

# **MECHWAR 2**

## **STANDARD RULES**

for the games

# **RED STAR/WHITE STAR**

# **SUEZ TO GOLAN**

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## [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*.

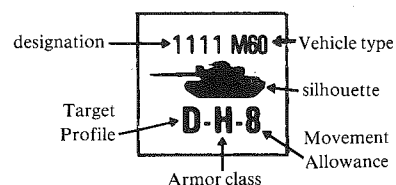
[3.31] There are two types of organizational counters: *combat units* and *non-combat units*. Combat units are represented, for play purposes, by two counters: the unit's particular organizational counter and a combat strength counter, which is always placed *under* the organizational counter and represents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

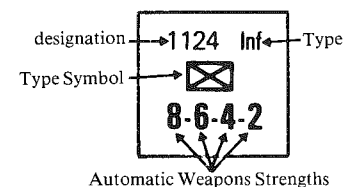
[3.33] Most organizational counters are printed on only one side, allowing them to be placed "face-down" and hidden on the map until observed by the Enemy Player.

#### [3.34] Sample Units:

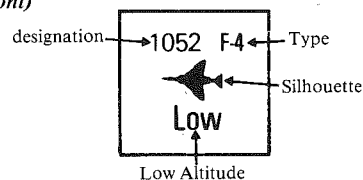
##### Vehicle Unit



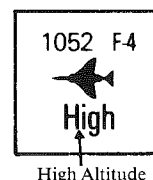
##### Infantry Unit



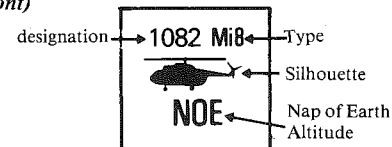
##### Aircraft Unit (Front)



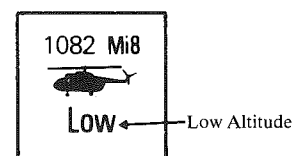
##### (Back)



##### 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.

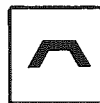
[5.16] Engineer units performing engineer functions with a Bound Command are not required to move.

#### [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:

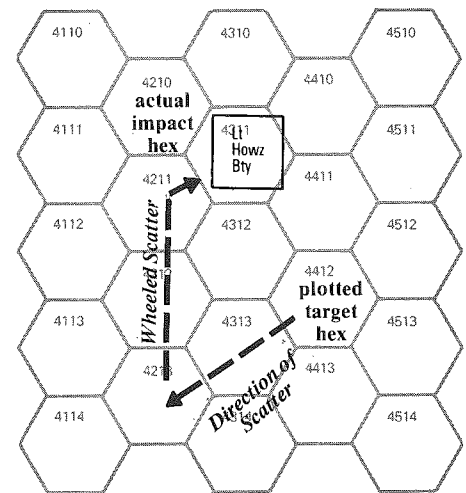
### SCATTERED ONE HEX:

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

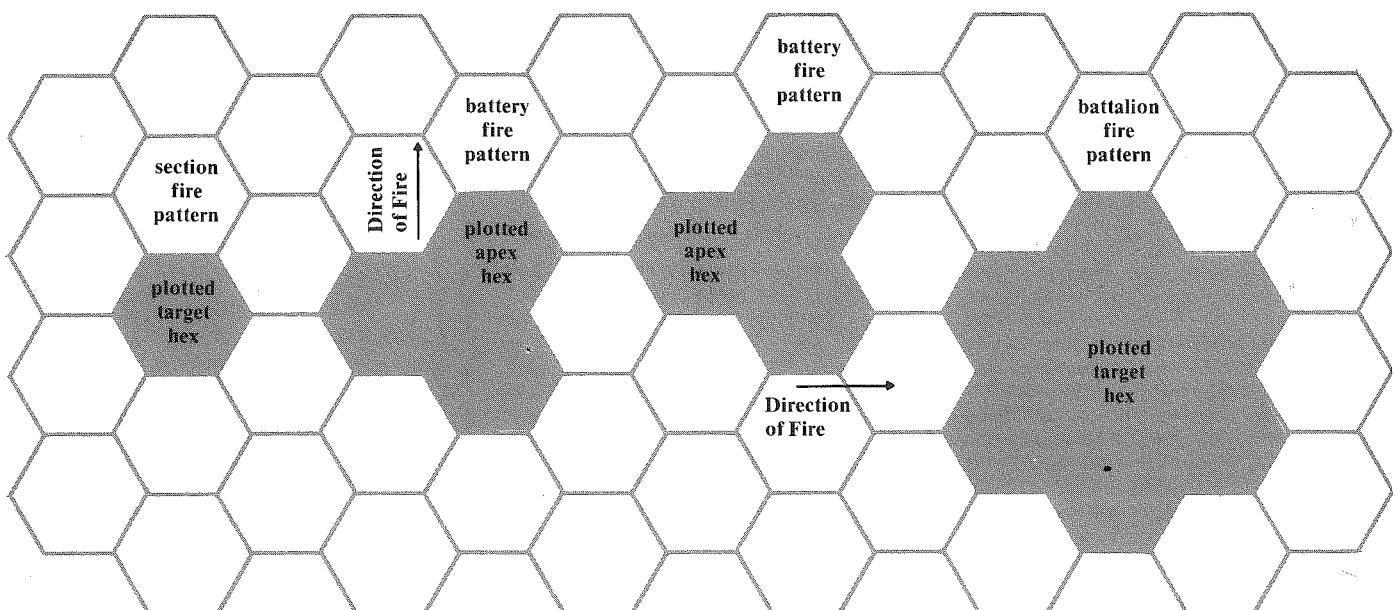
The effect of indirect fire on both vehicular and infantry units in each impact hex is reflected on the Indirect Fire Combat Results Tables (14.31 and 14.32). Depending on the results of Scatter the fire will either be *On-Target* or *Scattered*. There is a separate Combat Results Table for each of these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

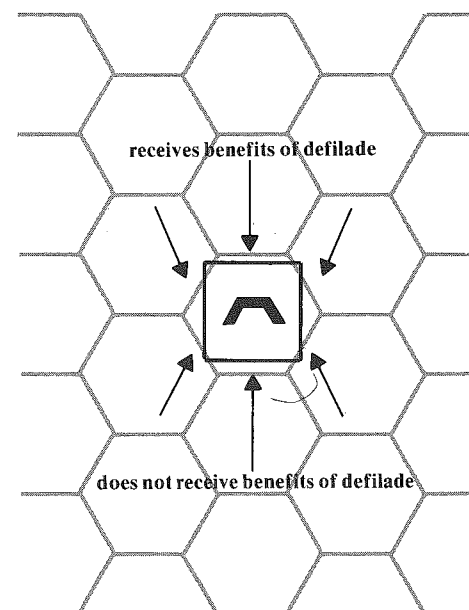
[15.32] Vehicular units in defilade receive no benefit from being in defilade when defending against an indirect fire or close assault attack.

#### [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:

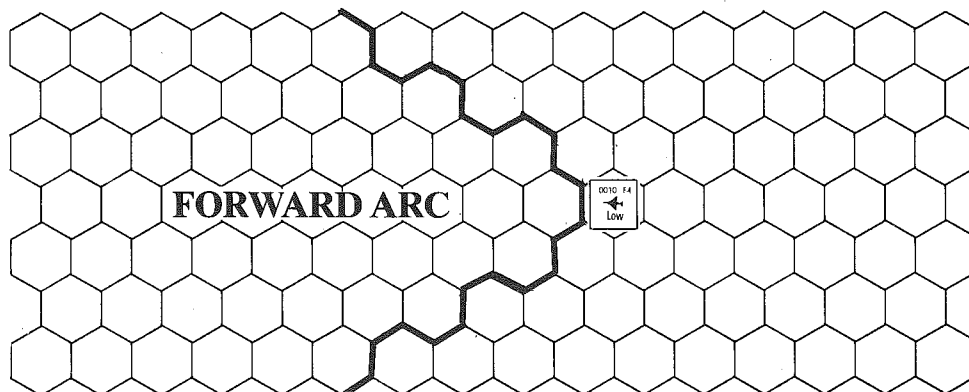
- (A) The type involved
- (B) The Game-Turn in which the strike will occur
- (C) If the strike is to be a bombing strike, the target hex of that strike.

[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.

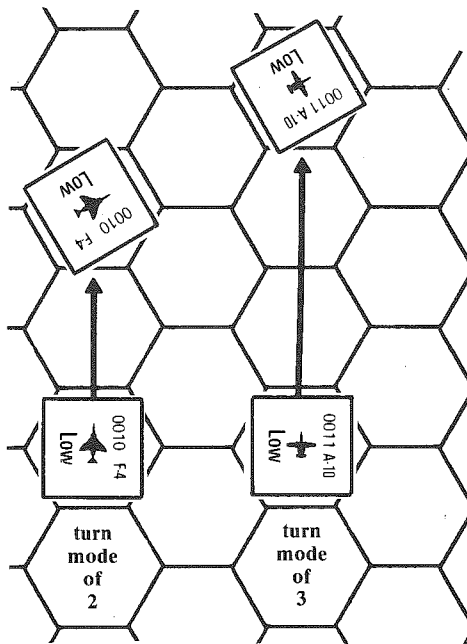
[20.13] While on the map, aircraft *must* be at either *high* or *low* altitude. Aircraft may switch freely between the two (flip the counter over to its appropriate side). Altitude affects an aircraft's Line of Sight and observation, as well as its defensive and offensive capabilities.

### 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.

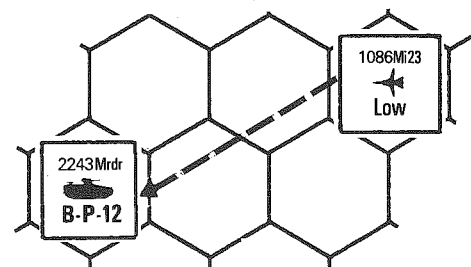
[20.23] Aircraft equipped with smart bombs may attempt to destroy bridges and ferries by conducting a bombing strike on one of the bridge or ferry hexes. The strike is conducted normally, with the exception that a separate die roll is made when resolving the results of the air strike. If a combat result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

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

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

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

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

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

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

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

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

### [23.5] OBSERVING UNITS WHICH FIRE

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

## [24.0] RIVER CROSSING

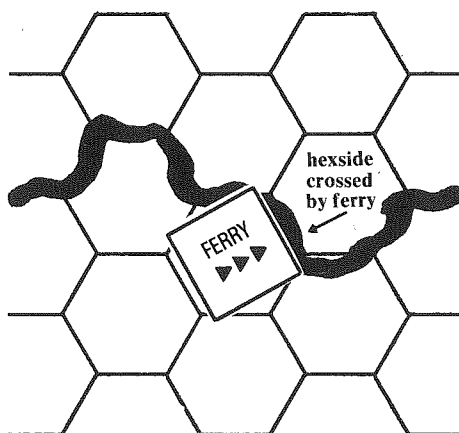
### GENERAL RULE:

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

### CASES:

#### [24.1] FERRIES

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



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

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

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

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

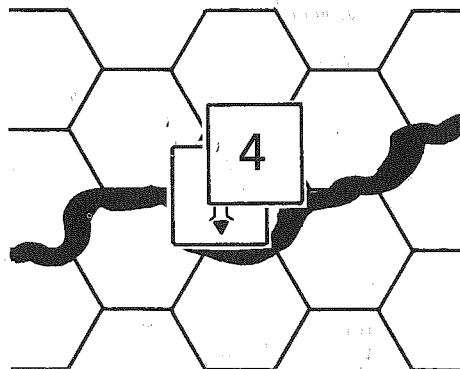
### [24.2] FIXED BRIDGES

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

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

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

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



### [24.3] BRIDGING UNITS

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

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

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

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

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

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

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

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

[24.35] All mobile bridges are class 4 bridges.

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

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

## [24.4] AMPHIBIOUS MOVEMENT

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

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

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

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

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

## [24.5] SNORKELING

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

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

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

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

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

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

## [25.0] POSITIONS OF ADVANTAGE

### GENERAL RULE:

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

### PROCEDURE:

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

#### (A) Height Level

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

#### (B) Defilade

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

#### (C) Terrain

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

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

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

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

## [25.1] RULES OF USE

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

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

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

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

## [26.0] ELECTRONIC WARFARE

### GENERAL RULE:

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

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

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

### CASES:

#### [26.1] RADIO DIRECTION FINDING

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

### PROCEDURE:

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

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

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

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

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

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

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

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

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

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

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

## [26.2] JAMMING UNITS

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

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

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

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

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

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

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

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

## [26.3] EFFECTS OF JAMMING

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

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

[26.33] Friendly jamming does not affect Friendly units.

## [26.4] THE EFFECTS OF JAMMERS ON COMPANIES

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

[26.42] Jammed companies may not Rally.

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

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

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

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

## [26.5] OTHER EFFECTS OF JAMMING

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

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

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

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

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

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

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

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

## [26.6] CIRCUMVENTION OF JAMMING EFFECTS — TELEPHONES

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

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

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

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

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

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

[26.66] Suppressed units may not communicate via telephone.



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

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

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

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

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

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

#### [26.7] CIRCUMVENTION OF JAMMING EFFECTS — SHORT RANGE RADIO

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

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

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

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

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

#### [26.8] CIRCUMVENTION OF JAMMING EFFECTS — VISUAL SIGNALS

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

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

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

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

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

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

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

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

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

#### [26.9] CIRCUMVENTION OF JAMMING EFFECTS — MESSENGERS

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

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

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

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

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

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

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

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

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

## [27.0] AMBUSH

### GENERAL RULE:

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

### PROCEDURE:

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

### CASES:

#### [27.1] HOW AMBUSH WORKS

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

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

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

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

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

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

## [27.2] RESTRICTIONS ON AMBUSH

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

[27.22] The owning Player may not change the location of a company ambush hex during the play of the game.

## [28.0] CAMOUFLAGE

### GENERAL RULE:

Friendly units may make it more difficult for Enemy units to observe them through the use of camouflage. In some scenarios, units may begin the game in camouflage. When a unit is camouflaged this fact must be written down on the unit status sheet.

### PROCEDURE:

Whenever a camouflaged unit would ordinarily be observed by an Enemy unit, the owning Player may roll one die and consult the Camouflage Observation Chart. If the number is less than or equal to the camouflage value indicated for a unit in the appropriate type of terrain, then the unit is not observed.

[28.11] Only one die roll need be made for the effects of camouflage in a given Phase. If the unit is not observed, then it will remain so for the entire Phase (unless it moves, fires, or becomes involved in a close assault) regardless of the number of Enemy units that might ordinarily attempt to observe it in that Phase.

[28.12] Camouflaged units are automatically observed if they fire any of their weapon systems, move from the hex they currently occupy or become involved in a close assault.

[28.13] Once a camouflaged unit is observed it is no longer considered to be camouflaged.

[28.14] Camouflaged units that leave the hex they currently occupy are no longer considered to be camouflaged.

[28.15] **Camouflage Observation Table**  
(see separate sheet)

[28.16] The camouflage value of all camouflaged units is increased by 2 during night conditions, and by 1 during fog, rain, falling snow, blizzard.

[28.17] Camouflaged units may not use IR or WL searchlights. (See Case 23.2).

## [29.0] ENGINEERS

### GENERAL RULE:

Engineer units are used to maintain Friendly ferry points, construct and destroy bridges, construct abatis, breach minefields, and aid Friendly units performing close assault in town hexes.

## [29.1] 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.

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by Charles Kamps Jr.

The cornerstone of all Soviet tactical doctrine is the offensive. Historically, since 1918, it has taken pride of place over other tactical concepts as the best method of repelling invasions of the Soviet Union. Today, the Soviets' offensive doctrine rests on four principles regarded as key to its success: surprise; massing of superior firepower; high speed maneuver; and the theory of the 24-hour continuous battle. Surprise is achieved by short periods of preparation for attack and last minute massing of attack units. Camouflage and deception are instrumental on the tactical level to assure secrecy of plans, especially when nuclear strikes are to precede the attack. Firepower superiority is to be achieved at the point of breakthrough by massing conventional or nuclear artillery *fires* and not by actual gun concentration as in WW II. In keeping with surprise, prep fires are to be short but intense. While priority targets are designated by higher headquarters, each commander from regiment on up has organic artillery with which to affect the battle. Maneuver speed is achieved by pressing tank and motorized rifle units ahead at full speed into breakthrough points, using engineers to maintain momentum in the face of obstacles. Frontline units continue the offensive day and night in all weather until expended, at which time fresh formations pass through the first echelon to continue the attack.

# MECHANIZED WARFARE in the 1980's



## Dealing with the Anti-tank Threat

The recent dramatic increase in the effectiveness of anti-tank weapons, in which the Soviets have played a leading role, has caused some concern in such a tank-oriented army. Expecting to face numerous Western anti-tank weapons in any attack, Soviet planners have developed three counter-measures to overcome them: the nuclear option; the artillery option; and the maneuver option. According to the Soviets, the threat of nuclear weapons employment will force NATO to disperse its forces to the extent that high concentrations of anti-tank weapons, enough to stop a Soviet breakthrough, will be impossible without the risk of presenting a nuclear target. Should tactical nuclear weapons (TNW) actually be employed, they will create radioactive areas in the path of advance which would preclude the employment of infantry-manned anti-tank weapons by NATO. Conversely, Soviet troops could remain mounted and pass through the danger zones unimpaired. Under the artillery option, massive suppression fires from Soviet guns would keep Western anti-tank gunners out of the picture in critical breakthrough areas. To this end, the Soviets have introduced armored self-propelled (SP) guns into their forward units which are capable of keeping pace with a mechanized assault. Tactics suggested by advocates of the maneuver option stress a more fluid and high speed offensive by mechanized troops. They propose rear area raids by small groups of BMP fighting vehicles to confound enemy defenses in conjunction with airborne and airmobile forces. These low-density operations could prevent effective NATO concentration in an area of attack.

**Trading Casualties for Speed** Soviet attack doctrine for mechanized and tank forces emphasizes speed and shock effect rather than the concept of *fire and maneuver* at the small unit level. They therefore accept heavy losses and isolated units as normal conditions of warfare. They do not employ large flank guard forces in offensive operations, but rely on speed of advance. In order to maintain the pace of the advance, Soviet doctrine calls for attack from the line of march and rapid deployment into battle order when necessary to overcome stubborn resistance. To further facilitate forward movement, units are trimmed to a minimum of logistical "tail" and carry six days worth of necessary supplies to reduce dependence on rear echelon services during the initial stages of combat.

## Types of Offensive Action

The Soviets recognize three major types of offensive action: the meeting engagement (including advance to contact); the breakthrough; and the pursuit. The Soviets believe that the *meeting engagement*, essentially a surprise encounter for both sides, will be common in fluid battles and in nuclear combat. Their tactics call for a hasty attack from the line of march, characterized by swift and aggressive maneuver. In this way they hope to overwhelm an equally unprepared enemy force without taking time to coordinate attacking units or extensive fire support.

The *breakthrough* is a deliberate attack against a well defined enemy line of resistance. Its aim is to strike into enemy rear areas rather than to consolidate on terrain objectives. The breakthrough utilizes firepower and mass to create a gap for pursuing forces to pour through. Once the enemy main line of resistance is overcome, further combat is characterized by series of meeting engagements.

The *pursuit* is not only a form of offensive action, it is a Soviet principle of war. Pursuit plans are drawn up prior to an attack and are initiated upon breakthrough by regimental commanders.

The aim of the pursuit is to complete the destruction of enemy forces, not just follow them. During the pursuit, considerable latitude in operational control and artillery employment devolves upon the regimental commanders until the operation is terminated on order of Army or Front headquarters.

**Types of Maneuver** The Soviets employ five basic forms of maneuver in the attack: the *single envelopment*; the *double envelopment*; the *penetration*; and at Army and Front level the *multiple penetration* and the *pincers*. The *single envelopment* is used to pin the enemy against an obstacle by encirclement. The attack force breaks through a weakly defended area and drives deep into the enemy rear. A supporting attack may be launched by followup forces to take advantage of the disrupted defense line, or it may precede the main attack as a strong diversion. The *double envelopment* is considered the most decisive form of attack. Where the Soviets mass a preponderance of forces, they may be expected to use the double envelopment to entrap and destroy enemy forces. Supporting attacks may lure enemy forces to the supposed point of attack in preparation for the double envelopment, which will subsequently pocket the defenders or force them into nuclear strike kill zones. In the *penetration*, the Soviets mass combat power on a narrow front to break through an over-extended defense line while simultaneous feints deceive the enemy as to the real point of concentration. Once a gap is created the enemy is defeated in detail as his freedom of maneuver has been lost to the pinning "feints".

**Artillery Support** Artillery support for the offense consists of preparatory fires and fires in support. Prep fires destroy or disrupt enemy defensive positions and command centers, and are ideally based on thorough reconnaissance. Nuclear fires, when employed, would precede a brief 20 minute conventional preparation. In a nonnuclear environment, prep fires may last from 40 minutes to 1 hour. When the assault begins, support fires carry the leading elements through the enemy defenses using prearranged concentrations. During this phase the artillery remains under centralized control but is available to respond to direct requests from units for "on call" fire missions. As the attack presses on, continuous support is provided by the forward displacement of batteries. No more than one-third of the supporting artillery is moved at any one time. When the enemy's artillery positions have been overrun and the pursuit phase begins, artillery control is decentralized to the regimental commanders for more flexible exploitation.

**Primary Maneuver Unit: The Regiment** The primary building block of the Soviet division, and also the smallest unit capable of sustained independent action, is the motorized rifle regiment. Its mission in the attack is to penetrate as far as enemy direct support artillery positions and then exploit and pursue as necessary. It will normally attack in two *echelons*, the first consisting of 2 motorized rifle battalions reinforced by 2 tank companies from the regimental tank battalion; and the second consisting of one motorized rifle battalion which may or may not be reinforced with the remaining tank company. The second echelon usually follows the first at a distance of 3 to 6 kilometers and may be used to: reinforce the first echelon; outflank enemy positions; mop up bypassed pockets of resistance; or meet counterattacks threatening the regiment's flanks. As part of a secondary attack, the regiment may occupy a front of 10 to 15 kilometers. When operating as part of the main effort it has a front of 5 to 8 kilometers, and actually attacks on a 4 kilometer wide zone.

The regiment may execute a movement to contact independently or as part of a division ad-

vance. As part of a divisional movement, it may be assigned two or more routes and usually deploys one battalion as an advanced guard. In the attack, the regimental first echelon jumps off from covered positions and leaves security in the hands of the anti-tank reserve held at regiment. Enemy hedgehogs are bypassed and screened by the first echelon. If a weak spot is found, the second echelon will be deployed immediately to surround and destroy committed enemy forces. The regimental commander may also concentrate his tank battalion and use it to race ahead of retreating enemy columns to cut them off. Fire support is provided by organic mortars and regimental 122mm battery as well as by *regimental artillery groups* of direct support units formed from division and army assets.

**Times to Deploy the Regiment** An advancing regiment can be expected to launch a hasty attack with one battalion within one hour of the time its reconnaissance elements encounter significant opposition. The assault battalion will take up positions under cover as close as possible to the enemy — preferably within 1½ kilometers. As supporting artillery fires commence, the battalion will engage with tank weapons and *Sagger* and 73mm fire from BMPs. Artillery prep fires, including smoke and nonpersistent gas, may total 2,000 rounds delivered in 10 to 20 minutes. The battalion will assault through the smoke, infantry remaining mounted, and attempt to overrun the enemy.

**Deliberate Attack** Should the hasty attack fail, the regiment will probably dig in and pin the enemy while a second echelon regiment mounts a deliberate attack. The regiment in contact will locate enemy obstacles and anti-tank weapons for the assault forces. A 15 to 30 minute artillery preparation will attempt to neutralize the defense while the assaulting regiment and engineers move forward. When they are within 100 meters of the enemy positions, fires will shift to deeper targets. Tanks always lead the assault, firing on the move. Should a significant target arise, a whole platoon or company of tanks may engage it in mass from the short halt (4 to 8 seconds). Artillery will attempt to suppress anti-tank defenses, but should it fail, the infantry may dismount far forward and close assault the AT positions. The BMPs follow the infantry to provide support, but the tanks will continue on at high speed, leading to a dangerous gap between the two arms. In rare instances fire and maneuver may be utilized, but never below the company level. When possible, deliberate attacks will take place at night. Under conditions of darkness, infantry may lead the attack in preference to armor. Artillery prep fires would be kept to a minimum to enhance surprise. To reduce confusion, column formations are utilized and maneuver is kept simple. Often second echelon units will only pass through the assault elements at the approach of daylight.

**Use of the Tank Regiment** The motorized rifle division's tank regiment is usually employed as a second echelon unit to exploit breakthroughs. By virtue of its heavy armor protection, the tank regiment is particularly useful in following up nuclear strikes by rapid advance through contaminated areas. As an exploitation unit it sets the pace of pursuit and can envelop enemy flanks at high speed. It would be used in the first echelon only when conditions highly favorable to armor employment are present, or when nuclear fires are anticipated.

**The Motorized Rifle Battalion** The motorized rifle battalion usually attacks with its companies in a geometric formation: line; inverted wedge; wedge; or column. Most often it will employ 2 companies (reinforced by 2 platoons of tanks) on line in a first echelon, and retain the third company and remaining tank platoon in the second echelon



(inverted wedge). Engineers and anti-tank weapons may be attached from regiment and division. As part of a main effort the battalion will attack on a front of 1000 to 1,500 meters; while making a secondary attack it can occupy 1,700 to 2,300 meters. The second echelon will follow the first at a distance of 800 meters.

**Company Level Tactics** Companies assault with platoons abreast on a front of 500 to 800 meters, with attached tank platoons leading. Each platoon attacks on line over a front of 150 to 250 meters. The organic battalion mortars support from positions 400 meters behind the leading companies, while battalion anti-tank assets prepare to support threatened flanks. Attacks are conducted mounted, with infantry firing through vehicle weapon ports. Infantry dismounts only as companies and only when necessary to silence anti-tank defenses. Captured positions are not consolidated, but passed through quickly with little reorganization. Should the battle go as planned, the Soviets expect to penetrate 12 to 15 kilometers in the first 6 to 12 hours after attacking a prepared defense, and thereafter maintain an advance of 3 to 4 kilometers per hour.

**Pursuit** The pursuit phase, following the breakthrough, employs second echelon tank units to maintain direct pressure on the retreating enemy while other tanks race ahead on parallel routes to strike the enemy in the flanks and cut off his avenue of withdrawal. They may be aided by airmobile troops who take advantage of the defender's disorganization by infiltrating into rear areas to seize key bridges and choke points.

### Defects in Soviet Offensive Doctrine

There are several marked disadvantages to Soviet attack doctrine:

1. Units are most often employed in geometric formations for control, and seldom revert to fire and maneuver even when resistance is encountered.
2. For speed, the Soviets prefer attack from the line of march, and will not delay a hasty attack to wait for proper artillery support.
3. In order to maintain momentum, they will accept high losses and bypass potentially dangerous enemy concentrations.
4. During movement to contact, inadequate reconnaissance may lead to incorrect deployment due to faulty appreciation of the terrain and enemy situation.
5. Short of a deliberate attack, artillery preparation may be ineffective as concentrations are of short duration, many enemy positions may not have been pinpointed, and no more than two-thirds of the guns within range will be ready for action.

**Experience with Soviet Doctrine** The Soviet Union's client states in the Middle East adhere to its offensive doctrine but in practice fall far short of its ideal. In 1973 the Syrians demonstrated that using Soviet tactics straight from the book without the benefits of good tank country, imagination, or obscured enemy observation can be tantamount to suicide. On the Sinai front it can be seriously asserted that Soviet doctrine was not actually employed by the Egyptians. Except for the Suez Canal crossing, the Egyptians did not use Soviet tactics of breakthrough and pursuit in their cautious advance. The most logical explanation for this is that their political objectives could be secured without a great advance. In fact, the Egyptians developed their own tactics specifically to deal with the Israelis. Their offensive consisted of an essentially infantry paced assault, initially, backed up by tanks and artillery. The original operation took place under an umbrella of surface-to-air missiles and was screened forward by hundreds of man-carried Sagger anti-tank missiles. In later stages of "tank" warfare, the Egyptians

discovered that their unsupported armored vehicles fared no better against Israeli tanks than the Israeli tanks had against Egyptian Saggars.

### The American Approach

On the other side of the battlefield, most of the U.S. Army's recent attack doctrine stems directly from Israeli experience gained during the October 1973 War. The cornerstone of the fighting system, however, is traditionally American — always substitute firepower for manpower whenever possible. The Army's use of this doctrine reached its logical conclusion in Vietnam, where a division commander could call upon perhaps 18 battalions of field artillery plus helicopter gunships, tac air, and naval gunfire support. Thus the Army, unwilling to close like the Marines, became adept at blowing away jungle, huts, water buffalo, the odd civilian, and occasionally the enemy — if he stuck around to watch the fireworks. In carrying on this tradition, American commanders are now instructed to rely on artillery fire support to provide most of the "shock" effect in an attacking situation, especially since it is unlikely that most commanders will have anything like a 6 to 1 superiority that Army doctrine calls for in the attack, even locally.

**Basic US Maneuver Unit** The basic building block of the US division is the Battalion task force. It is formed by taking a mechanized or armored battalion and substituting the opposite type company for one of its own. After such a swap the participating armored battalion would control 2 tank companies and a mech company while the mechanized battalion would retain 2 mech companies and gain 1 tank company. Under the new Division Restructuring Study (DRS), battalions and companies are smaller than they were previously. Now combined arms coordination will be the province of the battalion commander and not the company commander, who under the larger unit system could control a *team* of tank and infantry platoons. Companies will henceforth fight as pure units.

**US Command Control** American doctrine calls for brigade and battalion commanders to "direct the battle" by assigning objectives, coordinating fire, and supervising their subordinate units. The battalion CO will personally tailor his combined arms team to the mission and integrate the effects of infantry, artillery, tanks, attack helicopters, tac air, engineers, air defense assets, and electronic warfare. Captains, commanding companies, are to "fight the battle" and will be primarily concerned with technical aspects of cover, concealment, suppression, and teamwork within their units. Control and distribution of fire from all organic and supporting weapons systems is considered critical at battalion and company level since American forces expect to fight outnumbered and must, of necessity, make every shot count. Commanders are now expected to operate as the Soviets do, from armored vehicles far forward, instead of from comparatively extravagant command posts, as was the practice previously.

### US Doctrine and the Next War

In a European scenario, the US Army does not anticipate many favorable opportunities for offensive action. Recognizing the risks of attacking when outnumbered, Army doctrinal literature advises that a commander "should only attack if he expects the eventual outcome to result in decisively greater enemy losses than his own, or result in the capture of objectives crucial to the outcome of the larger battle." The Army's general guidance for the offense stresses many of the same points as Soviet attack doctrine: suppression of enemy defensive fires; shock — through speed, surprise, and violence; reinforcement of success; disruption

of the enemy's rear; and relentless pursuit. There are subtle differences however, such as the special emphasis placed on suppression of enemy air defense weapons because of the US reliance on tactical air support.

American doctrine stresses that the primary offensive weapon is the tank, and therefore all other elements of the combined arms force must be employed to support its advance. In addition to the normal supporting arms, this includes the extensive utilization of attack helicopters to guard open flanks, provide quick reinforcement, deepen penetrations, and sweep around enemy flanks.

**US and Soviet Doctrinal Differences** Within the various forms of offensive combat there is a great divergence between the Soviet and American positions. During movement to contact, US Army doctrine emphasizes meeting the enemy with the least force possible in order to avoid casualties. Forward motion, while nominally "aggressive", is actually a fairly cautious process. It is achieved by the "overwatch" system — new rhetoric for movement by bounds. Overwatch is *usually* accomplished within the platoon, and consists of the element always being covered while in motion by another *overwatching* element which is supposed to bail it out by direct fire in case of enemy contact. After contact is made, commanders are encouraged to allow no let up in momentum to occur, but launch a hasty attack. Contrary to the Soviet hasty attack, US units are to utilize as much firepower as can possibly be brought to bear, including aircraft and helicopters, to *develop* the situation. The hasty attack should ideally fix the enemy's forward elements with firepower while finding gaps or weak spots and exploiting open flanks. Deliberate attacks differ only by the scale of prior preparation. Like the Soviet breakthrough, they aim to penetrate on a narrow front and drive deep into the enemy's rear. Exploitation is supposed to be conducted by previously uncommitted forces, but in a European environment these are likely to be hard to come by. In contrast to the Soviet echelon system, US commanders will have few reserves to work with, and will only be able to withhold such forces as may be necessary to insure a bit of flexibility and continued momentum.

A battalion task force will ideally advance on two routes, with two companies leading and one in reserve. The object of the battalion's attack will be to break through the Soviet defensive line by isolating and destroying several strongpoints, opening a gap for exploitation. The task force will attempt to deal with one company strongpoint at a time by using smoke and artillery fires to isolate it from supporting positions. At the same time the task force advances using covering terrain to avoid enemy fire, and then closes on its objective by fire and maneuver. Thorough reconnaissance is depended upon to find the path of least resistance to the objective. After one strongpoint has been overrun and consolidated, others may be taken similarly but from the rear. Depending upon the degree of defensive preparation, the task force may be divided into two or three elements. The assault team, built around an infantry platoon reinforced by engineers, penetrates the strongpoint. The support force, including tanks, infantry, engineers, and TOW missiles, provides overwatching fires along with battalion mortars. Should significant obstacles, such as minefields, be present, there may also be a breaching force to open paths for the assault team. A task force reserve, consisting primarily of tanks, may be available to exploit or to mop up the strongpoint. This reserve is usually part of the support force initially.

**US Artillery Support** The leading company will usually have immediate artillery support in the form of a "dedicated battery" of six or eight 155mm howitzers. The battery and the company

are in constant communications with each other. This system provides instant response to calls for suppression of enemy ATGMs, sacrificing a little accuracy to gain speed and volume of fire in a critical situation. Artillery support is very flexible, with the battalion commander having access to a wide variety of options. Depending upon the division's priorities, the battalion may be supported by one battalion of 32 155mm howitzers in direct support, or by the entire Division Artillery of 96 155mm and 12 8-inch howitzers plus additional guns in general support from the attached Field Artillery Group from Corps. This would be the exception, however, as artillery support will be at a premium and any single unit could not expect heavy support for more than a brief period. Attack helicopters and tac air would also be available on a strict priority basis.

**US Offensive Techniques** American attack doctrine continues to stress careful prior reconnaissance to pinpoint enemy weapons even though the time for such activities may often not be available on a fluid battlefield. Such a reconnaissance, properly executed, would give the attacking commander valuable information for use in tailoring his forces and maximizing use of terrain. The essence of the commander's scheme of maneuver embodies six points: use of covered approaches to close with the enemy; mounted movement as far forward as the situation and terrain allow; rapid crossing of open areas; maneuver to the rear of enemy strongpoints; advance by fire and maneuver; and penetration on a narrow front. With the primary emphasis on terrain movement, geometric formations are never employed. Upon arrival on the objective, the enemy position or a prominent terrain feature, the attacking unit consolidates. Consolidation involves reorganization and resupply in a defensive posture while preparing to continue the attack or repel a counterattack.

**The Israeli Connection** In the Middle East, the Israeli Defense Force pioneered many of the small unit tactics which are now being adopted by the US Army. In the initial stages of the 1973 War, the IDF attacked Arab units with pure tank formations supported by aircraft. The resulting losses, suffered at the hands of Arab anti-tank and anti-air missiles, caused the Israelis to resurrect a combined arms doctrine. Field artillery took on the new role of *suppression* of ATGMs and, when close enough, SAMs. Mech infantry regained importance and no longer ate the dust of the tanks, but advanced with or ahead of them to add suppressive fires. Within the armored forces, specific techniques were developed to deal with the Soviet-made ATGMs. One is to designate a tank in each platoon as "Sagger watch". This vehicle overwatches the platoon and warns of incoming ATGMs. While the platoon takes evasive action, the "Sagger watch" tank brings fire on the ATGM gunner's approximate position. As the Sagger is difficult to control, the gunner is the weak link in the system. If he can be distracted there is a good chance that he will lose effective control or overcorrect the flight path and the missile will crash. Evasive tactics include dodging behind covering terrain, steering an erratic path, or turning hard just before missile impact. The Sagger's slow time of flight to a maximum range of 3,000 meters (27 seconds) is sufficient to employ evasion or fire or both.

### Soviet Defensive Operations

The Soviets consider the defensive to be only a temporary situation during which their forces regroup for continued offensive action. Nevertheless, they have a highly developed defensive doctrine based primarily on anti-tank tactics. A deliberate defense consists of defense "belts" of self-sufficient, mutually supported battalion areas which are backed up by mortar, tank, and artillery

elements. Each has an associated obstacle belt or minefield to canalize attacking forces into anti-tank kill zones.

**The Security Zone** The attacker first encounters the Soviet *security zone*. This consists of reconnaissance and delay forces which are deployed on a scale of 1 battalion per 8-12 kilometers of front. The security zone is usually manned by second echelon motorized rifle regiments which may take positions up to 25 kilometers ahead of the main force when not in contact with the enemy. The regiment, in turn, deploys combat outposts consisting of its second echelon units along the edge of the security zone. The main task of the security force is to identify and delay enemy thrusts.

**The Main Defense Belt** The *main defense belt* is behind the security zone and usually located along the line of a natural obstacle. It may be up to 15 kilometers deep and is manned by first echelon motorized rifle units. A *second defense belt*, usually consisting of prepared but unmanned positions, is sited 8 to 10 kilometers behind the main belt. It serves as a command, reserve, and artillery area, and becomes a fall-back position for the main belt forces should a penetration occur. The *third defense belt* is a further 8 to 10 kilometers back, and consists of army level counterattack forces. As emphasis is on anti-tank defense in depth, major armor avenues of approach are reinforced by division and army assets which may permit a concentration of up to 25 gun or missile systems per thousand meters of front.

**Defensive Techniques** On regimental and lower levels, Soviet commanders are taught to adhere to the following principles: 1st echelon units defend their positions even if bypassed; enemy tanks are to be considered the highest priority targets; obstacles and fire plans must be mutually supporting to canalize the attacking forces; and both tank and anti-tank reserves are to be maintained in all second echelons to block penetrations and initiate counterattacks. At higher levels, commanders are primarily involved with the offensive aspects of reserve deployment and counterstroke. Artillery supports the defense through fire plans formulated at the highest artillery headquarters on the scene. Control is centralized, and fire missions are allocated according to the following priorities: 1. counterbattery strikes (especially against nuclear capable units); 2. neutralization of enemy headquarters; 3. interdiction of enemy columns; 4. interference with enemy deployment; 5. final defense fires in support of units in contact; 6. destruction of penetrating enemy units; 7. prep fires for counterattacks; 8. covering fires for obstacles or gaps between friendly units; 9. contamination of terrain by chemical munitions; 10. smoke obscuration of enemy OPs; and 11. night illumination.

**Regimental Offensive Organization** A first echelon motorized rifle regiment defends a front 10 to 15 kilometers wide and 8 to 10 kilometers deep. It deploys 2 battalions in its first echelon and one in the second. The regimental tank battalion is usually massed for a counterattack, but may have some elements detached to support strongpoints. The regimental artillery group may consist of up to 4 battalions including division assets and multiple rocket launchers. The regimental CP, anti-tank reserve, and counterattack force are located in the second echelon. Attacking enemy units are quickly engaged by indirect fire from mortars and artillery, followed by anti-tank weapons at maximum range. Any penetrations are blocked by the second echelon and local counterattacks are mounted. Should the regimental sector be penetrated, the divisional tank regiment would execute a further counterattack in coordination with the divisional artillery group. The tank regiment remains dispersed until the time of attack to avoid

becoming a lucrative nuclear target.

**Types of Defense** The defense may be conducted in one of two ways — mobile (hasty) or area. A true mobile defense can rarely be employed below division level. It depends on massed fires, including nuclear fires, to destroy the enemy. Units are generally dispersed and ready to resume an offensive posture on order. The more typical area defense emphasizes digging in with engineer assistance. Units maintain enough dispersion to avoid nuclear destruction while remaining within supporting range of each other. A motorized rifle battalion will always use some variation of the area defense. Typically it will defend a zone 5,000 to 7,500 meters wide by 4,000 meters deep. It will guard armor avenues of approach and ensure that its fire overlaps into the areas of adjacent battalions. First echelon rifle companies employ two platoons each in front line strong points and establish a second line about 450 meters to the rear with the remaining platoon. The battalion's remaining company constitutes a second echelon about one kilometer further back. When time permits, extensive obstacles are prepared and wire communication lines are laid.

**Withdrawal** Should defending forces find it necessary to withdraw as part of a general retrograde movement, a motorized rifle regiment will usually be assigned as a divisional covering force. The division will break off during night while the covering force executes a counterattack, which may be supported by nuclear or conventional fires. While the division retires to the next defense line, the covering force executes a delay on intermediate defense lines to slow the attacker.

### US Defensive Doctrine

On the operational level, US defensive doctrine for Europe can best be described as extremely risky. Major Soviet thrusts are to be blunted by a heavy covering force of armored cavalry supported by extra maneuver battalions and artillery, and stopped by massing every available "uncommitted" battalion on a division front in a 10-12 kilometer wide zone. The theory is that 6-8 battalions can stop a 20-25 battalion Soviet first echelon attack on a narrow front. This, of course, leaves the division commander with weak flanks, no appreciable reserves, and on the receiving end of 70-100 Soviet guns per kilometer of attack frontage with his tightly packed defending battalions. As long as they are not outnumbered by more than 3 to 1 (5 to 1 on favorable terrain), US planners are confident that they can defeat a Soviet assault with such deployments. This asks a great deal of the division commander, who must make the critical decision to concentrate on the basis of information which may be less than complete, and in any event places his command in peril of being surrounded, or targeted for nuclear weapons.

**Defensive Zones** US defensive doctrine recognizes three organizational areas: the covering force area, the main battle area, and the rear area. The covering force of reinforced armored cavalry deploys as far ahead of the main force as possible. It has four primary missions: 1. identify the main enemy strength and axis of advance by forcing him to deploy; 2. deceive the enemy as to the location of the main force; 3. force the enemy to displace his air defense umbrella prior to encountering the main force; and 4. trade space for time to allow the main force to deploy and prepare defensive positions. US commanders hope that the covering force will be able to attrite the Soviets down to the desired 3 to 1 proportion that they desire. It will attempt to do this by drawing the attacking forces away from their forward air defenses and artillery support, and in turn subject them to US artillery, tac air, and attack helicopters.

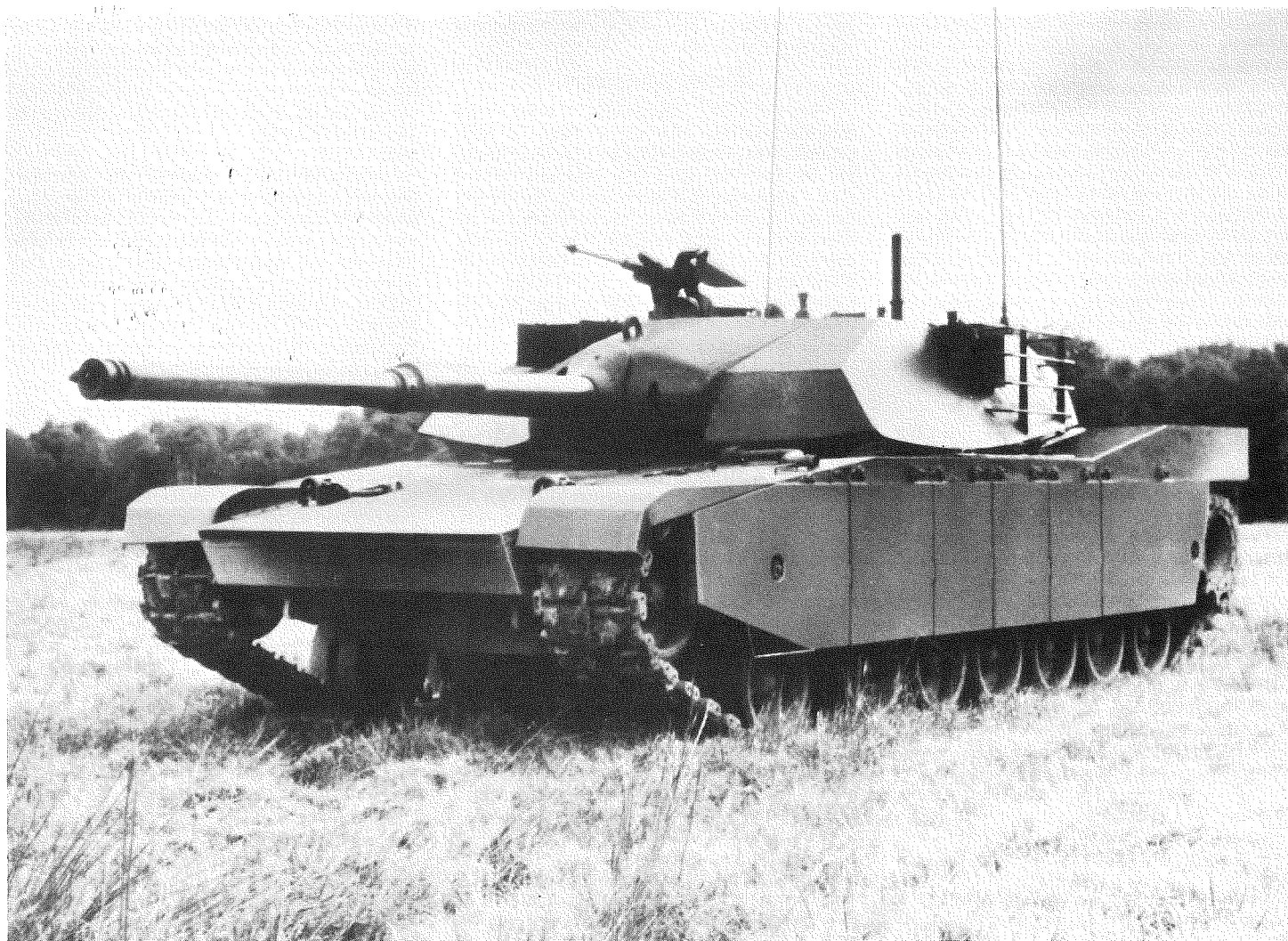
**The Main Battle Area** The main battle area is where an "elastic" defense is to be conducted, with tanks and ATGMs opening fire at maximum range to further attrite the enemy before the closes. Counterattacks in the main battle area are to consist of placing units to the flank or rear of the enemy advanced elements to destroy them by long range fire. Sweeping counterstrokes designed to paralyze rear echelon and headquarters units are *not* envisioned. For defense of the rear area, US doctrine places emphasis on air cavalry units acting as fire brigades, and increased training of service units in self defense roles.

**Battle Positions** Brigade and battalion commanders direct the defense by choosing "battle positions", usually on key terrain, from which their units may defend, support, block, or attack depending on the situation. Battle positions are manned by anything from a platoon to a full battalion, and are temporary in nature. They are not intended to be strongpoints as such, but simply positions which maximize the capabilities of organic weapons. Colonels are expected to coordinate artillery fires to engage the enemy at the earliest possible opportunity. They further have responsibility for the employment of attached helicopters which may either take the enemy under direct fire, or land dismounted ATGM teams at vulnerable points. As the battle develops, these commanders direct the support of tac air, and cross reinforce their mech and armored battalions as the situation and terrain dictate.

**Company Level Defense** Company commanders see that each weapon is sited to provide maximum coverage with minimum vulnerability. Company COs are charged with conducting a forward defense which combines many elements of an ambush. Cover, concealment, and "firing first" are primary considerations. Tanks and ATGMs are considered the backbone of the defense. On the lower levels (company and battalion), a typical defensive action is expected to open with battalion scouts directing laser guided artillery projectiles onto Soviet vehicles at long range. Priority targets would be BRDM Sagger vehicles and BMP infantry assault vehicles, as their onboard ATGMs pose the most destructive long range threat. As the Soviets penetrated natural and man-made obstacles, the US force would retire to secondary battle positions after extracting maximum losses with TOW ATGMs and tank guns. Using overwatch and smoke, companies would back into their new positions and attempt hasty resupply and medical evacuation. When it became available, tac air would be integrated into the battalion fire plan in the later stages of the engagement. To temporarily delay the Soviet second echelon, the battalion commander would call on division assets to deliver "instantaneous" minefields by field artillery (155mm with either 36 anti-personnel or 9 anti-tank mines per round) or helicopter (160 mines per aircraft, capable of placing a field 20 x 300 meters at 80 to 90 knots). As the enemy advanced toward the main battle position,

attack helicopters would be vectored into their flanks to deliver TOW ATGM fire at ranges up to 3,750 meters. Under ideal conditions, the Soviets would suffer tremendous losses, and their attack would falter and fail. The key phrase here is "under ideal conditions". Realistically, other internal and external factors will blur the scenario considerably. Currently, US combat engineers do not have sufficient earth moving equipment to provide adequate obstacles and dig fighting positions. Similarly, long range engagement of the Soviets can be nullified by a smoke barrage on US positions, further weakening the defense. During most of the year in Germany a natural "smoke" in the form of fog will also degrade long range weapons (Summer — 4 days average 3.2 hours per day; Fall — 30 days average 5 hours per day; Winter — 33 days average 6 hours per day; and Spring — 11 days average 3.6 hours per day). Soviet first and second echelon attacks may be timed closely, which with the "24 hour battle" will leave US forces little time to reorganize and reprovision. Soviet electronic warfare assets may jam the critical radio links between battalion and company, destroying effective coordination. US battalions will lack equipment which some commanders deem necessary to fight in a high intensity environment such as: tracked combat support vehicles and heavy vehicle retrievers; adequate smoke munitions; an infantry fighting vehicle with at least 30mm armament (since the cancellation of the unsatisfactory MICV); and facilities for

US Army XM-1 tank prototype



chemical decontamination. Of course the availability of tac air, helicopters, and artillery support will also modify the equation for better or worse. In addition to attacking under conditions of reduced visibility with chemical and electronic support, the Soviets can be counted on to employ engineers in the forward echelons to breach obstacles and tank ditches in 30 to 60 minutes, and simple minefields in zero to 30 minutes — depending on their willingness to accept casualties. Finally, attack helicopters, which will be unable to operate using nap-of-the-earth tactics in fog, will be prime targets for Soviet direct support artillery when they can employ terrain flying.

**US Withdrawal.** US retrograde operations closely parallel those of the Soviets. A covering force is left in contact to demonstrate while the main body breaks for the next defense line. US doctrine places more emphasis on special units to conduct the delay and economy of force missions, however. Armored cavalry and helicopters are generally depended upon to mask the main body during a withdrawal if enemy pressure is not sufficient to pin maneuver battalions in the line.

### Special Operations

Both East and West plan on extensive use of air assets to alert the ground picture through tactical air strikes, airmobile and airborne operations, and helicopter gunship support. Soviet ground attack aircraft, including the MIG-21 and MIG-23, can deliver nuclear ordnance as well as conventional bomb and rocket loads. The more recent SU-19 has the capability to underfly Western air search radar and make deep penetrations with a very low flight profile. US military leaders expect that the Soviets will be able to achieve local air superiority where desired in spite of the qualitative inferiority of their high performance aircraft. Helicopter gunship support is provided by the MI-24 attack and assault helicopter. It can be armed with radio guided Swatter ATGMs as well as rocket pods and 23mm cannons. The MI-24 can also carry 8 fully equipped troops for air assault missions. While airmobile operations are normally conducted with regular motorized rifle troops or paratroopers, it is rumored that the Soviets may be training some specialist formations for the air assault role. Both airmobile and airborne operations are geared to support of advancing armored columns. Most battalion-sized missions would have limited objectives, such as cutting enemy lines of retreat or capturing strategic bridges. Battalions may be dropped up to 160 kilometers behind enemy lines, and regiments up to 320. Airborne units have organic heavy mortar artillery and multiple rocket launchers as well as Sagger ATGMs and BMD infantry assault vehicles — essentially scaled down BMPs.

**Air Support** The US Army maintains that it cannot win the land battle without the aid of the Air Force. USAF high performance aircraft are expected to: win the air superiority battle (F-15); provide reconnaissance (RF-4C); and conduct battlefield interdiction (F-111). Close air support is to be provided by the new A-10 ground attack aircraft, which is estimated to have a 33% kill probability per pass against a stationary tank. The A-10 is considered to have a 13% hit vulnerability per pass against tanks without including the possible presence of SA 7 or 9 missile systems or the ZSU-23-4 SP AA gun system. US close air support is to be directed by a FAC (Forward Air Controller) who is in visual sighting distance of the target or at a battalion CP. The Israelis noted from recent experience, however, that ground FAC directed missions have become the exception rather than the rule in close air support. In any event, the Air Force will have a variety of ordnance with which to engage Soviet ground forces, the most impressive being the Maverick guided weapon (carried on

F-4, A-10, & F-5) which has a 90% hit capability and a standoff range of 20 kilometers.

**Attack Helicopters** By 1982 the US Army will have 1,050 Cobra attack helicopters armed with the TOW ATGM. The Cobra is a tested and proven system which has been upgraded and improved. It can carry up to 8 TOW missiles, or a combination of TOW and 2.75 inch rockets. Its chin turret mounts a 7.62mm mini-gun and a 40mm grenade launcher. In the 80s it will be replaced by the Advanced Attack Helicopter (AAH) which will mount 12-16 Hellfire terminal guided ATGMs with 8,000 meters range, and a new 30mm automatic cannon. The US Army has led the world in attack and assault helicopter tactics since the Viet Nam War. Although the same air superiority situation will not prevail in Europe, current doctrine has come into line with the expected anti-air threat. Every mech infantry battalion is capable of dismounting troops for airmobile operations, which may take the form of rear area raids, economy of force operations, or emergency reinforcement of critical areas. Perhaps the greatest single handicap to helicopter operations in Germany will be the weather. Ceilings of less than 200 feet and visibility of less than 1 mile will greatly restrict the ability of the attack helicopter to maneuver and engage targets.

**Electronic Warfare** In recent years, the capabilities of the Electronic Warfare community have increased impressively. During the next European war, the various aspects of "EW" will have an even greater impact on fighting and command control than they demonstrated in 1973 in the Middle East. These aspects or sub-fields include: Electronic Warfare Support Measures (ESM — essentially signal intelligence); Electronic Countermeasures (ECM — jamming and deception); and Electronic Counter — Countermeasures (ECCM — signal security).

### Soviet Equipment

Soviet EW equipment, while less sophisticated than that of the West, is more powerful and available in larger numbers. During the October 1973 War, the Egyptians utilized Soviet equipment and techniques to bring effective artillery fire on Israeli headquarters and artillery units by radio direction finding. In most cases, artillery could be brought to bear in matter of minutes. The Soviets, in all probability even more proficient, should be able to target Western transmitters in less than 5 to 10 minutes. Using active jamming, the Soviets intend to neutralize entire brigade and battalion radio nets during critical operations, thus denying US commanders their primary means of control. On the other hand, the Soviets place less reliance on radio communications than Western armies. At the tactical level more use is made of visual signals, including pyrotechnics. Extensive utilization of phased attack plans and motorcycle messengers also reduces the need for radio traffic. Most Soviet transmitters are continuous wave — that is they broadcast Morse Code — which operates better through jamming than FM voice radios in use in Western countries.

### US Equipment

While present US ECM capabilities do not measure up to Soviet standards, a new family of equipment should be available in the mid-1980s to deal with the problem effectively. American ESM is generally of a high caliber, and is counted on to give US commanders as much tactical information as could be reasonably expected from the generally quiet Soviets. ECCM is quite a problem in the US Army. Every tactical vehicle has one or more voice radios, and naturally people use them. The result is that Soviet ESM assets have a fairly easy time identifying US nets and picking up useful intelligence information. The use of *secure voice*

(i.e. scrambler) equipment down to company commander level eliminates some of the problem at the expense of range and reliability of communications, but additionally reveals the importance of the stations with such capabilities.

**Nukes and Gas** In a future European tactical environment, one must consider the effects of NBC (Nuclear, Biological, Chemical) Warfare. Biological operations may be discarded on the grounds that their effects could ultimately damage the home country of the perpetrator as much as that of the victim. Chemical operations, on the other hand, will certainly be an important part of any conventional or nuclear Soviet plan. Current Soviet doctrine places emphasis on bulk dissemination of toxic chemical agents by aircraft and cannon or rocket munitions. They will employ *persistent* agents to contaminate obstacles on routes used by enemy forces for advances or retreats, with special emphasis on preventing enemy escape from pursuing Soviet units. These concentrations may last from 8 to 12 hours with favorable weather conditions. Aside from the obvious toxic effects of nerve or blister agents, the Soviets hope to achieve casualties through exhaustion and heat stress due to the necessity for exposed troops to wear masks and protective clothing for prolonged periods. Most Western soldiers, excepting the West Germans and the British, are not trained to fight in an NBC environment. Conversely, Soviet units accept NBC conditions as the *normal* tactical situation, and adjust their training accordingly. Soviet tanks and APCs employ gas overpressure systems which allow the occupants to traverse contaminated areas without masks or special clothing, to arrive at their destination in a fresh condition. Defensively, the Soviets employ chemical land mines to insure that an attacker must undergo the additional fatigue of assaulting masked and suited for gas. At each echelon of command, Soviet chemical decontamination assets are capable of processing units rapidly and in mass.

**US Chemical Capabilities** US offensive chemical capability is very small by Soviet standards. It is limited to so-called *binary munitions*, in which the various chemical components are separated and inert during normal storage, but combine in flight to produce a toxic agent before the shell explodes. It would be some time before any appreciable chemical capability would be in the hands of US commanders in war time. Defensively the situation is nearly as bad. The US Army's Chemical Corps, near extinction five years ago, has been revived due to the vast amounts of NBC detection and protection equipment found on captured Soviet Egyptian vehicles in 1973. Alive to the fact that the Soviets take NBC seriously, the US Army is now issuing chemical protective clothing as well as gas masks. This clothing, rather crude but economical, resembles the normal fatigue uniform, but is impregnated with a chemical neutralizing agent and a preservative coating. Giving some protection against vapors and aerosols, the outfit is reduced in effectiveness by oil, grease, or sunlight, and must be re-impregnated after each chemical attack. Decontamination units, formerly all reserve companies, are now being formed on an experimental basis in the regular army, although on a scale much lower than in the Soviet forces. It is difficult to appreciate the strain of operating in an NBC environment until one actually dons a gas mask and then attempts a normally simple task such as sighting a rifle or talking on a radio.

**Soviet Nukes** Enough tactical nuclear weapons (TNW) exist in Europe to potentially target every combatant battalion or even company in the theater. Soviet TNW are generally large (over 20 kilotons) and "dirty" with respect to



fallout. They are considered weapons of *mass* destruction by the Soviets, who place political restraints on their initial employment. Once the nuclear balloon goes up, however, the Soviets consider no holds barred as far as TNWs are concerned. Most Soviet delivery systems for TNW are either missiles or aircraft, but evidence suggests that some of their larger artillery pieces may also be nuclear capable. During nuclear war, the Soviets may employ TNW as the primary means of destruction on the battlefield. In a large scale offensive, their priorities for nuclear strikes would be: 1) destruction of enemy nuclear delivery means; 2) prep fires; 3) reduction of enemy pockets; 4) neutralization of enemy counterattacks; 5) destruction of enemy reserves and troop concentrations. Their forces are to exploit nuclear strikes by passing through contaminated areas in armored vehicles.

**U.S. Nukes** The US has long believed in the *surgical strike* principle of TNW equipment. This concept envisions small yield weapons being employed to knock out headquarters or critical logistics centers, and block defiles by tree blowdown. To keep fallout and collateral (civilian) damage to a minimum, air bursts in the low kiloton or sub-kiloton range were favored. The development of the enhanced radiation (ER) warhead, the so-called "neutron bomb", has not altered the basic doctrine. The difference is that the ER warhead achieves target effect by intense radiation instead of blast. The weapon is very economical against tank type targets (the prime Soviet threat) while relatively less destructive toward nearby civilian dwellings in the vicinity of the blast. For example, a 1 kiloton ER warhead has about the same radius of effect as a 10 kiloton fission warhead for incapacitating tank crews — 700 meters. The fission warhead, however, will cause urban destruction out to 1,200 meters while the ER warhead will do so only to a distance of 400 meters. The ER warhead will be available to the US Army through the Lance missile and the 8" SP howitzer. In spite of this technological breakthrough, the West has yet to develop an aggressive doctrine for employment of TNW with conventional ground forces, or to train troops seriously for nuclear combat.

### Urban Areas

One area of increasing importance in highly urbanized Europe is "MOBA" (Military Operations in Built-Up Areas). In contrast to the comparative neglect of MOBA by the West, the Soviets have thoroughly studied its special problems over the past 15 years, and altered their training programs accordingly. Some of the prominent peculiarities of MOBA include: 1) tactical advantage passes to manpower intensive armies; 2) long range

weapons will be restricted to less than 500 meters normally; 3) command control is hampered by degraded radio communications; 4) higher than normal ammunition expenditure will cause logistics bottlenecks; and 5) civilian refugees can be expected to magnify command and coordination problems.

**Soviet City Fighting** The Soviets expect to encounter at least one *city* on each axis of advance every 50 kilometers. Although they would prefer to bypass these in order to maintain the speed of their advance, they realize that this might not always be possible. During the first two months of 1945, the Soviets had to take over 300 towns and cities from the Germans by direct assault. There is no reason to suppose that they will have an easier task next time. Aside from the development of specialized training areas for city combat, the Soviets have also laid down specific task organizations for units attacking urban or fortified localities. A motorized rifle regiment with a city assault mission would be assigned a sector about 1500 meters wide. Its reinforcing elements would include: 3 battalions of artillery and heavy mortars; 2 tank companies; 1-3 batteries of SP guns; and 1 combat engineer battalion reinforced with mine-clearing tanks. The regiment would attack in two or three echelons, each composed of a motorized rifle assault battalion reinforced with: 2 artillery batteries; 1 SP gun battery; and 1 engineer company. The battalion would assault on a front of 750 meters with 2 or 3 assault groups, each deployed on a 200-300 meter front. Each assault group is composed of a motorized rifle company supported by: 1 field artillery battery (employing direct fire); 1 or 2 tank platoons; 1 engineer sapper platoon; and assorted chemical and flame thrower detachments.

**Soviet Engineers in the Streets** Engineers play an important part in the Soviet concept of MOBA. Commanders rely on engineer reconnaissance to provide information on enemy positions and optimal approach routes. Once the battle is joined, engineers on foot are expected to advance with the infantry to clear obstacles by demolition and also support attacks with flame. As city fighting breaks up into localized battles over various strongpoints, engineers prepare weapons positions and defenses for Soviet forces. In the event of isolation during the battle, troops are under standing orders to defend in place unless directed to withdraw. As street fighting of this kind — essentially unchanged since World War II — is demoralizing and apt to cost heavy casualties, assault formations receive special attention from political officers and are liable to be leavened with ardent communists.

**US Street Fighting** The US Army, in its latest doctrinal literature, recognizes that it is not well

versed in MOBA, but can no longer ignore the problem. The rapidly expanding urban areas of Europe leave a forward defense very little room to operate. Consequently, the Army is rethinking MOBA, chiefly along defensive lines. Higher commanders are faced with the dilemma of defending politically important areas of cultural and historical significance which most certainly would be destroyed if held. Smaller villages, which dot the German landscape every 2 to 4 kilometers do not pose the same problem. In fact they are well suited to serve as battle positions for defending troops as they are sited along lines of transportation, and generally have good fields of fire extending around them. Future US plans include extensive use of airmobile troops in urban defense, and wider city fighting training for all units along the lines of that conducted by the Army's Berlin Brigade.

### Soviet River Crossing

One further special operation which deserves particular attention is the river crossing. In Germany the Soviets can expect to meet water barriers 10 to 20 meters wide every 10 kilometers, 20 to 100 meters wide every 50 kilometers, and more than 100 meters wide every 100 to 200 kilometers. In preparation for this they have taken pains to insure that rivers will not be major impediments to their advance. All Soviet APCs are amphibious, and tanks carry snorkel gear which allows them to deep ford in up to 5.5 meters of water. In addition to regimental engineer assets, each division has an engineer battalion capable of laying a ribbon pontoon bridge 119 meters long in 20 minutes, and enough amphibian ferries to transport an entire motorized rifle battalion in one lift. Under favorable conditions the Soviets will send airmobile troops through a disorganized enemy to seize bridges intact. Normally however, they will employ engineer recon teams ahead of a division to check the water obstacle for defenses, mines, fordability, bank slope, and access. The engineers will identify and prepare 4 to 8 crossing points which the division will utilize simultaneously. Prior to crossing operations, tac air will interdict the planned bridgehead area, and artillery will fire suppression missions against enemy forces in the area. At each crossing point, a motorized rifle battalion will "swim" to the far bank in APCs under cover of smoke and direct fire from supporting tanks. Once the opposite shore has been secured, subsequent waves of deep fording tanks and pontoon bridges would be deployed. Should the crossing be unopposed, the division could be across in as little as 3 hours during daylight. Opposed crossings, generally commencing at dusk could take a division 6 to 8 hours to complete. ■■



# **MECHWAR 2**

# **RED STAR/**

# **WHITE STAR**

# **EXCLUSIVE RULES**

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## [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><i>Front</i></p> <div>1213 Inf mechanized infantry Platoon 7-5-3-1</div> <div>1171 Inf Marine infantry Platoon 8-6-4-2</div>	<p><i>Back</i></p> <div>3062 Scrp Scorpion reconnaissance Platoon B-P-15</div> <div>3051 Scm Scimitar reconnaissance Platoon B-P-15</div>	<p><i>Front</i></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><i>Back</i></p> <div>0010 F4 High</div> <div>0011 A-10 High</div>
<p><i>Front</i></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><i>Back</i></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><i>Back</i></p> <div>0015 Tndo Tornado fighter bomber (1 Flight) Low</div>	<p><i>Back</i></p> <div>0015 Tndo High</div>
<p><i>Front</i></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><i>Back</i></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 ChS AH-1S Cobra attack helicopter (1 Section) NOE</div> <div>0009 ChL 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><i>Back</i></p> <div>0003 UH1 Low</div> <div>0006 ChS Low</div> <div>0009 ChL Low</div> <div>0012 LOH Low</div> <div>0013 Lynx Low</div>	<p><i>Back</i></p>
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## NEUTRAL MARKERS

Non-persistent Chemical

Persistent Spray

Non-persistent Chemical

Persistent Gas

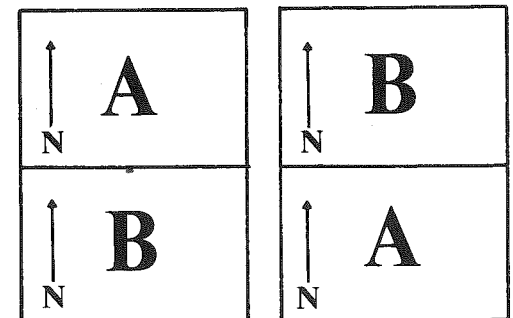
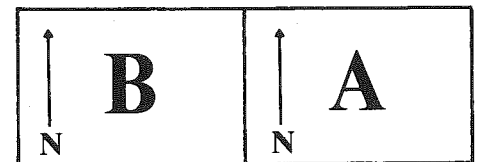
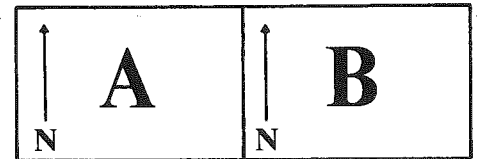
Nuclear Impact

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.

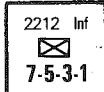
## CASES:

**[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 map edge 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 aials, 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

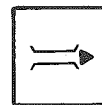
Nuclear fire missions have severe and varied effects on the physical environment within a certain distance of the impact hex. This radius varies with the size of the warhead. To determine the effects radius for environmental effects, see the table in Case 107.79. The effects are listed in the following 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 ½ 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 ¼ 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

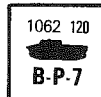
List the artillery available to the first Player by number of units, caliber, pattern (= size of unit), when available (by Game-Turn or other), whether smoke- or starshell-capable (starshell at night only), range (when using two maps or jamming), and direction (mapedge) from which fire is coming. Among 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 panzer grenadier 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 (AB DIV)	Max 49	in 8 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 paratroop 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**

[111.71] **Artillery:** Only the 4.2" mortars are smoke capable.

### [111.8] VICTORY CONDITIONS

[111.81] Each Player receives Victory Points for Enemy vehicles/steps eliminated as outlined in Case 108.9.

[111.82] In addition, the Soviet Player receives 50 Victory Points if no US company in Morale 1 or 0 exits the North mapedge.

[111.83] In addition, the US Player receives 25 Victory Points for each company in Morale State 0 which exits the North mapedge.

[111.84] The Player with the most Victory Points at the end of the game wins.

## [112.0] LOST IN THE BLACK FOREST

### [112.1] GENERAL INFORMATION

This scenario depicts a meeting engagement of two reconnaissance parties at night.

[112.11] The scenario uses map B.

[112.12] The scenario takes place in 15 Game-Turns.

[112.13] The war is a month old, and the southern end of the front has been stable for over a week; after the Soviets and Czechs swept through Bavaria they had been halted in the Battle of Tuebingen just to the south of Stuttgart. The Soviet Central Group of Forces army, however, has been resupplied and is planning to outflank Stuttgart by moving in force through the rugged Schwarzwald, the Black Forest of cuckoo clock and fairy tale fame.

SCGF has decided to gamble on an unexpected thrust by the veteran 31st Tank Division to the Rhine River. Under cover of darkness, the 31st has sent out its recon BN to prepare the way. Major D. Andrikanov, commanding the BN, has been given orders to proceed as far as he can without getting into a major fight, discover what forces lie between the division and the Rhine, and eliminate any Enemy units which are large enough to interfere with his mission but small enough for his battalion to handle. Speed is of the essence, for the main body of the 31st is to move out by midnight.

Assigned to screen this sector of the Black Forest is a troop of armored cavalry under the American VII Corps, commanded by Major Sturgis, who was recently airlifted out of the besieged garrison at Nuremberg and given command of the squadron. The squadron itself had arrived through the Reforger Program only a week ago and was thus assigned to the inactive Black Forest sector for training purposes. Major Sturgis' mission is to train his men and report any unusual events to VII Corps headquarters in Stuttgart.

### [112.2] PHYSICAL ENVIRONMENT

[112.21] It is nighttime with a quarter moon.

[112.22] The weather is clear and cool, the ground is dry.

[112.23] The Wornitz is a small river. There are Class 4 bridges at 0310, 2602, and 6008; Class 3 bridges at 1203, 4710, and 6005; Class 2 bridges at 0508, 3002, and 3104; Class 1 bridges at 1304 (place the preceeding where roads cross the river hexsides); Class 0 bridges at 0508/0509, 1902/2002, 3707/3708, 4410/4411/4412, 5710/5809.

### [112.3] NOTES ON US FORCES

One tank platoon, one APC (with infantry) platoon and one TOW platoon may be set up in any hex in or west of the 45xx hexrow. The remainder

of the squadron is set up in any town hex in or west of the 45xx hexrow, but with no more than one platoon of any type in the same town, and with all infantry dismounted. A maximum of 15 dummies may be used.

### [112.4] NOTES ON SOVIET FORCES

[112.41] Units are set up in or east of the 60xx hexrow (extending off the map as in proper formation (see Case 112.43); off-map units expend Movement Points to reach the map as if there were additional hexrows) and in road or trail hexes or adjacent to them.

[112.42] The Soviet Player may choose to withhold any of his set-up units. These withheld units may be brought on as reinforcements during any Game-Turn at a 61xx hexrow road or trail hex or from the third Game-Turn on at 4734, 4233, or 5301. He may also bring on a maximum of 15 dummies as if they were withheld units.

[112.43] Units enter in column, with at least one hex space between companies; companies may enter on separate roads/trails; BN HQ enters one hex behind one of the BRDM1 companies; motorcycles are placed at Player's option.

### [112.5] REINFORCEMENTS

The Soviet ROD enters any east mapedge road or trail hex in column formation (any order of units) beginning Game-Turn six.

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

[112.61] **Artillery:** Beginning Game-Turn 5 the US will receive one battery of off-map 155mm howitzer support from the west mapedge. This battery will only reach hexes in or north of the xx22 hexrow and in or west of the 47xx hexrow.

[112.62] **Air Support:** There is no US air support.

[112.63] **Minefields:** The Americans may deploy 5 real defensive minefields and 5 dummies west of the Soviet set-up hexes. There are no mineplows.

[112.64] **Chemicals:** All American units are set up in CP1 Status. The American Player has no chemicals.

### [112.7] SECOND PLAYER SPECIAL INFORMATION

[112.71] **Artillery:** Soviet Player has one battery of light howitzer (122mm MRLs) off-map to the east.

[112.72] **Air Support:** The Soviets have no air support.

[112.73] **Minefields:** There are no Soviet minefields; each tank platoon has a lead tank with mineplows. **Exception:** ROD tanks all have mineplows.

[112.74] **Electronic Warfare:** Soviet BN HQ includes radio detection gear.

[112.75] **Chemical Warfare:** Soviet infantry have incapacitating gas grenades. The off-map MRL battery is stocked and loaded with non-persistent lethal gas in unlimited amounts.

### [112.8] SPECIAL SCENARIO RULES

There are no special scenario rules.

### [112.9] VICTORY CONDITIONS

The U.S. Player receives Victory Points for destroying Soviet units as noted in 108.9, and (beginning with Game-Turn 10) an additional 5 Victory Points for each Game-Turn that the Soviet BN HQ has *not* exited the West mapedge. For each of his units exited off the West mapedge the Soviet Player receives Victory Points equal to the amount that the U.S. Player would receive for destroying that unit.

## [113.0] CUSTER'S LAST STAND

### [113.1] GENERAL INFORMATION

This scenario represents a Soviet mopping-up operation by a second-echelon motor rifle regiment against an armored cavalry troop.

[113.11] The scenario is played on map A.

[113.12] The scenario is played in 10 or fewer Game-Turns.

[113.13] Everyone was stunned by the speed of the Soviet armored breakthrough, but for the 7th Armored Cavalry Troop, under Capt. Armstrong G. Custer, it meant a rude awakening to the fact that they were cut-off and surrounded. To Lt. Col. A. Sitya Ingbulyakov and his motor rifle regiment of the 57th Guards Motor Rifle Division, it was just another job.

### [113.2] PHYSICAL ENVIRONMENT

[113.21] The scenario is played in daytime. The weather is clear, with no wind.

[113.22] All rivers in the scenario are small. There are Class 4 bridges wherever roads cross and Class 2 bridges wherever trails cross.

### [113.3] NOTES ON SOVIET FORCES

[113.31] The Soviet Player sets up anywhere on the map not within 10 hexes of an American unit. The 3rd platoon of the 3rd company of each battalion is down one vehicle/step; BRDM-2 vehicles have Sagger; the tank battalion is T62s.

[113.32] The Soviet Player has no dummies.

### [113.4] NOTES ON US FORCES

[113.41] The US Player sets up the armored cavalry troop at any hex of Height Level 2, 3, or 4 on the Kasberg (the mountain in the center of the map); or in the Hasenwald (the light woods around 3010). Tanks are M60A2.

[113.42] The US Player may deploy 10 dummies.

### [113.5] REINFORCEMENTS

There are no reinforcements in this scenario.

### [113.6] SOVIET SPECIAL INFORMATION

[113.61] **Artillery:** The regiment has from higher headquarters a battalion of 122mm light howitzers and a battery of 152mm medium howitzers from the east mapedge. These patterns can't be broken down.

[113.62] **Air Support:** The Soviet Player may deploy one Mi24 helicopter unit.

[113.63] Soviet artillery is equipped with non-persistent lethal chemicals in unlimited amounts, and may be pre-loaded with chemicals at the Soviet Player's option. Soviet units begin in any CP Status, at the owning Player's option.

### [113.7] US SPECIAL INFORMATION

[113.71] **Artillery:** There is no higher-level artillery.

[113.72] The US troop may be designated for ambush at the beginning of the game.

[113.73] US units may be set up in any CP Status, at the owning Player's option.

### [113.8] VICTORY POINTS

[113.81] The Soviet Player receives 100 Victory Points for wiping out every American unit.

[113.82] The US Player receives 100 Victory Points for smiling at the end of the game.

[113.83] If the Players agree to play this scenario twice, switching sides, the Player who as Soviet wipes out the Americans most quickly and with fewest losses wins.

## [114.0] THE GAUNTLET

### [114.1] GENERAL INFORMATION

This scenario depicts a US rear-guard action against a Soviet pursuit.

[114.11] Both maps are used in this scenario, with the 61xx hexrow of map **B** overlapping the 01xx hexrow of map **A**.

[114.12] The scenario is played until the last unit of the American battalion has exited the west mapedge of map **B** or has been eliminated.

[114.13] Second battalion, a mech-heavy task force under Lt. Col. George Collier, is the sole survivor of the Battle of Weiden, where 3rd Brigade/1st Armored Division met its unhappy fate. Collecting various refugee units, the battalion is fleeing towards Nuremberg, to the west. In hot pursuit is the 1st Tank Regiment of the victorious 11th Guards Tank Division, 1st Guards Tank Army, commanded by Col. Yury Kuriyakin.

### [114.2] PHYSICAL ENVIRONMENT

[114.21] The scenario takes place in daylight. The weather is clear.

[114.22] All rivers in the scenario are small rivers. There are Class 4 bridges wherever roads cross rivers; there are Class 2 bridges wherever trails cross rivers; there are Class 0 bridges at A0314/0413; B5509/5510; B3809/3909; B3306/3406; B4410/4411/4412; B2001/2002; B0806/0807. None of the bridges is prepared for demolition except the ones at B5908 and B3104.

### [114.3] NOTES ON SOVIET FORCES

[114.31] The Soviet Player sets up anywhere in or east of the A 47xx hexrow. Platoons of the 1st battalion are down 1 tank each.

[114.32] Soviets do not deploy dummies.

[114.33] Soviets deploy in battalion column (see Case 110.5).

### [114.4] NOTES ON US FORCES

[114.41] The US Player is the second Player.

[114.42] The US Player sets up the 2nd battalion (mech-heavy task force) plus 3rd platoon/4th mech company, brigade HQ, 1st and 2nd platoons/5th tank company, and 2 × engineer squad, between hexrows A24xx and A41xx and within two hexes of the road between A2719 and A4120; these units are all down 1 vehicle/step, with M60A1 tanks. The US Player sets up the air cavalry reinforced team (using 7th company infantry) and armored cavalry troop (using M60A2 tanks) anywhere west of the A42xx hexrow.

[114.43] The US Player may deploy any number of dummies.

### [114.5] REINFORCEMENTS

There are no reinforcements for either Player.

### [114.6] SOVIET SPECIAL INFORMATION

[114.61] The regiment has outrun artillery support from higher headquarters.

[114.62] Regimental HQ and one battalion HQ have radio detection gear.

### [114.7] US SPECIAL INFORMATION

[114.71] **Artillery:** The US has no artillery support from higher headquarters.

[114.72] **Air Support:** The US Player may deploy the air cavalry's helicopter units.

[114.73] The US Player may designate either the armored cavalry or the air cavalry, or both, as ambush-prepared.

[114.74] The US battalion HQ is equipped with radio detection gear.

### [114.8] SPECIAL RULE

The morale of the US battalion is never better than Morale Level 1; the Movement Point Allowance of all of its vehicles is decreased by 2 Movement Points. These rules do not affect the armored cavalry or the air cavalry, and the Movement Point reduction does not affect 1-vehicle units, other than HQs, which are affected.

### [114.9] VICTORY CONDITIONS

[114.91] The Soviet Player receives Victory Points for each unit eliminated (see Case 109.9).

[114.92] The US Player receives Victory Points for each unit eliminated (see Case 108.9). In addition, the US Player receives 50 Victory Points for exiting brigade HQ, 20 Victory Points for exiting battalion HQ, 5 Victory Points for exiting any other US unit, 20 Victory Points for each Soviet battalion which breaks (see 18.8), and 100 Victory Points for breaking regimental HQ. US units may only exit the west map **B** mapedge.

[114.93] The Player with the most Victory Points at the end of the game wins.

## [115.0] FROM THE HALLS OF FREMDINGEN TO THE SHORES OF THE RIESE

### [115.1] GENERAL INFORMATION

This scenario depicts an East German delaying action in the face of a US marine landing.

[115.11] The scenario is played on map **A**.

[115.12] The scenario is played in 15 Game-Turns.

[115.13] The war is already a year old, and NATO at last is going over to the offensive. An amphibious task force has landed the US 2nd Marine Division on the North Sea coast with orders to drive inland and cut off a large body of Soviet troops to the west. Lt. Col. R. Gresham's Marine Amphibious Unit is to advance to the Riese River and secure the bridges before the Warsaw Pact can mount a counterattack. Barring the way is Lt. Col. H. Jurgens with a battalion of East German troops on routine occupation duty; he has been ordered to delay the Marine advance and hold onto the Riese Bridges until a regiment from the East German 9th Tank Division can arrive on the scene.

### [115.2] PHYSICAL ENVIRONMENT

[115.21] The scenario takes place in daylight. The weather is clear and dry with no wind.

[115.22] The Riese is a medium-sized river. The Horloff River is a small river. Bridges at 5614/5715 and 5418/5519 are Class 4, bridges at 5024/5125, 4925/4926 and 4826/4827 are Class 1. All bridges are prepared for demolition.

### [115.3] NOTES ON US FORCES

The US Player sets up north of the XX14 hexrow and west of the 06xx hexrow. Any or all of the U.S. units may be designated as reinforcements at the discretion of the US Player; units so designated may enter between 0104 and 0112 during any Friendly Movement Phase.

### [115.4] NOTES ON WARSAW PACT FORCES SECOND PLAYER

[115.41] The East German sets up battalion HQ, 1 × engineer squad, 1 × T-62 platoon (4 tanks), and 1 company BMPs and infantry in Fremdingen and 1 company BMPs and infantry evenly distributed among Utzwingen, Schopfloh, and Buhlingen; the third company of BMPs and infantry are evenly distributed among Niederhofen,

Ehingen, and Hausen. The second T-62 platoon (4 tanks) is set up in Hausen. Other battalion assets (mortars, ATGM team, 1 × BTR60) may be set up in any town hex on the map.

[115.42] There are 14 or fewer East German dummies, set up in any of the towns mentioned in Case 115.41.

### [115.5] REINFORCEMENTS

There are no reinforcements for either side.

### [115.6] SPECIAL INFORMATION — U.S. PLAYER

[115.61] The US Player has 1 battalion (which may be broken down into 3 battery patterns) of 105mm Light Howitzer, 1 battery of 155mm Medium Howitzers, and 1 battery of 175mm Medium Howitzers off-map to the west. In addition, the U.S. Player has 1 section of naval heavy howitzer and two batteries of naval medium howitzer off-map to the west. Naval gunfire is ineffective in hexes 0214, 0215, 0116, 0314, 0315, 0316, 0317, 0216, 0117, 1704, 1705, 1803-1808, 1902-1908, 2001-2008, 2101-2104, 2201-2202, 2301-2303, 2324-2328, 2423-2428, 2501-2502, 2519-2521, 2523-2529, 2601, 2617-2621, 2623-2629, 2701-2702, 2716-2722, 2726-2728, 2816-2821, 2916-2922, 3016-3022, 3117-3122, 3201, 3223, 3323, 3422-3424, 3501, 3523, 3524, 3601, 3701, 3814-3818, 3915-3918, 4013-4018, 4106, 4107, 4111, 4113-4119, 4205, 4206, 4213-4219, 4305-4311, 4313, 4314, 4318-4320, 4405-4414, 4417-4419, 4506-4514, 4606-4613, 4707-4709, 4712, 5009-5016, 5110-5112, 5114-5117, 5209-5211, 5214-5216, 5312, 5315-5317, 5803, 5804, 5903-5904, 6003-6004, 6103-6108. Naval gunfire is not smoke-capable.

[115.62] The U.S. Player has three F4 air units available beginning Game-Turn 1. If any of these air units is eliminated, triple-damaged, or runs out of ammunition and is voluntarily removed from play, it is replaced by a fresh F4 four Game-Turns later. The Marines also have 2 × Cobra 1S and 2 × Cobra 1Q beginning Game-Turn 1.

[115.63] The U.S. battalion is RD-equipped.

[115.64] The U.S. infantry units have incapacitating gas grenades.

### [115.7] SPECIAL INFORMATION — EAST GERMAN PLAYER

[115.71] The East German Player has 2 batteries and 1 section of light howitzer to the east. Beginning Game-Turn 5 he also has 1 battery medium howitzer and an additional battery of light howitzer to the east.

[115.72] The East German Player has no air support. His off-map air defenses are: **East:** 2 × missile 1 (4 vehicles) **South:** 1 × missile 1 (4 vehicles) — tracking range extends on map.

### [115.8] SPECIAL SCENARIO RULES

Case 105.11 does not apply to this scenario.

### [115.9] VICTORY CONDITIONS

The U.S. Player wins if he has units occupying hexes 5715 and 5519; or either 5715 or 5519 plus both 5125 and 4926, at the end of the game. The East German Player wins if he prevents the U.S. Player from attaining his Victory Conditions. Either Player wins if the Enemy battalion is broken. This Victory Condition supercedes the conditions listed above.

## [116.0] WACHT AM WORNITZ

### [116.1] GENERAL INTRODUCTION

This scenario depicts a Soviet river crossing opera-

[continued on page 19]



# MECHWAR 2

## RED STAR/ WHITE STAR

### CHARTS & TABLES

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#### [7.17] DAY CLEAR WEATHER OBSERVATION RANGE TABLE

Target Unit is ...	Observation Range in hexes is ...	Target Unit is ...	Observation Range in hexes is ...
<b>Infantry</b>		<b>Vehicle (cont.)</b>	
stationary in Clear	3	moving in Clear	Unlimited
moving in Clear	6	moving in any terrain other than Clear	15
moving or stationary in Defilade or in any terrain other than Clear	1	Any bridge or ferry	Unlimited
<b>Vehicle</b>		Maximum Range of Observation	Unlimited
stationary in Clear	15	Any Firing Unit	Unlimited
stationary in Light Woods or Rough 1	2		
stationary in Defilade or in any terrain other than Clear, Light Woods, or Rough 1	1		

**Notes.** Unobserved units leaving a hex within the Line of Sight of an Enemy unit and directly entering a hex not within the Line of Sight of an Enemy unit are not considered observed. If

the Line of Sight runs along a hexside where one hex contains blocking terrain and the other does not, the Line of Sight is considered blocked.

#### [6.9] COMBINED TERRAIN EFFECTS AND FUNCTIONS CHART

Terrain	Movement Point Cost		
	Vehicle to enter defilade	Vehicle to enter or cross	Infantry to enter or cross
Clear	+8	2	1
Road <sup>1</sup>	NA	1	1
Trail <sup>1</sup>	NA	2	1
Town	+3	2	1
Devastated Town	P	P	2
Light Woods <sup>2</sup>	+3	3	2
Heavy Woods <sup>3</sup>	+3	all	2
Blown Down Woods <sup>4</sup>	P	P	2
Burning Woods <sup>4</sup>	P	P	P
Rough 1	+7	2	1
Mount Infantry	NA	2	1
Dismount Infantry	NA	2	1
Upslope (see 6.34)	NA	0	+1
River Hexside	NA	Case 24.0	P
Lake Hexside	NA	Case 101.2	P
Prohibited Hexside	NA	P	P
Bridge Hexside	NA	+2	+0
Smoke	NA	+1	+1
Rough 3	+3	4	2

**Important:** Hexes containing the color or more than one Height Level are considered to be at the *lowest* indicated color (e.g., hex A2321 is at Height Level 1). Hexes containing both light and Heavy Woods symbols (e.g., A1003) are considered to be Heavy Woods. Hexes containing even a partial Lake symbol (e.g., A0318) are full lake hexes.

<sup>1</sup> Supercedes cost of other terrain in hex/hexside; unit must be in column. <sup>2</sup> If unit did not enter the hex via a road/trail. <sup>3</sup> If unit did not enter the hex via a road/trail; vehicle units may always enter one hex of heavy woods per Friendly Movement Segment by spending their entire Movement Allowance to do so. <sup>4</sup> Costs apply to heavy and light woods.

P = Prohibited; NA = Not applicable (other terrain in hex determines cost). **Note:** There is no cost for leg infantry to enter defilade.

#### [9.21] VEHICLE AUTOMATIC WEAPONS CHART

Nr. of Vehicles in Firing Unit	Range (Hexes)		
	0-4	5-8	9-10
5	5	4	3
4	4	3	2
3	3	2	1
2	2	1	0
1	1	0	0

# = Unit's attack strength.

#### [9.3] AUTOMATIC WEAPONS COMBAT RESULTS TABLE

DIE	Combat Strength									
	0	1	2	3	4	5	6	7	8	9
2	S	S	S	S	1	2	2	2	2	2
3	-	S	S	S	S	1	1	1	1	1
4	-	-	S	S	S	S	S	1	1	1
5	-	-	-	-	S	S	S	S	1	1
6	-	-	-	-	-	S	S	S	S	S
7	-	-	-	-	-	-	S	S	S	S
8	-	-	-	-	-	-	S	S	S	S
9	-	-	-	-	-	S	S	S	S	1
10	-	-	-	S	S	S	S	S	1	1
11	-	S	S	S	S	S	S	1	1	2
12	S	S	S	S	S	1	2	2	2	2

Results are unmodified; see Case 9.4.

#### [10.22] MAIN GUN ANTI-INFANTRY ATTACK STRENGTH TABLE

Firing System	Number of Firing Vehicles				
	5	2	3	4	1
Tank Heavy Main Gun	8	6	4	2	1
Medium Main Gun					
Classes 1 and 2	5	4	2	1	0
Class 3	9	8	7	5	3
Beehive	(see Case 102.5)				

# = Attack Strength.

### [10.3] MAIN GUN ANTI-VEHICLE COMBAT RESULTS TABLE

Nr. of Vehicles  
or Steps  
in Firing Unit

Attack Strength

<i>One</i>	0	-	1	2	3	4	5	6	7	-	8	9									
<i>Two</i>	-	0	-	1	-	2	3	4	5	6	-	7	8	9							
<i>Three</i>	-	-	0	-	1	-	2	3	-	4	-	5	6	7	8	9					
<i>Four</i>	-	-	0	-	1	-	2	-	3	-	4	-	5	6	7	-	8	9			
<i>Five</i>	-	-	0	-	1	-	-	-	2	-	3	-	-	4	5	6	-	7	8	9	
<i>DICE</i>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>J</b>	<b>K</b>	<b>L</b>	<b>M</b>	<b>N</b>	<b>P</b>	<b>Q</b>	<b>R</b>	<b>S</b>	<b>T</b>	<b>U</b>	<b>V</b>	
<i>2</i>	1	-	-	-	-	-	1	1	1	1	1	1	1	1	1	2	3	3	2	3	5
<i>3</i>	-	-	-	1	-	-	1	-	-	1	1	1	1	1	1	2	3	3	2	1	1
<i>4</i>	-	1	-	1	1	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>5</i>	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>6</i>	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	5
<i>7</i>	-	-	1	-	-	1	1	1	2	2	2	2	2	3	3	3	4	3	4	3	
<i>8</i>	-	-	-	-	-	-	-	1	1	1	-	-	2	2	2	2	2	4	4	4	
<i>9</i>	-	-	-	-	-	-	-	-	-	1	2	2	2	2	2	2	2	4	3	4	
<i>10</i>	-	-	-	-	-	-	-	-	-	-	1	2	2	2	2	2	4	4	4		
<i>11</i>	-	-	-	-	-	-	-	-	-	-	2	2	-	-	2	3	3	2	2	3	
<i>12</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	3	3	3	2	4

# = Number of vehicles lost, unmodified. Determine modifiers and proceed to Table 12.11  
- = No vehicles lost, unmodified.

### [12.11] VEHICLE LOSS MODIFICATION TABLE

DIE	Armor Class			
	Chobham	Hard	Protected	Light
-3	-3	-3	-2	-1
-2, -1	-3	-2	-1	-
0	-3	-1	-	-
1	-2	-1	-	-
2	-2	-	-	-
3-5	-1	-	-	-
6-8	-	-	-	-
9	+1	+1	+1	+1
10	+1	+1	+1	+2
11	+1	+2	+2	+2
12 or more	+2	+2	+3	+3

See Case 12.12 for explanation of results.

### [10.51] HEAVY MAIN GUN ATTACK STRENGTH TABLE

Range in Hexes	A			B			C			D			E			Target Class Sighting System
	O	S	L	O	S	L	O	S	L	O	S	L	O	S	L	
0	8	8	9	8	8	9	8	8	9	9	9	9	9	9	9	
1	7	7	8	8	8	9	8	8	9	9	9	9	9	9	9	
2	7	7	8	8	8	9	8	8	9	8	8	9	8	8	9	
3-5	6	6	7	7	7	8	7	7	8	7	8	9	8	8	9	
6-7	3	4	5	4	5	6	4	5	6	5	6	8	6	7	8	
8-10	2	2	5	3	3	6	3	3	6	4	4	7	5	5	7	
11-15	0	1	4	2	2	5	3	3	5	3	3	6	3	4	7	
16-20	0	0	3	0	0	4	0	1	4	1	2	5	1	3	6	
21-25	P	P	0	P	P	1	P	P	2	P	P	3	P	P	4	
26 or more	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	

# = Attack Strength; O = Optical sighting; S = Coincident Sighting; L = Laser Rangefinder; P = No attack permitted.

### [11.41] PERSONAL ANTI-TANK ATTACK STRENGTH TABLE

Range in Hexes	Attack Rating		
	R	B	A
0	5	3	2
1	3	1	1
2	1	P	P
3 or more	P	P	P

# = Attack Strength; P = No attack permitted; R = PPG-7; B = 3.5" rocket launcher (bazooka), armburst, PZ4FF; A = LAW (Light Assault Weapon).

### [10.52] MEDIUM MAIN GUN ATTACK STRENGTH TABLE

Range in Hexes	A			B			C			D			E			Target Class Firing Unit Gun Class
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	
0-1	5	4	3	5	4	3	6	5	4	7	6	5	8	7	6	
2-3	4	2	1	5	3	2	5	4	3	6	5	4	7	6	5	
4-5	3	1	P	3	2	1	5	3	1	5	4	2	6	5	3	
6-8	2	0	P	2	1	P	2	1	P	3	2	P	4	3	P	
9 or more	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	

# Attack Strength; P No attack permitted. Note: All medium main guns are considered to use an optical fire control system.

### [12.21] INFANTRY LOSS MODIFICATION TABLE

DIE	Result
0 or less	-1
1-7	-
8 or more	+1

See Case 12.22 for explanation of results.

### [11.3] ATGM ATTACK STRENGTH

Weapons System	Range in Hexes										
	0	1-2	3-5	6-7	8-10	11-12	13-15	16-17	18-19	20	21 or more
Improved TOW	P	6	7	7	7	7	7	7	7	P	P
TOW	P	5	7	7	7	7	7	P	P	P	P
Swatter	P	P	4	6	7	7	7	7	P	P	P
Sagger	P	P	4	7	7	7	7	P	P	P	P
Dragon	P	6	7	P	P	P	P	P	P	P	P
2nd Generation Soviet ATGM; HOT	P	5	6	7	7	7	7	7	7	7	P
Shillelagh	P	P	3	5	7	7	7	P	P	P	P
Milan	P	5	7	7	7	P	P	P	P	P	P
Swingfire	P	3	5	7	7	7	7	7	7	7	P
S11	P	P	4	6	6	6	6	P	P	P	P

# = Attack Strength; P = No attack permitted.

### [14.27] ARTILLERY SCATTER TABLE

DICE ROLL	Fire for Effect	OBSERVER Range (in hexes)			
		0-20	21-40	41-60	61+ or unobserved
2	S	S-1	S-2	S-3	S-4
3	S	S-1	S-1	S-2	S-3
4	On T	On T	S-1	S-1	S-2
5	On T	S	S	S-1	S-1
6	On T	S	S	S	S-1
7	On T	On T	S	S	S
8	On T	S	S	S	S-1
9	On T	S	S	S-1	S-1
10	On T	On T	S-1	S-1	S-2
11	S	S-1	S-1	S-2	S-3
12	S	S-1	S-2	S-3	S-4

On T = On target; S = scatter in target hex; S-1(-4) = scatter one (two, three or four) hex(es).

### [14.28] MISSILE/ROCKET SCATTER TABLE

DIE	Missile/Rocket Type			
	FROG	Honest John	Lance	SCUD
1	S	S	T	S
2	S	S	S	S-1
3	S	S	S	S-2
4	S	S-1	S	S-3
5	S-1	S-2	S-1	S-4
6	S-2	S-3	S-1	S-4

T = on target; S = scatter in target hex; S-# = scatter indicated number of hexes.

### [12.3] LOSS MODIFIER CHART

#### A. Troop Quality of Firing Unit

Seasoned	+2
First Line	+1
Second Line	0
Reserve	-1
Green	-2

#### B. Target Unit Is...

Class B vehicle in Defilade	-1
Class A, C, D, or E vehicle in Defilade	-2
Infantry	0
Infantry in Defilade	-1*
Snorkeled	+4
Using amphibious movement	+2
Moving	-2
Stacked (for each Friendly unit of the same type — infantry or vehicle — in the hex)	+2
In Column	+4
In a smoke hex	-2
Silhouetted	+3

#### C. Firing Unit Is...

Suppressed vehicle	-1
Suppressed infantry	-2
Performing short halt	-3
Performing fire and move	-2
(Protected vehicle in CP3)	-1
(Unprotected vehicle in CP2)	-2
(Unprotected vehicle in CP3)	-3
(Infantry in CP2)	-2
(Infantry in CP3)	-3
Class 3 medium main gun firing at hard target	-3
Class 1 or 2 medium main gun firing at hard target	-1
Any class medium main gun firing at protected or light target	+3
Dispersed	-2

#### D. Defending Unit Is In...

	Vehicle	Infantry
Clear hex	0	0 (+5*)
Devastated town hex	NA	-6 (-6*)
Town hex	-1	-4 (-4*)
Light woods hex	-2	-2 (+2*)
Heavy woods hex	-3	-2 (+1*)
Rough 1 hex	-1	-1 (+4*)
Rough 2 hex	0	-1 (+2*)
Rough 3 hex	-3	-2 (+1*)
Lake/canal hex	+4	-2 (-2*)
Road/trail hex	Use other terrain in hex	

Only those modifications marked with an asterisk (\*) are used when modifying the result of indirect fire combat. All die roll modifications are cumulative. Parenthesized ( ) items in part C above apply only to *Red Star/White Star*.

**[14.31] ON-TARGET ARTILLERY COMBAT RESULTS TABLE**

<i>DICE</i>	Weapon Type					
	Lt Mrtr	Med Mrtr	Lt Howz	Med Howz	Hvy Howz	SHvy Howz
2	S	1	2	3	3	3
3	1	1	1	2	2	2
4	S	1	1	1	2	2
5	S	S	1	1	1	1
6	-	S	S	1	1	1
7	-	-	S	S	S	1
8	-	S	S	S	1	S
9	S	S	S	S	S	S
10	S	S	S	2	2	2
11	S	1	1	1	1	2
12	1	1	1	1	2	1

Results = Unmodified combat results; see Case 9.4.

**[14.32] OFF-TARGET ARTILLERY COMBAT RESULTS TABLE**

DICE	Weapon Type						
	Lt Mrtr	Med Mrtr	Lt Howz	Med Howz	Hvy Howz	SHvy Howz	FROG SCUD
2	S	S	S	1	1	1	2
3	-	S	S	S	1	S	1
4	-	-	S	-	S	1	1
5	-	-	-	-	-	-	1
6	-	-	-	-	S	S	1
7	-	-	-	S	S	S	S
8	-	-	-	-	-	-	S
9	-	-	S	-	-	-	1
10	-	-	-	S	S	S	1
11	-	S	S	S	S	S	1
12	-	S	S	S	1	1	1

Results = Unmodified combat results; see Case 9.4.

## [18.2] MORALE TABLE

*Nr. of Vehicles  
or Steps in  
Original Company*

[illegible]

# = Morale level increase; - = No effect.

### [18.9] BATTALION HQ TABLE

Value of the HQ	Initial Headquarters Rating											
	A	B	C	D	E	F	G	H	J	K	L	
	–	–	–	–	1	1	1,2	1,2	1,2	1-3	1-4	
	–	–	1	1	2	2,3	3,4	3-5	3-6	4-6	5-6	
	–	1	2	2,3	3	4,5	5,6	6	–	–	–	
	1	2	3	4	4	6	–	–	–	–	–	
	2	3	4	5	5	–	–	–	–	–	–	
	3-6	4-6	5-6	6	6	–	–	–	–	–	–	
	Avg.	5.5	5.0	4.3	3.8	3.5	2.5	2.0	1.8	1.7	1.5	1.3

Number under column headings A-L is the die roll. "Avg" indicates the average value for a HQ rolling on that column.

**[19.36] ANTI-INFANTRY MINEFIELD COMBAT RESULTS TABLE (Bold Movement Only)**

Type of Minefield	Number of Steps Lost			
	None	One	Two	Three
Artillery Delivered	2-5,8-10	6,7,12	11	NA
Hasty	7	5,6,8	9-12	2-4
Defensive	7	2,9,11,12	4,8,10	3,5,6
Barrier	11,12	4,8	2,3,5,9	6,7,10

# = Roll (on two dice) necessary to lose indicated number of steps; NA = Not applicable.

**[19.37] ANTI-VEHICLE MINEFIELD COMBAT RESULTS TABLE**

Type of Minefield	Number of Vehicles Destroyed					
	None	One	Two	Three	Four	Five
Artillery Delivered other tank	2-5,8-10 7	6,7,12 5,6,8	11 9-12	NA 3-4	NA 2	NA NA
Hasty other tank	2 NA	7 2	4,8,10 4	3,5,6 3,5,9	9,11 6,7,10	12 8,11,12
Defensive other tank	NA NA	2 NA	4 NA	5,7 2	3,6,8,11 4,5	9,10,12 3,6-12
Barrier other tank	NA NA	NA NA	NA NA	2,3 NA	4,5,6 6	7-12 2-5,7-12

NA = Not applicable; # = Die roll; **Tank** = Any vehicle identified as a tank on its Data Sheet; **Other** = Any vehicle other than a tank.



## [17.21] MOUNTED COMBAT MATRIX

### Infantry Weapon System

Vehicle Class	Automatic Weapons	ATGM (see 17.22)	Personnel Anti-Tank	Air Defense	Medium Main Gun
Hatch	Normal*	Normal*	Normal*	Normal*	P
Mixed	Normal†	Normal*	Normal*	Normal*	P

\*May not fire if vehicle is suppressed or is protected vehicle in CP3 status. † Halved if vehicle is either suppressed or is protected and in CP3 status, otherwise normal. **Normal** = Attack strength of firing weapon system is not affected; **P** = Prohibited.

## [19.52] MINE PLOW DAMAGE TABLE

DIE	Type of Minefield
NA	Artillery-delivered
6	Hasty
5 or 6	Defensive
4, 5, or 6	Barrier

If indicated number is rolled on one die, unit's mine plow is destroyed.

## [20.76] DIE ROLL MODIFICATION CHART (Ground to Air)

Modification...	if Firing Unit...
-1	has 2 vehicles/steps
-2	has 3 vehicles/steps
-3	has 4 vehicles
-4	has 5 vehicles
+2	is suppressed
Modification...	if Target Unit altitude is...
-2	High
0	Low
+2	NOE
Modification...	if Target Unit Defense Class is...
+6	A
+4	B
+2	C
+1	D
0	E
-1	F

## [20.73] TRACKING RANGE CHART

Weapon System	Tracking Range (in hexes)
*Gun 1	20
*Gun 2	20
Gun 3	5
*Missile 1	Unlimited
*Missile 2	50
Missile 3	20
Missile 4	10
*Missile 5	Unlimited

\*Radar controlled (see Case 20.69).

## [20.74] GROUND TO AIR COMBAT RESULTS TABLE

	Attack Strength								
DIE	1	2	3	4	5	6	7	8	9
-1	H	H	H	H	H	H	H	H	H
0	-	H	H	H	H	H	H	H	H
1	-	-	H	H	H	H	H	H	H
2	-	-	-	H	H	H	H	H	H
3	-	-	-	H	H	H	H	H	H
4	-	-	-	-	H	H	H	H	H
5	-	-	-	-	-	H	H	H	H
6	-	-	-	-	-	-	H	H	H
7	-	-	-	-	-	-	H	H	H
8	-	-	-	-	-	-	-	H	H
9	-	-	-	-	-	-	-	-	H
10 or more	-	-	-	-	-	-	-	-	-

- = No effect; H = Hit, see Case 20.7. Die rolls of less than -1 are resolved as -1.

## [20.77] AIR DEFENSE COMBAT STRENGTH CHART

Firing Weapon System	Range (in hexes)							
	0-1	2-5	6-10	11-15	16-20	21-30	31+	Off-Map
Gun-1	9/5	8/4	6/3	4/1	-/-	-/-	-/-	6/3
Gun-2	7/4	5/2	3/1	2/-	-/-	-/-	-/-	3/1
Gun-3	2/-	-/-	-/-	-/-	-/-	-/-	-/-	NA
Mx-1	-/-	-/-	-/-	-/-	8/8	8/8	7/7	4/7
Mx-2	-/-	-/-	8/-	8/-	7/-	6/-	5/-	5/-
Mx-3	-/-	-/-	6/-	4/-	2/-	-/-	-/-	2/-
Mx-4	-/-	5/-	3/-	1/-	-/-	-/-	-/-	NA
Mx-5	-/-	-/-	-/-	7/5	7/5	6/4	3/2	5/3

#/# = Strength at Low or NOE altitude/Strength at High altitude; - = No attack possible; NA = Not applicable; Mx = Missile.

## [23.11] NIGHT OBSERVATION CHART

Target Unit Is...	Phase of Moon (Natural Sight)				Target Unit Is...	Ambient Light		
	Full	1/2 or 3/4	1/4	New or Overcast		1/4 to Full Moon	New Moon	Overcast
Infantry, stationary in Clear terrain	1	0	0	0	Infantry, stationary in Clear terrain	2	0	0
Infantry, moving in Clear terrain	2	1	1	0	Infantry, moving in Clear terrain	4	1	0
Infantry, stationary or moving in any terrain other than Clear	1	0	0	0	Infantry, stationary or moving in any terrain other than Clear	2	0	0
Vehicle, stationary in Clear terrain	2	1	1	0	Vehicle, stationary in Clear terrain	4	1	0
Vehicle, in Defilade or stationary in any terrain other than Clear	1	0	0	0	Vehicle, in Defilade or stationary in any terrain other than Clear	2	0	0
Vehicle, moving in Clear terrain	8	6	4	2	Vehicle, moving in Clear terrain	16	4	3
Vehicle, moving in any terrain other than Clear	4	3	2	1	Vehicle, moving in any terrain other than Clear	8	2	1
Maximum Range of Observation	Unlimited				Maximum Range of Observation	unlimited.		

# = Observation Range in hexes

## [103.6] WEATHER EFFECTS CHART

Effects on:	Weather Condition			
	Light Fog	Medium Fog	Heavy Fog	
Vehicle Movement	No effect	Pay double terrain Movement costs*	May not move more than 1 hex per Phase	
Infantry Movement	No effect	May not move more than two hexes per Phase	May not move more than 1 hex per Phase	
Aircraft	No effect	May not attack units in medium fog hexes.	May not attack	
Helicopters	No effect	May not enter medium fog hexes except to dismount transported units.	May not enter heavy fog except to dismount transported units.	
Units using laser fire control	Must use secondary fire control	Must use secondary fire control	Must use secondary fire control	
Effects on:	Weather Condition			
	Rain	Ground Snow, Mud	Falling Snow	Blizzard
Vehicle Movement	No effect	Must pay double terrain costs for movement at levels 1-5*	Must pay double terrain costs for movement	Must pay triple terrain costs for movement
Infantry Movement	May not move more than one hex per phase one hex per Phase			
Aircraft	May not be used	No effect	May not be used	May not be used
Helicopters	may be used for transport only	No effect	May be used for transport only	May not be used
Units using laser fire control	Must use secondary fire control	No effect	Must use secondary fire control	Must use secondary fire control

\*Does not apply when unit is moving in Column on a road.



## [103.7] ADVANCED OBSERVATION RANGE TABLE

Target Unit Is...	Regular Observation		
	Falling Snow, Rain or Light Fog	Medium Fog	Blizzard or Heavy Fog
Stationary Infantry in Clear terrain	1	1	0
Moving Infantry in Clear terrain	5	2	1
Infantry in other terrain	1	1	0
Stationary vehicle in Clear terrain	7	2	0
Stationary vehicle in light woods or rough	2	1	1
Stationary vehicle in Defilade or any other type of terrain	1	0	0
Moving vehicle in any terrain	10	3	1
Maximum Observation Range			
	10	3	1

### Note:

- (1) worst fog hex in Line of Sight applies;
- (2) at night during bad weather most severe restriction applies.

## [28.15] CAMOUFLAGE OBSERVATION TABLE

Camouflaged Unit Is In...	Camouflage Value
Clear	0
Rough 1 hex	1
Light Woods or Rough 3 hex	2
Heavy Woods or Town hex	3
Devastated Town hex	4

# = Player attempting to sight camouflaged unit must roll indicated number or higher.

## PLAYER'S NOTES

Three main factors shape the *Mech War 2* fire-fight. First, it takes only a small superiority in force to achieve a significant victory. Second, it is almost impossible for a smaller force to withdraw from a firefight without taking heavy casualties. Third, even firefights between relatively equal forces will be bloody and quick.

In short, *Mech War* rewards the Player who adheres to the time-honored military principle of concentration of force at the decisive point. This concentration does not entail a return to the Macedonian phalanx, however. Rather, it requires tactical deployments which give your units the ability to focus their attacks on the enemy force through interlocking fields of fire ("kill zones"). Never commit your forces piecemeal. You cannot rely on a central reserve to reinforce threatened areas; the fight will probably be over before they arrive. When you are caught at a disadvantage, you might as well fight it out and try and take some of the enemy with you. If, on the other hand, you can throw more firepower at the enemy than he can throw back at you, you can gain a significant advantage in just one Movement Phase. You will inflict more losses on the enemy than you will suffer yourself, and you will leave more of your units unsuppressed. Subsequent exchanges of fire will only multiply these advantages. This may allow a defender to stage a successful counterattack, so long as he has gained a substantial, if temporary, local superiority. In exercising this option, however, the defender must be quite sure that he has that superiority. Otherwise he can lose the better part of his force to no effect.

Maneuver and deployment must be used to achieve concentration at the desired point. This requires that the defender retain as much mobility as possible, unless he is absolutely certain of the avenue of approach that the enemy will take. A constant goal should be to disrupt the concentration of enemy forces. A second and related goal is to seize control of terrain features which could be important in the ensuing combat. Helicopter-borne troops may prove useful in achieving both of these objectives.

### TERRAIN

Terrain has three effects. First, it gives additional defensive benefits to units deploying in or behind it. Thus infantry gain a substantial advantage in towns, and all units gain some advantage in woods. Defilade, which is really a terrain effect, works the same way. When units with missile systems must defend behind rivers, they should be deployed at more than half their range away from the river. This will allow them to avoid the effect of the water on their guidance systems and still outrange their opponents. Players should try at all times to use the defensive value of terrain as much as possible.

The second effect of terrain is to slow or stop movement. Properly used, woods, towns and rivers will channel the enemy advance, giving a defensive force time to react. Rivers perform an additional function, allowing a defender to get easy hits on units attempting to cross and completely stopping non-amphibious (i.e., tank) units which are not snorkeled. The environmental effects of artillery can enhance the movement-slowing effects of terrain, but the Player should remain aware of the advantages which they may afford to

the defender, particularly infantry in devastated town hexes.

Minefields, fog and smoke all have effects similar to that of terrain. Players should be particularly aware of the uses and limitations of minefields. Minefields will not, by themselves, block an enemy advance. Instead, they function very much like rivers, with mineplow-equipped units playing the role of the snorkel. In order for mines to be effective, friendly units must be able to cover them with effective fields of fire.

The third and most important effect of terrain is to block Lines of Sight. A Player can use terrain to divide his opponents potential fields of fire, to reduce the effective range of his missile systems, to prevent the entire enemy force from getting into action, and to divide a large firefight into several smaller ones, giving a smaller force some chance of inflicting damage on the opposition. Towns, woods, and particularly heights should be used as much as possible to achieve these effects.

Smoke can perform much the same function. Smoke works best because it is dynamic. Creating a sudden change in the map, it forces your enemy to move and deprives him of defensive terrain. Effective use of smoke requires careful planning. Keep in mind that smoke may always scatter away from the intended target.



### [106.32] CP STATUS CHANGE CHART

#### Change in Status

CP1 to CP2 CP2 to CP3

CP1 to CP3 CP3 to CP2

CP2 to CP1

CP3 to CP1

#### Cost to Unit Is ...

Chemical Protected	1 Movement Point	NA
Unprotected Vehicle	1 Movement Phase	4 Movement Points
Infantry	1 Movement Phase	No Cost

NA = Not Applicable.

**Note:** In cool weather, the cost for infantry and unprotected vehicles to change from CP1 to CP2 or from CP3 to CP2 or from CP3 to CP1 is doubled.

### [106.53] LETHAL CHEMICAL COMBAT RESULTS TABLE

Delivery System	Defending Unit Is In:	DICE	
		CP1	CP2
Mortar	Impact hex	2-8	2-6
	adjacent to I.H.	2-6	2-4
Howitzer	Impact hex	2-6	2-4
	adjacent to I.H.	2-4	2-3
Rocket	Impact hex	4-7	2-6
	adjacent to I.H.	2-5	4-5
	two hexes to I.H.	2-4	3
Missile	Impact hex	2-9	2-7
	adjacent to I.H.	4-7	2-5
Aircraft	Impact hex	2-7	2-6
	adjacent to I.H.	2-6	4-5
	two hexes to I.H.	2-4	2-3

**Note:** I.H. = Impact hex (any hex in impact pattern). If two-dice roll is within indicated range for delivery system, unit is immediately eliminated.

### [106.64] CHEMICAL DRIFT CHART

Prevailing Wind Direction (from)	Actual Direction of Movement (refer to compass rose/scatter diagram)	
	DIE	
West	1-3	Northeast
	4-6	Southeast
North	1-2	Southwest
	3-4	South
	5-6	Southeast
East	1-3	Northwest
	4-6	Southwest
South	1-2	Northwest
	3-4	North
	5-6	Northeast

### [107.27] NUCLEAR LOAD AND PLOT TIME CHART

Delivery System Type	Warheads which may be loaded onto that system (kilotons)	Load Time (Game-Turns)	Plot Time (Game-Turns)
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#### NATO:

Artillery	½,1,2,ERW*	4	2
Honest John	5,10	6	3
Lance	2,5,10, ERW	6	3
Aircraft	5,10,ERW	15	Varies

\*8-inch howitzer only for ERW

#### Warsaw Pact:

Artillery	2	4	2
FROG	5,10	6	2
SCUD	10	12	4
Aircraft	5,10	15	Varies

#### Bomber Plot Time

(Bomber Plot Time is determined when the load order is given by roll of one die; it reflects a wide range of variables including distance to air base, communications lag, availability of aircraft, etc.).

DIE ROLL	Plot Time (Game-Turns)	Plot Time (Game-Turns)
1	4	1
2	6	2
3	7	2
4	9	3
5	10	3
6	12	4

**Note:** As an exception to Case 107.23, the target hex may be changed while plot time for the aircraft is running, up until the plot change time has expired.

**[107.61] ANTI-INFANTRY  
NUCLEAR COMBAT RESULTS TABLE**

This table applies to dismounted infantry, motorcycles, jeeps, and helicopters on the ground.

Delivery System:	Artillery			FROG, Honest John		Lance, SCUD			Aircraft	
KILOTONNAGE:	1/2	1	2	5	10	2	5	10	5	10
HEXES FROM IMPACT:										
0	E	E	E	E	E	E	E	E	E	E
1	3-10*	3-10*	E	E	E	E	E	E	3-10*	E
2	2-7*	3-9*	3-10*	3-9*	E	3-10*	3-10*	E	3-10*	3-10*
3	3-6*	4-7*	3-8*	3-8*	3-10*	3-8*	3-10*	3-10*	3-9*	3-9*
4	4-5	6-7	4-7*	2-7*	3-10*	4-7*	3-8*	3-10*	2-7*	3-9*
5	4-5	4-5	6-7	3-6*	3-9*	6-7	4-7*	3-8*	4-7*	3-8*
6	-	-	4-5	6-7	3-8*	4-5	6-7	4-7*	6-7	2-7*
7	-	-	-	-	2-7*	4-5	6-7	3-6*	6-7	3-6*
8	-	-	-	-	2-7*	-	4-5	6-7	4-5	3-6*
9	-	-	-	-	3-6*	-	4-5	6-7	-	6-7
10	-	-	-	-	6-7	-	-	4-5	-	4-5
11	-	-	-	-	-	-	-	4-5	-	4-5
12	-	-	-	-	-	-	-	-	-	-

If the two-dice roll is in the range indicated for the delivery system and size of warhead, the unit is eliminated immediately. E = automatic elimination; \* = delayed radiation kill. - = No effect.

**[107.62] ANTI-WHEELED VEHICLE  
COMBAT RESULTS TABLE;  
EXTERNAL SYSTEMS DAMAGE TABLE**

When used as Combat Results Table, applies to all vehicle units with Light armor class and BTR60, ASU85, MTU55, AVLB, Biber; as external systems damage table applies to all vehicle units.

Delivery System:	Artillery			FROG, Honest John		Lance, SCUD			Aircraft	
KILOTONNAGE:	1/2	1	2	5	10	2	5	10	5	10
HEXES FROM IMPACT: 0	E	E	E	E	E	E	E	E	E	E
1	4-7*	3-9*	3-10*	3-10*	E	3-9*	E	E	3-9*	3-10*
2	4-5	3-6*	3-8*	3-10*	E	4-7*	3-10*	3-10*	2-7*	3-9*
3	-	5	6-7	2-7*	3-10*	6-7	2-7*	3-9*	3-6*	3-8*
4	-	-	5	3-6*	3-8*	5	3-6*	3-8*	6-7	3-8*
5	-	-	-	4-5	4-7*	-	6-7	4-7*	5	4-7*
6	-	-	-	-	3-6*	-	5	3-6*	-	3-6*
7	-	-	-	-	4-5	-	-	6-7	-	6-7
8	-	-	-	-	-	-	-	4-5	-	4-5
9	-	-	-	-	-	-	-	5	-	5
10	-	-	-	-	-	-	-	-	-	-

For explanation of results, see table 107.61.

### [107.63] ANTI-TANK, ANTI-APC NUCLEAR COMBAT RESULTS TABLE

Applies to all vehicle units with Chobham, Hard, or Protected class armor other than units listed under 107.61 or 107.62.

Delivery System:	Artillery			FROG, Honest John		Lance, SCUD			Aircraft	
KILOTONNAGE:	1/2	1	2	5	10	2	5	10	5	10
HEXES FROM IMPACT 0	E	E	E	E	E	E	E	E	E	E
1	5	6-7	2-7*	3-9*	3-10*	6-7	2-7*	3-10*	4-5	2-7
2	-	5	4-5	3-6*	3-8*	5	6-7	3-8*	5	3-6
3	-	-	-	5	3-6*	-	5	3-6*	-	4-5
4	-	-	-	-	4-5	-	-	4-5	-	-
5	-	-	-	-	-	-	-	-	-	-

For explanation of results, see Table 107.61.

### [107.64] ANTI-HELICOPTER NUCLEAR COMBAT RESULTS TABLE

For Helicopters on the ground, use Table 107.61.

All Delivery Systems					
KILOTONNAGE	1/2	1	2	5	10
HEXES FROM IMPACT: 0-2	E	E	E	E	E
3	3-8*	E	E	E	E
4	4-7	3-9	E	E	E
5	3-6	2-7	3-9	E	E
6	6-7	4-7	3-8	3-10	E
7	4-5	3-6	2-7	3-9	3-10*
8	5	6-7	4-7	3-8	3-10
9	-	4-5	3-6	2-7	3-9
10	-	5	6-7	4-7	3-8
11	-	-	4-5	3-6	2-7
12	-	-	5	6-7	4-7
13	-	-	-	5	6-7
14	-	-	-	-	5
15	-	-	-	-	-

For explanation, see Table 107.61.

### [107.79] NUCLEAR ENVIRONMENTAL EFFECTS RADIUS TABLE

Effect	Kilotonnage				
	1/2	1	2	5	10
Tree Blowdown	-	-	2	5	10
Tree Burning	1	2	3	5	9
Wind Dispersion					
Gas, Smoke	5	10	20	40	All
Fog	-	-	All	All	All
Town Devastation	-	2	3	5	10
Bridge Destruction	1	2	3	5	8
E-M Pulse Damage					
Class 1	5	7	10	13	15
Class 2	3	4	5	7	8

# = Radius of damage (in hexes) from impact hex; - = No effect; E-M = Electro-magnetic (see Case 107.76).

### [107.84] RADIOACTIVE CONTAMINATION ZONE COMBAT RESULTS TABLE

Number of Vehicles/Steps in Unit					
DICE	1	2	3	4	5
2-8	-	-	-	-	-
9	-	-	-	1	1
10	-	-	1	1	2
11	-	1	2	2	3
12	1	2	3	3	4
13 or more	1	2	3	4	5

# = Number of vehicles/steps incurring delayed fatal radiation (Case 107.81); - = No effect. For dice roll modifications, see Case 107.85.

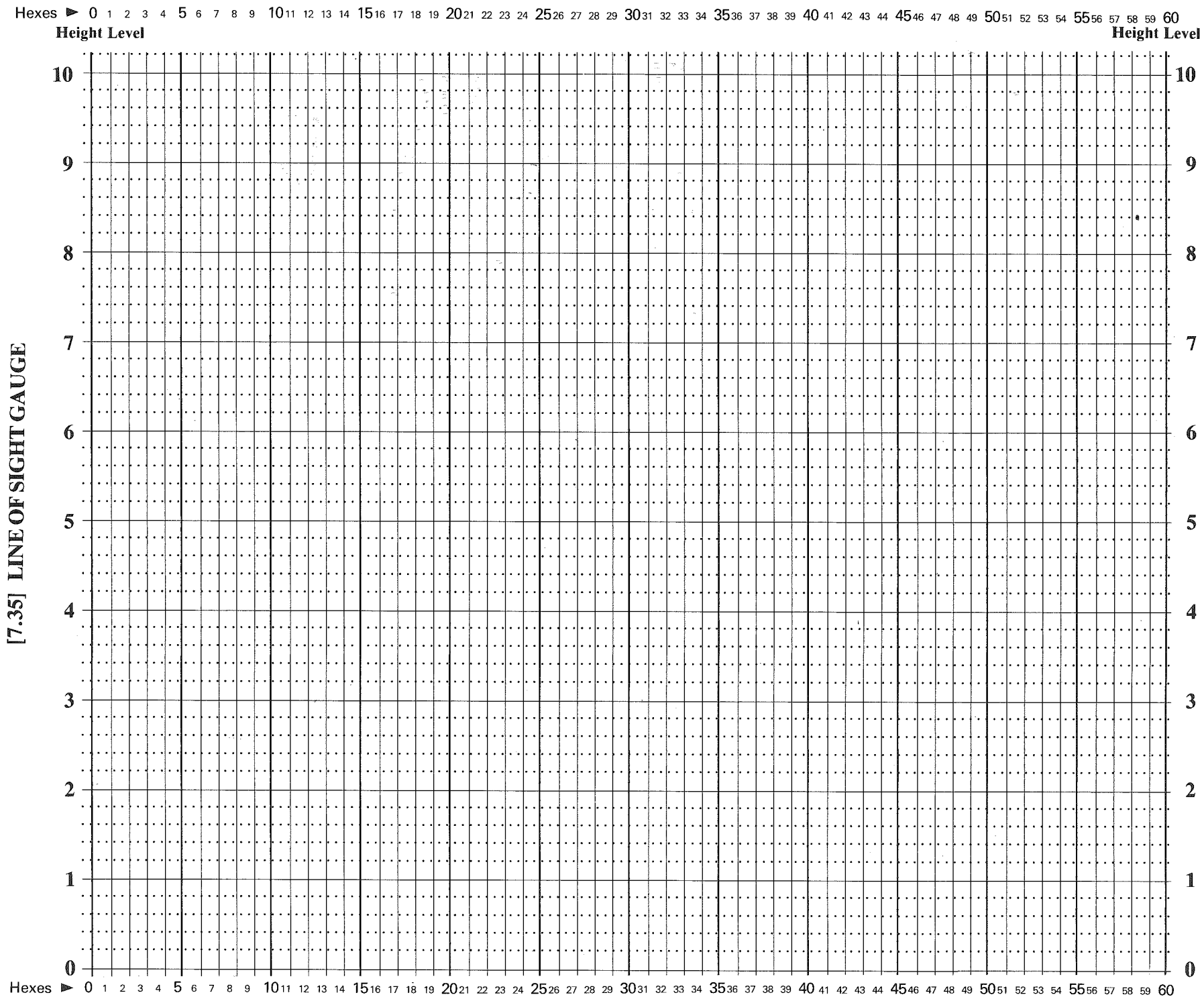
Fill in the appropriate "unit" identification (platoon designation, name of the specific company or battalion, etc.) on each line and indicate the appropriate status as necessary under the columns to

the right. Abbreviations may be used to denote "additional status" as follows (appropriate Case numbers are in parentheses): **A** = Ambush (27.0); **C** = Camouflaged (28.0); **E** = Stripped of external systems (107.67); **K** = ATGM kill (14.34); **N** = Delayed nuclear kill (107.8); **R** = Radio silence (26.16); **S** = Snorkeled (24.5); **V** = Visual discipline

(107.77). Unit status should be indicated in pencil, as most values are subject to change during play.

**IMPORTANT:** Retain this copy of the Unit Status Sheet without marks on it, as you will need to make duplicate photo-copies. SPI grants permission to reproduce this page for personal use. Additional copies are *not* available from SPI.

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Note: Height Levels 7 - 10 are not used in *Mech War 2*.



[continued from page 18]

tion designed to seize a secure bridgehead as a prelude to further operations.

[116.11] The scenario uses map B.

[116.12] The scenario takes place in 15 Game-Turns.

[116.13] Following the breakthrough operation at Kleinstadt by the 1st Guards Army, the 7th Motor Rifle Division was given the mission of destroying the remaining US Hercules missile site southwest of the breakthrough zone. Racing ahead of the main body of the division is Col. Yuri Gaganov's 1st Motor Rifle Regiment; Gaganov is to seize a bridgehead across the Wornitz River before the US can bring up corps reserves to form a defense line. With a bridgehead in place, the division should have no trouble driving through to the vital SAM site.

Defending the Wornitz River Line is Lt. Col. Bruce O'Connor's Mech-Heavy Task Force. His mission is simple: hold the river until help arrives from corps.

## [116.2] PHYSICAL ENVIRONMENT

[116.21] The scenario takes place during daytime. The weather is clear and cool, with a light wind. The ground is dry.

[116.22] The Wornitz is a medium river. There are Class 4 bridges at each of the following hexsides: 0508/0509, 1203/1204, 1304/1305, 2602/2603, 3104/3004, 4411/4412, 4710/4711, and 5908/6008.

## [116.3] NOTES ON SOVIET FORCES

The Soviet Player deploys in any hex at Height Level 1 or 2 north of the Wornitz River and east of the 4000 hexrow (inclusive). Units may be deployed in defilade.

## [116.4] NOTES ON US FORCES

The U.S. Player deploys in any hex south of the Wornitz River and/or any hex in or adjacent to the town of Gerlofingen (3002). These units may be deployed in defilade.

## [116.5] SOVIET REINFORCEMENTS

All Soviet reinforcements enter from the north mapedge, on any hex east of the 4001 hex column (inclusive).

[116.51] On Game-Turn 1 the Soviet Player receives 2 motorized rifle battalions plus the following units: 2 × SP74, 2 × MTU-55, 1 × engineer platoon with BTR-60.

[116.52] On Game-Turn 3 the Soviet Player receives 1 tank battalion (T-72).

[116.53] On Game-Turn 6, the Soviet Player receives 1 motorized rifle battalion and 1 regiment HQ.

## [116.6] SPECIAL INFORMATION

[116.61] The Soviet Player has 2 light howitzer battalions, 1 medium howitzer battalion, and 1 light rocket launcher battalion to the north.

[116.62] The U.S. Player has 1 heavy howitzer section, and three batteries of light howitzer to the south.

## [116.7] VICTORY CONDITIONS

The Soviet Player wins if he controls at least three intact bridges (of any kind) across the Wornitz River east of the 25xx hexrow (inclusive) and none of these bridges is in the Line of Sight of a U.S. unit. The U.S. Player wins by preventing a Soviet victory. Smoke does not block LOS when determining Victory.

# [117.0] PARATROOPERS TAKE A STAND

## [117.1] GENERAL INFORMATION

This scenario depicts Soviet airborne forces on the defensive.

[117.11] This scenario is played on map A.

[117.12] The scenario is played in 20 Game-Turns.

[117.13] It is 1982, about a week after the war began. The main front lies to the east, where the Third Shock Army is battering its way through fierce Bundeswehr resistance. To the west lies the Ruhr. In hopes of crushing the West German 7th Panzergradiad Division, the Third Shock has had the 5th battalion, 1st regt, 106th Guards Airborne Division dropped off by helicopter just east of the key town of Fremdingen. The mission assigned to the battalion's Lt. Col. Bazhanov is simple: hold this stretch of the *autobahn* and the key bridges at 5519 against any breakout attempt by the West Germans, until relieved by the Soviet Army.

Unknown to Bazhanov and his hand-picked men, the 1st battalion, the Black Watch (Highlanders) Battlegroup of the British 4th Armoured Division is on its way to join the Germans at the front, and is marching down from the northwest. Lt. Col. MacCaskill, leading the Highlanders, is also unaware of the Soviet paratroop operation — that is, until he enters Fremdingen, where locals have heard rumours of Soviets dropped during the night. (It is 0715 hrs. as the Scots arrive).

Off-map to the east, Brig. Gen. Kurt Hasenpfeffer's badly-battered 1st brigade of the 7th PG Division has disengaged from the pursuing Soviets and is moving to the west with orders to set up a new defensive line behind the Riese River. When will he arrive with his depleted brigade?

## [117.2] PHYSICAL ENVIRONMENT

[117.21] The scenario takes place during daytime.

[117.22] The weather is cool with light wind; there is mud on the ground. There is light fog at the outset. Fog changes are determined each Record Phase with a roll of one die: on a 1-3 the fog gets lighter, on a 4-5 it remains the same, and on a 6 it gets heavier. Once gone, it does not reappear.

[117.23] The Horloff River is a small river; the Riese River is a large river. There are Class 4 bridges at 5519/5418 (two bridges) and 5715/5614; Class 2 bridges at 4925/4926 and 4826/4827; Class 1 bridges at 5024/5125; Class 0 bridges at 6010/6111, 5229/5230, 5732/5733 and 0413/0314. Any two bridges may be designated by the Soviet Player as prepared for demolition at the start of play. This is written down and not shown to the NATO Player until the bridges are blown.

## [117.3] NOTES ON NATO FORCES

[117.31] The complete British battlegroup comes on the map Game-Turn 1 at 0106 and 0108 in the following order:

0106	0108
2 × Scimitar First Team, 5 hexes after Scimitars, one unit per hex, Chieftans in the lead.	2 × Scorpion Second Team, 5 hexes after Scorpions, one unit per hex, Chieftain in the lead.
Fourth Team, 5 hexes after last unit of first team, one unit per hex.	Third Team, 5 hexes after last unit of Second Team, one unit per hex.

HQ may be placed with either Third or Fourth team. The Scimitars and Scorpions come with the maximum Movement Allowance, all others as

described above. Units not able to be placed on map in any First Player Movement Phase are deferred to the next First Player Movement Phase.

[117.32] One squad of engineers arrives with third and one with fourth teams.

[117.33] The NATO Player may deploy a maximum of one dummy counter with each real unit he brings in.

[117.34] The British enter in column formation, and must remain in column formation on roads with Bound Orders until one of the following conditions is met: (A) A Soviet unit is sighted; (B) A British unit reaches 0915 or 0816; (C) Soviet jamming goes into effect.

## [117.4] NOTES ON SOVIET FORCES

[117.41] The Soviet Player sets up the complete airborne battalion plus 1 × ZSU23 and 2 × 120mm, 1 × engineer platoon. One seasoned Company is set up in Ehingen, another seasoned company is set up in Niederhofen. The ATGM team may be set up at any of the following locations: 4121, 4511, 5408, or in Ehingen or Niederhofen. The BRDM2 unit may be set up at any of the following locations: 4833, 5115, 5906, or in Ehingen or Niederhofen. All other units may be set up anywhere between the Riese River and the 15xx hexrow.

[117.42] The Soviet ATGM team has second generation ATGMs, as do BRDM2s.

## [117.5] REINFORCEMENTS

[117.51] There are no British reinforcements other than units listed in 117.32.

[117.52] There are no Soviet reinforcements.

[117.53] The arrival of West German reinforcements for the NATO Player is as follows: at the beginning of play, the NATO Player writes down on a slip of paper a single number, for example "3". Beginning with Game-Turn 6, during each Record Phase the NATO Player rolls one die for German reinforcements, and makes a note of the results. German reinforcements begin to enter three Game-Turns after the die-roll matches the number previously written on the slip of paper.

**First Game-Turn of German reinforcement arrival:**

2 × Spahpanzer during the First NATO Movement Phase.

**Second Game-Turn of reinforcement arrival:**

**First NATO Movement Phase:** 1 × Gepard, 1 company of Leopards.

**Second NATO Movement Phase:**

1 company of Marders and infantry, 1 engineer squad.

**Third Game-Turn of German reinforcement arrival:**

**First Movement Phase:** None

**Second NATO Movement Phase:** 2 companies of Marders and infantry, PG BN HQ.

**Fourth Game-Turn of reinforcement arrivals:**

**First NATO Movement Phase:** 1 company of Leopards, Panzer BN HQ, BDE HQ, 1 × Roland, 1 × Biber, 1 × engineer squad.

**Second Movement Phase:** 1 × Gepard, 1 × Jaguar, 1 × mortar, 1 company of Marders and infantry, 1 × EW unit.

**Fifth Game-Turn of reinforcement arrivals:**

**First NATO Movement Phase:** 1 × company of Leopards, 1 × mortar, 3 × Kanone, 2 × Jaguar, 1 × Gepard, 1 × engineer squad.

There are 3 Marder vehicles per platoon and 3 Leopard vehicles per full-strength platoon. Losses are as follows: first company of Leopards to arrive is down 1 tank per platoon; last company of Leopards to arrive is down 2 tanks per platoon; Last company of Marders and infantry to arrive is

down 1 vehicle/1 step per platoon. Leopards have Chobham armor. The West Germans may deploy a total of 10 dummies. West German units may enter any hex between 6111 and 6130.

#### [117.6] SPECIAL INFORMATION NATO

[117.61] **Artillery:** British organic artillery may not be pre-plotted. Beginning 4 Game-Turns after the first Soviet unit is sighted or Soviet jamming is used, the British receive 2 sections light howitzer (20 hexes west) and 1 section medium howitzer (35 hexes west).

Germans organic artillery may not be plotted until the first Soviet unit has been sighted or RDF-located by German units. The organic SP howitzers are with brigade HQ. Beginning 4 Game-Turns after the first Soviet unit has been sighted or RDF-located by a German unit, or Soviet jamming is used, the Germans receive 1 battery light howitzer (40 hexes east) and 1 battery heavy howitzer (40 hexes east). Two Game-Turns later it also receives 1 battalion light howitzer (45 hexes north), and another battery light howitzer (40 hexes east), and 1 × Lance (200 hexes north) and 1 Honest John (65 hexes north).

[117.62] **Air Support:** Beginning Game-Turn 8, the NATO Player has available 2 × Tornado and 3 × F4; each of these air units may only appear once during the game.

[117.63] **Electronic Warfare:** The West Germans have direction finding gear with each one of their HQs and one EW unit. This cannot be used from off-map.

[117.64] **Nuclear Warfare:** The West Germans have one ERW loaded on the Lance missile; it may not be plotted before the Lance becomes available.

#### [117.7] SPECIAL INFORMATION (SOVIETS)

[117.71] **Artillery:** Soviets have a FROG section but may give it orders only when Enemy jamming is not in effect.

[117.72] **Air Support:** Soviets have 2 × Mi8 and one Mi 24 helicopter units, set up between 4107 and 4112. There are no Soviet off-map air defenses.

[117.73] **Minefields:** Soviets have 4 hasty minefields and 10 dummy minefields, set up within 10 hexes of the Riese River.

[117.74] The Soviet Player may designate any company, all of whose units are east of hex row 32xx, as ambush-prepared.

[117.75] Soviet BN HQ contains direction-finding gear. The Soviets also set up one EW jamming unit with the airborne battalion.

#### [117.8] SPECIAL RULES

[117.81] Fixed-wing aircraft and helicopters have no effect on each other.

[117.82] Case 105.11 does not apply to airborne companies (BMDs and infantry).

[117.83] NATO may not use Case 14.7.

[117.84] The road from 0106 through 2719, 4921 and 5519 to 6120 is *autobahn*. Units moving in column along *autobahn* for their entire Movement Phase receive 3 extra Movement Points.

#### [117.9] VICTORY CONDITIONS

[117.91] The Soviet Player receives Victory Points for NATO vehicles/steps lost as in Case 108.9. In addition, the Soviet Player receives 20 VPs for each vehicle/step with ammunition remaining and in Morale State 2 or less within 5 hexes of the Riese River and north of xx26 hexrow at the end of the

game; 10 VPs for each such unit within 13 hexes of the Riese River; 5 VPs for each such unit within 4 hexes of the Fremdingen-Belzheim road. The Soviet Player loses 20 VPs for each bridge demolished.

[117.92] The NATO Player receives Victory Points for Soviet vehicles/steps lost as in Case 70.9. In addition, the NATO Player receives 20 Victory Points for each German company in Morale State 1 or better west of the Riese River; he receives 50 Victory Points if British BN HQ reaches any hex adjacent to German Brigade HQ; he receives 30 Victory Points (once) if any German unit exits the west mapedge while remaining entirely in road hexes from the Riese River west.

[117.93] By subtracting the Soviet Victory Point Totals from the NATO Victory Points, a Victory Point Game Total is obtained.

#### VICTORY POINT GAME TOTAL

Soviet Heroic Victory	Less than 0
Soviet Tactical Victory	0-29
Soviet Marginal Victory	30-75
NATO Marginal Victory	75-100
NATO Tactical Victory	101-150
NATO Glorious Victory	151 or more

[117.94] When playing with separate British and German Players, only the British Player receives points for bringing his HQ adjacent to the German brigade HQ; only the German Player receives Victory Points for companies west of the Riese; the two NATO Players receive 15 Victory Points for exciting a German unit off the west mapedge. (See Case 70.92); Victory Points for unit losses accrue to the firing unit.

### [118.0] ANNEX TO "PARATROOPERS TAKE A STAND"

#### [118.1] GENERAL INFORMATION

This annex continues the scenario "Paratroopers Take a Stand" with the arrival of the main Soviet forces. Section 118.0 contains the necessary modifications to Section 117.0. The case number at the beginning of each case delineates the case being modified. Players must decide whether or not they will use the annex *before* play begins.

[117.11] In this scenario, map B is added to map A; the 01xx hexrow of map B overlaps the 61xx hexrow of map A.

[117.12] The scenario is played in 50 Game-Turns.

[117.13] Map B: The Wornitz, which is a continuation of the Riese, and is also a large river. The Kunigunde is a medium river. There are Class 4 bridges wherever rivers are crossed by roads on map B; and two Class 4 bridges each at 3004/3104 and 5908/6008; there are Class 1 bridges wherever trails cross rivers on map B. There are Class 0 bridges at 0607/0708, 1802/1902, 3708/3808, 2803/2802, 5608/5609.

[117.53] German reinforcements begin to enter during the first NATO Movement Phase following the matching die roll described in Case 117.53 between B6102 and B6112.

[117.52] A Soviet motor rifle regiment begins to arrive during the first Soviet Player Movement Phase of the eighth Game-Turn following the matching die roll of Case 117.53 at any east B mapedge hex. The regiment has T62 platoons attached, and also 1st tank battalion (T72), 4 × BRDM1 and 3 × BMP (in a recon detachment), 2 × MTU55, 3 × PMP, 1 × TPP. All Soviet ATGMs are second-

generation; T-72s have laser sighting and Chobham armor. (This regiment is not the same which beat up the German brigade, but, following Soviet practice, is the former second-echelon regiment which has now become the first-echelon regiment). Regiment enters in march formation, unless Enemy units can be seen from the mapedge, in which case they may enter in any formation. (See Case 110.5). The arrival of the regiment should be spread out over several Movement Phases for the sake of realism.

[117.62] NATO air units may not appear after Game-Turn 12. There is no NATO off-map air defense to the east, or south of the maps. NATO off-map air defense to the north is 2 × GUN1 (3 vehicles) and 1 × missile 2 (3 vehicles); to the west of map A is 2 × missile 2 (3 vehicles).

[117.61B] The organic West German medium howitzers may lay down up to 8 batteries of artillery-delivered minefields.

[117.71] Beginning with the Game-Turn of their arrival, Soviets have full MR division artillery (the 1 FROG section attached to the airborne BN is from this group, and is available to regiment when out of contact with the AB BN). Plus one SCUD battalion, all at the maximum ranges given in Case 108.61 to the east.

[117.72] Beginning Game-Turn 15, Soviets have 3 MIG23s and 4 SU19s, each of which may function during one Game-Turn. Soviet off-map air defense to the east of map B is: 2 × gun1 (3 vehicles), 3 × missile 1 (4 vehicles), 3 × missile 5 (4 vehicles). The missile 1 units also cover map B.

[117.75] The Soviet motor rifle regiment has 1 EW jammer (or 2 if the other Soviet jammer has been eliminated) and 2 RD-equipped battalions.

[117.78] The Soviets may pre-load one SCUD or one FROG with a 5 KT nuclear warhead.

[117.83] Germans may use Case 14.7 (artillery fire) but only against the Soviet regiment, not the airborne battalion.

[117.84] The *Autobahn* continues on map B from 0120 along the road through B0611, 1305, 2704, 3104, 4709 to 6108.

[117.91] The Soviet Player receives Victory Points for NATO vehicles/steps lost as in Case 108.9. In addition, the Soviet Player receives 50 VPs for each company in Morale State 1 or better which is exited off the west A mapedge between 0102 and 0113 before Game-Turn 25; 40 VPs if exited between Game-Turns 25 and 29; 30 VPs if exited between Game-Turns 30 and 40; 20 VPs if exited between Game-Turns 40 and 50.

[117.92] The NATO Player receives Victory Points for Soviet vehicles/steps lost as in Case 108.9. In addition, he receives 10 Victory Points for each NATO company in Morale State 1 or better west of the Riese/Wornitz River and east of the 32xx hexrow at the end of the game.

### [119.0] NUKE RAID!

#### [119.1] GENERAL INFORMATION

The scenario depicts a vital target raid.

[119.11] The scenario is played on map B.

[119.12] The scenario is played until one side or the other attains its Victory Conditions.

[119.13] An American nuclear storage depot is located in Frankenhofen, defended by Major Bruce Wallace's armored cavalry troop. The mission given to Col. Alexei Gurzheyev and his Soviet tank regiment (1st Regiment, 51st Tank Division) is simple: destroy the depot at all costs.

## [119.2] PHYSICAL ENVIRONMENT

[119.21] The scenario takes place at night, with a quarter moon. The weather is clear and cool with no wind.

[119.22] The Wornitz and Kunigunde Rivers are small. There are Class 4 bridges wherever roads cross rivers, Class 1 bridges wherever trails cross rivers, Class 0 bridges at 0806/0907, 1902/2002, 3708/3807, 5709/5710. None of the bridges are prepared for demolition.

## [119.3] NOTES ON SOVIET FORCES

[119.31] The Soviet Player has no set-up units, but brings in a tank regiment beginning with the first Soviet Movement Phase at the east mapedge. The regiment is reinforced with a motor rifle battalion; tanks are T62s.

[119.32] Each battalion has either a platoon or three squads of engineers and their vehicles.

[119.33] Two MTU-55 units are attached to the regiment.

[119.34] The Soviet Player has as many dummies as he needs.

[119.35] The Soviet Player enters in battalion column, with the recon company preceding the remainder of the regiment by 10 hexes (see Case 110.5).

## [119.4] NOTES ON U.S. FORCES

[119.41] The US Player sets up an armored cavalry troop; its units may be in any town but Ofterried; and in Frankenhofen he sets up 1 × M150, 1 × M60A2, 1 × 4.2", and 3 × infantry, and 1 × M113, organized into a heavy security company.

[119.42] The US Player sets up as many dummies as he needs.

[119.43] The US infantry are set up dismounted.

## [119.5] REINFORCEMENTS

[119.51] There are no Soviet reinforcements.

[119.52] The US receives one Mech-heavy task force (tanks are M60A1) reinforced with 2 × M150, 1 × engineer squad, Game-Turn 6 at any west mapedge hex. They may enter in column.

## [119.6] SOVIET SPECIAL INFORMATION

[119.61] **Artillery:** The Soviet Player has from the east mapedge a battalion or three batteries of 122mm MRL light howitzers and a FROG battalion. The Soviet Player may not take advantage of Case 14.7. The Soviet Player may, at his option, pre-load FROGS and MRLs with chemicals.

[119.62] **Air Support:** Soviet eastern off-map air defense is 1 × gun 1 (3 vehicles) and 1 × missile 5 (4 vehicles).

[119.63] Soviet tank platoons each have one mineplow.

[119.64] Soviet tanks may be equipped for snorkeling at the Soviet Player's option; if so he must write this down before seeing the US set-up.

[119.65] Soviets have RD gear with regiment HQ and one battalion HQ.

[119.66] Soviets enter in CP1 status. Soviet infantry has incapacitating gas grenades. Soviet MRLs are equipped with 10 points of non-persistent lethal gas, FROGS are equipped with 3 points of persistent lethal spray.

## [119.7] US SPECIAL INFORMATION

[119.71] **Artillery:** US units organic artillery, is starshell- and smoke-capable only for the armored cavalry and security company mortars. Beginning Game-Turn 5, US has 1 section 155mm medium

howitzer from the north, and 1 battery of the same from the west; only the section is smoke-capable.

[119.72] **Air Support:** Beginning Game-Turn 10, the US has one F4 available to it. An additional F4 becomes available every third Game-Turn. Beginning Game-Turn 8, the US has 2 × cobra AH1s helicopters available. An additional 2 cobra AH1Q helicopters become available Game-Turn 12.

[119.73] The US may deploy 5 barrier mines and 5 dummies within three hexes of Frankenhofen. US artillery does not have mines.

[119.74] The security company's M113 is equipped with RD gear.

[119.75] US set-up units are set-up in CP1 status.

[119.76] US has one Lance missile off-map to the west which is equipped with one 2 KT warhead; it is not loaded.

## [119.8] SPECIAL RULES

[119.81] The US Heavy Security Company never checks for morale.

[119.82] Soviet units may Bound even in Morale 2 Status. Soviet units benefit from a column shift of two to the left when checking for morale.

## [119.9] VICTORY CONDITIONS

[119.91] The Soviet Player wins if any Soviet engineer unit occupies hex 1515 and remains there in Overwatch Command for two Game-Turns.

[119.92] The US Player wins if the Soviet regiment breaks or all its battalions are broken or all its companies are in Morale State 3 or if the Soviet Player has no units within three hexes of Frankenhofen by Game-Turn 30 or if the Soviet Player has not won by Game-Turn 40.

# [120.0] THE BATTLE OF THE RIESE

## [120.1] GENERAL INFORMATION

This scenario depicts a Soviet attempt to expand a bridgehead in the face of a NATO counterattack.

[120.11] The scenario is played on map A.

[120.12] The scenario is played in 30 Game-Turns.

[120.13] Following a breakthrough on the Luneburger Heide of the North German Plains, the lead battalion of the 32nd Guards Motor Rifle Division raced ahead and managed to reach the Riese River, which is the last important water obstacle between the Soviets and the port of Bremen, before German engineers could blow the bridges. Under cover of darkness the battalion crossed the Riese and fought a pitched battle with a company of German defenders, driving them back to the Hasenwald. As the sun rises on the foggy landscape, the 31st Panzergrenadier Brigade of the 11th Panzergrenadier Division has rushed into the breach, with orders to destroy the Riese bridges. The tired Soviets, meanwhile, have dug in to await the arrival of the division's tank regiment. Can they hold out until the tanks arrive? Brig. Gen. Jurgen Arndt commands the Germans, with Lt. Col. Gregor Novaritch commanding the motor rifle battalion and Col. Ivanof Shchenkov leading the tank regiment.

## [120.2] PHYSICAL ENVIRONMENT

[120.21] The scenario takes place in daylight.

[120.22] The scenario starts out with medium fog. Each Record Phase, the NATO Player rolls one die: on a 1-2, the fog becomes one level lighter; on

a 3-5 it remains the same; on a 6 it becomes one level heavier. There is a light wind, and the temperature is cool. Once the fog disappears, it will not return.

[120.23] The Riese is a medium river; the Horloff is a small river. There are Class 4 bridges at 5418/5519 and 5614/5715. There are Class 1 bridges at 5024/5125, 4925/4926, and 4826/4827. There are Class 0 bridges at 0112/0211 5732/5733. All of the bridges are prepared for demolition.

## [120.3] NOTES ON WEST GERMAN FORCES

[120.31] The West Germans set up a depleted Panzergrenadier brigade plus 3 engineer squads in or west of the 37xx hexrow and south of the xx13 hexrow, and east of the 18xx hexrow. (Current organization.)

[120.32] The West Germans have 10 dummies.

## [120.4] NOTES ON SOVIET FORCES

[120.41] The Soviet Player sets up the motor rifle battalion, and tank regiment's recon company in or east of the 42xx hexrow. All BMPs, tanks and infantry platoons are down 1 vehicle/step. Four units may be camouflaged. Also, set up is a ROD at 6120 or 6125 and adjacent hexes or divided among both locations. The ROD is entirely under Independent Command; tanks are T62s.

[120.42] There are three engineer squads set up with the motor rifle battalion and three engineer platoons and BTR60 units in the ROD.

[120.43] The Soviet Player may set up as many dummies as he likes.

[120.44] Units in the ROD may be set up in column formation.

## [120.5] REINFORCEMENTS

[120.51] There are no West German reinforcements.

[120.52] Beginning with Game-Turn 5, a Soviet T-72 tank regiment arrives at any east mapedge hex from 6111 to 6130 in regimental attack formation (see 110.5). The regiment is reinforced with a second motor rifle battalion (using 5th BN HQ for its HQ), 2 × SP74, and 2 × T12. Beginning with Game-Turn 6, the Soviet Player may bring in 3 PMP and 1 TPP bridging units in the same area in which the regiment may arrive.

## [120.6] WEST GERMAN SPECIAL INFORMATION

[120.61] **Artillery:** West Germans have the following higher-level artillery: 1 battery 175mm medium howitzer 100 hexes off-map to the south; 1 battery 110mm MRL (light howitzer) 60 hexes off-map to the south; 1 battery 8" heavy howitzer just off-map to the west. Artillery may be pre-plotted before the Soviet deployment is seen.

[120.62] **Air Support:** West Germans have the following off-map air defenses: 1 × missile 1 (3 vehicles) to the west, extending its range to cover the map; 2 × missile 2 (3 vehicles) to the south along with 1 × gun 1 (3 vehicles); 1 × gun 1 (3 vehicles) to the north.

[120.63] The West German Player may designate any tank platoons as prepared for snorkeling, but he must do so before seeing the Soviet set-up. This is marked on the unit status sheet.

[120.64] The West German Player may designate 1 company from the Panzergrenadier Battalion as ambush-prepared.

[120.65] The West German Brigade HQ and 1 of the battalion HQs have radio detection gear. The West Germans also have one jammer.

[120.66] West German units are set up in any CP Status, at the option of the German Player.

[120.67] The West German Player has a 2KT warhead available for his 8" howitzers. He may not plot the warhead for delivery in any hex in violation of the restrictions of Case 108.68.

### [120.7] SOVIET SPECIAL INFORMATION

[120.71] **Artillery:** Soviet units have from division: its MRL battalion (light howitzers) at '80 hexes to the east and its FROG battalion at 120 hexes to the east. Army throws in 1 130mm medium howitzer battalion at a range of 110 hexes to the east, and a SCUD battalion for good measure at a range of 300 hexes. Front weighs in with a second 130mm battalion at 100 hexes east, 1 180mm heavy howitzer battery at 140 hexes east. Shorter range artillery cannot reach the bridgehead). Artillery may be pre-plotted before the German deployment is seen.

[120.72] **Air Support:** The Soviet Player has available 5 missions of Mig23s and 3 missions of SU19s; each mission constitutes one Game-Turn's appearance by a fresh unit. He also has an Mi24 helicopter unit which he may bring on at any time; if it is shot down or runs out of ammunition, it is replaced 4 Game-Turns later by a second Mi24.

[120.73] **Minefields:** The Soviet Player may deploy 4 hasty minefield hexes and 5 dummy minefield hexes.

[120.74] **Snorkels:** The Soviet Player may bring in any tank battalion equipped for snorkeling by delaying the arrival of that battalion by 6 Game-Turns.

[120.75] **Ambushes:** The Soviet Player may designate all motor rifles companies set-up for ambush.

[120.76] **Electronic Warfare:** The Soviet Player has radio detection gear with regiment HQ, the set-up motor rifle battalion HQ, and one other battalion HQ. He has two jammer units with the tank regiment.

[120.77] **Chemical Warfare:** Soviet units are set up in CP1 or CP3 Status as the Soviet Player chooses; however, all set-up units must have the same chemical protection status when set-up. Soviet infantry units are equipped with incapacitating chemical grenades. The set-up mortar unit is equipped with 5 points of non-persistent lethal gas. MRLs are equipped with 10 points of non-persistent lethal gas. The 130mm units are each equipped with 5 points of persistent lethal spray and 5 points of persistent lethal gas, as well as with 5 points each of non-persistent lethal gas. Artillery may be pre-loaded with chemicals at the option of the Soviet Player.

[120.78] **Nuclear Warfare:** The Soviet Player may choose one from among the following; a SCUD loaded with a 10KT warhead, a FROG loaded with a 5KT warhead, or a 180mm howitzer loaded with a 5KT warhead.

### [120.8] VICTORY CONDITIONS

[120.81] The West German Player receives Victory Points for each vehicle or step lost by the Soviets as described in Case 108.9. In addition he receives 100 Victory Points for destroying the bridge at 5715; 125 Victory Points for destroying the bridge at 5519; 25 Victory Points for destroying any other bridge; 100 Victory Points if no Soviet tank company remains west of the Riese River and in Morale State 1 or 0 at the end of the game.

[120.82] The Soviet Player receives Victory Points for each vehicle or step lost by the West Germans

as described in Case 108.9. In addition, they receive 100 Victory Points if the West German Brigade's Morale breaks and 100 Victory Points for each unbroken battalion which exits 2 or more companies of Morale State 1 or better from the west mapedge between 0102 and 0113 by the end of Game-Turn 20; 50 Victory Points for each such unit exited by the end of Game-Turn 25; 30 Victory Points for each such unit exited by the end of the game.

## [121.0] ALL QUIET ON THE WESTERN FRONT

### [121.1] GENERAL INFORMATION

This is a reconnaissance patrol scenario.

[121.11] The scenario is played on map B.

[121.12] The scenario is played until the end of the Game-Turn following the one in which one side or the other has attained 100 Victory Points.

[121.13] It is New Year's Eve and the front in the mountains of southern Bavaria is inactive. Routine patrols, however, are a regular feature of wartime life. United States 2nd Lt. John Dinapoli is stuck with the task of taking his scout detachment out through the snow to make sure that no Soviets have moved into Furnheim, since the phone lines to Furnheim are down in the storm (or is it due to Enemy cutting?). Meanwhile, Capt. Danyel Neshchevskiy is given a similar mission: see if Americans have moved into Frankenhofen from their base in Weiltingen.

[121.14] **Special Rule:** No units may enter Gerolfingen.

### [121.2] PHYSICAL ENVIRONMENT

[121.21] The scenario takes place at night under overcast skies. The weather is blizzard.

[121.22] There are Class 4 bridges wherever roads cross the Wornitz River and Class 1 bridges wherever trails cross the river.

### [121.3] NOTES ON US FORCES

The US Player sets up one scout detachment from a mech battalion in Weiltingen.

### [121.4] NOTES ON SOVIET FORCES

The Soviet Player sets up one recon company from an MR regiment, reinforced with 2 × BMP but no infantry or motorcycles, in Reichenbach.

### [121.5] VICTORY CONDITIONS

If US units enter any or all hexes of the following towns: Irsengen, Furnheim, Himmelstall, Bosacker, Vietsweiler and Frankenhofen, the US Player receives 100 Victory Points. If Soviet units enter all of the following: Irsengen, Frankenhofen, Himmelstall, Furnheim, Die Enge (4528) and hex 1927, the Soviet Player wins 100 Victory Points. If either Player spots a unit of the other, he wins 50 Victory Points. Both Players receive 10 Victory Points for destroying any Enemy vehicle or infantry step. The Player with the most Victory Points at the end of the game is the winner.

## [122.0] BREAKTHROUGH ON THE FRONT LINE (Bonus Scenario)

### [122.1] GENERAL INFORMATION

This "campaign game"-sized scenario depicts a Soviet tank division's breakthrough attempt

against a section of the front line which has at least temporarily stabilized, with heavy forces on both sides. The scenario uses virtually all of the units in *Mech War 2*, but to achieve a Soviet force preponderance sufficient to even contemplate an offensive, the NATO forces have been given several handicaps. As this scenario strains the countermix to the limit, Players will have to improvise markers, and may wish to improvise counters. The scenario is most suitable for Multiplayer use, and has been playtested with 6-10 Players.

[122.11] Maps A and B are used in this scenario. The xx34 hexrow of map A overlaps the xx01 hexrow of map B.

[122.12] The game continues until broken off by mutual agreement or all companies are in morale 3 for either side or Game-Turn 30 + 2n, whereby n = number of Game-Turns in which nuclear warheads were detonated.

[122.13] The war is two weeks old. The Soviet forces in Germany have exhausted themselves in bitter fighting all the way from Kassel to the outskirts of the Ruhr. With fresh troops arriving from Soviet Russia, however, another general offensive has been ordered for all fronts, together with secondary and diversionary attacks. Central Front headquarters has decided to try for a breakthrough in the Sauerland, just southeast of the Ruhr. The commander of the 8th Guards Tank Army has picked the valley of the Wornitz for his attack; one of the reasons for this choice, besides the Soviet foothold on the Bohmighohe, is the problem NATO has in co-ordinating the forces of three national armies. The American 3rd Brigade, 2nd Armored Division (a reformed unit) has made its way northwest from the Westerwald; the 20th Panzergrenadier Brigade of the 7th PG Division is holding the center, not far from its peacetime barracks; and the 3rd Battlegroup, 5th British Field Force is holding the northern flank. Between these forces and the Ruhr there lies only a single home defense brigade: no match for a Soviet tank army. To the west lies a good road to the Rhine, bypassing the Ruhr. To spearhead the breakthrough attempt, 8th GTA has picked the 117th Guards Tank Division, veteran Lt. Gen. (2 star) Nikolayev Kurchenko in command. It is 4:30 a.m. as the preliminary artillery barrage begins.

### [122.2] PHYSICAL ENVIRONMENT

[122.21] The scenario takes place at night from Game-Turn 1 through Game-turn 8, under an overcast sky. Game-Turns 9-10 are "1/4 moon", 11-12 are "half moon", 13-14 are "full moon", and from 15 on are day. (This simulates dawn.)

[122.22] The weather starts rainy and warm with a light wind. The ground is firm. Beginning at Game-Turn 3, roll one die during each Record Phase. When a 1 is rolled, the rain ends. If playing with a weather front, the dry or foggy weather, and later the clear weather, arrives at the mapedge from which the prevailing winds are coming. The map remains "wet" for purposes of applying nuclear rules throughout the scenario. When rain ends, the die is rolled again to determine whether light fog takes its place. On a roll of 1-4, light fog is present; on a roll of 5-6, there is no fog. Beginning three Game-Turns after the rain ends, the NATO Player rolls one die each Record Phase to determine whether the overcast has lifted sufficiently to allow aircraft operations. On a roll of 1, this is the case, and aircraft may begin operating (in the clear area of the map) in the second Game-Turn after the one in whose Record Phase the overcast-lifting die roll was made. In the same manner, but using a separate die roll, the Soviet Player rolls one die to determine whether the fog has lifted; this die roll immediately follows the overcast die roll. If no rain-ending die roll has taken place by the end of

the Game-Turn 8 Record Phase, mud conditions take effect at the beginning of Game-Turn 9.

[122.23] The Wornitz is a medium river except between 5110 and 5409, where it is a small river on both sides. All other rivers are small. There are Class 4 bridges at: B2602/2603, B1203/1204, B0310/0410; a Class 3 bridge at B1304/1305; Class 2 bridges at B3004/B3104, B0508/B0509; Class 0 bridges at A5732/5733, A0314/0413, B0508/0509, B3002/3003, B5608/5609, military bridges (treat as Class 4 civilian bridges) B5905/6005, B6009/6010, A5832/5833, and a ferry at B4910/4911. Nuclear radiation zones exist at A3927 and A5413. Neiderhofen is a devastated town, impassable to vehicles. Also devastated are: A4920, A4921, A5020, A4121, A4020. All Wornitz River bridges are prepared for demolition.

### [122.3] FIRST PLAYER BASIC INFORMATION

[122.31] The Soviet Player is the first Player.

[122.32] The NATO Player sets up first.

[122.33] The Soviet Player sets up every unit in the Soviet countermix, other than Mi24 helicopters. The nine BMD counters, however, are not used as BMD units but as HQ units, as follows:

No. of BMD Unit	HQ Designation For This Scenario
1511	T-72 Tank Regiment HQ
1512	T-62 Tank Regiment HQ
1513	1st T-62 BN HQ
1521	2nd T-72 BN HQ
1522	3rd T-62 BN HQ
1523	3rd T-72 BN HQ
1531	4th T-62 BN HQ
1532	Recon BN HQ
1533	Division HQ

The regular regiment HQ unit commands the motor rifle regiment; the regular 1st BN HQ commands the 1st T-72 BN; the regular 2-4th BN HQs command the 2-4th motor rifle battalions; the regular 5th BN HQ commands the airborne battalion.

All BRDMs, BMPs #1013-1016, and motorcycles are under the recon battalion. BRDM2s are under the MR regiment. ATGM teams are ordinarily with MR battalions, but may be detached by the division to the airborne battalion, which, along with the recon battalion, is directly under division. ZSU23 units, SA9 units, the SP74 units, the jammer units, and the bridging units are all directly under division, which may detach them to lower HQs. The three engineer platoons and their BTR60s are divided among the three regiments. Airborne battalion controls the airborne infantry, ASU units, and helicopters. MR regiment controls the mortars and T12s. Division may attach MR battalions from the MR regiment to the tank regiments, or otherwise reorganized before setting up.

All Soviet units are at full ammunition and strength levels. Troop quality is seasoned for the airborne battalion, first-line for the T-72 regiment, second-line for the rest. BRDM2 units have 2nd generation Sagger. Beginning Morale Level is 0.

The Soviet units may be set up in any hex in or east of Soviet front lines, or they may be left off-map and brought in as reinforcements at any mapedge hex east of the Soviet front lines. Units set up on map may be set up camouflaged (up to 15 units) and in defile. Dismounted infantry may also be set up within 3 hexes or less on the NATO side of the Soviet front lines, provided that no Soviet unit is within 3 hexes of the NATO front line.

The Soviet front line runs as follows, from North to South: A6115-6119-6019-6020-5821-5822-5623-5724-5727-5627-5628-5230-5130-4931-4830-4532-4431-4232-4031-3932-3934-B3901-3904-3804-3808-3909-3910-4412-4413-4614-4621-4422-4423-4426-4728-4734.

Players who are able to use counters from a duplicate counter set or from *Suez to Golan* for the Soviet HQ may also deploy the BMD units as BMDs.

[122.34] Initial HQ ratings are: MR regiment: C; T-72 regiment: B; T-62 regiment: D; Recon BN HQ: B; MR battalion HQs: all C; T-72 battalion HQs: all C; T-62 battalion HQs: all D; Division HQ: B.

[122.35] There are 8 dummies provided. Consider each of these dummies to be a 3-motorcycle unit; thus there are no fake Soviet units in the game.

### [122.4] SECOND PLAYER BASIC INFORMATION

[122.41] The NATO Player is the second Player.

[122.42] Soviet infrared night recon flights have thoroughly checked out the area, and most of NATO's deployment is static. Therefore the NATO Player first sets up one-third of each type of vehicular unit, with HQs, jammers, air defense units, mortars, and recon units (including Armored Cavalry) exempted, face up. For the US and West German companies, this unit would be the first platoon. The Soviet Player then examines this set-up and plots his artillery for Game-Turns 1 and 2. When this is done, the units are turned face-down, and the NATO Player sets up the remainder of his units and his mines. Finally the Soviet Player sets up his units, and play begins with the Soviet Indirect Fire Phase of Game-Turn 1. By agreement of both Players, set-up units of both sides which cannot be seen by Enemy units may be left off the map, provided that their location is noted in writing and that they are placed on the map if they move or come within sighting range of an Enemy unit; once placed on the map they may not be removed without taking them out of play. Units must be set up in accordance with section 105.0. Soviet units should be set up in standard formations (see 110.5), but this is not mandatory.

[122.43] NATO units are set up as follows: The British battlegroup is set up on map A in or behind the NATO lines and in or east of the A38xx hexrow. The British are at Morale Level 0, Ammunition Level 3; troop quality is seasoned; tank, APC, and infantry platoons are all down one vehicle/step; 8 British units may be camouflaged. The battlegroup is commanded by (Lt. Col.) Sir Jonathan Michaels, K.C.B. 24th Baron of Finchley and Edmonton.

The West German Panzergrenadier Brigade is set up on map A in or behind the NATO lines and west of the A38xx hexrow. The Germans are at Morale Level 0, Ammunition Level 3; troop quality is first-line; all units are at full strength and 15 units may be camouflaged. The brigade is commanded by Brig. Gen. Kurt von Schmerdingen, whose summer villa is in hex A0418.

The US forces set up are 1st and 2nd battalions, brigade HQ, 1 × ALVB, 2 × Vulcan, 2 × Chaparel and an armored cavalry troop. The Americans set up on map B in or behind the NATO front lines. The second battalion must be south of the Bxx12 hexrow; the Armored Cavalry Troop within 5 hexes of the NATO front line. The Americans are at Morale Level 0, Ammunition Level 3, troop quality is second-line; all units are at full strength and 10 units may be camouflaged. M60A1 tanks are in use. The brigade is command

ed by Brig. Gen. T. Roy "Bulldog" Perry, West Point '56.

The NATO front line runs as follows, from North to South: A6106-6006-6007-5609-5610-5511-5512-5412-5413-5214-5215-5216-5218-5018-5020-4921-4922-4721-4520-4321-4220-4121-4020-3921-3820-3524-3225-3233-B3201-3203-3104-3105-3306-3309-3409-3410-4013-4018-3919-3921-3523-3527-3728-4026-4529-4530-4331-4334.

All NATO infantry is set up dismounted.

[122.44] HQ ratings are as follows: West German brigade: A; US Brigade: D; British Battalion: B; West German Panzer Battalion: B; West German Panzergrenadier Battalion: B; US 1st Battalion: D; US 2nd Battalion: E.

[122.45] The NATO engineer squads are divided among the three armies present; if additional counters are available, each Battalion may be given a platoon.

[122.46] NATO has 7 dummy counters, and may use LVT7 units as motorcycle units (3 vehicles).

### [122.5] REINFORCEMENTS

[122.51] *Soviet Reinforcements:* The Soviet Player may bring in his second-echelon tank regiment beginning Game-Turn 6. Players who have *Suez to Golan* may use a T-55 regiment. Players with a duplicate countermix may use a T-62 regiment. Players without either may at any time remove an entire tank regiment from the map (including an exited regiment) and bring it on as the second echelon regiment. Units removed in this fashion are not considered eliminated for purposes of NATO Victory Points. Reinforcements may arrive at any mapedge hex to the east of the Soviet front line as described in Case 122.33. The regiment has full ammunition and strength; crew quality is second-line; beginning Morale is 0. Regiment HQ is rated D, battalion HQs also rated D. If additional counters are not available, the ZSU23 and SA9 units, and engineer platoons, if eliminated, may be brought in immediately as reinforcements. In addition, they may also be brought in with the second-echelon regiment either after being eliminated a second time or being voluntarily removed.

[122.52] *NATO Reinforcements:* Beginning Game-Turn 8, the US has an air cavalry reinforced team available, entering on transport helicopters from the south map edge.

### [122.6] SPECIAL INFORMATION (Soviets)

[122.61] *Artillery:* If mortar counters are unavailable for all MR battalions, assume that mortars are with battalion HQ.

*Off-Map Artillery:* The tank division's 3 battalions of 122mm light howitzer and its MRL battalion are located 1 hex off-map to the east. The division's FROG battalion is located 20 hexes off-map to the east. 8th Guards Tank Army's full artillery is present: 2 × 130mm medium howitzer battalions and one 152mm medium howitzer battalion are 5 hexes off-map to the east. Central Front has been kind enough to provide three SCUD battalions which are 100 hexes off-map to the east, 3 battalions of 130mm medium howitzers and 1 battalion of 152mm medium howitzers 10 hexes off-map to the east, 1 180mm heavy howitzer battalion 25 hexes off-map to the east, and 1 240mm mortar (super heavy howitzer) battalion is located 1 hex off-map. A RAG-assigned artillery battalion may fire either 1 battalion or 3 battery patterns. All other Soviet conventional artillery fires battalion patterns.



**[122.62] Air Support:** Soviets may set up all their transport helicopters and these may be set up carrying infantry. Soviets receive 5 × SU19 missions and 5 × MiG23 missions. Each Game-Turn in which an airplane is used constitutes one mission; each mission has full ammunition. Once air superiority turns (see Case 122.82), only half (rounded down) of the unused air mission allotment may be used. Soviet off-map air defense is to the east. There are 6 × missile 1 (4 vehicles), whose effectiveness extends to on-map, 2 × gun 1 (3 vehicles), and 4 × missile 5 (4 vehicles).

**[122.63] Minefields:** If minefield counters can be improvised, or if Players are willing to keep track of them on paper, Soviets receive 10 barrier mines, 20 defensive mines, and 30 dummies. These may be placed anywhere in or behind Soviet lines. First Soviet tank platoon in each tank company is equipped with one mineplow.

**[122.64] Snorkeling:** The Soviet Player may, before the beginning of play, designate any of his tanks as prepared for snorkeling; this is done on the unit status sheet.

**[122.65] Ambushes:** Any Soviet motor rifle or airborne companies may be ambush-designated by the Soviet Player before the start of play.

**[122.66] Electronic Warfare:** The Soviets have two jamming units on map; one of these may be revived if eliminated and secretly placed within 5 hexes of division HQ, or a third jammer may be improvised and set up from the beginning. Division HQ, all regimental HQs, and 5 battalion HQs (designated by division) have radio detection gear. The Soviets have laid down underground field telephones connecting the following hexes: off map to A6120 to A5823 to A5931 to A6131 to off map and to B6106 to off map and to B5704 to B5002. Off-map connections go to artillery within 5 hexes of the map.

**[122.67] Chemical Warfare:** All Soviet infantry are equipped with incapacitating chemical grenades. Unlimited stocks of all kinds of chemicals are available to off-map artillery units. All Soviet units set-up on the map are set up in CP1 status.

**[122.68] Nuclear Warfare:** The Soviets have one 10KT warhead on a special air unit (see Case 107.44), a 5KT warhead loaded on a FROG, and two 2KT warheads available for loading by 180mm howitzers; these may be pre-loaded at the Soviet Player's option.

## **[122.7] SPECIAL INFORMATION (NATO)**

**[122.71] Artillery:** The following off-map artillery is available to the NATO Player.

**British:** 1 section 105mm light howitzer 20 hexes off-map to the north; 8" howitzer (for nuclear strike only), 55 hexes off-map to the north.

**German:** 1 section 8" heavy howitzer 50 hexes off-map to the north, 1 section 110 MRL 45 hexes off-map to the north.

**American:** 1 battery 155mm medium howitzer 50 hexes off-map to the south.

Beginning Game-Turn 4, the German off-map artillery changes to: 1 battery 8" heavy howitzer 50 hexes off-map to the north, 1 battery 110 MRL 45 hexes off-map to the north.

Beginning Game-Turn 8, the American off-map artillery changes to: 1 battalion or 3 batteries 155mm medium howitzer 50 hexes off-map to the south, of which only one battery is smoke capable.

Beginning Game-Turn 12, the British off-map artillery changes to: 1 battalion or 4 batteries 105mm light howitzer 20 hexes off-map to the north, of which one battery is smoke-capable; 1 battery

155mm medium howitzer 50 hexes and one battery 155mm medium howitzer 70 hexes off-map to the north; one section 8" heavy howitzer 55 hexes off-map to the north; 155mm is not smoke capable.

Beginning Game-Turn 25, German off-map artillery changes to: 1 battery 110 MRL 45 hexes off-map the north, 1 battery 8" heavy howitzer 50 hexes off-map to the north.

Once air superiority has turned, the West Germans may perform a tornado mission every other Game-Turn and an F-4 mission every other Game-Turn. These missions, if not used, may be saved up until used.

Off-map air defenses are as follows: on all sides and covering the maps: 2 × West German Missile 1 (3 vehicles); to the north: 3 × West German missile 2 (3 vehicles), 3 × West German gun 1 (3 vehicles), 1 × British missile 2 (3 vehicles); to the west: 2 × West German missile 2 (3 vehicles); to the south: 1 × American missile 3 (3 vehicles).

**[122.72] Air Support:** Beginning Game-Turn 8, the US has 3 × UH1 (see 122.52). Beginning the Game-Turn after the rain ends, the West Germans have 1 × BO-105 and 1 × LOH and the US has its 4 cobra units. (When playing with a weather front, the attack helicopters may not affect or be affected by the rainy area.)

**[122.73] Minefields:** The West Germans may place all the mine counters in the countermix behind or in NATO lines; here half of the real mines are barrier and half are defensive. American 155mm howitzers are capable of delivering mines in any 5 Game-Turns. If more mine counters are available, or if the Players are willing to keep track of them on paper, the British may place 10 defensive mines and 10 dummies.

**[122.74] NATO tanks are not prepared for snorkeling.**

**[122.75] Ambushes:** Each NATO battalion may designate one company as ambush-prepared.

**[122.76] Electronic Warfare:** The Germans have one EW jammer and the Americans have the other. The American Mech BN and the British Battle-Group are equipped with RD gear. Both brigade's HQs are also equipped with RD gear. Underground field telephone lines connect the following points:

**American Net:** B3103 to B2702

**1st British Net:** A3920 to A4920

**2nd British Net:** A5511 to A5308

**German Net:** A3030 to A2632 to A2624 to A2719 to A0915

**[122.77] Chemical Warfare:** All NATO units are set up in CP1 status. German infantry is equipped with incapacitating gas grenades.

**[122.78] Nuclear Warfare:** NATO has available, but not loaded, one German ERW on a Lance missile 300 hexes to the west; and two ½KT warheads for German 8" howitzers; the US has one ERW available, but not loaded, on a Lance 450 hexes to the south. The British have already loaded a 1KT warhead for their 8" howitzers. NATO may not endanger populated towns as in Case 108.68, Fremdingen, Weitigen, and Wornitzhofen are inhabited; all other towns are evacuated.

## **[122.8] SPECIAL RULES**

**[122.81]** All Soviet airborne and all German companies benefit from a column shift of 2 to the left when rolling for morale changes.

**[122.82]** Beginning with the Game-Turn following the one in which the overcast lifts, during the Record Phase of each Game-Turn, the NATO Player rolls two dice. If he rolls a 5, air superiority

turns from Soviet to NATO and remains with NATO. Otherwise, air superiority remains with the Soviets.

**[122.83]** Soviet doctrine calls for a surprise breakthrough attempt along a stable front to be preceded with an intensive 30-minute bombardment. During the Soviet Indirect Fire Phase of Game-Turn 1, the Soviet Player may deliver up to six Game-Turns' worth of indirect fire. NATO infantry units may mount vehicles after first round is delivered. Markers are placed on the map only for the final round. All fire for each round must be resolved before any artillery may be delivered from the next round. Following the final round of artillery fire, the Soviet Player may deliver nuclear strikes. Spotting for artillery fire during this Phase is governed by the usual rules, maximum spotting range being 10 hexes due to rain. All units are in visual discipline during any Soviet nuclear strike occurring in Game-Turn 1. All pre-game artillery attacks are resolved secretly by the defending Player if the effected units are not on the map.

**[122.84]** Division HQ is a 3-vehicle HQ unit and is eliminated when the last vehicle is destroyed. In addition to the normal Soviet HQ air defense, the division HQ also has one missile 1 unit, which is destroyed if the second vehicle of the HQ is destroyed. Division HQ also automatically includes a 3-step platoon of infantry co-located with the HQ whenever the HQ is in Overwatch; it has no effect on the game when the HQ is in Bound Command, and is reduced by one step for each vehicle lost by division HQ. If counters are available, division HQ is set up with 13 messenger motorcycle units, each with 3 steps.

Orders to artillery not formed into RAGs are treated as if originating at division HQ when jamming is in effect.

If division HQ is eliminated, it is replaced with a new division HQ (using the same counter) which is set down in the same hex as or adjacent to any regimental HQ; at the same time all Soviet companies not under Independent Command increase their Morale Level by 1 automatically.

Broken regimental HQ may not rally themselves. Instead they may be Rallyed by division HQ using the same procedures as are outlined in Case 18.8 for Rallying battalion HQ. Division HQ may be broken and Rally itself in the same manner as a regiment HQ under Case 18.8.

**[122.85]** This scenario is particularly well suited for Multiplayer use. For most realistic play, one Player should be the Soviet division commander. If this Player is willing, the division commander should then never see the map, but rather rely upon briefings from his regimental commanders, who must follow his orders as much as possible. The division commander controls all unattached off-map artillery. He must, however, form the division howitzers into RAGs (regimental artillery groups) under the control of the regimental commanders, by Game-Turn 6, and may add higher-level assets to them. During Enemy jamming, all RAGs revert to division control. He may at any time reorganize a RAG. He controls all reinforcements until they are on-map and makes the decision to voluntarily remove the reinforcement regiment. He may also detach battalions from one regiment and attach them to another, prior to the beginning of play.

If play is at regimental level, one Player should command the units, the independent battalions (airborne battalion and recon battalion), the jammer units, and all other units not attached to regiments either organically or by the division commander. This supercedes the distribution noted in Case 122.33. When the division com-



mander orders division HQ relocated, this Player actually moves the HQ. The division commander should have a duplicate of the maps, if available. If sufficient counters are available, the on-map Players should place those units which the on-map division HQ can "see" (including units in direct communication with division HQ) on his maps. The division commander can, of course, also place other units on his map, based on reports received from his subordinates.

NATO has no over-all commander, but uses national commanders in Multi-Player gaming. Thus, 8 Players are sufficient for a good Multi-Player game; over 20 Players could provide a good game with battalion-level command. In Multi-Player play, command, plotting, artillery resolution, movement, and combat may all be done simultaneously by all Players on a team.

[122.86] Should any NATO tank or APC company in Morale State 0 exit the east mapedge between A6115 and B6110 after all battalions of the second-echelon regiment has been brought onto the map, off-map artillery will be eliminated as follows:

<i>Distance from Mapedge</i>	<i>Game-Turns to Elimination</i>
1 hex	immediate
5-10 hexes	1 GT after exit

[122.87] Should any Soviet battalion whose companies are all in Morale State 0 exit the north mapedge between A1901 and A4601 at any time, northern artillery will be eliminated on the same timetable as is noted in Case 122.86, with the addition of: 11-20 hexes — 2 Game-Turns after exit.

[122.88] All hexes constituting the Soviet front lines on map A and on map B from the north mapedge to and including the Bxx23 hexrow are considered trench hexes. The NATO Players, or the NATO Player acting for each in turn, may designate two hexes of their front line as trench hexes for each infantry platoon in the set-up OB of their nationality; this is done by national sectors of the front line. Such trench hexes are announced to the Soviet Player before he plots his artillery; they may be designated by improvised markers or may be noted on a separate piece of paper. Trench hexes have no effect on tracked vehicles; they are impassable to Enemy wheeled vehicles (motorcycles, 81mm, 120mm, T12, BRDM) they require the expenditure of +1 Movement Point by entering infantry in addition to terrain costs (this includes lateral movement along a trench line). An engineer squad may "fill in" or bridge a trench hex by spending one Movement Phase Unsuppressed in a Bound Command in that hex; Players must keep track of filled-in trench hexes on a separate piece of paper; bridging units may also bridge trenches. A bridged or filled-in trench hex has no effect on movement.

Dismounted infantry in trench hexes in defilade benefit from a modification of -4 on their Loss Modification die roll; they do not modify losses from indirect fire attacks. Dismounted infantry moving from trench hex to trench hex may remain in defilade while moving. Trench hexes do not block Line of Sight. Dismounted infantry in trenches are considered to be "wheeled vehicles" when defending against nuclear attack. When a trench hex is close assaulted, its die modification benefits the defending infantry only on the first round; thereafter the Enemy is assumed to be contesting the trenches.

## [122.9] VICTORY CONDITIONS

[122.91] Each Player receives Victory Points for Enemy vehicles/steps destroyed or incurring lethal

radiation doses according to the schema in Case 108.9.

[122.92] The Soviet Player wins 200 Victory Points *once* if during any Record Phase in the game there are more broken NATO battalions than there are broken Soviet battalions. Players should jot these down each Record Phase for later comparison. The NATO Player wins 200 Victory Points for each broken regiment; the Soviet Player wins 300 Victory Points for each broken brigade. A Brigade or regiment may only yield Victory Points to the Enemy by being broken once; if Rallied and broken a second time, no further Victory Points accrue.

[122.93] Before plotting his artillery, the Soviet Player must choose his exit objective by chance. Objective A (the Ruhr) is any west mapedge hex north of A0116. Objective B (the Rhine) is any west mapedge hex between B0120 and B0106. The Objective may be chosen by drawing one of three cards, or in some other fashion, such that there are two chances of drawing Objective A for every one chance of drawing Objective B. The Objective chosen is not revealed to the NATO Player until the end of the game, but should be written down in a sealed envelope.

[122.94] For each tank, APC, or infantry company exiting 2 or more platoons at the proper Objective while in Morale 1 Status or better and whose battalion HQ, regiment HQ, and division HQ are all unbroken at the time of the company's exit, the Soviet Player wins 50 Victory Points. For each ZSU23 or SAM9 vehicle exited at the proper Objective, the Soviet Player wins 20 Victory Points. For exiting an unbroken division HQ which has never been replaced under Case 112.84, the Soviet Player wins 500 Victory Points. For exiting each jammer unit, the Soviet Player wins 50 Victory Points.

[122.95] If the Soviet Player can trace a path of contiguous hexes uninterrupted by an unbridged river hexside, from any second echelon entry hex (see Case 112.5) to any Objective exit hex without coming within the daytime Line of Sight of a platoon of a NATO company which is in Morale State 2 or better and which is not under Independent Command, he wins 500 Victory Points.

[122.96] For each NATO company in Morale State 1 or better exited off the east mapedge between A6115 and B6110 before Game-Turn 12, the NATO Player wins 50 Victory Points.

[122.97] For each Game-Turn, beginning with Game-Turn 10, in which the Soviet Player has not exited the majority of the companies of two separate, unbroken regiments in Morale State 1 or 0, the NATO Player wins 50 Victory Points.

[122.98] For each use (including duds) of a nuclear warhead, the owning Player loses 100 Victory Points.

[122.99] The Player with the most Victory Points at the end of the game is the winner. If the Margin of Victory is greater than 300 Victory Points, there is a *Substantial Victory*; if the Margin of Victory is greater than 500 Victory Points, there is a *Decisive Victory*; if the Margin of Victory is greater than 750 Victory Points, West Germany surrenders or the Red Army runs back to Russia.

## General Notes on the Bonus Scenario

The mission of a Soviet tank division on the attack is to breakthrough or overrun the Enemy line, bypass strongpoints of resistance (leaving them for a second-echelon motor rifle division to mop up) and move like hell on wheels for its strategic objective (in this case, the Ruhr or the Rhine). According to Soviet doctrine, the attacking tank division receives first priority for higher-level resources; its attack frontage would be about 60 hexes. The first

echelon battalions of both first echelon tank regiments should attack simultaneously. First direct fire weapons (tanks, assault guns, antitank guns, BMP/BMD guns) bring the Enemy under attack. Then, if Enemy antitank defenses are very strong, dismounted infantry close in under cover of rolling artillery fire. The dismounted infantry wipes out the first echelon of the defense, then remounts and continues the attack. Loss of two entire regiments is considered acceptable if breakthrough is achieved.

A division prefers to attack in two regimental columns in the first echelon. The third regiment may be left for the second echelon, may be used to protect flanks, may be distributed in support of the two lead regiments, or may make diversionary attacks. Local circumstances, however, may recommend a three-regiment attack.

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## AVAILABLE FORCES CHART

Scenario	Player/Unit	Morale State	Strength	Ammo Level	Troop Quality	Personnel Anti-Tank	BN HQ	Bde/ Regt
111.0	<i>First Player (deploys second)</i>							
	2nd Motor Rifle Bn (T62)	0	Full	3	2nd Line	RPG-7	C	-
	1st Tank Bn (T62)	0	Full	3	2nd Line	-	C	-
	<i>Second Player (deploys first)</i>							
	2nd Mech-Heavy Task Force (M60A2)	0	Full	3	2nd Line	Dragon, LAW	C	-
112.0	1st Armor-Heavy Task Force (M60A2)	0	Full	3	3rd Line	Dragon, LAW	C	-
	<i>First Player (deploys first)</i>							
	Armored Cav Troop (M60A2)	0	Full	2	2nd Line	Dragon, LAW	-	-
	<i>Second Player (deploys second)</i>							
	Recon Bn	0	Full	3	Seasoned	-	-	-
113.0	Route Opening Detachment (T72)	0	Full	3	Seasoned	RPG-7	-	-
	<i>First Player (deploys second)</i>							
	1st Motor Rifle Regt (T62)	0	113.31	3	1st Line	RPG-7	D	D
	<i>Second Player (deploys first)</i>							
	Armored Cav Troop (M60A2)	1	Full	3	1st Line	Dragon, LAW	-	-
114.0	<i>First Player (deploys second)</i>							
	1st Tank Regt (T62) (minus 1st Bn)	0	Full	2	1st Line	-	B	B
	1st Tank Bn (T62)	0	114.31	2	1st Line	-	-	-
	<i>Second Player (deploys first)</i>							
	2nd Mech-Heavy Task Force (M60A1) (reinforced)	1	114.32	1	Seasoned	Dragon, LAW	A	C
	Air Cav Team	0	Full	3	1st Line	Dragon, LAW	-	-
	Armored Cav Troop (M60A2)	0	Full	3	1st Line	Dragon, LAW	-	-
115.0	<i>First Player (deploys second)</i>							
	1st Marine Amphibious Unit (M60A1) (minus 8th Co)	0	Full	3	Seasoned	LAW	B	-
	8th Marine Co	0	Full	3	Reserve	LAW	-	-
	<i>Second Player (deploys first)</i>							
116.0	2nd Motor Rifle Bn (T62)	1	Full	3	2nd Line	RPG-7	F	-
	<i>First Player (deploys second)</i>							
	Composite Regt (T72) (bns enter as reinforcements)	0	Full 116.5	3	1st Line	RPG-7	E	F
	<i>Second Player (deploys first)</i>							
	2nd Mech-Heavy Task Force (M60A1)	0	Full	3	1st Line	Dragon, LAW	D	-

Scenario	Player/Unit	Morale State	Strength	Ammo Level	Troop Quality	Personnel Anti-Tank	BN HQ	Bde/Regt
<b>117.0</b>	<i>First Player (deploys second)</i>							
	3rd British Battlegroup	0	Full	3	1st Line	Milan	B	-
	1st WG Panzer Bn (of Panzergrenadier Bde)	1	117.53	2	Seasoned	-	B	B
	2nd WG Panzergrenadier Bn (of Panzergrenadier Bde)	1	117.53	2	Seasoned	Milan, PZF-44	C	-
	<i>Second Player (deploys first)</i>							
	5th Airborne Bn (minus 3rd Co)	0	Full	3	Seasoned	RPG-7	A	-
	3rd Co., Airborne Bn	0	Full	3	2nd Line	RPG-7	-	-
<b>118.0</b>	<i>Second Player</i>							
	1st Motor Rifle Rgt (T72) (reinforced)	0	Full	3	1st Line	RPG-7	C	C
<b>119.0</b>	<i>First Player (deploys second)</i>							
	1st Tank Rgt (T62) (reinforced, minus MR Bn)	0	Full	3	Seasoned	-	C	A
	2nd Motor Rifle Bn (T62)	0	Full	3	Seasoned	RPG-7	A	-
	<i>Second Player (deploys first)</i>							
	Armored Cav Troop (M60A2)	0	Full	3	1st Line	Dragon, LAW	-	-
	4th Heavy Security Co	0	Full	3	1st Line	Dragon, LAW	-	-
	2nd Mech-Heavy Task Force (M60A1)	0	Full	2	2nd Line	Dragon, LAW	D	-
<b>120.0</b>	<i>First Player (deploys second)</i>							
	2nd Panzergrenadier Bde (depleted)	0	Full	3	1st Line	Milan, PZF-44	Pz:A PG:C	B
	<i>Second Player (deploys first)</i>							
	2nd Motor Rifle Bn (T62)	1	120.4	2	Seasoned	RPG-7	B	-
	Recon Co (of Motor Rifle Regt)	1	120.4	2	Seasoned	-	-	-
	ROD (T62)	0	Full	3	1st Line	RPG-7	-	-
	1st Tank Rgt (T72) (reinforced)	0	Full	3	1st Line	RPG-7	-	-
<b>121.0</b>	<i>First Player (deploys first)</i>							
	Scout Detachment	0	Full	3	Seasoned	-	-	-
	<i>Second Player (deploys second)</i>							
	Recon Co (of Motor Rifle Regt)	0	121.4	3	Seasoned	-	-	-

### HOW TO USE THE AVAILABLE FORCES CHART

On the chart, each Player should locate the Scenario being played. The indicated brigades, regiments, battalions, etc., are the Player's forces for the scenario, composed of the corresponding units listed on the Player's Table of Organization (TO) chart. For example, in Scenario 113.0 the Soviet Player would receive all of the platoons indicated under the Soviet Second Motor Rifle Regiment on the TO chart. The status of such units, in terms of their morale, troop quality, HQ rating, etc., is also listed on the Available Forces Chart.

- If the indicated battalion is already in play, use the lowest-numbered battalion available (of the correct type). "Minus" indicates a unit with somewhat different status that is still considered part of the larger organization for morale purposes (e.g., the Soviet 1st Tank Battalion in 114.0 is considered part of the 1st Tank Regiment). "Full" strength indicates that the units have the exact number of platoons and vehicles/steps listed for them on the TO charts.

- Unless otherwise specified, all Friendly battalions in a Scenario have the same HQ rating.

- ( ) indicate the type of tank to be included in the organization. Unless otherwise specified, all Soviet "Tank Battalions" are from Tank Regiments.

- Forces for the Bonus Scenario are listed in rules Section 122.0, not on the Available Forces chart.

- Unless otherwise specified, all U.S. and West German organizations are "current" and not "future."

**Abbreviations:** BDE = Brigade; Regt = Regiment; Bn = Battalion; ROD = Route Opening Detachment; Mech = Mechanized; Cav = Cavalry; Co = Company; WG = West German; Pz = Panzer (Armored); PG = Panzergrenadier (Mechanized Infantry); MR = Motor-Rifle.

# TABLES OF ORGANIZATION

## BRITISH

### THIRD BATTLEGROUP

Battlegroup Assets (*Independent Command*)

3100 Bn HQ B-H-9	3051 Scm B-P-15	3061 Scrp B-P-15	3071 Rlnd B-P-9
1(1)	2(2)	2(2)	1(3)

#### First Team

3111 Cftn C-H-8	3113 Inf 7-5-3-1	3113 F432 B-P-9
2(3)	1(3)	1(4)

Team Assets (*Independent Command*)

3014 B1 B-P-9	3015 Swg B-P-9
1(1)	1(2)

#### Second Team

3121 Cftn C-H-8	3122 Inf 7-5-3-1	3122 F432 B-P-9
1(3)	2(3)	2(4)

Team Assets (*Independent Command*)

3024 B1 B-P-9	3025 Swg B-P-9
1(1)	1(2)

#### Third Team

3131 Cftn C-H-8	3132 Inf 7-5-3-1	3132 F432 B-P-9
1(3)	3(3)	3(4)

Team Assets (*Independent Command*)

3035 B1 B-P-9	3036 Swg B-P-9
1(1)	1(2)

#### Fourth Team

3141 Inf 7-5-3-1	3141 F432 B-P-9
3(3)	3(4)

Team Assets (*Independent Command*)

3044 Swg B-P-9
1(2)

## UNITED STATES

### 1st ARMOR HEAVY TASK FORCE (*Current*)

Battalion Assets (*Independent Command*)

1100 Bn HQ A-H-11	1012 4.2" A-P-11	1013 B1 A-P-11	1071 ATG 2-1-0-0	1071 M113 A-P-11	1041 AA A-L-15
1(1)	1(1)	1(1)	2(2)	2(2)	1(5)

#### 4th Mechanized Infantry Company (*Current*)

1141 Inf 7-5-3-1	1141 M113 A-P-11
3(3)	3(3)

Company Assets (*Independent Command*)

1013 B1 A-P-11	1021 M150 A-P-11
1(1)	1(2)

#### 5th Tank Company (*Current*)

(6th Company identical)

1151 M60 D-H-8	OR	1151 M60 A2 D-H-8	OR	1151 M60 D-H-8
3(5)		3(5)		3(5)

### 1st ARMOR HEAVY TASK FORCE (*Future*)

Battalion Assets (*Independent Command*)

1100 Bn HQ A-H-11	1012 4.2" A-P-11	1013 B1 A-P-11	1071 ATG 2-1-0-0	1071 M113 A-P-11	1041 AA A-L-15
1(1)	1(1)	1(1)	2(2)	2(2)	1(5)

1021 M150 A-P-11
3(4)

#### 4th Mechanized Infantry Company (*Future*)

1141 Inf 7-5-3-1	1141 M113 A-P-11
3(3)	3(3)

Company Assets (*Independent Command*)

1013 B1 A-P-11	1021 M150 A-P-11
1(1)	1(2)

#### 5th Tank Company (*Future*)

(6th Company identical)

1151 M60 D-H-8	OR	1151 M60 A2 D-H-8	OR	1151 M60 D-H-8
3(3)		3(3)		3(3)

**2nd MECH HEAVY TASK FORCE (Current)**

Battalion Assets (Independent Command)

1200 Bn HQ A-H-11	1011 4.2" A-P-11	1021 M150 A-P-11	1041 AA A-L-15	1071 ATG 2-1-0	1071 M113 A-P-11
1(1)	1(1)	6(2)	1(5)	2(2)	2(2)

**1st Mechanized Infantry Company (Current)**

(2nd Company identical)

1211 Inf 7-5-3-1	1211 M113 A-P-11
3(3)	3(3)

Company Assets (Independent Command)

1013 81 A-P-11	1029 M150 A-P-11
1(1)	1(2)

**3rd Tank Company**

1231 M60 A2 D-H-8	OR	1231 M60 D-H-8	OR	1231 M60 D-H-8
3(5)		3(5)		3(5)

**2nd MECH HEAVY TASK FORCE (Future)**

Battalion Assets (Independent Command)

1200 Bn HQ A-H-11	1011 4.2" A-P-11	1021 M150 A-P-11	1041 AA A-L-15	1071 ATG 2-1-0	1071 M113 A-P-11
1(1)	1(1)	3(4)	1(5)	2(2)	2(2)

**1st Mechanized Infantry Company (Future)**

(2nd Company identical)

1211 Inf 7-5-3-1	1211 M113 A-P-11
3(3)	3(3)

Company Assets (Independent Command)

1013 81 A-P-11	1021 M150 A-P-11
1(1)	1(2)

**3rd Tank Company**

1231 M60 D-H-8	OR	1231 M60 A2 D-H-8	OR	1231 M60 D-H-8
3(3)		3(3)		3(3)

**AIR CAVALRY REINFORCED TEAM**

(Independent Command)

1211 Inf 7-5-3-1	0003 UH1 NOE	0006 CH-53 NOE	0008 CH-53 NOE	0012 LOH NOE
3(3)	3	2	2	1

**SCOUT DETACHMENT**

(Independent Command)

1021 M150 A-P-11	1071 M113 A-P-11
2(2)	2(2)

**ARMORED CAVALRY TROOP**

(Independent Command)

1231 M60 D-H-8	OR	1231 M60 A2 D-H-8	OR	1231 M60 D-H-8
3(4)		3(4)		3(4)
1071 ATG 2-1-0	1071 M113 A-P-11	1011 4.2" A-P-11	1021 M150 A-P-11	
3(2)	3(2)	1(1)	3(2)	

**1st MARINE AMPHIBIOUS UNIT (MAU)**

MAU Assets (Independent Command)

1100 Bn HQ A-H-11	1061 AT A-L-15	1013 81 A-P-11	0008 CH-53 NOE	0006 CH-53 NOE
1(1)	2(4)	2(1)	2	2

**7th Marine Company**

(8th and 9th Companies identical)

1171 Inf 8-6-4-2	1171 LV D-L-10
3(3)	3(3)

**5th Tank Company**

1151 M60 D-H-8	OR	1151 M60 D-H-8
3(5)		3(5)

**4th HEAVY SECURITY COMPANY**

Company Assets (Independent Command)

1163 M60 A2 D-H-8	1021 M150 A-P-11	1011 4.2" A-P-11	1141 M113 A-P-11
1(3)	1(2)	1(1)	1(3)

**4th Security Company**

1141 Inf 7-5-3-1
3(3)

**DIVISION ASSETS**

(Independent Command)

1043 Vulc A-P-11	1046 Chpr A-P-11
2(3)	2(3)

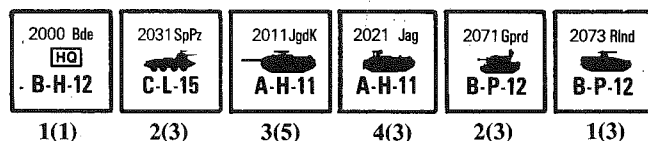
## WEST GERMAN

**Note:** The West German Army is planning to reorganize. Currently, the structure of Panzer and Panzergrenadier *battalions* varies, depending on the type of *brigade* (Panzer or Panzergrenadier) to which they are attached. In the future, there will be only one structure for each type of Battalion, regardless of the Brigade in which they appear. That is, "future" Battalions of a Panzer brigade will be identical to the battalions shown for the "future" Panzergrenadier brigade. **Panzer** = Armored. **Panzergrenadier** = Mechanized infantry.

### 2nd PANZERGRENADIER BRIGADE

*(Reduced, Current)*

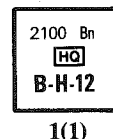
Brigade Assets *(Independent Command)*



### 1st Panzer Battalion

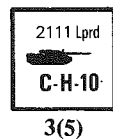
*(Panzergrenadier Brigade, Current)*

Battalion Assets *(Independent Command)*



### 1st Tank Company

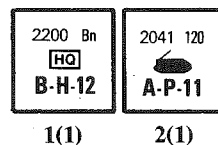
*(2nd, 3rd, and 4th Companies identical)*



### Second Panzergrenadier Battalion

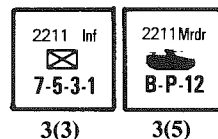
*(Panzergrenadier Brigade, Current)*

Battalion Assets *(Independent Command)*



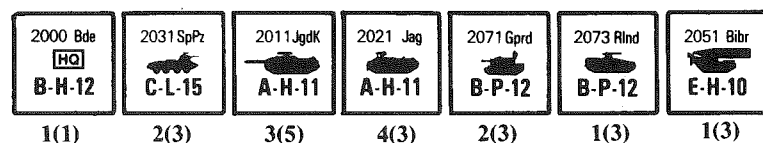
### 1st Panzergrenadier Company

*(2nd and 3rd Companies identical)*



### 2nd PANZERGRENADIER BRIGADE *(Reduced, Future)*

Brigade Assets *(Independent Command)*

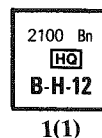


(Continued next column)

### 1st Panzer Battalion

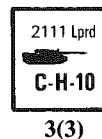
*(Panzergrenadier Brigade, Future)*

Battalion Assets *(Independent Command)*



### 1st Tank Company

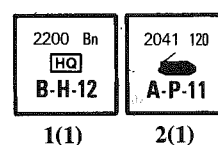
*(2nd and 3rd Companies identical)*



### 2nd Panzergrenadier Battalion

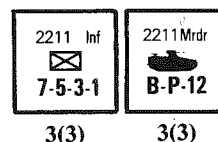
*(Panzergrenadier Brigade, Future)*

Battalion Assets *(Independent Command)*



### 1st Panzergrenadier Company

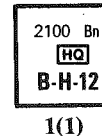
*(2nd and 3rd Companies identical)*



### 1st PANZER BATTALION

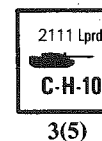
*(Panzer Brigade, Current)*

Battalion Assets *(Independent Command)*



### 1st Tank Company

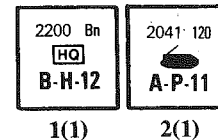
*(2nd and 3rd Companies identical)*



### 2nd PANZERGRENADIER BATTALION

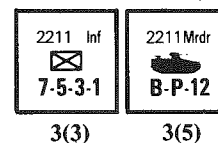
*(Panzer Brigade, Current)*

Battalion Assets *(Independent Command)*



### 1st Mechanized Infantry Company

*(2nd, 3rd, and 4th Companies identical)*

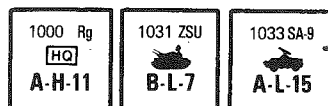




## SOVIET UNION

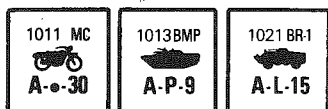
### 1st TANK REGIMENT

Regimental Assets (*Independent Command*)



1(1)      2(2)      1(4)

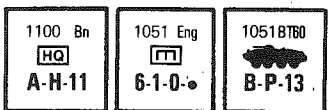
### Recon Company (*Independent Command*)



1(3)      1(3)      2(2)

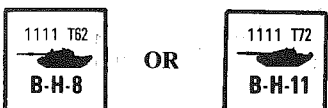
### 1st Tank Battalion (2nd and 3rd Battalions identical)

Battalion Assets (*Independent Command*)



1(1)      1(3)      1(3)

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

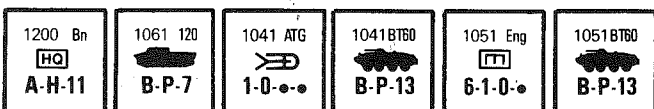


3(3)      3(3)

*Sometimes attached ...*

### 2nd Motor Rifle Battalion

Battalion Assets (*Independent Command*)



1(1)      2(1)      1(1)      1(1)      1(3)      1(3)

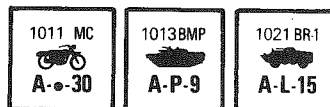
### 1st Motor Rifle Company (2nd and 3rd Companies identical)



3(3)      3(3)      1(4)

**Note:** T62 Platoon is attached to BMP Company for morale purposes. Only two 120mm mortar units are included in the countermix. If more than one motor rifle battalion is present in a scenario, the "missing" mortars are assumed to be included in the HQ unit of the additional motor rifle battalions. When one of these HQ units is eliminated, it permanently loses its mortar capabilities.

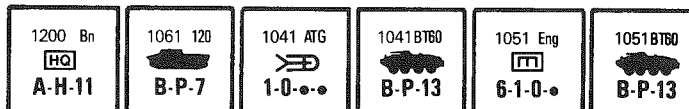
### Recon Company (*Independent Command*)



2(3)      1(3)      3(3)

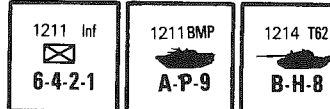
### 2nd Motor Rifle Battalion (3rd and 4th Battalions identical)

Battalion Assets (*Independent Command*)



1(1)      2(1)      1(1)      1(1) • 1(3)      1(3)

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



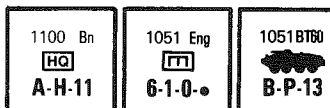
3(3)      3(3)      1(4)

**Note:** Only two 120mm mortar units are included in the countermix. If more than one motor rifle battalion is present in a scenario, the "missing" mortars are assumed to be included in the HQ unit of the additional motor rifle battalions. When one of these HQ units is eliminated, it permanently loses its mortar capabilities.

At the Player's option, the T62 battalion may either be attached as a fourth platoon to each BMP company (for morale purposes) *or* centralized as a separate tank battalion:

### 1st Tank Battalion (*Centralized*)

Battalion Assets (*Independent Command*)



1(1)      1(3)      1(3)

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

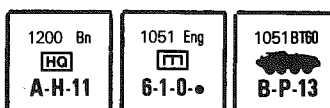


3(4)      3(4)

*Sometimes attached ...*

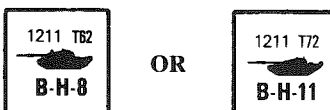
### 2nd Tank Battalion

Battalion Assets (*Independent Command*)



1(1)      1(3)      1(3)

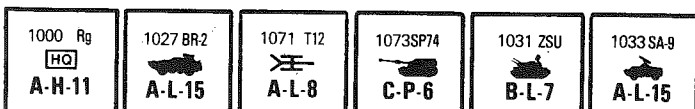
### 1st Tank Company (2nd and 3rd Companies identical)



3(3)      3(3)

### 1st MOTORIZED RIFLE REGIMENT

Regimental Assets (*Independent Command*)



1(1)      3(3)      2(3)      2(3)      2(2)      1(4)

(Continued next column)

**ROUTE OPENING DETACHMENT (ROD)**  
(Independent Command)

 1211 Inf 6-4-2-1 1(3)	 1211 BMP A-P-9 1(3)	 1091 MTU E-H-6 2(3)	 1051 Eng 6-1-0-0 1(3)	 1051 BTR B-P-13 1(3)
OR				
 1111 T72 B-H-11 1(3)				 1111 T62 B-H-8 1(3)

**Note:** Tank platoon has all three vehicles equipped with mineplows.

**RECON BATTALION**  
(Independent Command)

 1011 MC A-0-30 2(5)	 1014 BMP A-P-9 2(3)	 1022 BR-1 A-L-15 5(4)	 1100 Bn HQ A-H-11 1(1)
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**5th AIRBORNE BATTALION**  
Battalion Assets (Independent Command)

 1500 Bn HQ A-H-11 1(1)	 1075 AS57 A-L-8 1(3)	 1076 AS85 A-P-7 2(3)	 1074 SP74 C-P-6 1(3)	 1043 ATG 1-0-0-0 1(1)	 1043 BTR B-P-13 1(1)
 1027 BR-2 A-L-15 2(3)	 1061 120 B-P-7 2(1)	 1011 MC A-0-30 2(2)	 1032 ZSU B-L-7 1(3)		

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

 1511 Abn 7-5-2-1 3(3)	 1511 BMD A-L-8 3(3)
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**TANK DIVISION ASSETS (Independent Command)**

 1073 SP74 C-P-6 2(3)
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**Recon Company**  
(Independent Command)

 1011 MC A-0-30 1(3)	 1013 BMP A-P-9 1(3)	 1021 BR-1 A-L-15 2(2)
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**HOW TO USE THE  
TABLE OF ORGANIZATION  
(TO) CHART**

Refer to the Scenario being played on the Available Forces Chart to determine the specific Battalions, Brigades, Regiments, etc., present. The Player receives all units shown on the TO Chart for each indicated organization. #(#) = Number of units of that type (number of vehicles or steps in each unit). For example, the Soviet 1st Tank Company of the 1st Tank Battalion of the 1st Tank Regiment would be composed of the three T62 (or T72) platoons designated 1111, 1112, and 1113, with each platoon having three vehicles.

• All Assets have Independent Command. All units identified as Companies are treated as such for Command and Morale purposes, not including Company Assets (which have Independent Command). Mechanized Infantry Companies are considered to be composed of two separate companies — one infantry and one APC.

• The terms "Tank" and "Armored" are used interchangeably throughout the rules. For the British, "Teams" = Companies, and "Battlegroups" = Battalions; for the U.S., "Task Forces" = Battalions. OR indicates that all tank platoons of the indicated Company would be composed of one of the tank types shown, depending on the Scenario. Note that the same M60 counter is used to indicate either M60A1 or M60A3 platoons.

• Air Defense Units (ZSU 23/24, Vulcan, etc.) may be omitted from an organization if no opposing air units appear in the Scenario.

• Soviet Battalions shown as being sometimes attached are included only when their Regiment is indicated as being "reinforced" on the Available Forces Chart.

**UNIT DESIGNATIONS**

The four-digit designation of each unit (platoon) indicates its place within some higher organization, in the following manner. Reading from left to right, the first digit indicates the unit's Brigade or Regiment; the second digit indicates the unit's Battalion; the third number indicates the unit's Company; and the last digit indicates the number of the specific Platoon itself. For example, the U.S. M60 unit designated 1233 is the Third Platoon of the Third Company of the Second Battalion of the First Brigade. Basically, units with the same first digit belong to the same Brigade/Regiment, units with the same first and second digits belong to the same Battalion, and units with the same first three digits belong to the same Company.

• A zero (0) anywhere in a unit's designation indicates that the unit always has Independent Command and does not belong to any one particular organization. The only exception to this is HQ units, which (although they have Independent Command) should appear with their indicated Brigade/Regiment and Battalion.

• "Mechanized infantry" units (those that normally ride in APCs) have the same designation as their APCs. For convenience, infantry/APC units with the same designation should be grouped together, although such infantry/APC combinations may be made between any Friendly units, regardless of designation.

• Certain tank units (M60A1/M60A2/M60A3 and T72/T62) have the same designations, in order to allow Battalions to contain the appropriate tank types as the Scenario requires.

• Soviet units 1011 and 1012 are motorcycle platoons. They were accidentally omitted from the counter manifest.

# DATA SHEETS

## INFANTRY DATA

Type	Range in Hexes Automatic Weapons				Personnel Anti-tank Weapons	Air Defense
	0	1-2	3-4	5		
Soviet Mech	6	4	2	1	RPG-7	Missile 4
Soviet Abn	7	5	2	1	RPG-7	Missile 4
Soviet ATGM	1	0	P	P	SPG-9 (2)*, Sagger (4)	Missile 4
Soviet Eng Platoon	6	1	0	P	None	None
US Marine	8	6	4	2	LAW	Missile 4
US ATGM	2	1	0	P	Dragon (3), LAW	None
US Mech	7	5	3	1	Dragon (3), LAW	Missile 4
WG Pzgren	7	5	3	1	Milan (2), PZF-44	None
UK Mech	7	5	3	1	Carl Gustav (2)*, Milan (2)	None
All Eng Squads	2	0	P	P	None	None

Notes: \*SPG-9 and Carl Gustav are both Class 2 medium main guns. Infantry Automatic Weapons Strengths are printed on the counters themselves. The Personnel Anti-tank column indicates the weapon systems *available* to those units. The Available Forces Chart will indicate exactly which systems are to be used in a given scenario. ATGM units are always equipped with all Personnel Anti-Tank systems listed here for them, and all infantry units are always equipped with the Air Defense System listed for them. LAW and RPG-7 are the only Personnel Anti-Tank weapons systems that may be fired by *mounted* infantry. Mech = Mechanized, Abn = Airborne, Eng = Engineer, WG = West German, Pzgren = Panzergrenadier, UK = United Kingdom, P = Prohibited, (#) = Ammunition Depletion Number.

## AIR UNIT DATA

	Mig-23 (Soviet)	SU-19 (Soviet)	F-4 (NATO)	A-10 (NATO)	Tornado (NATO)
Air Defense Class	B/B	C/C	C/B	E/D	B/B
Tun Mode	2	3	2	3	2
Loss Mod. Nr.	3/2	3/2	3/2	5/4	3/2
Bombing Strike	HvyHow	HvyHow	HvyHow	HvyHow	HvyHow
Strafing Strike	(6)	(6)	(4)	(3)	(6)
on Vehicle	H	H	K	S	K
on Infantry	5	5	7	9	7
Air-to-Surface Missile	None	(4)	(5/2)	(6/3)	(4/1)
Resolved on	-	S	S	S	S

## AIR UNIT DATA SHEET EXPLANATIONS

- / - = Value used when air units are resolving attacks by Enemy Gun/Missile weapon systems. Aircraft HIT by Enemy Missile 4 weapon systems use their *Gun Loss Modification* number when resolving the effect of combat. Air units do not have Steps. When they take a loss, the unit is completely eliminated. \*Helicopter units HIT by any Enemy Missile system are automatically eliminated (there is no loss modification).

**Resolved on** indicates the "vehicle/step" line used when resolving ATGM combat on the Main Gun Anti-Vehicle Combat Results Table (10.3). (#) = Ammunition Depletion Number.

**Note 1:** Equipped with Class 3 Medium Main Gun (5), whose attacks are resolved on the "2 vehicle" line. Also equipped with Rocket Pod (5), which may make Direct Fire attacks on Enemy units within 0-6 hex range. Rocket attacks on vehicular units are resolved on the H column of the Main Gun Anti-Vehicle Combat Results Table; attacks on infantry units are resolved on the 5 column of the Automatic Weapons Combat Results Table. Only one of these two weapon systems may fire in a given Phase.

**Note 2:** Equipped with Rocket Pod (6), which may make Direct Fire attacks on Enemy units within 0-6 hex range. Rocket attacks on vehicular units are resolved on the E column of the Main Gun Anti-Vehicle Combat Results Table; attacks on infantry units are resolved on the 3 column of the Automatic Weapons Combat Results Table (9.3). May not fire in the same Phase that the helicopter unit mounted, dismounted, or transported infantry.

**Note 3:** Equipped with Rocket Pod (6), which resolves attacks in the same manner as the Rocket Pod given in Note 1.

## HELICOPTER DATA

Type	Air Defense Class	Loss Mod. Nr.	Main Gun	ATGM/Resolved on ...	Transport Capacity
Mi-24 (Soviet)	D/E	2/*	Note 1	Swatter (5) or 2nd gen. (5)/4	None
Mi-6 (Soviet)	F/E	1/*	None	None	4 platoons
Mi-8 (Soviet)	E/E	1/*	Note 2	None	2 platoons
Cobra 1Q (NATO)	A/D	3/*	Note 3	None	None
Cobra 1S (NATO)	A/D	3*	None	Improved TOW (4)/4	None
BO 105 (NATO)	B/D	2/*	None	HOT (5)/4	None
Lynx (NATO)	B/D	2/*	None	HOT (5)/4	None
UH-1 (NATO)	C/E	2/*	None	None	1 platoon
LOH (NATO)	A/B	1/*	None	None	None

**VEHICLE UNIT DATA UK (British)**

Vehicle	Type	MVT	Weapon Systems	Target Profile	Armor Class	Amphib Cap	Chem	Bridge Type	Night Equip	Smoke	Air Defense
Chieftain	Tank	8	Heavy Laser (1); Coax MG	C	H or C	Snorkel	Yes	4	IRSL, WLSL	Yes	None
Scorpion	Recon	15	Med 2 (2); Coax MG	B	P	Snorkel	Yes	1	None	Yes	None
Scimitar	Recon	15	Med 3 (2); Coax MG	B	P	Snorkel	Yes	1	None	Yes	None
Swingfire	ATGM Carrier	9	Swingfire (3)†; Tur MG*	B	P	Yes	Yes	2	None	No	Gun 3*
FV432	APC (hatch)	9	Tur MG*	B	P	Yes	Yes	2	None	No	Gun 3*
81mm	Mortar Carrier	9	Tur MG*; Med Mrtr*; Min: 2, Max: 17.	B	P	Yes	Yes	2	None	No	Gun 3*
Roland	SP AA	9	None	B	P	Snorkel	Yes	3	IRSL, WLSL	No	Missile 2 (4)
Bn	HQ	9	None	B	H	Yes	Yes	2	None	Yes	Missile 2 (4), Gun 3*

**VEHICLE UNIT DATA (West German)**

Vehicle	Type	MVT	Weapon Systems	Target Profile	Armor Class	Amphib Cap	Chem	Bridge Type	Night Equip	Smoke	Air Defense
Leopard II	Tank	10	Heavy Laser (1); Tur MG*, Coax MG	C	H or C	Snorkel	Yes	4	IRSL	Yes	Gun3*
Jaguar	ATGM Carrier	11	Hot (3)† or Tow (3)†; Tur MG*, Coax MG	A	H	No	Yes	2	None	Yes	Gun 3*
Jagd Panther SP AT		11	Med 1 (2); Tur MG*, Coax MG	A	H	Snorkel	Yes	3	IRSL	Yes	Gun 3*
Spahpanzer2 Recon		15	Med 3 (3); Tur MG*	C	L	Yes	Yes	3	IRSL, WLSL	Yes	Gun 3*
Marder	AFV (mixed)	12	Med 3 (2); Tur MG*, Coax MG	B	P	Snorkel	Yes	3	IRSL, WLSL	No	Gun 3*
120 mm	Mortar Carrier	11	Tur MG*; Lt Howz*; Min: 2, Max: 31	A	P	Yes	No	1	None	No	Gun 3*
Roland	SP AA	12	None	B	P	Snorkel	Yes	3	IRSL, WLSL	No	Missile 2 (4)
Gepard	SP AA	12	None	B	P	Snorkel	Yes	3	IRSL, WLSL	No	Gun 1 (4)
Biber	Bridging Vehicle	10	None	E	H	No	No	3	None	No	None
Bde and Bn	HQ	12	None	B	H	Snorkel	Yes	3	None	Yes	Gun 2 (3), Missile 4*

**VEHICLE UNIT DATA (NATO)**

Vehicle	Type	MVT	Weapon Systems	Target Profile	Armor Class	Amphib Cap	Chem	Bridge Type	Night Equip	Smoke	Air Defense
EW	EW	8	None	E	L	No	No	3	None	No	Gun 3* Missile 4*

## VEHICLE UNIT DATA (US)

Vehicle	Type	MVT	Weapon Systems	Target Profile	Armor Class	Amphib Cap	Chem	Bridge Type	Night Equip	Smoke	Air Defense
M60A1	Tank	8	Heavy Coincident (2); Tur MG*, Coax MG	D	H	No	Yes	4	IRSL, WLSL	No	Gun 3*
M60A2	Tank	8	<i>Heavy Laser (2), Shillelagh (3)</i> ; Tur MG*, Coax MG	D	H	No	Yes	4	IRSL, WLSL	Yes	Gun 3*
M60A3	Tank	8	Heavy Laser (2); Tur MG*, Coax MG	D	H	No	Yes	4	IRSL, WLSL Ambt	Yes	Gun 3*
M113	APC (hatch)	11	Tur MG*	A	P	Yes	No	1	None	No	Gun 3*
M150	ATGM Carrier	11	Tow (3)*†; Tur MG*	A	P	Yes	No	1	None	No	Gun 3*
81mm	Mortar Carrier	11	Tur MG*; Lt Mrtr*: Min: 2, Max: 17.	A	P	Yes	No	1	None	No	Gun 3*
4.2"	Mortar Carrier	11	Tur MG*, Med Mrtr*: Min: 2, Max: 27.	A	P	Yes	No	1	None	No	Gun 3*
Vulcan	SP AA	11	Tur MG*	A	P	Yes	No	1	None	No	Gun 2(5)
Chapparal	SP AA	11	Tur MG*	A	P	Yes	No	1	None	No	Missile 3 (4)
AA	Jeep	15	None	A	L +	No	No	1	None	No	Missile 4*
AT	Jeep	15	Med 2 (4)* or Tow (3)*	A	L +	No	No	1	None	No	None
LVTP7	APC (hatch)	10	Tur MG*	D	L	Yes	No	3	None	No	Gun 3*
AVLB	Bridging Vehicle	8	None	E	H	No	No	4	None	No	None
Bn and Bde	HQ	11	None	A	H	Yes	Yes	1	None	No	Missile 3* (5), Gun 3*

## VEHICLE UNIT DATA EXPLANATION SHEET

**Type:** AFV = Armored Fighting Vehicle; APC = Armored Personnel Carrier; Recon = Reconnaissance; ATGM = Anti-Tank Guided Missile; AT = Anti-Tank; SP = Self-Propelled; AA = Anti-Aircraft; HQ = Headquarters; EW = Electronic Warfare; Mvt = Movement Allowance. **Note:** Certain sources suggest that the Soviet BMP, BMD and SP74 units should have higher Movement Allowances than those given in the game. Players should feel free to experiment with the following increased Movement Allowances: BMP — 12; BMD — 10; SP 74 — 7.

**Weapon Systems:** Type of main gun and its Fire Control (Sighting System); ATGM system; Automatic Weapons (MG) systems. If the unit is a mortar carrier, its type of Section pattern and

minimum and maximum ranges are given (see Case 14.6). Hvy = Heavy main gun; Med = Medium main gun (Class 1, 2 or 3). \*Externally-directed weapons system. †Weapon system subject to external stripping (see 107.68). All vehicles with laser fire control have Coincident Fire Control as a secondary sighting system. Only one (not both) of a unit's weapon systems in *italics* may be fired in a given Phase. Unless specified in the scenario, the owning Player may choose which ATGM system to use in vehicles with more than one ATGM system listed. (#) = Ammunition Depletion number for the preceding Weapon System; Tur = Turret; Coax = Coaxial; MG = Machinegun.

**Note 1:** May use Indirect Fire as an on-map mortar, as follows: LtHowz; Min: 1; Max: 76. May also use Direct Fire as a Heavy Optical main gun (2), with a maximum range of 4 hexes. May not use both Direct and Indirect Fire in the same Game-Turn.

**Note 2:** Defends against all attacks as dismounted infantry (see also 102.6).

**Armor Class:** P = Protected; H = Hard; L = Light; + treated as dismounted infantry when resolving Automatic Weapons attacks; C = vehicle may have Chobham armor (unless specified Chobham in scenario, armor class is considered to be Hard). **Amph Cap** = Whether or not the unit may use amphibious movement. **Snorkel** = non-amphibious unit that may snorkel. **Chem** = Whether or not the vehicle is chemically protected. **Bridge Type:** The unit's Bridge Class (see 24.2). **Night Equip** = The unit's night equipment. IR = Infrared, WL = Whitelight; SL = Searchlight; Ambt = Ambient Light. All units are considered to have Passive Infrared. **Smoke** = Whether or not the unit is capable of producing vehicle smoke (see 16.4). **Air Defense Systems:** (#) = Ammunition Depletion number for preceding weapon system. \*Externally-directed weapon system.

## VEHICLE UNIT DATA (Soviet)

Vehicle	Type	MVT	Weapon Systems	Target Profile	Armor Class	Amphib Cap	Chem	Bridge Type	Night Equip	Smoke	Air Defense
T62	Tank	8	Heavy Optical (2); Tur MG*, Coax MG	B	H	Snorkel	Yes	3	IRSL, WLSL	Yes	Gun3*, Missile4*
T72	Tank	11	Heavy Laser(2); Tur MG*, Coax MG	B	H Or C	Snorkel	Yes	3	IRSL	Yes	Gun 3* Missile 4*
BMP	AFV (mixed)	9	Med 2 (3); Sagger (5)†; Coax MG	A	P	Yes	Yes	1	IRSL	Yes	Missile 4*
BTR-60	APC (Mixed)	13	Tur MG*, Coax MG	B	P	Yes	Yes	1	None	No	Gun 3* Missile 4*
BRDM 1	Recon	15	Tur MG*	A	L	Yes	Yes	1	IRSL	No	Missile 4*
BRDM 2	ATGM Carrier	15	Swatter (4)† or Sagger (4)†; Coax MG	A	L	Yes	Yes	1	IRSL	No	Missile 4*
BMD	AFV (Hatch)	8	Med 2 (4), Sagger (5)† Coax MG	A	L	Yes	Yes	1	None	Yes	Missile4*
120 mm	Mortar Carrier	7	Tur MG*; Lt. Howz*; Min: 2, Max: 28	B	P	Yes	No	1	IRSL	No	Gun 3*, Missile 4*
ZSU 23/24	SP AA	7	Tur Mg*	B	L	No	Yes	1	None	No	Gun 1 (4)
SAM 9	SP AA	15	Tur MG*	A	L	Yes	Yes	1	IRSL	No	Missile 3 (5)
ASU 85	Abn Gun	7	Med 1 (2); Coax MG	A	P	No	No	1	IRSL	No	Missile 4*
ASU 57	Abn Gun	8	Med 2 (3)	A	L	No	No	1	None	No	Missile 4*
T12	AT Gun	8	Med 1 (3)	A	L†	No	No	1	IRSL	No	Missile 4*
SP-74	SP Gun	6	Note 1; Tur MG*	C	P	No	Yes	3	IRSL	No	Missile 4* Gun 3*
Motorcycle	Recon	30	None	A	Note 2	No	No	0	None	No	None
MTU-55	Bridging Vehicle	6	Tur MG*	E	H	No	Yes	3	None	No	Gun 3*
TPP and PMP	Bridging Vehicle	8	Tur MG*	E	L	No	No	4	None	No	Gun 3*
Regt and Bn	HQ	11	None	A	H	Yes	Yes	1	IRSL	Yes	Gun 2 (5) Missile 5 (3)
EW	EW	8	None	E	L	No	No	3	None	No	Gun 2 (5) Missile 5 (3)



# Mech War 2 (Red Star/White Star Game) Counter Section Nr. 1 (200 pieces): Front

Quantity of Sections of this identical type in Red Star/White Star or Mech War 2: 1  
Quantity of Sections (all types) in Red Star/White Star: 4; in Mech War 2: 8

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1111 T72  B-H-11	1112 T72  B-H-11	1113 T72  B-H-11	1121 T72  B-H-11	1122 T72  B-H-11	1123 T72  B-H-11	1131 T72  B-H-11	1132 T72  B-H-11	1133 T72  B-H-11	1211 T72  B-H-11
1212 T72  B-H-11	1213 T72  B-H-11	1221 T72  B-H-11	1222 T72  B-H-11	1223 T72  B-H-11	1231 T72  B-H-11	1232 T72  B-H-11	1233 T72  B-H-11	1311 T72  B-H-11	1312 T72  B-H-11

1313 T72  B-H-11	1321 T72  B-H-11	1322 T72  B-H-11	1323 T72  B-H-11	1331 T72  B-H-11	1332 T72  B-H-11	1333 T72  B-H-11	1111 T62  B-H-8	1112 T62  B-H-8	1113 T62  B-H-8
1121 T62  B-H-8	1122 T62  B-H-8	1123 T62  B-H-8	1131 T62  B-H-8	1132 T62  B-H-8	1133 T62  B-H-8	1311 T62  B-H-8	1312 T62  B-H-8	1313 T62  B-H-8	1321 T62  B-H-8

1322 T62  B-H-8	1323 T62  B-H-8	1331 T62  B-H-8	1332 T62  B-H-8	1333 T62  B-H-8	1411 T62  B-H-8	1412 T62  B-H-8	1413 T62  B-H-8	1421 T62  B-H-8	1422 T62  B-H-8
1423 T62  B-H-8	1431 T62  B-H-8	1432 T62  B-H-8	1433 T62  B-H-8	1214 T62  B-H-8	1224 T62  B-H-8	1234 T62  B-H-8	1414 T62  B-H-8	1424 T62  B-H-8	1434 T62  B-H-8

1314 T62  B-H-8	1324 T62  B-H-8	1334 T62  B-H-8	1211 BMP  A-P-9	1212 BMP  A-P-9	1213 BMP  A-P-9	1221 BMP  A-P-9	1222 BMP  A-P-9	1223 BMP  A-P-9	1232 BMP  A-P-9
1233 BMP  A-P-9	1311 BMP  A-P-9	1312 BMP  A-P-9	1313 BMP  A-P-9	1321 BMP  A-P-9	1322 BMP  A-P-9	1231 BMP  A-P-9	1323 BMP  A-P-9	1331 BMP  A-P-9	1332 BMP  A-P-9

1333 BMP  A-P-9	1411 BMP  A-P-9	1412 BMP  A-P-9	1413 BMP  A-P-9	1421 BMP  A-P-9	1422 BMP  A-P-9	1423 BMP  A-P-9	1431 BMP  A-P-9	1432 BMP  A-P-9	1433 BMP  A-P-9
1511 BMD  A-L-8	1512 BMD  A-L-8	1513 BMD  A-L-8	1521 BMD  A-L-8	1522 BMD  A-L-8	1523 BMD  A-L-8	1531 BMD  A-L-8	1532 BMD  A-L-8	1533 BMD  A-L-8	1021 BD-1  A-L-15

1211 Inf  6-4-2-1	1212 Inf  6-4-2-1	1213 Inf  6-4-2-1	1221 Inf  6-4-2-1	1222 Inf  6-4-2-1	1223 Inf  6-4-2-1	1231 Inf  6-4-2-1	1232 Inf  6-4-2-1	1233 Inf  6-4-2-1	1311 Inf  6-4-2-1
1312 Inf  6-4-2-1	1313 Inf  6-4-2-1	1321 Inf  6-4-2-1	1322 Inf  6-4-2-1	1323 Inf  6-4-2-1	1411 Inf  6-4-2-1	1412 Inf  6-4-2-1	1413 Inf  6-4-2-1	1421 Inf  6-4-2-1	1422 Inf  6-4-2-1

1423 Inf  6-4-2-1	1431 Inf  6-4-2-1	1432 Inf  6-4-2-1	1433 Inf  6-4-2-1	1331 Inf  6-4-2-1	1332 Inf  6-4-2-1	1333 Inf  6-4-2-1	1511 Abn  7-5-2-1	1512 Abn  7-5-2-1	1513 Abn  7-5-2-1
1521 Abn  7-5-2-1	1522 Abn  7-5-2-1	1523 Abn  7-5-2-1	1531 Abn  7-5-2-1	1532 Abn  7-5-2-1	1533 Abn  7-5-2-1	1013 BMP  A-P-9	1014 BMP  A-P-9	1015 BMP  A-P-9	1016 BMP  A-P-9

1100 Bn  A-H-11	1200 Bn  A-H-11	1300 Bn  A-H-11	1400 Bn  A-H-11	1500 Bn  A-H-11	1000 Rg  A-H-11	1011 MC  A-30	1012 MC  A-30	1022 BR-1  A-L-15	1023 BR-1  A-L-15
1024 BR-1  A-L-15	1025 BR-1  A-L-15	1026 BR-1  A-L-15	1027 BR-2  A-L-15	1028 BR-2  A-L-15	1029 BR-2  A-L-15	1031 ZSU  B-L-7	1033 SA-9  A-L-15	1041 ATG  1-0-0-0	1042 ATG  1-0-0-0

## SOVIET

1043 ATG  1-0-0-0	1051 Eng  6-1-0-0	1052 Eng  6-1-0-0	1053 Eng  6-1-0-0	1041 BT60  B-P-13	1042 BT60  B-P-13	1043 BT60  B-P-13	1051 BT60  B-P-13	1052 BT60  B-P-13	1053 BT60  B-P-13
1061 I20  B-P-7	1062 I20  B-P-7	1071 T12  A-L-8	1072 T12  A-L-8	1073 SP74  C-P-6	1074 SP74  C-P-6	1075 AS57  A-L-8	1076 AS85  A-P-7	1077 AS85  A-P-7	1091 MTU  E-H-6

1092 MTU  E-H-6	1081 Mi6  NOE	1082 Mi8  NOE	1083 Mi8  NOE	1084 Mi24  NOE	1085 Mi24  NOE	1086 Mi23  Low	1087 Su19  Low	1034 EW  E-L-8	1035 EW  E-L-8
1032 ZSU  B-L-7	1021 BR-1  A-L-15								



*Mech War 2 (Red Star/White Star Game) Counter Section Nr. 1 (200 pieces): Back*

1087Su19



High

1086Mi23



High

1085Mi24



Low

1084Mi24



Low

1083 Mi8



Low

1082 Mi8



Low

1081 Mi6



Low



# Mech War 2 (Red Star/White Star Game) Counter Section Nr. 2 (200 pieces): Front

Quantity of Sections of this identical type in Red Star/White Star or Mech War 2: 1  
Quantity of Sections (all types) in Red Star/White Star: 4; in Mech War 2: 8

1231 M60  D-H-8	1232 M60  D-H-8	1233 M60  D-H-8	1151 M60  D-H-8	1152 M60  D-H-8	1153 M60  D-H-8	1161 M60  D-H-8	1162 M60  D-H-8	1163 M60  D-H-8	1231 M60 A2  D-H-8
1232 M60 A2  D-H-8	1233 M60 A2  D-H-8	1151 M60 A2  D-H-8	1152 M60 A2  D-H-8	1153 M60 A2  D-H-8	1161 M60 A2  D-H-8	1162 M60 A2  D-H-8	1163 M60 A2  D-H-8	1211M113  A-P-11	1212M113  A-P-11

1213M113  A-P-11	1221M113  A-P-11	1222M113  A-P-11	1223M113  A-P-11	1141M113  A-P-11	1142M113  A-P-11	1143M113  A-P-11	1171 LV  D-L-10	1172 LV  D-L-10	1173 LV  D-L-10
1181 LV  D-L-10	1182 LV  D-L-10	1183 LV  D-L-10	1211 Inf  7-5-3-1	1212 Inf  7-5-3-1	1213 Inf  7-5-3-1	1221 Inf  7-5-3-1	1222 Inf  7-5-3-1	1223 Inf  7-5-3-1	1141 Inf  7-5-3-1

## UNITED STATES

1142 Inf  7-5-3-1	1143 Inf  7-5-3-1	1171 Inf  8-6-4-2	1172 Inf  8-6-4-2	1173 Inf  8-6-4-2	1181 Inf  8-6-4-2	1182 Inf  8-6-4-2	1183 Inf  8-6-4-2	1071 ATG  2-1-0-•	1072 ATG  2-1-0-•
1073 ATG  2-1-0-•	1074 ATG  2-1-0-•	1071M113  A-P-11	1072M113  A-P-11	1073M113  A-P-11	1074M113  A-P-11	1000 Bde  A-H-11	1100 Bn  A-H-11	1200 Bn  A-H-11	1011 4.2"  A-P-11

1012 4.2"  A-P-11	1013 81  A-P-11	1014 81  A-P-11	1015 81  A-P-11	1021M150  A-P-11	1022M150  A-P-11	1023M150  A-P-11	1024M150  A-P-11	1025M150  A-P-11	1026M150  A-P-11
1027M150  A-P-11	1028M150  A-P-11	1029M150  A-P-11	1031M150  A-P-11	1032M150  A-P-11	1033M150  A-P-11	1034M150  A-P-11	1035M150  A-P-11	1036M150  A-P-11	1037M150  A-P-11

1038M150  A-P-11	1061 AT  A-L-15	1062 AT  A-L-15	1041 AA  A-L-15	1042 AA  A-L-15	0001 EW  E-L-8	0003 UH1  NOE	0004 UH1  NOE	0005 UH1  NOE	0006 ChIS  NOE
1043 Vulc  A-P-11	1044 Vulc  A-P-11	1045 Chpr  A-P-11	1046 Chpr  A-P-11	1051 AVL  E-H-8	0002 EW  E-L-8	0007 ChIS  NOE	0008 ChIS  NOE	0009 ChIS  NOE	0010 F4  Low

## NATO

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2111 Lprd  C-H-10	2112 Lprd  C-H-10	2113 Lprd  C-H-10	2121 Lprd  C-H-10	2122 Lprd  C-H-10	2123 Lprd  C-H-10	2131 Lprd  C-H-10	2132 Lprd  C-H-10	2133 Lprd  C-H-10	2141 Lprd  C-H-10
2142 Lprd  C-H-10	2143 Lprd  C-H-10	2211Mdr  B-P-12	2212Mdr  B-P-12	2213Mdr  B-P-12	2221Mdr  B-P-12	2222Mdr  B-P-12	2223Mdr  B-P-12	2231Mdr  B-P-12	2232Mdr  B-P-12

## WEST GERMAN

2233Mdr  B-P-12	2241Mdr  B-P-12	2242Mdr  B-P-12	2243Mdr  B-P-12	2211 Inf  7-5-3-1	2212 Inf  7-5-3-1	2213 Inf  7-5-3-1	2221 Inf  7-5-3-1	2222 Inf  7-5-3-1	2223 Inf  7-5-3-1
2231 Inf  7-5-3-1	2232 Inf  7-5-3-1	2233 Inf  7-5-3-1	2241 Inf  7-5-3-1	2242 Inf  7-5-3-1	2243 Inf  7-5-3-1	2011 JgdK  A-H-11	2012 JgdK  A-H-11	2013 JgdK  A-H-11	2021 Jag  A-H-11

2022 Jag  A-H-11	2023 Jag  A-H-11	2024 Jag  A-H-11	2031 SpPz  C-L-15	2032 SpPz  C-L-15	2041 120  A-P-11	2042 120  A-P-11	2051 Bibr  E-H-10	2000 Bde  B-H-12	2100 Bn  B-H-12
1191 Inf  8-6-4-2	1192 Inf  8-6-4-2	1193 Inf  8-6-4-2	1191 LV  D-L-10	1192 LV  D-L-10	1193 LV  D-L-10	2200 Bn  B-H-12	2071 Gprd  B-P-12	2072 Gprd  B-P-12	2073 Rlnd  B-P-12

3111 Cftn  C-H-8	3112 Cftn  C-H-8	3121 Cftn  C-H-8	3131 Cftn  C-H-8	3132 F432  B-P-9	3133 F432  B-P-9	3134 F432  B-P-9	3141 F432  B-P-9	3142 F432  B-P-9	3143 F432  B-P-9
3113 F432  B-P-9	3122 F432  B-P-9	3123 F432  B-P-9	3132 Inf  7-5-3-1	3133 Inf  7-5-3-1	3134 Inf  7-5-3-1	3141 Inf  7-5-3-1	3142 Inf  7-5-3-1	3143 Inf  7-5-3-1	3113 Inf  7-5-3-1

## BRITISH

0011 A-10  Low	0012 LOH  NOE	0013 Lynx  NOE	3062 Scrp  B-P-15	3035 81  B-P-9	3015 Swg  B-P-9	3025 Swg  B-P-9	3036 Swg  B-P-9	3044 Swg  B-P-9	3051 Scm  B-P-15
0014 B105  NOE	0015 Tnd  Low	3071 Rlnd  B-P-9	3061 Scrp  B-P-15	3014 81  B-P-9	3024 81  B-P-9	3122 Inf  7-5-3-1	3123 Inf  7-5-3-1	3100 Bn  B-H-9	3052 Scm  B-P-15



Mech War 2 (Red Star/White Star Game) Counter Section Nr. 2 (200 pieces): Back

0013 Lynx  
  
 Low

0012 LOH  
  
 Low

0011 A-10  
  
 High

0015 Tndc  
  
 High

0014 B105  
  
 Low

0006 ChIS  
  
 Low

0005 UH1  
  
 Low

0004 UH1  
  
 Low

0003 UH1  
  
 Low

0010 F4  
  
 High

0009 ChIQ  
  
 Low

0008 ChIQ  
  
 Low

0007 ChIS  
  
 Low



**Mech War 2 Counter Section Nr. 5 (200 pieces): Front**  
 Quantity of Sections of this identical type in *Red Star/White Star* or *Suez to Golan*: 1; in *Mech War 2*: 2  
 Quantity of Sections (all types) in *Red Star/White Star* or *Suez to Golan*: 4; in *Mech War 2*: 8

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1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
















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











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3	3	3	3	3	3	3	3	3	3





















3	3	3	3	3	3	3	3	3	3
3	3	3	3	3	3	3	3	3	3





















3	3	3	3	3	3	3	3	3	3
									

									
					In Colmn	In Colmn	In Colmn	In Colmn	In Colmn

In Colmn	In Colmn	In Colmn	In Colmn	In Colmn					
									

NEUTRAL

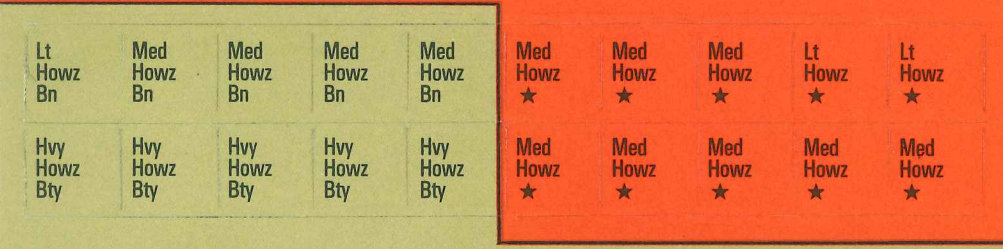


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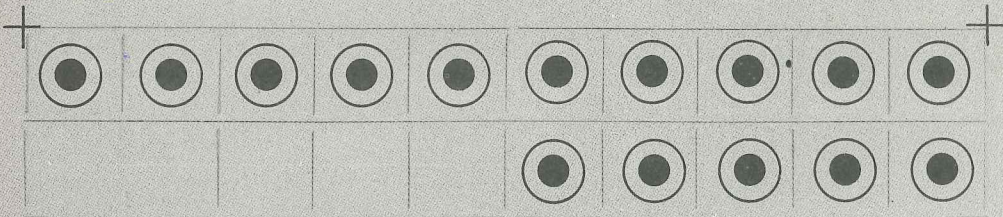
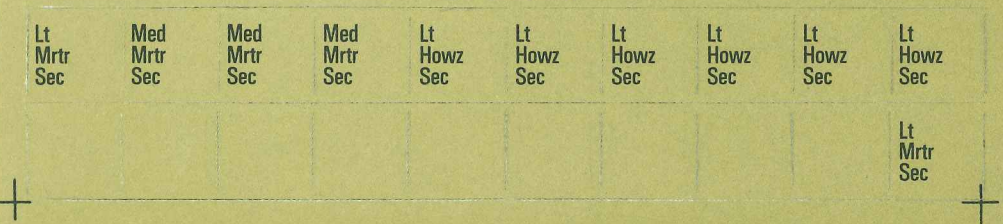




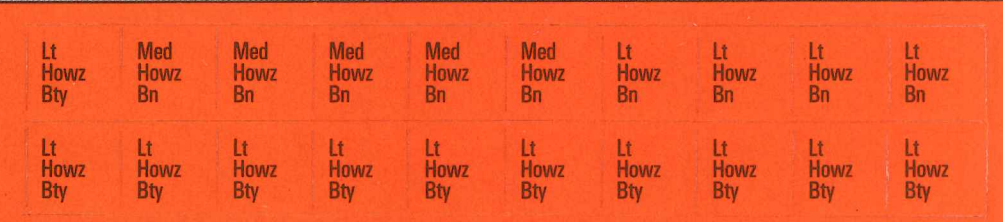
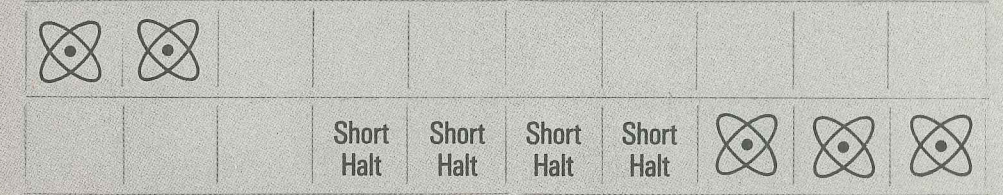
ARAB/SOVIET



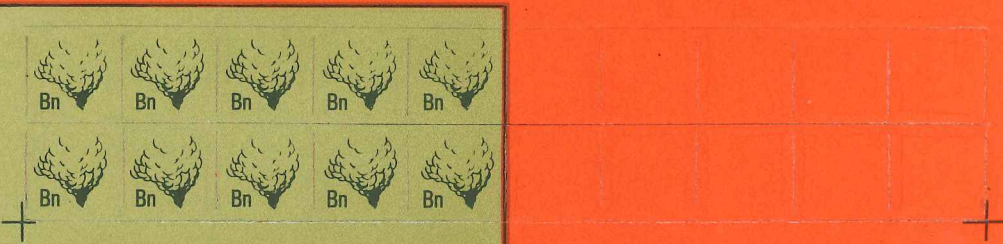
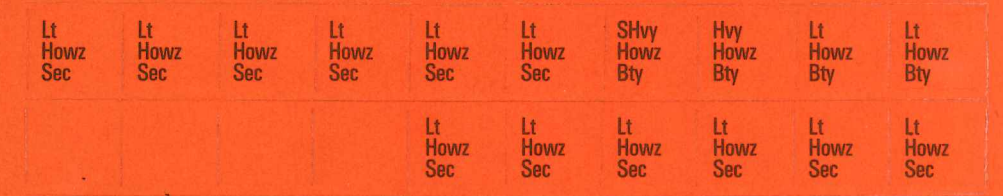
NATO/ISRAELI



NEUTRAL



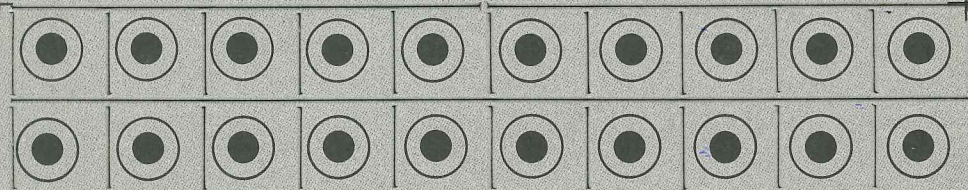
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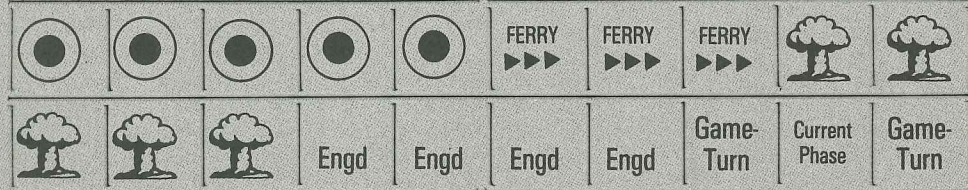


# Mech War 2 Counter Section Nr. 6 (200 pieces): Front

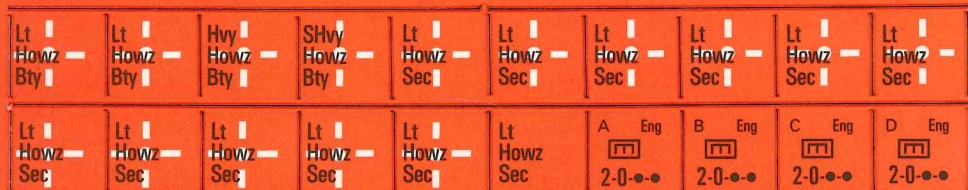
Quantity of Sections of this identical type in *Red Star/White Star* or *Suez to Golan*: 1; in *Mech War 2*: 2  
Quantity of Sections (all types) in *Red Star/White Star* or *Suez to Golan*: 4; in *Mech War 2*: 8



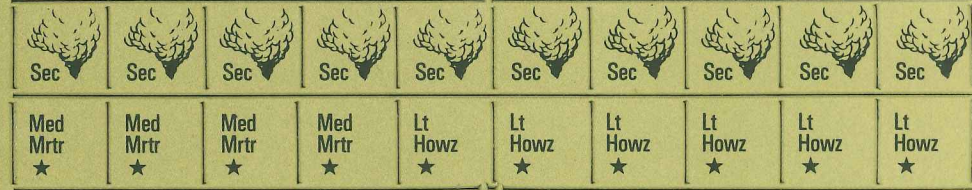
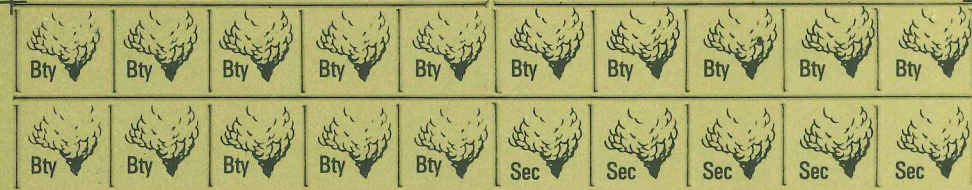
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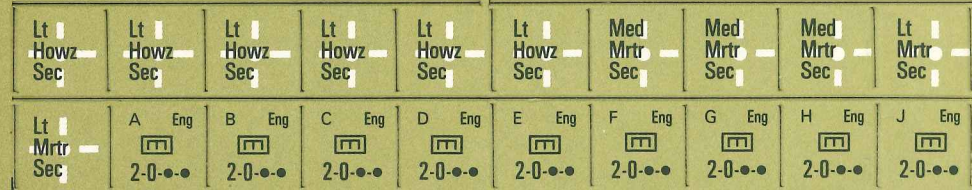
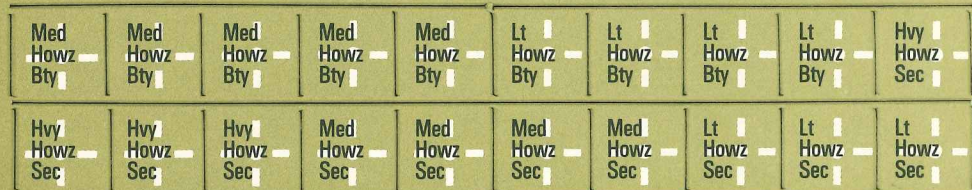
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NATO/ISRAELI





MECHWAR 2  
RED STAR/WHITE STAR

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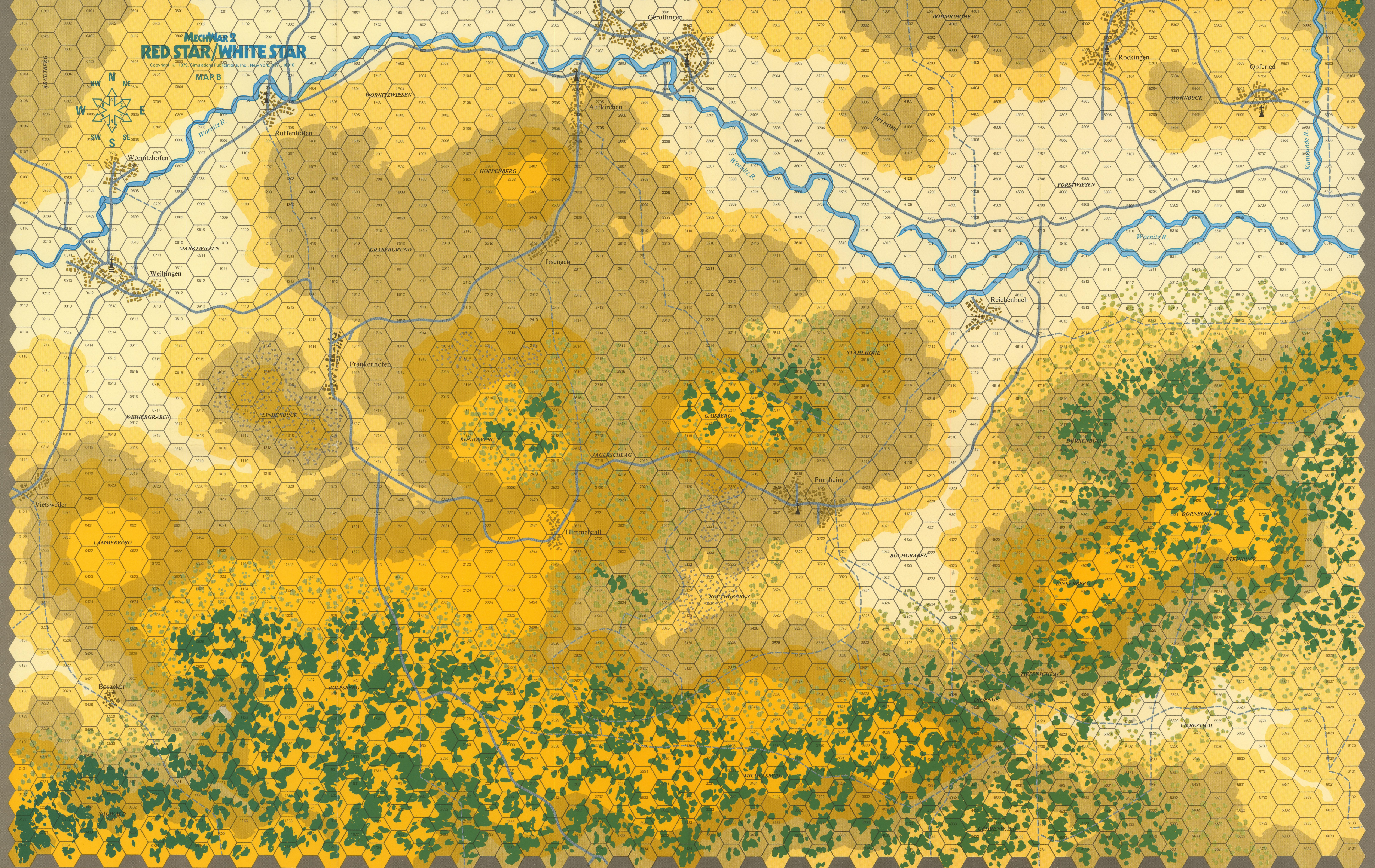
MAP B

Wornitz R.

Wornitz R.

Wornitz R.

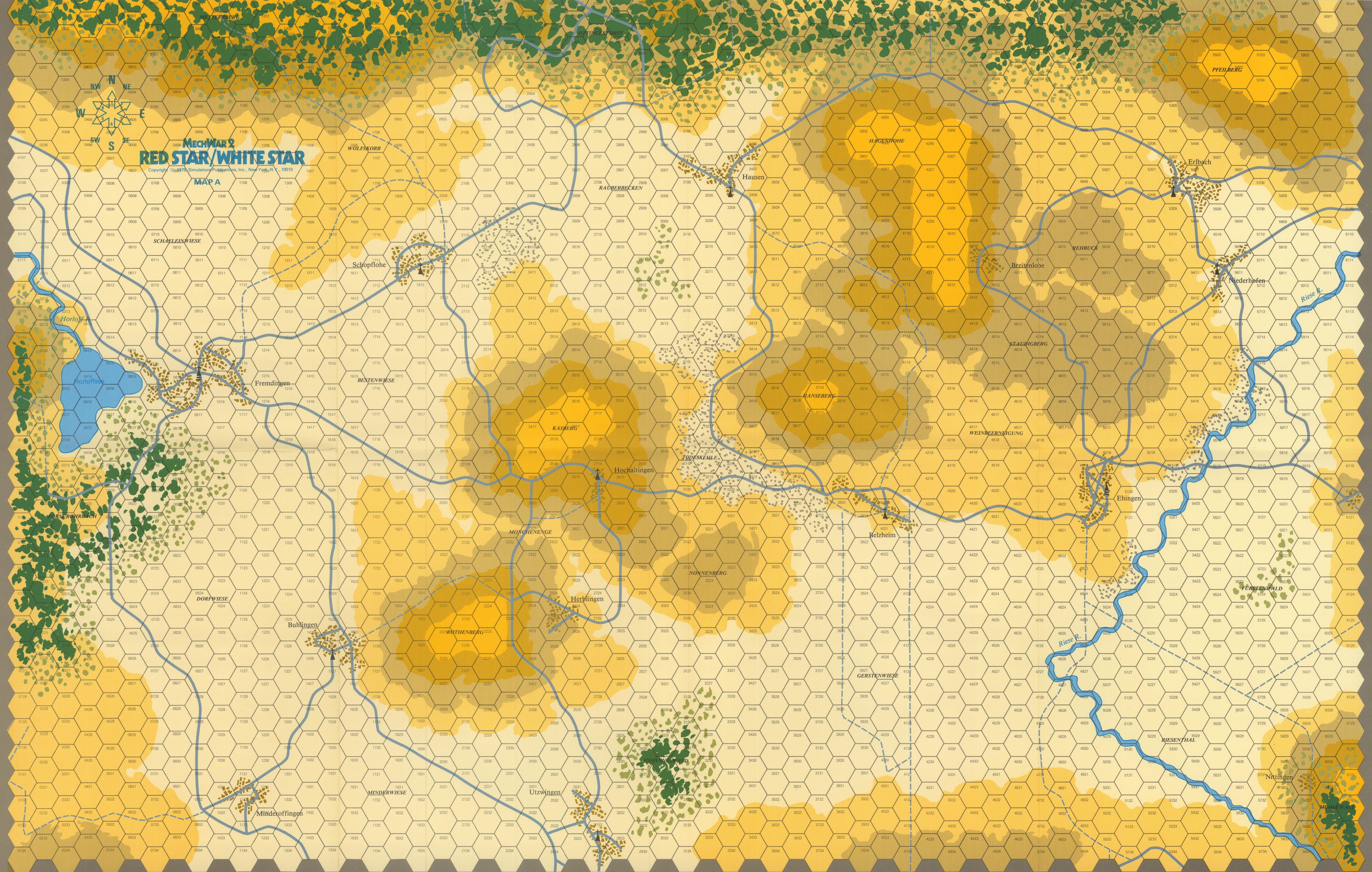
Kinnade R.



**Terrain Key**

Road	Trail	Town	Rough (1)	Light Woods	Heavy Woods	Level 0 (Clear)	Level 1	Level 2	Level 3	Level 4	River	Low Observatory	High Observatory	Lake
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**MECHWAR 2**  
**RED STAR/WHITE STAR**

MAP A

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