, commando, engineer squads, bridging units, ZSU-23/24, HQ, aircraft, and helicopter units.

[204.14] The following Israeli units always have Independent Command: 81mm, AT, RCCE, HQ, garrison infantry, aircraft, engineers squads, and bridging units.

[205.0] DOCTRINE**[205.1] ARAB DOCTRINE**

[205.11] At the end of any Phase, all Arab units without Independent Command (see Section 204.0) must be within two hexes (inclusive) of some other units of their company. That is, there may be a maximum of one intervening hex between the platoons of a company. This restriction does not apply if the company (for whatever reason) has been reduced to a single platoon.

[205.12] Arab companies may not be issued a Bounding Overwatch Command.

[205.2] ISRAELI DOCTRINE

[205.21] At the end of any Phase, all Israeli units without Independent Command (see Section 204.0) must be within two hexes (inclusive) of some other units of their company. That is, there may be a maximum of three intervening hex between the platoons of a company. This restriction does not apply if the company (for whatever reason) has been reduced to a single platoon.

[205.22] All Israeli units may be issued a Bounding Overwatch Command.

[205.23] Units of companies with Bounding Overwatch Commands are considered to fulfill their doctrine requirements as long as they can trace a Line of Sight to a unit of their company at the end of a Phase. For purposes of this rule (only) smoke hexes are not considered to block the Line of Sight. Companies with Bounding Overwatch Commands may also fulfill their doctrine requirements in the manner given in Case 205.21.

[205.24] In addition to the units listed in Case 204.14, the Israeli Player has the option of designating one platoon of each company to Independent Command. This must be done during the start of the game and cannot be reversed. The only disadvantage to this procedure is that whenever the "remainder" of the company rolls for morale, the Israeli Player must shift one column to the right on the Morale Table.

[206.0] SCENARIO FORMAT**GENERAL RULE:**

Suez to Golan is designed to be played on two levels. The first level is the standard scenario, which depicts an historical battle from the 1973 Arab-Israeli War. The second level is the ability for the Players to design their own scenarios (for this, see Section 210.0). The rules for each standard scenario will use the following format and rules.

[206.1] SCENARIO INFORMATION

This section details the physical conditions under which the battle was fought, and gives the number of Game-Turns in the scenario. Because the historical weather was always clear and dry, with a light wind (*i.e.*, no fog or rain), the scenario rules will list only if it is day or night. If it is night, the Phase of the Moon will also be given.

[206.11] Unless otherwise stated, all units begin the game with the strength given in the Order of Battle Charts (see Section 207.0).

[206.12] Units always begin the game with Level 3 ammunition.

[206.13] The number of dummies to be included in a scenario is left up to the discretion of the Players. Players may also deploy a number of dummies up to the limit of the counter mix.

[206.2] PLAYER DEPLOYMENTS

These sections deal with the nationality of the first and second Player, and the initial forces available to them. Included in this Section are specific deployment restrictions, as well as the required battalion and brigade HQ ratings. (Before play begins, each Player must secretly roll a die to determine the actual value of each of his HQ units.) All units should be deployed face down on the map, and turned up only as they are observed during the play of the game.

[206.3] VICTORY POINTS

[206.31] Victory Point Chart

<i>Each Enemy Vehicle or Step Eliminated</i>	<i>Victory Points Awarded</i>
Regiment or brigade HQ	60
Battalion HQ; any air unit	30
M60, Centurion, T62, ZSU 23/24, T55, T12, PMP, TPP, Israeli paratroop infantry, any mortar unit	5
BMP, M113, Israeli mechanized or garrison infantry	4
BTR-50, BTR-60, PT76, BRDM, Rce and ATGM vehicles, all Arab mechanized or foot infantry	3
Arab ATGM infantry, commandos	2
	1

[206.32] In certain scenarios, Players may receive Victory Points for having Friendly units exit the map. When exiting the map, a unit must pay the Movement Point cost for the hypothetical hex it is presumed to be entering off the map. The terrain in this hypothetical hex is assumed to be the same as the terrain in the hex the unit currently occupies.

[206.33] In certain scenarios, Players will receive Victory Points for "controlling" a certain hex at the end of the game. A hex is assumed to be controlled by the Player who last had a Friendly unit occupy or pass through the hex.

[206.34] Certain scenarios require that a Player clear a certain area or terrain feature of Enemy units and their Lines of Sight. Smoke hexes are not considered to block the Lines of Sight for this purpose (although certain weather conditions might).

[206.35] Units with Independent Command, units currently in Morale State 3 and units under Withdraw Commands have no bearing on any "Friendly" Victory Conditions. That is, the owning Player never receives Victory Points for exiting such units or having them control given hexes or trace a Line of Sight. Of course, such units would still provide the Enemy Player with Victory Points if they were eliminated.

[206.4] STARTING SEQUENCE

This section describes the order in which Players deploy their units, and indicates whether or not a Player may pre-plot the arrival of his artillery and air strikes. After the starting sequence has been completed, both Players must issue current commands for all of their companies. Play then begins with the first Player Indirect Fire Phase of Game-Turn 1.

[206.5] SPECIAL RULES

This Section provides any rules, limits, and restrictions that apply only to the scenario being played.

[206.6] REINFORCEMENTS

This Section describes how reinforcements (additional units) enter the game. Units entering the map as reinforcements are always considered to have a Bound Command.

[206.61] When not stated otherwise, units may be brought onto the map in any formation the Player wishes. The Player may use as many entry hexes as he desires; if more than one unit enters the map through the same hex, however, the units which do so are presumed to have been "staged back" during all or part of their movement.

[206.62] Units which are staged back must first be deployed off the map, one behind the other (and/or stacked), with the lead unit positioned adjacent to the desired entry hex plus the additional cost for any hypothetical hexes that it would have to traverse to reach the entry hex. The terrain in such hexes is assumed to be the same as that in the entry hex.

[206.63] Once Players have composed the order of units which are staged back, the relative positions of these units may not be altered until the units arrive on the map.

[206.64] Depending on the number of units entering at a given hex, it may not be possible to enter all units onto the map during the first Game-Turn or Phase that they are available. Units that cannot enter in a given Friendly Movement Phase simply enter in some following Movement Phase. Units which are off the map are out of play for all game purposes; except, of course, to be moved by the Friendly Player in order to reach the map.

[206.65] Players may choose to withhold some or all of the scheduled reinforcements off the map, at their option. These units are available to enter the map during any subsequent Friendly Movement Phase.

[207.0] ORDERS OF BATTLE

- Refer to the section of the Available Forces Chart which applies to the Scenario being played to determine what forces are available and what their status is.
- After determining what forces are available, consult the appropriate Tables of Organization to determine precisely which units constitute the available forces.
- Forces which enter the Scenario as reinforcements (if any) are indicated both in the Scenario and on the Available Forces Chart. The composition and status of such reinforcing units is also determined according to the Tables of Organization.

[208.0] SINAI SCENARIOS

All Egyptian tanks are T55; all Israeli tanks are M60. Egyptian brigade HQs have radio detection capabilities in all scenarios (see Case 26.1). When determining the apex hex of battery artillery patterns (see Case 14.1), the direction of fire of Egyptian artillery is from the west map-edge; Israeli artillery is from the east map-edge. The Bar-Lev positions in hexes 1406 and 1427 (only) begin all Scenarios set on October 6th or 7th with one (three-step) Israeli garrison infantry platoon occupying them.

[208.1] EGYPTIAN EXPANSION OF THE BRIDGEHEAD: 7 OCTOBER 1973

[208.11] Scenario Information:
Environment: Day
Game Length: 16 Game-Turns.

[208.12] First Player Deployment (Egyptian):
Deployment: May deploy in any hex west of the

2000 hex column (inclusive). May *not* be deployed in defilade.

Off-Map Artillery: 1 × battalion medium howitzer, 3 × battalion light howitzer.

[208.13] Second Player Deployment (Israeli):
Deployment: May deploy in any hex east of the 3100 hex column (inclusive). May be deployed in defilade.

Off-Map Artillery: 3 × battery light howitzer.

[208.14] Victory Conditions:

The Egyptian Player wins if he is the last Player to have a Friendly unit occupy or pass through the Tasa crossroads (hex 5518) by the end of the game. The Israeli Player wins by preventing an Egyptian Victory.

[208.15] Starting Sequence:

- (1) The Israeli Player deploys all his units on the map.
- (2) The Egyptian Player deploys his units on the map.
- (3) The Egyptian Player may pre-plot his artillery so that it impacts on Game-Turn 1.

[208.16] Special Rules:

- (1) The Israeli First Armored Battalion has only 23 tanks, instead of the normal 27. The Israeli Player must distribute these four "losses" as he sees fit, to any of a number of his platoons. Israeli units are not subject to Morale rules.
- (2) Neither Player may use smoke; Israeli vehicles may not use HE shell (see Case 10.2).

[208.2] ISRAELI COUNTERATTACK 8 OCTOBER 1973

[208.21] Scenario Information:

Environment: Day.
Game Length: 24 Game-Turns.

[208.22] First Player Deployment (Israeli):

Deployment: May deploy in any hex east of the 4200 hex column (inclusive). May be deployed in defilade.

Off-Map Artillery: 2 × battery light howitzer.

[208.23] Second Player Deployment (Egyptian):

Deployment: May deploy in any hex west of the 3000 hex column (inclusive). May be deployed in defilade.

Off-Map Artillery: 2 × battalion medium howitzer, 4 × battalion light howitzer.

[208.24] Victory Conditions:

The Egyptian Player receives 100 Victory Points for control of the ferry (see Special Rules below) at the end of the game, and an additional 100 Victory Points for exiting any unit off the east map-edge. The Israeli Player receives 500 Victory Points for having any Friendly unit enter hex 1424 (thus destroying the ferry). The Player with the most Victory Points at the end of the game wins.

[208.25] Starting Sequence:

- (1) The Egyptian Player deploys his units, including the secret deployment of the commando units (see Case 203.1).
- (2) The Israeli Player deploys his units.
- (3) Both Players may pre-plot their artillery so that it impacts in Game-Turn 1.

[208.26] Special Rules:

- (1) All Israeli tank platoons are composed of two vehicles (instead of the normal 3). Israeli units are not subject to morale rules.
- (2) There is an Egyptian ferry deployed in hex 1324, between hexes 1323/1424.
- (3) All Egyptian companies begin in Morale State 1.
- (4) Neither Player may use smoke; Israeli vehicles may not use HE Shells (see Case 10.2).

[208.3] EGYPTIAN BREAKTHROUGH: 9 OCTOBER 1973

[208.31] Scenario Information:

Environment: Day.

Game Length: 15 Game-Turns.

[208.32] First Player Deployment (Egyptian):

Deployment: May deploy in any hex west of the 2900 hexrow (inclusive). May not be deployed in defilade.

Off-Map Artillery: 2 × battalion light howitzer, 2 × battery light rocket launchers (LtHowz)

[208.33] Second Player Deployment (Israeli):

Deployment: May deploy in any hex east of the 3800 hex column (inclusive). May be deployed in defilade.

Off-Map Artillery: 1 × battery light howitzer.

[208.34] Victory Conditions:

Each Player receives 300 Victory Points if there are no opposing units on or adjacent to any hex of the road running along the 5500 hex column at the end of the game. The Player with the most Victory Points at the end of the game wins.

[208.35] Starting Sequence:

- (1) The Israeli Player deploys his units.
- (2) The Egyptian Player deploys his units.
- (3) The Egyptian Player may pre-plot his artillery so that it impacts on Game-Turn 1.

[208.36] Special Rules:

- (1) Each Egyptian light rocket launcher battery may fire only once during the play of the game.

[208.37] Reinforcements:

Game-Turn 8: The Israeli second tank battalion may enter from any hex along the north mapedge, east of the 4200 hex column (inclusive). The battalion HQ rating is **B**.

Game-Turn 10: The Israeli third tank battalion, accompanied by the first brigade HQ unit, may enter from any hex along the south mapedge, east of the 4200 hex column. Both the battalion and brigade commanders ratings are **C**.

[208.4] EGYPTIAN COLUMN ATTACK: 14 OCTOBER 1973

[208.41] Information:

Environment: Day.

Game Length: 20 Game-Turns.

[208.42] First Player Deployment (Egyptian):

Deployment: May be deployed in any hex west of the following north-south line: (inclusive): 3201 - 3207; 3308 - 3320; 3420 - 3423; 3524 - 3525; 3625 - 3628; 3729 - 3730; 3830 - 3833. May be deployed in defilade.

Off-Map Artillery: 2 × battalion medium howitzer, 3 × battalion light howitzer, 3 × battalion light rocket launchers (LtHowz).

[208.43] Second Player Deployment (Israeli):

Deployment: May be deployed (inclusive) in any hex east of the following north-south line: 4201 - 4221; 4322 - 4422; 4423 - 4523; 4524 - 4526; 4626 - 4727; 4728 - 4730; 4830 - 4833. May be deployed in defilade.

Off-Map Artillery: 2 × battery light howitzer.

[208.44] Victory Conditions:

The Egyptian Player wins if he is the last Player to have a Friendly unit occupy or pass through the Tasa crossroads (hex 5518) by the end of the game. The Israeli Player wins by preventing an Egyptian Victory.

[208.45] Starting Sequence:

- (1) The Israeli Player deploys his units.

- (2) The Egyptian Player deploys his units.

- (3) The Egyptian Player may pre-plot his artillery so that it impacts on Game-Turn 1.

[208.46] Special Rules:

- (1) Neither Player may use smoke.
- (2) The Israeli ATGM detachment is armed with TOW ATGM.
- (3) The Egyptian light rocket launchers may only fire twice during the game, and may not fire on consecutive Game-Turns.
- (4) The Egyptian Player has off-map air defenses of 10 × missile 1 (each with 3 vehicles) 10 × gun 1 (each with 2 vehicles) off the west map edge.
- (5) Israelis shift 2 columns left on morale dice rolls.

[208.47] Reinforcements:

Game-Turn 2: The Israeli Player may plot 2 × F-4 strikes. These aircraft may not be armed with air-to-surface missiles.

[208.5] OPERATION GAZELLE: 16 OCTOBER 1973

[208.51] Scenario Information:

Environment: Night, full moon.

Game Length: 15 Game-Turns.

[208.52] First Player Deployment (Israeli):

Deployment: May be deployed in any hex between the 1400 and 2500 hexrows (inclusive), but not within seven hexes of the north or south mapedges, (inclusive). May be deployed in defilade.

Off-Map Artillery: 2 × battery light howitzer.

[208.53] Second Player Deployment (Egyptian):

Deployment: Enter as reinforcements.

Off-Map Artillery: None.

[208.54] Victory Conditions:

The Israeli Player receives the standard Victory Point Value (see 206.31) for each of his vehicles or steps exited off the north mapedge at hex 0501. The Player with the most Victory Points at the end of the game wins.

[208.55] Starting Sequence:

- (1) The Israeli Player deploys his units.

[208.56] Special Rules:

- (1) The Israeli Player may deploy one ferry in any canal hex, at his option. The canal escarpment is considered cleared (see 201.27) from any three contiguous hexes of the Israeli Player's choosing.
- (2) Neither Player may use smoke.
- (3) The Egyptian Fifth Mechanized Infantry Battalion uses green troop quality.
- (4) There are Class 4 bridges across the Sweet-water Canal at hexsides 0805/0906, 0815/0915, 0823/0924, 0831/0932.

[208.57] Reinforcements:

Game-Turn 3: First and second companies, Egyptian First Tank Battalion may enter from any hex of the north mapedge between hex columns 1500 and 2900 (inclusive). They have no battalion HQ unit. The Fifth Egyptian Mechanized Battalion also enters in column from hex 0501, in column formation. Battalion HQ rating is **H**. The first company of the Egyptian Second Tank Battalion may enter from any hex of the south mapedge between hex columns 1500 and 3300 (inclusive). They have no battalion HQ unit.

[208.6] THE CHINESE FARM: 17 OCTOBER 1973

[208.61] Scenario Information:

Environment: Day.

Game Length: 20 Game-Turns.

[208.62] First Player Deployment (Israeli):

Deployment: May enter the map from any hex along the east mapedge on Game-Turn 1. May be in column formation.

Off-Map Artillery: None.

[208.63] Second Player Deployment (Egyptian):

Deployment: May be deployed in any hex north of the 0020 hex row (inclusive) and west of the 4500 hex column.

Off-Map Artillery: 1 × battalion medium howitzer, 2 × battalion light howitzer.

[208.64] Victory Conditions:

The Israeli Player wins if there are no Egyptian units with a Line of Sight on the road running from hex 6118 to hex 3422. (Smoke is not considered to block the Line of Sight for purposes of determining Victory). The Egyptian Player wins by preventing an Israeli Victory.

[208.65] Starting Sequence:

- (1) The Egyptian Player sets up his units.
- (2) The Israeli Player may pre-plot his artillery and air strikes so that they impact and arrive on Game-Turn 1.

[208.66] Special Rules:

- (1) The Israeli Player may plot 2 × F-4 strikes.
- (2) The Egyptian Player has off-map air defenses of 3 × missile 1 (each with 3 vehicles), and 6 × gun 1 (each with 2 vehicles) off the west mapedge.

[208.7] EXPANSION OF THE ISRAELI BRIDGEHEAD: 18 OCTOBER 1973

[208.71] Scenario Information

Environment: Day.

Game Length: 15 Game-Turns.

[208.72] First Player Deployment (Israeli):

Deployment: The first battalion may deploy on or east of the following line of hexes: 1216 - 0619; 0619 - 0620; 0721 - 0725; 0625 - 0726; 0826 - 0927; 1027 - 1228. Remaining battalions may deploy in any hex east of the 1400 hex column (inclusive).

Off-Map Artillery: 1 × battery medium howitzer, 3 × battery light howitzer.

[208.73] Second Player Deployment (Egyptian):

Deployment: May be deployed in any hex west of the line given in the deployment instructions for the First Israeli Battalion. May be deployed in defilade.

Off-Map Artillery: None.

[208.74] Victory Conditions:

The Israeli Player receives the standard Victory Point Value (see 206.32) for exiting units off the north edge of the map between hex columns 0100 and 0800 (inclusive). The Egyptian Player receives 500 Victory Points for eliminating the Israeli ferry in hex 1325. The Player with the most Victory Points at the end of the game wins.

[208.75] Starting Sequence:

- (1) Egyptian Player deploys his units.
- (2) The Israeli Player deploys his units.
- (3) The Israeli Player may pre-plot his artillery and air strikes so that they arrive on Game-Turn 1, if desired.

[208.76] Special Rules:

(1) There is an Israeli ferry (with six engineer squads) deployed in either or both of the ferry points. The ferry points are 1425 and 1224. The canal escarpment has been cleared from hexes 1425 and 1426.

(2) There are Class 4 bridges across the Sweet-water Canal at hexsides 0805/0906, 0815/0915, 0823/0924 and 0831/0932.

(3) Israelis shift 2 columns left on morale dice rolls.

[208.77] Reinforcements:

Game-Turn 1: First and Second Egyptian Tank Battalions may enter from any hex of the north mapedge between hex columns 0100 and 1200. The Third Egyptian Tank Battalion may enter from any hex along the south mapedge between hex columns 0100 and 1200 (inclusive). May enter in column formation. All battalions and Brigade HQ Ratings are D.

Game-Turn 1: The Israeli Player receives 1 × F-4 and 3 × A-4 airstrikes. They may be armed with air-to-surface missiles.

(1) There are no off-map Egyptian air defenses.

[209.0] GOLAN SCENARIOS**GENERAL RULE:**

Syrian tanks are specified as either T62 or T55; all Israeli tanks are Centurion. When determining the apex hex of battery artillery patterns (see Case 14.1), the direction of fire of Syrian artillery is from the east map-edge; Israeli artillery is from the west map-edge. The fortifications in hexes 5104, 5109, 5216, 5124, and 5130 begin all Scenarios set on October 6th or 7th (only) with one (three-step) Israeli garrison platoon occupying them.

**[209.1] NIGHT ATTACK
ON THE PURPLE LINE:
6 OCTOBER 1973****[209.11] Scenario Information:**

Environment: Night, ¼ moon.

Game Length: 15 Game-Turns.

[209.12] First Player Deployment (Syrian):

Deployment: May enter the map on Game-Turn 1 from any hex of the east mapedge. May be in column formation.

Off-Map Artillery: 2 × battalion light howitzers, 1 × battalion medium howitzers.

[209.13] Second Player Deployment (Israeli):

Deployment: May deploy in any hex west of the anti-tank ditch (the 5300 hex column, inclusive). May be deployed in defilade.

Off-Map Artillery: 2 × battery light howitzer.

[209.14] Victory Conditions:

The Syrian Player wins by having any unit east of the 3700 hex column (inclusive) at the end of the game. The Israeli Player wins by preventing a Syrian Victory.

[209.15] Starting Sequence:

(1) The Israeli Player deploys his units.

(2) The Syrian Player may pre-plot his artillery so that it impacts on Game-Turn 1.

[209.16] Special Rules:

(1) Neither Player may use smoke.

(2) There is an Israeli garrison infantry unit (with three steps) deployed in each Israeli fortification hex at the start of the game.

(3) The anti-tank ditch rules (201.42) are in effect.

(4) Before the start of the game, the Israeli Player may secretly place six permanent firing ramps (see Case 201.12) anywhere west of the Purple Line (the anti-tank ditch). The Player should note their location on the paper. Israeli vehicular units in firing ramp hexes conducting direct fire attacks on Syrian units within 5 hexes inclusive of the 5300 hex column have +5 added to the Loss Modification Die Rolls of the defending Syrian units.

**[209.2] NIGHT MEETING
ENGAGEMENT 6 OCTOBER 1973****[209.21] Scenario Information:**

Environment: Night, ¼ moon.

Game Length: 15 Game-Turns.

[209.22] First Player Deployment (Syrian):

Deployment: May enter the map from hex 3734 and/or 3334. The units must be in column formation.

Off-Map Artillery: None

[209.23] Second Player Deployment (Israeli):

Deployment: May be deployed in any hex north of the 0026 hexrow (inclusive). May be deployed in defilade.

Off-Map Artillery: None.

[209.24] Victory Conditions:

The Syrian Player wins by exiting any unit off the north map-edge. The Israeli Player wins by preventing a Syrian Victory.

[209.25] Starting Sequence:

(1) Israeli Player deploys his units.

[209.26] Special Rules:

(1) Units may not move or deploy west of hex column 2400 (inclusive) or east of hex column 4200 (inclusive).

(2) Syrian units may not enter a non-road hex or leave column formation until an Israeli unit has been observed.

(3) The Israeli company may set up an ambush position before the start of the game (see Section 27.0).

**[209.3] BATTLE ON THE
YEHUDIA ROAD
7 OCTOBER 1973****[209.31] Scenario Information:**

Environment: Day.

Game Length: 20 Game-Turns.

[209.32] First Player Deployment (Israeli):

Deployment: May enter from any hex of the north mapedge on Game-Turn 1. The units must be in column formation.

Off-Map Artillery: 2 × battery light howitzers.

[209.33] Second Player Deployment (Syrian):

Deployment: May enter from any hex of the south mapedge on Game-Turn 2.

Off-Map Artillery: 1 × battalion medium howitzer, 3 × battalion light howitzer.

[209.34] Victory Conditions:

The Syrian Player wins by exiting any unit off the north mapedge. The Israeli Player wins by preventing a Syrian victory.

[209.35] Starting Sequence:

(1) The Israeli units enter the map on Game-Turn 1.

[209.36] Special Rules:

(1) Units may not enter any hex west of the 1700 hex column or east of the 4000 hex column (inclusive).

(2) Neither Player may use smoke.

**[209.4] DEEPEST SYRIAN
PENETRATION 8 OCTOBER 1973****[209.41] Scenario Information:**

Environment: Day

Game Length: 20 Game-Turns

[209.42] First Player Deployment (Syrian):

Deployment: May be deployed in any hex east of the 4000 hex column. May not be deployed in defilade.

Off-Map Artillery: None

[209.43] Second Player Deployment (Israeli):

Deployment: May be deployed in any hex west of the 2700 hex column (inclusive). May be deployed in defilade.

Off-Map Artillery: None

[209.44] Victory Conditions:

The Syrian Player wins by having any unit west of the 0800 hex column at the end of the game. The Israeli Player wins by preventing a Syrian Victory.

[209.45] Starting Sequence:

(1) The Israeli Player deploys his units.

(2) The Syrian Player deploys his units.

[209.46] Special Rules:

(1) None

[209.47] Reinforcements:

Game-Turn 4: The Israeli Second Tank Battalion may enter the map from hex 0129. The units must be in column formation and the rating of the battalion HQ is B.

Game-Turn 10: The Israeli Third Battalion may enter the map from hex 0129. The units must be in column formation and the rating of the battalion HQ is B.

**[209.5] ISRAELI COUNTERATTACK
8 OCTOBER 1973****[209.51] Scenario Information:**

Environment: Day

Game Length: 20 Game-Turns.

[209.52] First Player Deployment (Israeli):

Deployment: May be deployed in any hex between the 2700 and 0900 hex columns (inclusive). May not be deployed in defilade.

Off-Map Artillery: 2 × battery medium howitzers, 3 × battery light howitzers.

[209.53] Second Player Deployment (Syrian):

Deployment: May be deployed in any hex east of the 3500 hex column (inclusive). Units may be deployed in defilade.

Off-Map Artillery: 2 × battalion medium howitzers, 3 × battalion light howitzers.

[209.54] Victory Conditions:

The Israeli Player wins by having any unit on or adjacent to a fortification hex at the end of the game. The Syrian Player wins by preventing an Israeli Victory.

[209.55] Starting Sequence:

(1) Syrians deploy their units.

(2) The Israeli Player deploys his units.

[209.56] Special Rules:

(1) Neither Player may use smoke.

(2) Each Player must deploy a total of five Class 4 bridges across any hexes of the anti-tank ditch. All minefields have been cleared from the anti-tank ditch.

[209.6] ISRAELI COUNTERATTACK 9 OCTOBER 1973

[209.61] Scenario Information:

Environment: Day

Game Length: 20 Game-Turns

[209.62] First Player Deployment (Israeli):

Deployment: May be deployed in any hex west of the 2400 hex column (inclusive). May be deployed in defilade.

Off-Map Artillery: 2 × battery medium howitzer, 3 × battery light howitzer.

[209.63] Second Player Deployment (Syrian):

Deployment: May be deployed in any hex east of the 2500 hex column (inclusive). May be deployed in defilade.

Off-Map Artillery: 1 × battalion medium howitzers, 3 × battalion light howitzers.

[209.64] Victory Conditions:

The Israeli Player wins by having any Friendly unit east of the 5300 hex column (inclusive) at the end of the game. The Syrian Player wins by preventing an Israeli Victory.

[209.65] Starting Sequence:

- (1) The Syrian Player deploys his units.
- (2) The Israeli Player deploys his units.
- (3) The Israeli Player may pre-plot his artillery and air strikes so that they impact (arrive) on Game-Turn 1.

[209.66] Special Rules:

- (1) Each Player must deploy a total of five Class 4 bridges across any hexes of the anti-tank ditch before the start of the game. All minefields have been cleared from the anti-tank ditch.
- (2) The Israeli Player may pre-plot his artillery and airstrikes so that they impact (arrive) on Game-Turn 1. The aircraft may not be armed with air-to-surface missiles.
- (3) The Syrian Player has off-map air defenses of 6 × gun 1 (each with 2 vehicles) and 3 × missile 1 (each with 3 vehicles) off the east mapedge.

[209.67] Reinforcements:

Game-Turn 1: 2 × Mirage; 1 × F-4 aircraft.

[210.0] SCENARIO DESIGN

GENERAL RULE:

Suez to Golan is set up so that Players may design their own scenarios and thus experiment with the very wide range of variables that the game provides. This section outlines the basic guidelines that should be followed when doing so. Players are encouraged to become familiar with the standard scenarios before designing their own.

[210.1] SCENARIO INFORMATION

[210.11] *Day or Night*: Many of the opening battles in the Golan Heights occurred at night, as did those relating with the Israeli canal-crossing operation. If a night scenario is chosen, the phase of the moon must also be given. The historical phases during the October War were as follows:

Date (October)	Phase of the Moon
6-8	One-Quarter
9-11	One-Half
12-14	Three-Quarters
15-17	Full
18-20	Three-Quarters
21-23	One-Half
24-26	One-Quarter
27-29	New Moon

[210.12] *Weather*: Most of the time the weather should be clear and dry. At certain times of the year, however, it would be possible to have rain and/or fog conditions on the Golan Heights (see Case 203.1). Wind conditions would be quite variable, but are not that important since they only affect the use of smoke.

[210.13] *Variable Weather*: Fog densities do tend to change unpredictably from time to time. One way to show this is to roll for fog changes during each Record Phase. On a 1, the fog gets one grade lighter and on a 6 it would get one grade heavier. Any other die roll would leave the fog density unchanged. The duration of rain may also be varied by rolling one die during the Record Phase. The rain continues until some agreed upon number is rolled.

[210.14] *Bridges and Ferries*: Because the Suez Canal is a man-made structure, its banks are steep and irregular, making it difficult to use bridging equipment designed for ordinary rivers. For this reason, it is impossible to construct bridges across the canal within the time scale of the game (five minutes per Game-Turn). Players should therefore designate bridges and ferries as being in place *before* the game begins. **Note**: Some of the canal's escarpment hexsides would have to be cleared in any crossing operation.

[210.15] *Bar-Lev Line, Fortifications, and Firing Ramps*: The Bar-Lev Line and fortifications hexes should be manned (by a platoon of garrison infantry) during the first few days of the war, and thereafter considered to be unoccupied (but still intact). Israeli firing ramps should be included in all Sinai Scenarios, and for the beginning of the war in the Golan.

[210.16] *Anti-Tank Ditch*: This should be intact on the first day of the war, and thereafter considered to be cleared of mines and bridged (by Class 4 bridges) in numerous locations.

[210.17] *Game-Turns*: This is a highly variable element. Basically, the greater the number of Game-Turns, the more cautious and calculating the Players may be in their tactics.

[210.2] PLAYER DEPLOYMENTS

[210.21] The First Player should generally be the one who is on the tactical offensive. The Second Player is the one on the tactical defensive.

[210.22] *Set-Ups*: Generally, the Second Player should deploy his units first, followed by the First Player deploying his units.

[210.23] *Unit Status*: Determine the following data for each company:

(A) Number of platoons in each company, and battalions in each brigade.

(B) *Type of Tanks*: Historically, for the Israelis all M-60 units were deployed in the Sinai, all Centurion units in the Golan. Egyptian tanks should be almost exclusively T-55, although an occasional battalion of T-62s would be possible. For the Syrians, the majority of tank units would be T-62, but many T-55 battalions should also be included.

(C) *Type of Infantry*: Except for the fortification garrisons, all Israeli infantry should be mechanized. The paratroop battalion should be included in scenarios centering around unusual and dangerous operations (such as the canal crossing). Their personnel anti-tank weapons should be restricted to 3.5" bazookas and LAWs. Arab infantry on the offensive should be mechanized, with leg infantry units used only in defensive situations.

(D) *Ammunition Levels*: This can be varied with the scenario, but should be consistent with the overall background (*i.e.*, Was there enough time for the units involved to have been supplied after their last battle).

(E) *Previous Losses*: Are all units at full-strength? Israeli units in the Sinai were greatly under-strength at the beginning of the war. Losses are also likely to affect units that have previously been committed to major combat operations. **Note**: It is possible to simplify matters by assuming that an understrength brigade has been reorganized into a full-strength battalion, and so forth.

(F) *Troop Quality*: Israeli troops should always be seasoned, with the exception of garrison infantry units, which might be considered first or second line. Arab units should be basically second line, with some first line, reserve, and green units included.

(G) *HQ Ratings*: The Israeli ratings should *always* be higher than that of the Arab units. The standard scenarios are a good guide for this. **Note**: "Elite" units (such as Israeli Paratroops and Arab T-62 Battalions) should have a correspondingly high HQ rating, and perhaps special morale shifts.

(H) *Ambushes*: Can be included in any scenario where sufficient time would have been available for the defending Player to arrange ambushes. This would be especially true of defending Egyptian commandos and small detachments of Israeli units.

[210.3] ENGINEERS

These units should only be included in scenarios involving water transport, fortification clearing, and/or mine clearing operations, as otherwise they are somewhat superfluous.

[210.4] OFF-MAP ARTILLERY

List the artillery available to each Player by number of units, caliber and pattern. Neither side made much use of smoke shell throughout the war, so its availability should be greatly limited (as in the standard scenarios). The standard scenarios are a good guide to the relative amount of artillery available to each side throughout the war.

[210.5] AIRSUPPORT

List the air units available to a Player and the type of weapons it may be armed with. Only one Player should be given air units in a given scenario. Historically, Egypt and Syria had very limited support in the opening hours of the war, and none thereafter. Israeli air support was greatly limited by Arab air defenses early in the war, but eventually gained the upper hand, becoming more prevalent and sophisticated towards the end. Israeli aircraft should not receive air-to-surface missiles (especially Maverick) until the final days of the war. Israeli off-map air defense systems would be primarily missile 1 (with 3 vehicles) American supplied Hawk missiles.

[210.6] COMMANDOS

Should be present only in the first days of the war, as they were not very mobile and tended to burn out quickly in combat. **Note**: They may use helicopter transport.

[210.7] RADIO DETECTION

The Egyptian Player should always have radio detection capabilities, but not jamming. The Israeli and Syrian Players should have neither.

[210.8] VICTORY CONDITIONS

Victory should be based on fulfilling certain geographic conditions, and/or the destruction of

[continued on page 9]

MECHWAR 2

SUEZ TO GOLAN

CHARTS & TABLES

Copyright © 1979, Simulations Publications, Inc.,
New York, N.Y., 10010

[6.9] COMBINED TERRAIN EFFECTS AND FUNCTIONS CHART

Terrain	Movement Point Cost		
	Vehicle to enter defilade	Vehicle to enter or cross	Infantry to enter or cross
Clear	+8	2	1
Road ¹	NA	1	1
Trail ¹	NA	2	1
Town	+3	2	1
Light Woods ²	+3	3	2
Heavy Woods ³	+3	all	2
Town			
Devastation	P	P	2
Burning Woods ⁴	P	P	P
Rough 1	+7	2	1
Rough 2	+6	3	2
Rough 3	+3	4	2
Mount Infantry	NA	2	1
Dismount Infantry	NA	2	1
Upslope (see 6.34)	NA	0	+1
River Hexside	NA	Case 24.0	P
Escarpment Hexside	NA	P	+1
Depression Hex	NA	P	P
Depression Hexside	NA	P	P
Railway Embank- ment Hexside	Case 201.2	0	0
Anti-Tank Ditch Hexside	NA	Case 201.4	Case 201.4
Canal Hex	NA	Case 201.4	
Trench Hex	+7	2	1
Fortification Hex, Bar-Lev Hex, Firing Ramp Hex	Case 201.0	Case 201.0	Case 201.0
Bridge Hexside	NA	+2	+0
Smoke	NA	+1	+1

Important: Hexes containing the color of more than one Height Level are considered to be at the *lowest* indicated color (e.g., hex D4212 is at Height Level 0). Hexes containing a partial canal symbol (e.g., C1233) are *not* canal hexes.

(1) Supercedes cost of other terrain in hex/hexside; units must be in column. (2) If unit did not enter the hex via a road/trail. (3) If unit did not enter the hex via a road/trail; vehicle units may always enter one hex of heavy woods per Friendly Movement Segment by spending their entire Movement Allowance to do so. (4) Applies only to *Red Star/White Star*.

P = Prohibited; NA = Not applicable (other terrain in hex determines cost). **Note:** There is no cost for leg infantry to enter defilade.

[7.17] DAY CLEAR WEATHER OBSERVATION RANGE TABLE

Target Unit is . . .	Observation Range in hexes is . . .	Target Unit is . . .	Observation Range in hexes is . . .
Infantry		Vehicle (cont.)	
stationary in Clear	3	moving in Clear	Unlimited
moving in Clear	6	moving in any terrain other than Clear	15
moving or stationary in Defilade or in any terrain other than Clear	1	Any bridge or ferry	Unlimited
Vehicle		Maximum Range of Observation	Unlimited
stationary in Clear	15	Any Firing Unit	Unlimited
stationary in Light Woods or Rough 1	2		
stationary in Defilade or in any terrain other than Clear, Light Woods, or Rough 1	1		

Notes. Unobserved units leaving a hex within the Line of Sight of an Enemy unit and directly entering a hex not within the Line of Sight of an Enemy unit are not considered observed. If the Line of Sight runs along a hexside where one hex contains blocking terrain and the other does not, the Line of Sight is considered blocked.

[9.21] VEHICLE AUTOMATIC WEAPONS CHART

Nr. of Vehicles in Firing Unit	Range (Hexes)		
	0-4	5-8	9-10
5	5	4	3
4	4	3	2
3	3	2	1
2	2	1	0
1	1	0	0

= Unit's attack strength.

[9.3] AUTOMATIC WEAPONS COMBAT RESULTS TABLE

DIE	Combat Strength									
	0	1	2	3	4	5	6	7	8	9
2	S	S	S	S	1	2	2	2	2	2
3	-	S	S	S	S	1	1	1	1	1
4	-	-	S	S	S	S	S	1	1	1
5	-	-	-	-	S	S	S	S	1	1
6	-	-	-	-	-	S	S	S	S	S
7	-	-	-	-	-	-	S	S	S	S
8	-	-	-	-	-	-	S	S	S	S
9	-	-	-	-	-	S	S	S	S	1
10	-	-	-	S	S	S	S	S	1	1
11	-	S	S	S	S	S	S	1	1	2
12	S	S	S	S	S	1	2	2	2	2

- = No effect. Determine modifiers and proceed to Table 12.21.

[10.22] MAIN GUN ANTI-INFANTRY ATTACK STRENGTH TABLE

Firing System	Number of Firing Vehicles				
	5	4	3	2	1
Tank Heavy Main Gun	8	6	4	2	1
Medium Main Gun					
Classes 1 and 2	5	4	2	1	0
Class 3	9	8	7	5	3

= Attack Strength.

[10.3] MAIN GUN ANTI-VEHICLE COMBAT RESULTS TABLE

Nr. of Vehicles
or Steps
in Firing Unit

Attack Strength

One	0	-	1	2	3	4	5	6	7	-	8	9									
Two	-	0	-	1	-	2	3	4	5	6	-	7	8	9							
Three	-	-	0	-	1	-	2	3	-	4	-	5	6	7	8	9					
Four	-	-	0	-	1	-	2	-	3	-	4	-	5	6	7	-	8	9			
Five	-	-	0	-	1	-	-	-	2	-	3	-	-	4	5	6	-	7	8	9	
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	
DICE																					
2	1	-	-	-	-	-	1	1	1	1	1	1	1	1	1	2	3	3	2	3	5
3	-	-	-	1	-	-	1	-	-	1	1	1	1	1	1	2	3	3	2	1	1
4	-	1	-	1	1	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	5
7	-	-	1	-	-	1	1	1	2	2	2	2	2	3	3	3	4	3	4	3	
8	-	-	-	-	-	-	-	1	1	1	-	-	2	2	2	2	2	4	4	4	
9	-	-	-	-	-	-	-	-	-	1	2	2	2	2	2	2	2	4	3	4	
10	-	-	-	-	-	-	-	-	-	-	1	2	2	2	2	2	2	4	4	4	
11	-	-	-	-	-	-	-	-	-	-	2	2	-	-	2	3	3	2	2	3	
12	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	3	3	3	2	4	

= Number of vehicles lost, unmodified. Determine modifiers and proceed to Table 12.21.
- = No vehicles lost, unmodified.

[12.11] VEHICLE LOSS MODIFICATION TABLE

	Armor Class			
DIE	Chobham	Hard	Protected	Light
-3	-3	-3	-2	-1
-2, -1	-3	-2	-1	-
0	-3	-1	-	-
1	-2	-1	-	-
2	-2	-	-	-
3-5	-1	-	-	-
6-8	-	-	-	-
9	+1	+1	+1	+1
10	+1	+1	+1	+2
11	+1	+2	+2	+2
12 or more	+2	+2	+3	+3

See Case 12.22 for explanation of results.

[10.51] HEAVY MAIN GUN ATTACK STRENGTH TABLE

Range in Hexes	A			B			C			D			E			Target Class
	O	S	L	O	S	L	O	S	L	O	S	L	O	S	L	Sighting System
0	8	8	9	8	8	9	8	8	9	9	9	9	9	9	9	
1	7	7	8	8	8	9	8	8	9	9	9	9	9	9	9	
2	7	7	8	8	8	9	8	8	9	8	8	9	8	8	9	
3-5	6	6	7	7	7	8	7	7	8	7	8	9	8	8	9	
6-7	3	4	5	4	5	6	4	5	6	5	6	8	6	7	8	
8-10	2	2	5	3	3	6	3	3	6	4	4	7	5	5	7	
11-15	0	1	4	2	2	5	3	3	5	3	3	6	3	4	7	
16-20	0	0	3	0	0	4	0	1	4	1	2	5	1	3	6	
21-25	P	P	0	P	P	1	P	P	2	P	P	3	P	P	4	
26 or more	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	

= Attack Strength; O = Optical sighting; S = Coincident sighting; L = Laser rangefinder;
P = No attack permitted.

[11.41] PERSONAL ANTI-TANK ATTACK STRENGTH TABLE

Range in Hexes	Attack Rating		
	R	B	A
0	5	3	2
1	3	1	1
2	1	P	P
3 or more	P	P	P

= Attack Strength; P = No attack permitted; R = RPG-7; B = 3.5" rocket launcher (bazooka), armburst, PZ4FF; A = LAW (Light Assault Weapon).

[10.52] MEDIUM MAIN GUN ATTACK STRENGTH TABLE

Range in Hexes	A			B			C			D			E			Target Class
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	Firing Unit Gun Class
0-1	5	4	3	5	4	3	6	5	4	7	6	5	8	7	6	
2-3	4	2	1	5	3	2	5	4	3	6	5	4	7	6	5	
4-5	3	1	P	3	2	1	5	3	1	5	4	2	6	5	3	
6-8	2	0	P	2	1	P	2	1	P	3	2	P	4	3	P	
9 or more	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	

Attack Strength; P No attack permitted. Note: All medium main guns are considered to use an optical fire control system.

[12.21] INFANTRY LOSS MODIFICATION TABLE

DIE	Result
0 or less	-1
1-7	-
8 or more	+1

See Case 12.22 for explanation of results.

[11.3] ATGM ATTACK STRENGTH

Range in Hexes

Weapons System	0	1-2	3-5	6-7	8-10	11-12	13-15	16-17	18-19	20	21 or more
Improved TOW	P	6	7	7	7	7	7	7	7	P	P
TOW	P	5	7	7	7	7	7	P	P	P	P
Swatter	P	P	4	6	7	7	7	7	P	P	P
Sagger	P	P	4	7	7	7	7	P	P	P	P
Dragon	P	6	7	P	P	P	P	P	P	P	P
2nd Generation Soviet ATGM; HOT	P	5	6	7	7	7	7	7	7	7	P
Shillelagh	P	P	3	5	7	7	7	P	P	P	P
Milan	P	5	7	7	7	P	P	P	P	P	P
Swingfire	P	3	5	7	7	7	7	7	7	7	P
S11	P	P	4	6	6	6	6	P	P	P	P

= Attack Strength; P = No attack permitted.

[12.3] LOSS MODIFIER CHART

A. Troop Quality of Firing Unit

Seasoned	+2
First Line	+1
Second Line	0
Reserve	-1
Green	-2

B. Target Unit Is...

Class B vehicle in Defilade	-1
Class A, C, D, or E vehicle in Defilade	-2
Infantry	0
Infantry in Defilade	-1*
Snorkeled	+4
Using amphibious movement	+2
Moving	-2
Stacked (for each Friendly unit of the same type — infantry or vehicle — in the hex)	+2
In Column	+4
In a smoke hex	-2
Silhouetted	+3

C. Firing Unit Is...

Suppressed vehicle	-1
Suppressed infantry	-2
Performing short halt	-3
Performing fire and move	-2
(Protected vehicle in CP3)	-1
(Unprotected vehicle in CP2)	-2
(Unprotected vehicle in CP3)	-3
(Infantry in CP2)	-2
(Infantry in CP3)	-3
Class 3 medium main gun firing at hard target	-3
Class 1 or 2 medium main gun firing at hard target	-1
Any class medium main gun firing at protected or light target	+3
Dispersed	-2

D. Defending Unit Is In...

	Vehicle	Infantry
Clear hex	0	0 (+5*)
Devastated town hex	NA	-6 (-6*)
Town hex	-1	-4 (-4*)
Light woods hex	-2	-2 (+2*)
Heavy woods hex	-3	-2 (+1*)
Rough 1 hex	-1	-1 (+4*)
Rough 2 hex	0	-1 (+2*)
Rough 3 hex	-3	-2 (+1*)
Lake/canal hex	+4	-2 (-2*)
Road/trail hex	Use other terrain in hex	

Only those modifications marked with an asterisk (*) are used when modifying the result of indirect fire combat. All die roll modifications are cumulative. Parenthesized () items in part C above apply only to *Red Star/White Star*.

[14.27] ARTILLERY SCATTER TABLE

DICE ROLL	Fire for Effect	OBSERVER Range (in hexes)			
		0-20	21-40	41-60	61+ or unobserved
2	S	S-1	S-2	S-3	S-4
3	S	S-1	S-1	S-2	S-3
4	On T	On T	S-1	S-1	S-2
5	On T	S	S	S-1	S-1
6	On T	S	S	S	S-1
7	On T	On T	S	S	S
8	On T	S	S	S	S-1
9	On T	S	S	S-1	S-1
10	On T	On T	S-1	S-1	S-2
11	S	S-1	S-1	S-2	S-3
12	S	S-1	S-2	S-3	S-4

On T = On target; S = scatter in target hex; S-1(-4) = scatter one (two, three or four) hex(es).

[14.28] MISSILE/ROCKET SCATTER TABLE

DIE	Missile/Rocket Type			
	FROG	Honest John	Lance	SCUD
1	S	S	T	S
2	S	S	S	S-1
3	S	S	S	S-2
4	S	S-1	S	S-3
5	S-1	S-2	S-1	S-4
6	S-2	S-3	S-1	S-4

T = on target; S = scatter in target hex; S-# = scatter indicated number of hexes.

Results = Unmodified combat results: see Case 9.4.

Results = Unmodified combat results: see Case 9.4.

= Roll (on two dice) necessary to lose indicated number of steps; NA = Not applicable.

= Morale level increase; - = No effect.

Number under column headings A-L is the die roll. "Avg" indicates the average value for a HQ rolling on that column.

NA = Not applicable; # = Die roll; **Tank** = Any vehicle identified as a tank on its Data Sheet; **Other** = Any vehicle other than a tank.

[17.21] MOUNTED COMBAT MATRIX

Infantry Weapon System

Vehicle Class	Automatic Weapons	ATGM (see 17.22)	Personnel Anti-Tank	Air Defense	Medium Main Gun
Hatch	Normal*	Normal*	Normal*	Normal*	P
Mixed	Normal†	Normal*	Normal*	Normal*	P

*May not fire if vehicle is suppressed or is protected vehicle in CP3 status. † Halved if vehicle is either suppressed or is protected and in CP3 status, otherwise normal. **Normal** = Attack strength of firing weapon system is not affected; **P** = Prohibited.

[19.52] MINE PLOW DAMAGE TABLE

DIE	Type of Minefield
N/A	Artillery-delivered
6	Hasty
5 or 6	Defensive
4, 5, or 6	Barrier

If indicated number is rolled on one die, unit's mine plow is destroyed.

[20.76] DIE ROLL MODIFICATION CHART (Ground to Air)

Modification... if Firing Unit...

-1	has 2 vehicles/steps
-2	has 3 vehicles/steps
-3	has 4 vehicles
-4	has 5 vehicles
+2	is suppressed

Modification... if Target Unit altitude is...

-2	High
0	Low
+2	NOE

Modification... if Target Unit Defense Class is...

+6	A
+4	B
+2	C
+1	D
0	E
-1	F

[20.73] TRACKING RANGE CHART

Weapon System	Tracking Range (in hexes)
*Gun 1	20
*Gun 2	20
Gun 3	5
*Missile 1	Unlimited
*Missile 2	50
Missile 3	20
Missile 4	10
*Missile 5	Unlimited

*Radar controlled (see Case 20.69).

[20.74] GROUND TO AIR COMBAT RESULTS TABLE

	Attack Strength								
DIE	1	2	3	4	5	6	7	8	9
-1	H	H	H	H	H	H	H	H	H
0	-	H	H	H	H	H	H	H	H
1	-	-	H	H	H	H	H	H	H
2	-	-	-	H	H	H	H	H	H
3	-	-	-	H	H	H	H	H	H
4	-	-	-	-	H	H	H	H	H
5	-	-	-	-	-	H	H	H	H
6	-	-	-	-	-	-	H	H	H
7	-	-	-	-	-	-	H	H	H
8	-	-	-	-	-	-	-	H	H
9	-	-	-	-	-	-	-	-	H
10 or more	-	-	-	-	-	-	-	-	-

- = No effect; **H** = Hit, see Case 20.7. Die rolls of less than -1 are resolved as -1.

[20.77] AIR DEFENSE COMBAT STRENGTH CHART

Firing Weapon System	Range (in hexes)							
	0-1	2-5	6-10	11-15	16-20	21-30	31+	Off-Map
Gun-1	9/5	8/4	6/3	4/1	-/-	-/-	-/-	6/3
Gun-2	7/4	5/2	3/1	2/-	-/-	-/-	-/-	3/1
Gun-3	2/-	-/-	-/-	-/-	-/-	-/-	-/-	NA
Mx-1	-/-	-/-	-/-	-/-	8/8	8/8	7/7	4/7
Mx-2	-/-	-/-	8/-	8/-	7/-	6/-	5/-	5/-
Mx-3	-/-	-/-	6/-	4/-	2/-	-/-	-/-	2/-
Mx-4	-/-	5/-	3/-	1/-	-/-	-/-	-/-	NA
Mx-5	-/-	-/-	-/-	7/5	7/5	6/4	3/2	5/3

#/# = Strength at Low or NOE altitude/Strength at High altitude; - = No attack possible; NA = Not applicable; Mx = Missile.

[23.11] NIGHT OBSERVATION CHART

Target Unit Is...	Phase of Moon (Natural Sight)				Target Unit Is...	Ambient Light		
	Full	1/2 or 3/4	1/4	New or Overcast		1/4 to Full Moon	New Moon	Overcast
Infantry, stationary in Clear terrain	1	0	0	0	Infantry, stationary in Clear terrain	2	0	0
Infantry, moving in Clear terrain	2	1	1	0	Infantry, moving in Clear terrain	4	1	0
Infantry, stationary or moving in any terrain other than Clear	1	0	0	0	Infantry, stationary or moving in any terrain other than Clear	2	0	0
Vehicle, stationary in Clear terrain	2	1	1	0	Vehicle, stationary in Clear terrain	4	1	0
Vehicle, in Defilade or stationary in any terrain other than Clear	1	0	0	0	Vehicle, in Defilade or stationary in any terrain other than Clear	2	0	0
Vehicle, moving in Clear terrain	8	6	4	2	Vehicle, moving in Clear terrain	16	4	3
Vehicle, moving in any terrain other than Clear	4	3	2	1	Vehicle, moving in any terrain other than Clear	8	2	1
Maximum Range of Observation	Unlimited				Maximum Range of Observation	unlimited.		

= Observation Range in hexes

[203.4] WEATHER EFFECTS CHART

Effects on:	Weather Condition		
	Light Fog	Medium Fog	Heavy Fog
Vehicle Movement	No effect	Pay double terrain costs for Movement*	May not move more than 1 hex per Phase
Infantry Movement	No effect	May not move more than two hexes per Phase	May not move more than 1 hex per Phase
Aircraft	No effect	May not attack units in medium fog hexes.	May not attack
Helicopters	No effect	May not enter medium fog hexes except to dismount transported units.	May not enter heavy fog except to dismount transported units.
Units using laser fire control	Must use Secondary control	Must use secondary fire control	Must use secondary fire control
Effects on:	Weather Condition		
	Rain	Mud	
Vehicle Movement	No effect	Must pay double terrain costs for movement at levels 1-5*	
Infantry Movement	May not move more than one hex per Phase		
Aircraft	May not be used	No effect	
Helicopters	may be used for transport only	No effect	
Units using laser fire control	Must use secondary fire control	No effect	

* Does not apply when unit is moving in Column on a road.

[203.5] ADVANCED OBSERVATION RANGE TABLE

<i>Target Unit Is...</i>	Regular Observation			
	Clear Day	Rain or Light Fog	Medium Fog	Heavy Fog
Stationary Infantry in Clear terrain	3	1	1	0
Moving Infantry in Clear terrain	6	5	2	1
Infantry in other terrain	1	1	1	0
Stationary vehicle in Clear terrain	15	7	2	0
Stationary vehicle in light woods or rough 1	2	1	1	0
Stationary vehicle in Defilade or any other type of terrain	1	1	0	0
Moving vehicle in any terrain	Unlimited	10	3	1

Maximum Observation Range

Unlimited	10	3	1
-----------	----	---	---

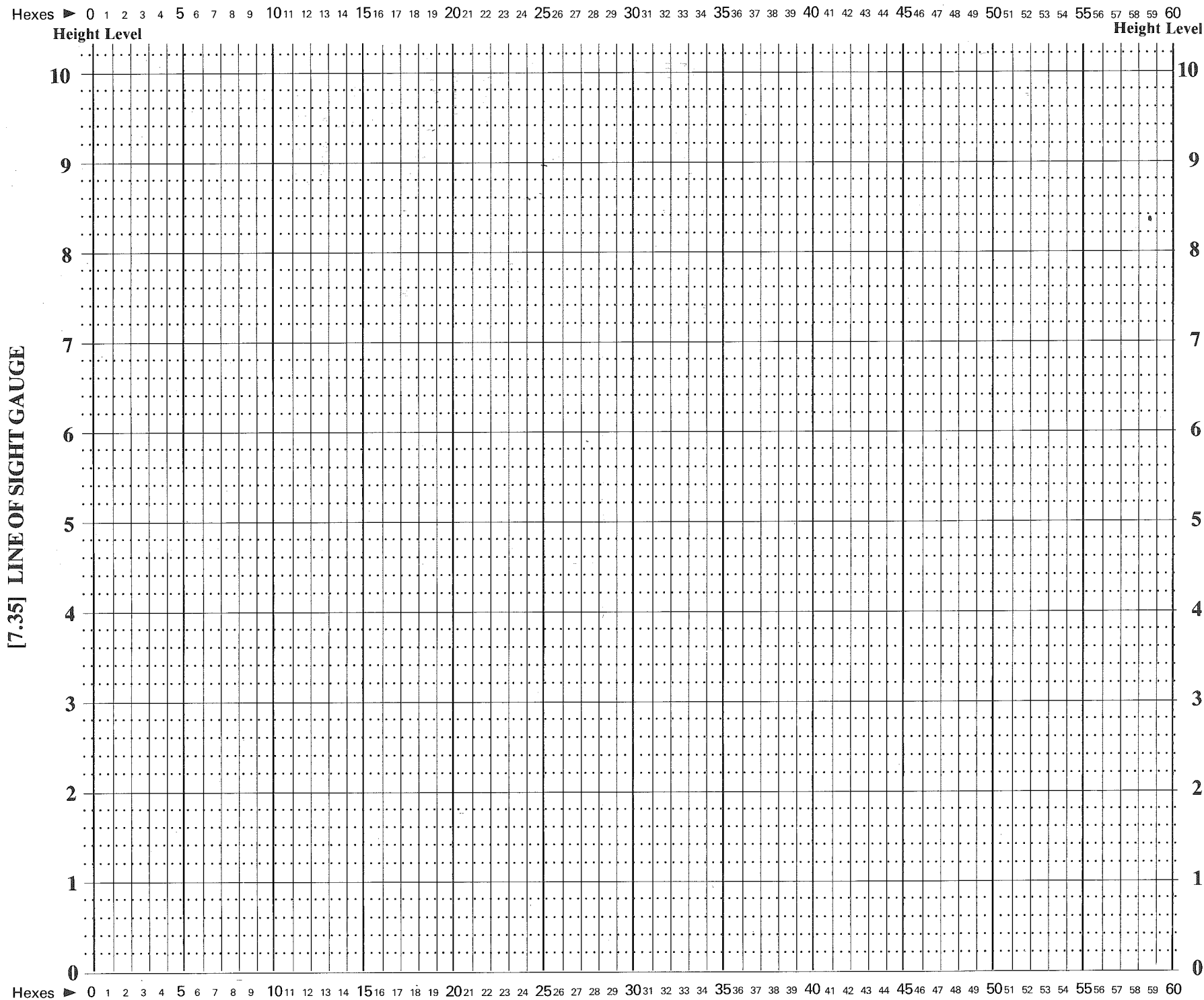
Note:

- (1) worst fog hex in Line of Sight applies;
- (2) at night during bad weather most severe restriction applies.

[28.15] CAMOUFLAGE OBSERVATION TABLE

<i>Camouflaged Unit Is In...</i>	Camouflage Value
Clear or Rough 2 hex	0
Rough 1 hex	1
Light Woods or Rough 3 hex	2
Heavy Woods or Town hex	3
Devastated Town hex	4

= Player attempting to sight camouflaged unit must roll indicated number or higher.



[7.35] LINE OF SIGHT GAUGE

Note: Height Levels 7 - 10 are not used in *Mech War 2*.

[continued from page 8]

Enemy units. There is no real reason for improvised scenarios to be balanced, as battles in the real world often are not. In such a case, Players may measure their own relative skills by playing a given scenario twice, switching sides the second time around.

[210.9] PRESENT AND FUTURE SCENARIOS

Although primarily designed to show the October War of 1973, *Suez to Golan* may also be used to devise scenarios set in the present or near future. Given the shifting nature of Middle East politics, it is possible to justify almost any scenario you might want. In terms of equipment, Israeli infantry units would be armed with Carl Gustav or Dragon ATGM, while the tank units would remain about the same, with Syrian tank units receiving more T-62s. Both Players should receive more generous smoke capabilities, and the use of radio jamming and detection by all sides is certainly likely. Should the Israeli Player be given radio detection capabilities, Arab radio detection values are as follows: Regiment HQ: 5, Battalion HQ: 4, On-Map Artillery Units: 5, ZSU23/24: 4.

PLAYER'S NOTES

Three main factors shape the *Mech War 2* firefight. First, it takes only a small superiority in force to achieve a significant victory. Second, it is almost impossible for a smaller force to withdraw from a firefight without taking heavy casualties. Third, even firefights between relatively equal forces will be bloody and quick.

In short, *Mech War 2* rewards the Player who adheres to the time honored military principle of concentration of force at the decisive point. Maneuver and deployment must be used to achieve this concentration. This requires that the defender retain as much mobility as possible, unless he is absolutely certain what avenue of approach his attacker will take. A constant goal should be to disrupt the assembly of enemy forces. A second and related goal is to seize control of terrain features which could be important in any ensuing combat.

TERRAIN

Terrain has three basic effects. First, it gives additional defensive benefits to units deploying in it. Defilade, which is really a terrain effect, works the same way. Players should try at all times to use the defensive value of terrain to their advantage. The second effect of terrain is to slow or stop movement. Properly used, escarpments, woods, rough-2 and rough-3 will channel an enemy ad-

vance, giving the defending force time to react. Control of roads takes on particular importance, as they are often the only means by which vehicular units can swiftly move and redeploy. The third and most important effect of terrain is to block Lines of Sight. A Player can use terrain to divide his opponent's fields of fire, to reduce the effective range of his missile systems, to prevent the entire enemy force from getting into action, and to divide a large firefight into several smaller ones, giving a less numerous force some chance of inflicting damage on the opposition.

Smoke, although not often available, can perform much the same function. Smoke works best because it is dynamic and can be placed when and where a Player wants it. Creating a sudden change in the map, it forces the enemy to move and deprives him of defensive terrain. Effective use of smoke requires careful planning. Always keep in mind that smoke may scatter away from its intended target.

TACTICS

Modern warfare emphasizes "combined arms" operations. Modern armies, however, have grown far beyond the three traditional arms (infantry, cavalry, artillery) of the nineteenth century. Tanks, infantry (and their APC's), missile carriers, and artillery all play distinctive roles. In addition, specialized reconnaissance forces, engineers, air, and air defense units all add to the complexity of modern warfare. One of the highlights of *Mech War 2* is that it enables the Players to observe the solutions adopted by the various countries to solve the same problems. Players will find that the composition and organization of their force will always determine (to some degree) the tactics which they can use.

The Israeli Army, for example, underwent considerable change during the 1973 war. At the beginning of the conflict they relied almost exclusively on the tank as the prime instrument of ground warfare. Infantry and artillery support was often non-existent or in very short supply. By the end of the war, however, the Israelis had reorganized their units to provide for much closer cooperation between all the military arms.

The Arabs, and particularly the Egyptians, depended on their infantry, especially on the defensive. Because infantry units (in good terrain) are relatively immune to the fire of enemy vehicles, they can form an effective anti-tank barrier. Given proper support, Sagger-armed infantry should be able to deal with almost any enemy vehicle attack.

Thus, the key to successful tactics is coordination. This is especially true with air units and artillery. Aside from its ability to lay smoke, artillery can suppress enemy units. This can have several im-

portant effects, including keeping your opponent's infantry buttoned up in their APCs. A good tactic is to lay down fire with the lighter artillery pieces on a line in front of a position over several Game-Turns. Once the artillery is firing for effect, it creates a "suppression zone" of sorts, affecting almost every unit which crosses it. Artillery is also the prime killer of dismounted enemy infantry, especially in clear terrain.

MORALE

Morale is one of the key advantages held by the Israelis. It allows them to absorb much higher losses than normal, with little or no effect. Conversely, the generally low Arab morale ratings mean that their units can react unpredictably and may be defeated due to morale effects alone. Whenever possible, the Israeli Player should concentrate fire on some specific portion of the Arab line. Keep firing until those units' morale has broken, and then move on to some other threatened portion of the front, repeating the process. Use terrain to achieve local superiority, and avoid a one-on-one shootout with the entire Arab force. Fire and move and short halt can play an effective part in these hit-and-run tactics. For their part, Arabs should seek to bring maximum force to bear along the whole of the Israeli position, hopefully outflanking and bypassing particularly stubborn centers of resistance. High losses are probably inevitable, but you may be able to overload your opponent and succeed by sheer weight of numbers.

DESIGN CREDITS

Game Design: Mark Herman
Physical Systems and Graphics:
Redmond A. Simonsen

Game Development: Thomas
Walczyk, Stephen Donaldson
Technical Assistance: Darryl Garrett,
Major Donald Mack, David Isby,
D.C. MacCaskill, Jack Moore,
Thomas Pratuch, Yadin Roman,
William Tallin

Rules Editing: Joseph Balkoski
Testing: John Kallaughner, Edward Curran,
Daniel Dennis, Mark Edwards, Andy Eiler,
Thomas Farnworth, Gary Gillette, Carey Gister,
Brian Gister, Martin Goldberger, Richard
Hammer, Tony Haug, Steve Heffler, Howard
Herman, Ralph Ovalle, Frank Radford, Dave
Richards, Durvis Roberts, Stephen Schrader,
Abe Taylor, Jack Walsh
Production: Orhan Agis, Robert A. Degni,
Rosalind Fruchtmann, Kate Higgins, Ted Koller,
Manfred F. Milkun, Bob Ryer

HOW TO USE THE

UNIT STATUS SHEET: Example

It is suggested that Players construct their own unit data sheets along the outline shown here. Fill in the appropriate "unit" identification (platoon designation, specific company or battalion, etc.),

on each line and indicate the appropriate status as necessary under the columns to the right. (You can vary the columns depending on the scenario and advanced rules being used.) Abbreviations may also be used to denote "additional status" as

follows (case numbers are in parenthesis): A = Ambush (27.0); C = Camouflaged (28.0); K = ATGM kill (14.34); R = Radio Silence (26.16). Unit status should be indicated in pencil, as most values are subject to change during play.

Unit Identification	HQ Value	Morale State/# of vehicles or steps when rolling for morale	Ammo Level	Infantry Fatigue Level	Troop Quality	Mine Plow	Vehicle Smoke	Additional Status
1st Tank Co.	A	0/9	-	-	Seasoned	-	-	-
1111	-	-	3	-	-	-	-	-
1112	-	-	3	-	-	-	-	-
1113	-	-	3	-	-	-	-	-

AVAILABLE FORCES CHART

Scenario	Player/Unit	Morale State	Strength	Ammo Level	Troop Quality	Personnel Anti-Tank	BN HQ	Bde/Regt
208.1	<i>First Player (deploys second)</i>							
	First Tank Bde	0	Full	3	2nd Line	None	F	E
	<i>Second Player (deploys first)</i>							
	First Armored Bn	See Case 208.16		3	1st Line	None	B	-
208.2	<i>First Player (deploys second)</i>							
	First Tank Bde							
	1st, 2nd, 3rd Tank Bns	See Case 208.26		3	Seasoned	None	B	B
	<i>Second Player (deploys first)</i>							
	First Armored Bde	1	Full	3	2nd Line	None	F	E
	Second Infantry Bde	1	Full	3	2nd Line	Sagger, RPG-7	F	E
	First Commando Detach.	-	Full	3	Seasoned	Sagger, RPG-7	-	-
208.3	<i>First Player (deploys second)</i>							
	First Tank Bde	0	Full	3	2nd Line	None	G,H,D	F
	<i>Second Player (deploys first)</i>							
	First Tank Bn	0	Full	3	Seasoned	None	A	-
	Second Tank Bn	0	Full	3	Seasoned	None	B	-
	Third Tank Bn	0	Full	3	Seasoned	None	C	C
208.4	<i>First Player (deploys second)</i>							
	First Tank Bde	0	Full	3	2nd Line	None	G,F,E	C
	Second Mech Infantry Bde	0	Full	3	2nd Line	RPG-7	E,E,D	B
	<i>Second Player (deploys first)</i>							
	First Tank Bde	0	Full	3	Seasoned	LAW	B,A,B	B
	1st, 2nd, 4th Bns							
	ATGM Detach.	-	Full	3	Seasoned	TOW	-	-
208.5	<i>First Player (deploys first)</i>							
	First Tank Bn (reorg.)	0	Full	3	Seasoned	LAW	A	-
	Fourth Paratroop Bn	0	Full	3	Seasoned	LAW	A	-
	Engineer detach.	-	Full	3	Seasoned	None	-	-
	<i>Second Player (enters as reinforcements)</i>							
	First Tank Bn	0	(208.57)	3	Reserve	None	H	-
	Fifth Mech Infantry Bn	0	Full	3	Green	RPG-7	H	-
	Second Tank Bn	0	(208.57)	3	Reserve	None	H	-
208.6	<i>First Player (enters as reinforcements)</i>							
	First Mech Infantry Bde (3rd, 4th, and 5th Bn)	0	Full	3	Seasoned	LAW	A,B,B	B
	First Tank Bn	0	Full	3	Seasoned	None	B	-
	<i>Second Player (deploys first)</i>							
	Second Infantry Brigade	0	Full	3	2nd Line	Sagger RPG-7	E,E,H, G	E
208.7	<i>First Player (deploys second)</i>							
	First Tank Bde (1st, 2nd and 3rd Tank Bns)	0	Full	3	Seasoned	LAW	A,B,B	A
	Fourth Paratroop Bn	0	Full	3	Seasoned	LAW	A	-
	<i>Second Player (deploys second)</i>							
	Fourth Infantry Bn	0	Full	3	2nd Line	Sagger, RPG-7	G	-
	First Tank Bde	0	Full	3	2nd Line	None	D,D,D	D

Scenario	Player/Unit	Morale State	Strength	Ammo Level	Troop Quality	Personnel Anti-Tank	BN HQ	Bde/Regt
209.1	<i>First Player (enters as reinforcements)</i>							
	First Tank Bde	0	Full	3	2nd Line	None	F,G,G	F
	Bridging Detach.	-	Full	-	-	None	-	-
	Engineer Detach.	-	Full	3	1st Line	None	-	-
	<i>Second Player (deploys first)</i>							
209.2	First Armored Bn	0	Full	3	Seasoned	None	A	-
	<i>First Player (enters as reinforcements)</i>							
	First Tank Bn (T55)	0	Full	3	2nd Line	None	I	-
	<i>Second Player (deploys first)</i>							
	First Company, First Tank Bn.	0	Full	3	Seasoned	None	A	-
209.3	<i>First Player (enters as reinforcements)</i>							
	First Tank Bn	0	Full	3	Seasoned	None	B	-
	Reconnaissance Detach.	-	Full	3	Seasoned	None	-	-
	<i>Second Player (enters as reinforcements)</i>							
	First Tank Bn (T55)	0	Full	3	2nd Line	None	H	-
209.4	Second Tank Bn (T62)	0	Full	3	2nd Line	None	E	-
	<i>First Player (deploys second)</i>							
	First Tank Bde (T62, T55, T55)	0	Full	3	2nd Line	None	D,E,F	E
	<i>Second Player (deploys first)</i>							
	First Tank Bn	0	Full	3	Seasoned	None	B	-
209.5	Second Tank Bn	0	Full	3	Seasoned	None	B	-
	Third Tank Bn	0	Full	3	Seasoned	None	B	-
	<i>First Player (deploys second)</i>							
	First Tank Bde (1st, 2nd and 4th Bn)	0	Full	3	Seasoned	LAW	B	B
	<i>Second Player (deploys first)</i>							
209.6	First Tank Bn	0	Full	3	Seasoned	None	F	-
	Second Mech Bde (T55)	0	Full	3	2nd Line	RPG-7	F	-
	<i>First Player (deploys second)</i>							
	First Tank Bde (1st, 2nd, 3rd and 4th Paratroop Bn)	0	Full	3	Seasoned	LAW	B,B B,A	B
	<i>Second Player (deploys first)</i>							
	Second Mech Bde (T55)	0	Full	3	2nd Line	RPG-7	G,G, G,G	G
	T-12 Detachment	-	Full	3	2nd Line	None	-	-

HOW TO USE THE AVAILABLE FORCES CHART

On the chart, each Player should locate the Scenario being played. The indicated brigades, battalions, etc., are the Player's forces for the Scenario, composed of the corresponding units listed on the Player's Table of Organization (TO) chart. For example, in Scenario 208.1 the Egyptian Player would receive all of the platoons indicated under the Egyptian "First Tank Brigade" on the TO chart. The status of such units, in terms of their morale, troop quality, etc., is listed on the Available Forces Chart.

- There are two Arab brigades: the First Tank Brigade and the Second Mechanized Infantry Brigade. They are always composed of the battalions and assets indicated on the TO chart. The Israelis have a much more flexible organization, and a single brigade (the First). When an Israeli brigade appears in a Scenario, the specific battalions which compose the brigade are indicated on the Forces

Available Chart. If other Battalions are also present (e.g., the Fourth Paratroop Battalion in Scenario 208.7) these battalions are *not* considered part of the brigade for morale purposes.

- "Full" Strength indicated that the units have the exact number of platoons and vehicles/steps listed for them on the TO Charts.

- If more than one battalion is present in a Scenario, their HQ ratings (if different) are listed in order, beginning with the First (or lowest numbered) Battalion.

- Syrian tank battalions have the specific type of tank (T55 or T62) of which they are composed indicated on the Forces Available Chart. If more than one tank battalion is present in the Scenario, their tank types (if different) are listed in order, beginning with the First (or lowest numbered) Battalion.

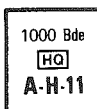
- Abbreviations: **BDE** = Brigade, **Bn** = Battalion, **Detach.** = Detachment; **Mech** = Mechanized, **Reorg.** = Reorganized.

TABLES OF ORGANIZATION

ISRAELI UNITS

BRIGADE ASSETS

(Independent Command)

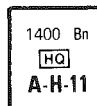


1(1)

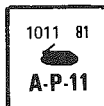
4TH MECHANIZED INFANTRY BATTALION

(5th Battalion identical)

Battalion Assets (Independent Command)

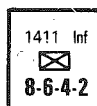


1(1)

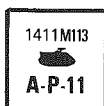


1(1)

1st Mechanized Infantry Company
(2nd and 3rd Companies identical)



3(3)

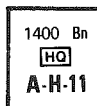


3(4)

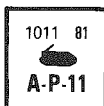
REORGANIZED 4th MECHANIZED INFANTRY BATTALION

(5th Battalion identical)

Battalion Assets (Independent Command)

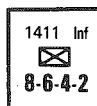


1(1)



1(1)

1st Mechanized Infantry Company
(2nd and 3rd Companies identical)



3(3)



3(4)

4th Tank Company



3(3)

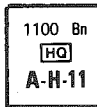
OR



3(3)

1st ARMORED BATTALION

(2nd and 3rd Battalions identical)



1(1)



1(1)

Battalion Assets
(Independent Command)

1st Tank Company (2nd and 3rd Companies identical)



3(3)

OR

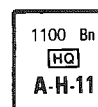


3(3)

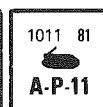
REORGANIZED 1st ARMORED BATTALION

(2nd and 3rd Battalions identical)

Battalion Assets (Independent Command)



1(1)



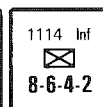
1(1)

First Tank Company

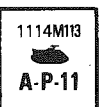
(2nd and 3rd Companies identical)



3(3)



1(3)

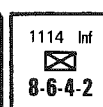


1(4)

OR



3(3)



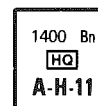
1(3)



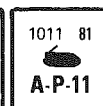
1(4)

4th PARATROOP BATTALION

Battalion Assets (Independent Command)



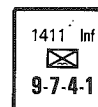
1(1)



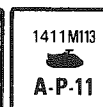
1(1)

1st Paratroop Company

(2nd and 3rd Companies identical)



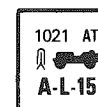
3(3)



3(4)

ANTI-TANK DETACHMENT

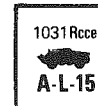
(Independent Command)



3(3)

RECONNAISSANCE DETACHMENT

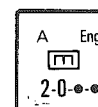
(Independent Command)



2(3)

ENGINEER DETACHMENT

(Independent Command)



9(3)

EGYPTIAN UNITS

1st ARMORED BRIGADE

Brigade Assets (*Independent Command*)

1000 Bde HQ A-H-11	1011 PT76 A-P-7	1013 BR-1 A-L-15	1021 ZSU B-L-7
1(1)	2(4)	1(4)	5(2)

1st TANK BATTALION

(2nd and 3rd Battalions identical)

Battalion Assets (*Independent Command*)

1100 Bn HQ A-H-11

1(1)

1st Tank Company

(2nd and 3rd Companies identical)

1111 T55 B-H-8	OR	1111 T62 B-H-8
3(3)		3(3)

2nd MECHANIZED INFANTRY BRIGADE

Brigade Assets (*Independent Command*)

2000 Bde HQ A-H-11	2051 120 B-P-7	2011 BR-2 A-L-15	2021 ZSU B-L-7
1(1)	2(1)	3(3)	3(3)

Note: Second (leg) Infantry Brigade would be identical to its mechanized counterpart except that no BTR-50 or BTR-60 Armored Personnel Carriers would be included in the infantry battalions.

4th MECHANIZED INFANTRY BATTALION

(5th Battalion identical)

Battalion Assets (*Independent Command*)

1400 Bn HQ A-H-11	2041 82 B-P-7	2031 ATG 1-0-0-0	2031 BT60 B-P-13	2021 ZSU B-L-7
1(1)	1(1)	1(1)	1(1)	2(3)

1st Mechanized Infantry Company

(2nd and 3rd Companies identical)

2411 Inf 4-2-1-0	2411 BT50 B-P-7
3(3)	3(3)

(2nd Mech Bde continues, next column)

6th MECHANIZED BATTALION (part of 2nd Mech Bde)

Battalion Assets (*Independent Command*)

1600 Bn HQ A-H-11	2041 82 B-P-7	2031 ATG 1-0-0-0	2031 BT60 B-P-13	2021 ZSU B-L-7
1(1)	2(1)	1(1)	1(1)	2(3)

1st Mechanized Infantry Company

(2nd and 3rd Companies identical)

2611 Inf 4-2-1-0	2611 BT60 B-P-13
3(3)	3(3)

7th TANK BATTALION

Battalion Assets (*Independent Command*)

1700 Bn HQ A-H-11

1(1)

1st Tank Company

(2nd and 3rd Companies identical)

2711 T55 B-H-8	OR	2711 T62 B-H-8
3(3)		3(3)

ANTI-TANK DETACHMENT

(*Independent Command*)

2061 T12 A-L-8

3(3)

COMMANDO DETACHMENT

(*Independent Command*)

0011 Cmd 3-2-1-0

9(1)

BRIDGING DETACHMENT

(*Independent Command*)

K PMP E-L-8	N TPP E-L-8
3(3)	1(3)

ENGINEER DETACHMENT

(*Independent Command*)

A Eng 2-0-0-0

9(3)

HOW TO USE THE TABLE OF ORGANIZATION (TO) CHART

Refer to the Scenario being played on the Available Forces Chart (pp. 18-19) to determine the specific Companies, Detachments, Battalions, and Brigades present. The Player receives all units shown on the TO Chart for each indicated organization. #(#) = *Number of units of that type (number of vehicles or steps in each unit)*. For example, the Israeli 4th Tank Company would be

composed of the three M60 (or Centurian) platoons designated 1441, 1442, and 1443, with each platoon having three vehicles.

- All Detachments and Battalion/Brigade assets have Independent Command. Each unit identified as a *Company* is treated as such for Command and Morale purposes, with the exception that Mechanized Infantry Companies are considered to comprise two *separate* companies — one infantry and one APC.

- The terms "Tank" and "Armored" are used interchangeably throughout the rule. "Or" indicates that all tank platoons of the indicated Company would be composed of one of the two tank types shown, depending on the Scenario.

- The Israeli Brigade HQ is included in the TO of any group of Israeli Battalions identified as a "Brigade" on the Available Forces Chart.

- Arab ZSU 23/24 units may be omitted if no Israeli aircraft appear in the Scenario.

SYRIAN UNITS

1st ARMORED BRIGADE

Brigade Assets (*Independent Command*)

1000 Bde HQ A-H-11	1011 PT6 A-P-7	1013 BR-1 A-L-15	1021 ZSU B-L-7
1(1)	2(4)	1(4)	5(2)

1st TANK BATTALION

(2nd and 3rd Battalions identical)

Battalion Assets (*Independent Command*)

1100 Bn HQ A-H-11
1(1)

1st Tank Company

(2nd and 3rd Companies identical)

1111 T55 B-H-8	OR	1111 T62 B-H-8
3(3)		3(3)

2nd MECHANIZED INFANTRY BRIGADE

Brigade Assets (*Independent Command*)

2000 Bde HQ A-H-11	2051 120 B-P-7	2011 BR-2 A-L-15	2021 ZSU B-L-7
1(1)	2(1)	3(3)	3(3)

Note: Second (leg) Infantry Brigade would be identical to its mechanized counterpart except that no BMP or BTR-60 Armored Personnel Carriers would be included in the infantry battalions.

5th MECHANIZED INFANTRY BATTALION

Battalion Assets (*Independent Command*)

1500 Bn HQ A-H-11	2031 ATG 1-0-0-0	2031 BT60 B-P-13	2041 82 B-P-7	2021 ZSU B-L-7
1(1)	1(1)	1(1)	2(1)	2(3)

1st Mechanized Infantry Company

2511 Inf 3-2-1-0	2511 BMP A-P-9
3(3)	3(3)

(Second Mech Bde continued next column)

6th MECHANIZED INFANTRY BATTALION

Battalion Assets (*Independent Command*) (Part of Second Mech Bde)

1600 Bn HQ A-H-11	2031 ATG 1-0-0-0	2031 BT60 B-P-13	2041 82 B-P-7	2021 ZSU B-L-7
1(1)	1(1)	1(1)	2(1)	2(3)

1st Mechanized Infantry Company (2nd and 3rd Companies identical)

2611 Inf 3-2-1-0	2611 BT60 B-P-13
3(3)	3(3)

7th TANK BATTALION

Battalion Assets (*Independent Command*)

1700 Bn HQ A-H-11
1(1)

1st Tank Company

(2nd and 3rd Companies identical)

2711 T55 B-H-8	OR	2711 T62 B-H-8
3(3)		3(3)

ANTI-TANK DETACHMENT

(*Independent Command*)

2061 T12 A-L-8
3(3)

COMMANDO DETACHMENT (*Independent Command*)

0011 Cmd 3-2-1-0
9(1)

BRIDGING DETACHMENT

(*Independent Command*)

K PMP E-L-8	N TPP E-L-8
3(3)	1(3)

ENGINEER DETACHMENT

(*Independent Command*)

A Eng 2-0-0-0
9(3)

UNIT DESIGNATIONS

The four-digit designation of each unit (platoon) indicates its place within some higher organization, in the following manner. Reading from left to right, the first digit indicates the unit's **Brigade** or **Regiment**; the second digit indicates the unit's **Battalion**; the third number indicates the unit's **Company**, and the last digit indicates the number of the specific **Platoon** itself. For example, the Israeli M60 unit designated 1233 is the "Third Platoon of the Third Company of the Second Battalion of the First Brigade." Basically, units with the same *first digit* belong to the same Brigade/Regiment, units with the same *first and*

second digit belong to the same Battalion, and units with the same *first three digits* belong to the same company.

- A zero (0) anywhere in a unit's designation indicates that the unit always has Independent Command and does not belong to any one particular organization. The only exception to this is HQ units, which (although they have Independent Command) should appear with their indicated Brigade/Regiment and Battalion.

- Arab HQ units of the Fourth, Fifth, Sixth and Seventh Battalions should have 2 (not 1) as their first digit, as they actually belong to the Second Regiment.

- "Mechanized infantry" units (those that normally ride in APCs) have the same designation as their APCs. For convenience, infantry/APC units with the same designation should be grouped together, although such infantry/APC combinations may be made between any Friendly units, regardless of designation.

- Certain tank units (M60/Centurian and T55/T62) have the same designations, in order to allow Battalions to contain the appropriate tank types, as the Scenario requires.

- Arab vehicular and commando units are printed in the same color, as they can be used in either Egyptian or Syrian organizations.

DATA SHEETS

INFANTRY DATA

Type	Range in Hexes Automatic Weapons				Personnel Anti-tank Weapons	Air Defense
	0	1-2	3-4	5		
Egyptian	4	2	1	0	RPG-7, Sagger (4)	Missile 4
Arab Commando	3	2	1	0	RPG-7, Sagger (4)	Missile 4
Syrian	3	2	1	0	RPG-7, Sagger (4)	Missile 4
Israeli Mech	8	6	4	2	LAW or Carl Gustav or RPG-7 or Dragon (3) or 3.5" bazooka	None
Israeli Paratroop	9	7	4	1	(same as Israeli Mech)	
Israeli Garrison	6	4	2	1	(same as Israeli Mech)	
All Engineers	2	0	0	0	None	None

None: Carl Gustav is Class 2 Medium Main Gun with Ammo Deplete of (2). Sagger, Carl Gustav, and Dragon systems may not be fired by mounted infantry units.
(#) = Ammunition Depletion number.

HEADQUARTERS UNIT DATA

	Arab	Israeli
MVT	11	11
Weapons	None	None
Target Profile	A	A
Armor Class	H	H
Amphib Capable	Yes	Yes
Bridge Type	1	1
Night Equip	IRSL	IRSL
Smoke	Yes	No
Air Defense	Gun 3 Missile 4	Gun 3 Missile 4

Note: All Arab and Israeli HQ units are treated as 3 Vehicles when resolving combat on the Air Defense Combat Strength Chart.

AIR UNIT DATA

	Mig-19 (Arab)	Mig-21 (Arab)	Mirage (Israel)	F4 (Israel)	A4 (Israel)
Air Defense Class	B/B	B/B	C/C	C/B	D/C
Tun Mode	2	2	2	2	2
Loss Mod. Nr.	3/2	2/1	3/2	3/2	2/1
Bombing Strike	MedHow	LtHow	HvyHow	HvyHow	HvyHow
Strafing Strike					
on Vehicle	H	H	K	K	K
on Infantry	5	5	7	7	7
Ammo Deplete	4	4	4	4	5
Air-to-Surface Missile					
Resolved on	None	None	S	S	S
Ammo Deplete	-	-	5/2	5/2	5/2

ARAB HELICOPTER UNIT DATA

	Air Defense Class	Loss Mod. Nr.	Main Gun	Ammo Deplete	ATGM	Transport Capacity
Mi8 (Hip)	E/E	1/*	see Note	6	None	2 platoons

Note: Mi8 may have rockets. If so, on Vehicle: E; on Infantry: 3. Maximum range, 6 hexes. *Helicopter units hit by any missile system are automatically eliminated (there is no loss modification).

VEHICLE UNIT DATA SHEETS EXPLANATION

Type: Lt = Light; Amph = Amphibious; AFV = Armored Fighting Vehicle; APC = Armored Personnel Carrier; Recon = Reconnaissance; Wheel = Wheeled Vehicle; ATGM = Anti-Tank Guided Missile; AT = Anti-Tank; SPAA = SelfPropelled Anti-Aircraft. **Mvt:** Movement Allowance. **Weapon Systems:** type of main gun: Fire Control (Sighting System); Automatic Weapons Systems. If unit is a Mortar Carrier, its type of Section Pattern and minimum and maximum ranges are given (see case 14.6). Hvy = Heavy Main Gun; Med = Medium Main Gun (Class 1, 2 or 3); (#) = Ammunition Depletion number for the preceding weapon system; Tur = Turret; Coax = Coaxial; MG = Machinegun; * = externally-mounted weapon system. **Armor Class:** P = Protected; H = Hard; L = Light. **Amphibious Capability:** Whether or not the unit may use Amphibious Movement. Snorkel = non-amphibious unit that may snorkel. **Bridge Class:** (see Case 24.2). **Night Equipment:** IR = Infrared; WL = Whitelight; SL = Searchlight. All units are considered to have Passive Infrared. **Smoke:** Whether or not the unit is capable of producing vehicle smoke (see Case 16.4). This option may only be used in Scenarios set in the 1980s. **Air Defense Systems:** (#) = Ammunition Depletion number; * = Externally Mounted weapon system.

AIR UNIT DATA SHEET EXPLANATIONS

-/- = Value used when air units are resolving attacks by Enemy Gun/Missile weapon systems. Aircraft HIT by Enemy Missile 4 weapon systems use their **Gun** Loss Modification number when resolving the effect of combat. * Helicopter units hit by any Enemy Missile system are automatically eliminated (there is no loss modification.).

VEHICLE UNIT DATA (Arab)

Vehicle	Type	MVT	Weapon Type(s)	Target Profile	Armor Class	Amphib Cap	Bridge Type	Night Equip	Smoke	Air Defense
PT 76	Lt Amph Recon Tank	7	Med 2 (3); Coax MG	A	P	Yes	1	WLSL	Yes	Missile 4*
T62A	Tank	8	Hvy; Optical RF (2); Tur MG*; Coax MG	B	H	Snorkel	3	IRSL; WRS�	Yes	Missile 4*;
T55	Tank	8	Hvy; Optical (2); Tur MG*; Coax MG	B	H	Snorkel	3	IRSL	Yes	Missile 4*; Gun 3*
BMP	AFV (mixed)	9	Sagger (5); Med 2 (3); Coax MG* may use only one weapon at a time	A	P	Yes	1	IRSL	Yes	Missile 4*;
BTR-60 APC	Amph Wheel (mixed)	13	Tur MG*; Coax MG	B	P	Yes	1	None	No	Missile 4*; Gun 3*
BRDM 1	Amphib Recon	15	Coax MG	A	L	Yes	1	IRSL	No	Missile 4*
120mm	Mortar Carrier	7	Tur MG*; Lt Howz (min/max range: 2/28)	B	P	Yes	1	IRSL	No	Missile 4*; Gun 3*
BRDM 2	ATGM	15	Swatter or Sagger ATGM (4); Coax MG	A	L	Yes	1	IRSL	No	Missile 4*
T12	AT Gun	8	Med 1 (3)	A	L	No	1	IRSL	No	Missile 4*
ZSU23/24	SP AA	7	Tur MG*	B	L	No	1	None	No	Gun 1 (4)
82mm	Mortar Carrier	7	Tur MG*; Lt Howz Sec (min/max range: 2/17)	B	P	Yes	1	IRSL	No	Missile 4*; Gun 3*
PMP or TPP	Bridging	8	Tur MG*	E	L	No	4	None	No	Gun 3*
BTR-50	APC(h)	7	Tur MG*	B	P	Yes	1	None	No	Gun 3*

VEHICLE UNIT DATA (Israeli)

Vehicle	Type	MVT	Weapon Type(s)	Target Profile	Armor Class	Amphib Cap	Bridge Type	Night Equip	Smoke	Air Defense
M60A1	Tank	8	Hvy; Coincident RF (2); Tur MG*; Coax MG	D	H	No	4	WLSL	No	Gun 3*
M113	APC (h)	11	3 x Tur MG*	A	P	Yes	1	None	No	Gun 3*
AT	Jeep AT	15	Med 2 (4)* or TOW	A	L	No	1	None	No	Gun 3*
Centurion	Tank	8	Hvy; Coincident (2); Tur MG*; Coax MG	C	H	No	None	WLSL	Yes	Gun 3*
81mm	Mrtr Carrier	11	Tur MG*; Med Mrtr (min/max range: 2/17)	A	P	No	2	IR	No	None
Rece	Recon	15	Tur MG*	A	L	No	1	None	No	Gun 3*

Mech War 2 (Suez to Golan Game) Counter Section Nr. 3 (200 pieces): Front

Quantity of Sections of this identical type in *Suez to Golan* or *Mech War 2*: 1
Quantity of Sections (all types) in *Suez to Golan*: 4; in *Mech War 2*: 8

Copyright © 1978, Simulations Publications, Inc., New York, N.Y., 10010

1111 M60 D-H-8	1112 M60 D-H-8	1113 M60 D-H-8	1121 M60 D-H-8	1122 M60 D-H-8	1123 M60 D-H-8	1131 M60 D-H-8	1132 M60 D-H-8	1133 M60 D-H-8	1211 M60 D-H-8
1212 M60 D-H-8	1213 M60 D-H-8	1221 M60 D-H-8	1222 M60 D-H-8	1223 M60 D-H-8	1231 M60 D-H-8	1232 M60 D-H-8	1233 M60 D-H-8	1311 M60 D-H-8	1312 M60 D-H-8

1313 M60 D-H-8	1321 M60 D-H-8	1322 M60 D-H-8	1323 M60 D-H-8	1331 M60 D-H-8	1332 M60 D-H-8	1333 M60 D-H-8	1111 Cent C-H-8	1112 Cent C-H-8	1113 Cent C-H-8
1121 Cent C-H-8	1122 Cent C-H-8	1123 Cent C-H-8	1131 Cent C-H-8	1132 Cent C-H-8	1133 Cent C-H-8	1211 Cent C-H-8	1212 Cent C-H-8	1213 Cent C-H-8	1221 Cent C-H-8

1222 Cent C-H-8	1223 Cent C-H-8	1231 Cent C-H-8	1232 Cent C-H-8	1233 Cent C-H-8	1311 Cent C-H-8	1312 Cent C-H-8	1313 Cent C-H-8	1321 Cent C-H-8	1322 Cent C-H-8
1323 Cent C-H-8	1331 Cent C-H-8	1332 Cent C-H-8	1333 Cent C-H-8	1411 M113 A-P-11	1412 M113 A-P-11	1413 M113 A-P-11	1421 M113 A-P-11	1422 M113 A-P-11	1423 M113 A-P-11

1431 M113 A-P-11	1432 M113 A-P-11	1433 M113 A-P-11	1511 M113 A-P-11	1512 M113 A-P-11	1513 M113 A-P-11	1521 M113 A-P-11	1522 M113 A-P-11	1523 M113 A-P-11	1531 M113 A-P-11
1532 M113 A-P-11	1533 M113 A-P-11	1114 M113 A-P-11	1124 M113 A-P-11	1134 M113 A-P-11	1214 M113 A-P-11	1224 M113 A-P-11	1314 M113 A-P-11	1324 M113 A-P-11	1334 M113 A-P-11

1234 M113 A-P-11	1411 Inf 8-6-4-2	1412 Inf 8-6-4-2	1413 Inf 8-6-4-2	1421 Inf 8-6-4-2	1422 Inf 8-6-4-2	1423 Inf 8-6-4-2	1431 Inf 8-6-4-2	1432 Inf 8-6-4-2	1433 Inf 8-6-4-2
1511 Inf 8-6-4-2	1512 Inf 8-6-4-2	1513 Inf 8-6-4-2	1521 Inf 8-6-4-2	1522 Inf 8-6-4-2	1523 Inf 8-6-4-2	1531 Inf 8-6-4-2	1532 Inf 8-6-4-2	1533 Inf 8-6-4-2	1114 Inf 8-6-4-2

1124 Inf 8-6-4-2	1134 Inf 8-6-4-2	1214 Inf 8-6-4-2	1224 Inf 8-6-4-2	1234 Inf 8-6-4-2	1314 Inf 8-6-4-2	1324 Inf 8-6-4-2	1334 Inf 8-6-4-2	1411 Inf 9-7-4-1	1412 Inf 9-7-4-1
1413 Inf 9-7-4-1	1421 Inf 9-7-4-1	1422 Inf 9-7-4-1	1423 Inf 9-7-4-1	1431 Inf 9-7-4-1	1432 Inf 9-7-4-1	1433 Inf 9-7-4-1	1011 81 A-P-11	1012 81 A-P-11	1013 81 A-P-11

1014 81 A-P-11	1015 81 A-P-11	1016 81 A-P-11	1017 81 A-P-11	1018 81 A-P-11	1019 81 A-P-11	1031 Rcce A-L-15	1032 Rcce A-L-15	1021 AT A-L-15	1022 AT A-L-15
1023 AT A-L-5	1041 Gar 6-4-2-1	1042 Gar 6-4-2-1	1043 Gar 6-4-2-1	1044 Gar 6-4-2-1	1045 Gar 6-4-2-1	1000 Bde A-H-11	1100 Bn A-H-11	1200 Bn A-H-11	1300 Bn A-H-11

ISRAELI

1400 Bn A-H-11	1500 Bn A-H-11	1051 A4 Low	1441 M60 D-H-8	1442 M60 D-H-8	1443 M60 D-H-8	1541 M60 D-H-8	1542 M60 D-H-8	1543 M60 D-H-8	1441 Cent C-H-8
1052 F4 Low	1053 Mir Low	1442 Cent C-H-8	1443 Cent C-H-8	1541 Cent C-H-8	1542 Cent C-H-8	1543 Cent C-H-8			

1111 T55 B-H-8	1112 T55 B-H-8	1113 T55 B-H-8	1121 T55 B-H-8	1122 T55 B-H-8	1123 T55 B-H-8	1131 T55 B-H-8	1132 T55 B-H-8	1133 T55 B-H-8	1211 T55 B-H-8
1212 T55 B-H-8	1213 T55 B-H-8	1221 T55 B-H-8	1222 T55 B-H-8	1223 T55 B-H-8	1231 T55 B-H-8	1232 T55 B-H-8	1233 T55 B-H-8	1311 T55 B-H-8	1312 T55 B-H-8

ARAB

1051 A4
High

1053 Mir
High

1052 F4
High

Mech War 2 (Suez to Golan Game) Counter Section Nr. 4 (200 pieces): Front

Quantity of Sections of this identical type in Suez to Golan or Mech War 2: 1
Quantity of Sections (all types) in Suez to Golan: 4; in Mech War 2: 8

Copyright © 1978, Simulations Publications, Inc., New York, N.Y., 10010

1313 T55 B-H-8	1321 T55 B-H-8	1322 T55 B-H-8	1323 T55 B-H-8	1331 T55 B-H-8	1332 T55 B-H-8	1333 T55 B-H-8	2711 T55 B-H-8	2712 T55 B-H-8	2713 T55 B-H-8
2721 T55 B-H-8	2722 T55 B-H-8	2723 T55 B-H-8	2731 T55 B-H-8	2732 T55 B-H-8	2733 T55 B-H-8	1111 T62 B-H-8	1112 T62 B-H-8	1113 T62 B-H-8	1121 T62 B-H-8

1122 T62 B-H-8	1123 T62 B-H-8	1131 T62 B-H-8	1132 T62 B-H-8	1133 T62 B-H-8	1211 T62 B-H-8	1212 T62 B-H-8	1213 T62 B-H-8	1221 T62 B-H-8	1222 T62 B-H-8
1223 T62 B-H-8	1231 T62 B-H-8	1232 T62 B-H-8	1233 T62 B-H-8	1311 T62 B-H-8	1312 T62 B-H-8	1313 T62 B-H-8	1321 T62 B-H-8	1322 T62 B-H-8	1323 T62 B-H-8

1331 T62 B-H-8	1332 T62 B-H-8	1333 T62 B-H-8	2711 T62 B-H-8	2712 T62 B-H-8	2713 T62 B-H-8	2721 T62 B-H-8	2722 T62 B-H-8	2723 T62 B-H-8	2731 T62 B-H-8
2732 T62 B-H-8	2733 T62 B-H-8	2511BT50 B-P-7	2512BT50 B-P-7	2513BT50 B-P-7	2521BT50 B-P-7	2522BT50 B-P-7	2523BT50 B-P-7	2531BT50 B-P-7	2532BT50 B-P-7

2533BT50 B-P-7	2411BT50 B-P-7	2412BT50 B-P-7	2413BT50 B-P-7	2421BT50 B-P-7	2422BT50 B-P-7	2423BT50 B-P-7	2431BT50 B-P-7	2432BT50 B-P-7	2433BT50 B-P-7
2511BMP A-P-9	2512BMP A-P-9	2513BMP A-P-9	2521BMP A-P-9	2522BMP A-P-9	2523BMP A-P-9	2531BMP A-P-9	2532BMP A-P-9	2533BMP A-P-9	2611BT60 B-P-13

2612BT60 B-P-13	2613BT60 B-P-13	2621BT60 B-P-13	2622BT60 B-P-13	2623BT60 B-P-13	2631BT60 B-P-13	2632BT60 B-P-13	2633BT60 B-P-13	1011PT76 A-P-7	1012PT76 A-P-7
0011 Cmd 3-2-1-0	0012 Cmd 3-2-1-0	0013 Cmd 3-2-1-0	0014 Cmd 3-2-1-0	0015 Cmd 3-2-1-0	0016 Cmd 3-2-1-0	0017 Cmd 3-2-1-0	0018 Cmd 3-2-1-0	0019 Cmd 3-2-1-0	

ARAB

1013 BR-1 A-L-15	2011 BR-2 A-L-15	2012 BR-2 A-L-15	2013 BR-2 A-L-15	1021 ZSU B-L-7	1022 ZSU B-L-7	1023 ZSU B-L-7	1024 ZSU B-L-7	1025 ZSU B-L-7	2021 ZSU B-L-7
2022 ZSU B-L-7	2023 ZSU B-L-7	2024 ZSU B-L-7	2025 ZSU B-L-7	2026 ZSU B-L-7	2027 ZSU B-L-7	2028 ZSU B-L-7	2029 ZSU B-L-7	2031 ATG 1-0-0-0	2032 ATG 1-0-0-0

2033 ATG 1-0-0-0	2031 BT60 B-P-13	2032 BT60 B-P-13	2033 BT60 B-P-13	2041 B2 B-P-7	2042 B2 B-P-7	2043 B2 B-P-7	2044 B2 B-P-7	2045 B2 B-P-7	2046 B2 B-P-7
2051 120 B-P-7	2052 120 B-P-7	2061 T12 A-L-8	2062 T12 A-L-8	2063 T12 A-L-8	1000 Bde A-H-11	2000 Bde A-H-11	1100 Bn A-H-11	1200 Bn A-H-11	1300 Bn A-H-11

1400 Bn <div>HQ</div> <div>A-H-11</div>	1500 Bn <div>HQ</div> <div>A-H-11</div>	1600 Bn <div>HQ</div> <div>A-H-11</div>	1700 Bn <div>HQ</div> <div>A-H-11</div>	0032Mi21 <div></div> <div>Low</div>			2411 Inf <div></div> <div>4-2-1-0</div>	2412 Inf <div></div> <div>4-2-1-0</div>	2413 Inf <div></div> <div>4-2-1-0</div>	
0021 Mi8 <div></div> <div>NOE</div>	0022 Mi8 <div></div> <div>NOE</div>	0023 Mi8 <div></div> <div>NOE</div>	0032Mi19 <div></div> <div>Low</div>				2421 Inf <div></div> <div>4-2-1-0</div>	2422 Inf <div></div> <div>4-2-1-0</div>	2423 Inf <div></div> <div>4-2-1-0</div>	2431 Inf <div></div> <div>4-2-1-0</div>

EGYPTIAN

2432 Inf 4-2-1-0	2433 Inf 4-2-1-0	2511 Inf 4-2-1-0	2512 Inf 4-2-1-0	2513 Inf 4-2-1-0	2521 Inf 4-2-1-0	2522 Inf 4-2-1-0	2523 Inf 4-2-1-0	2531 Inf 4-2-1-0	2532 Inf 4-2-1-0
2533 Inf 4-2-1-0	2611 Inf 4-2-1-0	2612 Inf 4-2-1-0	2613 Inf 4-2-1-0	2621 Inf 4-2-1-0	2622 Inf 4-2-1-0	2623 Inf 4-2-1-0	2631 Inf 4-2-1-0	2632 Inf 4-2-1-0	2633 Inf 4-2-1-0

	2611 Inf 3-2-1-0	2612 Inf 3-2-1-0	2613 Inf 3-2-1-0	2621 Inf 3-2-1-0	2622 Inf 3-2-1-0	2623 Inf 3-2-1-0	2631 Inf 3-2-1-0	2632 Inf 3-2-1-0	2633 Inf 3-2-1-0
	2511 Inf 3-2-1-0	2512 Inf 3-2-1-0	2513 Inf 3-2-1-0	2521 Inf 3-2-1-0	2522 Inf 3-2-1-0	2523 Inf 3-2-1-0	2531 Inf 3-2-1-0	2532 Inf 3-2-1-0	2533 Inf 3-2-1-0

SYRIAN

0032 Mi21



High

0032 Mi19



High

0023 Mi8



Low

0022 Mi8



Low

0021 Mi8



Low

Mech War 2 Counter Section Nr. 5 (200 pieces): Front
 Quantity of Sections of this identical type in *Red Star/White Star* or *Suez to Golan*: 1; in *Mech War 2*: 2
 Quantity of Sections (all types) in *Red Star/White Star* or *Suez to Golan*: 4; in *Mech War 2*: 8

Copyright © 1978, Simulations Publications, Inc., New York, N.Y., 10010










1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1

1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
















1	1	1	1	1	3	3	3	3	3
3	3	3	3	3	3	3	3	3	3

3	3	3	3	3	3	3	3	3	3
3	3	3	3	3	3	3	3	3	3





















3	3	3	3	3	3	3	3	3	3
3	3	3	3	3	3	3	3	3	3





















3	3	3	3	3	3	3	3	3	3
									

									
					In Colmn	In Colmn	In Colmn	In Colmn	In Colmn































In Colmn	In Colmn	In Colmn	In Colmn	In Colmn					
									

NEUTRAL



















									
									











									
Bty	Bty	Bty	Bty	Bty	Bty	Bty	Bty	Bty	Bty
									

[illegible]

									
									
ARAB/SOVIET									
									
Lt Howz ★	Lt Howz ★	Lt Howz ★	Lt Howz ★	Lt Howz ★	Lt Howz ★	Med Mrtr ★	Med Mrtr ★	Med Mrtr ★	Med Mrtr ★

Lt Howz Bn	Med Howz Bn	Med Howz Bn	Med Howz Bn	Med Howz Bn	Med Howz ★	Med Howz ★	Med Howz ★	Lt Howz ★	Lt Howz ★
Hvy Howz Bty	Hvy Howz Bty	Hvy Howz Bty	Hvy Howz Bty	Hvy Howz Bty	Med Howz ★	Med Howz ★	Med Howz ★	Med Howz ★	Med Howz ★
NATO/ISRAELI									
Hvy Howz Sec	Lt Howz Bty	Lt Howz Bty	Lt Howz Bty	Lt Howz Bty	Med Howz Bty	Med Howz Bty	Med Howz Bty	Med Howz Bty	Med Howz Bty
Lt Howz Sec	Lt Howz Sec	Lt Howz Sec	Med Howz Sec	Med Howz Sec	Med Howz Sec	Med Howz Sec	Hvy Howz Sec	Hvy Howz Sec	Hvy Howz Sec
Lt Mrtr Sec	Med Mrtr Sec	Med Mrtr Sec	Med Mrtr Sec	Lt Howz Sec	Lt Howz Sec	Lt Howz Sec	Lt Howz Sec	Lt Howz Sec	Lt Howz Sec
									Lt Mrtr Sec

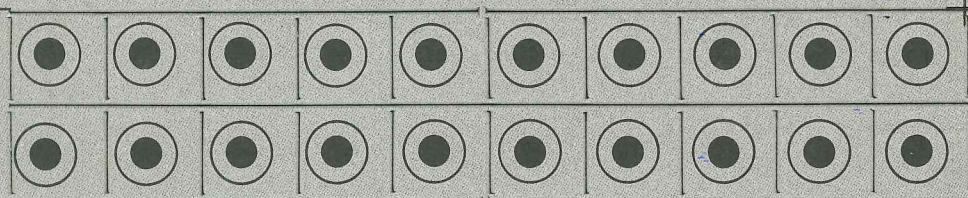
								
								
NEUTRAL								
								
			Short Halt	Short Halt	Short Halt	Short Halt		

Lt Howz Bty	Med Howz Bn	Med Howz Bn	Med Howz Bn	Med Howz Bn	Med Howz Bn	Lt Howz Bn	Lt Howz Bn	Lt Howz Bn	Lt Howz Bn
Lt Howz Bty	Lt Howz Bty	Lt Howz Bty	Lt Howz Bty	Lt Howz Bty	Lt Howz Bty	Lt Howz Bty	Lt Howz Bty	Lt Howz Bty	Lt Howz Bty
ARAB/SOVIET									
Lt Howz Sec	Lt Howz Sec	Lt Howz Sec	Lt Howz Sec	Lt Howz Sec	Lt Howz Sec	SHvy Howz Bty	Hvy Howz Bty	Lt Howz Bty	Lt Howz Bty
				Lt Howz Sec	Lt Howz Sec	Lt Howz Sec	Lt Howz Sec	Lt Howz Sec	Lt Howz Sec
NATO/ISRAELI									
									
									

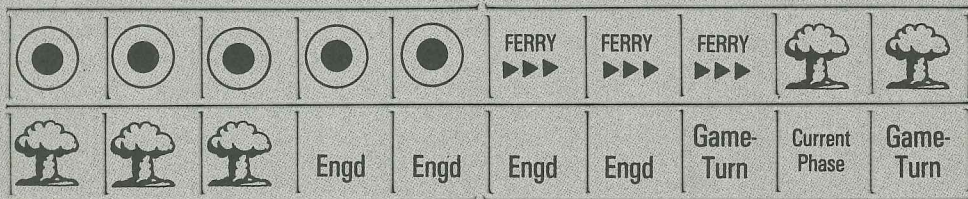
Mech War 2 Counter Section Nr. 6 (200 pieces): Front

Quantity of Sections of this identical type in Red Star/White Star or Suec to Golan: 1; in Mech War 2: 2

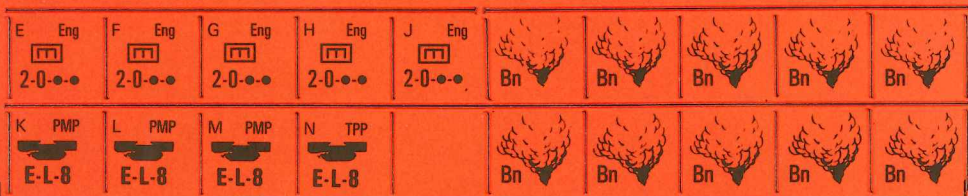
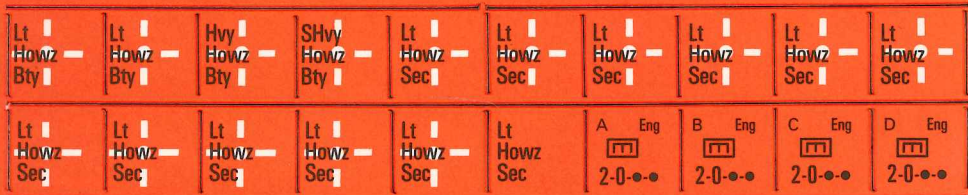
Quantity of Sections (all types) in Red Star/White Star or Suec to Golan: 4; in Mech War 2: 8



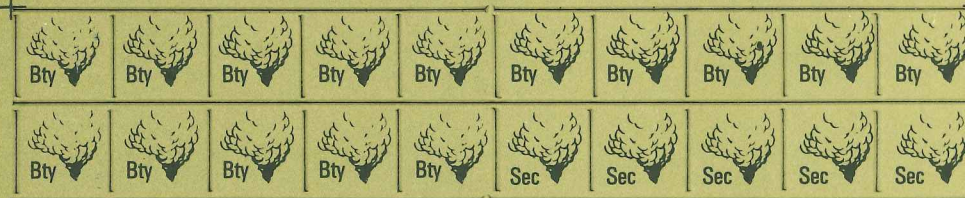
NEUTRAL



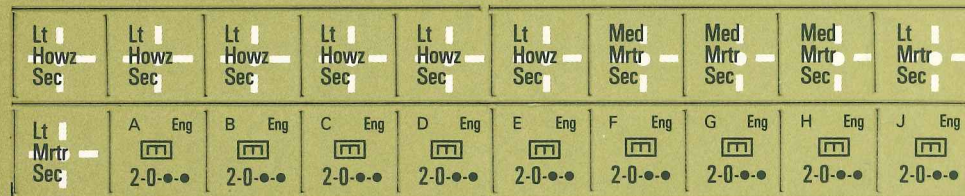
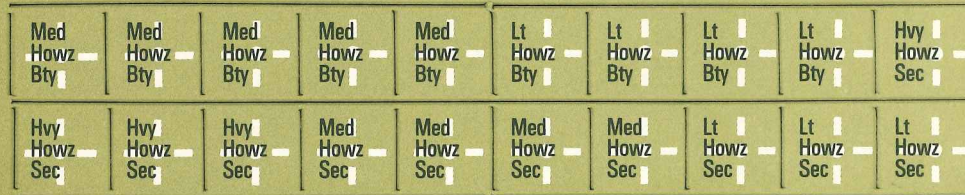
ARAB/SOVIET

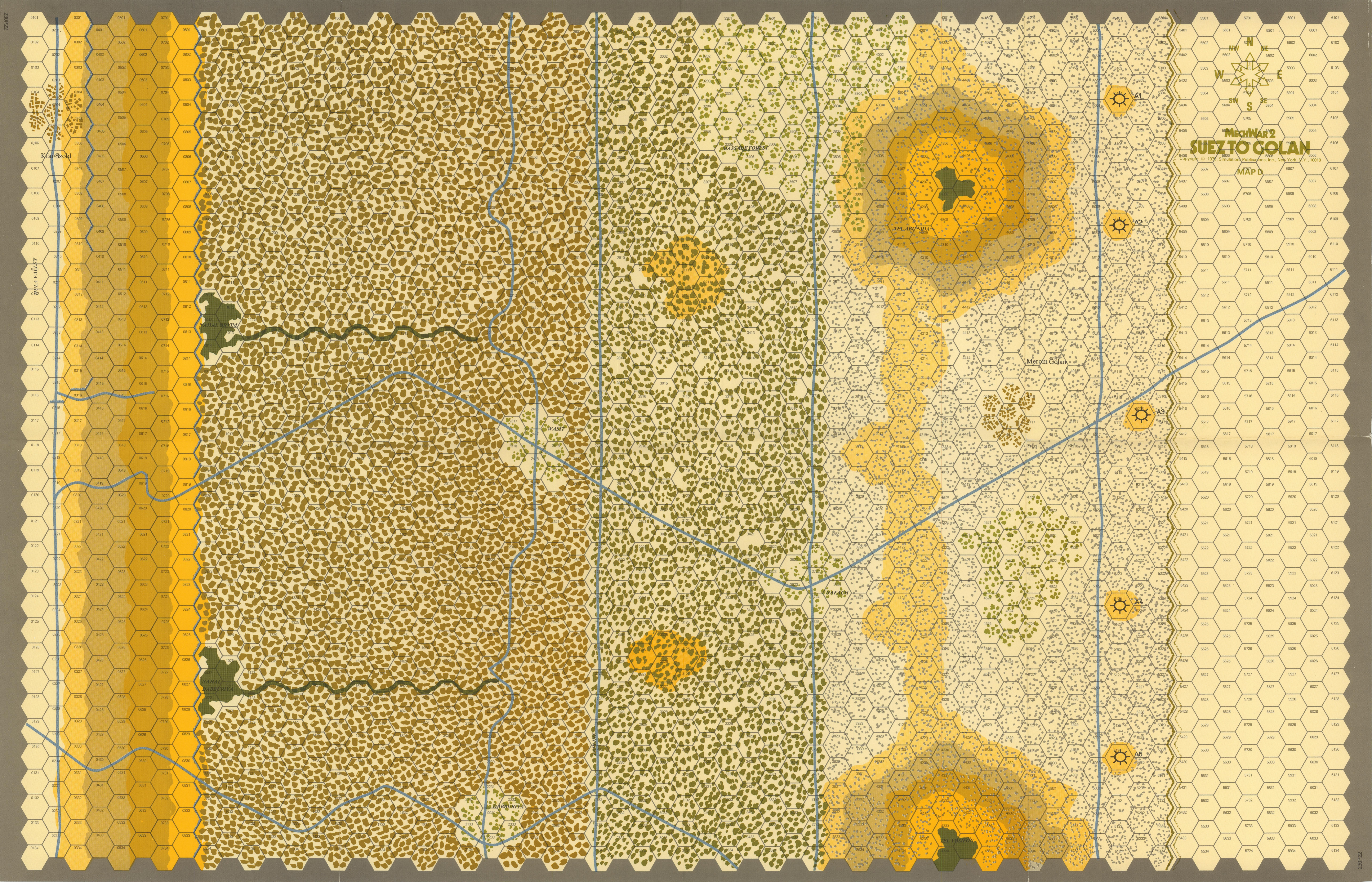


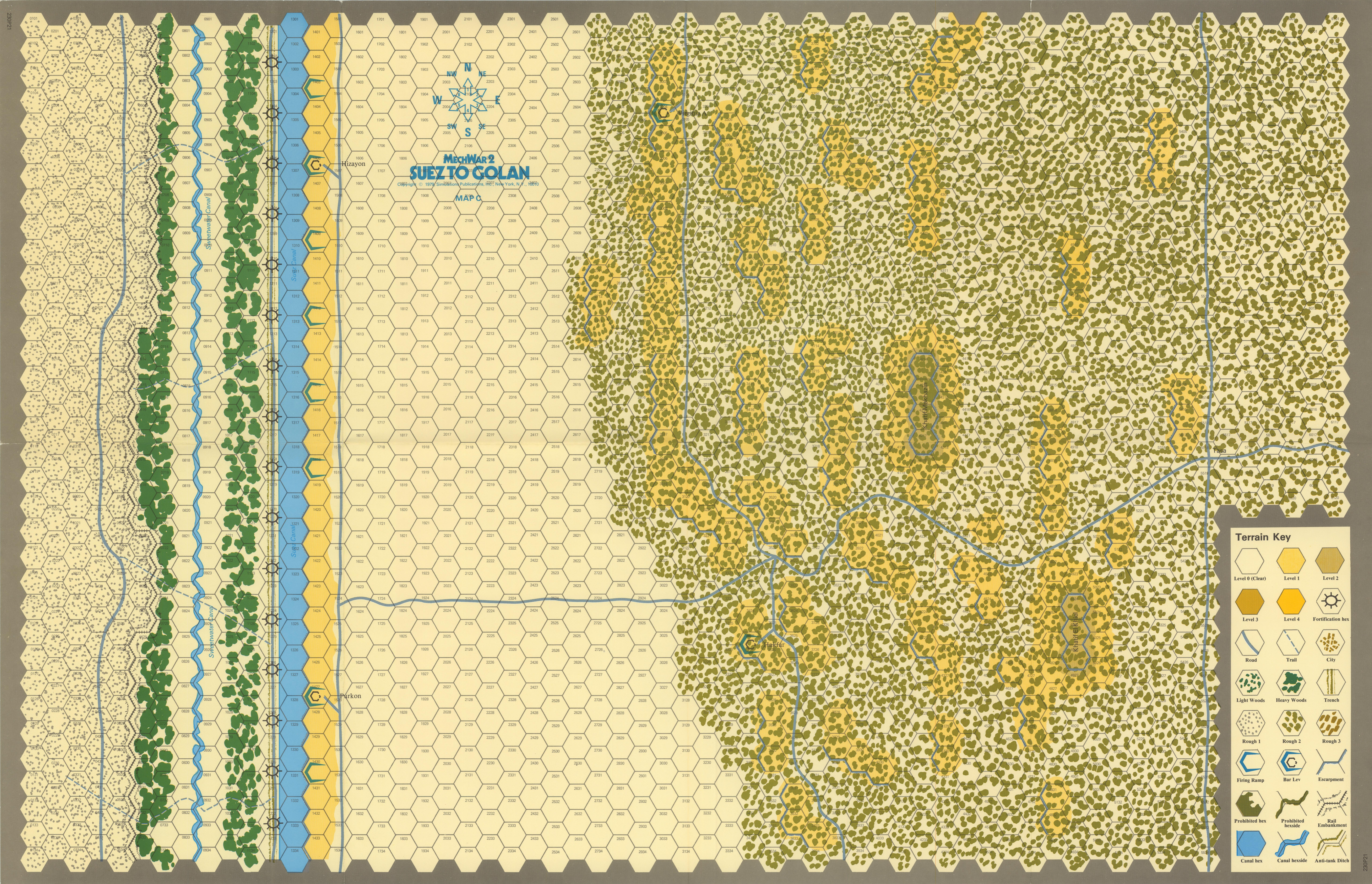
Copyright © 1978, Simulations Publications, Inc., New York, N.Y., 10010



NATO/ISRAELI







Terrain Key

Level 0 (Clear)	Level 1	Level 2
Level 3	Level 4	Fortification hex
Road	Trail	City
Light Woods	Heavy Woods	Trench
Rough 1	Rough 2	Rough 3
Firing Ramp	Bar Lev	Escarpment
Prohibited hex	Prohibited hexside	Rail Embankment
Canal hex	Canal hesside	Anti-tank Ditch