# Assault

# Tactical Combat in the 80's

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## Assault

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## introduction

Assault is a tactical level simulation of ground combat in Europe in the mid-1980's. As modern tactical combat is a subject of extreme breadth, Assault comprises the first in a series of games. Complete by itself, Assault covers mobile engagements between U.S. and Soviet tank and mechanized forces. Other games and modules add helicopters, engineering, combat in built-up areas, tactical air strikes, and other belligerents.

This bookiet contains the basic Assault rules and is included in each game in the series. Certain rules (most of rule 1, for example) apply only to Assault itself. Each game in the series other than Assault also contains a separate sheet or booklet listing additional rules and exceptions to these rules.

### Rule 1: Game Components

Assault contains the following components.

A. Maps: The two  $17^{\prime\prime} \times 22^{\prime\prime}$  maps depict areas representative of central Germany. A hexagonal grid is superimposed over the maps to regularize movement and placement of units. Each hexagonal cell (hereafter referred to as a hex) covers 250 meters of actual terrain from side to side.

The maps are laid out in such a way as to be geomorphic; that is, map edges with the same grid pattern may be butted together and the terrain will match.

**B. Counters:** Three counter sheets (480 counters total) are included representing the game units and a variety of non-unit markers. Each unit counter represents either a platoon (3-5 vehicles or weapons or 30-40 men) or a section (about half of a platoon). Sections have white, instead of black, numbers and/or letters on the bottom of the counter. Counter format is detailed on the unit identification chart.

Certain terms are used in conjunction with units throughout the rules: full-strength, half-strength, and step. A platoon initially has two steps and is called a full-strength unit. When it loses a step, it becomes a half-strength unit. A section initially has one step and is called a half-strength unit. These concepts are used and expanded upon in the rules.

- C. Rules: This rules booklet.
- D. Charts: A complete set of game charts is included. Their use is explained in later rules. Some of the charts are game record sheets, and permission is here granted for players to photocopy them for their own use.
- E. Scenario Folders: Each player has a scenario folder, the use of which is explained in rule 23.
- F. Reference Booklet: The reference booklet provides doctrinal and organizational background on the beliligerents, as well as designer's notes. While not essential to play, it is designed to aid understanding and enjoyment of the game.
- G. One Decimal Die: The die is used to generate random percentile numbers. In all cases, a roll of 0 is read as a roll of 10.

## Rule 2: Sequence of Play

Each turn in *Assault* represents five minutes of real time. A great deal can happen in five minutes on the battlefield, and the sequence of play reflects this. All activity in a turn is divided into phases. All activity in one phase must be completed before a new phase begins. The order of phases in a turn is:

## Soviet Player Turn

Soviet Artillery Phase: The Soviet player writes down artillery fire missions for later turns and then resolves all his fire missions due to arrive in the current turn.

First Soviet Movement Phase: The Soviet player moves any or all of his units. The U.S. player conducts opportunity fire against moving Soviet units.

Fire Phase: Both players simultaneously resolve fire from any or all of their direct fire units.

Second Soviet Movement Phase: The Soviet player again moves any or all of his units. The U.S. player again conducts opportunity fire.

### U.S. Player Turn

Artillery Phase: The U.S. player writes down artillery fire missions for later turns and then resolves all his fire missions due to arrive in the current turn.

First U.S. Movement Phase: The U.S. player moves any or all of his units. The Soviet player conducts opportunity fire against moving U.S. units.

Fire Phase: Both players simultaneously resolve fire from any or all of their direct fire units.

Second U.S. Movement Phase: The U.S. player again moves his units and the Soviet player again conducts opportunity fire.

During the Soviet player turn, the Soviet player is the phasing player and the U.S. player is the non-phasing player. During the U.S. player turn the roles are reversed.

## Rule 3: Unit Organization

A. General Explanation: Each counter in the game bears a unit identification (ID) in its upper left corner. For most units this consists of a plateon (or section) iD, a company ID, and a battalion ID. Exceptions are given in D below.

Unit IDs have a number of uses, the most common of which is in determining subordination for command control purposes. For example, every unit in a battalion is subordinate to the battalion headquarters. See rule 4. All unit organizations are shown on the unit organization charts.

Note: For purposes of these rules, platoons and sections are identical except that a platoon has two steps and a section has one step. For brevity, the term "platoon" will be used to mean "platoon or section" for the remainder of this rule.

- B. Formats for IDs: In unit IDs, the platoon ID is given first, followed by the company ID, followed by the battalion ID. Platoon and battalion IDs are numbers, while company IDs consist of one or more letters. On U.S. units (but not Soviet units), the battalion ID is preceded by a dash. For example, a U.S. unit identified as 18-2 is the 1st Platoon of B Company of 2nd Battalion; a Soviet unit identified as 2M4 is the 2nd Platoon of the mortar company of 4th Battalion. For exceptions to this scheme see D below. For further explanations see the unit identification chart.
- C. Definitions: Several organizational terms require game definitions.
- 1. Platoon: Each counter is a platoon (or a section; see A above) with certain exceptions. In the case of mechanized infantry, towed artillery, and similar units, each platoon consists of two counters: a transporting vehicle and its cargo, both of which have the same ID. For example, the Soviet platoon 1A4 consists of an infantry unit and a BMP-B unit. There are also a few units which are called platoons but which, in the game, function as companies. Such units are noted with a C in parentheses on the unit organization charts. For example, the mortar platoon of the U.S. 1st Battalion has two full-strength units (which the army calls sections); this platoon functions in all

respects as a company.

- 2. Company: A company consists of all units with the same company and battalion ID. For example, the U.S. company A-1 (A Company, 1st Battalion) consists of the platoons 1A-1, 2A-1, 3A-1, and the company HQ, HQA-1.
- 3. Battalion: A battalion consists of all units with the same battalion ID.
- 4. Nomenclature: For reasons of tradition, military terminology employs a number of alternates for the terms defined above. In cavalry units (and some others) companies are called troops and battalions are called squadrons. In artillery units, companies are called batteries. In these rules, "company" means "company, troop, or battery"; "battalion" means "battalion or squadron".

Some game unit IDs differ from their official values; for example, Soviet companies are actually numbered, but they have been given letters in the game.

- D. Exceptions: A number of units differ from the identification and organization scheme outlined above.
- One-unit Companies: Some companies are composed of only a single platoon. In these cases the platoon ID is omitted.
- 2. Regiments: Some Soviet units do not belong to a battalion, and are subordinated directly to a regiment. These units have a regimental ID in place of the battalion ID; regimental IDs are preceded by a dash. For example, 1AT-91 is the 1st Platoon of the anti-tank company of the 91st Regiment.
- 3. Headquarters, Tactical Operations Centers, and Observation Posts: U.S. company headquarters (HQs) and Soviet observation posts (OPs) are platoons of a company, with HQ and OP, respectively, in place of the platoon ID. For example, HQD-1 is the headquarters of D Company of the 1st Battalion, while OPM4 is the observation post of the mortar company of 4th Battalion. (Note that the U.S. has no OPs and the Soviets have no company HQs. Note also that not every U.S. company has an HQ.)

U.S. and Soviet battalion HQs, Soviet regimental HQs, U.S. battalion tactical operations centers (TOCs), and Soviet regimental TOCs are companies of a battalion/regiment, with no platoon ID and with HQ or TOC in place of the company ID. For example, TOC-3 is the tactical operations center of the U.S. 3rd Battalion, while HQ-91 is the headquarters of the Soviet 91st Regiment.

Some HQs, TOCs, and OPs consist of two units: a personnel class unit and a vehicle. The personnel class unit is the actual HQ, TOC, or OP; the vehicle unit is only its transport and is considered a separate platoon of the same company.

## **Rule 4: Command Control**

- A. General Explanation: Proper command control on the battlefield is essential to survival and success. In *Assault* command control problems are simulated through the use of operations points. Each player receives operations points from a variety of sources in each friendly movement phase. These are then spent to enable units to carry out certain functions.
- **B.** Sources of Operations Points: Operations points are received from four sources: headquarters, tactical operations centers, from off-board, and by default.
- 1. HQs: At the start of the game, each player generates the command rating of each of his HQ units. Roll the die once per HQ unit and consult the command rating table. The resulting command rating is recorded on a separate sheet of paper and is later transferred to the command record.

The command rating of the headquarters unit is the number

of operations points that HQ unit may use each friendly movement phase.

2. TOCs: At the start of the game each player must generate the command and planning ratings of each of his tectical operations center (TOC) units. Roll the die once per TOC unit and consult the command rating table. The resulting two numbers are the command (first number) and planning (second number) ratings and are recorded on a sheet of paper and on the command record.

The detailed function of TOC units is explained in rule 6. Command rating rolls are performed in the sight of the other player. However, secrecy is maintained regarding the identities of units being rolled for. Each scenario states the number of HOs and TOCs to roll for, often more than actually appear in the game. The player rolls for these, writes them on a sheet of paper, and numbers them in order, beginning with 1. Then, out of the other player's sight, the player transfers these ratings to his command record, in the order stated in the scenario. Finally, the player gives the original sheet of paper to his opponent.

3. Off-Board: Some scenarios specify that off-board operations points are available. These may be used exactly as any other operations points, and represent additional direction from higher handquarters.

4. Default: If no operations points are available from any other source, a player may always expend two operations points per friendly movement phase.

C. Subordination: A command unit may expend operations points to affect only units which are subordinate to it. All units in a U.S. company are subordinate to the company HQ. All units in a battation are subordinate to the battation HQ and (for the U.S.) battation TQC. All units in a Soviet regiment (all units with the regimental ID and all units assigned to that regiment in the specific scenario) are subordinate to the regimental HQ and TQC. All units are subordinate to off-board operations points and default operations points.

For example, all U.S. units with company/battalion IDs of B-3 are subordinate to HQ8-3; all units with battalion IDs of 3 (including HQB-3) are subordinate to HQ-3.

D. Uses of Operations Points: Units never need operations points to fire, nor do they need them to move in march formation tase rule 7). However, operations points are required when changing formation, moving in combat formation, replacing HQ casualties, cross-attaching units, and rallying shaken or broken units.

Each command operation (except cross-attaching) requires expenditure of 1 point if the affected unit is visible to the expending HQ or TOC or 2 points if it is not visible. The unit is visible if an unblocked line of sight exists between the two units; see rule 10. Cross-attaching always requires 2 points.

Offices more than one HQ and TOC will be able to use operations points to affect a particular unit. If the operation desired requires 2 operations points, 1 may be expended by each of two HQ or TOC units. For example, suppose the platoon 1B2 is not visible to any HQ or TOC unit. 2 points are required for it to move. The U.S. player could expend one from the HQB-2 and one from the HQ-2. Of course, either unit could expend both of the required points if it has them to expend.

1. Change Formation: 1 point (if visible) or 2 points (if not visible) are required for all the units in a hex to change from march to combat formation or vice versa.

2. Move in Combat Formation: 1 point (if visible) or 2 points (if not visible) allow all the units in a hex to move in combat

formation. Visibility is determined at the beginning of the movement phase.

To count as a single operation, all units must begin in the same hex, must move together as a stack, and must all face the same direction while moving (see rule 7). If a player wishes to break up a stack by moving it in different directions or different distances, the operations point cost must be paid separately for each unit or stack of units moving together.

3. Replace HQ Casualties: 1 point (if visible) or 2 points (if not visible) allows an eliminated HQ to be replaced. Visibility is determined for the hex in which the replaced HQ will appear (see below). An HQ is replaced using points from units to which it is subordinate; U.S. battalion and Soviet regimental HQs may be replaced using points from the TQC of the same unit. TQCs may never be replaced. If an HQ is replaced, re-roll its command rating. A replaced HQ may not expend any points in the phase in which it is replaced.

An HQ is replaced by removing personnel and/or vehicles from a specific unit. The HQ appears in the same hex as that unit.

a. U.S. Company/Soviet Battalion HQs: U.S. company and Soviet battalion HQs are replaced from other units in the same company or battalion. If the HQ is a vehicle unit, it is replaced from a unit containing the same vehicle. If the HQ (not its transport) is a personnel unit, it is replaced from a personnel unit; the HQ's transport may also be replaced from a unit containing the same vehicle, but the transport need not be replaced. The replacing unit takes one step loss (and is eliminated if already a half-strength unit) and the HQ is placed in that hex. For example, if the HQ of a U.S. tank company is eliminated, it is replaced by placing the HQ section back on the board in the same hex as any other full-strength platoon of the company and reducing the platoon to half strength with a hit marker. Alternatively, a half-strength unit could be removed from play and the HQ unit placed in its former hex.

If there is no way to replace an HQ (all eligible units have been eliminated), any surviving subordinate counter may be designated the new HQ at the same cost in operations points as would be required to replace the HQ. The counter remains the HQ until eliminated.

b. U.S. Battalion/Soviet Regimental HQs: A U.S. battalion or a Soviet regimental HQ is replaced from the unit's TOC. If the HQ is a personnel unit, the HQ counter is placed on the board in the same hex as the TOC. If the HQ is a vehicle unit, the HQ counter labeled *Repl HQ* is used instead. The Soviet counter receives a UAZ-469 for transport while the U.S. counter receives an M-151 (jeep). No loss is suffered by the TOC.

If the unit's TOC has been eliminated, the HQ may not be replaced, but any U.S. company HQ in the same battalion or Soviet battalion HQ in the same regiment may be designated as the battalion/regimental HQ. It still functions as a company/battalion HQ, but in addition all other units of the battalion/regiment are subordinate to it. No operations points are expended for this, but the HQ may not expend any points during the movement phase in which it becomes the new battalion/regimental HQ.

4. Cross-Attaching Units: Cross-attachment merely means that a unit has been assigned to the command of a headquarters to which it is not normally subordinate. For example, the U.S. quite often will cross-attach a mechanized company to a tank battalion, or vice versa. A unit which has been cross-attached is no longer subordinate to its old command units, but is instead

subordinate to its new command units.

Both players may cross-attach units. A player may cross-attach before the scenario begins and/or during the scenario. If a unit is cross-attached prior to the scenario, there is no penalty or cost. Cross-attachment during the scenario may be done only at the start of a friendly movement phase and requires the expenditure of 2 operations points by a command unit to which the unit was subordinated at the beginning of the phase. The cost is paid for each company or group of units from a single company cross-attached to a single other unit (company or battalion).

Both players may cross-attach up to two platoons to each company (with any three sections counting as one platoon) and may cross-attach up to two complete companies (a complete company is all surviving units of a single company) to each battalion. Note that each battalion or regimental HQ or TOC is a company, to which platoons or sections may be attached.

Record cross-attachments in the cross-attachment section of the command/morale record.

Raily: Command units spend operations points to raily shaken and broken units. See rule 17.

### E. Special Cases:

1. Exceptions: Recon units, HQ units, OP units, and TOC units do not require operations points to move or change formation. These units are marked with asterisks. In addition, units stacked with HQ or TOC units at the beginning of the movement phase, regardless of their subordination, may change formation and move without requiring operations points, provided they remain stacked with the HQ unit throughout the phase. (This is the only way in which an HQ with a command rating of O can exercise command).

Although an OP unit does not allow units it is stacked with to move in combat formation or change formation without using operations points, it does allow any vehicle transporting it to do so.

2. Soviet Battle Drill: While Soviet units do not have as extensive a command control arrangement as comparably-sized U.S. units, their reliance on well-rehearsed battle drills and formation movement allow large units to move at a relatively low cost in command or staff effort. Instead of addressing a move or formation change order to a hex, the Soviet player may do so for an entire platoon, company, or battalion. Such an order still requires 1 operations point if the platoon/company/battalion, or any counter of it, is visible to the TOC or HQ issuing the orders, and 2 if not. All counters of the platoon/company/battalion, with the exception of indirect fire units and their transports, must assume the same formation, assume and maintain the same facing, and expend the same number of movement points, moving in effect in formation. If this is not possible for all counters of the platoon/company/battalion, then Soviet battle drill movement may not be used. An HQ or TOC may issue a battle drill order without expending operations points if it begins the phase stacked with one or more counters in the unit receiving the order and remains stacked with that counter for the entire phase.

## Rule 5: Headquarters Units

The headquarters unit of a company, battalion, or regiment represents the commanding officer and a small command group.

At the start of each friendly movement phase the player must determine how many operations points each HQ unit is expending and which subordinate unit or units they will be spent on.

For example, the U.S. player has a company HQ which has a command rating of three. At the start of the movement phase he might decide that one operations point is being expended to change the third platoon from march to combat formation, a second point expended to allow the same platoon to move in combat formation, and the third point expended to allow the first platoon of the company, already in combat formation, to move. When an operations point is expended, this fact should be marked on the command record for that turn and phase.

As indicated previously, an HQ unit need not expend operations points to enable units to change formation or move if they are stacked with the HQ unit and remain stacked with it throughout the movement phase.

HQ units may move and/or fire in the same turn in which they expend operations points. HQ units may expend operations points while suppressed and/or shaken, but HQ units which are broken (see rule 17) may not expend operations points.

#### Rule 6: Tactical Operations Centers (TOCs)

A. Function: The tactical operations center of a battalion or regiment is the brain of the unit. While commanding officers can direct individual units, the TOC provides planning, coordination, and command support to the unit commander that multiplies his effectiveness.

At the start of each first movement phase of a player's turn, the player must decide which of the following actions each of his TOC units is performing: command, plan, or execute plan, and must write that fact on his command record for the turn.

- 1. Command: A TOC unit may function the same as an HQ unit, expending operations points equal to its command rating.
- 2. Plan: A TOC which plans may not expend operations points that movement phase. Instead, operations points equal to its command rating are accumulated for later use.

Accumulated operations points are recorded on the player's command record. The planning rating of the TOC unit is the maximum number of operations points that it may accumulate.

3. Execute Plan: A TOC unit which executes may expend as many of its accumulated operations points as desired, up to the total number accumulated.

## B. Limitations:

- Suppression: A suppressed TOC may not plan but may command and execute.
- 2. Movement: A TOC may not plan in a movement phase in which it moves (and if allocated to planning that turn it may not command or execute either).
- 3. Firing: A TOC may not fire in the friendly fire phase if it planned in the previous movement phase.
- 4. Losses: Once eliminated, a TOC may not be replaced. However, the unit HQ may use the accumulated operations points of the TOC. Each turn following elimination of the TOC, the accumulated operations points total is reduced by two in addition to any used by the commander. This reduction takes place at the end of the owning player's player turn.

The loss of one step has no effect on the TOC.

5. Loss of Command: A TOC may not plan or execute if the unit HQ is not in play. If the unit HQ of a U.S. battalion or a Soviet regiment is eliminated, it must be replaced before the TOC can plan or execute. The TOC may command in the absence of a unit HQ.

## Rule 7: Movement

A. General Explanation: Units move during the movement

phases of a turn. Each player may move his own units in each movement phase of his player turn. Each unit may be moved as many hexes as desired, up to the limits of its movement allowance. While a player is moving a unit, it may be subject to opportunity fire (see rule 15) or pass-through fire (see rule 19). If so, this fire is resolved before the unit finishes movement.

B. Procedure: Units may be moved individually or in stacks. Each individual unit or stack of units must complete its movement before another unit or stack of units begins moving.

Each unit or stack of units is moved by tracing its path of movement through hexes, expending movement points for each hex as it is entered. A unit's movement allowance is the maximum number of movement points it may expend per friendly movement phase. The movement point cost per hex is determined by the formation of the moving unit, the mobility class of the moving unit, and the terrain type of the hex.

A unit may always move one hex, even if it has insufficient movement points to do so (except mobility class S and L; see below), provided it is not into prohibited terrain or across a prohibited hexside.

A unit may enter a hex occupied by enemy units, but immediately ends its move upon so doing. A unit which begins its movement phase in the same hex as an enemy unit may leave the hex or perform any other activity within the hex except fire out of the hex.

C. Formations: Each unit must be in one of two formations at all times: march or combat. (Exception: Units whose morale has broken are in no formation. See rule 17.) Units may change formation at the beginning of a friendly movement phase. There is no limit to the number of units which may change formation at the start of a friendly movement phase, provided the appropriate operations point cost is paid. In general, units must be in march formation to use roads for movement, and do not require operations points to move. However, units in march formation may not fire except during a close assault (see rule 16).

A unit may change formation and move in the same movement phase. A unit which changes from march formation to combat formation and then moves must have operations points expended separately for the formation change and the movement.

Changing formation counts as movement for purposes of spotting and opportunity fire.

Units in march formation are differentiated from units in combat formation by their directions of facing. See F below.

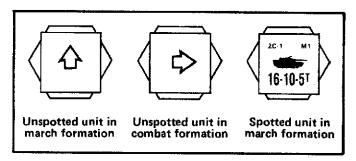
D. Mobility Class: There are five mobility classes: T (tracked), W (cross-country wheeled), R (road-bound wheeled), L (leg), and S (static). T, W, and R units (referred to as vehicle units) also have a movement allowance which they expend to move as explained above. S class units may not move on their own, but may be transported by other units (see rule 8). L class units (hereafter referred to as leg units) do not have or expend movement points. Instead, each leg unit may move one hex in a friendly movement phase. Leg units which move in the second friendly movement phase of a player turn are fatigued, and may not move in the first friendly movement phase of the next turn. Movement for this purpose is defined as entering a new hex; other actions performed in the movement phase, such as entering cover or changing formation, don't count. To mark fatigued units, place a fatigued marker on them.

E. Terrain: Terrain affects vehicle units and leg units differently. Vehicle units pay a variable movement point cost to enter certain terrain types. Leg units must make a die roll of a given

number or less to enter certain terrain types. The terrain effects chart details the movement point cost for vehicle units and the die roll necessary for leg units to enter a hex. Certain hexsides also have a movement point cost or die roll associated with crossing them. For vehicles this cost is added to the cost to enter the hex; for leg units, the most difficult die roll of the two required (if both the hex to be entered and the hexside to be crossed require die rolls) is used.

- 1. Amphibious Units: Some vehicle units have the letter A in addition to their mobility class, indicating that they are amphibious. Amphibious units can cross certain hexsides and enter certain terrain types prohibited to other units, as noted on the terrain effects chart.
- 2. Steep Slopes: A steep slope is defined as a hex containing two contour lines of different elevations. The terrain effects chart lists the effect of climbing a steep slope, which is in addition to the regular cost to enter the hex. Climbing a steep slope is defined as entering the hex from a hex of lower elevation. Vehicle units pay a cost to climb a steep slope if a movement point cost is listed. If the notation P appears, the unit is prohibited from entering the hex at all. Leg units have the notation F for steep slope, which means that a leg unit becomes fatigued climbing a steep slope. Leg units may only climb steep slopes in the first friendly movement phase of a turn. Units which are not prohibited from entering a steep slope hex pay no special cost for entering it unless they climb it.

F. Facing: Units always must be faced in a specific direction. A unit is faced in the same direction as the top of the counter if spotted or the direction of the arrow on the back of the counter if unspotted. Units in march formation always face a hexside, while units in combat formation face a hex vertex, as illustrated below.

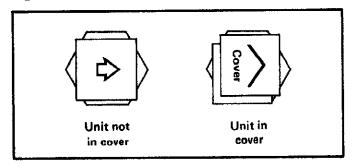


A unit must always face in the direction it is moving. A unit in march formation moves across the hexside it is facing, while a unit in combat formation may move across either hexside it is facing. A unit may change facing without movement cost immediately before entering each hex of its move. When it is finished moving it retains the facing of its last hex moved, unless it expends an additional movement point, in which case it may change facing. A change of facing counts as movement for purposes of spotting, opportunity fire, and (if in combat formation) operations point expenditure.

Facing affects the fire of enemy units on the unit in question, as explained in the direct fire rules.

Note that facing is also the means of determining the formation of a unit.

**G. Cover:** Any unit in combat formation may enter cover in any friendly movement phase if it does not move, dismount, or deploy in that phase. Entering cover counts as movement for purposes of operations point expenditure. A unit in cover is designated by placing a cover marker on the unit with the point



of the marker faced toward the same hex vertex the unit faces.

In addition, any unit which is fired upon during either fire phase (or which is in the same hex as such a unit) and is in combat formation automatically enters cover at the end of the phase, with the unit and its cover marker turned to face toward one of the vertices of one of the hexsides across which the fire came.

Cover affects the chance of spotting a unit and the chance of causing losses or suppression in direct fire, as explained in later rules. Only units in cover may conduct opportunity fire.

If a unit in cover moves out of the hex, the cover marker is removed from the map. A unit may change facing while in cover (changing the facing of the cover marker also); this counts as movement for purposes of operations point expenditure.

## Rule 8: Transport

- A. Which Units May Be Transported: All units with a mobility class of L (leg) and S (static) may be transported.
- B. Which Units May Transport Units: All transport units have a circle, either open or filled in, on the counter. Units with an open circle may transport only leg units. Units with a filled-in circle may transport either leg or static units. Each transport unit may transport as many steps as its current strength level, but never more.
- C. Procedure: Units being transported are placed under the transport unit, move at the rate of the transport unit, may not be fired at, and do not count against stacking. The identity of a transported unit is not revealed to the enemy if the transporting unit is spotted.

In order for a leg mobile unit to mount or dismount a transport, either the transport unit or the leg unit must spend the entire movement phase in the mounting hex. That is, a leg unit could move to a hex containing a transport unit and mount, or a transport unit could move to a hex containing an infantry unit and allow it to mount. Once mounted, no further movement is allowed that phase.

In order for a static unit to mount or dismount, both the static unit and the transport unit must spend the entire movement phase in the same hex. Static indirect fire units which are deployed (see rule 19) may not mount transport units.

A unit which dismounts may be placed in any formation and assume any facing without expenditure of operations points. If may not enter cover or deploy in the same phase. Dismounting counts as movement (for the transported unit) for purposes of spotting, opportunity fire, and passthrough fire.

- D. Fire From Transport Units: Transporting units may fire normally. Only infantry may fire while being transported. It may only do so with small arms ammunition from unsuppressed vehicles, and its conventional fire value is halved.
- E. Fire at Transporting Units: Transporting units are fired at normally. If a full-strength transporting unit is reduced to a half-strength unit, the mounted unit is also reduced to a half-strength unit. (A half-strength unit is unaffected.) If a full-strength unit

is destroyed, the mounted unit is reduced to a half-strength unit and is suppressed in the hex where the transport unit was destroyed. If a half-strength transport unit is destroyed, the mounted unit is suppressed in the hex where the transport unit was destroyed.

If a full-strength unit is carrying two half-strength units and is reduced to a half-strength unit, one of the half-strength units (determined randomly) is eliminated. If the full-strength unit is destroyed, the surviving half-strength unit is suppressed in the hex where the transport unit was destroyed.

F. Combined Transport: Two half-strength units may combine to transport a full-strength unit. The two transporting units must remain stacked together during the entire time they are transporting the full-strength unit. If one of the transporting units is destroyed, the transported unit is reduced to a half-strength unit.

#### Rule 9: Stacking

More than one unit may occupy the same hex. (This is called stacking.) There is no limit to the number of units which may occupy a hex. However, only a limited number of units may use road movement through a hex at a time, and only a limited number may fire from a hex.

- A. Road Movement: A maximum of six steps of units may move together as a stack in march order using road movement. (A full-strength unit has two steps; a half-strength unit has one step.) No unit or stack of units may use road movement to enter a hex already containing a unit which used road movement to enter that hex in that movement phase; no unit or stack of units may use road movement to enter a hex in which a friendly unit using road movement suffered a loss from opportunity fire in that movement phase.
  - B. Firing: A maximum of ten steps may fire from a hex.

## Rule 10: Spotting

A unit may not be fired at by direct fire unless it is spotted. All game units are backprinted with their national color and a facing arrow. Units start each scenario flipped over so that opponents do not know the actual strength and location of enemy forces. Units remain flipped until they are spotted, at which time they are turned face up. They remain face up (and spotted) until the end of a movement phase in which no enemy unit has an unblocked line of sight to them.

- A. When Spotting Takes Place: A player may attempt to spot as many enemy units as he desires at the end of each movement phase. A player may attempt to spot every enemy unit which fires at the end of each fire phase. Any player who wishes to fire MsI ammunition from a previously unspotted unit (see rule 13) must so declare at the beginning of the fire phase in which he will do so. The opposing player may attempt to spot the missile-firing unit before the fire is resolved. If successfully spotted, the missile-firing unit may be fired upon that fire phase.
- 8. Line of Sight: A player may attempt to spot only enemy units which are in the line of sight of one of his own units. A line of sight exists if the enemy unit is within the maximum line of sight distance of the spotting unit, and if the line of sight is not blocked. The line of sight is a straight line between the center of the spotting unit's hex and the center of the target unit's hex.
- 1. Maximum Line of Sight Distance: The maximum line of sight distance depends on the sum of the heights of the spotting and spotted units, as shown on the line of sight table.
- 2. Elevation: Elevation is shown on the map by contour lines and colored areas between them. There are 9 levels of terrain

elevation, from 0 to 8, each level change represents 25 meters of elevation change. Levels change at contour lines and hex boundaries. Portions of a hex which are in different colored areas are on different levels. The terrain key shows all possible combinations of color and level within a hex. Note that the same

Color: Level Light Green: 0 Light Brown: 1 or 2 Medium Brown: 3 or 4 Medium-Dark

Brown: 5 or 6

Dark Brown: 7 or 8

color may represent either of two different levels, depending on the presence or absence of another color in the hex. If a lower-level color is also present, it is the lower value; if a higher-level color is present or if the hex is only one color, it is the higher value. (Although this may sound confusing, examination of the terrain key should make every-

thing clear.) For example, if light brown and medium brown areas are both present in a hex, the light brown portion is at level 2, while the medium brown portion is at level 3.

A unit is always assumed to be on all levels present in the hex; that is, it may spot and be spotted from any of those levels. In addition, non-vehicle, dismounted units in a town hex or urban strip hex may attempt to spot (but may not be spotted) as if they were one level higher than the hex occupied.

3. Blocking Terrain: A line of sight is blocked if it passes through terrain higher than the line of sight itself. When both the spotter and the target are on the same elevation, this is an easy determination to make. When they are on different elevations, the line of sight graph is used.

Take out the line of sight graph and examine it. The vertical axis represents range measured in hexes. The horizontal axis represents height measured in elevation levels. To use the graph, first locate the position of the spotting unit. The spotting unit is always located on the zero hex range point of the range axis and the correct elevation on the height axis. Next, locate the target unit by cross-indexing the range to the target unit and its elevation. The intersection of these two lines is its position on the graph. Lay a straightedge on the graph connecting the two lines. The straightedge is the line of sight from the spotting unit to the target unit. Finally, determine the range and elevation of any potential blocking terrain. Determine its point on the graph in the same manner as if it were a target unit. If its location on the graph is above the line of sight, the line of sight is blocked. If it is exactly on or below the line of sight, the line of sight is not blocked.

All terrain is evaluated on the basis of the colored area through which the line of sight passes. Town, urban strip, and woods hexes are considered to be one elevation higher than the terrain level of the hex for purposes of blocking the line of sight. (Note that this is true even if the line of sight does not pass through the actual town, urban strip, or woods symbol; unlike the colored areas, the terrain is considered to fill the entire hex.) Hexes with smoke screens in them (see rule 20) are two elevations higher than the terrain level.

In addition, the line of sight to or from a unit in a woods hex is blocked if the immediately adjacent hex along the line of sight is also a woods hex.

The hexes the spotting unit and spotted unit are in never constitute a block to the line of sight.

C. Number of Spotting Attempts: Only one spotting attempt may be made per enemy unit per phase, conducted by the friendly unit of the spotting player's choice. Usually, but not necessarily, this will be the unit with the greatest chance to spot the

enemy unit.

D. Procedure: Five elements determine the likelihood of a successful spotting attempt: range, target type, terrain, target status, and spotter status. These elements are all covered on the spotting tables.

The range from the spotting unit to the target unit determines the basic die-roll required to spot the target. This is listed on the base roll table as the number or less which must be rolled on the die in order to spot.

The terrain the target unit is in modifies the basic roll. The terrain modifiers table lists the target type (personnel, weapon, or vehicle) and indicates the modifier applied against the spotting number. Note that without a modifier some spotting attempts are impossible. Two modifiers appear in each cell of the table. The first modifier is used if the target unit is not in cover; the second is used if it is in cover. The notation *Auto* means that a unit in that terrain type is automatically spotted by any enemy unit at any range provided it has an unobstructed line of sight to it.

The target status table lists additional modifiers based on the action of the target unit, making it easier to spot units which are moving, are firing missiles, or have just fired. The *moving* modifier is used only during the movement phase. Formation changes, mounting and dismounting (for the transported unit), deploying and undeploying are considered movement for spotting purposes. The *firing* modifier is used during the fire phase and, in the case of non-phasing units conducting opportunity fire, the movement phase.

Finally, the spotter status table lists modifiers based on the type of spotting unit.

Modifiers are added to or subtracted from the base chance. Thus, a positive modifier makes a unit easier to spot, while a negative modifier makes it harder to spot.

All modifiers are cumulative with the exception that a recon armored vehicle unit does not suffer the adverse modifier for being an armored vehicle but does receive the favorable modifier for being a recon unit. All units with asterisks other than HQs, OPs, and TOCs are recon units.

Both players are required to give enough information about their units which are spotting or being spotted to determine which modifiers apply (but only the minimum necessary amount of information).

The die is rolled once for each hex containing units the player is attempting to spot; however, since different modifiers may apply, some units in the hex may be spotted while others are not.

The auto-spot range table and the maximum spotting ranges table are play-aids created by combining information from the base roll table and the terrain modifiers table. They provide no new information in themselves, merely saving the players the trouble of computing the values they contain.

- E. Auto-spots: If at any time during a movement phase either player has an unobstructed line of sight to an enemy unit for which the modified roll to spot is 10 or more, that unit is automatically and immediately spotted. The auto-spot range table gives the distance at which this is true for all unit types. The spotter status and target status modifiers also apply on this table, as modifiers to the range. The notation *Max* means that the auto-spot range is the same as the maximum line of sight.
- F. Maximum Spotting Range: The maximum spotting range table gives the greatest distance at which a spotting attempt on a particular unit has any chance of success (that is, the roll needed is greater than 0). The spotter status and target status

modifiers also apply on this table as modifiers to the range.

**G. Dummies:** Dummy counters are included as listed in the scenarios and are used to confuse the opposing player as to a player's exact strength and disposition. Dummies move using whatever mobility category and movement allowance is desired by the player. Dummy counters may not spot; they are spotted as any unit type the owning player desires.

In order to maintain the illusion, the owning player may place any marker he wishes on a dummy (for example, he may give it a hit marker).

A dummy counter, once spotted, is removed from the board. A player may return a dummy counter to play at the start of any subsequent friendly movement phase by placing it inverted in the same hex as any unspotted friendly unit.

- H. Transports: When a spotted unit mounts a transport, the transport is automatically and immediately spotted. When a unit dismounts from a spotted transport, it is automatically and immediately spotted.
- I. Unspotting: If, at the end of any movement or fire phase a previously spotted unit is not within the line of sight of any enemy unit, it is flipped over to its unspotted side again. Some units may become incapable of spotting due to suppression (see rule 11) or morale (see rule 17). Although these units may not make spotting attempts on unspotted units, a spotted unit in their line of sight remains spotted.

## Rule 11: Combat Results

All results of all types of fire are expressed as either suppression, hit, elimination, or no effect.

- A. Suppression: A unit which is suppressed has not suffered sufficient losses to permanently affect its performance in game terms but has temporarily been rendered less effective, either due to losses or fright.
- 1. Effects of Suppression: A suppressed unit may not spot enemy units nor may it observe for indirect fire. Units suffer additional effects from suppression which vary depending on their defense class.

AFV class units may not be mounted or dismounted by other units, have their conventional fire values halved at ranges of 0 and 1 hex, and subtract one from their base hit number on all anti-armor fires at all ranges.

Suppressed personnel class units immediately go to ground, and thus have a cover marker placed on them. In addition, they may not fire, nor may they move toward a spotted enemy unit.

Suppressed weapons class unit may not fire or move.

Suppressed non-armored vehicle units may not move. Any personnel class units in the vehicle automatically dismount and are suppressed. Any weapons class unit in it is also suppressed and may not dismount.

- 2. Recovery From Suppression: A unit remains suppressed until rallied (see rule 17). The one exception to this is that if an unsuppressed personnel or weapons class unit mounts a suppressed non-armored vehicle, the vehicle unit automatically recovers from suppression.
- **B.** Hit: A unit that suffers a *hit* result loses one step of strength. All units begin the game with either one step or two steps of strength. A unit with two steps of strength which suffers a hit has a hit marker placed under the counter and is from then on treated as a unit with one step of strength. A unit which has one step of strength and which suffers a hit is removed from play. Note that a unit which starts the game with two steps of strength and which suffers two hits, either at the same time

or at different times, is removed from play.

A unit which suffers a hit is also suppressed.

- C. Elimination: A unit which suffers an elimination result is removed from play, regardless of how many steps of strength it has.
- D. No Effect: A no effect result has no effect on the strength of a unit, but does require the unit's company to check morale, as explained in rule 17.

### Rule 12: Direct Fire

There are two types of direct fire: anti-armor fire (directed only at armored vehicles) and conventional fire (directed at all units, including armored vehicles). Direct fire takes place during the fire phase and may take place during the movement phases (see rules 15 and 16). Direct fire during the fire phase is simultaneous; all units may fire before fire against them in that phase takes effect.

Each fire attack may be directed at any spotted enemy unit; all shots may, but need not be, directed at the same enemy unit. The targets of all fires from all units must be declared before any fires are resolved.

- A. Which Units May Fire: Any unit which has direct fire weapons may conduct direct fire. These units are listed on the fire data charts, along with the characteristics of those weapons. The characteristics listed are ammunition type, rate of fire, effectiveness at range, and ammunition supply. The ammunition supply value is used only if rule 22 is used.
- **B. Limitations:** Several considerations limit the ability of units to fire.
- 1. Range: The fire data charts give the effectiveness of various types of ammunition for a unit at various ranges. The presence of a dash (—) indicates that the unit may not fire that ammunition type at that range with any effect. Generally, the greater the range, the less effective the fire. No unit may conduct direct fire at ranges greater than those listed on the chart.
- 2. Line of Sight: The target of the fire attack must be in the line of sight of the firing unit. Line of sight is determined in the same manner as for spotting, except that dismounted personnel-class units in town and urban strip hexes may, at the owning player's option, fire from one elevation higher than the elevation of the hex. (In other words, they are firing from rooftops and upper stories of the tallest buildings in the hex.) If they do so, they may be spotted and fired upon at this higher elevation.
- 3. Formation: Only units in combat formation may fire. (Exception: see rule 16.)
- 4. Movement: A unit may not fire in the fire phase of the friendly player-turn if it moved in the first movement phase. Movement, for this purpose, is defined as entering a new hex; changing formation, mounting and dismounting, etc. are not movement. Movement in the second movement phase does not affect fire.
- 5. Units: Although units do not block line of sight for spotting purposes, they sometimes do block line of sight for firing purposes. A unit may never fire through a hex containing friendly units, nor may it fire conventional fire through any hex containing enemy units. A unit may fire anti-armor fire through a hex containing enemy units provided the hex contains no enemy AFV units.
- A unit may always fire over both friendly and enemy units with direct fire if it is on a higher elevation and the line of sight passes above, rather than through, the elevation of the hex be-

ing fired over.

C. Ammunition Types: There are a number of different ammunition types listed on the fire data charts. Their specific effects are detailed in the rules on anti-armor and conventional fire. However, a brief description of their actual function will aid in a general understanding of later rules.

#### 1. Anti-Armor Rounds:

- a. AP: Armor-piercing ammunition is an anti-armor round designed to punch through armor by virtue of the kinetic energy generated by extremely high velocities. The main armor-piercing round for both sides is the hyper-velocity, armor-piercing, finstabilized, discarding sabot (HVAPFSDS) round.
- b. APDU: Armor-piercing, depleted uranium ammunition is similar to AP but has a special penetrator core made from uranium, which in addition to its other properties is very dense, giving high penetration. The type of uranium used in these rounds is not dangerously radioactive.
- c. HEAT: High explosive anti-tank ammunition relies on the explosion of a shaped charge warhead to blow through armor.
- d. Msl: Guided anti-tank missiles are extremely accurate anti-armor weapons with HEAT warheads. Missiles are differentiated from other HEAT rounds since there are special rules relating to missile fire. These are found in rules 10, 13, and 15.
- e. SCAP: Small caliber armor-piercing rounds are fired by heavy machine guns and small cannons. SCAP rounds are differentiated from other AP rounds due to their lower chance of a kill on an armored vehicle once they achieve a penetration.

#### 2. Conventional Rounds:

- a. HE: High explosive rounds are effective against all targets. Other conventional rounds are not very effective against armored targets.
- b. SCHE: Small caliber high explosive rounds tack a large enough explosive charge to damage armored targets, but are otherwise similar to HE rounds.
- c. SA: Small arms fire consists of automatic weapons (machine guns and assault rifles) and grenade launchers.
- d. APERS: The anti-personnel round fired by U.S. tanks consists of a round which is packed with thousands of flechettes. The gunner selects a range (up to 1500 meters) at which the round will detonate. When it detonates, the flechettes are released as a cloud of lethal projectiles still travelling at high velocities along the ballistic path of the round with devastating effect on non-armored targets.
- e. IS: Incendiary smoke rounds are filled with white phosphorus which not only creates a good deal of smoke but also burns at extremely high temperatures. An exploding white phosphorus round thus is an extremely deadly weapon against non-armored targets.
- 3. Multi-purpose Rounds: If the fire data chart gives a single ammunition supply for two different rounds, the two are actually a single type of round capable of being used for both anti-armor and conventional fire. For example, the HEAT and HE rounds of the U.S. M1 tank are the same round; if fired at an armored vehicle it acts as a HEAT round, and if fired at any other unit it acts as an HE round.
- D. Rate of Fire: Each step of a unit may fire as many times per phase as its rate of fire as listed on the fire data chart. Also, each step of a unit has its full rate of fire for both opportunity fire and for close assault, even when both activities occur in the same movement phase. A personnel-class unit may always fire every ammunition type available at its listed rate of fire. Any

other type of unit with more than one type of ammunition available may fire one or several types in a phase, but the total number of fires may not exceed the lowest ROF number of the ammunition types being fired.

For example, a U.S. M.1 unit could fire twice (per step) with AP ammunition or twice with SA ammunition or once with each. A Soviet BMP-B unit could fire three times with SCAP ammunition or once with MsI ammunition. A U.S. infantry unit could fire once with HEAT ammunition, once with MsI ammunition, and twice with SA ammunition.

E. Strength of Firing Unit: All fire data is listed per step. Since full-strength units have two steps, each fire from such a unit enables the unit to make two attacks. These two attacks must use the same ammunition but may be directed at different targets.

For example, a full-strength Soviet S-122 platoon fires once with AP ammunition and once with HE ammunition. Since the platoon has two steps, it actually makes two attacks with HE and two with AP.

## Rule 13: Anti-Armor Fire

Anti-armor fire is directed at armored vehicle units. Ammunition types which may be used for anti-armor fire are those which, on the fire data chart, have two numbers separated by a colon in each column of the *effectiveness at range* section of the chart. These include AP, APDU, HEAT, SCAP, and MsI ammunition.

- A. Hit Procedure: The first number in the effectiveness at range section of the direct fire data chart is the base chance of achieving a hit on a target unit at a given range. Roll the decimal die; if the number rolled is equal to or less than the base chance to hit, the fire attack results in a hit. Several factors modify the base hit number.
- 1. Multiple Targets In Hex: Divide the number of enemy AFV steps in the hex by two, rounding fractional results down, subtract one, and add the total to the base hit number. This step is performed before using the modifiers in 2-4 below. For example, a unit has a base hit number of four and there are six steps of enemy AFV units in the target hex. Add (6/2-1=) 2 to the base hit number, giving a new hit number of 6.
- 2. Cover: If a unit is under cover and is being fired at across one of the two covered hexsides, divide the base hit number by two, rounding fractions down.
- 3. M-901 Units: If a U.S. M-901 unit is under cover and is being fired at across one of the two covered hexsides, divide the base hit number by three, rounding fractions down.
- 4. Missile Fire: If a unit is firing MsI ammunition at units in a woods hex, divide the base hit number by two, rounding fractions down. If the target is also under cover (see 2 and 3 above), divide by both modifiers before rounding off.

After the final hit number is determined, roll the die. A roll equal to or less than the hit number means that the target unit suffers one hit. A roll equal to or less than the hit number minus two means that the target unit suffers two hits. For example, a firing unit's final modified hit number is seven. If a seven or six is rolled, the target unit suffers one hit; if a five or less is rolled the target unit suffers two hits.

A target unit which suffers one or more hits will lose steps, provided the hits penetrate.

B. Penetration: Once a hit has been achieved, determine whether or not the ammunition used is capable of penetrating the vehicle's armor. To do so, compare the penetration of the ammunition to the armor of the target. If the penetration is equal

to or greater than the armor, the hit may penetrate. If it is less than the armor, the hit does not penetrate, and instead causes the target unit to be suppressed.

- 1. Penetration Value: Locate the correct column of the effectiveness at range section of the fire data chart. The second number (i.e. the number following the base hit number) is the penetration value of the ammunition at that range. For example, a Soviet T-80 firing AP ammunition has a penetration value of 15 at a range of eight hexes.
- 2. Armor Value: Each AFV unit has two armor values; the first value is for frontal shots and the second is for flank shots. If the line of sight crosses the hexside (march formation) or hexsides (combat formation) the unit is facing, the frontal armor is used. If the line of sight crosses any other hexside the flank value is used. If the line of sight exactly crosses the vertex between a front hexside and a flank hexside, the front value is used. If the firing unit is in the same hex as the target unit the flank value is always used.
- 3. Hit Confirmation: A hit from AP or APDU ammunition which is capable of penetrating the target's armor automatically causes a loss of one step. Hits from other ammunition must be confirmed. Roll the die once. If the number rolled is equal to or less than the difference between the penetration value of the ammunition and the armor value of the target, the hit causes a one-step loss. If not, the target is suppressed but otherwise unharmed.

In most cases, an addition to the difference between armor and penetration is made (thus making it easier to confirm the hit). If the target unit is protected by chobham armor, no addition is made. If the target unit is protected by laminate armor, two is added to the difference. In all other cases four is added to the difference; see the hit confirmation table. All vehicles protected by chobham or laminate armor are listed on the armor types table.

For example, a U.S. infantry unit firing HEAT ammunition achieves a hit on the front of a T-80 unit. The T-80 has a frontal armor value of 15 while the infantry's HEAT ammunition has a penetration of 17, or a difference of two. Since the T-80 has laminate frontal armor, two is added to the difference, for a final difference of four. The U.S. player must roll a four or less on the die to inflict a step loss on the T-80.

## Rule 14: Conventional Fire

Conventional fire may be directed at any unit. However, conventional fire from rounds other than HE rounds cannot inflict losses on armored vehicles; any result other than *no effect* merely suppresses the AFV unit. Conventional fire is resolved by the following procedure.

- A. Determine Target Defense Value: Each target has a defense value against conventional fire which is determined by the target defense class, the terrain it is occupying, and whether or not it is in cover.
- 1. Basic Defense Value: Consult the conventional fire defense table and cross-index the target defense class with the terrain of the hex it occupies. At the intersection there are two numbers separated by a slash. The first number is the defense value of the unit if it is in the open (i.e. not under cover) while the second number is the value if the unit is under cover.
- 2. Armored Vehicles: If the target is an armored vehicle, add its front or flank armor value to the defense value; if the target is being fired upon from both front and flank, use the front armor value.

3. Steps: Subtract 1 from the defense value for each step in the hex in excess of two. However, a unit may never have its defense value reduced below half the value listed on the chart.

For example, a U.S. infantry platoon is in a woods hex under cover. Also in the hex are two other platoons, one of which has already suffered a one step loss. The U.S. infantry unit is a P (personnel) class unit, and thus would normally have a defense value of fifteen. Since there are a total of five strength points in the hex, however, three is subtracted from the defense value giving a modified value of twelve.

- B. Determine Fire Value: Add the fire values of all conventional fires being directed at the target unit from all enemy units firing at it that phase. Thus if two enemy units, each with an ROF of 2 and two steps each, were firing at the unit, a total of 8 shots would be added together. If both firing units had a value of 4, the total fire value would be 32. If an armored vehicle is attacked by a combination of HE and other types of rounds, resolve the HE fire separately.
- C. Resolve the Attack: Compare the fire value to the defense value and convert it to one of the simple odds ratios found on the conventional fire results table. If rounding is necessary, round in favor of the target unit. Thus, a fire value of 32 versus a defense value of 7 would be a 4:1 attack. Roll the die and consult the conventional fire results table. The intersection of the odds column and the row corresponding to the die roll lists the result of the attack. Implement the result as explained in rule 11.

### Rule 15: Opportunity Fire

Opportunity fire takes place during the movement phase. Only units of the non-phasing player which are under cover may conduct opportunity fire, and only at units which are moving. For purposes of opportunity fire, the following actions are also considered movement: changing formation, mounting and dismounting (for the transported unit), deploying and undeploying.

- A. Limitations: Since units are moved individually or in stacks, the non-phesing player must choose whether or not he will conduct opportunity fire each time the phasing player moves a unit or stack. There is no limit to the number of opportunity fires a player may make in a movement phase, provided no unit exceeds its normal rate of fire for a phase. Fire is conducted based upon the facing of the target unit as it enters the target hex.
- 1. Range: All weapons may conduct opportunity fire at any enemy unit within four hexes. Units firing MsI ammunition may not conduct opportunity fire beyond four hexes. At ranges of five to eight hexes, units may conduct opportunity fire against enemy units only as they enter the second or any subsequent, consecutive hex under observation by the firing unit. That is, a unit cannot be fired on in the hex in which it is first visible to the firing unit. At ranges of nine to twelve hexes, units may conduct opportunity fire only in the third or any subsequent, consecutive hex under observation. No unit may conduct opportunity fire beyond a range of twelve hexes.

An enemy unit which begins the movement phase visible to the firing unit may be fired at in any hex of its movement (including the hex it begins in) up to a range of twelve hexes.

2. Fires per Hex: Any single step may fire against any single stack in any single hex once (with a ROF of 1). For example, if a stack moves three hexes within the line of sight and range of a unit, the unit may fire a total of three times, once per hex (assuming it has a sufficient ROF).

A unit eligible to conduct opportunity fire may do so against enemy units entering or leaving the hex the unit occupies.

B. Resolution: Opportunity fire is resolved as anti-armor or conventional fire as appropriate and resulting morale checks are resolved immediately. After they are resolved, movement proceeds.

## Rule 16: Close Assault

Close assault takes place during the movement phase and is resolved after all movement is completed. A close assault takes place when, at the end of movement, there are units of both players in the same hex.

If a close assault takes place, all units in the hex fire simultaneously. Close assault fire is resolved using the normal rules for anti-armor and conventional fire. Unlike fire conducted in a fire phase, units in march formation may fire in a close assault.

It is possible that after all fires are resolved, both players may still have units remaining in the hex. No special actions are required by these units. If at the end of the next movement phase there are still units of both sides in the hex, another close assault is resolved. No unit may fire during a fire phase if there are enemy units in the hex it occupies.

#### Rule 17: Morale

Units under fire may suffer from reduced combat effectiveness, especially when casualties are suffered. Units whose morale deteriorates can become shaken or broken.

A. Morale Checks: Units check morale by company. Each phase in which any unit of a company is fired at, the company must check morale. Regardless of how many times the company is fired at, it is never required to check morale more than once per phase. Morale checks during the movement phase occur the first time a unit of the company is fired upon. Morale checks in the fire phase occur at the end of the phase. To check morale, roll the die once. If the result is equal to or less than the current morale level of the company, the company passes the check; otherwise it fails the check.

Units which have been cross-attached to another company are treated as part of that company for morale purposes.

1. Morale Levels: A company's initial morale level depends on its initial number of steps. If the company initially has 4 or fewer steps, its morale is 8; if it has 5 through 8 steps, its morale is 10; if it has 9 or more steps, its morale is 12. The initial number of steps is counted before any cross-attachment occurs. A company's morale level is reduced by 1 for every step loss suffered (including steps of cross-attached units).

Each company's initial morale and any changes to its morale during the game are written down on the morale section of the command/morale record.

- 2. Failed Morale Checke: If a company fails a morale check it is shaken. A shaken company which fails a morale check is broken.
- a. Shaken: Units of a shaken company may not move any closer to the closest spotted enemy unit.
- b. Broken: Units of a broken company are in no formation; they move as if in march formation but all shots against them are considered to be flank shots. Units of a broken company may not fire, spot, or observe for indirect fire. They must move away from the closest spotted enemy unit to the extent of their movement ability. The identity of the closest spotted enemy unit may change during movement; that is, the closest

enemy unit is that unit which is closest during each hex of the broken unit's movement. If two units are equally close, the broken unit must move away from both of them.

If unable to move farther away from one enemy unit without approaching within the same distance of another enemy unit, the broken unit may not move.

Any unit which becomes broken in a hex also occupied by an enemy unit is removed from play (surrenders).

Any unit which leaves the board while broken is removed from play.

B. Raily: A player may attempt to raily broken and shaken companies at the start of a friendly movement phase. The attempt is made by a HQ or TOC to which the company is subordinate. Railying a company costs 1 operations point if any part of the company is visible to the HQ or TOC unit expending the operations point, and 2 points if it is not visible. TOCs may raily companies only while committed to command, not while planning or executing.

To attempt to rally a company, roll one die. If the result is equal to or less than the company's current morale level, the company rallies. Broken companies which rally become shaken. Shaken companies which rally become normal. Broken companies which became shaken immediately assume combat formation, with any facing desired by the player.

Players may also attempt to rally suppressed units at the start of each friendly movement phase. The procedure for rallying suppressed units is identical to that for rallying shaken and broken units except that it does not require the expenditure of operations points.

The player attempts to rally broken and shaken companies before attempting to rally suppressed units. If the company rallies, then all suppressed units of the company also rally and are no longer suppressed. If the company doesn't rally, then the player may attempt to rally each suppressed unit of the company individually.

C. HQs and TOCs: A shaken HQ must expend one of its operations points (if it has any) in each friendly movement phase in an attempt to rally itself (and any other units in its company). A shaken TOC allocated to command must do the same.

A broken HQ or TOC must attempt to rally itself in the same manner as a shaken HQ or TOC. A broken HQ or TOC may not expend operations points for any other purpose, and a broken TOC may not plan or execute.

## Rule 18: Entrenchments

Certain scenarios will call for one side to have several entrenchments. These must be placed on the board with the initial placement troops and, once placed, may not be moved. Each entrenchment may hold up to two steps of personnel or weapons class units.

A unit must be in combat formation and must spend its full movement phase in an entrenchment hex to enter the entrenchment; no expenditure of operations points is required and entering the entrenchment is not considered movement for any purpose (spotting, opportunity fire, etc.). A unit in an entrenchment is noted by placing the unit under the entrenchment marker. Dummy units may occupy entrenchments. A unit may not occupy an entrenchment already occupied by an enemy unit. Units may capture and occupy enemy entrenchments.

Units in entrenchments defend against indirect fire and conventional fire as listed on the conventional fire defense tables. An entrenched unit may not enter cover, but entrenched units

are considered to be under cover for spotting and opportunity fire purposes.

Entrenchments may not be placed in marsh hexes.

## Rule 19: Artillery and Indirect Fire

- A. General Explanation: Indirect fire represents the firepower of mortars and artillery, which deliver high trajectory plunging fire. Indirect fire units are all units which are included on the indirect fire data chart. Artillery forward observers call fire missions back to indirect fire units, which in turn fire on the requested target. The process of requesting fire takes time, as the following rules indicate.
- B. Requesting Fire: Indirect fire is requested at the beginning of each friendly artillery phase. The player secretly writes down his fire missions on his fire mission record. The left side of the record lists the turns of the game in order. Fire missions are written on the line of the turn in which they will arrive; record each firing unit's ID; for example, the 9th battalion would be 9, B battery of the battalion would be B9, and the 1st platoon of the battery would be 1B9.
- 1. Writing Fire Orders: Fire orders are written on the right side of the fire mission record. The turn of arrival and the unit firing are repeated. In addition, the player must specify the target hex number, the ammunition being fired, and whether the mission will use maximum ROF (see below). Other portions of the record are written down when the mission is fired; see below.
- 2. Observing Fire: a hex must be under observation by a unit capable of calling fire in order for a fire mission to be written for the hex. All U.S. units are capable of calling fire as are all Soviet HQ and OP units. An indirect fire unit may also observe for itself. For a hex to be under observation, an unblocked line of sight must be traced from the observing unit to the target hex. Procedures for tracing line of sight are explained in rule 10.
- 3. Delay: Indirect fire is subject to a delay of one or more turns. This varies depending on which unit is observing for the fire and, in the case of the Soviets, which unit is firing the mission. The indirect fire delay time chart lists the number of turns of delay for various observing units. In addition, when spotting with other HQ or OP, the Soviet player suffers an additional delay of one turn per command level separating observing unit from

the headquarters to which both it and the firing Company unit are subordinate. Command levels for the Battalion Soviets are shown at left.

Regiment

All OPs are company-level units.

Division Army Front

For example, if an OP requests fire from a different company of the same battalion, there is one additional turn of delay. If an OP requests fire from a company of another battalion in the same regi-

ment, there are two additional turns of delay. If a battalion  $H\Omega$  requests fire from divisional artillery, there are two additional turns of delay.

After the proper delay time is calculated, the unit firing the mission is written down on the fire mission record next to the turn number in which the mission will arrive, not the turn it was requested.

- 4. Canceling Missions: A fire mission may be canceled at the beginning of any friendly artillery phase. Another order may be written for the unit at that time, but it is subject to delay starting in that artillery phase; it may not be simply substituted for the canceled fire order.
- C. Indirect Fire Procedure: After all fire missions are recorded, fire missions due to arrive in the current turn are resolved.

All artillery firing at a hex is added together and attacks all units (enemy and friendly) in the hex.

- 1. Fire Mission Markers: When a fire mission arrives on the board, take a numbered fire mission marker and place it in the target hex. This marker will remain in place until the next artillery phase. Write the number of the marker in the proper space on the fire mission record.
- 2. Fire Value: The indirect fire data chart lists the fire value for each indirect fire unit in the game. The value listed is per step. Each full-strength counter has two steps and each half-strength counter has one. Since the fire value is per step, multiply it by two for full-strength units. Write the total fire value (after modification by D1 and D2 below) on the fire mission record.
- 3. Target Defense Value: The indirect fire defense chart lists the defense values of various units in various terrain.
- 4. Resolution: The fire values of all artillery units firing at a hex are added together. This is then compared to the defense value of the top unit in the stack and expressed as a simple odds ratio as found on the conventional fire combat results table. If rounding is necessary, always round in favor of the target unit. After locating the correct column of the combat results table, roll a die and implement the result.

Repeat this procedure for each unit in the target hex. Note that the fire strength will be the same each time, but the defense value may change.

- 5. Results: Results are explained in rule 11.
- D. Special Cases:
- 1. Max ROF: Each indirect fire weapon may fire at its maximum rate of fire for one turn per scenario. In that turn the fire value is modified by the *max ROF* multiplier on the indirect fire chart. The firing unit suffers no adverse effect from firing at its max ROF.

For example, the Soviet D-30 howitzer has a value of 4 when firing HE ammunition. Once during the game it may fire at max ROF. Since its max ROF multiplier is 6, its total value for that turn would be 24.

- 2. ICM: With some weapons, the U.S. player has a choice of firing either HE (High Explosive) or ICM (Improved Conventional Munitions). ICM may not be fired at town, urban strip, woods, full lake, or swamp hexes. When firing ICM the fire value is modified by the ICM multiplier on the indirect fire chart. If the max ROF option is taken with ICM, multiply the fire value both by the max ROF modifier and by the ICM modifier.
- 3. Smoke: An indirect fire unit may fire smoke instead of HE or ICM. Smoke missions are plotted using the same procedure as any other fire mission, except that units capable of laying more than one smoke screen may plot as many target hexes as smoke screens. The indirect fire chart indicates what type of smoke may be fired (chemical or incendiary) and how many smoke screens may be fired per step per turn. Incendiary screens last one turn; chemical screens last two turns. Screens are removed at the start of the artillery phase. The effects of smoke are detailed in rule 20.

For example, a U.S. M-125 mortar is plotted to fire an incendiary smoke mission. Since it may fire four incendiary smoke screens per turn, the U.S. player writes down up to four target hexes.

If there are units in the target hex the turn the smoke arrives, they may be subject to an attack. Chemical smoke missions do not attack units in the target hex but incendiary smoke missions do. Resolve the attack as if it were an HE fire mission but with a value of 10 per incendiary smoke screen targetted on the hex.

For example, a U.S. M-106 mortar can fire up to three incendiary smoke screens per turn per step, or a total of six per turn if a two-step unit. If all six were fired at a single hex, each unit in the hex would be attacked with a fire value of 60.

4. Pass-Through Fire: Indirect fire is assumed to be taking place over the course of the turn. Thus, the fire mission marker is left in place until the next friendly artillery phase and any unit moving into the hex during a movement phase is attacked by the fire mission as well. Units mounting or dismounting from transport units and units deploying or undeploying also suffer pass-through fire.

All units suffering pass-through fire are fired at as if in clear terrain. However, the total artillery fire value is halved, rounding fractions down, before the fire is resolved.

E. Deployment: In order to conduct indirect fire, or to be given a fire mission, units must be deployed. After all indirect fire in the friendly artillery phase has been resolved, the player may have any indirect fire units deploy. This is done by placing a deployed marker under the unit. A unit must be in combat formation when it deploys. When off-board artillery deploys, this fact, plus its distance off-board, should be noted under the current turn number on the fire mission record.

Indirect fire units which are deployed may not move. They may not enter cover, entrench, mount or dismount, or change formation or facing. (However, a unit which is already under cover or entrenched may deploy, in which case it also remains under cover or entrenched.) A deployed unit may fire in the direct fire phase of a player-turn only if it was not performing a fire mission in the preceding artillery phase (if no fire mission marker is on the board for it).

Indirect fire units may leave deployment during a friendly movement phase, paying their entire movement allowance to do so. Self-propelled artillery units may do so in either friendly movement phase; towed units may do so only in the second movement phase. Units may not leave deployment during a turn in which they conducted a fire mission.

Deploying and undeploying count as movement for purposes of spotting, opportunity fire, pass-through fire, and operations point expenditure.

- **F. Range:** Indirect fire is limited by the range of the firing unit. The indirect fire data chart lists the range of the various firing units in hexes. Artillery may not fire beyond its maximum range.
- **G. Off-Board Artillery:** In some scenarios, players receive off-board artillery. The scenario description states what units are received, how far off-board it starts, and whether it is deployed. No counters are received for off-board artillery; it exists only on the fire mission record.

Off-board artillery performs all its activity, including movement, during the friendly artillery phase. During the artillery phase, off-board artillery may do one of four things: deploy, undeploy, perform a fire mission or walt for an assigned mission (if deployed), or move (if undeployed). Fire missions are recorded as for other artillery. Deploying and undeploying are recorded in the left side of the fire mission record: instead of a fire mission, write D or U. Movement is also recorded on the fire mission record; instead of a fire mission, write M followed by the number of hexes off-board the unit will be after its movement. Each unit starts at a particular distance off-board. Each turn's movement may change this distance by up to 5 hexes; however, off-board artillery must always remain at least 5 hexes off-board.

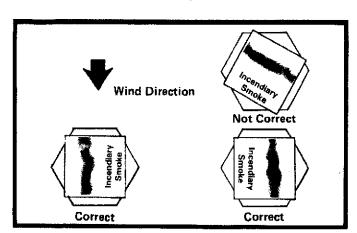
The range from off-board artillery to a target is equal to the

artillery's distance off-board plus the distance from the target to any hex on the owning player's board-edge (east or west).

#### Rule 20: Smoke

Smoke may be delivered by those indirect fire weapons so noted on the indirect fire data charts. There are two types of smoke: incendiary smoke and chemical smoke.

- A. Placement on the Board: Smoke missions are plotted using the same procedure as any other fire mission, except that units capable of laying more than one smoke screen may plot as many target hexes as smoke screens. In the artillery phase in which the smoke mission arrives, place one smoke marker on the map for each smoke screen.
- 1. Wind Direction: At the start of each scenario, roll the die and consult the wind direction diagram in the U.S. player's scenario folder. This is the direction of the wind for the entire scenario.
- 2. Wind Velocity: At the start of each scenario, roll the die and consult the wind velocity table. The result will either be light, moderate, or strong.
- 3. Orientation: Each smoke marker is placed in a hex but actually blocks two hexsides. The marker is faced toward a hex vertex, indicating that the two hexsides adjacent to that vertex are blocked. Smoke markers may only be faced in such a way that the line of blocked hexes is parallel to the wind direction.



4. Duration: On the turn of arrival of incendiary smoke, place an incendiary smoke marker on the target hex. At the start of the next friendly artillery phase, remove the marker.

On the turn of arrival of chemical smoke, place a chemical smoke 1 marker in the hex. If in a light wind condition, flip the marker to its chemical smoke 2 side at the start of the next friendly artillery phase and remove it at the start of the following friendly artillery phase. If in a moderate wind condition, flip the marker to its chemical smoke 2 side and add one additional chemical smoke 1 marker one hex downwind at the start of the next friendly artillery phase. At the start of the following friendly artillery phase remove the chemical smoke 2 marker and flip the downwind marker to its 2 side. In the next friendly artillery phase, remove the remaining marker.

If the wind velocity is strong, neither type of smoke round creates a smoke screen; no smoke markers are placed (but IS rounds may still attack units in the hex).

#### B. Effects:

1. Incendiary Smoke: Incendiary smoke blocks line of sight for spotting and fire purposes for all units. Incendiary smoke is considered to be two elevation levels tall. The line of sight must cross one of the two blocked hexsides to be blocked.

Incendiary smoke may also cause casualties if units are in the target hex the turn of its arrival. See rule 19.

- 2. Chemical Smoke: Chemical smoke has the same effect as incendiary smoke except that units equipped with thermal sights ignore the effects of chemical smoke. All U.S. M-1s, M-2s, M-3s, and M-901s are equipped with thermal sights. In addition, U.S. Dragon gunners have thermal sights, and thus U.S. Infantry may spot units through chemical smoke and fire MsI ammunition through it; they may not observe artillery fire through smoke or fire other ammunition through smoke. See the thermal sight units table.
- C. Direct Fire Smoke: A few direct fire units are listed as having IS (incendiary smoke) ammunition. This may be used in conventional fire, as detailed in rule 14. In addition, whenever IS ammunition is used to attack a target in direct fire, an incendiary smoke screen is placed in the target hex, regardless of the result of the fire attack (but not if the wind velocity is strong). The incendiary smoke screen lasts for one complete game turn starting in the artillery phase after it appears. Thus, a smoke screen which appears in the U.S. fire phase of turn 4 would be removed at the start of the Soviet artillery phase of turn 6.

## Rule 21: Cannon-Launched Guided Projectiles (Optional)

Cannon-launched guided projectiles (CLGPs) are currently in the final stage of development and may be fielded within the time frame of this game. If players wish, they may include the use of CLGPs in any scenario.

- A. Firing CLGPs: Only U.S. 155mm howitzers may fire CLGPs. CLGP fire is recorded as a normal fire mission with a specified target hex.
- B. Directing Fire: CLGPs impact during the artillery phase and count as a normal HE attack on the target hex unless they are directed by a designator unit. They may be directed to any hex within four hexes of the target hex provided the designator unit has an unobstructed line of sight to the designated hex and its range to the designated hex is no more than 24 hexes. The CLGP attack is then resolved against any one AFV unit in the hex as an anti-armor fire with a base hit number of 8. Hits automatically penetrate and do not need to be confirmed. If the CLGP attack is directed against an AFV unit, there is no HE attack.
- C. Designator Units: One counter in each U.S. company may be noted (on the ammunition record) as containing the company's laser target designator. The laser designator is not capable of penetrating smoke, and thus the smoke always blocks the line of sight for purposes of directing fire, even if the designator unit has thermal sights. Any casualty in the designator unit eliminates its ability to direct CLGP fire.

## Rule 22:, Ammunition Supply (Optional)

Given the time scale of Assault, it is possible for most units in the game to burn through their basic load of ammunition. This is particularly true of most units equipped with missiles. However, the mechanics involved in keeping track of each game shot are such that this rule is not recommended for players until they are thoroughly familiar with the game mechanics. At that point, players may keep track of ammunition in those weapons which have 3 or fewer shots available. Finally, experienced players may wish to keep track of all ammunition expenditures.

A. Ammo Supply: The direct and indirect fire data charts list the ammunition available to units in terms of game fires that may be made. Each time that a unit fires, regardless of the number of steps it has, it uses one unit of ammo.

Indirect fire units consume one unit of ammo per turn that they fire unless they fire at max ROF or they conduct direct fire. If they fire at max ROF, they consume units of ammunition equal to their max ROF multiplier. If they conduct direct fire, they consume one unit of ammunition per fire.

If the ammo supply column of the fire data chart lists one combined value for two different rounds (for example, HEAT and HE for the U.S. M1), these are actually the same round, which combines anti-armor and conventional fire effects. Use of either round reduces the combined ammo supply.

**B. Ammo Use:** Both players should have an ammo record with a separate line for each type of ammunition carried by each unit. The quantity of a round remaining to the unit should be changed each time it fires.

Once a unit has exhausted its basic load of ammo, that ammo type may not again be fired by that unit.

Units may not resupply during the course of the game.

#### Rule 23: Scenarios

Assault contains three scenarios. Players should decide by mutual consent which scenario is played. Beginning players should start with the Probe scenario, as it has fewer units in play and is thus more manageable.

Once a scenario is chosen both players randomly determine which force levels they will be using; since each player has six possible force levels, each scenario actually consists of  $6 \times 6$  or 36 scenarios, for a total of 108 in the game.

After determining scenario and force levels, the players consult their scenario folders for the details of the scenario: forces, special rules, victory conditions, and so on.

- A. Force Levels: Each side has six counters numbered from 1 to 6. These should be shuffled face down and each player draws one of his own counters. The other counters are placed aside. The counter drawn determines the forces available to the player for the scenario, as shown in the player's scenario folder. The force level counter should be saved and shown to the other player at the end of the scenario.
- B. Scenario information: Each player's scenario folder provides all information necessary to play each scenario. The information is divided into three parts: 1) general scenario information, which applies to all force levels of the scenario, 2) sections for each of the force levels in the scenario, containing information which applies to a single force level, and 3) the scenario chart, which details the units appearing in each force level and their arrival times.

### 1. General Scenario Information:

- $\boldsymbol{a}.$  Description: The player's situation and goals are briefly outlined.
- b. Maps and Wind Direction: The U.S. scenario folder shows the maps used, their orientation in relation to each other, and the compass directions of the assembled map. Soviet units always enter from the east, and U.S. units enter from the west. Note that the orientation of the map number in the diagram corresponds to the orientation of printed town names on the actual map.

The U.S. scenario folder also shows a wind direction compass for determining wind direction in the scenario.

c. Victory: This section lists those objectives for which the player receives victory points. This is generally expressed in terms of towns captured, enemy units eliminated, and friendly units exited off the map.

# **Expanded Sequence of Play**

## **Artillery Phase**

Record fire missions.

Adjust smoke markers from previous turns.

Resolve indirect fire.

Deploy artillery units.

# Soviet Player Turn

## First Movement Phase

Declare TOC action for turn.

Allocate operations points.

Attempt to rally broken or shaken units.

Attempt to rally suppressed units.

Change formation.

Move units, resolve all pass-through fire and opportunity fire, and check morale.

Mark fatigued units (those which climbed a steep slope this phase).

Remove fatigue markers (unless unit climbed steep slope this phase).

Attempt to spot.

Resolve close assaults.

## Fire Phase

Declare all missile fire.

Attempt to spot units firing missiles.

Resolve all remaining fires.

Resolve all fires.

Check morale.

Attempt to spot firing units.

## Second Movement Phase

Allocate operations points.

Attempt to rally broken or shaken units.

Attempt to rally suppressed units.

Change formation.

Move units, resolve all pass-through fire and opportunity fire, and check morale.

Mark fatigued units.

Attempt to spot.

Resolve close assaults.

Reduce accumulated operations points by 2 for all eliminated TOC units.

## U.S. Player Turn

The U.S. player turn is identical to the Soviet player turn in sequence.