STANDARD RULES for the VICTORY IN THE WEST Game System including OPERATION GRENADE

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[1.0] INTRODUCTION
Victory in the West is a set of regiment/battalion level simulations of critical campaigns that occurred on the western German frontier in the fall and winter of 1944-1945. Each of the games in this set simulates an engagement between the Allied and German forces in a period that was to mark the beginning of the end for Hitler's Third Reich.

[2.0] GAME EQUIPMENT
CASES:
[2.1] THE GAME MAPS AND CHARTS
Each Game-Map is a 22" x 34" representation of the battlefields over which the simulated campaigns were fought. A hexagonal grid is printed on the maps to regulate movement and placement of playing pieces. Also printed on the map or in the rules are charts and various visual aids.

[2.2] THE PLAYING PIECES
The cardboard pieces represent the actual military units that took part in the simulated engagements. Each "counter" contains certain information that is vital to the play of the game.

[2.21] How to Read the Counters
Each game's countermix includes forces from various nationalities and armies. Each nationality is portrayed by a color unique to that force.

[2.22] Sample Units
INFANTRY REGIMENT (US)
Front

Back
Designation
Type
Combat Strength
Movement Allowance

TANK BATTALION (US)
Front (only)

ARTILLERY BRIGADE (GERMAN)
Front (only)

STRENGTH CHIT
Front

Back
Designation
Type
Combat Strength
Movement Allowance

The back is blank.
A Note on Unit Designations and Types:
1. In all games, a unit's designation plays an important role. Thus, it is absolutely necessary that Players familiarize themselves with the reading of unit designations. For the most part, a unit's regimental number (or, in the case of some smaller formations, its battalion number) is printed on the left-hand side of the counter opposite the unit's type classification. The numbers across the top of each counter are given in the sequence division/corps (or, in the case of corps level troops, simply by corps number).
2. In the game Patton's Third Army, a German unit belonging to the Metz garrison has the letter "M" printed on its left hand side, opposite its type symbol. A German unit marked "T" or "S" (for tank or supply) is always hidden from the Enemy Player except at the end of the Turn in progress.
3. A unit's size plays an important role in combat: II = Battalion; III = Regiment; X = Brigade.

[2.23] Summary of Unit Types

<table>
<thead>
<tr>
<th>Front</th>
<th>Mechanized</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/9/12</td>
<td>6/4/12</td>
<td>1-12</td>
</tr>
<tr>
<td>Tank</td>
<td>Tank</td>
<td>Tank</td>
</tr>
<tr>
<td>Mech Infantry</td>
<td>Mech Infantry</td>
<td>Mech Infantry</td>
</tr>
<tr>
<td>Reconnaissance</td>
<td>Reconnaissance</td>
<td>Reconnaissance</td>
</tr>
<tr>
<td>5/3</td>
<td>5/3</td>
<td>5/3</td>
</tr>
<tr>
<td>Self-Propelled Artillery</td>
<td>Self-Propelled Artillery</td>
<td>Self-Propelled Artillery</td>
</tr>
<tr>
<td>Non-Mechanized</td>
<td>Non-Mechanized</td>
<td>Non-Mechanized</td>
</tr>
<tr>
<td>5/6</td>
<td>5/6</td>
<td>5/6</td>
</tr>
<tr>
<td>Infantry</td>
<td>Infantry</td>
<td>Infantry</td>
</tr>
<tr>
<td>31</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>Artillery</td>
<td>Artillery</td>
<td>Artillery</td>
</tr>
<tr>
<td>41</td>
<td>41</td>
<td>41</td>
</tr>
<tr>
<td>Anti-Tank</td>
<td>Anti-Tank</td>
<td>Anti-Tank</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

[3.0] GLOSSARY

Combat Class: A letter (A, B, or C) expressing the relative size of a unit in terms of manpower.
Combat Strength: A quantification of a unit's strength in attack and defense.
Morale Level: A quantification of a unit's skill in combat; the higher the number, the greater the chance of the unit being strong.
Movement Allowance: A quantification of a unit's mobility expressed in Movement Points.
Strength Chit: A marker carried under most combat units that determines the Combat Strength of the unit "carrying" the chit. Strength chits are always hidden from the Enemy Player except at the moment of combat.

[4.0] SEQUENCE OF PLAY

CASES:

[4.1] THE GAME-TURN

Each game is played in Game-Turns, each of which consists of two Player-Turns (one Allied and the other German). The Player whose Player-Turn is in progress is termed the Phasing Player.

[4.2] GAME-TURN SEQUENCE OUTLINE

Each Game-Turn must proceed strictly as described in the following Game-Turn outline:

A. ALLIED PLAYER-TURN

1. Mutual Supply Determination Phase

Both Players determine the supply status of all their units on the map.

2. Movement Phase

A. Tactical Movement Segment: The Allied Player may move all of his eligible units by employing tactical movement.

B. Strategic Movement Segment: The Allied Player may move all of his eligible units by employing strategic movement. (No unit may move both tactically and strategically in the same Player-Turn.)

3. Combat Phase

Allied units must attack adjacent German units as per the combat rules.

B. GERMAN PLAYER-TURN

1. Mutual Supply Determination Phase

As in Allied Player-Turn.

2. Movement Phase

As in Allied Player-Turn, except German units may move.

3. Combat Phase

As in Allied Player-Turn, except German units attack.

C. GAME-TURN INDICATION STAGE

The Game-Turn marker is advanced on the Game-Turn Track to indicate the start of a new Game-Turn.

[5.0] MOVEMENT

GENERAL RULE:

During the Movement Phase, the Phasing Player may move as many as or as few units as he desires. Movement is calculated in terms of Movement Points, which are expended in varying amounts as a unit moves from hex to hex depending on terrain. As long as a unit's Movement Allowance is not exceeded in a single Movement Phase, it may be moved as many as or as few hexes as desired. Unused Movement Points may not be accumulated or transferred to another unit. Movement is inhibited by the presence of Enemy units. A unit's movement may also be affected by whether the unit is mechanized or non-mechanized, by its supply status, and by whether it is executing tactical or strategic movement.

PROCEDURE:

During the Movement Phase, the Phasing Player may move his units in any order he wishes. Eligible units are moved individually, tracing a path of contiguous hexes through the hexgrid. Once a Player begins moving a particular unit, he must complete its movement before any other unit is moved. Units expend Movement Points from their Movement Allowance for each hex entered (or hexside crossed) according to the type of terrain in the hex.

CASES:

[5.1] HOW TO MOVE UNITS

[5.1.1] During a Movement Phase, all, some or none of the Phasing Player's units may be moved. Movement Point costs are summarized on the Terrain Effects Chart (5.62).
[5.1.2] Combat may never occur during the Movement Phase.
[5.1.3] During his Movement Phase, the Phasing Player must decide if each of his units will move tactically or strategically, if they move at all (see 5.4 and 5.5).

[5.2] MOVEMENT INHIBITIONS

[5.2.1] A unit may never enter a hex occupied by an Enemy unit.
[5.2.2] A unit must stop immediately upon entering an Enemy-controlled hex (see 6.0) and may not move further during that Movement Phase. However, a unit may leave an Enemy-controlled
The example at right represents a permissible execution of strategic movement. Note that if the moving unit began the Segment in hex A (or moved into hex A during the course of the Segment), strategic movement would not be permitted.

A unit using strategic movement employs its printed Movement Allowance and the Movement Point cost for each type of hex entered (or hexside crossed) as summarized on the Terrain Effects Chart. However, units employing strategic movement may use the Movement Point bonuses provided by roads. For example, a mechanized unit moving along a road would only spend ½ of a Movement Point per hex entered when employing this type of movement. However, note that a road benefit is only provided if a unit enters a hex through a hexside containing a road feature.

A unit may expend all, some, or none of its Movement Points in a single Movement Phase.

Advances or retreats due to combat are not movement and do not expend Movement Points.

As long as it does not move from one Enemy Zone of Control to another, a non-mechanized unit may always move at least one hex per Friendly Movement Phase, even if it does not possess enough Movement Points to accomplish this movement.

Each unit belongs to one of two movement classes: mechanized or non-mechanized. Mechanized units are tank, mechanized infantry, self-propelled artillery, or reconnaissance. Non-mechanized units include all other types.

Mechanized and non-mechanized units pay different Movement Point costs for each hex entered or hexside crossed (see 5.62).

In a Friendly Movement Phase, a given unit may employ either tactical or strategic movement, but never both. When using tactical movement, a unit may enter Enemy Zones of Control and perform combat in the ensuing Combat Phase.

A unit using tactical movement employs its printed Movement Allowance and the Movement Point cost for each type of hex entered (or hexside crossed) as summarized on the Terrain Effects Chart.

Any unit which enters a hex through a hexside crossed by a road while employing tactical movement may ignore the normal Movement Point cost of that hex (and hexside, if applicable) and pay one Movement Point only to enter the hex.

The Tactical Movement Segment is the first Movement Segment in a Player's Movement Phase. However, Players are not obligated to adhere rigidly to the sequence of moving units first tactically and then strategically. The sequence is structured in this fashion simply to help Players remember how units have been moved. Units may be moved by either method in any order the Phasing Player desires.

In a Friendly Movement Phase, a given unit may employ either tactical or strategic movement, but never both. A unit may only employ strategic movement if it remains at least three hexes away from Enemy units at all times during the Movement Segment (including at the start and at the end of the Segment). In order to count the distance from an Enemy unit to a moving unit, count from the Enemy unit's hex (exclusive) to the moving unit's hex (inclusive).

The example at right represents a permissible execution of strategic movement. Note that if the moving unit began the Segment in hex A (or moved into hex A during the course of the Segment), strategic movement would not be permitted.

A unit using strategic movement employs its printed Movement Allowance and the Movement Point cost for each type of hex entered (or hexside crossed) as summarized on the Terrain Effects Chart. However, units employing strategic movement may use the Movement Point bonuses provided by roads. For example, a mechanized unit moving along a road would only spend ½ of a Movement Point per hex entered when employing this type of movement. However, note that a road benefit is only provided if a unit enters a hex through a hexside containing a road feature.

Mechanized units may not cross river hexsides unless these hexesides are traversed by roads. This movement may be accomplished either tactically or strategically.

Terrain Effects Chart (see charts and tables)

In a Friendly Movement Phase, a given unit may move through hexes occupied by friendly units at no additional Movement Point cost. There is no limit to the number of friendly units that may be moved through a particular hex during a Movement Phase. However, there are limitations with regard to the number of friendly units that may enter the Movement Phase "stacked" in the same hex (see 7.1).

Friendly-controlled hexes never interfere with the movement of friendly units.

GENERAL RULE:
The six hexes immediately surrounding a unit (or stack) constitute that unit's Zone of Control. Zones of Control affect movement, combat, and supply. Hexes upon which units exert Zones of Control are called "controlled hexes."

CASES:

ZONES OF CONTROL

All units exert Zones of Control except cadre, artillery, and battalion-size units.

EFFECTIVENESS OF ZONES OF CONTROL

Any unit that exerts a Zone of Control exerts it at all times during the Game-Turn (Exception: See Case 9.97*219).

A unit never pays an additional cost to enter an Enemy-controlled hex. However, units do pay a Movement Point penalty to leave an Enemy-controlled hex (see 6.32).

No terrain ever affects Zones of Control. There is no additional effect in having more than one unit exert its Zone of Control into a given hex.

All units must cease movement immediately upon entering an Enemy Zone of Control. Such units may move no further during the Movement Phase.

A unit occupying an Enemy-controlled hex at the beginning of its Movement Phase may leave that hex, but only if it moves directly into a hex that is not Enemy-controlled. Units may not move directly from one Enemy-controlled hex to another, except as a result of combat. When a unit exits an Enemy-controlled hex at the beginning of the Movement Phase, it must expend one-half of its Movement Allowance (rounded fractions down) plus the terrain cost of the hex entered. If a unit's Movement Allowance has been reduced due to supply, this Movement Point penalty is equal to one-half the unit's modified (not printed) Movement Allowance. Remember that if a unit exits an Enemy Zone of Control in the Movement Phase, it may not enter another Enemy-controlled hex for the duration of this Phase.

A unit may move without penalty into and through hexes that are adjacent to units that do not exert Zones of Control.

Friendly units do not negate Enemy Zones of Control in the hexes they occupy for the purposes of movement.

ZONES OF CONTROL AND COMBAT

Friendly units do not negate Enemy Zones of Control in the hexes they occupy for the purposes of tracing paths of retreat (see 9.9).

ZONES OF CONTROL AND SUPPLY

An Enemy-controlled or Enemy-occupied hex blocks the tracing of Friendly supply through that hex (Exception: See Case 6.52).

Friendly units (not Friendly Zones of Control) negate the presence of Enemy Zones of Control in the hexes they occupy for the purposes of tracing supply.

A maximum of three units may end the Friendly Movement Phase stacked in the same hex.

CASES:

STACKING RESTRICTIONS

Stacking restrictions apply only at the end of a Friendly Movement Phase. During a Movement Phase, Friendly units may freely enter and pass through stacks to an unlimited depth. If stacks of units exceed stacking restrictions at the end of a Friendly Movement Phase, the excess must be eliminated by the owning Player.

There is no Movement Point cost to stack or unstack.

A cadre unit counts as a battalion-size unit, regardless of its original size.

STACKING AND COMBAT

No more than one regiment or brigade-sized unit may attack from or be attacked in any
single hex during a given Combat Phase. (Exception: Up to 3 artillery brigades may be in "Support" [see 8.6] from the same hex. All battalion-sized units in a hex must always attack or be attacked.

[7.22] When more than one regiment or brigade is in a single hex, the owning Player may choose which units will participate in combat immediately before the resolution of the combat. Units that do not participate in any combat but are in a hex where other units attack from or are attacked are affected by the combat results. Non-participating units may not attack nor be attacked for the duration of the Combat Phase, although they may be used to fulfill divisional integrity requirements (see 9.4).

[8.0] LIMITED INTELLIGENCE

GENERAL RULE:

Many combat units do not have Combat Strengths printed on their counters. Rather, these units are of indeterminate strength until they have participated in combat for the first time during a game. This strength is a function of a unit's Combat Class and Morale Rating (both printed on the counter itself). The unit's strength will be represented on a numbered chit (chosen at the moment of first combat), which is carried underneath its "parent" combat unit until it is eliminated as a result of combat. In general, the Enemy Player may never examine an owning Player's chit unless the owning Player's unit is about to perform combat.

PROCEDURE:

At the moment in which a regiment or brigade-sized combat unit is first performing combat (either attacking or defending), the owning Player must pick a strength chit for this unit. The Player determines the morale of the unit in question and picks a strength chit from the corresponding morale pool. This strength chit is immediately placed underneath the combat unit. The owning Player determines the unit's combat class and locates this letter on the unit's strength chit. The number immediately adjacent to this letter on the strength chit is the Combat Strength of the unit in question.

CASES:

[8.1] COMBAT CLASSES

Regimental and brigade-sized combat units belong to a specific combat class. A combat class is simply a letter which appears on a combat unit counter indicating in very general terms the size of the unit in question. Both Players possess units of combat classes "A", "B", and "C" (smallest).

[8.2] MORALE RATINGS

Regimental and brigade-sized combat units possess an individual morale rating. A morale rating is a number which appears on a combat unit counter indicating in very general terms the capabilities of the unit in question. Both Players possess units with morale ratings of 1 (worst), 2, and 3 (best).

[8.3] STRENGTH CHITS

[8.3.1] A strength chit is simply a counter with a set of numbers and letters on both sides. One of these numbers will represent the Combat Strength of a regimental or brigade-size combat unit that is about to engage in combat for the first time in the game. The letters represent the combat classes of the potential "parent" unit which "owns" the strength chit when chosen. From this moment a strength chit is picked, it must remain underneath its parent combat unit until this unit is eliminated or reduced to cadre status due to combat. Once a unit has had a strength chit picked for it, it may not own another for the remainder of the game.

[8.3.2] Both Players possess units of three different morale ratings (1, 2, and 3). Each one of these states of morale has a set of differently numbered strength chits. Before the start of the game, the Player determines his unit's different sets of strength chits should be separated and placed in their own morale pool - preferably in a wide-mouthed cup, but anything that can hold each entire set is acceptable. Of course, it would be wise for the Players to keep each morale pool separated by rating even when the game is not being played.

[8.3.3] When a regimental or brigade-size unit is engaged in combat, the owning Player must choose a strength chit at random from the "morale pool" corresponding to the morale rating of the combat unit in question. The chosen strength chit should be immediately placed underneath the parent combat unit.

[8.3.4] In order to determine the Combat Strength of a unit that possesses a strength chit, it is necessary to compare the unit's combat class (see 8.1) with the corresponding letter on the unit's strength chit. The number adjacent to this letter on the chit is the Combat Strength of the unit in question.

[8.3.5] Note that each strength chit is front and back-printed in a different color. One side is the "stronger" side and the other side is the "weaker" side. When a strength chit is first chosen for a combat unit, it is always placed with its stronger (front) side showing. The weaker (reverse) side is used if the unit is "reduced" due to combat.

[8.5] STACKING AND STRENGTH CHITS

[8.5.1] Strength chits never count for stacking purposes. A combat unit and its companion strength chits are considered a single unit in themselves.

[8.5.2] Due to combat losses, a unit may be reduced to cadre status, and its strength chit removed from play (see Section 7.0). When a strength chit is removed from play (due to any circum­stance), it is always placed back in the same morale pool from which it had come. It may be chosen later in the game at random by either Player.

[8.6] UNITS WITHOUT STRENGTH CHITS

Cadre, battalion-size, and artillery units never use strength chits. These units have constant Combat Strengths, obviating the need for strength chits (their Combat Strengths are printed directly on the counter). Since their strengths are constant, it is unnecessary to "hide" them from the Enemy Player.

[9.0] COMBAT

GENERAL RULE:

Subject to the stacking-combat restrictions of Case 7.2, Friendly units which are adjacent to Enemy units during the Combat Phase must attack those Enemy units. A given unit possesses a Combat Strength which is used when attacking and defending. This strength may not be divided among different combatants. The Phasing Player is termed the attacker, while the non-Phasing Player is termed the defender regardless of the overall strategic situation. The outcome of any given attack may be affected by terrain, whether the attacking and/or defending units have divisional integrity, whether the attacker is eligible for a combined attack, whether an enemy Player has artillery support or air support, and by the supply status of the attacking and defending units. Combat results include losses to involved units (listed in terms of "steps"; see 8.5) and/or retreats.

PROCEDURE:

The German infantry regiment 126/48/13 is performing combat for the first time. The unit is morale level 1, so the German Player picks a chit from morale pool #1. The chit is immediately placed underneath 126/48/13 with the front side facing up. The combat class of the unit is C, so the combat strength of this unit is 3.

The German infantry regiment 126/48/13 is performing combat for the first time. The unit is morale level 1, so the German Player picks a chit from morale pool #1. The chit is immediately placed underneath 126/48/13 with the front side facing up. The combat class of the unit is C, so the combat strength of this unit is 3.

Due to certain stacking-combat restrictions (see 7.2), some units may be adjacent to Enemy units but are unable to attack or defend. Such units would not have strength chits picked for them.

[8.4] LIMITED INTELLIGENCE

[8.4.1] The owning Player must pick strength chits for his applicable units after his attack (or the Enemy Player's attack) has been declared (i.e., immediately before the die roll resolving each combat takes place). Once a unit has been committed to an attack (or has been attacked), it may not be withdrawn from the combat due to a "low" chit pick, even if the ensuing ratio proves to be unfavorable to the owning Player.

[8.4.2] Obviously, neither Player will know the exact strength of any of his units that are about to perform combat for the first time (although rough estimates are possible from a unit's combat class and morale rating). After a unit receives a strength chit, the owning Player is always free to lift up the parent combat unit to examine the strength chit beneath in order to determine the unit's Combat Strength. This examination may occur at any point during the Game-Turn, as frequently as the owning Player chooses. The Enemy Player may never lift up the owning Player's combat units in order to examine their strength chits unless those units have been committed to combat. This examination may occur only at the moment of combat, immediately before the combat ratio is determined. After the die roll resolving the combat takes place, the Enemy Player may not examine the owning Player's strength chits until those chits' parent units are again involved in combat. Note: It is strictly forbidden for either Player to ever write down the strength of a "tried" Enemy unit on a piece of scrap paper.

[continued on page 33]
OPERATION GRENADE

The Battle for the Rhineland
23 Feb. - 5 Mar. '45

EXCLUSIVE RULES


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[15.0] INTRODUCTION

Operation Grenade is a simulation of the US Ninth Army's February 1945 offensive in the Rhineland area of Germany. Each Game-Turn represents one day of real time and each hex represents approximately 2.4 miles across.

[16.0] SETTING UP THE GAME

GENERAL RULE:

After Players have chosen sides, they may deploy their forces on the map. This may be performed by either following the instructions of this Section or by reading the set-up hexes listed on the counters themselves.

CASES:

[16.1] GERMAN SET-UP

0112: 941/335/8
0110: 942/335/8
0310: 943/335/8
0410: 27/12/58
0510: 48/12/58
0609: 49/12/58
0708: 1156/363/81
0808: 1157/363/81
0908: 1158/363/81
1008: 1034/59/81
1207: 1035/59/81
1209: 1036/59/81
1307: 1150/183/12
1406: 1151/183/12
1506: 1152/183/12
1705: 1218/176/12
1805: 1219/176/12
1807: 1220/176/12
2106: 1224/190/2
2209: 1225/190/2
2510: 1226/190/2
1804: 22/8F3/2
2006: 24/8F3/2
0514: 9P/81, 33/9P/81, 244/9P/81
1412: 11P/81, 15/11P/81, 301/11P/81
0809: 403/81
0312: 407/58
2218: Pol/12
2521: 668/58.

[16.2] US SET-UP

0407: 4Cav/7
0108: 13/8/7, 28/8/7, 121/8/7
0308: 413/104/7, 414/104/7, 415/104/7
0303: Hez/3A/7, Bd/3/A/7, Hky/3A/7
0504: 329/83/19, 330/83/19, 331/83/19
0707: 115/29/19, 116/29/19, 175/29/19
0608: 117/30/19, 119/30/19, 120/30/19
0605: 113/19
0403: A/2A/19, B/2A/19, R/2A/19
0703: A/5A/13, B/5A/13, R/5A/13
1106: 333/84/13, 334/84/13, 335/84/13
1004: 11Cav/13
0805: 405/102/12, 406/102/13, 407/102/13
1703: A/8A/16, B/8A/16, R/8A/16
1305: 134/35/16, 137/35/16, 320/35/16
1403: 13Cav/16
0801: 313/79/16, 315/79/16
1604: 314/79/16
2004: 285/75/12
2306: 290/75/12
2507: 291/75/12.
All remaining US tank and infantry battalions, artillery and self-propelled artillery brigades: Either stacked with or adjacent to any regimental or brigade-sized unit belonging to the same corps, but never in a German Zone of Control.

[17.0] ROER RIVER FLOOD

GENERAL RULE:

Before the start of the game, the German player must declare the type of flood he wishes to create throughout the Roer River valley. He must choose one of two possible types of flood: a flash flood (17.1) or a gradual flood (17.2).

CASES:

[17.1] FLASH FLOOD

[17.11] If a flash flood is declared by the German player at the start of the game, all hexes shaded to indicate that they are part of the Roer River Valley become swamp hexes, including towns. Except for roads, all other terrain features lying within the valley should be ignored.

[17.12] If a flash flood is declared, the game must begin on 17 February. Place the Start marker in this box on the Game-Turn Track, indicating this day as Game-Turn 1.

[17.13] If a flash flood is declared, the Roer is considered a normal river for the duration of the game. There is no difference between the upper Roer and the lower Roer.

[17.14] If a flash flood is declared, all units that are defending in hexes that were originally swamp...
hexes within the Roer valley use the CRT line entitled Hilltop when resolving this combat. However, these hexes are not considered hilltops for movement or observation purposes.

17.2 GRADUAL FLOOD

If the German player declares a gradual flood, the date on which the game starts is subject to the US player’s declaration of D-Day (18.0). When D-Day is declared on a particular date, the Start marker should be placed in the corresponding date on the Game-Turn Track, indicating this day as Game-Turn One. In the event of a gradual flood, all Roer River Valley hexes maintain their original terrain type throughout the game.

18.0 DECLARING D-DAY

(Graded Flood Only)

GENERAL RULE:

If the German player declares a gradual flood, the US player is obligated to declare a day between 17 February and 24 February (inclusive) as D-Day (the day in which the game will begin). After D-Day is announced, the Start marker should be placed in the corresponding box on the Game-Turn Track, indicating this day as Game-Turn One. The US player then rolls a single die in order to determine the current of the Roer River on D-Day, modifying this die roll depending on the date on which D-Day is declared.

CASES:

18.1 ROER RIVER CURRENT

The US player must roll a single die after declaring D-Day, modifying this die roll according to the instructions of Case 18.12. No die roll may ever be modified above 6 or below 1.

18.11 The following are the types of Roer River current that are created by the US player’s die roll:

a. 5 or 6 (Torrent): If a unit is attacked exclusively across an upper Roer hexside, its Combat Strength is multiplied by five. If it is attacked exclusively across Roer hexes, at least one of which is a lower Roer hexside, its Combat Strength is multiplied by five (five if in an entrenched). b. 2, 3, or 4 (Rapid): If a unit is attacked exclusively across an upper Roer hexside, its Combat Strength is multiplied by four. If it is attacked exclusively across Roer hexes, at least one of which is a lower Roer hexside, its Combat Strength is multiplied by four (four if in an entrenched). c. 1 (Normal): If a unit is attacked exclusively across an upper Roer hexside, its Combat Strength is multiplied by three. If it is attacked exclusively across Roer hexes, at least one of which is a lower Roer hexside, its Combat Strength is multiplied by three (three if in an entrenched).

18.12 The following are the modifiers to the US player’s Roer River die roll:

+1: If D-Day is 17, 18, or 19 February.
No modification: If D-Day is 20 February.
-1: If D-Day is 21 February.
-2: If D-Day is 22 February.
-3: If D-Day is 23 February.
-4: If D-Day is 24 February.

18.13 The current of the Roer as determined on D-Day is in effect up to and including 24 February. Starting on 25 February, the entire Roer (both upper and lower) becomes a normal river for the remainder of the game.

18.14 All Roer hexes are considered normal river hexes for purposes of movement, regardless of the current.

18.15 Gradual Flood:

(Modifiers to Roer River Die Roll Summary)

(see map)

18.16 Gradual Flood:

(Roer River Currents and Effects Summary)

(see map)

18.2 US SURPRISE COMBAT BONUS

18.21 If the US player declares D-Day to be 23 February or earlier, each attack conducted by US forces on Game-Turn One receives a Surprise Combat Bonus. Each surprise combat bonus allows the US player to shift the combat ratio one column to the right on the CRT. No attack may receive more than one surprise combat bonus.

18.22 If D-Day is declared to be 24 February, no surprise combat bonus may ever be awarded to US attacks during this Game-Turn. Similarly, no surprise bonus may ever be awarded to the US player if the German player has declared a flash flood (17.0).

19.0 MOVEMENT AND SUPPLY RESTRICTIONS

GENERAL RULE:

Both players’ initial forces may be restricted in movement and supply capabilities during the opening turns of the game.

CASES:

19.1 GERMAN MOVEMENT RESTRICTIONS

19.11 On Game-Turn One, none of the three units of the 9th Panzer Division may move. On Game-Turns One and Two, none of the three units of the 11th Panzer Division may move.

19.12 No German unit belonging to the 2nd Corps may move unless a strategic withdrawal has been obtained (19.2). However, if any unit of this corps is attacked, all units of the 2nd Corps may move without further restriction for the remainder of the game.

19.2 GERMAN STRATEGIC WITHDRAWAL

19.21 At the beginning of all German Player-Turns starting with Game-Turn Three, the German player must roll a single die in order to determine if a Strategic Withdrawal occurs. A die roll of 6 indicates that a strategic withdrawal takes place — all other die rolls indicate no effect. Once a strategic withdrawal occurs, the German player ceases to roll for it for the remainder of the game.

19.22 Starting with Game-Turn Eight, all German strategic withdrawal die rolls are reduced by one. However, no die roll may be reduced below one.

19.23 German Strategic Withdrawal Summary

(see map)

19.3 US MOVEMENT RESTRICTIONS

19.31 Throughout the first three Game-Turns, no US mechanized unit may move (although self-propelled artillery units may be used in support). On Game-Turn Four, mechanized units may move without restriction.

19.32 No US unit belonging to the 7th Corps may ever move north of the 0900 hexrow during the course of the game.

19.4 US SUPPLY RESTRICTIONS

19.41 All US 12th Corps units are automatically out of supply throughout the first six Game-Turns, regardless of normal supply considerations.

19.42 All US 16th Corps units are automatically out of supply throughout the first two Game-Turns, regardless of normal supply considerations.

20.0 IMPROVED POSITIONS

CASES:

20.1 IMPROVED POSITIONS HEXES

Certain hexes on the map are designated as improved positions hexes. All improved positions hexes are considered normal entrenched hexes with one exception: German units defending in improved positions hexes are not strafed. Instead, each attack in such a hex is increased in Combat Strength by two (this addition is made after the stack’s Strength is multiplied by a certain factor due to an attack across a river hexside). Like entrenched, improved positions may benefit only the German player.

20.2 US 739th (MINE-CLEARING) TANK BATTALION

The US 739th Tank Battalion was equipped with mine-clearing tanks. In addition to functioning as a normal unit, if this unit ever participates in an attack against an improved positions hex, this improved position is ignored when determining the combat ratio for this attack. In addition, US units may be awarded a combined arms combat bonus (9.5) in this combat. (Exception: If 739/19 is participating in an attack across a river hexside, improved positions may benefit only the German player.)

21.0 GERMAN VOLKSTURM

GENERAL RULE:

Some German towns possess a Volkssturm Value (a parenthesized number following the town name). These towns are eligible to receive Volkssturm units at the moment the first US unit enters an adjacent hex.

CASES:

21.1 HOW VOLKSTURM UNITS ARE CREATED

21.11 The first time a US unit enters a hex adjacent to a German town possessing a Volkssturm Value (either through movement or advance or retreat after combat), the movement of that US unit is temporarily interrupted while the German player rolls a single die in order to determine if Volkssturm units are created. On a die roll equal to or greater than the town’s Value, no Volkssturm units are created, and the US unit may resume its movement. On a die roll less than this Value, a number of Volkssturm units equivalent to the difference between the die roll and the Value are immediately made available to the German player.

21.12 If Volkssturm units are created, they must be chosen at random by the German player from...
those Volkssturm units not currently being used in the game. After they are chosen, they must be placed in any of the hexes of that town. They may be placed in US Zones of Control, and, if more than one is created, they may be stacked in the same hex. However, it is not permissible to violate stacking limits with the placement of Volkssturm units (if this is unavoidable, newly-created Volkssturm units may be placed in any adjacent hex not occupied by US units).

[21.13] After Volkssturm units are deployed, the US unit (whose movement was interrupted) may continue to move normally. (Since Volkssturm units are battalion-sized, they exert no Zones of Control.)

[21.2] RESTRICTIONS

[21.21] Each German town possessing a Volkssturm Value may only conduct a Volkssturm die roll once per game. After this die roll occurs (if ever), the German player should note this fact on a separate sheet of paper, indicating that no more Volkssturm units may be created by this town for the remainder of the game.

[21.22] The number of Volkssturm units in the countermark is an unlimited limit. If Volkssturm units are created and there are no more remaining off-map, the German player does not receive these units. However, each time a Volkssturm unit is eliminated, it immediately becomes available for use again by the German player.

[21.23] If a US unit moves adjacent to more than one town possessing a Volkssturm Value, the German player rolls the die for each town before the US unit may resume its movement.

[21.24] Volkssturm units are battalion-sized. It is permissible for them to function like normal units in all respects after their creation.

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[22.0] THE RHINE RIVER

CASES:

[22.1] MOVEMENT AND ATTACK RESTRICTIONS

[22.11] US units may neither move nor attack across Rhine River hexes, except across an unblown Rhine bridge (22.2). US units may remain adjacent to German units without attacking when separated by Rhine River hexes, although they are subject to normal Movement Point penalties when leaving a German unit's Zone of Control (6.32).

[22.12] German units may move and attack across Rhine hexes as if it were a normal river. However, they may remain adjacent to US units without attacking when separated by Rhine hexes, although they are subject to normal Movement Point penalties when leaving a US unit's Zone of Control (6.32).

[22.2] THE RHINE BRIDGES

There are 10 bridges across the Rhine displayed on the map. At certain times, the German player may attempt to blow these bridges.

[22.21] The first time a US unit enters the western, northwestern, or southwestern hexes (hereafter, simply "western") terminus hex of a Rhine bridge (either through movement or advance or retreat after combat), the movement of this unit is temporarily interrupted while the German player rolls two dice in order to determine if this bridge is successfully blown. The German player may attempt to blow each Rhine bridge only once per game, and only at the moment a US unit first enters its western terminus hex. For example, the western terminus hex of the bridge at Koen is 0419.

[22.22] Blowing Rhine Bridges:

a. If a non-Volkssturm German unit occupies the eastern terminus hex of the Rhine bridge at the moment the dice are rolled, the bridge is successfully blown on any roll between 3 and 11, inclusive. For example, the eastern terminus hex of the bridge at Koen is 0420.

b. If no non-Volkssturm German unit occupies the eastern terminus hex of the Rhine River bridge at the moment the German dice roll takes place, the bridge is successfully blown on any roll between 4 and 11, inclusive.

c. If a US "ruse" is being attempted (22.23), the Rhine bridge is successfully blown on any roll between 5 and 11, inclusive, regardless of the "whether there are any German units in the eastern terminus hex.

[22.23] Only once per game, the US player may declare a "ruse" immediately before the German player is about to roll the dice in an attempt to blow a Rhine bridge (see 22.22c for the effects of a "ruse").

[22.24] If a US unit enters the western terminus hex of more than one Rhine bridge, the German player rolls the dice once for each bridge comprising this terminus hex.

[22.25] US units may conduct attacks across non-blown Rhine bridge hex sides and, providing the combat result is favorable, may advance combat over such hex sides. A US unit attacking across a Rhine bridge may only attack the German unit(s) occupying the eastern terminus hex of this bridge, and, no other. However, German units defending in this hex are "tripped" in Combat Strength whenever they are attacked across a Rhine bridge hexside.

[22.26] Rhine Bridge Blowing Summary

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[23.0] VARIABLE GERMAN REINFORCEMENTS

GENERAL RULE:

At the beginning of each German Movement Phase, the German player must perform three reinforcement die rolls: once for the south, once for the east, and once for the north map edges. Each die roll of 1 for the south or east map edges indicates that German reinforcements are available from this direction in the current Movement Phase (23.1 and 23.2). A die roll of 1 or 2 indicates that German reinforcements are available from the north in the current Movement Phase (23.3). Once the available reinforcements from a particular map-edge have been exhausted, the German player ceases to roll the die for this map-edge for the remainder of the game.

CASES:

[23.1] South Map-Edge Reinforcements

All reinforcements from the south must enter the map on Entry Hex B (0124). If reinforcements are made available from the east, they must be taken in the following order:


b. Second die roll of 1: 3PG/58.

c. Third die roll of 1: 2106/106/58, 106/58.

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[23.2] EAST MAP-EDGE REINFORCEMENTS

All reinforcements from the east must enter the map on Entry Hex C (1421). If reinforcements are made available from the east, they must be taken in the following order:

a. First die roll of 1: Util/406/12, NCO/406/12.

b. Second die roll of 1: 15PG/12.

c. Third die roll of 1: 2115/10P/58, 22SS/10P/58, 10SS/10P/58.

[23.3] NORTH MAP-EDGE REINFORCEMENTS

All reinforcements from the north must enter the map on Entry Hex D (2618). If reinforcements are made available from the north, they must be taken in the following order:

a. First die roll of 1 or 2: Lr/12, 130/Lr/12.

b. Second die roll of 1 or 2: 2F/12.

c. Third die roll of 1 or 2: 7F/12.

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[23.4] Variable German Reinforcement Summary

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[24.0] WEATHER AND MUD

GENERAL RULE:

The state of the weather influences air operations as well as the condition of the ground.

CASES:

[24.1] WEATHER

[24.11] At the beginning of every Game-Turn, the US player should roll a single die and consult the Weather Table in order to determine the state of the weather for the rest of the Game-Turn.

[24.12] If the weather is clear, both players may use all of their assigned Air Points during the current Game-Turn (25.0). If the weather is light overcast, only one-half of each player's Air Points may be used. If the weather is heavy overcast, neither player may use Air Points for the duration of the Game-Turn.

[24.13] Some results on the Weather Table may call for rain or thaw. If rain or thaw occurs, mud is created (24.3).

[24.14] If the weather in the immediately preceding Game-Turn was clear, the US player should subtract 1 from his weather die roll. If the weather in the immediately preceding Game-Turn was heavy overcast, the US player should add 1 to his weather die roll.

[24.15] Weather Table

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[24.2] MUD

[24.21] Mud is in effect during each Game-Turn in which rain or thaw occurs, as well as the following Game-Turn. Place the Mud marker on the Game-Turn Track one space ahead of the Game-Turn track in which rain or thaw occurs. Example: There is a thaw on Game-Turn Two. Mud is in effect during Game-Turns Two and Three. If there is a thaw on Game-Turn Three, mud would also be in effect during Game-Turn Four.

[24.22] During mud Game-Turns, the following special rules are in effect:

a. All stream hexes are considered river hexes.

b. All mechanized units pay increased Movement Point costs for certain types of terrain (4 in clear, 6 in woods, and 8 in hilltop).

In addition, non-mechanized units pay 2 Movement Points to enter a woods hex, and 3 Movement Points to enter a swamp hex.
c. In all combat, the combat ratio on the CRT is shifted one column to the left in favor of the defender.

[24.3] GAME-TURN ONE WEATHER
On Game-Turn One, the US player should subtract 1 from his weather die roll.

[25.0] AIR POINT AVAILABILITY

GENERAL RULE:
The US player has six Air Points available to him each Game-Turn of the game. The German player has two Air Points available to him from Game-Turn Two through the end of the game.

[26.0] US BRIDGES

GENERAL RULE:
Due to the proficiency of American forces in constructing bridges at short notice, US mechanized units have a limited capability to cross non-Rhine River hexes. If any US mechanized unit begins the US Movement Phase adjacent to a river hexside, that unit may expend its entire Movement Allowance to move across that hexside. However, such a maneuver is only possible if the unit does not enter an enemy Zone of Control upon crossing the hexside. This movement may be accomplished even if the unit is out of supply or isolated.

[27.0] SPECIAL RULES

CASES:

[27.1] SWAMP HEXES
No mechanized unit may ever enter, exit, or retreat into a swamp hex unless this movement is performed through a hexside crossed by a road. Non-mechanized units must pay two Movement Points (three in mud Game-Turns) to enter a swamp hex through a non-road hexside. Units defending in swamp hexes employ the same line as town and wooded hexes on the CRT when resolving combat.

[27.2] SPECIAL GERMAN DIVISIONS
[27.21] The 406th Infantry Division and the 8th Fallschirmjager (Parachute) Division consist of only two regiments. These units may receive a divisional integrity combat bonus when attacking, even though only two regiments are adjacent to the Enemy unit which is the subject of the attack.

[27.22] The units 9P/81, 11P/81, Lr/12, 15PG/12, 7FJ/12, 2FJ/12, and 3PG/58 are kampfgruppen (battle-groups). They represent only portions of their parent divisions. None of these units may ever receive a divisional integrity combat bonus, although they employ strong chits in the same manner as other regiments.

[27.3] US REINFORCEMENTS
Due to a gradual flood declaration (see 18.0), Game-Turn One may occur anywhere between 17 and 24 February. The Start marker should be placed in the corresponding box on the Game-Turn Track, indicating this day as Game-Turn One.

[27.31] On Game-Turn 4, the US player receives the 95th Division (393/95/7, 394/95/7, 395/95/7) as a reinforcement.

[27.32] On Game-Turn 5, the US player receives the 95th Division (377/95/19, 378/95/19, 379/95/19) as a reinforcement.

[27.33] All US reinforcements enter the map through Entry Hex A (0301).

[28.0] VICTORY CONDITIONS

GENERAL RULE:
The game ends at the end of the March 4, 1945 Game-Turn. At this point, the US player must add up the number of Victory Points he has accumulated over the course of the game in order to determine a victor. The German player may never accumulate Victory Points — the winner is based entirely on the number of Victory Points accumulated by the US player.

CASES:

[28.1] VICTORY POINTS FOR GERMAN TOWNS
The US player receives the following Victory Points for either occupying or having been the last to pass through German town hexes at the end of the game. (Note: The US Player must occupy or pass through the parenthesized hex number in the case of multi-hex towns.)

- 3 Victory Points: Koln(0419), Geldern(2613), Rheinberg(2618), Moers(2218).
- 1 Victory Point: Neuss(1317), Moenchengladbach(1513), Viersen(1812), Krefeld(1916), Venlo(2209), Roermond(1804).

[28.2] VICTORY POINTS FOR RHINE BRIDGES
[28.21] The US player receives 5 Victory Points for each unblown Rhine Bridge which at least one US unit has crossed from west to east (either moving or as a result of combat) during the course of the game. (Exception: 28.22).

[28.22] In order for the US player to receive five Victory Points for an unblown Rhine Bridge, at least one US unit which crossed that same bridge must end the game east of the Rhine River, regardless of the presence of enemy Zones of Control.

[28.23] Victory Point Summary
(see map)

[28.3] DETERMINING A VICTOR
At the end of the game, the US player must add up the Victory Points he has accumulated and consult the following Victory Conditions in order to determine the winner of the game:

German Decisive Victory: The US player has accumulated fewer than 9 Victory Points.

German Substantive Victory: The US player has accumulated between 9 and 11 Victory Points, inclusive.

German Marginal Victory: The US player has accumulated between 12 and 14 Victory Points, inclusive.

US Marginal Victory: The US player has accumulated between 15 and 17 Victory Points, inclusive.

US Substantive Victory: The US player has accumulated between 18 and 22 Victory Points, inclusive.

US Decisive Victory: The US player has accumulated more than 22 Victory Points.

[28.4] VICTORY CONDITION SUMMARY
(see map)

PLAYER'S NOTES

US Strategy
In order to win the game, the US player must attack constantly when the battle line is stationary and move as rapidly as possible. The US player must use his armor divisions to rapidly exploit German disintegration. A major drive to the northeast must be combined with a less ambitious attack toward Cologn to gain enough Victory Points to ensure victory. Capturing a Rhine bridge can only be achieved through luck.

The US player has a truly monumental force at his disposal at the start of the game. However, due to the extremely narrow frontage on which his army deploys, he will be incapable of employing more than a fraction of his force for the first few Game-Turns. After this period, his army should develop into a veritable steamroller. Don't forget to employ the 739th Tank Battalion to good advantage against German improved positions.

German Strategy
Initially, the German player should defend the Roer line as vigorously as possible. The extremely weak forces at his disposal at the start of the game can only attempt to make a stand in improved positions or enrenchments. The Roer can also enhance their defensive capabilities considerably. Meanwhile, the meager reinforcements or reserves available to the German player should prepare rear-area positions to await the inevitable US breakout. The rear positions do not have to be linear; rather, the German Player should attempt to defend only those areas rich in Victory Point value. All in all, the German Player faces a seemingly monumental task in Grenade, but an initial vigorous defense followed by judicious retreats can put all of the pressure on the US player.

GRENADE DESIGN CREDITS

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ratio. Apply the result immediately before resolving any other attacks. Separate combats may be resolved in any order the Phasing Player desires, so long as all of his necessary combats are resolved at some time during the Combat Phase.

CASES:

[9.1] WHICH UNITS MAY ATTACK

[9.11] Every non-Phasing unit adjacent to a Phasing unit must be attacked by some Phasing unit during that Combat Phase (Exception: see 7.2 and 9.13).

[9.12] All the Phasing Player’s units ending their Movement Phase adjacent to Enemy units must attack some unit during the ensuing Combat Phase (Exception: see 7.2 and 9.13). The Phasing Player may choose which Friendly units will attack each adjacent Enemy unit so long as all adjacent, Enemy-occupied hexes are attacked.

[9.13] Any units occupying town or entrenchment hexes (German units only — see 12.0) are not obligated to attack adjacent Enemy units during the Combat Phase, and no unit may be attacked more than once per Combat Phase.

[9.14] No unit may attack more than once per Combat Phase, and no unit may be attacked more than once per Combat Phase.

[9.2] MULTIPLE UNIT AND MULTI-Hex COMBAT

[9.21] If a Phasing Player’s unit is adjacent to more than one Enemy unit, it must attack all those adjacent Enemy units subject to stacking restrictions that are not engaged by some other attacking unit (Exception: see 7.2 and 9.13).

[9.22] Units in two or more different hexes may combine their Combat Strengths to attack a single, adjacent hex.

[9.23] All units in a single hex must be attacked as a single, combined Combat Strength. The defender may not withdraw a unit in a hex except due to stacking restrictions (see 7.2).

[9.24] When a single hex contains more than one unit, each of those units may attack a different hex at the owner’s discretion subject to the restrictions of Case 7.2.

[9.25] A single attack may involve numerous attacking and defending units. However, for an attack to be resolved as a single combat, all attacking units must be adjacent to all defending units.

[9.26] If several units subject to a single attack are defending in more than one hex, use the terrain line on the CRT most favorable to the defender.

[9.3] EFFECTS OF TERRAIN ON COMBAT

[9.31] Except in one instance (see 9.32), there are no modifications to a unit’s Combat Strength due to terrain. Instead, terrain effects are “integrated” into the CRT. After determining the combat ratio, simply determine the terrain type occupied by the defending units and locate the corresponding line on the CRT.

[9.32] If a unit is attacked entirely across river hexes, its Combat Strength is doubled. If such a unit is attacked on more than one river hex (see 12.0), it is tripled in strength.

[9.33] If, at the instant a combat is being resolved, a player has a unit occupying a hilltop hex that is within two hexes of a unit defending in the combat, the Player receives a hilltop combat bonus. When determining the distance between the hilltop and the defending hex, count from the hilltop (exclusive) to the defending hex (inclusive). Note: The hilltop combat bonus is available to both the attacker and defender, however, see 9.35.

[9.34] Each occupied hilltop hex may provide a hilltop combat bonus as there are defending stacks within a two-hex radius. An occupied hilltop hex may provide a hilltop combat bonus even if it is in an Enemy Zone of Control at the instant of combat resolution. However, an occupied hilltop hex may never provide a hilltop bonus for itself if it is being attacked.

[9.35] A Player who is permitted a hilltop combat bonus may “shift” the combat ratio one column to the left. If an Enemy unit is defending within two hexes of an occupied hilltop, shift the ratio one column to the left; if an Enemy unit is defending within two hexes of an occupied hilltop, shift the ratio one column to the right. A maximum of one hilltop combat bonus per combat is allowed. If both the attacking and the defending Player are eligible for a hilltop combat bonus, only the defending Player receives it.

[9.4] DIVISIONAL INTEGRITY

Both Players may receive a divisional integrity combat bonus in the attack or defense.

[9.41] If, at the moment of resolution of an attack, the Phasing Player has all the regiments in a particular division adjacent to the Enemy units that are the subject of the attack, the Player receives a divisional integrity combat bonus. It is not required that all these regiments actually participate in the attack (although at least one must participate); it is only necessary for them to be adjacent to the Enemy units at the moment of combat resolution. Regiments fulfilling this requirement may be stacked in the same hex.

[9.42] If a regiment of the non-Phasing Player is being attacked and, at the moment of resolution of this combat, is adjacent to or stacked with another regiment of the same division, the non-Phasing Player receives a divisional integrity combat bonus.

[9.43] When a divisional integrity combat bonus is applied to an attack, shift the ratio column one to the right on the CRT for each participating division fulfilling the requirements of Case 9.41. When a divisional integrity combat bonus is applied to a defense, shift the ratio column one to the left on the CRT. (Note that these shifts are in addition to any other shifts that may be applied to a combat.)

[9.44] The maximum number of shifts that may be awarded in an attack due to divisional integrity is two. The maximum number of shifts that may be awarded to a defense due to divisional integrity is one.

DIVISIONAL INTEGRITY REQUIREMENTS

In order to fulfill divisional integrity, it is not necessary for German panzer or panzer grenadier divisions to employ their combat tank battalions.

[9.5] COMBINED ARMS

[9.51] Both Players are eligible to receive a combined arms combat bonus when attacking. In order to receive such a bonus, the attacking Player must possess a stack of units containing both a tank unit and a non-tank unit (Exception: see 9.52).

[9.52] Any unit whose combat class identification letter is parenthesized automatically receives one combined arms bonus if it participates in an attack that has a tank unit stacked with it in order to receive the bonus. However, the cadre side of a unit whose combat class is parenthesized does not automatically receive the combined arms bonus.

[9.53] For each attacking stack that meets the requirements of Case 9.51, the attacking Player may shift the ratio column one to the right on the CRT.

[9.54] If a stack of defending units possesses at least one non-tank and one tank unit (or anti-tank unit), then the attacking Player may never receive any combined arms bonuses against this stack. This is known as combined arms defense, although no shifts are awarded on the CRT — it simply negates combined arms attack. Similarly, no combined arms shifts may ever be awarded against German units defending in an entrenchment hex (see 12.22) or a stack that contains a unit with a parenthesized combat class (see 9.52).

[9.55] If an attack is being made entirely across river hexes, the maximum number of combined arms bonuses that may be awarded for this attack is one.

Combined Arms Example:

[9.6] ARTILLERY UNITS

Artillery units may be used in combat in two ways: either normally (using their printed Combat Strengths) or “in support” (providing more advantageous combat ratios to units within range).

[9.61] An artillery unit that is adjacent to Enemy units in either Player’s Combat Phase must employ its printed Combat Strength in combat (be it an attack or defense). It may not employ a “support bonus” (see 9.62).

[9.62] If, at the beginning of any Combat Phase, an artillery unit is not adjacent to any Enemy units but is within three hexes of an Enemy or Friendly unit that is defending in a combat, the owning Player may apply the “support bonus” to that combat. Each support bonus applied indicates that the subsequent combat is resolved one column to the left of the owning Player’s favor on the CRT (to the left of the Friendly unit is defending or to the right if an Enemy unit is defending).

[9.63] In order to provide a support bonus, an artillery unit must be part of the same corps formation on at least one unit in the Friendly attacking or defending stack.

[9.64] Each artillery unit may provide a maximum of one support bonus per Combat Phase. After it is used, the artillery unit may not be used in support once again for the remainder of the Phase. The total number of support bonuses that may be ap-
plied per combat by a Player is two if an Enemy stack is defending or one if a Friendly stack is defending. It is possible for both Players to apply support bonuses to the same combat. (In all com-
bats, the attacking Player first announces if he is applying any support, and then the defending Player. This announcement is made before the revelation of strength chips — (if any).)

[9.65] If, due to advances or retreats after com-
batt, an artillery unit that began the Combat Phase
not adjacent to an Enemy unit finds itself adjacent
to such a unit, the artillery unit may still apply
support bonuses to units within range for the
remainder of the Combat Phase.

[9.7] COMBAT AT HIGH AND
LOW RATIOS
Any attacks made at ratios lower or higher than
those printed on the CRT use the lowest or highest
ratio columns provided by this Table. Any shifts in
the ratio columns are made from the lowest or highest
column. No ratio may ever be re-
duced voluntarily.

[9.8] COMBAT RESOLUTION
[9.81] Each unit consists of a number of "steps" of
strength, indicating the amount of losses that
the unit may take before being eliminated from
play. A step loss will reduce the unit’s Combat
Strength (or, in some cases, eliminate it from
play). Each consists of three steps of strength.
Some smaller units may consist of only two steps.
All artillery, cadre, and battalion-size units consist
of a single step only.

[9.82] The following is a summary of the number
of steps possessed by each unit-type:
1. Each combat unit whose original strength chip
   possesses a Combat Strength of three or more has
   three steps of strength. When such a unit takes a
   one step loss, its strength chip is flipped over to its
   reduced side. Of course, its new Combat Strength
   will be smaller than the original. When the unit
   takes a two-step loss (or it takes a one step loss
   after having previously taken a one step loss), the
   strength chip is removed from play entirely (see
   8.52) and the parent combat unit is flipped to its
   cadre side (see 10.0). When a unit worth three steps
   loses three steps in combat, its strength chip is
   removed from play and the parent combat unit is
   eliminated.

2. Each combat unit whose original strength chip
   possesses a Combat Strength of two or less has two
   steps of strength. When such a unit takes a step loss, its
   strength chip is removed from play and the parent
   combat unit is flipped over to its cadre side. (Note
   that when flipped over, such a unit’s strength chip
   will indicate zero strength — this is not considered
   a step.) When a unit worth two steps takes a two step
   loss, its strength chip is removed from play and the
   parent combat unit is eliminated.

3. All artillery, cadre, and battalion-size units consist
   of a single step of strength only. If any of
   these units are forced to lose a step in combat, they
   are immediately eliminated from play. They never
   possess strength chips.

[9.83] All combat results are expressed in terms of
steps lost. For horizontal retreats, the letters "A" and
"D" on the CRT stand for attacker and defe-
der, respectively.

[9.84] All combat results are expressed in terms of
a number(s) preceded by the letters "A" or "D."

[9.85] All numbers in the combat result which are
parenthesized indicate mandatory step losses for
the affected Player’s units. Those numbers which
are not parenthesized signify that the affected
unit(s) must retreat the indicated number of hexes
and/or take a step loss equal to the unparenthe-
sized number result. All attacking units are subject
to any “A” result. All defending units are subject
to any “D” result. Thus, if a Player elects
to retreat, all of his units involved in a combat
must retreat. If a Player elects to (or must) incur
step losses, any one (or more) of his units involved in
the combat may be reduced as long as the total
number of steps lost equals the requirement.

Example: A German stack receives a D2(2) result.
Immediately, the German Player reduces two units
in the stack by one step each. (Alternatively, he
could have chosen to reduce one unit by two steps
instead.) Next, the German Player must choose
one of the following options:
1. He may take two more step losses and not
   retreat (see 9.9), if he has these steps available
   to him in the stack.
2. He may retreat two hexes (see 9.9).
3. He may lose one step of strength and retreat
   one hex (or vice versa).

[9.86] If the owning Player is required to take step
losses, he must first take these losses from those
units that actually participated in the combat. If
there are not enough steps available among these
units, he may take losses from units that are
stacked on the same hex but did not participate
in the combat.

[9.87] If the owning Player is required to take step
losses due to his own attack, he must first take
these losses from any of his tank units that partici-
ated in the attack. If the attacking Player pos-
sessed no tank units, he is under no further restric-
tions with regard to the manner in which these
losses are applied.

[9.88] Combat Results Table

[9.9] RETREATS AND ADVANCES
AFTER COMBAT
[9.91] A Player may retreat his units due to an un-
parenthesized combat result (see 9.85). All retreats
are expressed in hexes, not Movement Points.
Retreats are always preceded by the owning Player.
When a retreat is called for, move the stack as
a whole (not each unit individually) according to the
following priorities:
1. To a hex that is the maximum possible distance
   from any Enemy unit.
2. To a non-Enemy-controlled hex.

In accordance with these priorities, the owning
Player may retreat his units in any way he sees fit
as long as no retreat stack enters the same hex
more than once.

[9.92] A unit may retreat through Enemy Zones of
Control (see 6.4). However, for each Enemy-
controlled hex entered, the owning Player must
lose one step of strength from any one unit in the
retreating stack.

[9.93] A unit may retreat in violation of stacking
limitations so long as this situation is corrected
by the end of the next Friendly Movement Phase.
However, if a unit retreats onto a Friendly-occupied
hex and that hex then undergoes an attack in the
next Combat Phase, the retreated unit may never
add its Combat Strength to those of the units
already in the hex. If units in that hex then suffer
an adverse combat result, the previously retreated
unit is eliminated from play (its step losses do not
count in the determination of step losses in the new
combat).

[9.94] Whenever a stack is forced to retreat as a
result of combat, it will leave a path of vacant
hexes behind it called the path of retreat. Any vic-
torious units which participated in the combat (or
which are stacked with units which participated)
are allowed to advance along this path of retreat
and sometimes deviate from it (see 9.95). An ad-
venture after combat may not exceed the number of
hexes the defeated unit retreated (Exception: see
9.97). If a defending or attacking unit is eliminated
due to combat, the victorious units may freely ad-
vance the number of hexes remaining in the elimi-
nated unit’s retreat result obligation.

[9.95] Advances after combat are conducted as
follows:
1. Move each victorious unit individually. The
first hex entered must be the hex formerly
occupied by the retreating units.

2. All units except those bearing a tank or
mechanized infantry symbol may advance the per-
missible number of hexes along the path of retreat
just conducted by the retreating Player. This move
is conducted hex-by-hex and may not deviate from
the path of retreat. If an Enemy unit retreats
through an Enemy-occupied hex, the advance
along the path of retreat would have to cease prior
to that hex.

3. Units bearing a tank or mechanized infantry
symbol may never advance or retreat across river
hexes unless those hexides are traversed by a road.
Units forced to retreat off the map are eliminated.

[9.96] Some combat results on the CRT are in
bold face. These are considered particularly suc-
cessful attacks and are labeled breakthroughs.
Breakthrough attacks differ from normal attacks
in the following ways:
1. The attacking Player determines the path
   of retreat.
2. All units retreating due to this combat lose their
   Zones of Control for the duration of the current
   Combat Phase.
3. The defending Player may not take step losses
   in lieu of retreating (unless he is completely sur-
rounded by Enemy Zones of Control).

[9.97] The attacking Player may advance all his par-
ticipating units one extra hex more than the ad-
vanced normally permitted by this result (if the
units are non-tank, non-mechanized infantry, they
may deviate from the path of retreat in the last
hex advanced into).

[10.0] CADRE UNITS

GENERAL RULE:
Every non-artillery or battalion-size combat unit is
back-printed with a cadre side. All cadres have a
printed Combat Strength and Movement Allowance (they
do not employ a combat class or a morale rating). Cadres are formed when units take
step losses in combat. If a unit originally consisted
of three steps of strength, the cadre side of the
parent unit is considered the third step of strength.
Similarly, if a unit originally was worth two steps
of strength, the cadre side is considered the second
step. All cadre units themselves are worth one step
of strength. Cadres never exert Zones of Control,
and are considered a battalion-size unit for stacking
purposes.
[11.0] SUPPLY

GENERAL RULE:
Units must be considered in supply in order to use their Combat Strengths and Movement Allowances without penalty. There are three possible states of supply: in supply, out of supply, and isolated.

PROCEDURE:
Supply determination for all purposes is made by both Players during the Mutual Supply Determination Phase of each Player-Turn. A unit in supply at the beginning of the Player-Turn is considered in supply at all times during that Player-Turn. A unit that is out of supply at the beginning of a Player-Turn is considered out of supply for the duration of the Turn, even if it moves back into supply during its Movement Phase.

CASES:

[11.1] SUPPLY LINES
A supply line is defined as a path of continuous hexes traceable from a combat unit to a road hex, and then in turn from that road hex along a contiguous path of road hexes to a Friendly map edge. None of these hexes may be Enemy-occupied or Enemy-controlled hexes (unless they are occupied by Friendly units). Terrain does not affect the tracing of supply lines.

[11.2] WHEN A UNIT IS “IN SUPPLY”
[11.21] In order for any combat unit to be in supply, the owning Player must be able to trace a supply line (see 11.1) six hexes (or Movement Points) or less in length to a road hex from that unit and, in turn, must be able to trace a supply line of contiguous road hexes of any length from this road hex to a “Friendly” map edge road hex.

[11.22] Unless otherwise stated, the western map edge is Friendly to the Allied Player and the eastern map edge is Friendly to the German Player.

[11.3] WHEN A UNIT IS “OUT OF SUPPLY”
[11.31] A unit is out of supply under the following circumstances:
1. It is able to trace a supply line to a road hex, but this supply line is over six hexes in length, and/or...
2. The road hex to which a supply line is traced is unable to trace a series of continuous road hexes to a Friendly map edge.

[11.32] Place an Out of Supply marker on all units that are determined to be out of supply during the Mutual Supply Determination Phase.

[11.33] All units that are out of supply have their Combat Strengths and Movement Allowances decreased as follows:
1. If the units are attacking, their individual Combat Strengths are halved (round fractions down).
2. If the units are defending, their Combat Strengths remain the same.
3. If the units are tank, mechanized infantry, or reconnaissance, their Movement Allowances are halved (round fractions down).
4. If the units are not tank, mechanized infantry, or reconnaissance, their Movement Allowances remain the same.

Note: All units have a minimum Combat Strength of one.

[11.41] A unit is isolated when it is completely unable to trace a supply line to a road hex. Place an Isolated marker on all units that are determined to be isolated during the Mutual Supply Determination Phase.

[11.42] All units that are isolated have their Combat Strengths and Movement Allowances decreased as follows:
1. If the units are attacking, their Combat Strengths are one.
2. If the units are defending, their final Combat Strengths are halved individually (round fractions down).
3. If the units are tank, mechanized infantry, or reconnaissance, their Movement Allowances are three Movement Points.
4. If the units are not tank, mechanized infantry, or reconnaissance, their Movement Allowances are halved (round fractions down).

[11.5] AUTOMATIC SUPPLY
[11.51] All units which enter the map as reinforcements are automatically in supply during the first two Game-Turns in which they have entered the map.

[11.52] All units which occupy a Friendly map edge hex (see 11.22) or a hex adjacent to a Friendly map edge hex are automatically in supply.

[11.53] All German units which occupy entrenchment hexes (see 12.0) are automatically in supply.

[12.0] ENTRANCEHMENTS

GENERAL RULE:
Some hexes on the map are permanently designated as entrenchments. These hexes can only benefit the German Player.

CASES:

[12.1] ENTERING ENTRANCEHMENTS
There is no Movement Penalty to enter an entrenchment hex. Entrenchment hexes are permanent. They may never be destroyed by either Player.

[12.2] EFFECTS OF ENTRANCEHMENTS
[12.21] German units defending in entrenchment hexes have their Combat Strengths doubled (if attacked exclusively across river hexides, their Combat Strengths are tripled). It makes no difference what direction the attack on the entrenchment hex is coming from.

[12.22] Allied units participating in an attack against German units in entrenchment hexes may never receive a combined arms bonus (see 9.5).

[12.23] German units occupying entrenchment hexes are not obligated to attack adjacent Allied units during the German Combat Phase, although they may do so.

[13.0] AIR POWER

GENERAL RULE:
Each Player possesses a certain number of Air Points. Each Air Point may be used once per Game-Turn in a “ground support” role. During each Game-Turn, the owning Player must keep track of the employment of his Air Points on a separate sheet of paper. Air Points may never be eliminated.

CASES:

[13.1] GROUND SUPPORT
[13.11] Both Players’ Air Points may be used for ground support during either Player’s Combat Phase. For each Air Point allocated by the Phasing Player to an attack, the combat ratio is shifted one column to the right on the CRT. For each Air Point allocated by the non-Phasing Player to a defense, the combat ratio is shifted one column to the left on the CRT. When using an Air Point, the owning Player need only state this fact aloud while noting its use on a separate piece of paper.

[13.12] A maximum of one Air Point may be allocated by each Player per combat.

[13.13] Air Points must be allocated by both Players to a combat before strength chits (if any) are revealed. The Phasing Player announces his Air Point allocations first, followed by the non-Phasing Player.

[14.0] REINFORCEMENTS

GENERAL RULE:
Both Players may receive reinforcements. These units appear during the owning Player’s Movement Phase on the Game-Turn indicated on the particular game’s Game-Turn Track. Each listing of reinforcements includes the designation of the reinforcing unit as well as its “entry hex.”

CASES:

[14.1] MOVEMENT OF REINFORCEMENTS
[14.11] During his Movement Phase, the owning Player places any scheduled reinforcements near the entry hex on the map called for. If more than one unit is scheduled to appear in the same entry hex during the same Game-Turn, these units are deployed off-map, one behind the other, with the lead unit poised adjacent to the entry hex. As each unit enters the map, it must pay the terrain cost for the type of terrain in the hex plus any additional cost for hypothetical hexes that it would have to traverse in order to enter this entry hex. These hypothetical hexes are considered to be of the same terrain type as the entry hex itself.

[14.12] It is permissible for reinforcements to employ strategic movement in their Game-Turn of entry as long as they remain at least three hexes away from Enemy units at all times during the Movement Phase.

[14.2] RESTRICTIONS
[14.21] If an entry hex is occupied or in the Zone of Control of an Enemy unit, the Phasing Player may bring his reinforcements onto the map within three (or more, if necessary) hexes of the original entry hex without delay.

[14.22] Reinforcements may be purposefully delayed by the owning Player for as long as he wishes.
### COMBAT RESULTS TABLE

<table>
<thead>
<tr>
<th>Defender's Terrain</th>
<th>COMBAT RATIOS (Attacker to Defender)</th>
<th>Terrain</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hilltop</strong></td>
<td>1-3 1-2 1-1 2-1 3-1 4-1 5-1 6-1 7-1 8-1 9-1 10-1 11-1+</td>
<td></td>
</tr>
<tr>
<td><strong>Woods</strong></td>
<td>1-4 1-3 1-2 1-1 2-1 3-1 4-1 5-1 6-1 7-1 8-1 9-1 10-1+</td>
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<tr>
<td><strong>Town, Swamp</strong></td>
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<tr>
<td><strong>Clear</strong></td>
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<tr>
<td>3</td>
<td>A1(2)</td>
<td>A1(1)</td>
<td>D2(1)</td>
<td>D1</td>
<td>D1</td>
<td>D2(1)</td>
<td>D2</td>
<td>D2</td>
<td>D2</td>
<td>D2</td>
<td>A1</td>
<td>A1</td>
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<td>D1(1)</td>
<td>D2(1)</td>
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<td>A1</td>
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<td>D1</td>
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<td>A1</td>
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<td>A2(2)</td>
<td>A1</td>
<td>A1</td>
<td>D3(2)</td>
</tr>
</tbody>
</table>

1. Letters preceding results indicate to whom results apply. A = Attacker; D = Defender. Ratios greater than the right-hand column (less than left-hand column) are resolved on the right-hand (left-hand) column.
2. The unparenthesized number indicates the number of hexes the owning Player retreats his units and/or the number of steps lost from the owning Player's units (see Case 9.85). The number in parentheses is the number of optional step losses incurred by the owning Player's units. These losses must be taken immediately before any retreat result is fulfilled.
3. A result in bold (typeface) indicates a "Breakthrough" (see Case 9.97). All retreating units lose their Zone of Control for the duration of the Combat Phase. In addition, victorious units may advance after combat one hex more than the normal permissible advance.

### SUMMARY OF SHIFTS TO RATIO COLUMNS

A. **Shift one column to the right** (if employed in the attack) or one column to the left (if employed in the defense):
   1. Divisional Integrity (see 9.4)
   2. Artillery "Support Bonus" (see 9.62)
   3. Hilltop Combat Bonus (see 9.3)
   4. Ground Support (see 13.1)

B. **Shift one column to the right**:
   1. Combined Arms Combat Bonus (see 9.5)

C. **Shift one column to the left**:
   1. If Mud Game-Turn is in effect (20.2, Patton's Third Army)
Operation Grenade Counter Section Nr. 1 (255 pieces): Front

Quantity of Sections of this identical type: 1. Total quantity of Sections (all types) in game: 1.

U.S.

GERMAN

STRENGTH CHITS

A1 | A2 | A3 | A4
---|---|---|---
B1 | B2 | B3 | B4

A5 | A6 | A7 | A8
---|---|---|---
B3 | B4 | B5 | B6

A9 | A10 | A11 | A12
---|---|---|---
B7 | B8 | B9 | B10

A13 | A14 | A15 | A16
---|---|---|---
B11 | B12 | B13 | B14

A17 | A18 | A19 | A20
---|---|---|---
B15 | B16 | B17 | B18

A21 | A22 | A23 | A24
---|---|---|---
B19 | B20 | B21 | B22

A25 | A26 | A27 | A28
---|---|---|---
B23 | B24 | B25 | B26

A29 | A30 | A31 | A32
---|---|---|---
B27 | B28 | B29 | B30

A33 | A34 | A35 | A36
---|---|---|---
B31 | B32 | B33 | B34

A37 | A38 | A39 | A40
---|---|---|---
B35 | B36 | B37 | B38

A41 | A42 | A43 | A44
---|---|---|---
B39 | B40 | B41 | B42

A45 | A46 | A47 | A48
---|---|---|---
B45 | B46 | B47 | B48

A51 | A52 | A53 | A54
---|---|---|---
B51 | B52 | B53 | B54

A55 | A56 | A57 | A58
---|---|---|---
B55 | B56 | B57 | B58

A61 | A62 | A63 | A64
---|---|---|---
B61 | B62 | B63 | B64

A65 | A66 | A67 | A68
---|---|---|---
B65 | B66 | B67 | B68

A73 | A74 | A75 | A76
---|---|---|---
B73 | B74 | B75 | B76

A79 | A80 | A81 | A82
---|---|---|---
B79 | B80 | B81 | B82

A83 | A84 | A85 | A86
---|---|---|---
B83 | B84 | B85 | B86

A91 | A92 | A93 | A94
---|---|---|---
B91 | B92 | B93 | B94

A95 | A96 | A97 | A98
---|---|---|---
B95 | B96 | B97 | B98

A100 | A101 | A102 | A103
---|---|---|---
B100 | B101 | B102 | B103

A105 | A106 | A107 | A108
---|---|---|---
B105 | B106 | B107 | B108

A110 | A111 | A112 | A113
---|---|---|---
B110 | B111 | B112 | B113

A115 | A116 | A117 | A118
---|---|---|---
B115 | B116 | B117 | B118

A120 | A121 | A122 | A123
---|---|---|---
B120 | B121 | B122 | B123

A125 | A126 | A127 | A128
---|---|---|---
B125 | B126 | B127 | B128

A130 | A131 | A132 | A133
---|---|---|---
B130 | B131 | B132 | B133

A135 | A136 | A137 | A138
---|---|---|---
B135 | B136 | B137 | B138

A140 | A141 | A142 | A143
---|---|---|---
B140 | B141 | B142 | B143

A145 | A146 | A147 | A148
---|---|---|---
B145 | B146 | B147 | B148

A150 | A151 | A152 | A153
---|---|---|---
B150 | B151 | B152 | B153

Supplies

1 2 3 4 5 6 7 8 9 10 11 12


304P21
Operation Grenade Counter Section Nr. 1 (255 pieces): Back
GAME-TURN RECORD TRACK

**EXPLANATION:**

FF: Game begins if Flash Flood is declared. Sur: Last Game-Turn in which surprise combat bonus is available to US Player if Gradual Flood is declared. +1 or -1: Modifier to US Player's Roer River die roll if Gradual Flood is declared. Note: If the US Player declares a Gradual Flood, place the Start marker on the date declared as D-Day. This day becomes Game-Turn One.

**[9.88] COMBAT RESULTS TABLE**

<table>
<thead>
<tr>
<th>Defender's Terrain</th>
<th>HILLTOP</th>
<th>WOODS, TOWN, SWAMP</th>
<th>CLEAR</th>
<th>DICE 2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
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<tbody>
<tr>
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<td>6-1</td>
<td>7-1</td>
<td>8-1</td>
<td>9-1</td>
<td>10-1</td>
<td>11-1+</td>
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<td></td>
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<tr>
<td>WOODS, TOWN, SWAMP 1-4</td>
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<td>1-1</td>
<td>2-1</td>
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<td>8-1</td>
<td>9-1</td>
<td>10-1+</td>
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<tr>
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<td>7-1</td>
<td>8-1</td>
<td>9-1+</td>
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</tr>
</tbody>
</table>

**COMBAT RATIOS (Attacker to Defender)**

1. Letters preceding results indicate to whom results apply. A = Attacker; D = Defender. Ratios greater than the right-hand column (less than left-hand column) are resolved on the right-hand (left-hand) column.
2. The unparenthesized number indicates the number of hexes the owning Player retreats his units and/or the number of steps lost from the owning Player's units (see Case 9.85). The number in parentheses is the number of mandatory step losses incurred by the owning Player's units. These losses must be taken immediately before any retreat result is fulfilled.
3. A result in bold (typeface) indicates a “Breakthrough” (see Case 9.97). All retreating units lose their Zone of Control for the duration of the Combat Phase. In addition, victorious units may advance after combat one hex more than the normal permissible advance.

**SUMMARY OF SHIFTS TO RATIO COLUMNS**

A. Shift one column to the right (if employed in the attack) or one column to the left (if employed in the defense):
   1. Divisional Integrity (see 9.4)
   2. Artillery “Support Bonus” (see 9.62)
   3. Hilltop Combat Bonus (see 9.3)
   4. Ground Support (see 13.1)

B. Shift one column to the right:
   1. Combined Arms Combat Bonus (see 9.5)
   2. Ground Support (see 13.1)

C. Shift one column to the left:
   1. If Mud Game-Turn is in effect (see 24.2)

---

**[5.62] TERRAIN EFFECTS CHART**

<table>
<thead>
<tr>
<th>Terrain Type</th>
<th>Non-Mech</th>
<th>Mech</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear</td>
<td>1</td>
<td>2(4)</td>
</tr>
<tr>
<td>Woods</td>
<td>1(2)</td>
<td>4(6)</td>
</tr>
<tr>
<td>Hilltop</td>
<td>2</td>
<td>6(8)</td>
</tr>
<tr>
<td>Swamp</td>
<td>2(3)</td>
<td>P</td>
</tr>
<tr>
<td>Town</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Lake</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>Stream</td>
<td>+1</td>
<td>+2</td>
</tr>
<tr>
<td>River</td>
<td>+2</td>
<td>P²</td>
</tr>
<tr>
<td>Road (Strategic)</td>
<td>1/3</td>
<td>1/3(1/2)</td>
</tr>
<tr>
<td>Road (Tactical)</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Notes: P = Prohibited. 1. All Stream hexides if the hexside is crossed either tactically or strategically. 2. Mud River hexides during Mud Game-Turns. 3. River hexides if the hexside is crossed either tactically or strategically.

---

**[18.16] GRADUAL FLOOD**

Roer River Currents and Eff

<table>
<thead>
<tr>
<th>Current</th>
<th>Die Roll</th>
<th>Upper Roer</th>
<th>Lower Hex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Torrent</td>
<td>5 or 6</td>
<td>x 5</td>
<td>x 4</td>
</tr>
<tr>
<td>Rapid</td>
<td>2, 3, or 4</td>
<td>x 4</td>
<td>x 3</td>
</tr>
<tr>
<td>Normal</td>
<td>1</td>
<td>x 3</td>
<td>x 2</td>
</tr>
</tbody>
</table>

Notes: No die roll may ever be modified. 1. x 5 if the defending unit occupies an entrenched position; the defending unit occupies an entrenched position. 2. x 3 if the defending unit occupies an entrenched position; the defending unit occupies an entrenched position.
[19.23] GERMAN STRATEGIC
WITHDRAWAL SUMMARY

<table>
<thead>
<tr>
<th>Turn</th>
<th>Die Roll Needed</th>
<th>Modifiers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>No die roll</td>
<td>None</td>
</tr>
<tr>
<td>3-7</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>8 to end</td>
<td>1</td>
<td>-1</td>
</tr>
</tbody>
</table>

[20.24] RHINE BRIDGE BLOWING

Bridge Blown on Die Roll...

<table>
<thead>
<tr>
<th>Condition</th>
<th>Bridge Blown on Die Roll</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-volkssturm German unit occupies the eastern terminus hex.</td>
<td>3-11 (inclusive)</td>
</tr>
<tr>
<td>No non-volkssturm German unit occupies the eastern terminus hex.</td>
<td>4-11 (inclusive)</td>
</tr>
<tr>
<td>US use is attempted.</td>
<td>5-11 (inclusive)</td>
</tr>
</tbody>
</table>

[28.4] VICTORY CONDITION

Summary

<table>
<thead>
<tr>
<th>US Victory Points</th>
<th>Victory Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fewer than 9</td>
<td>German decisive</td>
</tr>
<tr>
<td>9-11 (inclusive)</td>
<td>German substantive</td>
</tr>
<tr>
<td>12-14 (inclusive)</td>
<td>German marginal</td>
</tr>
<tr>
<td>15-17 (inclusive)</td>
<td>US marginal</td>
</tr>
<tr>
<td>18-22 (inclusive)</td>
<td>US substantive</td>
</tr>
<tr>
<td>More than 22</td>
<td>US decisive</td>
</tr>
</tbody>
</table>

[18.16] GRADUAL FLOOD

Roer River Currents and Effects Summary

<table>
<thead>
<tr>
<th>Current</th>
<th>Die Roll</th>
<th>Upper Roer Hexside</th>
<th>Lower Roer Hexside</th>
</tr>
</thead>
<tbody>
<tr>
<td>Torrent</td>
<td>5 or 6</td>
<td>×5</td>
<td>×2^2</td>
</tr>
<tr>
<td>Rapid</td>
<td>2, 3, or 4</td>
<td>×4</td>
<td>×3^3</td>
</tr>
<tr>
<td>Normal</td>
<td>1</td>
<td>×3</td>
<td>×2^3</td>
</tr>
</tbody>
</table>

Notes: 1. No die roll may ever be modified above 6 or below 1.
2. ×5 if the defending unit occupies an entrenchment hex.
3. ×4 if the defender occupies an entrenchment hex.

ABBREVIATED SEQUENCE OF PLAY

A. ALLIED PLAYER-TURN
1. Mutual Supply Determination Phase
2. Movement Phase
3. Combat Phase

B. GERMAN PLAYER-TURN
1. Mutual Supply Determination Phase
2. Movement Phase
3. Combat Phase

C. GAME-TURN INDICATION PHASE
**VICTORY POINT SUMMARY**

<table>
<thead>
<tr>
<th>Town or Event</th>
<th>US Victory Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Koeln (0419)</td>
<td>3</td>
</tr>
<tr>
<td>Geldern (2613)</td>
<td>3</td>
</tr>
<tr>
<td>Rheinberg (2618)</td>
<td>3</td>
</tr>
<tr>
<td>Moers (2218)</td>
<td>3</td>
</tr>
<tr>
<td>Neuss (1317)</td>
<td>1</td>
</tr>
<tr>
<td>Moenchengladbach (1513)</td>
<td>1</td>
</tr>
<tr>
<td>Viersen (1812)</td>
<td>1</td>
</tr>
<tr>
<td>Krefeld (1916)</td>
<td>1</td>
</tr>
<tr>
<td>Venlo (2209)</td>
<td>1</td>
</tr>
<tr>
<td>Roermond (1804)</td>
<td>1</td>
</tr>
<tr>
<td>Unblown Rhine Bridge</td>
<td>5²</td>
</tr>
</tbody>
</table>

Notes: 1. In order to receive the listed Victory Points, the US player must occupy or have been the last to pass through the listed hex number in the case of multihex towns. 2. In order to receive these Victory Points, the conditions of Case 28.2 must be fulfilled.

**WEATHER TABLE**

<table>
<thead>
<tr>
<th>Die</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Clear (Thaw)</td>
</tr>
<tr>
<td>1</td>
<td>Clear</td>
</tr>
<tr>
<td>2</td>
<td>Light Overcast</td>
</tr>
<tr>
<td>3</td>
<td>Light Overcast</td>
</tr>
<tr>
<td>4</td>
<td>Light Overcast</td>
</tr>
<tr>
<td>5</td>
<td>Heavy Overcast (Rain)</td>
</tr>
<tr>
<td>6</td>
<td>Heavy Overcast (Rain)</td>
</tr>
</tbody>
</table>

Modifiers:
+1 if weather in immediately preceding Game-Turn was Light Overcast.
-1 if weather in immediately preceding Game-Turn was Clear.
0 if weather in immediately preceding Game-Turn was Light Overcast.
-2 if D-Day is 17, 18, or 19 February
0 if D-Day is 20 February
-1 if D-Day is 21 February
-2 if D-Day is 22 February
-3 if D-Day is 23 February
-4 if D-Day is 24 February

**VICTORY CONDITION SUMMARY**

<table>
<thead>
<tr>
<th>US Victory Points</th>
<th>Victory Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fewer than 9</td>
<td>German decisive</td>
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<tr>
<td>9-11 (inclusive)</td>
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<tr>
<td>More than 22</td>
<td>US decisive</td>
</tr>
</tbody>
</table>

**TERRAIN KEY**

- Town
- Woods
- Swamp
- Improved Position
- Entrenchment
- Rhine River Bridge
- Entry Hex
- Roer River
- Stream
- River
- Lake
- Victory Point Hex
- Road
- Hilltop
- Roer Valley

**OPERATION GRENADE**


304P21
**[9.88] COMBAT RESULTS TABLE**

<table>
<thead>
<tr>
<th>Defender's Terrain</th>
<th>HILLTOP</th>
<th>WOODS, TOWN, SWAMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>MERCH</td>
<td>1-2</td>
<td>1-2</td>
</tr>
<tr>
<td>1-1</td>
<td>2-1</td>
<td>3-1</td>
</tr>
<tr>
<td>4-1</td>
<td>5-1</td>
<td>6-1</td>
</tr>
<tr>
<td>7-1</td>
<td>8-1</td>
<td>9-1</td>
</tr>
<tr>
<td>10-1</td>
<td>11-1</td>
<td>+</td>
</tr>
</tbody>
</table>

**COMBAT RATIOS (Attacker to Defender)**

1. Letters preceding results indicate to whom results apply: D = Defender. Ratios greater than the right-hand column (left-hand column) are resolved on the right-hand (left-hand) column.
2. The unparenthesized number indicates the number of the Player retreats his units and/or the number of steps lost by the owning Player's units (see Case 9.85). The number in parentheses indicates mandatory step losses incurred by the owning Player's units.