

# **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*.

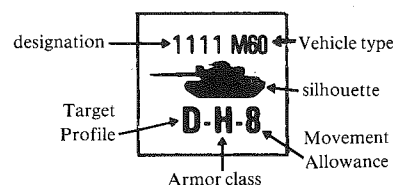
[3.31] There are two types of organizational counters: *combat units* and *non-combat units*. Combat units are represented, for play purposes, by two counters: the unit's particular organizational counter and a combat strength counter, which is always placed *under* the organizational counter and represents 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.

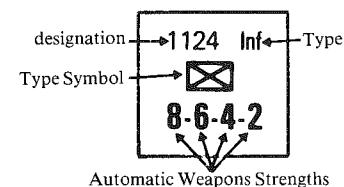
[3.33] Most organizational counters are printed on only one side, allowing them to be placed "face-down" and hidden on the map until observed by the Enemy Player.

#### [3.34] Sample Units:

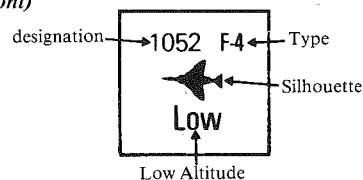
##### Vehicle Unit



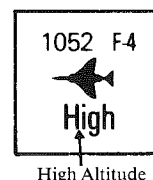
##### Infantry Unit



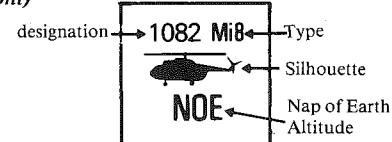
##### Aircraft Unit (Front)



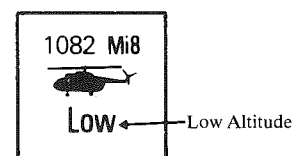
(Back)



##### 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	Back (off-target):
	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.

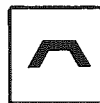
[5.16] Engineer units performing engineer functions with a Bound Command are not required to move.

#### [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:

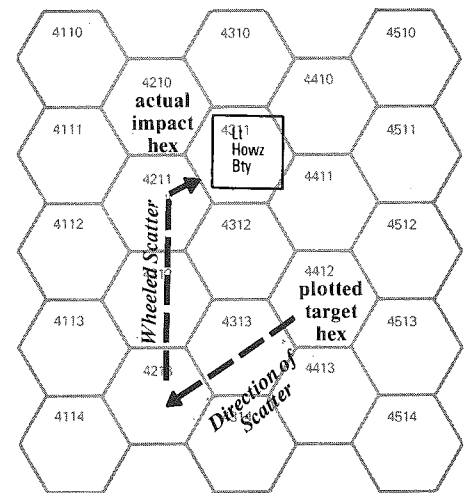
### SCATTERED ONE HEX:

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

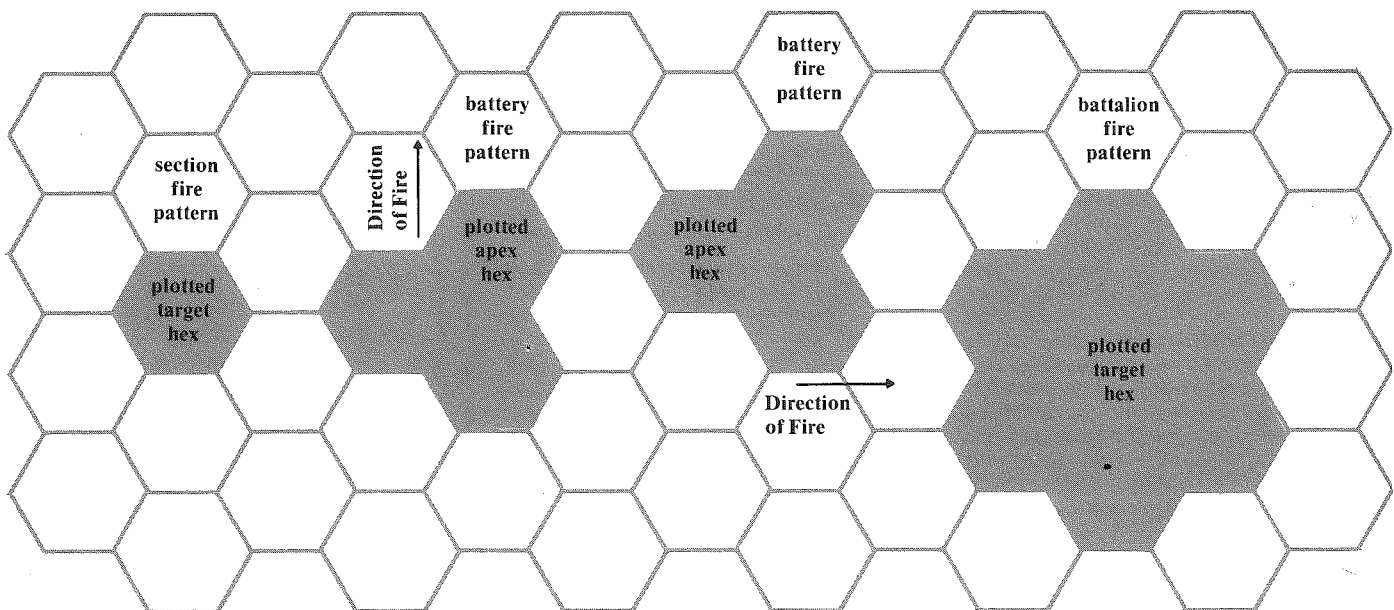
The effect of indirect fire on both vehicular and infantry units in each impact hex is reflected on the Indirect Fire Combat Results Tables (14.31 and 14.32). Depending on the results of Scatter the fire will either be *On-Target* or *Scattered*. There is a separate Combat Results Table for each of these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



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.

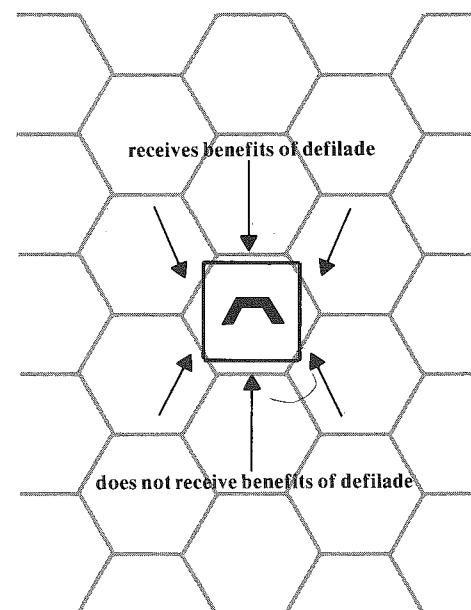
[15.32] Vehicular units in defilade receive no benefit from being in defilade when defending against an indirect fire or close assault attack.

#### [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:

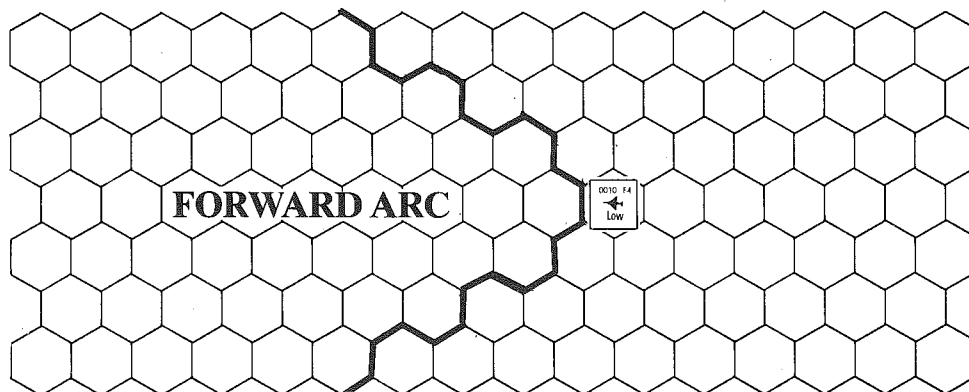
- (A) The type involved
- (B) The Game-Turn in which the strike will occur
- (C) If the strike is to be a bombing strike, the target hex of that strike.

[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.

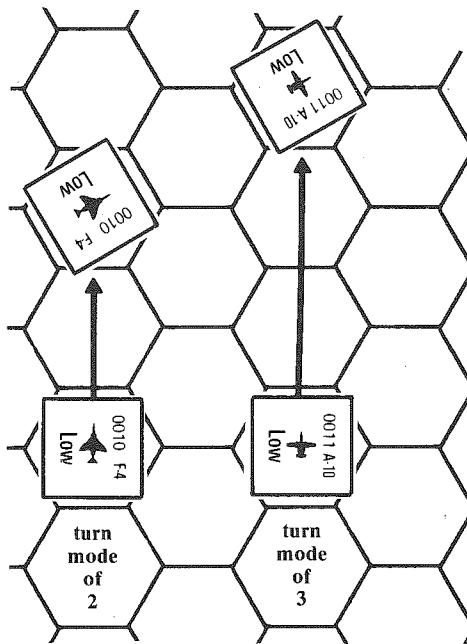
[20.13] While on the map, aircraft *must* be at either *high* or *low* altitude. Aircraft may switch freely between the two (flip the counter over to its appropriate side). Altitude affects an aircraft's Line of Sight and observation, as well as its defensive and offensive capabilities.

### 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.

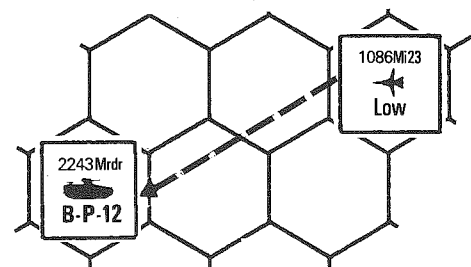
[20.23] Aircraft equipped with smart bombs may attempt to destroy bridges and ferries by conducting a bombing strike on one of the bridge or ferry hexes. The strike is conducted normally, with the exception that a separate die roll is made when resolving the results of the air strike. If a combat result 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
Light mortar, light howitzer	impact hex and two adjacent hexes in all directions
Medium mortar	impact hex and three adjacent hexes in all directions
Medium howitzer	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

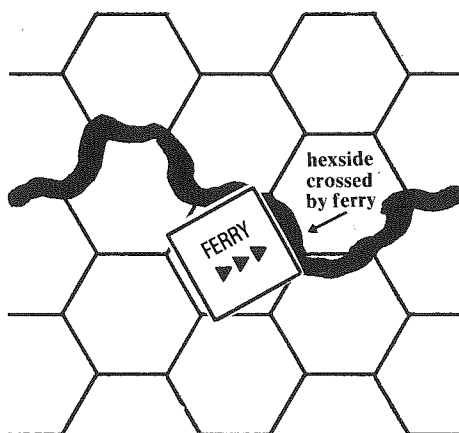
### GENERAL RULE:

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.

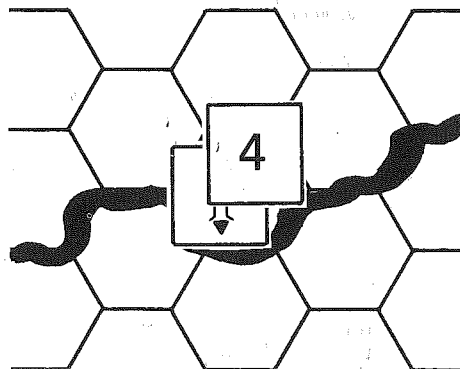
## [24.2] FIXED BRIDGES

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
Small	2	6	2
Medium	2	12	4
Large	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] ENGINEERS 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 defilade, 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.

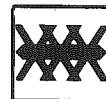
[29.32] Dismounted infantry units accompanied by Friendly engineer squads have -2 added to all of their defending die rolls on the Loss Modification Table when defending against close assault in town hexes. There is no additional effect for having more than one engineer squad in the hex.

## [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**



# **MECHWAR 2**

# **RED STAR/**

# **WHITE STAR**

# **EXCLUSIVE RULES**

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

## **100.0 INTRODUCTION**

### **101.0 SPECIAL TERRAIN FEATURES**

- 101.1 The Game Maps
- 101.2 Lake Horloff

### **102.0 SPECIAL UNITS**

- 102.1 Soviet Engineer Platoons
- 102.2 ATGM Squads (Teams)
- 102.3 Beehive Rounds
- 102.4 Chobham Armor
- 102.5 Five Vehicle Platoons
- 102.6 Motorcycles
- 102.7 NATO Artillery-Delivered Minefields
- 102.8 Aircraft Weapons Load
- 102.9 Shillelagh Missiles

### **103.0 WEATHER**

- 103.1 Fog
- 103.2 Rain and Mud
- 103.3 Snow
- 103.4 Temperature
- 103.5 Wind
- 103.6 Weather Effects Chart
- 103.7 Advanced Observation Range Table
- 103.8 Night and Weather

### **104.0 INDEPENDENT COMMAND**

- 104.1 The Concept of Independent Command
- 104.2 Effects of Independent Command

### **105.0 DOCTRINE**

- 105.1 Soviet Doctrine
- 105.2 NATO Doctrine
- 105.3 Effects of Breaking Doctrine

### **106.0 CHEMICAL WARFARE**

- 106.1 Vehicle Units
- 106.2 Infantry Units

### **106.3 Changing Status**

### **106.4 Delivery of Chemical Weapons**

### **106.5 Types and Effects of Chemical Weapons**

### **106.6 Spread and Dispersal of Chemical Weapons**

## **107.0 TACTICAL NUCLEAR WARFARE**

### **107.1 Load Time**

### **107.2 Plot Time**

### **107.3 Mission Abort (Optional)**

### **107.4 Delivery Systems**

### **107.5 Prompt Effects**

### **107.6 Nuclear Combat Tables**

### **107.7 Environmental Effects**

### **107.8 Delayed Nuclear Effects**

### **107.9 Enhanced Radiation (Neutron) Warhead (Hypothetical)**

## **108.0 SCENARIO DESIGN**

### **108.1 General Introduction**

### **108.2 The Physical Environment**

### **108.3 First Player Basic Information**

### **108.4 Second Player**

### **108.5 Reinforcements (Basic Units)**

### **108.6 Special Information (First Player)**

### **108.7 Special Information (Second Player)**

### **108.8 Special Scenario Rules**

### **108.9 Victory Conditions**

## **109.0 MULTI-PLAYER GAMES**

### **109.1 Communications between Jammed Headquarters in Multi-Player Games**

### **109.2 Elimination of HQ Units**

### **109.3 Victory Points**

### **109.4 Higher-Level Assets**

### **109.5 Company Commanders**

**110.0 FOG OF WAR RULES**

- 110.1 Random Selection
- 110.2 Scenario Details Subject to Random Selection
- 110.3 Variable Weather
- 110.4 Notes on Soviet Tactics
- 110.5 Soviet Formations
- 110.6 NATO Formations

**SCENARIOS****111.0 A CHANCE ACQUAINTANCE**

- 111.1 General Information
- 111.2 Physical Environment
- 111.3 Notes on Soviet Forces
- 111.4 Notes on US Forces
- 111.5 Reinforcements
- 111.6 Soviet Special Information
- 111.7 US Special Information
- 111.8 Victory Conditions

**112.0 LOST IN THE BLACK FOREST**

- 112.1 General Information
- 112.2 Physical Environment
- 112.3 Notes on US Forces
- 112.4 Notes on Soviet Forces
- 112.5 Reinforcements
- 112.6 Special Information (First Player)
- 112.7 Second Player Special Information
- 112.8 Special Scenario Rules
- 112.9 Victory Conditions

**113.0 CUSTER'S LAST STAND**

- 113.1 General Information
- 113.2 Physical Environment
- 113.3 Notes on Soviet Forces
- 113.4 Notes on US Forces
- 113.5 Reinforcements
- 113.6 Soviet Special Information
- 113.7 US Special Information
- 113.8 Victory Information

**114.0 THE GAUNTLET**

- 114.1 General Information
- 114.2 Physical Environment
- 114.3 Notes on Soviet Forces
- 114.4 Notes on US Forces
- 114.5 Reinforcements
- 114.6 Soviet Special Information
- 114.7 US Special Information
- 114.8 Special Rule
- 114.9 Victory Conditions

**115.0 FROM THE HALLS OF FREMDINGEN TO THE SHORES OF THE RIESE**

- 115.1 General Information
- 115.2 Physical Environment
- 115.3 Notes on US Forces
- 115.4 Notes on Warsaw Pack Forces (Second Player)
- 115.5 Reinforcements
- 115.6 Special Information (US Player)
- 115.7 Special Information (East German Player)
- 115.8 Special Scenario Rules
- 115.9 Victory Conditions

**116.0 WACHT AM WORNITZ**

- 116.1 General Introduction
- 116.2 Physical Environment
- 116.3 Notes on Soviet Forces
- 116.4 Notes on US Forces
- 116.5 Soviet Reinforcements
- 116.6 Special Information
- 116.7 Victory Conditions

**117.0 PARATROOPERS TAKE A STAND**

- 117.1 General Information
- 117.2 Physical Environment
- 117.3 Notes on NATO Forces
- 117.4 Notes on Soviet Forces
- 117.5 Reinforcements
- 117.6 Special Information (NATO)
- 117.7 Special Information (Soviet)
- 117.8 Special Rules
- 117.9 Victory Conditions

**118.0 ANNEX TO "PARATROOPERS TAKE A STAND"**

- 118.1 General Information

**119.0 NUKE RAID!**

- 119.1 General Information
- 119.2 Physical Environment
- 119.3 Notes on Soviet Forces
- 119.4 Notes on US Forces
- 119.5 Reinforcements
- 119.6 Soviet Special Information
- 119.7 US Special Information
- 119.8 Special Rules
- 119.9 Victory Conditions

**120.0 THE BATTLE OF THE RIESE**

- 120.1 General Introduction
- 120.2 Physical Environment
- 120.3 Notes on West German Forces
- 120.4 Notes on Soviet Forces
- 120.5 Reinforcements
- 120.6 West German Special Information
- 120.7 Soviet Special Information
- 120.8 Victory Conditions

**121.0 ALL QUIET ON THE WESTERN FRONT**

- 121.1 General Introduction
- 121.2 Physical Environment
- 121.3 Notes on US Forces
- 121.4 Notes on Soviet Forces
- 121.5 Victory Conditions

**122.0 BREAKTHROUGH ON THE FRONT LINE**

- 122.1 General Information
- 122.2 Physical Environment
- 122.3 First Player Basic Information
- 122.4 Second Player Basic Information
- 122.5 Reinforcements
- 122.6 Special Information (Soviets)
- 122.7 Special Information (NATO)
- 122.8 Special Rules
- 122.9 Victory Conditions

## [100.0] INTRODUCTION

In its full version, *Red Star/White Star* 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 given and then gradually introduce more units and Advanced rules into play. Some of the Advanced rules, such as positions of advantage or weather, require little in the way of additional time and effort; others, such as chemical and nuclear weapons, require a great deal more. Players must thus use their own discretion when deciding the scope of the scenario to be played, and are 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.

### CASES:

### SUMMARY OF UNIT TYPES

#### SOVIET UNION

Front	Back
1121 T72 B-H-11 T72 main battle tank Platoon	1071 T12 A-L-8 T-12 anti-tank gun Platoon
1322 T62 B-H-8 T-62 main battle tank Platoon	1073SP74 C-P-6 SP-74 self-propelled gun Platoon
1233BMP A-P-9 BMP armored fighting vehicle Platoon	1075AS57 A-L-8 ASU-57 self-propelled assault gun Platoon
1511BMD A-L-8 BMD armored fighting vehicle Platoon	1076AS85 A-P-7 ASU-85 self-propelled assault gun Platoon
1021BD-1 A-L-15 BRDM-1 reconnaissance Platoon	1091MTU E-H-8 MTU-55 bridge layer Platoon
1213 Inf 6-A-2-1 mechanized infantry Platoon	1081 Mi6 NOE Mi-6 Hook transport helicopter (1 Section)
1512 Abn 7-5-2-1 Airborne infantry Platoon	1083 Mi8 NOE Mi-8 Hip transport helicopter (1 Section)
1000 Rg HQ A-H-11 Regimental Headquarters unit	1085Mi24 NOE Mi-24 Hind assault helicopter (1 Section)
1100 Bn HQ A-H-11 Battalion Headquarters unit	1086Mi23 Low Mi-23 Flogger fighter-bomber (1 Flight)
1027BR2 A-L-15 BRDM-2 ATGM Platoon	1087Su19 Low Su-19 Fencer strike aircraft (1 Flight)
1031 ZSU B-L-7 ZSU 23/24 self-propelled anti-aircraft Platoon	1034 EW E-L-8 Electronic Warfare unit

#### Back:

#### UNITED STATES

Note: M-60 counters are used to represent either the M 60 A1 or the M-60 A3.

Front	Back
1071 ATG 2-1-0-0 ATGM Team	
1231 M60 D-H-8 M60 main battle tank Platoon	
1232 M60 A2 D-H-8 M60 A2 main battle tank Platoon	
1213M113 A-P-11 M113 armored personnel carrier Platoon	
1181 LV D-L-10 LVTP 7 Marine armored personnel carrier Platoon	
1021M150 A-P-11 M150 TOW ATGM Section	
1061 AT A-L-15 jeep-mounted TOW ATGM Platoon	
1041 AA A-L-15 jeep-mounted Redeye anti-aircraft Platoon	
1043 Vulc A-P-11 Vulcan Self-propelled anti-aircraft Platoon	
1081 Mi6 Low Chapparral self-propelled anti-aircraft Platoon	
1083 Mi8 Low AVLB bridging Platoon	
1085Mi24 Low 4.2" medium Mortar Platoon	
1086Mi23 High 81mm light Mortar Platoon	
1087Su19 High 1000 Bde HQ A-H-11 Brigade Headquarters unit	
	1100 Bn HQ A-H-11 Battalion Headquarters unit

<p><b>Front</b></p> <div>1213 Inf mechanized infantry Platoon 7-5-3-1</div> <div>1171 Inf Marine infantry Platoon 8-6-4-2</div>	<p><b>Back</b></p> <div>3062 Scrp Scorpion reconnaissance Platoon B-P-15</div> <div>3051 Scm Scimitar reconnaissance Platoon B-P-15</div>	<p><b>Front</b></p> <div>0010 F4 F-4 Phantom fighter bomber (1 Flight) Low</div> <div>0011 A-10 A-10 ground attack aircraft (1 Flight) Low</div>	<p><b>Back</b></p> <div>0010 F4 High</div> <div>0011 A-10 High</div>
<p><b>Front</b></p> <p>WEST GERMANY</p> <div>2051 Bibr Biber bridge layer Platoon E-H-10</div> <div>2111 Lprd Leopard main battle tank (Panzer) Platoon C-H-10</div> <div>2211 Mdr Marder armored fighting vehicle Platoon B-P-12</div> <div>2011 JgdK Jagd Panther Kanone self-propelled anti-tank gun Platoon A-H-11</div> <div>2021 Jag Jaguar Rakete ATGM Platoon A-H-11</div> <div>2071 Gprd Gepard self-propelled anti-aircraft gun Platoon B-P-12</div>	<p><b>Back</b></p> <div>3015 Swg Swingfire ATGM Platoon B-P-9</div> <div>3133 F432 FV432 armored personnel carrier Platoon B-P-9</div> <div>3035 81 81mm medium Mortar Platoon B-P-9</div> <div>3071 Rind Roland self-propelled anti-aircraft Platoon B-P-9</div> <div>3100 Bn Battalion Headquarter's unit B-H-9</div> <div>3122 Inf mechanized infantry Platoon 7-5-3-1</div>	<p><b>Back</b></p> <div>0015 Tndo Tornado fighter bomber (1 Flight) Low</div>	<p><b>Back</b></p> <div>0015 Tndo High</div>
<p><b>Front</b></p> <div>2031 SpPz Spah Panzer 2 Reconnaissance Platoon C-L-15</div> <div>2041 120 120mm heavy Mortar Platoon A-P-11</div> <div>2073 Rind Roland self-propelled anti-aircraft Platoon B-P-12</div> <div>2000 Bde Brigade Headquarters unit B-H-12</div> <div>2100 Bn Battalion Headquarters unit B-H-12</div> <div>2211 Inf mechanized infantry (Panzergrenadier) Platoon 7-5-3-1</div>	<p><b>Back</b></p> <div>0001 EW Electronic Warfare unit E-L-8</div> <div>0003 UH1 UH-1 "Huey" Iroquois transport helicopter (1 Section) NOE</div> <div>0006 CbtS AH-1S Cobra attack helicopter (1 Section) NOE</div> <div>0009 CbtL AH-1Q Cobra attack helicopter (1 Section) NOE</div> <div>0012 LOH LOH "LOACH" light observation helicopter (1 Section) NOE</div> <div>0013 Lynx Lynx attack helicopters (1 Section) NOE</div>	<p><b>Front</b></p> <div>0003 UH1 Low</div> <div>0006 CbtS Low</div> <div>0009 CbtQ Low</div> <div>0012 LOH Low</div> <div>0013 Lynx Low</div>	<p><b>Back</b></p>
<p><b>Front</b></p> <p>UNITED KINGDOM</p> <div>3111 Cfn Chieftain main battle tank Platoon C-H-8</div>	<p><b>Back</b></p> <div>0014 B105 BO 105 attack helicopter (1 Section) NOE</div>	<p><b>Front</b></p> <div>0014 B105 Low</div>	<p><b>Back</b></p>

## NEUTRAL MARKERS

Non-persistent Chemical

Persistent Spray

Non-persistent Chemical

Persistent Gas

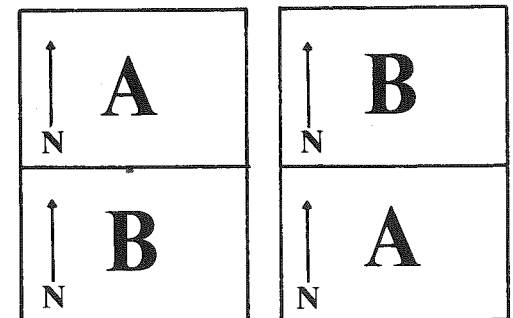
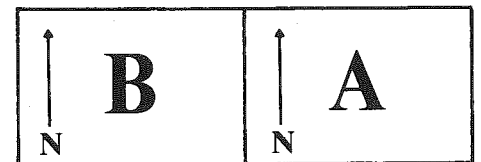
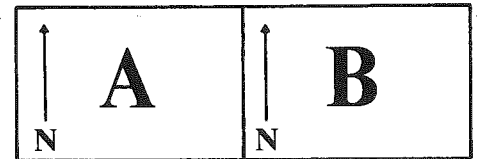
Nuclear Impact

Nuclear Contamination

## [101.0] SPECIAL TERRAIN

## [101.1] THE GAME MAPS

The Red Star/White Star maps were developed from actual West German terrain. Map A depicts primarily open country, while map B shows a more closed and heavily wooded area. Although most scenario examples in the game are structured so that they may be played on one of the two maps, the maps themselves are in fact geomorphic and may be joined to create a larger playing area in any of the following patterns:





In order to join the maps the Players should first trim the mapedges, as shown, and overlap the two maps along the appropriate mapedge.

### [101.2] LAKE HORLOFF

Lake Horloff (on map A) is a special terrain feature. The following rules apply to all lake hexes.

[101.21] Non-amphibious units may never enter a lake hex.

[101.22] Amphibious units (only) may enter lake hexes by spending one complete Movement Phase (with a Bound Command) to do so. (Exception: see Case 24.45).

[101.23] While in a lake 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 lake hex. (Exception: see Case 24.4).

[101.24] Lake hexes do not block the Line of Sight and are considered to be at Height Level 0.

[101.25] Units may not enter lake hexes by snorkeling; nor may bridges of any sort be constructed across lake hexes.

[101.26] Indirect fire impacting on a lake hex is resolved normally. Nuclear weapons impacting in a lake hex have their effects resolved normally with the exception that the impact hex does not become Rough 3 terrain; rather, it remains a normal lake hex, and is contaminated.

## [102.0] SPECIAL UNITS

### CASES:

#### [102.1] SOVIET ENGINEER PLATOONS

Soviet engineer platoons are a special type of engineer unit. They are normally composed of three engineer squads and may perform the same functions as other engineers (see Section 29.0).

[102.11] Engineer platoons are treated as normal infantry units for purposes of stacking and being mounted in APCs.

[102.12] When performing any engineer function, each step of a Soviet engineer platoon counts as one single engineer squad.

[102.13] If he desires, the Soviet Player may reorganize his engineer squads into platoons and vice versa. The former may be done by having two or three engineer squads spend one Friendly Movement Phase stacked in the same hex with a Bound Command; the latter by just having the platoon spend one Friendly Movement Phase in a hex with a Bound Command. In either case, at the end of the Phase the owning Player should place the newly formed unit on the map, removing the old counters.

[102.14] For purposes of re-organization, one engineer squad equals one step of an engineer platoon, and vice versa.

[102.15] Units may not reorganize while Suppressed, in defilade, CP3 status, mounted in APC's and/or in Morale States 2 or 3.

[102.16] The Soviet Player's ability to reorganize his engineer units is limited by the number of platoons and squads in the counter mix.

#### [102.2] ATGM SQUADS (Teams)

Both Players have special infantry units known as ATGM squads (or teams).

[102.21] Soviet ATGM squads are one-step infantry units. However, when attacking Enemy units with their personnel anti-tank weapons, they are treated as a three-step unit.

[102.22] US ATGM teams are considered to be standard infantry units except that they have only two steps, and have their automatic weapons strength halved (round fractions down) after taking a one-step loss. The only restriction placed on them is that they must always end a Phase stacked in the same hex as, adjacent to, or mounted in "their" APC (the vehicle unit which has the same designation as the unit). This restriction is removed if the APC unit is eliminated during the play of the game.

#### [102.3] BEEHIVE ROUNDS

US heavy main guns are equipped with *Beehive*, a special anti-personnel shell. When firing at Enemy infantry units such weapon systems always use the Beehive line on the Main Gun Anti-Infantry Combat Results Table (10.21).

#### [102.4] CHOBHAM ARMOR

*Chobham* is a new type of armor that has yet to be tested in combat. Its exact composition is still secret, but it is believed to be based on the "sandwich" principle, with layers of titanium mesh, ceramic sheathing, and titanium backing. It's only effect on play is that the units would use the Chobham column on the Vehicle Loss Modification Chart when defending against Enemy main gun/ATGM attacks.

#### [102.5] FIVE VEHICLE PLATOONS

Certain vehicle units may consist of five vehicles. As there are no 5 strength markers included in the game, Players should indicate a current strength of five vehicles by not putting any strength marker at all under the unit in question.

#### [102.6] MOTORCYCLES

[102.61] Motorcycles move like vehicle units, but enter defilade without expending Movement Points, and are treated as dismounted infantry when fired upon. A motorcycle may always exercise the option of entering defilade immediately after the first fire on it has been resolved.

[102.62] Moving motorcycles benefit from a Loss Modification die roll modification of -5 on roads, -4 on trails, -3 in clear terrain, -2 in towns (if not moving on roads) or light woods. This modification does not apply to the second and third rounds of close assault, but does apply to withdrawal fire. It supercedes the -2 modification for moving units. A motorcycle in the same hex as an Enemy unit without Attack Strength is not involved in close assault procedures with that unit. For convenience, Players may agree to conduct close assaults involving motorcycles quickly with an automatic result: the motorcycle unit loses 1 vehicle and withdraws (without withdrawal fire) to an adjacent hex; this will save time, while producing the average result.

[102.63] Motorcycles may not enter heavy woods hexes, except on roads or trails.

[102.64] Motorcycles are treated as vehicles for observation purposes. Motorcycles have neither stacking limit nor effect on stacking limits of other vehicles.

[102.65] Suppressed motorcycles may not move and are considered in defilade. Motorcycles in CP3 status have their Movement Allowance halved (fractions rounded up). Motorcycles may change CP status from 2 to 3 or from 3 to 2 by expending half their Movement Allowance; they make other changes in CP status by expending their entire Movement Allowance.

[102.66] Should a scenario provide more motorcycle units than the counter mix allows, and additional counters cannot be improvised, eliminated motorcycle units may be placed back on the map with any of the highest class of HQs present until the full number has been used. If no HQ is present, they may be placed with any Friendly unit.

[102.67] Motorcycles in mud and ground snow conditions (see Case 103.0) have their Movement Allowance halved (round fractions down) unless on roads. Motorcycles in falling snow and blizzard conditions have their Movement Allowance reduced to one-fourth (round fractions down) whether on roads or not; when reduced by falling snow or blizzard there is no additional reduction for ground snow. Otherwise, reductions are cumulative and are arrived at by multiplication; thus a motorcycle on a muddy trail in CP3 status would have its Movement Allowance reduced to one-quarter (one-half times one-half), fractions rounded down (from 30 to 7).

[102.68] Motorcycles in Rough 1 and light woods expend 4 Movement Points for each hex they enter; in clear terrain and towns they expend 2 Movement Points per hex; on roads and trails they expend 1 Movement Point per hex. Motorcycles never enter column or dispersed formation.

[102.69] Friendly vehicular units may move through a hex containing an Enemy motorcycle unit without stopping for close assault. If the Friendly vehicle ends the Movement Phase in the same hex with the Enemy motorcycle unit, however, it must engage in close assault.

#### [102.7] NATO ARTILLERY-DELIVERED MINEFIELDS

In certain scenarios, the NATO Player may have the ability to deliver (place) artillery-delivered minefields on the map during the play of the game.

### PROCEDURE:

To place an artillery minefield, the NATO Player must first plot a normal fire mission for a Friendly 155mm medium howitzer unit equipped with artillery mines. He must also specify that the unit is in fact using artillery mines. The fire mission is then carried out normally, but when resolving the impact of the fire mission the owning Player must place a minefield marker in every hex of the artillery pattern (noting the type of minefield — artillery-delivered — on a separate piece of paper).

[102.71] Artillery-minefield fire missions have their Scatter resolved normally. Scattered artillery minefields have the same effects as those that impact on-target.

[102.72] Units in hexes affected by artillery minefields during the Indirect Fire Phase in which they are placed are immediately attacked by them, as if the units had just entered the hex. Thereafter, the hex is treated like an ordinary artillery-delivered minefield.

[102.73] If two artillery minefields impact in the same hex at any time during the game, the minefield is considered to be "upgraded" to a "hasty minefield." There is no additional effect for more than two artillery minefields impacting in a hex.

[102.74] Artillery minefields have no effect on ordinary minefield hexes or units in such hexes (though they would affect dummy minefield hexes).

[102.75] Artillery minefields have no effect on lake hexes.

[102.76] Artillery *cannot* deliver dummy minefields.

#### [102.8] AIRCRAFT WEAPONS LOADS

All aircraft (except those carrying nuclear weapons) are assumed to be able to carry out straf-

ing strikes. In addition, each aircraft unit may be equipped with one of the following weapons systems. The exact weapons 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
- (C) conventional air-to-surface missiles \*
- (D) Maverick air-to-surface missiles (NATO Player only). \*

\* if conventional ASMs are carried, the Player should use the ASM ammo depletion number to the left of the slash on the aircraft's data sheet; if carrying Maverick ASMs (which are equally effective but much smaller), use the ASM ammo depletion number to the right of the slash.

### [102.9] SHILLELAGH MISSILES

US M60A2 tanks carry Shillelagh missiles, which have an infrared laser guidance system. These missiles may not be fired during rain, falling snow, blizzard, or fog conditions.

## [103.0] WEATHER

### GENERAL RULE:

All battles do not occur under ideal weather conditions. The Standard Rules assume that the weather is clear and dry. When this is not the case the scenario instructions will list the appropriate weather conditions. Basically, adverse weather serves to reduce the movement abilities and observation range of units. The effects of each type of weather are given below.

### CASES:

#### [103.1] FOG

The fog represented in the game simulates the type of low-lying ground fog commonly experienced throughout Germany. There are three types of fog: *light*, *medium*, and *heavy*. Each of these types has separate effects. The type of fog listed in the scenario instructions always refers to its "density" at Height Level 0. Thereafter, it *decreases* one level for each level in height (*i.e.*, if Height Level 0 has heavy fog, Height Level 1 has medium fog, Height Level 2 has light fog, and Height Level 3 is clear.

#### [103.2] RAIN AND MUD

The only effect of mud is to slow movement. Rain mainly reduces the observation range.

#### [103.3] SNOW

There are three possible snow conditions: *ground snow*, *falling snow* and *blizzard*. Ground snow is literally that — snow from a previous snowfall. Falling snow reduces movement and the observation range, while blizzard conditions greatly reduce them.

#### [103.4] TEMPERATURE

There are three possible temperature conditions: *cool*, *warm*, and *hot*. The only effect of temperature is on units in CP status. (See Case 42.2).

#### [103.5] WIND

There are four possible wind conditions: *calm*, *light*, *moderate* and *heavy*. The only effects of wind are on chemical weapons, spreading fires, and the use of artillery smoke. (See Case 106.6).

#### [103.6] WEATHER EFFECTS CHART

(see separate sheet)

### [103.7] ADVANCED OBSERVATION RANGE TABLE

(see separate sheet)

### [103.8] NIGHT AND WEATHER

When a nighttime scenario includes any but clear weather, the worst effects on movement, observation, *etc.* are governing. Starshell may not be used in fog, rain, falling snow or blizzard. Artillery observation is the same at night as by day. That is, when observing for artillery, it is only necessary to have a Line of Sight to the target hex.

## [104.0] INDEPENDENT COMMAND

### CASES:

#### [104.1] THE CONCEPT OF INDEPENDENT COMMAND

The command rules (Section 5.0) assume that all units are allocated to some specific company, and thus receive commands (and all other company status) on a company basis. However, some units operate under Independent Command and use the rules in Case 104.2. These units vary by nationality and are listed in Section 105.0.

#### [104.2] EFFECTS OF INDEPENDENT COMMAND

[104.21] Units with Independent Command are treated in all respects as separate companies and must be issued separate commands during each Friendly Command Phase.

[104.22] Units with Independent Command do not enter morale states unless affected by electronic, chemical, or nuclear warfare. When this occurs, these units may be rallied like companies, using the HQ to which they are attached. In some scenarios, this HQ may be off-map.

## [105.0] DOCTRINE

### CASES:

#### [105.1] SOVIET DOCTRINE

[105.11] At the end of any Phase, all Soviet units without Independent Command must be within two hexes of a unit of their company. That is, there may be a *maximum* of one intervening hex between each of the platoons of a company. This restriction does not apply if the company (due to losses) is reduced to a single platoon or if the unit is in formation according to doctrine (see Case 110.5).

[105.12] Soviet tank companies may not be issued a Bounding Overwatch Command. See also Case 105.22.

[105.13] The following Soviet units always have Independent Command: BRDM, ASU-85, ASU-57, T-12, SP-74, 120mm, motorcycle, MTU-55, ZSU-23/24, SAM-9, engineer squads, ATGM squads, engineer platoons, headquarters, helicopters, and aircraft. All of these units have a "0" somewhere in their identification numbers.

[105.14] Soviet platoons which have been airlifted by transport helicopter have Independent Command for as long as they are three or more hexes away from another unit of their company. In considering morale for the remainder of the company these units are not considered part of the company.

#### [105.2] NATO DOCTRINE

At the end of any Phase, all NATO units without Independent Command must be within three hexes

(inclusive) of a unit of their company. That is, there may be a *maximum* of two intervening hexes between each of the platoons of a company. This restriction does not apply if the company (due to losses and/or regrouping) is reduced to a single platoon.

[105.21] All NATO units may be issued the Bounding Overwatch Command.

[105.22] Units 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. They may also fulfill their requirements in the manner given above.

[105.23] The following NATO units always have Independent Command: M-150, AVLB, M-551, M-125, 81mm, 4.2", Biber, Scorpion, 120mm, Scimitar, jeep, Roland, Chapparral, Vulcan, helicopter, aircraft, engineer squads, HQs, and Gepard. All of these units have a "0" somewhere in their unit identification numbers.

[105.24] In addition to the units listed in 105.23, the NATO Player has the option of designating one platoon of each company to Independent Command. This must be done before the start of the game and cannot be reversed. The only disadvantage to this is that whenever the "remainder" of the company rolls for morale, the owning Player must shift one column to the right on the Morale Table.

### [105.3] EFFECTS OF BREAKING DOCTRINE

[105.31] At the beginning of any Friendly Movement Phase in which any units of a company do not fulfill their doctrine requirements due to movement in a previous Friendly Movement Phase, all units of that company (except those with independent command) immediately increase their morale state by 1.

[105.32] If units of a company are forced "out of doctrine" due to losses in combat, the company has one Game-Turn (Phase to end of corresponding Phase) to remedy the situation. If the company is not in doctrine when the time to remedy the situation has expired, all units of that company (except those with independent command) immediately increase their morale state by 1. Henceforth such a company is also liable to the effects of Case 105.31.

## [106.0] CHEMICAL WARFARE

### GENERAL RULE:

Soviet doctrine includes the widespread use of various chemical agents in order to destroy Enemy forces. When using the chemical rules, all units are considered to be in one of three Chemical Protection (CP) states. Units in CP1 are completely unprotected against chemical attack, those in CP2 are partially protected, while those in CP3 are fully protected. CP1 is considered to be "normal" and has no special effects on the movement and combat of units.

### PROCEDURE:

Units are assigned a CP state at the start of the game. Thereafter, they may change their status. CP status is assigned by company and all units of a given company must have the same CP status. This status is recorded for each company on the Player's unit status sheet.



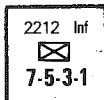
## CASES:

### [106.1] VEHICLE UNITS

All vehicles in the game are listed (on their data sheets) as being either protected or unprotected as far as chemical warfare is concerned. Protected vehicles may be in either CP1 or CP3; unprotected vehicles in either CP1, CP2, or CP3.

[106.11] Vehicles in CP3 may not mount or dismount infantry, nor use any of their externally-controlled weapons systems. All units attacked by vehicles in CP3 receive a die roll adjustment on the Loss Modification Tables (see Case 12.3). All chemically-protected vehicle units in CP3 status are considered Suppressed (see Case 8.6) as long as they remain in that status.

[106.12] Vehicles in CP2 may mount and dismount infantry, and use their external weapons systems normally. However, all units attacked by vehicles in CP2 receive a die roll adjustment on the Loss Modification Tables (see Case 12.3).



### [106.2] INFANTRY UNITS

Like unprotected vehicles, infantry units can be either in CP1, CP2, or CP3.

[106.21] In warm or hot weather, infantry in CP2 or CP3 status have their fatigue level increased by 2 when performing double-time. If such units charge, their fatigue level is increased by 2 and they take an immediate step loss. (This is done after completing their movement, and the unit's company must check morale for the loss).

[106.22] In warm weather, infantry units in CP3 status require 2 Segments of rest (see Case 6.76) to remove one level of fatigue. In hot weather, infantry units in CP3 status may remove one fatigue level only by taking a 1-step loss, in addition to the two segments of rest.

[106.23] In hot weather, infantry units in CP3 status automatically increase their Morale Level by 1. This increase in Morale Level is cancelled whenever such infantry units change CP status; it is also cancelled for any company which has been attacked by chemicals and for all units in any battalion if both of the following conditions have been met: (A) any company of the battalion has been attacked by chemical weapons and (B) EW jamming is not in effect.

[106.24] All units attacked by infantry in CP2 or CP3 receive a die roll adjustment on the Loss Modification Tables (see Case 12.3).

[106.25] Infantry units in CP3 have their observation range reduced to 0 hexes during rain or snow conditions, or while in a heavy fog or smoke hex.

[106.26] Infantry units which remain in close assault in CP3 status for three Game-Turns in warm weather and for two Game-Turns in hot weather take an automatic 1-step loss. Should such a unit remain in close assault in CP3 status it must take an additional step loss every second Game-Turn after its first step loss under this case. These step losses are effective at the end of the Close Assault segment. Players will have to keep track of how long infantry units have been in close assault in CP3 status on a separate sheet of paper.

### [106.3] CHANGING CP STATUS

A change in Chemical Protection is considered to be a "change of status" (see Section 5.0), but may be done under any Command.

[106.31] Changes in CP status are done by company. Changes in CP status may require the expenditure of Movement Points as noted in the CP Status Change Chart (see Case 106.32).

### [106.32] CP Status Change Chart (see separate sheet)

[106.33] Infantry units may only change from CP1 to CP2 or from CP1 to CP3 only while in the same hex as a Friendly APC unit (any number of vehicles) or a Friendly HQ unit. Some scenarios may specify that due to absence of Chemical Protection equipment other restrictions are placed upon changes by infantry out of CP1 status.

[106.34] Following a chemical attack on any unit of a company at the beginning of the next Friendly Movement Phase all units of that company (regardless of command) automatically enter the highest CP status possible for them (see Case 106.33). They must expend Movement Points if required to do so by the CP Status Change Chart (see Case 106.32).

### [106.4] DELIVERY OF CHEMICAL WEAPONS

The availability of chemical weapons will be listed in the scenario instructions. They may be delivered onto the map by Friendly artillery, aircraft or missile unit. Players must load their delivery systems with chemical weapons and note this fact on the indirect fire plot in advance (see 106.46); however, the actual target hex coordinates may be plotted with the same delay as normal. Note that the loading and targeting of chemical weapons may be pre-plotted before the game begins. When chemical weapons are used, the Player must place the proper impact marker in the hex. Each delivery system is assumed to deliver one "point" worth of chemicals into each hex.

[106.41] Chemical weapons delivered by aircraft are plotted like normal bombing strikes, and have their Scatter resolved as such.

[106.42] Aircraft may deliver chemical weapons by conducting a normal bombing strike against a hex while carrying chemical weapons. Helicopters may never deliver chemical weapons.

[106.43] There is *no additional effect* if more than one point of chemical weapons of the same type is placed in the same hex. Different chemicals have their presence noted separately.

[106.44] The NATO Player may never plot the use of lethal chemical weapons on or adjacent to town hexes. The Soviet Player has so such restriction.

[106.45] If specified in the scenario, infantry units may deliver non-persistent incapacitating chemicals (primarily tear gas) by hand grenade. This need not be plotted in advance, and may take place under an Overwatch Command or while using short halt under a Bound Command or while in close assault. The owning Player simply announces that gas grenades have been delivered to any hex containing or adjacent to any Friendly infantry unit equipped with such grenades. Gas grenades may not be delivered by infantry units in vehicles which are Suppressed. The effects of gas grenades (see Case 106.51) are felt immediately upon delivery. *A given infantry unit may use incapacitating chemicals only once per game;* mark this fact on the unit's status sheet.

[106.46] Chemicals may be delivered by missile, rocket or aircraft beginning 10 Game-Turns after these delivery systems are loaded with chemicals. Chemicals delivered by mortars or grenades are not delayed due to loading. Chemicals delivered by artillery other than mortars may be delivered beginning 3 Game-Turns (Soviets) or 6 Game-Turns (NATO) after they are loaded with chemicals.

[106.47] While loaded with chemicals, delivery systems may not be loaded with or fire any other type of munitions. After firing chemicals, a delivery system may not fire other types of munitions for 6 Game-Turns (missiles, rockets, air-

craft), 2 Game-Turns (artillery other than mortars), or 1 Game-Turn (mortars).

### [106.5] TYPES AND EFFECTS OF CHEMICAL WEAPONS

There are two general types of chemical weapons: *persistent* (either gas or spray) and *non-persistent*. This determines how likely the chemical is to disperse once on the map. One type of chemical — persistent gas — may even drift from hex to hex on the map. Chemical weapons attack all units within a certain distance of their impact hex. The effects depend on whether the chemical is lethal or incapacitating. Chemical weapons affect all units in CP1 or CP2; *they have no effect on units in CP3*.

[106.51] Incapacitating chemicals do not kill, but do prevent troops from functioning effectively. All companies whose platoons (any or all) are affected by incapacitating chemicals immediately enter Morale State 3.

[106.52] All lethal chemicals will attempt to kill all units they affect. The "attacking" Player (the one who placed the chemical) should roll two dice for each affected unit, and consult the Lethal Chemical Combat Results Table (47.53). If the die roll is within the indicated range of numbers, the unit is immediately and completely eliminated (remove it from the map), regardless of the number of steps or vehicles in the unit. All units (and their companies) of units that undergo a lethal chemical attack while in CP1 status immediately enter Morale State 3.

### [106.53] Lethal Chemical Combat Results Table (see separate sheet)

[106.54] Any unit (in CP1 or CP2) entering the effectiveness zone of a chemical weapon is immediately attacked by it; likewise a moving gas effectiveness zone (see Case 106.63) immediately attacks all units (in CP1 or CP2) in hexes into which it moves or through which it passes.

### [106.6] SPREAD AND DISPERSAL OF CHEMICAL WEAPONS

Once delivered on the map, chemical weapons remain in the hex until they drift or disperse. Chemicals that disperse are immediately removed from the map.

[106.61] Non-persistent chemicals automatically disperse and are removed in the same manner as smoke.

[106.62] During the Record Phase, the first Player rolls two dice for dispersion (removal) of persistent gas markers. If the result is a 2, and there is a moderate or heavy wind, all such markers are removed. If there is a light wind or calm, only markers at Height Level 4 or 5 are removed. If a 3 or 4 is rolled, and moderate or heavy wind is in effect, all such markers are removed. If the roll is 5, markers are removed only under heavy wind conditions. No dispersion dice roll need be made if winds are light or calm and there are no such markers at Height Level 4 or 5.

[106.63] If persistent gas is not dispersed during the Record Phase by the procedure in Case 106.62 and there is any wind condition but calm, the gas will drift: 4 hexes in light wind, 8 hexes in moderate wind, 15 hexes in heavy wind. The direction of drift is the same for all persistent gas markers on the map. The drift pattern is determined during the Record Phase and is calculated hex by hex using the Chemical Drift Chart (see Case 106.64) to determine the path of drift from the starting hex to the first hex outward, then from the first to the second hex, etc., until the pattern has been established up to the number of hexes given above for the prevailing wind strength. That pattern is then applied to all persistent gas markers not dispersed under Case 106.62. The prevailing wind direction



is given in the scenario, as determined by the die roll described in Case 108.22.

**[106.64] Chemical Drift Chart**  
(see separate sheet)

**[106.65]** Drifting gas attacks all units in CP1 or CP2 status into whose locations it drifts during the Record Phase; all results of these attacks are resolved *immediately*.

**[106.66]** Persistent spray lethals do not disperse. *They remain in their impact hex throughout the entire game.*

**[106.67]** Chemical weapons (any type) may not be used under rain or any type of snow weather conditions. (See Section 103.0).

## **[107.0] TACTICAL NUCLEAR WARFARE**

### **COMMENTARY:**

The possible use of tactical (battlefield) nuclear weapons in a general European war has been much discussed in recent years, though more attention has been paid to the supposed deterrent value of the nuclear stockpiles maintained by both sides than to the practical questions surrounding their actual use to influence the immediate battle. While the strategic and political implications of tactical (10 kilotons or under) nuclear weapons are beyond the scope of *Mech War 2*, it is still possible to demonstrate how these weapons work on the battlefield. In the absence of published NATO doctrine relating to tactical nuclear weapons, the Player is put in the position of discovering for himself how to exploit, and defend against, this formidable weapon system. He may be warned that a nuclear environment radically affects battlefield tactics, and what he learned was most effective on the conventional battlefield may be most dangerous on the nuclear battlefield.

### **GENERAL RULE:**

All nuclear weapons have both prompt and delayed effects. They may be delivered onto the map by artillery, missile, rocket or aircraft through a procedure known as a *nuclear fire mission*. Each fire mission involves the use of a specific nuclear warhead of between ½ and 10 kilotons in yield, automatically set for airburst at the most effective altitude. The scenario instructions will state which Players, if any, have the use of tactical nuclear weapons, and will specify the warheads and delivery systems available.

### **PROCEDURE:**

When requesting a nuclear fire mission, the Player must first load a specific warhead onto a specific delivery system. This requires a certain amount of advance planning. The necessary delay between the loading of a delivery system with a warhead and the actual delivery of that warhead is known as the *load time*. Once the order to load a warhead has been given and noted on the Player's Artillery Data Sheet, the Player may plot the intended impact hex for that warhead. This is also listed on the Player's Artillery Data Sheet. There is a minimum time interval between the assigning of target coordinates (impact hex) and the delivery of the warhead. This is known as *delay time* and may vary from the standard delay times for conventional and chemical munitions. Delay time and load time may run simultaneously. When the nuclear fire is due to impact on the map, the Player must check to see whether the mission has been aborted; if it has not been, the Player then announces the plotted impact hex, resolves the Scatter, places the nuclear impact marker on the actual impact hex, and resolves all prompt nuclear effects

on nearby units and terrain. During the Resolution Segment of the next Friendly Indirect Fire Phase, the marker is then turned over to its radiation contamination side.

### **CASES:**

#### **[107.1] LOAD TIME**

In order for a nuclear weapon to be delivered, it must first be loaded onto a specific delivery system. The number of Game-Turns required to complete the loading procedure varies with the delivery system, and may be found in Case 107.27.

**[107.11]** A load order specifies both the warhead and the delivery system to be loaded, and is written on the indirect fire plot during the Plot Segment of the Indirect Fire Phase, together with the Game-Turn of the order and the Game-Turn of its completion (which is the first Game-Turn on which it may be delivered).

**[107.12]** No warhead may be delivered until its load time has expired.

**[107.13]** Once a load order has reached an air rocket, missile, or section artillery delivery system, that delivery system is considered unloaded of any other munitions and may not be used for any other purpose. A load order, however, does not prevent the arrival of other munitions from that delivery system during the same Indirect Fire Phase in which the load order is received.

**[107.14]** A load order may be cancelled at any time prior to its completion. **Exception:** see Case 107.24.

**[107.15]** A new load order must be given for the second nuclear warhead in scenarios providing for more than one warhead for either Player.

**[107.16]** If a load order for an air, rocket, missile or section artillery delivery system is cancelled, or a different load is to be put onto the already-loaded delivery system, the warhead must be unloaded before other munitions can be loaded onto the delivery system. This unload time must be added to the load time for the other munitions. Unload time is 2 Game-Turns for artillery, 3 Game-Turns for missiles or rockets, 4 Game-Turns for aircraft.

**[107.17]** A scenario may specify a load order having been given prior to the Game-Turn in which play starts.

#### **[107.2] PLOT TIME**

In order for a loaded nuclear weapon to be delivered, it must be plotted in advance to impact on a specific Game-Turn at a specific impact hex. The number of Game-Turns required between the plot order and the delivery of the warhead varies with the delivery system and may be found in Case 107.27.

**[107.21]** A plot order specifies both the warhead loaded and the desired impact hex; it is written on the indirect fire plot during the Plot Segment of the Indirect Fire Phase, together with the Game-Turn of its delivery.

**[107.22]** An invalid plot order may not be executed; the system remains loaded with the warhead until either a valid plot order is received or an unload order is received.

**[107.23]** A plot order may be changed during the Plot Segment of any Friendly Indirect Fire Phase up until one Game-Turn before delivery. If a change in the plot order occurs before the minimum plot time specified in Case 107.27, the plot is changed and there is no delay. If a change in the plot order is ordered while the plot time is running, but before the cancellation point (the Game-Turn before delivery, see Case 107.24) is reached, the plot is changed and the delivery is delayed until the minimum plot time has taken place. A plot change can not be given after the Plot Segment of the Indirect Fire Phase of the Game-Turn

preceding the scheduled delivery.

**[107.24]** A plot may be cancelled at any time up until the cancellation point (the Indirect Fire Phase of the Game-Turn preceding the scheduled delivery). If this is done, the plot is cancelled and no delivery is scheduled, but the delivery system remains loaded with the warhead and ready to receive a new plot.

**[107.25]** Once the cancellation point (see Case 107.24) has been passed, the Player loses control of that nuclear fire mission; all further processes are automatic.

**[107.26]** Each warhead delivery requires a separate plot.

#### **[107.27] Nuclear Load and Plot Time Chart** (see separate sheet)

#### **[107.3] MISSION ABORT (Optional)**

Nuclear fire missions may abort for a variety of reasons beyond the control of the commander represented by the Player in *Mech War 2*. These reasons range from higher levels of command through communications and technical problems with delivery systems to a battlefield dud.

**[107.31]** During the Resolution Segment of the Indirect fire Phase in which the nuclear fire is plotted to arrive, the owning Player should roll two dice. If the indicated number is rolled (for the delivery system being used), then the mission has been aborted, and does not occur. The warhead involved is considered to have been expended, and may not be used later in the game. The Player must make a separate die roll for each nuclear fire mission.

**[107.32]** There may be no voluntary abort after the cancellation point (see Case 107.24) has passed.

**[107.33]** All nuclear fire missions using artillery delivery systems abort on a die roll of 2, 3 or 12.

**[107.34]** All fire missions using a missile or air delivery system abort on a die roll of 2 or 3.

#### **[107.4] DELIVERY SYSTEMS**

In order to perform a nuclear fire mission, the Player must choose which of his delivery systems he wishes to use.

**[107.41] Artillery:** Nuclear fire missions may be carried out by heavy howitzer artillery units of any pattern. The pattern of fire has no effect on a nuclear fire mission; the warhead is presumed to impact only in the impact hex which was plotted (and Scattered). A single howitzer unit, however, may deliver two warheads at once, onto the same or different target hexes if the scenario provides for two warheads available.

**[107.42] Missile:** Nuclear fire missions may be carried out by Honest John, Lance or SCUD missiles or by FROG rockets.

**[107.43] Air:** Nuclear fire missions may be delivered by SU19, MiG23, F4, A10, Tornado, or A4 aircraft, but only if these planes are at high altitude. The fire mission is conducted in the same manner as a bombing strike. If any air unit carrying a nuclear warhead is eliminated, the owning Player rolls one die. On a 1-3, the warhead is eliminated and is out of the game. On a 4-6, the air unit continues on with the warhead towards its target. In this case the air unit may only carry out the nuclear fire mission, and is eliminated from the game as soon as the nuclear fire mission has been completed. See also the note at the end of Case 107.44.

**[107.44]** Air units carrying out nuclear fire missions must remain at high altitude and may not carry out bombing or strafing. They must head directly towards the target hex already plotted from the mapedge hex in which they come on the map and must deliver the warhead to that hex and no other.

(Alternative to Cases 107.43 and 107.44). Nuclear fire missions may be delivered automatically by additional bomber aircraft not represented in the game. In this case, the warhead is automatically delivered to the plotted impact hex. **Note:** This case is more realistic than Cases 107.43 and 107.44, but much less interesting to play.

[107.45] Scatter for artillery delivery systems conducting a nuclear strike is resolved normally. An S result is the same as on target for nuclear weapons.

[107.46] Scatter for FROGS is resolved normally.

[107.47] Scatter for missiles (Honest John, Lance, SCUD) is resolved normally, unless Enemy EW jamming (see Section 26.0) is in operation. If EW jamming is in operation, the owning Player rolls two dice following the determination that the mission has not aborted (see Case 107.3). On a roll of 2 and 3, jamming has successfully interfered with the missile guidance system, and a further one-die roll is required to determine the effects of the interference. On a 5 or 6, the missile is a dud and the warhead does not explode. On a 1, the missile Scatters an additional 2 hexes. On a 2, the missile Scatters an additional 3 hexes. On a 3, the missile Scatters an additional 8 hexes. On a 4, the missile Scatters an additional 15 hexes.

[107.48] Aircraft, which normally do not Scatter, roll for Scatter on the 21-40 column of the Artillery Scatter Table (14.27). An S result is the same as on-target for nuclear weapons.

#### [107.5] PROMPT EFFECTS

After Scatter has been resolved, the Phasing Player should place a nuclear explosion marker in the actual impact hex. He must now roll two dice for every unit (whether Enemy or Friendly) within the prompt effect radius of the impact hex, and consult the appropriate Nuclear Combat Results Table. This radius will vary with the size of the warhead and the type of defending unit. Cross-index the die roll with the appropriate-sized warhead column to determine the correct combat result. Then determine environmental effects (see Case 107.7).

#### [107.6] NUCLEAR COMBAT TABLES (see charts and tables)

##### [107.61] Anti-Infantry Nuclear Combat Results Table

##### [107.62] Anti-Wheeled Vehicle Combat Results Table; External Systems Damage Table

##### [107.63] Anti-Tank, Anti-APC Nuclear Combat Results Table

##### [107.64] Anti-Helicopter Nuclear Combat Results Table

##### [107.65] Explanation of Results

If a number in the indicated range is rolled for a given defending unit, then that unit is completely eliminated (regardless of the number of steps or vehicles that it contained). Other defending units suffer no combat losses, but may be stripped of external systems (see Case 107.67). The companies to which surviving units belong must immediately enter Morale State 3. This applies even to units with Independent Command, if they survive a nuclear attack. A unit is considered a survivor of a nuclear attack if it is within possibly lethal range for that type of unit for that size warhead (there is a chance of a combat result under Cases 107.61 through 107.64) and is not eliminated as a result of the attack. An asterisk (\*) next to the result refers to latent results under Case 107.8.

[107.66] Defilade, Height Levels, terrain, weather, Chemical Protection status, Suppression, smoke, etc. *have no effect* on nuclear combat results. Units attacked by the prompt effects of nuclear weapons do not roll on the Loss Modification Tables.

[107.67] After the immediate lethal effects of a nuclear fire have been resolved (see Cases 107.61-107.64) and the environmental effects have been resolved (see Case 10.7), external systems damage is determined for all surviving vehicular units using the table in Case 107.62. If such surviving vehicular units are within such a range as to make a result possible using the appropriate column on that table. This is done by the Phasing Player rolling two dice for each such vehicular unit separately. If the dice roll results in a number within the range of numbers given in that table, that unit is stripped of external systems. If the number is outside the range listed in that table, there is no further effect. All results are applied to the entire unit, and are noted on the unit status sheet.

[107.68] External systems include: all externally-directed weapons systems (marked with an \* on unit data sheets), all other external weapons systems (marked with a # on unit data sheets), searchlights, mine plows, laser range finding and amphibious capability.

[107.69] EW jamming units, motorcycles, anti-aircraft units, jeeps and HQ units are considered eliminated if stripped of external systems under Case 107.67. All companies stripped of external systems under Case 107.67 are permanently jammed and subject to all the restrictions of Case 26.2. (The units have lost radio communications due to the elimination of aerials, etc.) If all of the weapons systems of a unit have been stripped, the unit may be retained for reconnaissance or infantry transport (APCs).

#### [107.7] ENVIRONMENTAL EFFECTS

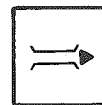
Nuclear fire missions have severe and varied effects on the physical environment within a certain distance of the impact hex. This radius varies with the size of the warhead. To determine the effects radius for environmental effects, see the table in Case 107.79. The effects are listed in the following cases:

[107.71] **Burning Trees:** All light or heavy woods hexes within the effects radius listed in Case 107.79 become burning woods. All units in burning woods are eliminated. Additionally, units may not enter burning woods hexes.

**Tree Blow-Down:** In rain, mud, or any kind of snow conditions, the woods do not burn. Instead, they are blown down. Vehicular units may not enter blow-down hexes; infantry units may enter normally.

[107.72] **Crater:** The impact hex of a nuclear fire becomes a Rough 3 hex *immediately*, unless it is a lake hex (see Case 101.26). There are no roads or trails (or anything else!) remaining in this hex.

[107.73] **Towns:** Unless rain, mud or any type of snow is in effect, all town hexes within  $\frac{1}{2}$  the burning tree radius (fractions rounded up) become burning town hexes *immediately*. All units in burning town hexes are eliminated. Additionally, units may not enter burning town hexes. All town hexes within the range noted in Case 107.79 which are not burning become devastated. Vehicular units in devastated town hexes are considered eliminated. Infantry units in devastated town hexes lose one step. If rain, mud, snow is in effect, all town hexes within  $\frac{1}{4}$  of the burning tree radius (fractions rounded up) become burning town hexes *immediately*. If there is falling snow or rain, the fire is extinguished 4 Game-Turns after delivery, and the hexes become devastated.



[107.74] **Bridges:** All affected bridges are destroyed; place destroyed bridge markers in place of permanent (civilian) bridge markers; military bridge markers are simply removed.

[107.75] **Wind:** Whenever a nuclear warhead impacts on the map, all smoke, non-persistent gas, and persistent gas markers are removed from the map immediately. Such markers may not be placed for one full Game-Turn following a nuclear delivery including the whole next Friendly Indirect Fire Phase.

[107.76] **Electro-Magnetic Pulse:** Whenever a nuclear warhead impacts on the map, E-M Pulse conditions are in effect for both sides until the end of the next Indirect Fire Phase of the Player who initiated the nuclear attack. Furthermore, Players may not attempt to initiate jamming for 3 Game-Turns following a nuclear blast. Telephone communication and short-range radio may not be used while E-M Pulse is in effect. E-M pulse will also destroy the effectiveness of delicate electronic equipment. Such equipment is divided into two classes. Class one includes jammer units, air defense units with search radar turned on at the time of the nuclear detonation, and HQ units. Class two includes all other air defense units. If within the damage radius of E-M Pulse, air defense units and jammer units are eliminated from the game; HQ units lose their ability to communicate by radio with other units, who are thus "jammed" with respect to the HQs. Such HQ units remain on the map, but may not exercise HQ functions such as giving new Bound Commands to companies or Rally companies, unless using the provisions of Cases 21.26 through 21.29, until the afflicted HQ unit has spent two *entire* Game-Turns in the same or an adjacent hex to another Friendly HQ. If there is no other Friendly HQ in the game, the afflicted HQ is considered eliminated from play and is replaced like any other eliminated HQ unit.

[107.77] **Dazzle:** A unit affected by dazzle may not move, fire, rally, observe, or perform engineering functions. An MTU55 or AVLB which has commenced bridge-launching operations may continue bridge-launching during dazzle. During daylight, dazzle affects all units on-map for two Game-Turns (Indirect Fire Phase to Indirect Fire Phase), except as noted below. Off-map artillery is not affected by dazzle. During nighttime, dazzle affects all units within 20 hexes of the impact hex *at the time of detonation* for four Game-Turns; all units from 21 to 30 hexes for three Game-Turns; all units further than 30 hexes, and on map, for two Game-Turns, except as noted below.

Once it has been determined how long dazzle affects a given unit, this determination is not changed by the unit's subsequent movement closer to an impact hex; thus a unit 32 hexes away from the impact when a nuclear detonation goes off at night is dazzled for two Game-Turns; if the unit moves on the third Game-Turn closer to the impact hex, it does not pick up extra dazzle Game-Turns. Beyond the period of dazzle, there is an additional period of one Game-Turn during which units which were not in visual discipline (see below) may move and fire automatic weapons, but not other weapons systems. During this additional period (Indirect Fire Phase to Indirect Fire Phase) such units may not rally or perform engineering functions, may not observe Enemy units beyond regular observation range, and may not receive visual signals (if jamming is in effect) from beyond

regular observation range. If Enemy jamming is not in effect at the time of detonation, units of the Player who delivered the nuclear burst are automatically in visual discipline. If Enemy jamming is in effect, visual discipline is an order which must be given during a Command Phase and communicated to units; it is noted on the Command Sheet. Visual discipline may be ordered for some units and not ordered for others. A Player who is not delivering nuclear bursts may also order visual discipline.

On a visual discipline order, units may not move, fire, rally, observe, or perform engineering functions. An MTU55 or AVLB which has commenced bridge-launching operations may continue bridge-launching while in visual discipline. A visual discipline order is not announced to the opposing Player. Visual discipline is automatic during full dazzle effects. This is important if more than one nuclear burst is detonated in a short time period. "Movement" as used in this Case includes changes in formation and defilade. As long as dazzle is even partially effective for any units on the map (two Game-Turns by day, five by night), air units may not be brought onto the map.

#### [107.78] Spread of Burning Fire (Optional)

Unless there is rain, mud, or any kind of snow condition, or it has rained recently, fires will spread. Players must keep track of this on a separate piece of paper. Fire will spread to adjacent town and heavy woods hexes during each Movement Phase (Friendly or Enemy). When using this case, Players must also use the wind rules. Fire will spread at the following rate:

Wind Condition	With the Wind	Not With the Wind
Calm	1 hex	1 hex
Light	2 hexes	
Moderate	4 hexes	1 hex in Movement Phase of Player whose nuclear strike started fire
Heavy	6 hexes	—

Fire spread takes effect at the beginning of the Movement Phase. All units in a burning hex are eliminated; burning hexes are impassable to all units. Fire will spread to light woods hexes only in moderate or heavy wind and "with the wind" direction.

#### [107.79] Nuclear Environmental Effects Radius Table (see separate sheet)

#### [107.8] DELAYED NUCLEAR EFFECTS

[107.81] If a unit is attacked on a Nuclear Combat Results Table (see Cases 107.61-107.64) for lethality (not for external systems damage) and the range of dice results governing the combat results for that unit is marked with an asterisk (\*), the men in the unit are assumed to have absorbed a fatal dose of radiation, even if the unit survives the nuclear attack. Such units remain in the game and function normally, and companies containing them do not count them as losses for morale purposes, but they are considered to be destroyed for purposes of Victory Conditions at the end of the game. Such units are worth only  $\frac{1}{2}$  the amount of Victory Points (fractions rounded up, not down) as immediately destroyed units. **Note:** Men in such units would become functionally impaired in about two hours and dead within a few weeks. The effect of lethal dosages (presumably known through personal dosimeters) on morale is unknown.

[107.82] During the Resolution Segment of the next Friendly Indirect Fire Phase following the Friendly Indirect Fire Phase in which the nuclear weapon was detonated, the Friendly Player inverts the nuclear blast marker to its radioactive contamination side.

[107.83] The hex containing a radioactive contamination marker and all adjacent hexes constitute a radioactive contamination zone. All units moving through or into a radioactive contamination zone are attacked on the Radioactive Contamination Combat Results Table (see Case 107.84), with the Player who delivered the nuclear weapon rolling two dice for each such unit. Units remaining in such a zone are also attacked during each of their Movement Phases in which they remain in the zone.

#### [107.84] Radioactive Contamination Zone Combat Results Table (see separate sheet)

[107.85] The following conditions produce die modifications on the Radioactive Contamination Combat Results Table (see Case 107.84):

- 10 KT warhead: +1
- Adjacent hex rather than impact hex: -2
- Hard or protected armor: -2
- Moving vehicle: -2
- Chemically protected vehicle in CP3 status: -1

#### [107.9] ENHANCED RADIATION (NEUTRON) WARHEAD (Hypothetical)

If specified in the scenario, the NATO Player (only) may use a neutron warhead when making a nuclear fire mission, provided the delivery system used is a Lance missile, 8" howitzer, or aircraft. The effects of such a warhead are as follows:

[107.91] All units with hard or Chobham armor within a radius of three hexes (exclusive) from the impact hex are eliminated.

[107.92] All other units within a radius of four hexes (exclusive) from the impact hex are eliminated.

[107.93] All units within six hexes (exclusive) of the impact hex assume a delayed fatal dose of radiation (see Case 107.8).

[107.94] The following effects are modified by E.R.W.; there is no nuclear wind. Tree blow-down only applies in hexes adjacent to the impact hex. Bridges are only destroyed if any part of the bridge is in or adjacent to the impact hex.

[107.95] The following effects do apply to E.R.W.: E-M Pulse (107.76), Dazzle (107.77), crater (107.72), contamination (107.82), tree burning (107.71), (tree burning radius 3 hexes only).

### [108.0] SCENARIO DESIGN

*Mech War 2* is set up so that Players may design their own scenarios and thus experiment with the very wide range of variables which the game provides. This section therefore outlines what may be varied within a scenario; it may be likened to a list of ingredients available and general cooking directions. In the following sections will be found several complete scenarios, much like sample recipes. Players are encouraged to become familiar with these scenarios before designing their own. The scenarios provided may, of course, be used in designing your own, simply by varying the key ingredients.

#### [108.1] GENERAL INTRODUCTION

In the general introduction, the basic type of situation is outlined. This may be a meeting engagement, a reconnaissance sortie, a pursuit/rear guard action, an ambush, a vital target raid, a bridgehead expansion, a section of front line, a mopping-up operation, an airborne operation, a river-crossing, a reconnaissance in force, etc.

[108.11] Maps used and how they fit together.

#### [108.12] Number of Game-Turns

The number of Game-Turns may be established in the scenario or it may be left open, the game then ending when other specified conditions have been met.

#### [108.13] The Strategic Situation

Here the general strategic situation is outlined.

### [108.2] THE PHYSICAL ENVIRONMENT

[108.21] The scenario takes place by day or by night. If by night, the phase of the moon (full, half, quarter, or new) is given. If it is nighttime and the sky is overcast, it is equivalent to new-moon conditions. It will always be overcast during rain, falling snow, and blizzard conditions. **Notes:** (1) Soviet doctrine emphasizes limited-visibility operations; it is realistic to assume that many, perhaps most, scenarios in which Soviet units have the initiative take place at night or under foul-weather conditions. (2) Fixed-wing aircraft may not operate at night. (3) Helicopters all have IR and WL searchlights.

#### [108.22] Weather Conditions

The weather may be clear, rainy (Germany is often rainy through all seasons), foggy (fog is common during the German morning, and will tend to get thinner as the sun burns through it, so you may want to vary the fog as described below; fog may be heavy, medium or light), snowing (regular or blizzard), windy (calm, light, moderate, or heavy). The temperature (if there is a possibility of chemical rules coming into play) would be cool, warm, or hot. The ground condition may include mud (especially if it is raining) or snow on the ground.

To determine the prevailing wind direction (chemical warfare and nuclear scenarios only), roll one die before commencing play. On a 1-3, winds come from the West; on a 4 from the North; on a 5 from the East; on a 6 from the South.

The wind may be changed in strength without varying other weather conditions. Roll for wind change each record phase, using 1 die. On a 1, the strength of the wind may change, based on a second die roll: 1-2: wind increases one level. 3-4: wind remains the same 5-6: wind decreases one level.

**Notes:** 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, using one die. On a 1, the fog gets one grade lighter; on a 2-5 it remains the same, and on a 6 it gets one grade heavier. Or, if your scenario is set on a morning with the sun burning away the fog, change the effect of a die roll of 2 so that it also makes the fog one grade lighter. Or perhaps you would like a scenario with the fog rolling in. In that case, agree that a die roll of 5 makes the fog heavier, while on 2 it remains the same. Fog is likely during fall and winter, an average of one-third of the mornings are foggy for 5 to 6 hours; during the spring, an average of one-eighth of the mornings are foggy for 3-4 hours a day. Fog dissipation would be less likely in the winter, on European map B, and during rain conditions.

Perhaps the rain is in the form of a shower. This can be handled by rolling dice during the Record Phase. When the agreed upon number turns up, the rain begins, and continues until a second agreed-upon number is rolled in the End-Phase "rain roll." Using a die result of 2 or 3 to end the shower will result in an average of a half-hour shower.

You may incorporate weather fronts by having the weather start out on one mapedge and move to another (from prevailing wind direction) at the following rate:



*Light wind* - 4 hexrows per Game-Turn  
*Moderate wind* - 8 hexrows per Game-Turn  
*Heavy wind* - 15 hexrows per Game-Turn

(The wind level is always that of the incoming weather). You may also make the impending change known from the start of play (if both sides are assumed to be good at weather forecasting). In any situation spanning two weather areas, the worst weather applies.

#### [108.23] Rivers and Bridges

Designate the rivers on your maps as small, medium or large, and rate your bridges as you place them on the map. A small river is considered to be 10 meters wide, a medium river 10 to 20 meters wide, a large river over 20 meters wide. In a rainy scenario, rivers may be rated as larger than they would be in a dry scenario. In West Germany, main-road bridges should usually be rated at 4, secondary road bridges at 3 or 2, trail bridges at 1, and there is usually an abundance of 0 (foot-) bridges across small rivers or streams. In winter scenarios, rivers may be frozen, making river hex-sides passable to dismounted infantry, motorcycles, or class 1 vehicles, depending on thickness of ice and class of river.

#### [108.24] Pre-Existing Radiation and Damage

If your scenario takes place after nuclear weapons have been used, you may want to designate hexes (presumably the sites of targets in the recent past) as being radiation zones. You may want to improvise a radiation marker to designate these hexes, and indicate hexes already suffering environmental damage.

### [108.3] FIRST PLAYER BASIC INFORMATION

#### [108.31] Who Is The First Player?

Generally, this should be the Player on the tactical offensive.

#### [108.32] Who Sets Up First?

Generally, this should be the Player on the tactical defensive.

#### [108.33] Set-Up Units

List all the units given to the first Player to be set up before play begins. List each company and unit with Independent Command or refer to standard Orders of Battle and provide for them the following data:

- A) Nationality
- B) Which battalion it is in (if not obvious from the unit ID number — this particularly applies to attached Independent Command units)
- C) Beginning Morale Level and special morale considerations (**Note:** units with losses from an ongoing engagement may be forced to base morale calculations on the number of vehicles/steps hypothetically present at the previous start of the fighting rather than at the start of the game.)
- D) Ammunition levels for each unit (does the strategic situation provide enough time for the deployed units to have been resupplied?)
- E) Troop quality of each unit (this may be uniform for all units deployed, vary by battalion, or by company. See the strategic situation.)
- F) Number of vehicles in each full-strength unit, if not standard
- G) Location — within what area or at what specific locations are the units set up?
- H) Losses (are the units at full strength, or have they already taken losses? Losses may be uniform or may be varied by unit. Again, see the strategic situation.)
- I) Peculiarities: Do Soviet ATGM BRDM-2 vehicles have Sagger or Swatter or second-generation? Do NATO units have improved

TOW? Is the Soviet second-generation ATGM deployed? Do Soviet HIPs (Mi8 helicopters) carry rocket pods? Is anyone using Chobham armor (most likely: Leopard II; other possibilities: T72, Chieftain)?

#### J) Camouflaged set-up units

**Note:** "Soviet" units may be used to represent Warsaw Pact allies such as East Germans, Czechs, Poles, or Hungarians. These allies generally have inferior leadership and older equipment (e.g., T62s instead of T-72s).

#### [108.34] Initial Battalion and Brigade/Regiment Ratings (see separate sheet)

[108.35] Engineer units, if any (on the average, 1 platoon per battalion, but limited by the counter-mix).

[108.36] Military water transport, if any. (This may include ferries or bridges.) The location of ferries and bridges, if left to the owning Player's choice, should be written down before the Enemy Player sets up. Bridges and ferries need not be placed on the map, if this is the case, until they are either used or can be seen by Enemy units.)

[108.37] Number of dummies provided. (Recommended is the maximum you enjoy playing with and is provided by the counter-mix or can be improvised.)

[108.38] Set up formation, if any are mandated (set up vehicular units not in column are automatically in defilade; infantry may be set up in or out of defilade.)—see list of formations, page 15.

#### [108.4] SECOND PLAYER

Provide the same information as in Case 108.3, only with respect to the second Player.

#### [108.5] REINFORCEMENTS (Basic Units)

All reinforcements require the same information as that given with respect to set-up units. Do not forget reinforcement dummies. Reinforcements should be listed by Game-Turn and Phase of their arrival. Determine where (or within what range) they enter the map(s) and in what formation. *Reinforcements always enter with a Bound Command.*

When not stated otherwise, units may be brought onto the map in any formation the owning Player wishes. The Player may use as many entry hexes as he desires, if more units are to enter the map at a single hex than stacking limits or the formation will allow, however, the extra units are presumed to have been "staged back" during all or part of their movement.

Units which are staged back must first be deployed off the map, with the lead unit positioned adjacent to the desired entry hex, etc. Each such unit would enter with a Movement Point expenditure equal to the cost of the entry times the number of hexes "back" from the mapedge the unit was deployed. Such units may never be attacked or fire until they are on the map. Once staged back, the relative position of reinforcement units may not be altered until they arrive on the map. Units which are unable to enter during a specific Movement Phase have their entry postponed to the next Friendly Movement Phase.

Players may choose to withhold some or all of their scheduled reinforcements. Such units are available to enter the map during any subsequent Friendly Movement Phase, but under the same conditions of arrival location and formation. A scenario may, however, specify a mandatory arrival.

#### [108.6] SPECIAL INFORMATION (First Player)

#### [108.61] Artillery

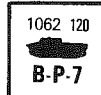
List the artillery available to the first Player by number of units, caliber, pattern (= size of unit), when available (by Game-Turn or other), whether smoke- or starshell-capable (starshell at night only), range (when using two maps or jamming), and direction (mapedge) from which fire is coming. Among Soviet equipment only the following may ever be designated as smoke-capable: 120mm mortars, MRL, 122mm howitzers, SP74 and 130mm howitzers. Among NATO equipment, only the following may ever be designated as smoke capable: 81mm mortar, 4.2" mortar, 120mm mortar, MRL, 105mm and 155 mm howitzers. All light and medium mortars may be designated as starshell capable. Among the howitzers, only NATO 105mm and Soviet 122mm (including SP74) may be designated as starshell capable.

List any pre-plotted fire missions (see Case 14.13). If there are pre-plotted fire missions of any kind. (Artillery, air, etc.). The owning Player ordinarily should write down his plots before the Enemy Player sets up his units. If either Player may not take advantage of Case 14.7 (on-call targets) specify this. If any weapons systems are pre-loaded with nuclear or chemical munitions, specify this; the scenario may also allow Players the option of pre-loading.

#### NOTES ON ARTILLERY

##### Organic Artillery

The following artillery is organic to the units concerned and should always be provided in the scenario with those units; see also Standard Orders of Battle.



**Soviet:** Motor Rifle Battalion: 2 sections of light howitzer (= heavy mortar), represented by the 120mm mortar counters provided in the standard OB. If there is more than one motor rifle battalion in your scenario, the battalion mortars must be represented by "off-map" artillery, or you may assume that the mortars are always with battalion HQ, or you may improvise additional "mortar" counters. On the CRT, 4.2" mortars are "medium mortars," UK 81mm mortars are "medium mortars," US 81mm mortars are "light mortars," and 120mm mortars are "light howitzers".

**West German:** Panzergrenadier Brigade: One battalion of self-propelled 155mm howitzers (medium howitzers), which will have to be represented either off-map or with brigade HQ, and which can fire one battalion pattern or three battery patterns. Players may, of course, improvise a counter for this artillery unit, if so, give it values of the Soviet SP74 unit.

##### Higher-Level Artillery Assets

Most artillery assets are held by higher-level commands (regiment, division, corps, army, front) and allocated downwards by those commands, depending on the situation, mission of the lower command, and conflicting demands for those assets. The artillery noted here would be the maximum which could be expected to be provided for an operation on the scale of the game. Players will have to be careful, in constructing a scenario, with the amount of higher-level artillery given to each side.

**Soviet:** It is Soviet doctrine to down-attach artillery for virtually any major mission. An advance company is usually expected to receive a battery of SP-74s (light howitzers), a motor rifle battalion can expect a battalion of same. It is also Soviet practice to frequently form "regimental artillery groups" (RAGs) out of division and higher-level

assets for routine support of Soviet regiments. A major operation can expect support from commands all the way up to the front level.

**Motor Rifle Division:** 2 battalions 122mm howitzers (light howitzers for CRT); 1 BN 152mm howitzer (medium howitzer for CRT), 1 FROG battalion, 1 battalion 122mm BM21 multiple rocket launchers, (LT howitzer for our CRT). Each battalion of 122mm howitzers or MRLS fires either a battalion pattern or 3 battery patterns. The 152mm howitzer fires only a battalion pattern. The FROG battalion fires 2 × FROG section patterns. Trucks accompanying the FROG battalion carry sufficient missiles for 63 such fires (each pattern representing the impact of 2 FROG missiles).

**Tank Division:** Three battalions of 122mm howitzers, no 152mm howitzers, otherwise as with motor rifle division (above).

**RAG:** has two to four battalions of 122 and 155mm howitzers. RAG battalions fire either 1 battalion or 3 battery patterns.

**Airborne Division:** One battalion of 122mm howitzers, 1 battalion 140mm multiple rocket launchers (medium howitzer). For the airborne battalion represented in the game, figure about 1 section, 2 sections or 1 battery of each type.

**Army:** Two 130mm medium howitzer and one 152mm medium howitzer battalions and a SCUD brigade of 3 battalions. The howitzers fire battalion patterns. The SCUD battalion fires 3 SCUD guided missiles in section patterns. The reload time for a SCUD launcher is not known to us; for game purposes assume 3 Game-Turns (each SCUD can fire every 3 Game-Turns).

**Front:** The Soviet front actually has two SCUD brigades, three scaleboard (SS20 medium range guided missile) brigades, 6 battalions of 130mm howitzers (medium howitzers), 3 battalions of 152mm howitzers (medium howitzers), 1 180mm (heavy) howitzer battalion, and 1 240mm mortar (super heavy howitzer for CRT purposes) battalion. Some day when sitting alone and feeling vengeful, you may want to find out what happens when a Soviet regiment at the breakthrough point receives all the artillery support a front, an army, a division and that regiment can muster. In the ordinary scenario, however, no regiment is going to have that sort of support. The countermix allows impact markers for the following front-level support as a practical maximum for a regimental operation: 1 battalion medium howitzer, 1 battery heavy howitzer, and 1 battery superheavy howitzer, plus as many missiles as you care to rain down upon the NATO forces (practically speaking, scaleboards are unlikely to appear near the front, and any regiment will consider itself lucky to get a whole battalion of SCUDs in its support).

#### United Kingdom (UK)

**Field Force:** A British field force is directly under corps. One heavy battalion 105mm SP howitzers (LT howitzer for CRT purposes). Fires battalion pattern or 4 battery patterns.

**Division:** One heavy battalion 105mm SP howitzer (see under field force), 2 batteries 155mm SP howitzer (medium howitzer for CRT purposes) firing battery patterns, one 8" howitzer section (heavy howitzer for CRT) firing section pattern.

**Corps:** One battalion 175mm SP guns (medium howitzer for CRT) firing BN pattern or 3 battery patterns, 8 × lance missiles. (Nuclear only.) A British combat team is roughly equivalent to a company, and a battle group roughly equivalent to a battalion; there are 5 battle groups per division. Thus, if all battle groups in the division are equally hard-pressed, etc., the battlegroup in the game should receive 2 sections light howitzers, 1 section medium howitzers, maybe 1 section medium howitzers from corps if it is lucky. (Note: British

sections are 4 guns each rather than the standard 3; this has been factored into the above average artillery distribution to the battlegroup).

#### West German

**Division:** Two batteries 175mm SP guns (medium howitzers for CRT), 1 BN 110mm multiple rocket launchers (light howitzer for CRT), 1 battery 8" SP howitzers (heavy howitzers for CRT), 4 × Lance or Honest John sections (nuclear only). Of this, the average battalion is likely to get 1 section heavy howitzers, 1 section light howitzers. Where the "depleted PG BDE" is in the scenario, it should on the average receive from division: 1 battery heavy How and 1 battery light How.

**Corps:** One battalion 155mm howitzers, (med. howitzers for CRT), 2 battalions 105mm howitzer (light howitzer for CRT). Our panzergrénadier brigade is likely to get some of this only if it is in a real hot spot, being one-ninth to one-twelfth of the corps.

#### United States

**Armored Cavalry Regiment:** One battalion of 155mm SP howitzers (medium howitzer for CRT)\*. Any troop may consider itself lucky to get a battery.

**Brigade:** No organic artillery

**Division:** Two batteries of 8" SP howitzers (heavy howitzer for CRT).\*\*

**Corps:** Two batteries of 175mm SP guns (medium howitzer for CRT)\*\*\* 6 batteries of 8" SP howitzers (heavy howitzer for CRT)\*\*\* 6 × Lance (nuclear only).

\* Battalion(s) may also fire as 3 battery or 9 section patterns.

\*\* Battalion(s) may also fire as 3 battery patterns.

\*\*\* Battery may also fire as three section patterns.

**Note:** The U.S. Marine Amphibious Unit in *Mech War 2* should average 1 battalion (which may be broken down into 3 battery patterns) of 105mm light howitzers, 1 battery of 155mm Medium Howitzers, and 1 battery of 175mm medium howitzers. Naval gunfire is highly variable and may range from 1 section of light howitzers (a destroyer) to several batteries of medium howitzers and a few sections of heavy howitzers. Naval gunfire follows relatively flat trajectories, so certain hexes on the side of heights facing away from the ships should be immune to naval gunfire; Players should agree to designate these hexes before playing. The Marines also rely heavily on attack helicopters and abundant F4 fixed-wing air support.

**Doctrine:** American and British artillery doctrine calls for centralized control of artillery, with small groups of support artillery being given to lower commanders as designated artillery and the rest subject to sudden availability and equally sudden withdrawal, depending on the higher command's assessment of the over-all needs. A US Task Force therefore may expect to "own" one battery or three sections of medium howitzer, and may or may not get additional support up to a probable maximum of 3 batteries heavy howitzers and 3 battalion patterns worth of medium howitzer.

**Ranges and Distance From the Front:** This is relevant to 2-map scenarios and EW-jamming scenarios. The distance from contact must be translated to distance from a particular mapedge in any particular scenario.

SOVIET		
Artillery	Range in hexes	Hexes distance from contact
120mm Mortar	2-28	(on map)
122mm MRL	Max 102	(may relocate to mapedge)

140mm MRL	Max 49	in 8
(AB DIV)		Game-Turns)
FROG	55-350	40-90
SCUD	Max 1400	100 or more
122mm HOW	Max 76	some on map, rest 5-20
130mm HOW	Max 135	20-35
152mm HOW	Max 62	20
180mm HOW	Max 150	50
240mm MOR	2-48	15

NATO		
155mm HOW	90	20-40
81mm Mortar	2-17 hexes	(on map)
4.2" Mortar	2-27 hexes	(on map)
Honest John	25-190	55-65
Lance	550	300-400
MRL	45-70	30-55
120mm MOR	2-31	10
105mm HOW	55	20
8" HOW	84	25-50
175mm Gun	163	40-50
Naval Gunfire	70	10-60

#### [108.62] Air Support/Off-Map Air Defense

List the air units, including helicopters, available to the first Player, if any. Generally speaking, only the side with air superiority should have air support. Players are cautioned to not go overboard in allocating air support. Do NATO units have Maverick missiles?

**Notes:** Generally speaking, the US is expected to have air superiority in its sector. The West Germans will probably have it more often than not. The British are likely to lose it to the Soviets. Since the Soviets will probably be able to gain temporary local air superiority by massing their tactical air forces, one can assume that a major operation like a river crossing or a paradrop will have Soviet air support. It may be interesting, however, to experiment and see what results from the unexpected: NATO bombs a river crossing or the Americans get hit with the new Soviet SU-19S, etc.

Helicopters from both sides may be allowed simultaneously as long as neither Mi24 nor Cobra is among them. List off-map air defense assets, by map edge.

#### Off-Map Air Defenses

**Soviet:** Up to 4 × gun 1 (3 vehicles), 6 × missile 1, 4 × missile 5. Of these the missile may extend their effectiveness to on-map.

**U.S.:** Up to 1 × missile 3 (3 vehicles) and 1 × gun 2 (3 vehicles) effective off-map only; up to 1 × missile 1 (3 vehicles) whose effectiveness may extend to on-map.

**UK:** Up to 3 × missile 2 (3 vehicles) and 2 × missile 4 (3 vehicles) effective off-map only; possibly 1 × missile 1 (3 vehicles), effectiveness may extend to on-map.

**WG:** Up to 6 × gun 1 and 3 × missile 2 (3 vehicles) effective off-map only; possibly 1 × missile 1, whose effectiveness may extend to on-map.

#### [108.63] Minefields

List the type and amount of minefields, if any, available to the first Player, together with any restrictions on where they may be placed. Consult the strategic situation for guidance on how much time the defender has had to emplace mines. Include the amount of dummy minefields. (See Case 19.3). Also list which units are equipped with mineplows. (A Soviet tank platoon may have one

tank equipped with a plow; ROD tanks all have plows. US is unlikely to use them at all.) **Note:** If US medium howitzers are capable of delivery of artillery-delivered mines (not very plentiful), this must be specified. By agreement among the Players, the location of mined hexes (other than artillery delivered and hasty minefields) may be written down rather than noted with markers on the map.

#### [108.64] Snorkeling

If the first Player is to have any units prepared for snorkeling rivers, list them. Reinforcements may also arrive in shape for snorkeling; this may be specified or left open to the owner's choice. (**Note:** snorkeling preparation takes up to half an hour and thus should delay entry of reinforcements if it is owner's option.) The owning Player should be able to cancel snorkel preparations before play begins, if he so desires.

#### [108.65] Ambushes

If any companies of the first Player are to be designated for ambush, list them. You may also leave it up to the owning Player's option to designate a certain number of companies as ambush-prepared. Players are advised not to go overboard on ambushes.

#### [108.66] Electronic Warfare

Radio detection equipment is likely to be present in medium-sized or larger scenarios, with NATO forces somewhat more likely to have it at battalion level than the Soviets. Assume that all brigade/regiment HQs have RD equipment. If the scenario provides for 1 or more BN HQ to be RD-equipped. The owning Player must write down which battalion HQ unit contains radio-detection gear before the start of play.

Jamming units are likely to be found in major encounters, with Soviets, Germans and Americans most likely to have them present. Jammers come in pairs, so that one unit can operate while the other is moving or setting up. You may have a scenario, however, in which there is only one jamming unit available to a given side. Scenarios with jamming are particularly appropriate for Multi-Player play. The location of jammers should be left to the owning Players, who should be able to set them up or bring them into the game stacked with other units.

Radio detection values are as follows: all jamming units are 5, Soviet artillery units are 3, NATO artillery units are 4, Soviet regimental HQ are 4, NATO brigade HQ are 5, Soviet BN HQ are 2, NATO BN HQ are 4; Roland: 5, Gepard: 5, ZSU23: 2, Vulcan: 2, other AA systems may not be located with RD gear. The scenario should list any previously established field telephone lines. Underground lines would only be found in static positions. If US or UK vehicles have signal flags/lights, this should be noted.

#### [108.67] Chemical Warfare

If the scenario is to include a chemical environment, list the chemical preparedness status of set-up units belonging to the first Player (reinforcements should be left to owner's option). Also list chemical points by type and delivery system available to the first Player, and indicate if any of the delivery systems are already loaded with chemicals, or leave it to the owning Player's option to pre-load chemicals before beginning play. You may also set up chemical contamination markers on the map before starting play. **Notes:** A chemical environment is fairly likely for medium- and large-scale encounters after the first few days of a surprise attack, and probably from the start in a prepared attack. Soviet units have a great deal more chemical munitions on hand than NATO

units, and have such an advantage in training that it would be militarily advantageous to use them. The Soviets are more likely to use persistent chemicals on the tactical defense (including flank security), and non-persistent chemicals on the tactical offense, as close to the line of contact as *Mech War 2* depicts. HQ units are especially likely to be targeted for chemical delivery. Soviet infantry is more likely to be equipped with incapacitating chemical hand grenades during the opening weeks of a war, but thereafter the US is likely to catch up (perhaps drawing upon ample stocks in police inventories).

In the first week of a Soviet chemical attack, NATO troops are likely to be at a severe disadvantage in training and equipment to handle chemical warfare. This is difficult to simulate. The disadvantage in training may be handled by increasing the Loss Modification Die Roll Modifier for dismounted infantry and unprotected vehicles in CP3 status to -5 and for such units in CP2 status to -3 (see Case 12.3, Loss Modifier Chart). The disadvantage in equipment may be more directly simulated by specifying in the scenario that all or some companies must remain in CP1 status, having neither mask nor protective suit. This would not affect protected vehicles. The disadvantage in morale may be simulated by requiring that all companies of any battalion which has been attacked by chemicals and sustained casualties as a result of this attack immediately increase their Morale Level by 1.

#### [108.68] Nuclear Warfare

If the scenario takes place in a nuclear environment, list the warheads and delivery systems available to the first Player, if any. There should be no more than three nuclear deliveries in most scenarios, both sides totalled. Players, may, however, be given a wide choice of warheads and delivery systems.

The scenario may list pre-loaded or even pre-plotted delivery systems, but must then specify the warhead loaded; alternatively, the scenario may allow owning Players to pre-load delivery systems before beginning to play. If Players are allowed to pre-plot nuclear strikes, this should ordinarily be done before Enemy units have been set up.

The scenario may specify a Victory Point cost for using up a warhead, varying somewhat (though not drastically) with its size, so as to simulate the limited availability of warheads. It has been authoritatively estimated that there is a tactical nuclear warhead for every battalion in Europe.

**Notes:** Soviet doctrine has always emphasized nuclear warfare, though there are small signs that for the first time in years the Soviets are willing to contemplate a non-nuclear environment. Whether the Soviet doctrine is so much propaganda to intimidate potential enemies is an interesting question, and many have wondered why the Soviets should want to initiate nuclear warfare in the face of an apparent 2-1 advantage in warheads for NATO. Yet the fact remains, that the Soviet army is trained for nuclear exploitation and has a viable nuclear doctrine, while NATO has neither training nor doctrine.

NATO tactical nuclear weapons tend to be on the small side, and what little written material is available on their use has emphasized rear-area targets rather than the immediate battlefield. Soviet warheads are believed to be somewhat larger on the average, but seem to be intended more for the immediate battlefield. In *Mech War 2*, therefore, the Soviets may have more warheads available than NATO, even if the strategic situation is reversed. If one is dealing in a nuclear environment, then a major Soviet operation like a

river crossing is very likely to be preceded or accompanied by a nuclear strike.

Consider Soviet artillery of heavy howitzer class, super-heavy howitzer class (including 240mm mortars), aircraft, FROGs and SCUDs to be nuclear-capable. For NATO, consider 8" howitzers, Honest John, and Lance missiles as well as aircraft to be nuclear-capable. When playing with the enhanced radiation weapon (ERW) option, consider 8" howitzers and Lance missiles to be ERW-equipped. In this case, since the ERW is designed for battlefield use, scenarios should provide more abundant stocks of ERW warheads. Subtract some of the blast-and-burn nuclear warheads which you might otherwise have given NATO, but leave the sum total of warheads significantly higher than you would otherwise have allotted to NATO.

Most scenarios should include a rule making it impossible for NATO to target an area within a certain number of hexes of an unevacuated town. This range is 5 hexes for 1/2 and 1 KT, 6 hexes for 2 KT, 9 hexes for 5 KT, 11 hexes for 10 KT, 6 hexes for ERW. West Germans should always be prohibited from plotting such a nuclear strike. Note any evacuated towns.

#### [108.7] SPECIAL INFORMATION — SECOND PLAYER

This is the same as 108.6, but for the second Player.

#### [108.8] SPECIAL SCENARIO RULES

List here any special scenario rules. These would include rules derived from Sections 109.0 and 110.0.

#### [108.9] VICTORY CONDITIONS

Victory Conditions should reflect the nature of the situation (in a vital target raid, for instance, losses are irrelevant and the only question is whether the objective is destroyed or captured, or not), the forces given to both sides, the time factor, and such special situations as weather. Scenarios need not be "balanced", especially if they can be played twice with the Players changing sides and comparing Victory Point Totals.

Common ways of awarding Victory Points are:

- (A) Exiting units off of particular map edges
- (B) Being sole occupant of a given town, hex, or elevation
- (C) Destroying Enemy vehicles/steps
- (D) Forcing Enemy companies into unfavorable morale states
- (E) Doing any of the above by a certain Game-Turn

**Comments:** Exiting units is more important to the Player on the offensive. Enemy vehicles/steps may have different values. One way of doing this is as follows:

- 70 Pts: BDE HQ
- 60 Pts: REGT HQ
- 40 Pts: Air Unit destroyed, Jammer
- 30 Pts: B0105, Mi24, BN HQ
- 20 Pts: UH1, Mi8; air unit triple-damaged
- 10 Pts: Air Defense Unit
- 7 Pts: SP74, M60, Leopard, Chieftain, Mortar
- 5 Pts: T72
- 4 Pts: T62, MTU55, AVLB, M150, Marder, Jaguar, Kanone, Biber, Scorpion, Scimitar, Swingfire.
- 3 Pts: BMP, BMD, M113, FV432, LVTP7, BRDM2, NATO infantry, ASU57, ASU85, T12.
- 2 Pts: BTR60, BRDM1, Jeep, Soviet Infantry

In assigning relative Victory Point values for objectives (occupation of points or map exiting) and units, consider that the Soviets expect to lose heavily in units in order to gain their objectives speedily, and begin the war with a great preponderance of tanks and armored personnel carriers. NATO Players, however, would be expected to be more cautious in jeopardizing their forces, with the British and Americans more likely to give ground than the West Germans in order to save their units.

If your scenario special rules allow for defending units to withdraw off the map, they do not count as units eliminated. In this case, it may be best to assign Victory Points by vehicles/steps lost rather than by units, as a losing Player would then withdraw his crippled companies without taking a Victory-Point penalty.

Units in Morale 3, units holding withdraw commands, and Independent Command units may not be considered for exit VP purposes unless specified otherwise (as in recon scenario). Other Morale-Level restrictions may be added to Victory Conditions. **Note:** Exiting a map, a unit pays the terrain cost of a hypothetical off-map hex of the same terrain as the on-map hex of exit.

A scenario may be designed so that Players receive Victory Points for "controlling" a certain hex at the end of the game, or by a certain number of Game-Turns. A hex is assumed to be controlled by the Player who last had a Friendly unit occupy or pass through the hex.

A scenario may require that a Player clear a certain area or terrain feature of an Enemy unit and/or their Lines of Sight. Smoke hexes are not considered to block the Line of Sight for this purpose (although weather conditions might).

## [109.0] MULTI-PLAYER GAMES

*Mech War 2* lends itself well to Multi-Player gaming. The roles and responsibilities of the different Players can be defined either by designing a scenario with two different NATO nationalities represented, or by allotting different HQs (and their subordinate units) to different Players. In the latter case, each Player might command a battalion, or even a company in a small scenario. If battalions are under separate command, assets from regiment or above should either be allocated to the battalions, or retained under the control of another Player representing higher headquarters. In smaller scenarios, the same may be done with units under Independent Command (see Section 45.0). A single Player may wear more than one "hat."

### [109.1] COMMUNICATIONS BETWEEN JAMMED HEADQUARTERS IN MULTI-PLAYER GAMES

[109.11] When Enemy jamming is in effect, communications between Allied Players are impossible except as governed by Cases 26.6 through 26.9.

[109.12] Communication established by field telephone or short-range radio between HQ units allow the Players representing those HQs to freely communicate. Messages sent via short-range radio relay links between HQs are limited to ten words or numbers, are subject to all the restrictions of Case 26.71, and may only take place during a Command Phase, whether Friendly or Enemy. The content of such relayed messages, however, is not restricted. (See also Case 109.6).

[109.13] Players may not exchange messages via hand-signals.

[109.14] Communications via signal flag or light are limited to messages which must be written down and handed to the recipient. If the message is to be relayed via visual signals by a non-HQ unit, rather than go directly from HQ to HQ, the content of the message must be limited to the following word-units: (any hex number), (any number), (any time or sequence designation, *i.e.*, GT6, 2nd Enemy Movement Phase), APC, artillery, bad, battalion, bound, brigade, chemical protection status, company, destroy, enemy, fire, friendly, from, future, gas, good, halts, heavy, help, hill, HQ, I need, I offer, in, infantry, jammer, light, locate, long, morale, move, near, negative, no, nuclear, order, overwatch, pass, past, plural, rally, RD, regiment, reinforcement, remain, river, search, short, smoke, suppression, tank, to, town, vehicle, visual discipline, where, withdraw, woods, yes, ?, :, +, . . .

[109.15] Communications between Players using visual signals may only take place during Command Phases, whether Friendly or Enemy. Direct (HQ to HQ) visual signals may be unrestricted in content, in which case they are limited to 15 word-units per Command Phase; or they may be limited to the words noted in Case 109.14, in which case they are limited to 60 word-units per Command Phase. Relayed visual signals are restricted to the word-units noted in Case 109.14 and may not exceed  $60 \div (x + 1)$  word-units per Command Phase, whereby  $x$  is the number of relay stations between sender and final recipient. A HQ may send or receive any number of messages via visual signals per Command Phase, as long as the limit on word-units is not exceeded with any other sender or receiver, including relay links.

[109.16] Communications via messenger must be written down during a Friendly Command Phase, together with *Addressee*, *Sender*, and *Command Phase of Arrival*. The message is delivered to the Addressee at the beginning of the Command Phase of Arrival. There is no restriction on the content of such messages, but no message may contain a text (excluding Addressee, Sender, Sender's position, time message is written, time of Arrival) longer than 60 words/numbers. Only one such message may be sent from any one HQ to any other HQ during any Command Phase.

#### Example of Message:

"TO: RGT HQ  
FROM: 3RD BN: 4513; GT5/1ST CMD PHASE  
HAVE LOCATED ENEMY MORTARS AT:  
3916; REQUEST ARTILLERY FIRE: INTEND  
TO MOVE 1ST COMPANY INTO DURRENB-  
BUCK, 2ND COMPANY TO 4010 AREA; 3RD  
COMPANY REMAIN IN REICHENBACH.  
NEED REINFORCEMENTS."

A number counting as one word-unit of a message may have more than one digit. Thus, "3916" above counts as a single word for purposes of observing limits on the number of word-units in a message.

[109.17] When units are spotted, the owning Player has the option of showing their face-up side only to Players whose units are doing the spotting. In this case, spotted units must be marked in some way for as long as they remain spotted.

[109.18] When a HQ unit moves into signal flag/light, hand signal, short range radio, or field telephone communications range of the last reported position of another Allied HQ unit, the moving unit's Player may verbally request confirmation from the second unit's Player, to the effect that he is still in communications range, giving the new location of the moving HQ. This may also be done in writing. If the second HQ is, in fact, within range, communications may be commenced; if

not, the first HQ is informed of that fact, but the location of the second HQ is not given.



### [109.2] ELIMINATION OF HQ UNITS

When a HQ unit is eliminated, the Player is eliminated from the game and another Allied Player assumes control of the eliminated Player's units. Application of this case may be waived by consensus of Allied Players.

### [109.3] VICTORY POINTS

Victory Points should in most cases be awarded to the team, but certain scenarios may provide for different objectives for different units and thus provide for different Victory Point Totals for each Player.

### [109.4] HIGHER-LEVEL ASSETS

If there is a Player representing a HQ higher than those of the other Players on his team, whether on or off map, that Player controls assets not organic to or attached to the smaller units. Thus, if there is a Soviet Regimental commander, he would control regimental HQ, air defense units, SP74s, regimental reconnaissance, engineer platoon, and all artillery not organic to the battalions (*i.e.*, other than the battalion mortars). If there is a US brigade commander, he would control all but designated artillery, air defense units, engineer platoons, *etc.* In scenarios where the brigade/regiment commander is not allowed to see the map, on-map units theoretically under his control must be played by other Players designated by him. The regiment or brigade commanders can give orders to the battalion/team commanders, but not to companies; how the lower commanders use their companies in pursuit of objectives given to them by the higher commander is up to them.

### [109.5] COMPANY COMMANDERS

When playing with separate company commanders, the battalion commander issues the orders (Bound, Overwatch, *etc.*) to the company, but has no further control over the units in the company. This communication is subject to all the restrictions of Interplayer communication in EW jamming situations and CP3 status.

**Player's Note:** When Allied Players are in communication, they may not spend more than 5 minutes per Game-Turn in joint discussion. Depending on the scenario, pre-game consultation may also be limited.

### [110.0] FOG OF WAR RULES

*Mech War 2* cannot hope to adequately simulate the problems of limited tactical intelligence on the modern battlefield. Abundant use of dummy counters helps, but slows down the game. At the same time, much of modern tactics depends upon ambushes, surprise, deception, and exploitation of unexpected opportunities.

In this section, Players are provided with suggestions which you may incorporate in your scenarios to introduce as much surprise, suspense, uncertainty, and realism in the Fog-of-War context as possible. The price is that this is likely to upset pre-planned Victory Conditions. But for Players who would like a rip-roaring game and aren't too particular about who comes out ahead on points, full speed ahead!

#### [110.1] RANDOM SELECTION

In order to take advantage of the provisions in this section. Players will need one or more decks of common playing cards and a number of envelopes. When picking cards, all cards are placed face down. The face of the chosen card is seen only by the picker of the card, who places it in an



envelope marked as to the specific type of Random Event symbolized by the card. (Example: "reinforcements", "chemicals", etc.). The card is only shown when the event comes into play.

## [110.2] SCENARIO DETAILS SUBJECT TO RANDOM SELECTION

Cases cited are references to Section 108.0

[108.33] List several set-up OBs and dummies sufficient to provide a total which is the same for all of them, then match the OBs with card suits for random selection of OB; you may even provide more than 4 alternatives by using card numbers instead of suits.

[108.5] List reinforcement OBs in the same manner as was done with set-ups. Here, however, there are additional factors to be varied: entry hexes (usually a range of hexes) and Game-Turns. Due to these additional factors, a full set of alternatives can be drawn up and matched to each number in a deck of cards (i.e., 2-10, or even 2-10, J, Q, K, A).

[108.61] List alternative artillery from higher HQs and match the alternatives with cards. Have the US or British Player draw a card every 4 Game-Turns during the Friendly Indirect Fire Plotting Segment. Telling him what artillery is available to him in the second through sixth Game-Turns following the one in which the card is drawn. Soviet and West German artillery is more stable within the time frame of *Mech War 2*, however, it may also be varied by this method, though the variations should not be as severe as with US or British artillery. Organic artillery should never be varied by this method.

[108.62] Air support should be made less predictable. Match cards with particular air units (including helicopters) and with no air support and draw for air support during the Friendly Indirect Fire Plotting Segment every other Game-Turn for the next two Game-Turns. Optional to this provision may be the replacement of shot-down units.

Also added to the card mix may be a card or cards signifying a change in air superiority. If this card is drawn, the drawing Player loses all air support immediately and the Enemy Player picks a card for his air support. If a "change-in-air-superiority" card is to be included in the mix, the Players should agree before beginning play what cards would be in the changed pot and what they mean.

[108.67] Does the Enemy Player have chemicals or not? You can keep it a secret if you use a card selection in which certain cards mean "no chemicals", others give varying types and amounts of chemicals. Of course, just when you have decided he doesn't have any, comes the big surprise — now where did I leave that gas mask?

[108.68] Do for nuclear warheads what you did for chemicals.

[108.9] Give the Players a variety of Victory Condition Alternatives keyed to a variety of alternate objectives, chosen by matching them with cards. One way to do this is to vary the area in which units are to be exited for Victory Points, or in similar fashion to vary objectives without changing the nature of the objective. Another way is to vary the type of objective altogether. In this case take care, however, that the objectives do not mismatch, as when one side is told to pursue and the other to expand a bridgehead. Some good combinations follow the Key to Second Player Objectives.

### KEY TO SECOND PLAYER OBJECTIVES:

- A = Hold onto specified territory
- 2 = Prevent Enemy from exiting specified area
- 3 = Destroy Enemy forces
- 4 = Delay and Withdraw with minimal losses (use tougher morale rules)

- 5 = Ambush Enemy force
- 6 = Eliminate Enemy bridgehead
- 7 = Withdraw to specified area as soon as possible and with minimal losses (use tougher morale rules)
- 8 = Withdraw to specified area as soon as possible
- 9 = Eliminate Enemy EW gear
- 10 = Eliminate Enemy HQ
- J = Counterattack
- Q = Counterattack despite losses (use easier morale rules)
- K = Recon Enemy force and Withdraw

<i>First Player Objectives</i>	<i>Second Player Objectives</i>
Exit specified area with minimal losses (use tougher morale rules)	All but 6 (7, 8 only if first Player sets up in contact)
Exit specified area regardless of loss, as soon as possible (use easier morale rules)	All but 6 (7, 8 only if first Player sets up in contact)
Recon Enemy forces and positions	1, 3, 5, J, Q
Pursue and bypass Enemy	All but 6 and K
Pursue and destroy Enemy	All but 6 and K
Raid on vital target (use easier morale rules)	A, 4, 5, 6, J, Q (some of these assume the vital target has already left)
Expand bridgehead	All
Mop up by-passed Enemy	A, 3, 4, 5, 6, 7, J, Q, K
Link up with airborne landing	A, 3, 4, 5, 6, 7, J, Q, K
Make airborne landing	A, 3, 5, 6, J, Q, K
Cross river (can be combined with other objectives)	All
Recon in force	All but 2, 6, 9, K

## [110.3] VARIABLE WEATHER

Your scenario may be livened up a bit by having a weather change in the midst of battle. Pick the new weather by assigning possible changed weather conditions to cards and rolling each Game-Turn to see whether a change is due. When a 2 is rolled on two dice (1 + 1), the weather will start to change 2 Game-Turns (all weather rolls are made during the Record Phase) later.

## [110.4] NOTES ON SOVIET TACTICS

For Soviet attack and defense formations, see the Section on formations, 110.5.

### [110.41] Motor Rifle Tactics

In a dismounted attack, which is likely against strong opposition or at night, the M.R. company dismounts as a unit close to the Enemy lines. At night, infantry may precede tanks. As soon as the Enemy front line is overrun, infantry remounts. Vehicles provide suppression fire, as does artillery.

### [110.42] Tank Tactics

Tanks attack buttoned up (CP3 Status) at full speed until a dangerous Enemy is spotted, then fire at short halt while continuing to move. If short halt fire is not sufficient to knock out the Enemy, the tanks will go into defilade and fire until the target is destroyed. Tanks will first open fire at 7 or 8 hexes distance from the target. After a breakthrough is achieved, the tanks will reform into column. When a tank regiment makes a deliberate attack, the second echelon battalions march in company column 15 hexes behind the tanks.

## [110.43] General Tactics

A favorite Soviet tactic is to detach one-third of a unit as a "holding force" This force, which may be as small as a tank company or a motor rifle platoon, engages the Enemy directly, either by charging, short-halting, or exchanging final fire. Meanwhile, the other two-thirds of the unit outflanks the Enemy and pounces upon it from the flank or rear. In pursuit, one-third of the force pursues directly, while two-thirds takes a parallel route at full speed in hopes of reaching a junction before the retreating force, or failing that, falling upon it from the flank.

## [110.5] SOVIET FORMATIONS

**Tank Company Attack:** Three platoons advance in parallel formations (line abreast) over a 3-hex front; or 2 platoons up over a 4-hex front and the third platoon either in the middle or covering a flank. Attached AFVs are 1 hex behind; engineers may precede or accompany tanks.

**M.R. Company Attack:** Same as tank company. In a breakthrough operation, company attacks 3 platoons abreast, covering 3 hexes in a conventional environment and 4 hexes in a nuclear environment. Attached tank platoon is one hex in front of AFVs by day. In dismounted attacks, the three platoons attack line abreast covering 3 or 4 hexes, separated from the next company by 1 empty hex; AFVs follow infantry by 2 to 3 hexes.

### M.R. Company Defense

(First Echelon Company):

Two platoons up, 1 is 2-3 hexes back, with 2 hexes between platoons.

(Second Echelon Company):

All 3 platoons abreast, 2 hexes between platoons, 5-8 hexes from first echelon.

## BATTALION MARCH FORMATIONS:

### Battalion Column:

Units of the battalion are strung out in single file, with 3 hexes per company and no empty spaces; BN HQ follows the first company.

### Company Column:

Companies advance in parallel formation, 4 hexes apart, with BN HQ 2 hexes behind the middle company.

### Company Column Echeloned Right:

Right-hand company is one hex back from the others.

### Company Column Echeloned Left:

Left-hand company is one hex back from the others.

### Company Wedge Column:

Middle company is one hex ahead of the others. (In wedge formation, distance between companies may increase to 5 hexes)

### Platoon Column:

Same as Company Column, but platoons, instead of following each other single file, are spread out so as to be advancing in parallel.

## M.R. BN MARCH TO MEETING ENGAGEMENT FORMATION:

A. Recon Patrol

B. (10-20 hexes behind A) M.R. company, tank platoon, anti-tank gun platoon, mortar section, engineer squad.

C. (25 hexes behind B) BN HQ, engineer platoon (minus one squad), anti-tank battery, tank CO (minus one platoon), AA battery, mortars, M.R. company (one platoon), M.R. company — one platoon per hex, in that order of march.

D. (Parallel to BN HQ and off to either flank) M.R. platoon from second M.R. company.

**M.R. Battalion Attack:**

Two companies advance in parallel formations (line abreast) over a 5 to 8 hex front, tanks with first echelon; third company (second echelon) 4 to 15 hexes behind, in column until committed. BN HQ is 2-3 hexes behind one of the leading companies. The second echelon may also be used as a holding force (see Case 110.43). Mortars are deployed 3 to 7 hexes behind the lead companies. Battalion may detach one platoon as a reserve. In a breakthrough attack, all 3 companies attack as one echelon.

**TANK BATTALION MEETING  
ENGAGEMENT DEPLOYMENT COLUMN**

- A. One tank platoon
- B. (5 hexes behind) One tank company, one M.R. platoon, one mortar (mortar, if present in OB, may be withheld at owning Player's option)
- C. (20 to 40 hexes behind — owning Player's option) One tank company — 5-10 hexes on both sides are the remaining two tank platoons of the company whose lead platoon is noted in A.
- D. (1 hex behind last platoon of tank company in C) BN HQ, engineer platoon, AA battery.
- E. (With D or one hex behind D) MR company, minus the platoon at B.
- F. (With or one hex behind D) Artillery-mortars (all but mortar in B).
- G. (With or one hex behind E) Last tank company.
- H. (5 or more hexes behind F) Recon platoon.

*Note: This is a reinforced battalion.*

**Tank Battalion Attack:**

In company column to 20 hexes from Enemy; in platoon column (platoons abreast) by 15 hexes from Enemy; covers 5 to 10 hexes until Enemy is sighted, then spreads out to 15 to 25 hexes.

**M.R. REGIMENTAL MARCH FORMATION:**

- A. Recon Co.
- B. (Variable distance behind A) MR BN, with ENG squad, anti-tank and anti-air elements.
- C. (5 hexes behind B) Remainder of regiment, except for D.
- D. (5-10 hexes behind C) One MR company.

**M.R. Regiment Attack:**

Advanced guard consists of MR BN plus recon company, anti-air, engineer and anti-tank elements. First echelon is two battalions, with 1 M.R. Co. as advanced guard ahead of them; second echelon is third M.R. battalion, 15-30 hexes behind first echelon; 1 tank company is kept in reserve. Regt. HQ is either 5-10 hexes from the lead elements or near the second echelon battalion. A forward regiment receives from division's second echelon an advanced guard of one (tank-) reinforced battalion with anti-air, engineer and anti-tank elements. Anti-tank units are deployed on the flanks. Attack frontage is 20 to 30 hexes ordinarily, 10-20 hexes in a breakthrough operation, in nuclear environments; somewhat less in conventional environments.

**TANK REGIMENTAL MARCH FORMATION:**

- A. Recon company
- B. (Variable distance behind A) Motor-rifle battalion, often reinforced with tank company, engineers or ROD.
- C. (15-45 hexes behind B) Remainder of regiment, in two columns at least 15 hexes apart, with 10-25 hexes separating battalions in the same column; 1 platoon/hex in the daytime, 1 company/hex at night.

**TANK REGIMENTAL ATTACK FORMATION:**

This is like a motor rifle regiment, but much more flexible.

**Note:** as long as units are in formation as described above, the requirements of Soviet doctrine (105.1) are considered met, even though a platoon may be at some distance from the rest of its company. In such a case, the Soviet Player may consider detached platoons to be under Independent Command.

**[110.6] NATO FORMATIONS**

NATO formations are very flexible. For a Mech battalion on the defense, two companies in the front line may cover about 15 hexes. Each company has two platoons up front and one behind. The third company is either consolidated some 10 hexes behind the lead companies, or spread out 6-10 hexes behind. If the third company is tanks, it may be as much as 30 hexes behind. Armored and Panzergrenadier battalions may defend a front line covering 25 hexes, but without appreciable reserves.

**[110.61]** West German battalions may cover up to 25 hexes in defense.

**[110.62]** Air and armored cavalry units will deploy in front of the battalion front line, if available, according to U.S. tactics.

**[110.63]** In the attack, NATO units move by Bounding Overwatch, not only at the platoon level, but also at the company level. **Notes:** A scenario should never force a Player to maintain attack formation, though it may specify a set-up in which the units are already in attack formation. East and West both agree that combined-arms operations will be the norm in modern European combat. The US practices cross-attachment to achieve a combined arms combat force. Thus a Mech battalion and an armored battalion will trade one company, creating the task forces which are part of the standard O.B. below. If Players are willing to keep track of who belongs to whom, cross-attachment may also be practiced at the company level (giving a company with 2 platoons of one type and one platoon of the other). Players may also form "pure" battalions in this way. Soviet practice is not cross-attachment, but down-attachment. Thus the tanks of a T-62 battalion are distributed to BMP companies; the motor-rifle company does not give up any BMPs in this process. Down-attachment can work at all levels down to company; Soviet Doctrine calls for virtually any unit with a combat mission to be reinforced with down-attached units; these usually come out of the "second-echelon" forces.

## SCENARIOS

**GENERAL NOTES:**

- All units have organic artillery (see Case 108.61 and Standard Orders of Battle).
- All artillery which may be designated as smoke — or starshell — capable (see Case 108.61) is so designated in the following scenarios unless otherwise specified.
- Scenarios are presented in roughly ascending order of complexity. Not all scenarios are evenly balanced, but each demonstrates a different aspect of modern warfare.
- Specific information is given only where needed. Unless otherwise specified, the wind condition is always light.

**AVAILABLE FORCES:**

- Refer to the section of the Available Forces Chart (pp. 26-27) which applies to the scenario being played to determine what forces are available and their status.
- After determining which 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 on the Available Forces Chart. The composition of reinforcing forces is also determined according to the Tables of Organization.

For purposes of Victory Conditions, a company (or other organization) is considered to fulfill a Victory Condition as long as one-half or more (round fractions down) of the vehicles and/or steps in that organization fulfill the stated Victory Condition (e.g., exit the map, remain west of a certain river, etc.).

## [111.0] A CHANCE ACQUAINTANCE

**COMMENTARY:**

The most frequent type of encounter between opposing forces in modern war, say the experts, is to be the meeting engagement.

**CASES:****[111.1] GENERAL INFORMATION**

**[111.11]** This scenario takes place on Map A.

**[111.12]** The scenario lasts for 20 Game-Turns.

**[111.13]** The main battle is on the other side of the Ottinger Forest, but two Soviet battalions — one motor-rifle and one tank — have been detached to form flank security and reconnoiter, moving in parallel towards the setting sun. Two US task forces, meanwhile, are heading north; they are supposed to relieve two exhausted battalions still fighting it out north of the forest.

**[111.2] PHYSICAL ENVIRONMENT**

**[111.21]** This scenario takes place in daylight. The weather is clear.

**[111.22]** Both rivers are small rivers. There are Class 4 bridges wherever roads cross them, and Class 2 bridges wherever trails cross them.

**[111.3] NOTES ON SOVIET FORCES**

**[111.31]** The Soviet motor rifle battalion is set up along the road from hex 4104 to 5308, with the lead unit at 4104. The tank battalion, with T-62 tanks, is set up along the road from hex 5018 to 5511, with the lead unit at 5018.

**[111.32]** The Soviet Player may deploy seven dummy counters.

**[111.33]** Both Soviet battalions are set up in Column formation, in battalion column. (See Case 110.5).

**[111.4] NOTES ON US FORCES**

**[111.41]** The mech-heavy task force is set up along the road from hex 2528 to 2534; the armor-heavy task force is set up along the trail from hex 4127 to 4134. US tanks are M60A2.

**Note:** Players may want to try this scenario while reversing the set-up positions of the two US task forces, or with M60 A1 or M60 AB.

**[111.42]** The US Player may deploy six dummy counters.

**[111.43]** Both battalions are set up in Column formation, with two units per hex and two hexes between companies. Set-ups may extend off-map.

**[111.5] REINFORCEMENTS**

Neither Player receives reinforcements.

**[111.6] SOVIET SPECIAL  
INFORMATION**

**[111.61]** Artillery: There is no artillery available from higher HQ.

**[111.7] US SPECIAL INFORMATION**



# MECH WAR 2 ADDENDA As of November 1979

## STANDARD RULES

### Charts and Tables

[12.11] **Vehicle Loss Modification Table (deletion)**  
Delete the Chobham column

[12.3] **Loss Modifier Chart (corrections)**

A. "Moving" should be "moving vehicle."

B. "Stacked..." should be "for each additional Friendly unit...."

(additions)

C. If an infantry or vehicle unit is in a hex that receives fire simultaneously from two enemy positions whose direct fires enter the target hex from directly opposite hexsides, add +4 to the loss modification die-roll. (This accounts for flank and rear hits.)

D. **Target Unit Is:**

Class B vehicle in defilade: -2

Class A, C, D, or E vehicles in defilade: -4

E. **Firing Unit is:**

Suppressed Infantry: -4

Infantry unit firing ATGM and receives overwatch fire as a result of that firing: -4

Vehicle firing ATGM and receives overwatch firing as a result of that firing: -2

E. **Use the following procedure for chobham vehicles.** For each chobham vehicle hit, roll a die. On a roll of 1, 2, or 3, the vehicle is destroyed. On a roll of 4, 5, or 6, there is no effect.

[14.32] (correction) This should be titled "Scattered Artillery Combat Results Table."

[20.74] **Ground to Air Combat Results Table (correction)** At an attack strength of 4, a die roll of 3 is "no effect."

[20.77] **Air Defense Combat Strength Chart (correction)** Gun-3 at 0 hex range is rated "4/0."

[28.15] **Camouflage Observation Table (addition)** Camouflage values are increased, cumulatively, as follows: smoke: +1; night: +2; medium fog: +1; heavy fog: +2; ground or falling snow: +1; blizzard: +2.

The Player's Notes were written by John Kallaugh.

**Rules: (\* = optional)**

[4.1C2] (clarification) First sentence should read: Friendly units with short halt designation and enemy units with fire-and-move designation may also fire in the Final Fire Segment.

[6.4] (correction) Exception: In a town hex there may be up to 6 platoons of infantry plus one platoon of engineers.

[6.43] (correction) Infantry and engineers in town hexes do not suffer on the Loss Modification Tables for stacking.

[6.55] (addition) Vehicular units in heavy woods or town hexes may remain in Column Formation while using mine plows to breach minefields or when entering breached minefield hexes.

[7.36] (addition) Infantry in town hexes may be spotted from more than one hex away only if the infantry unit has fired in that Phase.

[9.4] (correction) Suppressed infantry units receiving an S result do not suffer a step loss if in town, trench or fortification hexes. (optional, but recommended) Protected Target Class Vehicles use the same combat results as Light Target Class Vehicles against Indirect Fire. Hard Target Class Vehicles: All combat results suppress them as before, but when the fire is from (artillery) indirect fire and the result is 1, 2, 3, 4, or 5, add up the cumulative effect of these particular results for each hex during each Indirect Fire Phase and

divide this total by 3. This result represents the number of Hard Target Vehicles destroyed. If any of the indirect fire units are a motorized rifle battalion or the equivalent, divide by 2 instead of 3. Example: Three Indirect Artillery battalions fire onto the same hex and the following are the results: 1, 2, 3. If the target was a Protected or Light Vehicle, 6 vehicles would be destroyed. If the target were Hard Vehicles, 2 would have been destroyed. If one of the 3 battalions was a motorized rifle battalion, the loss would have been 3 vehicles.

[12.2] (correction) If the defending infantry unit is in a town, trench or fortification hex, each original step loss is separately modified through this procedure. Thus, for example, a 2-step loss would be treated as two separate 1-step losses, each of which is separately modified, when the defending infantry is in a Town hex.

[13.13] (addition) The -4 loss modification for infantry in a Town hex does not apply to a unit which enters Close Assault from another hex during the Phase of entry.

[14.14] (correction) In the "Patterns of Fire Example," the direction of fire arrow for the battery fire pattern should be reversed.

[14.32] (correction) The Off-Target CRT should be called the Scattered CRT.

[14.6] (clarification) All on-map artillery units are sections.

[15.25] (addition) A vehicle unit which is subject to Opportunity Fire while entering defilade does not benefit from the die roll adjustment when resolving that attack. Instead, it receives a modification for moving.

## [15.5] (addition) EFFECTS OF DEFILADE ON OBSERVATION

Units in defilade which have not fired in the current Phase have the range at which they can be observed reduced to 1 hex by day in Clear Terrain in good weather; to 0 hexes in other circumstances.

[16.57] (clarification) Vehicle smoke is removed at the end of the next Friendly Movement Phase.

[18.12] (clarification) A company which has ceased to exist is counted as in Morale State 3.

\*[19.45] (addition) A result of 3 on the On-Target Artillery CRT will breach a barrier minefield hex. A result of 2 or 3 on either Artillery CRT will breach a defensive minefield hex. A result of 1, 2, or 3 on either Artillery CRT will breach a hasty or Artillery-delivered minefield hex.

[20.5] (clarification) At night or in foul weather conditions, treat helicopters as moving vehicles in determining the range at which they can be observed.

[20.54] (correction) "Friendly Movement Phase," not "Indirect Fire Phase."

[20.72] (correction) The first sentence should read: "Consult the Air Defense Combat Strength Chart (20.77)."

[20.73] (correction) The reference to 20.75 should be to 20.74; the reference to 20.77 should be to 20.76.

\*[20.79] (addition) The combat strength of air defense systems against helicopters is doubled if the attack takes place while the helicopter unit is engaged in mounting or dismounting operations (see 20.91).

[23.33] (addition) Units spotted at ambient light ranges, which could not be spotted using natural light, are shown to the spotting player (dummies are removed), but they are not spotted for purposes of fire combat and are not flipped over.

[24.51] (correction) The reference is to 24.4, not 26.3.

[25.0] (correction) Procedure (c): The order of priority of rough and smooth 2 should be reversed.

[26.15] (addition) Friendly artillery units may be located while friendly jamming is in effect, but in such circumstances their RDF value is 2.

[26.22] (correction) Jammers are 3-vehicle units and are able to function with 2 vehicles remaining, but not with a sole vehicle remaining.

[26.23] (correction) Delete the reference to Overwatch in the fifth line.

[26.26] (correction) Delete the word "again."

[26.66] (addition) Exception: Units in trench, fortification or Town hexes.

[26.7] and [26.8] (clarification) Relay links by short-range radio and visual signals are limited to a total of 4 such links. Telephone links are not limited.

[26.88] (clarification) If such a displaced signal hex is chosen, that displaced hex is considered to be the reference point for RDF on that HQ (see Case 26.1); the second line should read: "from any one hex."

[28.16] (clarification) These increases are cumulative.

\*[28.18] (addition) Camouflage values are decreased by 2 for units in the same hex as the unit attempting to observe them. If such camouflaged units remain unobserved, it is not involved in close assault. As an exception to 28.11, the camouflage die roll must be repeated for each dismounted infantry platoon which subsequently enters the hex.

[29.31] and [29.32] (correction) Delete the last sentence in both Cases. The + or -2 die modification applies to each Friendly engineer squad.

\*[29.33] (addition) Three engineer squads or an engineer platoon may create Town devastation in a hex by spending 6 consecutive complete Game-Turns in that hex with a Bound command, not being attacked by any form of direct fire.

## SUEZ TO GOLAN

### Rules

[205.21] (correction) The third line should read "four hexes," not "two hexes."

## RED STAR/WHITE STAR

### Charts and Tables

[10.22] **Main Gun Anti-Infantry Attack Strength Table (correction)**

(a) "Number of Firing Vehicles" should read from left to right: 5 4 3 2 1.

(b) Beehive values are the same as Class 3 Medium Main Gun.

[107.27] **Nuclear Load and Plot Time Chart (correction)** Under Bomber Plot Time, the second column should be headed: "Plot Change Time," not "Plot Time."

**Infantry Data (corrections)** US Marines also have Dragon (3) Personnel Anti-tank Weapons. UK Mech also have LAW Personnel Anti-tank Weapons. All infantry units except engineers have ambient light capability.

**Helicopter Data (correction)** Mi-24 has a transport capacity of 1 platoon.

### Vehicle Unit Data (corrections)

(a) Scorpion and Scimitar do have Amphibious Capability.

(b) Chieftain, Leopard II and T72 tanks all have Ambient Night Equipment.

(c) Treat M60A2 main guns as Heavy Optical, in order to account for the short range of the gun.



**Vehicle Unit Data Explanation Sheet (correction)**  
Change the suggested Movement Allowance for the SP74 to 11.

**[111.0] Available Forces Chart (correction)** Armor-Heavy Task Force should be 2nd line.

**Maps A and B (correction):** Treat all woods hexes as "Heavy Woods."

**Tables of Organization (corrections)**

**Soviet Union**

5th Airborne Battalion: in most cases there will be only one company of BMDs with the three infantry companies.

1st Motorized Rifle Regiment: will increasingly have 6(3) x SP74 rather than 2(3).

1st Tank Regiment: will have 2(3) x SP74, also now has an organic Motor Rifle Company as Regimental Asset.

In the Route Opening Detachment, it is the BTR60's, not the tanks, which all have mineplows. In the Airborne Battalion, only one company has BMD's (but keep three BMD companies in scenario 117.0).

**United Kingdom**

Armor Platoons have 4 tanks, not 3.

**United States**

The M113 platoon of the Armored Cavalry Troop has 3 vehicles, not 2. The M113 platoon of the Mechanized Infantry Company has 4 vehicles, not 3; the Mech Heavy Task Force has 2(2) 4.2" platoons, not 1(1); and 3(3) M113 platoons, not 2(2).

**West Germany**

A late report indicates that the planned reorganization of the *Bundeswehr* has been cancelled.

2nd Panzergrenadier Brigade has 6(3) x M109G self-propelled guns, values: C-P-7, Turret MG\*, no amphib, chemical protection, Bridge-3, IRSL, No Smoke, Gun 3\* air defense. Spahpanzer platoons have 2 vehicles, not 3; Jagdpanzer Kanone platoons have 4 vehicles, not 5; Jaguar Rakete platoons have 2 vehicles, not 3.

2nd Panzergrenadier Brigade also receives 1st, 2nd, 3rd and 4th companies (all identical).

**Rules**

**[101.23] (correction)** The exception should read: LVTP-7 may use its turret MG.

**[102.4] (correction)** Instead of using a separate column on the Vehicle Loss Modification Chart, use the Hard column, but for each vehicle loss resulting from the normal procedures, roll one die. If the die result is even, the vehicle is saved.

**[102.9] (correction)** Replace the existing text with: **ATGM'S AT NIGHT AND IN FOUL WEATHER.** The following ATGM systems may *not* be used at night or during rain, falling snow, blizzard, or through fog: Sapper, Swatter, Shillelagh, Swingfire, S-11, TOW. The following *may* be used: improved TOW, Dragon, HOT, 2nd Generation Soviet, Milan.

**[106.1] (note)** CP1 is unprotected. CP2 represents men wearing suits but not masks while in a vehicle. CP3 represents either a sealed protected vehicle, or men wearing suits and masks in an unprotected vehicle.

**[122.34] (addition)** Airborne battalion HQ: B.

**[122.43] (corrections)** Third paragraph, reference should be to Task Forces, not battalions. NATO front line should be corrected in these places: 5412-5414-5214-5215-5216-5217 and 3820-3522-3524. US Armored Cav tanks are M60A2.

**[122.51] (clarification)** If using T-55 counters, play with T-62 values.

**[122.68] (addition)** These may also be pre-plotted.

**[122.71] (correction)** Game-Turn 25 German indirect fire units are battalions, not batteries. The following two paragraphs belong under Case 122.72.

**[122.76] (correction)** All NATO Bn HQs have RDF gear.

**[122.85] (correction)** The second paragraph should begin: "If play is at regimental level, one Player should command the air units, the independent battalions..."

**[122.88] (correction)** The first sentence of the second paragraph should read: "Dismounted infan-

try in trench hexes in defilade benefit from a modification of -4 on their Loss Modification die roll against direct and non-nuclear indirect fire."

**[106.44] (clarification)** Only unevacuated Town hexes are affected.

**[106.52] (correction)** The reference is to 106.53.

**[107.62] (addition)** This CRT is also used to attack all minefields.

**[107.66] (correction)** Exception: infantry units in Town or trench hexes are attacked on the Anti-Wheeled Vehicle CRT rather than on the Anti-Infantry Nuclear CRT.

**[107.73] (correction)** The sixth sentence should read: "Infantry units in town hexes which become devastated lose one step."

**[107.76] (clarification)** Class one includes operating jammer units. Class two includes non-operating jammers and HQ units observing radio silence.

**[107.77] (clarification)** A Player who is not delivering a nuclear weapon must have visual discipline in effect for a full Game-Turn in order for it to be effective at the time an Enemy nuclear weapon is delivered.

**[107.77] (addition)** A Visual Discipline Command is automatically replaced by an Overwatch command for any unit or company whose unit is attacked by Enemy direct fire.

**[107.94] (addition)** Town devastation affects hexes adjacent to the impact hex only.

**[108.61, page 12, column 2] (correction)** United States, Division: should have three asterisks, not two.

**[111.43] (clarification)** "two units per hex" does not include the third or fifth unit of a company.

**[112.0] (Second Player addition to Available Force Chart)** 2 Motor Rifle Companies on Game Turn 2 enter in column march on any east mapedge road or trail hex.

**[122.1] (correction)** The reference in line 6 should be to *Red Star/White Star*.



## WEST GERMAN TABLE OF ORGANIZATION

The organization in the rules is a peacetime organization. The wartime organization is as follows:

### 2nd PANZERGRENADIER BRIGADE (Reduced)

Brigade Assets (Independent Command)

2000 Bde HQ B-H-12	2031 SpPz C-L-15	2021 Jng A-H-11	2071 Gpnd B-P-12	2073 Rind B-P-12	2051 Bdr E-H-10
1(1)	2(2)	6(2)	2(3)	1(3)	1(3)

### 1st Panzer Battalion

(Panzergrenadier Brigade, Current)

Battalion Assets (Independent Command)

2100 Bn HQ B-H-12
1(1)

### 1st Tank Company

(2nd and 3rd Companies identical)

Current	Future
2111 Lprd C-H-10	2111 Lprd C-H-10
3(5)	3(4)

### Second Panzergrenadier Battalion

(Panzergrenadier Brigade, Current)

Battalion Assets (Independent Command)

2200 Bn HQ B-H-12	2041 IZB A-P-11
1(1)	1(6)

### 1st Panzergrenadier Company

(2nd and 3rd Companies identical)

2211 Inf 7-5-3-1	2211 Mdr B-P-12
3(3)	3(3)

### 3rd Mixed Combat Battalion

Battalion Assets (Independent Command)

2200 Bn HQ B-H-12
1(1)

### 4th Tank Company

2111 Lprd C-H-10
---------------------

3(5) or 3(4)

### 1st Panzergrenadier Company (2nd and 3rd Companies identical)

2211 Inf 7-5-3-1	2211 Mdr B-P-12
3(3)	3(3)

### Engineer Company

H Eng 2-0-0-0
9 (plus transport)

### Artillery Battalion

Med Howz Bty
3(155mm)

Although extra counters are required, a full organization would include another Panzergrenadier Battalion identical to the 2nd Panzergrenadier Battalion.