

BITTER WOODS

THE BATTLE OF THE BULGE

DESIGNER EDITION

RULES OF PLAY



Compass Games
New Directions in Gaming

TABLE OF CONTENTS

Basic Rules

1.	Introduction.....	2
2.	Game Equipment.....	2
3.	Prepare for Play.....	4
4.	Sequence of Play.....	4
5.	Movement.....	4
6.	Stacking.....	5
7.	Zones of Control.....	5
8.	Improved Positions and Fortifications.....	6
9.	Combat.....	6
10.	Artillery.....	8
11.	Aircraft Support.....	9
12.	Supply.....	9
13.	Bridges.....	10
14.	Reserves.....	10
15.	Initial Surprise.....	11
16.	Reinforcements.....	11
17.	Victory Conditions.....	11

Optional Rules

18.	Divisional Integrity.....	12
19.	SS Panzer Scare.....	12
20.	Attrition.....	12
21.	Bombardments.....	12
22.	Challenging Air Interdiction.....	13
23.	Angriff aus der Bewegung.....	13
24.	Leader Units.....	13
25.	Fuel Dumps.....	14
26.	Surrender.....	14
27.	Peiper and Skorzeny.....	14
28.	Inter-Allied Cooperation.....	15
29.	Random Events.....	15
30.	Schnee Eifel.....	15
31.	Variable Surprise Shift.....	15
32.	Combined Arms Bonus.....	15
33.	Monschau Artillery Restriction.....	16
34.	Accelerated Allied Leader Reaction.....	16
35.	German 7th Army Garrison.....	16

Variant Rules

36.	The Peiper Alternative.....	16
37.	German Army Artillery.....	17
38.	Additional Random Events.....	17

Examples of Play.....	20
Designer's Notes.....	22
Game Credits.....	23

Components

1 Box and 1 Die
1 30" x 44" Map
528 x 5/8" Die Cut Counters
1 Charts and Tables Card (double sided)
1 German Order of Appearance Card (single sided)
1 Allied Order of Appearance Card (single sided)
1 Expansion Card (single sided)
1 Patton's Relief of Bastogne Scenario Card (double sided)
1 Plan Martin Scenario Card (double sided)
2 Erasing the Bulge Scenario Set-Up Cards (single sided)
1 Erasing the Bulge Scenario Card (double sided)
1 Designer Edition Rules Book
1 Designer Edition Player's Handbook

1. INTRODUCTION

"Soldiers of the Western Front! Your great hour has arrived. Large attacking armies have started against the Anglo-Americans. I do not have to tell you more than that. You feel it yourself. WE GAMBLE EVERYTHING!"

—Generalfeldmarshall von Rundstedt.

DESIGNER EDITION BITTER WOODS is a two-player game depicting Germany's last offensive of late 1944 known as the "Battle of the Bulge." The Campaign Game focuses on the period from 16 to 26 December when the Germans had to achieve decisive results.

1.1 Game Scale

Each game-turn represents approximately 12 hours of real time. Each map hex represents about 2 miles. Unit scale consists primarily of regiments and brigades.

1.2 Basic Game Rules: 3.0-17.0

The Basic Game includes those rules needed to familiarize new players with the basic mechanics of the game. When players are comfortable with the mechanics of the Basic Game, they may add Optional Rules, Additional Random Events or Variants that will enhance the historical and tactical aspects of the campaign.

1.3 Optional Rules: 18.0-35.0

These rules are intended to add historical realism by introducing mechanics that reflect local, tactical, WWII operations in the Ardennes.

1.4 Variants: 36.0-37.0

Two Variants are included: The Peiper Alternative and German Army Artillery. Players may incorporate Variants separately or together. The Variants slightly modify the game mechanics in order to more accurately recreate certain aspects of the battle.

- The Peiper Alternative Variant may be used with the Campaign Game, the Extended Campaign Game, any of the scenarios beginning on 16AM, the Early German Offensive Scenario and the Southern Shoulder Alternative Scenario. It is not applicable to the Patton's Relief of Bastogne Scenario or the Erasing the Bulge Scenario.

- The German Army Artillery Variant may be used with the campaign games and any of the scenarios.

1.5 Additional Random Events: 38.0

These rules incorporate events that did occur in addition to purported events and potential scenarios that could have occurred. They are rolled for on the 17AM and/or 19AM turns. Their use presents a greater challenge for both the Allied player and the German player, and allows players to experiment with alternative strategies. The Additional Random Events add uncertainty to the Campaign Game, the Extended Campaign Game, the Six-Turn scenario beginning on 16AM, the Eight-Turn scenario beginning on 16AM and the Southern Shoulder Scenario. They are not intended for use with the Patton's Relief of Bastogne Scenario, the Plan Martin Scenario or the Early German Offensive Scenario.

2. GAME EQUIPMENT

"Everything has changed in the west! Success-complete success-is now in our grasp!"

—Adolf Hitler.

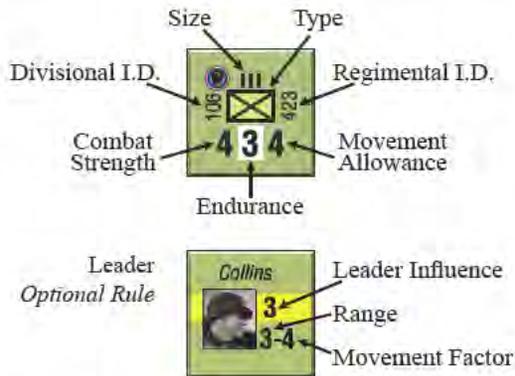
2.1 The Map

The map shows the Ardennes region including portions of Germany, Luxembourg, Belgium, and France where the Battle of the Bulge was fought. The map illustrates the most prominent terrain features of this region. A grid of numbered hexagons (hexes) has been superimposed on the map as a means of regulating the movement and positioning of combat units and other playing pieces. Also located on the map is the Terrain Effects Chart, which specifies the movement cost for each type

of terrain, the Game Turn Record Track, the Supply Shortage Table, and the Bridge Demolition Table.

2.2 The Unit Counters

The cardboard pieces or unit counters represent individual combat units that fought during the battle. Each unit contains several pieces of information: nationality, unit ID, size, type, combat strength, endurance rating, and movement allowance. A sample is provided below:



2.3 Unit Sizes

- X - Brigade
- II - Battalion
- III - Regiment
- XXXX - Army

2.4 Color Schemes

The colors used to identify the combat units are:

- GREEN:** U.S. Army units. These are further delineated by the background color of the NATO symbol box. The U.S. Army units assigned to the U. S. First Army have a light green background color within the NATO symbol box. The U.S. Army units assigned to the U.S. Third Army have a blue background color within the NATO symbol box.
- RED:** British Army units. All British are further delineated by an orange background color within the NATO symbol box.
- GRAY:** German Wehrmacht. These are further delineated by the background color of the NATO symbol box. The Wehrmacht units assigned to the German Sixth Panzer Army have an orange background color within the NATO symbol box. The Wehrmacht units assigned to the German Fifth Panzer Army have a light blue background color within the NATO symbol box. The Wehrmacht units assigned to the German Seventh Army have a green background color within the NATO symbol box.
- BLACK:** German Waffen SS. These are usually assigned to the German Sixth Panzer Army.

LIGHT BLUE: German Luftwaffe Fallschirmjäger units. These are further delineated by the background color of the NATO symbol box. The Luftwaffe Fallschirmjäger units assigned to the German Sixth Panzer Army have an orange background color within the NATO symbol box. The Luftwaffe Fallschirmjäger units assigned to the German Seventh Army have a green background color within the NATO symbol box.

2.5 Unit Types

All ground units belong to one of four categories: mechanized, non-mechanized, artillery, and leaders. Mechanized units consist of armor/panzer (units containing a silhouette), armored cavalry, and armored infantry (Panzergranadier). Artillery units consist of corps artillery, army artillery (Variant Rule 37), and rockets (Nebelwerfer). Leader units consist of individual generals and their staff. Non-mechanized units consist of all other ground units. The unit types are as follows:



2.6 Definition of Terms

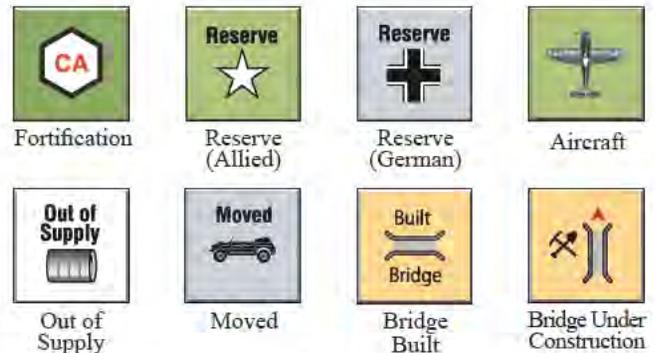
COMBAT STRENGTH: A quantification of a unit's ability to combat enemy units.

ENDURANCE RATING: A quantification of a unit's training, morale, leadership, and ability to endure the rigors of combat.

MOVEMENT ALLOWANCE: The measure of a unit's ability to move across the map.

2.7 Game Markers

The game also includes a variety of markers that are used to facilitate play of the game. Samples are provided below:



2.8 The Player Aid Cards

A number of Player Aid Cards have been provided to facilitate play of the game. These Player Aid Cards and the applicability of each to the Campaign Game and the many scenarios are described below.

- The Charts and Tables Card. Contains the Combat Results Table. Always required for play.
- The German Order of Appearance Card. Lists German unit starting positions on 16AM and reinforcements through the 26PM turn. Required for the Campaign Game and scenarios beginning on the 16AM turn or earlier.
- The Allied Order of Appearance Card. Lists Allied unit starting positions on 16AM and reinforcements through the 26PM turn. Required for the Campaign Game and scenarios beginning on the 16AM turn or earlier.
- The Plan Martin Scenario Set-Up Card with Plan Martin Map Card on the reverse side. Both sides required for play of the scenario.
- The Patton's Relief of Bastogne Scenario Set-Up Card with Scenario Player Aid Card on reverse. Both sides required for play of scenario.
- The Expansion Card. This card contains the Extended Campaign Game Turn Track, the Extended Campaign Game Order of Battle and other information for play of the Extended Campaign Game. The Turn Track is

also used for the Erasing the Bulge Scenario.

- The Erasing the Bulge German Set-Up Card. Lists German unit starting positions and reinforcements for the Erasing the Bulge Scenario.
- The Erasing the Bulge Allied Set-Up Card. Lists Allied unit starting positions for the Erasing the Bulge Scenario.
- The Erasing the Bulge Scenario Instructions Card with the Order of Battle Restrictions for Erasing the Bulge on the reverse side. Both sides required for play of the scenario.

2.9 The Player's Handbook

The Player's Handbook contains additional rules specific to the Extended Campaign Game, the Six-Turn Tournament Scenario, the Eight-Turn Tournament Scenario, the Plan Martin Scenario, the Patton's Relief of Bastogne Scenario, the Erasing the Bulge Scenario, the Southern Shoulder Scenario and the Early Ardennes Offensive Scenario. Also included in the Player's Handbook are historical articles concerning Kampfgruppe Peiper and Artillery in the Ardennes.

3. PREPARE FOR PLAY

"The First Army is making a terrible mistake in leaving VIII Corps static, as it is highly probable that the Germans are building up east of them."

—General George S. Patton.

The Allied player controls elements of the U.S. and British Armies, and aircraft units. The German player controls all German Army, SS, Luftwaffe ground units, and aircraft units. Players place their "At Start" units on the map in accordance with their respective Order of Appearance Cards or Set-Up Cards. The remaining unit counters are reinforcements that enter the game on the game-turn specified. After completing set-up, play may begin.

4. SEQUENCE OF PLAY

"Auf Wiedersehen, Herr Leutnant, see you in America!"

—Anonymous soldier of 1SS to an officer of Peiper's Group.

Each game-turn consists of a German Player Turn and an Allied Player Turn. The sequence of each game-turn must be strictly followed.

A. GERMAN PLAYER TURN

- 1. Mutual Supply Phase:** Each player checks the supply status for all of his units in play (rule 12). The Allied player may perform air drops (12.5) during the mutual supply phase of the German player turn.
- 2. Allied Interdiction Phase:** The Allied player places any available air units to interrupt German movement (11.3).
- 3. German Reserve Phase:** German mechanized units may be placed in reserve (14.1).
- 4. German Movement Phase:** The German player may conduct movement (rule 5), build improved positions (8.1), and begin to repair bridges (13.3). Any German reinforcements scheduled to arrive this turn may enter play at this time.
- 5. German Combat and Demolition Phase:** The German player conducts combat (rule 9) in any order desired. Bridges may be blown at the end of this phase (13.1).
- 6. German Mechanized Exploitation Phase:** German mechanized units placed in reserve (rule 14) may move their full movement allowance.
- 7. German Bridge Construction Phase:** Bridge construction may be completed at this time (13.3).

B. ALLIED PLAYER TURN

The Allied Player Turn is identical to the German Player Turn (switching the term German for Allied), except for the following differences:

- The Allied player may perform air drops (12.5) during the mutual supply phase of the German Player Turn.
- The Allied player may build fortifications during his movement phase.

- There is no Air Interdiction Phase.

C. RECORD KEEPING PHASE

Record the completion of a game-turn by advancing the Game Turn Marker one box along the Game Turn Record Track.

5. MOVEMENT

"All this big stuff is a sure sign we're in for a fight."

—An anonymous American officer at Clervaux.

5.1 Procedure

During the appropriate movement phase, a player may move as many or as few units as desired. Units are moved from hex to adjacent hex. A hex may never be skipped or jumped. A friendly unit may never move through or end movement in a hex occupied by an enemy unit.

5.2 Movement Allowances

Each ground unit has a "movement allowance" printed on the counter. This allowance is the maximum number of movement points (MPs) that may be expended during the movement phase. As each unit enters a hex, the unit expends MPs from its movement allowance. Unused MPs may not be accumulated from game-turn to game-turn, nor may they be transferred to other units.

GUARANTEED ONE HEX MOVEMENT: A unit, (except for the three German Army Artillery units - see rule 37), may always move at least one hex regardless of the movement cost as long as the movement is not into prohibited terrain, nor across prohibited hex-sides, nor from one hex in the ZOC of an enemy unit directly to another hex in the ZOC of the same enemy unit (exceptions—bridge construction, 13.3, and advance after combat, 9.8).

5.3 Terrain Effects on Movement

The Terrain Effects Chart located on the map identifies the types of terrain and the costs incurred when moving into each type. Units expend MPs based on the terrain of the hex entered as explained below:

Roads: Road movement is accomplished by moving units through connecting road hexes. The road movement rate, except for German infantry and German artillery, is one-fourth of a movement point (1/4 MP) per hex entered, regardless of the other terrain in the hex or connecting hex-side. German infantry and German rockets have a road movement rate of 1/3 MP per hex entered. German corps artillery have a road movement rate of 1/2 MP per hex entered.

Forest: All units, except those with an armor silhouette, entering a hex containing a forest expend 2 MPs; those units with an armor silhouette are allowed in forest hexes only on roads, and they may enter and leave forest hexes only along the path of a road.

Example: armor units may only exit hex 0812 by moving directly into hex 0912.

Broken: Units entering a broken terrain hex expend 2 MPs. Broken terrain represents rolling hilly ground with occasional steep draws near running bodies of water.

Town: All units entering a town hex expend 1 MP.

Light Woods: Non-mechanized units entering a light woods hex expend 1 MP; mechanized and artillery units expend 2 MPs. A ground freeze occurs beginning with the 23AM December game-turn. At this time, all units entering a light woods hex expend 1 MP.

Clear: Units entering a clear hex expend 1 MP. Mud conditions exist on the December 18AM through 19PM game-turns. During these turns, mechanized and artillery units entering a clear hex expend 2 MPs.

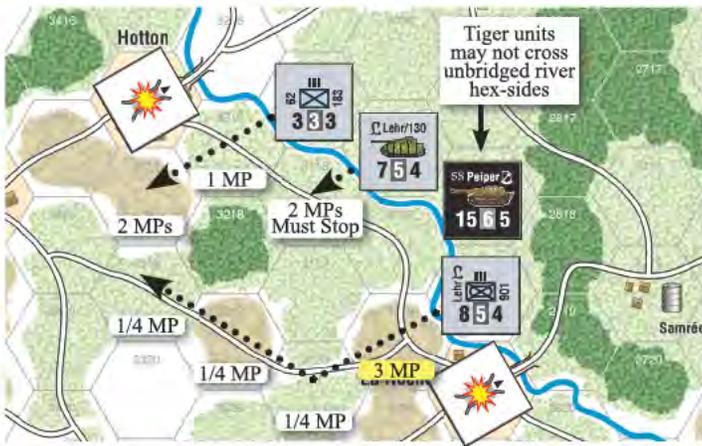
River Hex-side: Units may not cross an unbridged river hex-side unless they begin their movement next to the river hex-side and their first move is to cross that river hex-side. Units that begin the turn adjacent to an unbridged river hex-side may be covered with a Ford counter to indicate potential river crossing abilities. The rules for crossing are specific for

the different unit types as follows:

- An infantry or armored infantry unit that begins its turn next to a river hex-side may cross that river hex-side into a town, clear hex or light woods hex and continue movement without penalty; crossing into a forest hex or broken terrain hex costs an additional +1 MP.
- Armor, armored cavalry and artillery units that start their turn next to a river hex-side may cross that river hex-side and end their movement (they may move normally on the following turn). Panther, Tiger, or Jagd-tiger units may never cross unbridged river hex-sides.

The Meuse: Armor, armored cavalry, and artillery units may cross a Meuse River hex-side only at a bridge. An infantry or armored infantry unit that begins its turn next to an unbridged Meuse River hex-side may cross that river hex-side and end its movement. The unit may proceed the following turn.

Cliff Hex-side: Movement and combat across cliff hex-sides is prohibited. Artillery may provide fire support across cliff hex-sides.



Various examples of crossing a river hex-side with MP cost of each hex indicated. Note that crossing into a forest or broken hex costs +1MP (highlighted in yellow).

5.4 Army Boundaries (Dotted Red Lines)

For the first 3 days (6 game-turns), mechanized units of the 5th Panzer Army, 6th Panzer Army, and 7th Army may not violate each other's army boundaries.

- Mechanized units of the 6th Panzer Army may not attack into, move into, or move south of the road beginning at hex 0915. Mechanized units of the 5th Panzer Army may move along this road and attack out of it, but may not move north of the road. Mechanized units of both armies may use the road from 0613 to 0914 (inclusive).
- Mechanized units of the 5th Panzer Army and 7th Army may move along the road beginning at hex 1129 and attack out of it, but 5th Panzer Army mechanized units may not move south of the road and mechanized units of the 7th Army may not move north of the road.
- Army boundary restrictions are removed beginning with the 19AM game-turn. Any mechanized unit that enters one of the army boundary termination points (hex 2417 or 1730) prior to the 19AM game-turn is free to ignore boundaries for the remainder of the game.
- If terrain permits, mechanized units may retreat across an army boundary but must conform to the army boundary rules at the earliest opportunity.

5.5 Exiting the Map

- German mechanized units may exit the map only from road hexes across the Meuse River on the western and northern map edges. Exiting the map is calculated at the road movement rate. Towns bordering the map edges are considered to have a road leading off the map.
- Allied units with no retreat route other than off the northern, southern, or western map edges, and out of supply Allied units that voluntarily exit

the northern, southern, or western map edges may return to the game. Exited Allied units must remain off the map for at least one complete game-turn and may re-enter during any subsequent game-turn. Re-entry must be along the same map edge on any road hex containing a boxed letter. For purposes of retreat, German ZOCs extend off the map edge, so that retreating Allied units forced to exit the map may be eliminated.

6. STACKING

"Drive hard, Peiper, and hold the reins loose."

—SS-Brigadeführer Kraemer, Chief-of-Staff, 6th Panzer Army.

6.1 Stacking Limit

No more than three ground units of any type may end movement stacked in the same hex (units may freely move through hexes occupied by friendly units regardless of the number of units occupying the hex). The only exceptions to this rule are the 653 JPZ Panzer, which may stack free and the German Panzer Lehr Division, which may stack all four of its unit counters in the same hex.

6.2 Aircraft and Game Markers

Improved positions, fortifications, aircraft, and player aid markers do not count against stacking.

6.3 Enemy Units

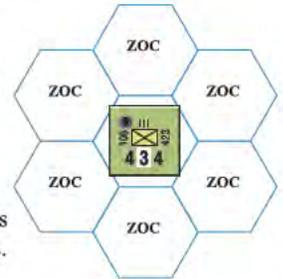
Units may never be moved into or through hexes occupied by enemy units.

7. ZONES OF CONTROL

"...the enemy will never be allowed to cross the Meuse."

—General Dwight D. Eisenhower.

The six hexes immediately surrounding a ground unit's hex constitute the Zone of Control (ZOC) of that unit.



7.1 ZOCs and Terrain

ZOCs extend into all types of terrain and across all non-Meuse River hex-sides. ZOCs do not extend across Meuse River hex-sides.

7.2 Features

ZOCs are exerted at all times, regardless of the phase. The ZOCs of both sides may be simultaneously exerted in the same hex(es). The presence of a ZOC is never affected by enemy or friendly units.

7.3 ZOC Exceptions

Artillery and individual Peiper Alternative breakdown units only exert a ZOC in the hex they occupy. Von der Heydte units and leader units never exert a zone of control.



An example emphasizing artillery's lack of a ZOC and how the Meuse River can block a ZOC.

7.4 Stops Movement

Units entering an enemy ZOC must immediately stop movement. A unit starting its turn in the ZOC of an enemy unit may move directly into the ZOC of a different enemy unit, and then must stop. Units may not move directly from one hex to another hex through the ZOC of the same enemy unit (exceptions—bridge construction, 13.3, and advance after combat, 9.8). However, a unit may move out of the ZOC of an enemy unit and re-enter the same unit's ZOC from another hex.

7.5 Retreating into a ZOC

Units forced to retreat into hexes containing enemy ZOCs are eliminated.

7.6 Aircraft and Ground Units

Aircraft units are never affected by the ZOCs of ground units.

8. IMPROVED POSITIONS & FORTIFICATIONS

"That place is very strong. I don't think the troops we have—without further improvement—can take the thing."

—General Harrison to General Hobbs, C.O. 30th U.S. Infantry Division.



8.1 Improved Positions

BENEFIT: Improved positions negate any attacker's ER advantage (9.3). Note that this does not give the defender an automatic ER die roll modifier—the defender must have a higher ER value than the attacker to receive the modifier.

Example: An American 5-4-4 regiment in an improved position would cancel the ER advantage of an attacking 9-5-4 panzer regiment. The improved position would provide no benefit to that same regiment if attacked by German units with an ER of 4, since those attacking units do not have an ER advantage.

TO BUILD: Supplied mechanized or supplied non-mechanized units that do not move during a friendly player game-turn, and which are not adjacent to an enemy unit, may build an improved position in any hex exclusive of town hexes. To identify an improved position, place an improved position marker in the hex.

REMOVAL: The improved position marker remains on the mapboard as long as a friendly unit occupies the hex. If all friendly units leave the hex, either due to combat or normal movement, the improved position marker is removed.



8.2 Fortifications

BENEFIT: Defending units receive the same benefit as an improved position. In addition, units defending in a fortification may ignore CA results when called for on the CRT.

TO BUILD: All hexes of Clervaux, Dinant, Namur, and Liège are considered permanent fortifications and may not be removed from play. St. Vith, Bastogne, and Marche were recognized as major road hubs of strategic significance and may be converted into fortifications. A supplied mechanized or supplied non-mechanized Allied unit may create a fortification in any of these town hexes using the same method as constructing an improved position. To identify a fortification, place a fortification marker in the hex.

REMOVAL: Unlike improved positions, a fortification marker in St. Vith, Bastogne, or Marche remains in the hex if vacated by friendly units. Any of these three fortifications is considered eliminated and its marker removed from play upon entry by a German ground unit.

8.3 Clervaux Bottleneck

Advance after combat through the town of Clervaux was especially difficult due to the twisted and tortuous main road passing through the narrow streets of the town. A narrow, one lane, serpentine road climbs out of the eastern side of the town up a low ridge into the western side of the town, first passing by a chateau dominating the Clerf River, and then a

12th Century monastery carved out of solid rock, where elements of the 110th Regiment, 28th Infantry Division made a gallant stand. To reflect this "bottleneck," units advancing after combat against units defending in the town of Clervaux halve the number of hexes called for on the CRT (round fractions up). Mechanized units may not use a road bonus in this advance.

Example: A 3-1 combat against a unit in Clervaux results in a D3 on the CRT. Attacking units may advance two hexes after combat.

9. COMBAT

"General, if you don't want to be captured, you'd better get out of town! The Germans are only a mile away."

—Col. Dickson to General Hodges, Commander U.S. 1st Army.

9.1 In General

The player conducting combat during his combat phase is termed the "attacker," the other player the "defender," regardless of the overall strategic situation.

WHO MAY ATTACK: During a player's Combat Phase, the phasing player conducts attacks against any enemy units adjacent to friendly units. Combat against adjacent enemy units is optional, not mandatory.

ARTILLERY AND ROCKET UNITS: Corps artillery units not adjacent to enemy units and rocket units adjacent to enemy units may provide assistance in the form of combat support. Note: The ability to provide combat support is assessed at the moment combat is declared.

DECLARING ATTACKS: Combats are conducted in any order the attacking player wishes. Attacks need not be declared beforehand, but once declared, combat may not be canceled.

RESTRICTIONS:

- No attacking unit may be used in more than one combat during the attacker's combat phase.
- A unit's combat strength may not be split.
- All defending units stacked in the same hex must be combined into one defense strength.

MAXIMUM COMBAT MODIFIERS: In no combat may the die roll modifier exceed +2 or -2, nor may the number of column shifts on the CRT exceed two shifts to the left or two shifts to the right.

MINIMUM VALUE: Units never have a combat strength of less than one, even if a unit is out of supply.

9.2 Combat Procedure

1. **DETERMINE PARTICIPANTS:** For each battle, the attacking player designates which units will be attacking, including any supporting artillery and/or aircraft. Next, the defending player designates any supporting artillery and/or aircraft. Note that defending aircraft counters may cancel attacking aircraft counters.

2. **DETERMINE ODDS:** Total the combat strength of attacking units involved in a specific attack and compare it to the total combat strength of defending units in the hex under attack. State the comparison as a ratio of the attacker's strength to the defender's strength. Round off the ratio in favor of the defender to conform to the ratios found on the CRT.

Example: 17:6 becomes 2:1.

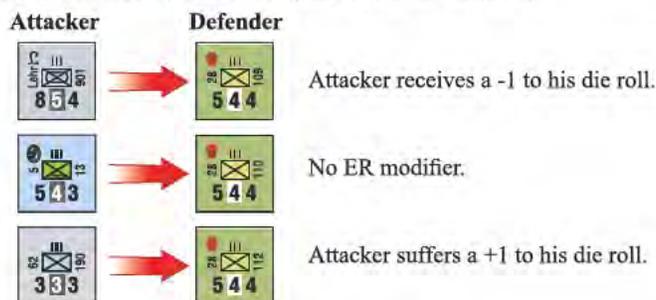
3. **ROLL THE DIE:** The attacker rolls the die (taking into account any die roll modifiers and column shifts). The number rolled on the die is cross-indexed with the appropriate column on the CRT. The result of the combat is applied immediately before any other combat is conducted.

4. **APPLY RESULTS.** The defender always applies his result first, followed by the attacker.

MAXIMUM ODDS: Due to the sequencing of the attacker's CRT shifts and die roll modifiers prior to the defender's CRT shifts and die roll modifiers, no attack against a defender in forest or broken terrain may ever exceed 6-1 odds.

9.3 Endurance Rating (ER) Bonus

Before resolving each combat, the single highest ER among the attacking units is compared to the single highest ER of the defending units, including any artillery providing offensive or defensive support. If the attacker's ER value is higher, subtract one (-1) from the die roll. If the defender's ER value is higher, add one (+1) to the die roll. A unit's ER may be modified by shock (21.3) and supply status (12.4).



9.4 Terrain Effects on Combat

Defender Occupies:

- CLEAR or LIGHT WOODS: None
- FOREST: One column shift to the left. Note that armor units may attack into forest hexes even if no road exists.
- BROKEN: One column shift to the left.
- TOWN: The combat strengths of all defending non-artillery units are doubled. If all attacking units are attacking across river hex-sides, the defending units receive a one column shift to the left in addition to being doubled on defense.
- RIVER: If all attacking units are attacking across river hex-sides, then all defending non-artillery units have their combat strength doubled. Note, a unit that is prevented from moving across a river may still attack across it.
- CUMULATIVE EFFECTS OF TERRAIN: Terrain effects are cumulative, with the exception that no unit may be doubled more than once. For defending units in more than one terrain, consider the terrain most favorable to the defender.



Example: The German player has three attacks along the river line. "A" is a 9 to 8 with one shift left for broken terrain. "B" is a 10 to 3; The Allied artillery unit does not receive the doubling benefit of terrain for the town or river and is halved on defense, with one shift left due to an across river attack against a town. "C" is a 12 to 4 with one shift left for the broken terrain and a +1 to the die roll for the superior Allied ER. Note that the Glider Infantry unit does not receive the river defense benefit since not all German units are attacking across a river hex-side.

9.5 Combat Results

- DE** All Defending units are eliminated. Attacker may advance one hex.
- AE** All attacking units are eliminated. Defender may advance one hex.
- D#** Defender must retreat the number of hexes indicated. Attacker may advance an equivalent number of hexes.

- A#** Attacker must retreat the number of hexes indicated. Defender may advance one hex.
- 1D#** The first number represents the defender's combat loss; the second number represents hexes retreated. Defender suffers one combat loss and must retreat the number of hexes indicated. Attacker may advance an equivalent number of hexes.
- 1A#** The first number represents attacker's combat loss; the second number represents hexes retreated. Attacker suffers one combat loss and must retreat the number of hexes indicated. Defender may advance one hex.
- CA** COUNTERATTACK: In his turn, the defender must either withdraw or counterattack if not in a fortification. If the defender chooses to counterattack, all defending units in the original battle must combat at least one hex of original attacking units. If stacking permits, other units may be brought up to participate in the counterattack from within the original hex and from any adjacent hex. Any unit moved into the original hex is obligated to participate in the counterattack with all of the original defending units. If the defender chooses to withdraw, the original position must be vacated and may not be entered by other friendly units in the same game-turn. Units unable to withdraw due to enemy ZOCs must counterattack. Unaccompanied corps artillery units forced to counterattack are eliminated. In this situation, a friendly non-artillery ground combat unit must occupy the hex with the artillery unit to be able to perform a CA. If this is not possible due to enemy ZOCs, the unaccompanied friendly artillery unit is automatically eliminated at the start of the friendly combat phase. Since no combat takes place, enemy units may not advance into the vacated hex.
- SU** SUPPRESSED: Combat is inconclusive. Both sides remain in place. The defender may choose to stand fast, reinforce, withdraw, or attack. The attacker is not obligated to re-fight the original battle in his next turn.
- ENG** ENGAGED: Attacking and defending units are locked in combat and must remain in place. The attacker must re-fight the original battle in his next turn. Both players, in their respective turns, may reinforce the engagement. If any engaged unit is attacked or any engaged unit attacks any adjacent unit (whether or not it was part of the original engagement), or if the original hex is vacated by all original defending units (infantry and mechanized infantry may not vacate the hex), the original engagement is considered broken and need not be fought again. Armor, armored cavalry, and artillery units are free to ignore engaged results.
- FF** FIREFIGHT: Both the attacker and defender must take a combat loss. Each side selects their own loss. No advance is possible unless the defender is eliminated. In this case, the attacker may advance only into the vacated hex.

9.6 Combat Losses

INDICATING LOSSES: All unit counters, except artillery, have a front-side and a backside. A unit with its front-side up is considered to be at full strength; a unit with its backside up is considered to be at reduced strength. A full strength unit's combat loss is marked by flipping the unit over to its reduced strength side. Reduced strength units and artillery units are eliminated if either sustains a combat loss.

DISTRIBUTING LOSSES: If multiple units are involved in a combat, the player suffering losses may take losses from any of the units involved in that particular combat.

9.7 Retreat After Combat

Retreating due to combat uses no movement factors. The retreating player may move retreating units in any order desired as explained below:

GUIDELINES:

- Where possible, each unit's retreat route must traverse the fewest

number of hexes leading to a friendly supply road. The supply road must have no hex in an enemy ZOC, unless that hex is occupied by a friendly unit. If any retreat debt remains, it is continued along the road toward a friendly source of supply.

- A unit continuing its retreat along a supply road may change to another supply road at an intersection or town. This may result in a unit not having retreated the indicated number of hexes away from its original position- this is legal.

- When choosing a retreat path along a supply road towards a supply source, players may not choose a path that will eventually require retreating units to jump off that supply road, if there is an alternate retreat path along a supply road that will not require retreating units to jump off that alternate supply road. Instead, the player must choose the alternate path.

- The requirement to retreat toward friendly supply may not dictate a unit's elimination if there is an alternate retreat route available; however, an alternate retreat route may be chosen only if elimination would occur during the current combat phase.

- Retreating units may exceed their movement allowance during retreat.

Example: A German infantry unit may retreat through two broken terrain hexes if required by the CRT.

- Allied armor units and German armor units bearing the Mk IV silhouette may retreat across a blown bridge into a forest road hex as long as the road leads directly to the blown bridge hex-side being crossed.

- Allied units may retreat off the map (5.5).

RESTRICTIONS:

- Retreating units must retreat the indicated number of hexes.

- No unit may retreat into the same hex twice.

- Retreating units may not end their retreat in violation of the stacking rules.

- Retreating units may not enter a hex occupied by an enemy artillery unit or a hex in the ZOC of an enemy unit, regardless of the presence of a friendly unit or friendly ZOC.

PENALTIES:

- A unit that cannot retreat, has no place to retreat to, or is unable to retreat the indicated number of hexes is eliminated.

- German units bearing the Panther, Tiger, or Jagdtiger silhouette that are forced to retreat across an unbridged river hex-side are eliminated. Armor, armored cavalry, and artillery units forced to retreat across an unbridged Meuse River hex-side are eliminated. Any unit forced to retreat across a Meuse River cliff hex-side is eliminated.

9.8 Advance After Combat

If the defending player is forced to retreat due to combat, the attacking player may advance any number of units involved in the combat. Advancing after combat must be performed immediately after the attacker wins a combat, and before resolving another combat.

LENGTH OF ADVANCE: The number of hexes a unit may advance when attacking is equal to the number of hexes the defender retreated. Should defending units be eliminated due to a lack of a retreat route, the attacking units may still advance the full number of hexes called for on the CRT. If the attacker retreats, defending units may advance a maximum of one hex.

TERRAIN EFFECTS ON ADVANCE: You may not move a unit during an advance after combat further than it could move during regular movement.

Example: a German infantry unit may not advance into two broken terrain hexes unless utilizing a road.

ROAD BONUS: Mechanized units beginning their advance after combat from a road hex may advance 1.5 multiplied by the number of hexes called for by the CRT (round any fractions up) provided the entire advance remains on the road.

Example: combat against a reduced regiment results in a 1D3; mecha-

nized units may advance 5 hexes provided the entire advance remains on the road.

RESTRICTIONS:

- An advancing unit may not enter or exit hexes that it is prohibited from entering or exiting during normal movement.

- Artillery units may never advance after combat.

- The advancing path must first include the hex the defending unit(s) occupied. Advancing units may then deviate from the path of retreat.

- **ENEMY ZOCs:** An advancing unit may ignore an enemy ZOC in the first hex of the advance (which must be the defender's hex), but must stop in the second enemy ZOC entered.

- **RIVERS:** Units advancing after combat may not cross an unbridged river hex-side unless it is the first hex of their advance. All units (except Panther, Tiger or Jagdtiger units) that attack across an unbridged river hex-side may advance no farther than the defender's hex. Exception: infantry and armored infantry units that did not move in the preceding Movement Phase may advance after combat as far as allowed - such units should be marked with a Ford counter prior to combat. Infantry and armored infantry attacking across an unbridged Meuse River hex-side may advance no farther than the defender's hex.

- **HEAVY TANK UNITS AND RIVERS:** German units bearing the Panther, Tiger or Jagdtiger silhouette may only advance across a river hex-side at a bridge. Armor and armored cavalry units may only advance across a Meuse River hex-side at a bridge.

- **FOREST HEXES:** Armor silhouette units may not advance into or out of a forest hex unless moving along a road.

10. ARTILLERY

"We're going in now. Let 'er roll!"

—Lt. Colonel Abrams.

10.1 In General

Artillery consists of two separate types, corps artillery and German rockets. Artillery units may use their combat strengths to either support attacking friendly units or support defending friendly units.

RANGE: Most corps artillery units have a range of four hexes. Corps artillery with a range other than four hexes are designated by a raised number above the corps designation. All rocket units have a range of one hex. Range is not affected by line-of-sight or terrain.

FREQUENCY: Allied Artillery may use their combat strength once during each player turn. German Artillery may use their combat strength only once per game-turn. Flip over an artillery counter to its "fired" side to designate it has already participated in combat.

10.2 Artillery Support

Both the attacker and defender may commit artillery to support their units in combat. There is no limit to the number of artillery units that may be used in any one combat.

OFFENSIVE SUPPORT: Artillery providing offensive artillery support add their combat strengths to the other attacking non-artillery units. To provide offensive support, all defending enemy units must be within range of the attacking artillery. Artillery providing support must do so in conjunction with at least one friendly mechanized class or infantry class unit.

DEFENSIVE SUPPORT: Artillery units providing defensive artillery support add their combat strengths to the defender's side in an individual combat. The friendly defending unit(s) receiving support must be in range of the supporting artillery. The range for defensive artillery support is determined by including the defender's hex, not the hex occupied by the attacking enemy unit.

ARTILLERY SUPPORT AND CRT RESULTS: Artillery units providing offensive support neither retreat or suffer combat losses when attacking non-adjacent enemy units. Artillery providing defensive support

and artillery not in an enemy ZOC neither suffers nor benefits from any combat result.

10.3 Artillery Adjacent to Enemy Units

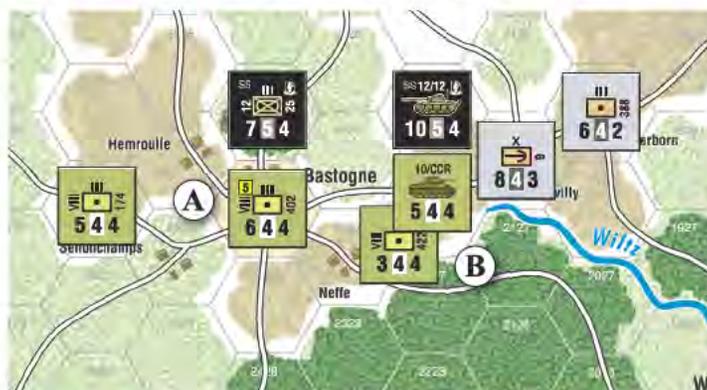
Corps artillery units adjacent to enemy units may not bombard (rule 21), attack, or provide defensive ground support. Corps artillery defending against an attack by adjacent enemy units do so at half strength (round any fractions up). Artillery units defending against adjacent enemy units do suffer retreats and combat losses, unlike “ranged” combat.

GERMAN ARTILLERY IN DEFENSE: German artillery units do defend against enemy attack. This is an exception to the rule prohibiting German artillery from using their combat strength more than once per game-turn.

10.4 German Artillery Limitations

ROCKETS: German rocket units were not long-ranged weapons and, therefore, may only combat adjacent enemy units. Rocket units have a defense value of 1, either defending alone or in concert with friendly units. Rocket units may not provide defensive ground support.

CORPS ARTILLERY: German corps artillery were primarily horse-drawn and much slower than vehicular-towed artillery. For this reason, German corps artillery may not move and fire in the same game-turn. Players should flip German corps artillery units over, if they move, as a reminder that they may not fire in the combat phase.



Example: The 12/12SS attacks hex "B". The German player can use both of his artillery units (the 9th Rocket and the 388th). The Allied player can only use the 174 at full strength and the 422 at half strength. The 402 is not available since it is adjacent to an enemy unit. The odds are 24 to 12 with one shift left for the broken terrain and -1 to the die roll for the superior German ER.

11. AIRCRAFT SUPPORT

"Let everyone hold before him a single thought-to destroy the enemy on the ground, in the air, everywhere-destroy him!"

—General Eisenhower, Order of the Day, 22 December 1944.

11.1 In General

During the course of the game, both players receive a number of aircraft units as indicated on the Game Turn Record Track located on the map. The number to the left of the slash is the number of German aircraft units; the number to the right is the number of Allied aircraft units. These units reflect the number of sorties flown during the campaign. An aircraft unit may only be used once per game-turn.

11.2 Ground Support



To indicate that an aircraft unit is providing ground support, place the counter in any enemy hex you wish to combat. Only one air unit per side may be placed in any one hex. An aircraft unit providing ground support shifts the combat one column to the right for the attacker and one column to the left for the defender. Aircraft units may only be used to support attacking or defending

ground units; they may not combat ground units by themselves. Aircraft units are placed prior to the resolution of a specific combat. The attacker allocates his air unit, if any, followed by the defender.

11.3 Interdiction

The Allied player may fly interdiction missions to interrupt German movement. During the Allied interdiction phase, prior to the German reserve phase, the Allied player may use any available Allied aircraft for interdiction. Each aircraft unit may be placed on any occupied or unoccupied hex. The effect is to increase the entry cost of the hex by 2 full movement points for mechanized units and 1 full movement point for all other units. A limit of one aircraft unit per hex may perform interdiction. Interdiction lasts throughout the German Player Turn and affects the movement phase and exploitation phase, but has no effect on advance, retreat, or the tracing of supply.

12. SUPPLY

"Permission or not, we're breaking out of here on foot!"

—Colonel Peiper to his radio officer.

12.1 Checking Supply

Ground units are required to be “in supply” in order to operate within their full capabilities. The supply status of all units is checked during the mutual supply phase of each Player Turn. A unit is considered to be in supply only if it can trace a supply path to a supply source. Units not in supply are considered “out of supply” and are identified with an Out of Supply marker.

12.2 Supply Paths

A supply path is any path of contiguous hexes free of enemy ZOCs running from the unit’s hex to a road leading off a friendly map edge. Supply paths are not affected by terrain or interdiction.

RESTRICTIONS

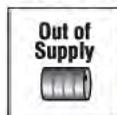
- The supply path from the unit to a road may not be more than four hexes long. Once on the road the supply path may be of any length.
- Supply may not be traced through enemy ZOCs unless the ZOC is occupied by a friendly unit.
- Supply roads may be traced across rivers only via intact bridge hex-sides.

12.3 Supply Sources

GERMAN: The German supply sources consist of any road leading off the eastern map edge, and any Liège hex occupied by a German combat unit.

ALLIED: The Allied supply sources consist of any road leading off the western, southern, and northern (west of hex row 1300) map edges, and any friendly controlled Liège hex.

12.4 Out of Supply



Units unable to trace a supply path to a supply source are considered out of supply until their next supply phase. Out of supply markers are provided to identify these units.

EFFECTS OF OUT OF SUPPLY: Units out of supply have their combat strengths for attack and movement allowances halved (round any fractions up), and their endurance ratings reduced by one. Artillery may not provide offensive ground support when in this state. Units out of supply may not build improved positions or fortifications, and may not attempt to blow or to build a bridge.

12.5 Air Drops

The Allied player may choose one or more hexes on the map to receive an air drop. Air drops are conducted during the mutual supply phase of the German Player Turn, and only on turns when Allied air support is available. Each unused aircraft unit may perform one air drop. Designate an air drop by placing an air supply marker in the hex. All Allied units in the designated hex are considered “in supply” until the mutual supply

phase of the next German Player Turn.

12.6 German Supply Shortage

COMMENTARY: As the battle progressed, the Germans experienced increasing difficulties in transporting supplies to their mechanized units.

RULE: Beginning on 20AM and for each remaining game-turn, the German player must roll for supply shortage. Supply shortage is determined by a die roll during the mutual supply phase of each German Player Turn. On a result of 1 or 2, no units are out of supply. On any other result, the German player must reference the Supply Shortage Table located on the game map and roll again. The designated units are considered out of supply for that game-turn.



Example: The German Panzer unit is in supply as it can trace four hexes to a road. The non-road portion can be through any type of terrain and can cross unbridged river hexes. Note that friendly units negate enemy ZOC's for purposes of tracing supply and the Allied artillery does not have a ZOC.

13. BRIDGES

"Those damned engineers!"

—Peiper, after arriving at a blown bridge near Stavelot.

13.1 Bridge Demolition



Either player may attempt to blow bridges. Bridge demolition attempts occur at the end of each friendly combat phase, and are resolved by using the Bridge Demolition Table printed on the map. A player may make only one attempt per bridge per friendly combat phase.

RESTRICTIONS:

- No bridge blowing is allowed by the Allied player on the Dec. 16AM and 16PM game-turns.
- Bridge demolition may only be attempted if there is an enemy unit adjacent to or within one hex of the bridge, and a friendly unit occupies the hex containing the bridge hex-side.
- Only mechanized or non-mechanized units may attempt to blow a bridge; artillery units and leader units (rule 24) may not attempt to blow a bridge.
- Units out of supply may not attempt to blow a bridge.

PROCEDURE: The proximity of the enemy unit to the bridge determines which column to use on the table. If an enemy unit is one hex away from the bridge hex-side, a die roll of 4 or less blows the bridge. If an enemy unit is adjacent to a friendly unit with a bridge between them, a die roll of 3 or less blows the bridge.



Example: It is the end of the Allied combat phase and the Allied player decides to blow some bridges. He can blow the bridge at "A" on a 1-3 and the bridge at "B" on a 1-4. He cannot blow the bridge at "C" as there is no bridge blowing unit adjacent to the bridge hex-side.

13.2 Blown Bridges

Place a blown bridge marker over the bridge site. Both players must treat a blown bridge as an unbridged river hex. A supply road may not be traced across the river.

AT START SITUATION: The following bridges are considered blown at the start of play: 1424, 1129, and 0533.

13.3 Rebuilding Bridges

Bridges may be rebuilt by either player at original bridge sites. Bridges were rebuilt by special engineer units that were attached to combat divisions. Only mechanized and non-mechanized units may rebuild bridges; artillery units and leader units may not rebuild (facilitate building) a bridge. The unit rebuilding the bridge must be in supply, must begin the turn next to the bridge hex-side, and may not participate in combat. Bridge construction markers are provided to identify these units. If, during the Bridge Construction Phase of that same turn, the hex on the opposite side of the river is free of enemy units, any friendly units in the construction hex may advance across the river and stop. To complete the bridge, the required advance must include the constructing unit and may be performed from ZOC to ZOC of the same or different enemy unit(s). The bridge is now considered rebuilt.

13.4 German Bridging Equipment Limits

The German player may rebuild a maximum of 8 bridges.

14. RESERVES



14.1 Placing Units in Reserve

At the start of each player's turn, any on map supplied mechanized unit may be declared "in reserve" by placing a reserve marker on the unit. Reserve units may not move in the Movement Phase or conduct combat in the Combat Phase.



14.2 Releasing Units from Reserve

After all combat, any reserve unit may conduct an exploitation movement utilizing its full movement factor. No combat may be performed after this exploitation move.

14.3 Losing Reserve Status

If a reserve unit moves during the mechanized exploitation phase, or at any time a unit in reserve is adjacent to an enemy unit, remove the reserve marker; the unit is no longer considered in reserve.

15. INITIAL SURPRISE

"But where in the hell has this son of a bitch gotten all this strength?"

—General Omar N. Bradley.

COMMENTARY: The German offensive caught the Allies completely off guard. Communications were disrupted as a result of German radio jamming, pre-planned artillery targeting and the confusion caused by the weight of the initial attack. To reflect this situation, the following conditions are in effect.

15.1 The Surprise Shift

All German attacks on the 16AM turn receive a favorable shift of one column to the right on the CRT.

15.2 Allied Movement Restrictions

On the 16AM turn, Allied units are restricted in their ability to move. Only Allied units that began the game in a German ZOC are eligible to move their full movement allowance. Allied artillery units have a movement allowance of 1; units of the U.S. 2nd Infantry Division have a movement allowance of 3 (due to veteran status); and other Allied non-artillery units, which did not begin the game in a German ZOC, have a movement allowance of 2. For purposes of advancing after combat on the 16AM turn, all Allied units are considered to have their full movement allowance. Beginning with the December 16PM turn, all Allied units may move normally.

15.3 Allied Artillery Restrictions

Allied artillery have a movement allowance of 1, and may not fire offensive ground support on the 16AM turn. If a German unit advanced adjacent to an Allied artillery unit, it is free to move its full movement allowance.

15.4 Bridge Demolition Restrictions

No Allied unit may attempt to blow bridges on the 16AM and 16PM turns.

15.5 German Movement Restrictions

Units of the 1SS Panzer Corps (1SS, 12SS, and Panzer Brigade 150) were prevented from participating in the opening attack. They were expected to exploit any breakthrough achieved. These units may not move during the 16AM turn.



15.6 Initial German Supply

All German units are considered to be in supply for the first four game turns. No German unit may be placed out of supply during this time.

15.7 Traffic Jams

Due to the congestion at the initial points of departure, on the 16AM turn all German mechanized units have their movement allowance reduced by 1. No German mechanized unit may be placed in reserve. For purposes of advancing after combat on the 16AM turn, German mechanized units have their movement allowance reduced by 1MP, and no German mechanized unit may advance after combat farther than the number of hexes called for by the CRT. German units may attack only those Allied units facing their respective army staging areas as defined by the set up locations on the Order of Appearance Cards. Beginning with the 16PM turn, the German player may place mechanized units in reserve, and is free to attack any Allied unit (within the Army Boundaries restrictions of section 5.4).

Examples: On the opening move, units of the 5th Panzer Army may attack only those units between 28/110 and 14th Armored Cavalry, inclusive.

Units of the 6th Panzer Army may attack only those units between 14th Armored Cavalry and 102nd Armored Cavalry, inclusive. Units of the 7th Army may attack only those units between 4/12 and 28/109, inclusive.

16. REINFORCEMENTS

"Like Christ come to cleanse the temple."

—British officer describing Field Marshal Montgomery's entry to General Hodges' Headquarters.

16.1 When and Where Reinforcements Enter

Reinforcements may enter the game on the dates specified, in accordance with the players' Order of Appearance Cards. Each reinforcement group has a letter code listed next to its arrival time indicating which road or roads it may enter the map. Note that the Order of Appearance Cards may stipulate that certain geographical objectives be obtained before reinforcements are permitted to enter play.

16.2 Blocked Entry Hexes

If all designated hexes are blocked by enemy units or their ZOCs, reinforcements may be delayed (16.3) or enter the nearest map edge hex free of enemy units and their ZOCs. Reinforcements may enter the game in an enemy ZOC but must stop and move no farther.

16.3 Delayed Reinforcements

Players may delay the arrival of any new unit until a later game-turn. If a player chooses to delay reinforcements, they may be brought into play on any road hex containing a boxed letter along the same map edge they were scheduled to enter.

16.4 Entry Cost

A unit entering the map does so by expending at least one full movement point in the first hex entered.

17. VICTORY CONDITIONS

"If we reached the Meuse, we should have got down on our knees and thanked God —let alone try and reach Antwerp!"

—Generalfeldmarshall von Rundstedt.

The Victory Conditions for play of the Campaign Game, which is played from the 16AM turn through the 26PM turn, are as follows:

17.1 German Strategic Victory

The German player wins a Strategic Victory if he has at least one supplied unit in each of the three towns (Bastogne, St. Vith, and Marche), and he exits off the western or northern map edge a total of six supplied mechanized units, two of which must be armor (the equivalent of a panzer corps), from any road hex west of the Meuse River. The instant the German player accomplishes this, the game ends.

NOTE: Less than six supplied mechanized units exited does not qualify the German player for another victory level.

17.2 German Tactical Victory

The German player wins a Tactical Victory if, at the end of the game, he has three supplied mechanized units, one of which must be armor (the equivalent of a panzer division), across the Meuse River north of the town of Vireux (hex 5223), and there is at least one supplied German unit in at least two of the three towns (Bastogne, St. Vith, and Marche).

17.3 Draw

The game is a Draw (neither player wins) if, at the end of the game, the German player has at least one supplied unit in at least two of the three towns (Bastogne, St. Vith and Marche), and at least one supplied mechanized unit (1) across the Meuse River north of the town of Vireux (hex 5223) or (2) within one hex of a Meuse River hex side north of the town of Vireux (hex 5223), and south of the village of Ramet (hex 3204).

17.4 Allied Tactical Victory

The historical result. At the end of the game, the Allied player avoids both the German conditions for victory and those for a draw.

17.5 Allied Strategic Victory

The Allied player avoids both the German conditions for victory and for a draw, and at the end of the game there are no German units in the towns of Bastogne, Marche, and Houffalize.

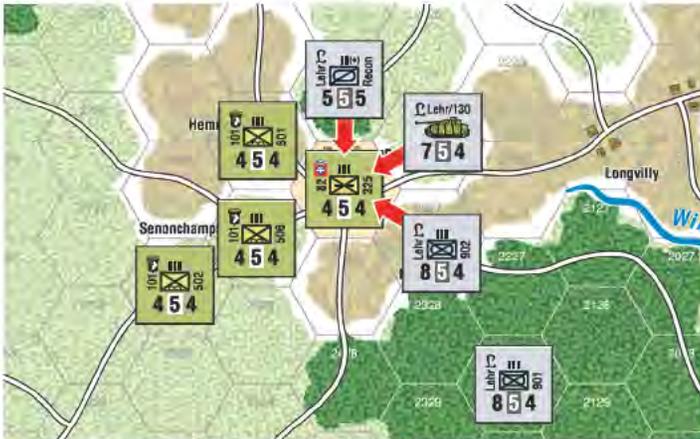
17.6 Victory Level Shift

Should the German player succeed in eliminating 48 or more Allied units, the victory level shifts one level in favor of the German player. Should the Allied player succeed in eliminating 12 or more German mechanized units, the victory level shifts one level in favor of the Allied player. In determining German losses, each panzer unit eliminated is considered equivalent to 2 mechanized units eliminated.

OPTIONAL RULES

18. FLANKING ATTACK AND COORDINATED DEFENSE (DIVISIONAL INTEGRITY)

A die roll modifier of -1 is applied when certain attacking divisions participate in flanking attacks. A die roll modifier of +1 is applied when certain defending divisions are attacked.



Example: Panzer Lehr is eligible for the flanking attack bonus - three of its four component units are involved in the attack. The 101st Airborne benefits from a Coordinated Defense, because it is an Allied Division with an ER of 5 and at least three of its four component units is adjacent to at least one other of the division.

18.1 Flanking Attack

When defending units occupying one hex are attacked from three hexes or from two non-adjacent hexes, one is subtracted from the combat result die roll if three units from one German mechanized division or three units from one Allied division possessing an ER of 5 or 6 participate in the attack. All units of the attacking division may, but need not, occupy the same hex.

18.2 Coordinated Defense

When a German mechanized division or Allied division has at least three units with an ER of 5 or 6 stacked together or positioned so that each unit is adjacent to at least one other unit of the division, one is added to the combat die roll for attacks against a hex containing one or more of these units.

18.3 Restrictions

- If any unit of the division is shocked (21.3) or unsupplied, a divisional integrity bonus may not be realized.
- The maximum number of divisional integrity die roll modifiers per combat is +1 or -1.

CANCELING THE BONUS: Fortifications and across-Meuse River attacks cancel the attacker's flanking attack bonus. If both attacker and defender possess divisional integrity, regardless of the presence of a Fortification or a Meuse River hex-side, no modifier applies.

19. SS PANZER SCARE

COMMENTARY: Attacking SS panzer units had a profound psychological effect on the American soldier during the opening stage of the battle. The combination of the fearsome Tiger tanks, which were often confused with Panther tanks, and the reputation of the SS soldier for tenacity and sometimes near reckless abandon in combat occasionally tipped the scale of battle.

RULE: On the 16PM through 17PM turns, after declaring combat where an attacking SS Panzer regiment is involved, (or SS Panzer Battalion - see rule 36), the German player rolls the die to determine if one shift to the right occurs on the CRT. This die roll is conducted after the American player declares any supporting artillery and/or aircraft. Compare the die roll to the highest ER of the defending units. If the die roll is equal to or greater than the ER, one shift to the right occurs. A maximum of one die roll attempt may be applied per attack, regardless of the number of SS panzer regiments (or battalions) involved in the attack.

Example: On the 17AM turn, the 12SS Panzer Regiment attacks the 9th Regiment of the U.S. 2nd Infantry Division. A die roll of 5 or 6 results in a shift to the right on the CRT.

20. ATTRITION

COMMENTARY: As the battle progressed, combat units, particularly mechanized, became subject to fatigue and mechanical breakdown.

RULE: Beginning with the 21AM turn, any mechanized attacking unit that has been in play for five or more days (ten turns) is subject to combat attrition. In any attack in which the combat result contains an asterisk on the CRT, the attacker is required to take a combat loss. The combat loss must be applied to a mechanized unit. In no case, may this combat loss be applied to a unit that is already reduced. If all attacking mechanized units are reduced, or if all attacking units are non-mechanized, ignore this result.

21. BOMBARDMENTS

21.1 In General

The attacker may use his artillery to bombard defending ground units immediately preceding a combat phase ground attack in hopes that the bombardment will shock the defenders. Artillery used to bombard may not provide offensive ground support in the same game-turn. Defending artillery may not bombard nor may it support friendly units being bombarded.

21.2 Procedure

It requires a minimum of two corps artillery units or two rocket units to bombard. Bombardments do not use the CRT, rather the bombarding player rolls one die for each enemy unit in the bombarded hex. If the result is greater than the defending unit's Endurance Rating, the unit is "shocked." Shock markers are provided to identify shocked units.

DIE ROLL MODIFIERS: Apply a +1 die roll modifier to the bombardment die roll if four artillery units (in any combination) bombard the same hex. Bombarding with more than four artillery units confers no additional benefit. Apply a -1 die roll modifier when bombarding an enemy fortification.

Example: The German player is bombarding a supplied American infantry unit with an ER of 4 in Dinant with three corps artillery and one rocket unit. A die roll of 4 occurs with both die roll modifiers canceling each other. The American infantry unit is not shocked because the die roll did not exceed the unit's ER of 4.

RESTRICTIONS: The hex bombarded must be adjacent to a friendly occupied hex, within range of the attacking artillery units, and must be subsequently attacked in the same combat phase. Bombardments may be conducted only once against a particular hex during a given combat phase.

21.3 Effects of Shock

Shocked units have their ERs reduced by one, and their combat factors halved (round any fractions up). Shocked units may not conduct Angriff attacks (rule 23). Shocked units not occupying a fortification must retreat in the combat phase if required by the CRT, regardless of the presence of a friendly leader unit. Leader units (rule 24) may not be shocked. Shock markers are removed at the end of the friendly player's turn.

22. CHALLENGING AIR INTERDICTION

22.1 Procedure

German mechanized units may enter an interdicted forest road hex by paying two additional full movement points and stopping. If a mechanized unit wishes to move into or through the interdicted hex using the road movement rate, it must challenge the interdiction (22.2).

22.2 Challenging the Interdiction

Roll the die after the challenging unit pays the road movement cost to enter the interdicted forest road hex. On a die roll of 1 or 2, the unit takes a step loss and must stop in the interdicted hex. On a die roll of 3 or 4, the unit must stop in the interdicted hex. On a die roll of 5 or 6, the unit may continue moving at the road movement rate. If a failed challenge results in a violation of the stacking limit, at the end of the movement phase, over-stacked units that challenged the interdiction must be eliminated.

23. “Angriff aus der Bewegung” (ATTACK ON THE MOVE)

“We were going through fast, all guns firing, straight up the road to bust through before they had time to get set.”

—1st Lt. Charles Boggess in Sherman tank “Cobra King.”

COMMENTARY: Occasionally, armored units would attempt to bypass an enemy defensive position while friendly infantry “tied down” or otherwise occupied the enemy. This attempt required significant coordination and some degree of subterfuge on the part of the attacker.

23.1 Angriff Attack Eligibility

Supplied German or Allied units may attempt an Angriff attack on odds of 2-1 or greater if the following conditions are met.

- Attacking units must include at least one armor/panzer unit (containing a silhouette) possessing an ER of 5 or greater.
- The attacker must have odds of 2-1 or greater. Should the defender commit defensive ground support resulting in odds less than 2-1, the combat must be conducted as a non-Angriff attack utilizing the standard CRT.
- An Angriff attack may not be selected if re-fighting an engaged battle.
- An Angriff attack may not be conducted during the 16 AM game-turn.

23.2 Procedure

The intention to use this tactic must be announced prior to the resolution of combat. The attacker uses the special Angriff Attack table. All die roll modifiers and column shifts still apply.

MAXIMUM ODDS: Due to the sequencing of the attacker's CRT shifts and die roll modifiers prior to the defender's CRT shifts and die roll modifiers, no Angriff attack against a defender in forest or broken terrain may ever exceed 3-1 odds.

RESTRICTIONS:

- Units may not be bombarded (rule 21) in the same combat phase prior to an Angriff attack.
- Shocked units (21.3) may not participate in an Angriff attack.
- Neither player may commit aircraft to an Angriff attack.
- A unit advancing after an Angriff attack may not cross an unbridged river hex-side unless it did not move during the movement phase.

23.3 Results

The defending unit is never retreated or forced to lose a step in an Angriff attack. An Angriff advance allows attacking mechanized units to advance in any direction except into the hex or into the ZOC of a unit defending in the attack. Mechanized units advancing after an Angriff attack must still abide by all movement, to include river hex sides, air interdiction, and advance restrictions, and must stop upon entering the first enemy ZOC. Non-mechanized attacking units may not advance at all, and at least one attacking infantry unit or mechanized infantry unit must remain adjacent to the defending unit(s).

24. LEADER UNITS

“One of the most interesting and tricky battles I have handled.”

—Field Marshal Sir Bernard Law Montgomery.

NOTE: This replaces the basic game's reserve rule.

COMMENTARY: Leader units represent various army and corps leaders and their staffs. They have the ability to influence combat and dispatch reserves (see illustration page 3).

24.1 Leader's Influence

The leader's influence is the number of battles a leader may affect in any player's turn.

24.2 Leader's Range

The leader's range represents a line of communication, in hexes, from the leader unit. The line of communication may be traced through any type of terrain, but may not be traced through an enemy ZOC unless the ZOC is occupied by a friendly unit.

24.3 Properties of Leader Units

Leaders may move as mechanized or non-mechanized units, interchanging between the two at any time. Leaders do not count towards stacking limits, with the exception that only one leader may occupy a given hex. Leaders may advance after combat when stacked with friendly attacking units. Leader units may be selected to satisfy combat losses. Leaders have no ZOC, no combat strength, and, if alone in a hex in an enemy ZOC, they are immediately eliminated.

24.4 Combat Capability

Any combat unit that is not shocked (or that is shocked and occupying a fortification) and is within range (24.2) of a friendly leader unit may take combat losses rather than retreat. If a player chooses to exercise a leader's influence, the entire retreat obligation must be satisfied by combat losses. The number of hexes to be retreated may not be split between step losses and retreated hexes. Units that participated in the combat but are not within the leader's range and shocked units not occupying a fortification must still retreat. A leader's influence may be used during attack and, again, during defense.

Examples:

1. A stack of units occupying the fortified town of Bastogne incurs a 1D2 combat result and is in range of a friendly leader unit. The stack must take a mandatory one combat loss and, in addition, may choose to remain in place and take two additional combat losses or retreat two hexes.
2. The mandatory step loss may come from any of the defending units. Any shocked units must retreat two hexes while unshocked units and shocked units occupying a fortification may remain in place by absorb-

ing two losses if in range of a friendly leader unit.

24.5 Reserves

PLACING UNITS IN RESERVE: At the start of each player's turn, any supplied mechanized unit may be declared "in reserve" by placing a reserve marker on the unit. Non-mechanized units may not be placed in reserve. Units in reserve may not move or conduct combat.

RELEASING UNITS FROM RESERVE: One of the following friendly leader units must occupy the same hex at the beginning of the mechanized exploitation movement phase for the reserve unit to be released: Manteuffel, Patton, or Collins. The remaining leaders may also release reserves, but only if they did not move, and only if they started the friendly player turn in the same hex as the mechanized unit to be released. The Peiper Panzer Regiment and Führer Escort Brigade (Fuh Es) may be released from reserve without the need for an accompanying leader. This exception reflects the aggressiveness and independent tactical initiative exhibited by their commanders, Jochen Peiper and Otto Remer, respectively.



MOVED COUNTERS: Three German Moved markers are provided in the counter mix to designate a leader unit that has moved.

PROCEDURE: After all combat, any reserve mechanized unit and the leader that released it may conduct an exploitation movement utilizing their full movement factors. The leader unit does not have to accompany the reserve unit, and may conduct exploitation movement only if it had not moved during the prior movement phase. No combat may be performed after this exploitation move.

LOSING RESERVE STATUS: If at any time a unit in reserve is adjacent to an enemy unit, remove the reserve marker; the unit is no longer considered in reserve. Only a leader unit may release a mechanized unit from reserve. Should a German leader unit be eliminated, immediately remove any reserve markers from mechanized units of the appropriate army.

MONTGOMERY: The Montgomery leader may influence combat and dispatch reserves of either Allied nationality. The other Allied leaders may do so only with units of their own nationality.

24.6 German Leader Restrictions

German leader units may release reserves only with mechanized units belonging to their own army. German mechanized reinforcements must be declared attached to one of the three German armies on their turn of arrival. German leader units, however, may influence any battle within range regardless of army affiliation. German leader units are obligated to abide by the same army boundary limitations as mechanized units belonging to the same army.

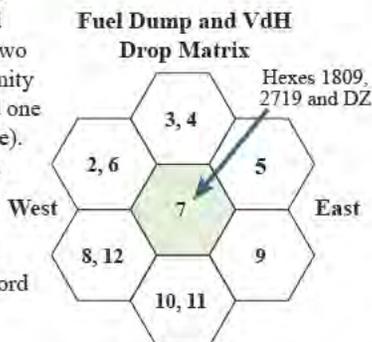
25. FUEL DUMPS

"They are deliberately sacrificing their armor to bleed us dry!"

—Colonel Hessler, *BATTLE OF THE BULGE*, Warner Bros. Pictures Inc.

25.1 Hidden Fuel Dumps

At the start of the game, the Allied player determines the location of two hidden fuel dumps, one in the vicinity of hex 1809 (Francorchamps), and one in the vicinity of hex 2719 (Samrée). Secretly roll the die twice for each fuel dump. Use the sum of the dice, and then reference the Fuel Dump Matrix (right) to determine the location of the fuel dump. Record the locations on a piece of paper.



EXAMPLE: If a 2 or 6 is rolled for the Francorchamps fuel Dump, the dump is placed in hex 1909.

25.2 Capture

At the moment a German unit enters a fuel dump hex and a line of supply can be traced from the fuel dump hex to the eastern map edge, the Allied player must declare its location, and the fuel dump is considered captured. Should the Francorchamps fuel dump be captured, any die roll on the Supply Shortage Table applicable to mechanized units of the 6th Panzer Army is ignored (do not re-roll the die). Should the Samrée fuel dump be captured, any die roll on the Supply Shortage Table applicable to mechanized units of the 5th Panzer Army is ignored (do not re-roll the die). If both fuel dumps are captured, the German player need not roll on the Supply Shortage Table for the remainder of the game. A fuel dump's location must be revealed whenever a German unit moves into the fuel dump hex, but it is not considered captured until the German unit can trace a German line of supply to the hex. Once captured, fuel dumps may be recaptured by the opposing player.

25.3 Destruction

At the moment a German unit is adjacent to an Allied occupied fuel dump hex, the Allied player has the option of declaring the location of the fuel dump and rolling the die for its destruction. Any supplied or unsupplied Allied ground unit may attempt to blow a fuel dump. If the Allied player declines the initial opportunity to blow the fuel dump, the next opportunity occurs at the end of the next Allied combat phase. One destruction attempt may be performed per fuel dump per turn. On a die roll of 1, 2, or 3 the dump is destroyed. The fuel dump hex must be Allied occupied, adjacent to an enemy occupied hex, and its location revealed prior to any destruction attempt die roll.

26. SURRENDER

"NUTS!"

—McAuliffe's reply to the German surrender demands at Bastogne.

RULE: Each turn beginning with the 17AM game-turn that units possessing an unmodified ER of 3 or less are determined to be out of supply, and are surrounded by enemy ZOCs in adjacent hexes, the die is rolled. If a "6" is rolled, one step loss from each affected unit is considered to have "surrendered." Full strength units are flipped to their reduced strength side while reduced strength units are removed from play. These die rolls are done before friendly movement and combat. Should a hex of out of supply units contain one or more units with an unmodified ER of 4 or greater, none of the units in the hex is subject to surrender.

27. PEIPER AND SKORZENY

"It's a long way to Tipperary, boys!"

—Lt. Colonel Jochen Peiper to prisoners of Battery B of the 285th Field Artillery Observation Battalion.

COMMENTARY: Kampfgruppe Peiper and Panzer Brigade 150, under the Command of Colonel Skorzeny, possessed special capabilities. Peiper's force was very strong with 5000 men, 100 tanks (including more than 40 Tigers), a battalion each of panzergrenadiers and self-propelled artillery, a motorized flak battalion, a combat engineer battalion, and a panzer recon battalion. Panzer Brigade 150 was disguised as an American unit of the 5th Armored Division and was partially equipped with captured American tanks and vehicles. It was intended to slip through Allied lines during the confusion caused by the attack of 6th Panzer Army.

27.1 Kampfgruppe Peiper

For the 17AM game-turn only, Kampfgruppe Peiper receives the following benefits:

- May ignore enemy ZOCs and air interdiction in the movement phase.

- If placed in reserve, may ignore air interdiction and may attempt to ignore enemy ZOCs during its exploitation movement. This is done by rolling one die for each attempt to move through an enemy ZOC. On a die roll of 1, 2 or 3 the attempt is successful. On a 4, 5 or 6 the attempt is unsuccessful and the Kampfgruppe must end its movement.

- If placed in reserve, it may attack after completing all units' exploitation movement. The attack must be conducted by the Peiper unit alone, without friendly air support or friendly artillery support, against any adjacent enemy unit(s). The attack is conducted normally with all applicable die roll modifiers and CRT shifts. At any time during this attack's advance after combat, you may convert the remaining unused hex advance to movement points and move Kampfgruppe Peiper through connecting road hexes at the road movement rate.

EXAMPLE: From hex 1211, Peiper attacks a reduced regiment in hex 1311. The result is a 1D3. Peiper may advance to hex 1311 and then advance 8 hexes along the road.

27.2 Panzer Brigade 150

On any one game-turn from 16PM through 18PM, Panzer Brigade 150 may attempt to ignore enemy ZOCs. This may be done only once by rolling a die for the attempt to move through an enemy ZOC. On a die roll of 1, 2 or 3 the attempt is successful. Any other die roll and the attempt is unsuccessful; the unit must end its movement. A successful "Skorzeny Sneak" may occur in either the German movement phase or the German mechanized exploitation phase. It may not occur during an advance after combat, and must stop upon entering the first Allied ZOC.

28. INTER-ALLIED COOPERATION

"We are going to lick the Germans here today!"

—General Ridgway, *Order of the Day*, 24 December, 1944.

28.1 British Movement Restriction

The 11/29 Armor Brigade and Montgomery leader are the only British units that may cross the Meuse River.

28.2 Stacking Restriction

Except for the Montgomery leader, British and U.S. units may not voluntarily stack together.

28.3 Combat Penalty

Due to the difficulty encountered in coordinating inter-Allied operations, one column shift benefiting the German player is applied on the CRT for any combat involving both American and British non-leader units.

28.4 Artillery and Aircraft

Artillery may support any combat involving at least one unit of its own nationality. Allied aircraft units may support combat involving either friendly nationality.

29. RANDOM EVENTS

"All you people here in this region are terrorists!"

—Peiper to M. Natalis, *Stoumont*.

Once during the game, at the start of the 18AM game-turn, after the placement of any Allied air interdiction, the German player rolls the die, and implements the directive.

#1: Von der Heydte (VdH) Parachute Drop Successful: The German player selects one non-forest, non-town hex north of the 6th Panzer Army boundary as the Drop Zone (DZ). He then rolls the die twice for each of the four VdH companies. Use the sum of the dice and reference the VdH Drop Matrix. The Matrix is the same as that used for Hidden Fuel Dumps - see Rule 25.1. The sum of the dice determines the landing site for each of the four companies. Each Allied unit entering a landing site hex occupied by a VdH company must make a die roll. 1, 2 or 3 = no effect. 4, 5 or 6 = unit must pay 1 additional MP to enter the hex. The Al-

lied unit attempting the hex entry must have an additional MP to expend prior to making the attempt. It costs the Allied player 1 additional MP to enter a landing site hex containing two or more VdH units (no die roll is required). Allied units may retreat without penalty through a hex occupied by one or more VdH units. Remove every company at the end of the turn that its hex has been entered by an Allied unit or the beginning of the 19AM game-turn, whichever occurs first.

#2: SS Atrocities Increase American Resolve: Add one to the die roll for all German attacks involving SS units on the next two game-turns.

#3: German Commandos Prevent Bridge Destruction: At the end of the German 18AM game-turn, the German player may designate one bridge north of the 6th Panzer Army boundary which may not be blown by the American player (this effect prevents demolition during the Allied 18AM game-turn).

#4: German Commando Deception: German player selects one town hex north of the 6th Panzer Army boundary. For the 18AM game-turn, each Allied unit entering the town must make a die roll. 1, 2 or 3 = no effect. 4 or 5 = unit may not use road movement for remainder of turn. 6 = unit must stop and end movement.

#5: Operation Bodenplatte Launched: At great risk, the Luftwaffe attempts to neutralize Allied Air Power. Each player rolls the die and subtracts this die roll from his next available, unused, air units, carrying over any excess losses to the next appropriate game-turn(s).

#6: Jagdtigers Reach the Bulge: The 653 Jagd Panzer (653 JPZ) may enter 18AM from any eastern board edge road hex containing a boxed letter. This unit does not count against stacking restrictions.

30. SCHNEE EIFEL

COMMENTARY: Without a doubt, the Schnee Eifel was the most rugged terrain in the Ardennes. This, in addition to the congested road net, limited the German breakout opportunity in this region.

RULE: On the 16AM turn, subtract one from the number of hexes that the Germans may advance or retreat after combat against either of the two Allied units in the Schnee Eifel (the 106/422 and the 106/423 regiments).

31. VARIABLE SURPRISE SHIFT

NOTE: This replaces rule 15.1 in the Basic Game. For each combat declared on the German 16AM turn involving a German mechanized unit possessing an ER of 5, the German Player rolls the die to determine if one shift to the right occurs on the CRT. The die roll is conducted after the Allied player declares any supporting artillery. If the die roll is greater than the highest ER of the defending units, then the surprise is successful, and the German player receives the shift. If the die roll is less than or equal to the highest ER of the defending units, then no surprise is achieved, and no shift is received.

EXAMPLE: On 16AM, Panzer Lehr attacks the 14th Armored Cavalry. A die roll of 5 or 6 results in a shift to the right on the CRT.

32. COMBINED ARMS BONUS

RULE: If an armor/panzer unit is attacking into a clear or light woods hex, in combination with both an infantry or mechanized infantry unit and an artillery unit, then the attacker receives a one column shift to the right on the CRT. The combination of attacking units need not occupy the same hex. The artillery must either provide offensive ground support or have successfully bombarded at least one of the defending units. The shift is negated if the defender occupies an improved position.

33. MONSCHAU ARTILLERY RESTRICTION

During the initial staff planning for the offensive, Field Marshal Model, commander of Army Group B, forbade the use of artillery on the historic town of Monschau. His staff conveyed that he wished to save the historic buildings and landmarks within the town. Therefore, the 6th Panzer Army artillery was not free to use their guns on the American defense located in the town. During the course of the battle, the town escaped the artillery pounding that occurred throughout the rest of the front. Should this optional rule be selected, the German player may not use artillery support in any initial attack on the town of Monschau. This restriction applies only for the 16AM game-turn.

34. ACCELERATED ALLIED LEADER REACTION

The German offensive came as a complete surprise to the Allied High Command. At the time, it was felt that the Germans were capable of only limited offensive action. German radio jamming, and the effects of the initial artillery bombardment, to include long range artillery, which focused on centers of communication, succeeded admirably in creating confusion within the Allied ranks. Initial impressions were that the offensive could be nothing more than local "spoiling attacks," or an attempt to shorten the defensive line in key locations. This optional rule assumes that the Allied leaders were more prompt to react to the reports of German attacks. Allow all Allied leader units to move their full movement allowance beginning with the 16AM game-turn.

35. GERMAN 7th ARMY GARRISON

The primary objective of the German 7th Army was to provide flank protection for the 5th Panzer Army. Hitler envisioned the 7th Army advancing as far as Luxembourg City, Arlon, and Neufchateau. The more realistic German General Staff recognized the fact that Brandenberger would be fortunate to get half that far, and directed him to capture Martelange to the west and Mersch to the south. Of the three German Armies, the 7th Army was the only one to come close to attaining its objectives, a fairly remarkable feat given its limited resources.

Utilizing this optional rule, the German player must occupy the towns of Mersch and Consdorf, and hexes 1134 and 0335 at the beginning of each German game-turn from 18AM through 21PM. For each game-turn that this condition is not met, the movement factor of every unit assigned to the German 7th Army is reduced by one during the German movement phase, and movement for German 7th Army mechanized units during the mechanized exploitation phase is prohibited.

VARIANT RULES

36. THE PEIPER ALTERNATIVE

The Peiper Alternative Variant may be used with the Campaign Game, the Extended Campaign Game, any of the scenarios beginning on 16AM, the Early German Offensive Scenario and the Southern Shoulder Scenario. It is not applicable to the Patton's Relief of Bastogne Scenario or the Erasing the Bulge Scenario. For actual tournament play, this variant is not used for the Eight-Turn Scenario that begins on 16AM, but is used for the Six-Turn Scenario that begins on 16AM.

The Peiper Alternative (PA) replaces the single Kampfgruppe (KG) Peiper unit with three separate units representing the battalions comprising the KG, including elements of HQ 1st SS Panzer Regiment, artillery, engineer, and an attached Luftwaffe flak battalion. The three PA units are equal in combined combat strength to the original KG Peiper unit, and

retain the endurance rating of 6 and movement allowance of 5. The PA units are:



Standard Alternate

Also used with the PA is a Peiper leader unit. The alternate Peiper leader unit is to be used only if the SS Atrocity Random Event occurs.

The PA KG Peiper combat unit retains all the properties listed under rule 27.1 In addition, the following rules are in effect:

1. All PA KG Peiper units must be within 2 hexes of at least one other PA unit at the end of any movement or combat phase, including advance after combat. Allied units and their ZOCs may be present between PA units that are within 2 hexes of each other. There is no requirement for PA KG Peiper units to be within 2 hexes of another 1st SS Pz Division regiment. The Peiper leader unit may not be used to determine the "within 2 hex" rules for other PA units.
2. If possible, no PA unit may end a retreat more than 2 hexes from another PA unit. A PA unit which ends a retreat more than 2 hexes from another PA unit, must, by the end of the following German player's turn, be within two hexes of at least one other PA unit.
3. Only the 1st SS Pz Battalion and Abteilung (Abt.) 501 receive the SS Panzer Scare benefit. If both these units are in the same attack, only one SS Panzer Scare die roll is allowed. If 1st SS Pz Battalion and Abt. 501 are in their own separate attacks, each attack is eligible for a SS Panzer Scare die roll.
4. In addition to 1/1st SS PzGr Regt and 1/2nd SS PzGr Regt, both 1st SS Pz Battalion and 3rd SS PzGr Battalion are required for 1st SS Pz divisional integrity for a flanking attack or coordinated defense die roll modifier. Schwere SS Pz Abt. 501 is not necessary for 1st SS Pz divisional integrity. (Note: Although attached to KG Peiper, Schwere SS Pz Abt. 501 was an independent heavy Tiger battalion with primary assignment to 1st SS Pz Corps.)
5. Abt. 501 and 1st SS Pz Battalion may each qualify separately as contributors to a combined arms bonus. The 3rd SS PzGr Battalion does not qualify as a contributor for determining a combined arms bonus. Both Abt. 501 and 1st SS Pz Battalion require participation of an infantry regiment or panzergrenadier regiment, and an artillery unit to qualify for the combined arms bonus.
6. Similar to the standard KG Peiper (15-6-5) unit, all three PA units are free to ignore engaged combat results.
7. All PA KG Peiper units may be stacked with other German units. All three PA units, when occupying one hex, are treated as one unit for stacking purposes. Otherwise, all solitary PA units are treated as 1/3 of a unit for stacking purposes. There is no additional movement point cost in stacking or separating PA units. Within the aforementioned conditions, PA units may combine, separate, and recombine with themselves or other units at the German player's discretion.
8. Individual PA KG Peiper units are considered 1/3 of a unit for purposes of exiting the map. All three PA KG Peiper units are required to exit the map to count as one unit for determining victory conditions. The Peiper leader unit does not count towards units contributing to victory conditions.
9. A PA KG Peiper unit does not have a ZOC unless stacked with the PA 3rd SS PzGr Battalion. The 3rd SS PzGr Battalion does not have its own ZOC; it only serves to create a ZOC when it is in the same hex with one or both of the other PA KG Peiper units.
10. A PA KG Peiper unit Endurance Rating benefit occurs regardless of the number of PA units occupying a hex.
11. Providing all three PA units are at full strength and located in the same hex, they may combine and be replaced with the standard KG

Peiper (15-6-5) unit. Conversely, the standard, full strength KG Peiper (15-6-5) unit may, in the same fashion, be broken down into the three PA units. This may occur at any time during a game-turn, including the combat phase, for the purpose of resolving a firefight or advance or retreat after combat. Subsequent to unit combination or unit substitution, the remaining movement allowance is the least number of movement points remaining from among the involved units.

Example: During a German movement phase, the three PA units move into the same hex. In doing so, 3rd SS PzGr Battalion expends 2 MPs; 1st SS Pz Battalion expends 3 MPs, and Abt. 501 expends 5 MPs. All three PA units are then substituted with the standard Peiper (15-6-5) unit. The unit may move no further this movement phase because Abt. 501 expended all 5 of its MPs.

12. If any of the PA KG Peiper battalion units are reduced or eliminated, no replacement with the standard KG Peiper unit is allowed.

In addition to conforming to standard DBW leader rules (combat influence, range, movement, etc.), the Peiper leader unit operates with the following special rules:

1. It may only be used in conjunction with the three PA units or standard Peiper (15-6-5) unit. It has no influence or effect on any other German unit used in BW. If stacked with non-KG Peiper units that are attacked, it may not convert retreat hexes into step losses for the non-KG Peiper units. It may convert retreats into step losses only for the three PA units. The Peiper leader unit may be chosen as a step loss in combat only when stacked in the same hex with another PA unit.
2. It may move and release PA reserve status units in the same turn, similar to the Manteuffel and Patton leader units.
3. Any number of PA KG Peiper units, including the standard Peiper (15-6-5) unit, may be placed in reserve, and may move in a Mechanized Exploitation Phase (MEP) only if released by the Peiper leader unit or the Dietrich leader unit.
4. The Peiper leader unit must conform to the “within 2 hex” rules for PA units at the end of the MEP.
5. If the SS Atrocity Random Event is rolled, the “standard” Peiper leader unit must be immediately changed to the alternate “mug shot” Peiper leader unit. This replacement is in effect for the remainder of the game. The “mug shot” unit retains the same capabilities as the “standard” Peiper leader unit.
6. The Peiper Leader unit is an exception to rule 24.3. It is free to stack with other leader units in the same hex.

37. GERMAN ARMY ARTILLERY

This variant adds one artillery unit counter for each of the three German armies and introduces army command and control for the German Corps Artillery and the Nebelwerfer Brigades. The German Army Artillery Variant may be used with the campaign games and any of the scenarios.

37.1 German Army Level Artillery Assets

These units are essentially undersized, immobile, Corps Artillery Groups. The army designation (XXXX) reflects their organization, not their size. They have guns that vary in range. They are governed by all rules for German Corps Artillery except as follows: they stack for free; they are immobile and may not move. If they are required to retreat, they are eliminated instead.

The starting locations for the German Army Level Artillery units are shown on the German Order of Appearance Card. These starting locations are identical for all applicable scenarios except the Plan Martin Scenario. For the Plan Martin Scenario, each of these units may be placed in any hex of their respective army set-up area that is not adjacent to an Allied combat unit.

37.2 German Artillery Command and Control

The German Artillery Command and Control System was exceptional. However, during the Battle of the Bulge it was proven beyond a doubt that the American System was second to none. US Army Field Artillery units were equipped with an abundance of transport and ammunition. The US Army Artillery Command and Control System was vastly superior with its unique Fire Direction Centers, L4 Air Observation units, Graphical Firing Tables, and especially its FM Radio Network. The US Army Artillery FM Radio Network allowed artillery battalions from neighboring Corps and Armies to be called when help was needed. No other country possessed the resources necessary to permit this flexibility. When using this variant, the flexibility of German artillery is curtailed in order to more accurately reflect its inferiority to the American system. For the first 3 days (6 game-turns), the German Corps Artillery units and Nebelwerfer Brigades of the 5th Panzer Army, 6th Panzer Army, and 7th Army must adhere to the same army boundary restrictions as German mechanized units. They may not violate each other’s army boundaries as described below.

- a. The German Corps Artillery units and Nebelwerfer Brigades of the 6th Panzer Army may not attack into, move into, or move south of the road beginning at hex 0915. The German Corps Artillery units and Nebelwerfer Brigades of the 5th Panzer Army may move along this road and attack out of it, but may not move north of the road. The German Corps Artillery units and Nebelwerfer Brigades of both armies may use the road from 0613 to 0914 (inclusive).
- b. The German Corps Artillery units and Nebelwerfer Brigades of the 5th Panzer Army and 7th Army may move along the road beginning at hex 1129 and attack out of it, but 5th Panzer Army German Corps Artillery units and Nebelwerfer Brigades may not move south of the road and German Corps Artillery units and Nebelwerfer Brigades of 7th Army may not move north of the road.
- c. German Corps Artillery may only provide offensive or defensive support to combat involving at least one unit of the same army designation. Furthermore, German Corps Artillery may only bombard enemy units that are adjacent to a hex containing at least one German unit of the same army designation.
- d. The German Artillery Command and Control restrictions are removed beginning with the 19AM game-turn. German Corps Artillery units and Nebelwerfer Brigades may retreat across an army boundary but must conform to the army boundary rules at the earliest opportunity. Those German Corps Artillery units and Nebelwerfer Brigades that move west of an army boundary termination point prior to the 19AM game-turn are free to ignore the boundaries for the remainder of the game.

38. ADDITIONAL RANDOM EVENTS

For players who wish to explore additional historical subtleties associated with the Battle of the Bulge, it is recommended that these Random Events be used in addition to those provided in Section 29 of the rules. The first set of additional Random Events become possible on the German 17AM turn. The second set of additional Random Events become possible on the German 19AM turn.

Players may use either or both sets of the Additional Random Events for the Campaign Game, the Extended Campaign Game, the Six-Turn scenario beginning on 16AM, the Eight-Turn scenario beginning on 16AM and the Southern Shoulder Scenario. They are not intended for use with the Patton’s Relief of Bastogne Scenario, the Plan Martin Scenario or the Early German Offensive Scenario.

38.1 Additional Random Events – 17AM.

The German player rolls two dice at the beginning of the 17AM turn and the results are applied.

17AM

ROLL RANDOM EVENT

- 2-3 Night Sights for 3rd Panzer Regiment, 2nd Panzer Division. Increase ER of regiment to 6 on all PM turns beginning with the 17PM turn.
- 4 Bayerlein distracted by Belgian locals. The movement factor of all Panzer Lehr units is reduced to 2 for the 17AM turn.
- 5 Sepp Dietrich gets bombed and may not release reserves from 17AM through 18PM.
- 6 The Heiderscheid bridge (hex 1630) may not be blown by the American player on the 17AM or 17PM turns.
- 7 For the rest of the game, the Samrée Dump may only be blown on a die roll of 1.
- 8 Damned Engineers. One time during the game, the Allied player may designate a bridge blown without a die roll; however, all other bridge blowing requirements must be met. This event does not negate 18AM Random Event #3.
- 9 Rear Area Hysteria. The movement factors of Generals Hodges and Middleton are halved until the end of the American 18PM turn.
- 10 The 106th Infantry Division receives air supply. Regiments of the 106th that are east of the Our River are automatically in supply on Dec 17 and Dec 18. For each of these regiments that begins an Allied turn west of the Our River, the normal supply rules are in effect. The US player does not need to designate aircraft for this result to take effect.
- 11-12 The Fuh Gd Brigade arrives as a reinforcement for the German 7th Army on 17AM.

38.2 Additional Random Events – 19AM.

The German player rolls two dice at the beginning of the 19AM turn and the results are applied.

19AM

ROLL RANDOM EVENT

- 2 German logisticians are fully prepared for the Ardennes Offensive. German mechanized units are not subject to German Supply Shortage (see 12.6) for this game. Also, include the German artillery supply event listed directly below (dice roll 3).
- 3 German logisticians are better prepared for the Ardennes Offensive. Starting on 19AM, German artillery may use their combat strength once during each player turn (see 10.1).
- 4 Operation Spätlese. The German 15th Army launches its planned offensive on 21AM. The Germans receive no reinforcements after 22AM. The Allies receive no American reinforcements on the north edge (K-Q) after 22AM. Also, reduce Allied aircraft by two units for each turn from 24AM through 26PM.
- 5 Hitler agrees with Manteuffel that the German 7th Army needs a mechanized division. The 9th Panzer Division reinforces the German 7th Army on the 19AM turn.
- 6 Hitler agrees with Manteuffel that the German 7th Army needs a mechanized division. The 15th Panzer Grenadier Division reinforces the German 7th Army on the 19AM turn.
- 7 Kampfgruppe Peiper receives air supply. Peiper is automatically in supply from the German 19AM turn through the Allied 21 PM turn.

- 8 Operation Spätlese Delayed. The German 15th Army launches its planned offensive on 22AM. The Germans receive no reinforcements after 23AM. The Allies receive no US reinforcements on the north edge (K-Q) after 23AM. Also, reduce Allied aircraft by one unit for each turn from 24AM through 26PM.
- 9 US Infantry bombed by 9th Air Force. Immediately reduce a full strength US infantry regiment north of the 6th Panzer Army boundary. Hex Priorities: #1 - Malmedy; #2 - Any other town; #3 - Any other hex. If there are no full strength infantry units available, re-roll the Random Event.
- 10 The Russians launch their anticipated winter offensive early. The German player receives no aircraft units after the 24PM turn and the German reinforcements that are scheduled to arrive on 25AM and 25PM are sent to the Eastern Front instead.
- 11 Hitler directs more "V-Weapons" at Liège instead of Antwerp. Main fuel dumps at Liège are destroyed. Allied mechanized units suffer fuel shortages. The movement allowance of most Allied mechanized units is reduced from 5 or 4 to 3 from 23AM through 26PM. Eight units are not affected: 4CCA, 4CCB, 4CCR, 6Cav, 2Cav, 6CCA, 6CCB and 6CCR.
- 12 Hitler directs all "V-Weapons" at Liège. Ammo and fuel dumps at Liège are destroyed. Most Allied artillery units may only use their combat strength once per game-turn from 23AM through 26PM. Six artillery units are not affected: 193, 203, 183, 177, 182 and 404. Also, include the fuel dump event listed directly above (dice roll 11).

38.3 Additional Random Events – Commentary

Night Sights. The rested and reconstituted 3rd Panzer Regiment was at full strength and its new Panthers were equipped with brand new infrared night sights. This event assumes that after the first employment of the sights on 16PM the unit attains reasonable proficiency.

Bayerlein Distracted. General Bayerlein was a veteran of North Africa and Normandy. After the virtual annihilation of his Panzer Lehr Division in Normandy, he became pessimistic and cynical. During his advance on Bastogne, he accepted the advice of a Belgian farmer thought to be friendly to the Germans. Claiming to have intelligence about the American dispositions in the Bastogne area, the Belgian cautioned Bayerlein not to take the primary road leading into the town, because it was heavily defended (when in fact it was not). Bayerlein took the advice and led his lead elements down a secondary road, which dwindled off into a muddy trail. This sidetracking cost the division several hours lost time. Furthermore, shortly after midnight on the 19th, prior to the arrival of U.S. 101st Airborne, a U.S. Army aid station was captured in the town of Mageret. Bayerlein gave orders for the aid station to care for German wounded. Later that morning, Bayerlein returned to the aid station under the auspices of seeking care for a minor splinter wound. Apparently, a nurse there had caught his eye. Bayerlein noted that the nurse was "young, blonde and beautiful." Rumors soon spread about his flirtations while his subordinates awaited orders. After the war, Field Marshal Manteuffel commented that Bastogne would have fallen prior to the arrival of the American 101st Airborne Division, had Bayerlein shown more élan and drive.

Sepp Dietrich Gets Bombed. We are not talking Allied aircraft here. It has been traditionally accepted that Sepp consumed liberal quantities of alcohol on 17-18 Dec and that he was ineffective during part of that time. After the battle, Colonel von der Heydte reflected that he had grave misgivings about Sepp's capability, as the commander always seemed to be drunk. It should be noted, however, that Sepp's embellished SS emblem does not depict crossed cocktail glasses as some historians have suggested.

Heiderscheid Bridge. There was confusion on both sides concerning the Heiderscheid Bridge and its structural integrity. A bridge near Heiderscheid was blown by the Germans in late December; however, two other bridges in close proximity remained intact.

Samrée Dump. The dump was captured by the 116th Panzer Division. The fuel and provisions obtained at this dump greatly assisted the German drive to Marche, Rochefort and Celles. This event does not give the dump to the Germans outright, but it does greatly increase the chance that it will be captured intact.

Damned Engineers. There is a famous book of this name that tells of the heroic exploits of the American combat engineers during the Battle of the Bulge. Peiper lamented about the bridges that were blown in his face by the Damned Engineers. This event allows the US player one heroic bridge blowing action by the immortalized, Damned Engineers.

Rear Area Hysteria. As intelligence of the German offensive was gathered by the US Army, it became clear that the Germans had committed Special Forces to the battle. When German parachutists were accidentally dropped in far-flung rear areas, lurid tales began to circulate about German commando operations. Then rumors grew worse when four Germans dressed as Americans were captured at an American fuel point after they mistakenly requested petrol instead of gas for their jeep. American officers all over Belgium, Luxembourg and France were detained by privates who quizzed them on their knowledge of baseball, geography and movie stars. This hysteria reached to the top, as Bradley was detained by suspicious sentries and Eisenhower's staff tried to curtail his freedom for fear of his safety. This event assumes that the two US generals near the front get the full-blown treatment by American privates who take the opportunity to exercise their unexpected authority over officers, regardless of rank.

The 106th and Air Supply. Air supply was requested by General Jones of the 106th on 17AM. Corps HQ informed him that supplies would arrive later that day. The IX Troop Carrier Command loaded forty planes with supplies for the 106th. Of these, 23 were able to take off from Welford, England before fog closed the base. The planes arrived over Florennes, Belgium on 17PM. The aircraft circled over Florennes until they were diverted to Liège. When they got to Liège, they were diverted all the way to Dreux in France. In a tragedy of errors, the mission was repeatedly botched until it was finally cancelled on 22 December. The lessons learned in this aborted mission were rapidly addressed and assured successful re-supply to the surrounded defenders of Bastogne. This event assumes that Allied coordination was successful for the 106th.

Führer Gd Brigade Arrives 17AM. One of Von Manteuffel's primary concerns was the ability of the 7th Army to keep pace with the 5th Panzer Army and cover his left flank. He lobbied for a mechanized division for the 7th Army, but his request was personally denied by Hitler. This event assumes that Hitler at least speeds up the western transfer of the Führer Grenadier Brigade.

German Logisticians. The Ardennes Offensive was a surprise to many, including quite a few Germans. Hitler kept the Ardennes Offensive a secret from most of his own people. As a result, German supply units were unaware of the offensive purpose for the supply dumps they were creating east of the Rhine. There were sufficient quantities of fuel and ammunition for the offensive, but it just could not be brought forward fast enough from so far in the rear. According to Hugh Cole, the problem was not a lack of supply, rather the difficulty in transporting it from dumps that were too far to the east. This event assumes German logisticians were told about the offensive and were able to position the main dumps accordingly.

Operation Spätlese. This was to be an offensive by the German 15th Army and the right pincer of Hitler's grandiose plan for a double envelopment. The 6th Panzer Army had to achieve certain objectives before Spätlese would be launched. The necessary objectives were never

achieved. Operation Spätlese was canceled on Dec 24, and certain 15th Army units were sent to fight in the Ardennes. This event assumes that Operation Spätlese is launched on 21AM. Thus, the German 15th Army does not send any units south, and the US 9th Army withholds those that have not yet begun their road march to the Ardennes. Allied air power would also be affected.

Delayed Spätlese. This event assumes that the 15th Army Offensive is only a diversionary attack to tie up US reserves. In this case, the German 23AM reinforcements are not withheld from the Ardennes and neither is the US 2nd Armored Division. The 2nd Armored began its road march on 21AM. Allied air power would also be less affected by a later and smaller Operation Spätlese.

Mechanized Division for the 7th Army. This event assumes that Hitler grants Von Manteuffel's request for a mechanized division for the 7th Army. It will be the 9th Panzer or the 15th Panzer Grenadier. Hitler actually granted some of Von Manteuffel's special requests.

Peiper and Air Supply. The Luftwaffe flew two air supply missions in order to get supplies to the isolated Peiper Kampfgruppe. Although the first mission was successful, the airdrop provided was too small. The second mission, which was comprised of 20 cargo planes, was unsuccessful, as most of the cargo fell to the 82nd Airborne. This event assumes that the Luftwaffe turns in a sterling effort.

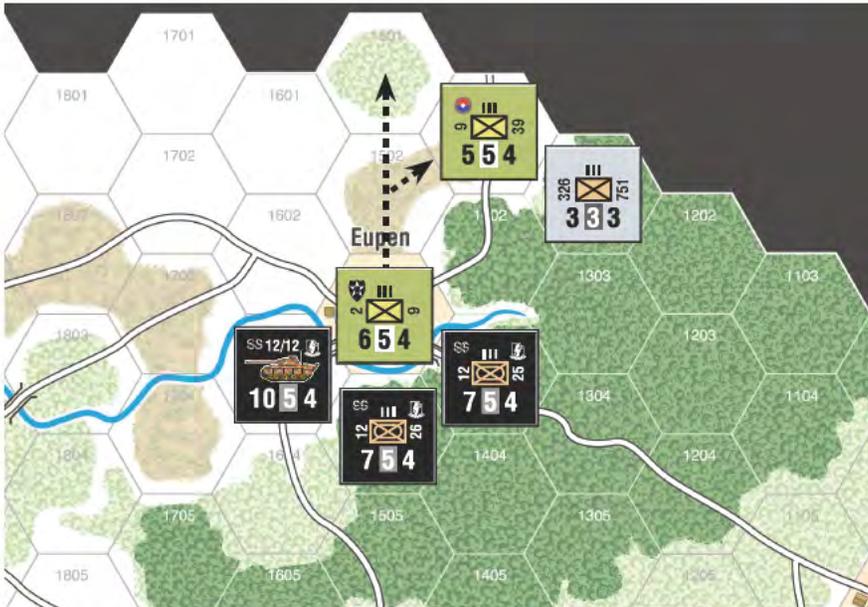
Friendly Fire. On Dec 24-25, the US 9th Air Force twice bombed Malmédy and the American 120th Infantry Regiment. The town was set afire and the regiment suffered a considerable amount of casualties.

Russian Winter Offensive. Stalin moves up the famous Russian Winter Offensive that was launched on 12 Jan. After WWII, Stalin claimed that the Russian winter offensive of 1945 saved the Allies' bacon in the Ardennes. This random event gives Stalin a reason to crow.

V-Weapon Offensive. From Dec 16 to 31 Dec, a total of 740 V-1's and 924 V-2's were launched against Antwerp and Liège to disrupt the flow of allied supplies to the Ardennes. Liège took most of the V-1 strikes, while Antwerp took most of the V-2's. One V-1 took out a 400,000-gallon fuel dump near Liège on Dec 17. On the other hand, the city of Antwerp was almost completely destroyed. The damage to Allied supply systems would have been greater if the Germans had concentrated more of the V-Weapons against Liège, which was the center of the largest supply dump network on the western front. There are two random events that address heavier V-Weapons attacks against Liège. The mechanized and artillery units of Patton's Third Corps and Twelfth Corps are not affected by these results, as they were supplied from Luxembourg City and Arlon.



EXAMPLES OF PLAY



12SS attacks US 2/9 in Eupen at 1-1 (-1DRM for flanking attack, doubled defense for attacking a town, 1 CRT shift left for attacking a town across a river). The result is D2. Although the Allied player would prefer to retreat in a westerly direction to hex 1601, he is obligated to retreat to hex 1501, closest to a friendly supply road in hex 1401, even though a German advance after combat or subsequent German move may result in the entrapment of both US 2/9 and US 9/39. Note that US 9/39 negates the German ZOC in hex 1401 for the purpose of tracing supply.



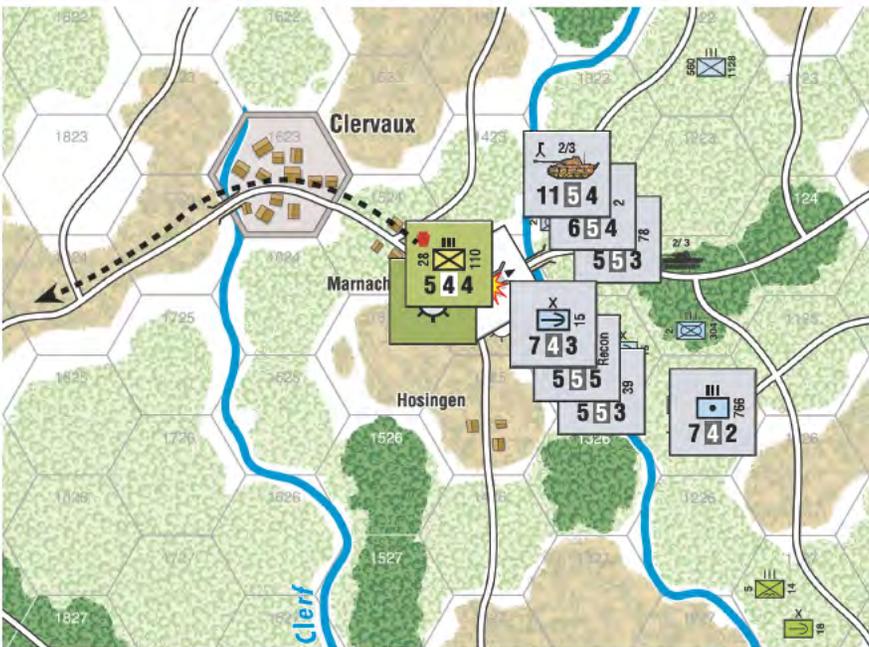
It is the German 17AM game-turn. Panzer Brigade 150 attempts a "Skorzeny Sneak" from hex 1311 to hex 1411 to surround US 2/23. A die roll of 2 results in a successful attempt. Panzer Brigade 150 must end its movement in hex 1411. It may not move to Ligneuville or Baugnez as it must end its movement upon entering the first Allied ZOC.



US 4/12 is attacked at 4-1 (1 CRT shift left for broken terrain). The result is D3. The first two retreat hexes must be along the supply road. Since a retreating unit may not voluntarily retreat off map, the Allied player may choose hex 2034 or hex 2135 as the final retreat hex. Had the result been a D4, the Allied player may retreat to any of the following hexes, being careful not to enter the same hex twice, as all are within one hex of a friendly supply road: 2033, 2034, 2134, 2135, 2234, and 2235.



After having conducted a successful “Skorzeny Sneak” with Panzer Brigade 150 into hex 1812, the German player decides to launch an “Angriff aus der Bewegung” attack vs. US 1/16 at 4-1 (-1 DRM for ER advantage). The result is Adv 2. Panzer Brigade 150 may not advance into hex 1913, as this would violate the rules of movement. For the same reason, it may not advance into hex 1912, as it did not start the game-turn next to the river hex-side. Panzergrenadier SS 3/2 advances into Francorchamps via hex 1810 in search of the hidden fuel dump. Note that at the end of the game-turn each KG Peiper unit remains within 2 hexes of another KG Peiper unit.



It is the opening game-turn and the German player chooses to attack the American “bloody 110th,” less the 26/78, which has been declared a bridge builder, at 3-1 (doubled defense for attacking across a river, 1 CRT shift left for broken terrain, German ER DRM cancelled by IP). The German player successfully die rolls a variable surprise shift, resulting in 1 CRT shift right for a 4-1. The result is a D4. US 28/110 must retreat to hex 1824. Although panzergrenadier 2/2 started its game-turn in hex 1324, rule 15.7 Traffic Jams prevents the unit from advancing further than the defender’s vacated hex (2 MPs for broken terrain, +1 MP for crossing a river into broken terrain). The German player chooses to advance only Lehr Recon into the vacated hex, whereupon it must stop. In the German Bridge Construction Phase, 26/78, accompanied by 2/3, are advanced into hex 1424, being careful to abide by the three ground unit stacking limit, and a new bridge is declared built.

DESIGNER'S NOTES

Randy Heller

This, the fifth edition of *Bitter Woods*, represents an evolution that first began with the game's initial release by The Avalon Hill Game Company in the summer of 1998. Since then, four editions have been published while attracting a large fan base through tournament play and garnering a number of hobby award nominations. This recognition and continued sales led Compass Games to contract for another edition, with additional and refined scenarios, plus larger size playing pieces for the benefit of our aging gamers.

I have read nearly every popular account of the battle, but it was not until I came across a gem of a little book entitled, *The Key to the Bulge, The Battle for Losheimergraben*, by Stephen M. Rusiecki, did I realize that the Germans had a reasonably good chance of reaching the Meuse River in force. Reflecting on other Battle of the Bulge games already published, it was apparent that few of them truly allowed for the opportunity to exploit this possibility. Once a steady Allied player rode out a few initial game-turns, the accumulating tide of Allied reinforcements typically saw play stagnate mid-game, with the German forces far from their objectives. My goal was to design a highly playable, relatively fast moving regimental level game, within the framework of a historically accurate order of battle and sound map research, which would reflect the strategy and tactics needed for the German forces to reach and cross the Meuse. It was important to me to ensure whatever chrome the game offered was applicable to fighting in the forested regions of the Ardennes, and not perceived as simply rules additions for the sake of complexity. For a game to be ultimately successful and played repeatedly, it must find the right balance between complexity and playability.

I had the pleasure of working on past Bulge game designs with both Danny Parker and Bruno Sinigaglio, who are both longtime friends. It was with their assistance that *Bitter Woods* undoubtedly has the most accurate order of battle of any regimental level Battle of the Bulge game. Primary research was conducted from records at the National Archives and OCMH in Washington D.C. Combat values were derived from Danny's work, which took a statistical analysis approach utilizing a linear regression that was both logical and well referenced. The map was drawn from 1944 U.S. Army series, 1 to 100,000 scale maps, and courtesy of Danny Parker. As an aside, Danny graciously gave me the original color map utilized by Hugh M. Cole to write the official U.S. history of the battle (dated June 1943).

Bitter Woods contains a number of noteworthy design decisions which I feel are of value and worth sharing:

The map depicts the primary road net in the Ardennes. Certainly there were a plethora of secondary and minor roads, some of which amounted to nothing more than dirt trails. However, attempting to deploy onto these numerous unpaved roads was something else again. Without the benefit of frozen ground, the secondary roads were often at risk of being churned into a quagmire of mud, particularly after a few vehicles traversed the ground.

Provided adequate German mechanized forces are dedicated from the start, the capture of St. Vith should be relatively easy. Not so with Clerveaux. The town, with its age-old chateau that served as the headquarters of the 110th Infantry, was a classic, natural fortification. The approach to and egress from Clerveaux were narrow and treacherous under combat conditions. The race to Bastogne by the 2nd Panzer was lost here due to the gallant action of the "Bloody 110th." To encourage a historically accurate town defense, Clerveaux was made a permanent fort with a unique "bottleneck" rule.

Few Bulge games accurately depict the heroic siege and relief of Bastogne. In fact, most experienced Allied players prefer to abandon this

vital road junction rather than sacrifice valuable units to a defense that seems to easily succumb to the first German attack. *Bitter Woods* encourages a defense of Bastogne by providing the Allied player with a reasonable chance of retaining the town. The German player, like his historical counterpart, is often torn between maintaining a western drive to the Meuse River or diverting a panzer corps to capturing the fortified town.

I felt one of the greater dilemmas a Bulge game designer faces is the breakout of Kampfgruppe Peiper. Should his infamous penetration of the Allied defense on the second day of the battle and headlong dash for the Meuse River be reflected with special rules? If so, should the breakout be a given or problematic? Few will argue that his boldness and tactical initiative were without peer in the 6th Panzer Army. Peiper's Kampfgruppe was well versed in night combat. The tactic employed was simple and straightforward - attack at full speed with all guns blazing. The gamble was bold and not without risk, but the results were often stunning. This reputation and the fact that had he attacked Stavelot on the evening of the 17th, rather than waiting until the following morning, would have carried him through Trois Pons and beyond, influenced me to address this potential. However, I did not feel circumstances warranted a guaranteed breakout. The net result is what I feel to be an elegant design approach that allows the players a reasonable opportunity to duplicate or thwart what is one of the most well-known aspects of the battle.

Air power is relatively depicted in the game based upon the number of flights flown per day. For example, the Germans committed 650 fighters on the 17th and another 849 on the 18th to the Ardennes battlefield. A little known fact is that the antiquated Ju-87 Stuka dive bomber was used in flights of fifty aircraft during the battle. The Germans attempted to use their aircraft in a predominantly ground attack role. For this reason, only the Allied player may additionally use his aircraft for supply and interdiction.

Bitter Woods offers a step reduction to depict unit losses. It is not until the upper limits of the Combat Results Table that one experiences outright defender elimination. Be careful not to misinterpret the meaning of unit removal. U.S. units were almost always removed from the front at twenty percent casualties; this would represent a defender eliminated. Figure ten percent losses represent a flip or step reduction. For the Germans, the formula is more difficult. German soldiers had a reputation for attacking in the face of imminent death and futility. Americans would not. So defender eliminated results for the Germans would represent a forty to fifty percent loss, or double U.S. losses.

Both sides were capable of building and destroying bridges and did both on multiple occasions throughout the battle. The primary research question is just what were the German bridge building capabilities? The Germans had two types of bridging equipment available, *Brückengerät* (bridge column) B and J. The J type was for heavier bridges, which were actually trestle bridges, unlike the pontoon B type. The J type could support tanks. If one adds up the numbers, there were eight J type columns distributed among the three armies and en route to Army Group B. The engineering capacity within each army also had to be considered. The net result was to limit the German player to eight tank-bearing bridges, no more and no less.

I believe that designing appropriate movement capabilities within the confines of the Ardennes battlefield represented my greatest conundrum. At the forefront of my mind was the keen desire to retain playability. Did I really want to task players with keeping track of movement costs to enter and leave an enemy zone of control, in addition to penalizing units for stacking, or could movement costs more easily be reflected by simply paying terrain costs? For the Allies, transportation and supply activities

were organized at the corps or army level in numerous truck battalions possessing hundreds of vehicles, making the American forces extremely mobile. Once the ground froze, off road mobility was surprisingly enhanced. As Cole points out, "When Combat Command Reserve started for Remichampagne on the morning of 26 December, the ground was frozen and tank going was even better than it had been during the summer pursuit across France."

This leads well into a discussion of artillery. U.S. artillery tradition had high morale and training. They were rich with ammunition, capable of multiple fire missions throughout the day, and highly mobile. The German artillery was limited because of the lack of ammunition, which made it absolutely necessary to hoard ammunition for important assignments, which were primarily offensive. German corps artillery was predominantly horse drawn, which made it slow to displace and move. German rocket units (*Nebelwerfers*), on the other hand, were an altogether different matter. The maximum range of the 15cm *Nebelwerfers* was 7,200 yards, exactly four miles or two hexes, but they were more accurate and more effective at three miles or 1.5 hexes. The 15cm made up at least two-thirds of the *Nebelwerfer* brigades in the Ardennes, hence the lower limit of 1.5 hexes rounded down to one hex. Cole states, "This weapon seems to have been a major feature in carrying German firepower forward during the Ardennes offensive." Parker states, "The lighter werfers were a major factor in carrying German firepower along with the armored spearheads." For these reasons, the *Nebelwerfers* maintain their mobility in *Bitter Woods*.

One of the greater challenges to designing a game on the Battle of the Bulge is not to lose sight of the need to maintain German momentum. If the Germans are too easily caught up in mirroring history by failing to break through the Elsenborn Ridge, then they are likely to meet a brick wall come mid-game and never have a realistic chance of reaching the Meuse River. I believe the failure of the German 6th Panzer Army to succeed in its initial breakout was a failure of its leadership, rather than it's potential. It is up to the designer and developer to place the gamer in a position to change history, not necessarily be pigeonholed into consistently recreating it.

Gamers will no doubt discover the major difference between *Bitter Woods* and many other Battle of the Bulge game designs lies in the dynamics of the Mechanized Exploitation Phase. Leader units will prove to be a two-edged sword. Although they provide the defender with the capability of retaining a defensive position rather than retreating, their ability to release reserves for mechanized exploitation has proven to be the greatest weapon in the German offensive arsenal. The Allied player must keep an ever watchful eye out for the possibility of a German mechanized breakthrough and attempt to provide a defense in depth whenever possible. For this reason, *Bitter Woods* can sometimes be unforgiving for a novice Allied player. Do not expect to do well against a seasoned German player without some game preparation. As with other Battle of the Bulge games, there is a learning curve to playing the Allies. Competitive play of *Bitter Woods* consistently reveals the edge lies with the Allies. As the Allied player, be patient and study your defense options. With continued play and acquired skill, you will soon develop the expertise needed to be a competent General Patton.

In closing, I was asked what I felt most proud of about this edition of *Bitter Woods*. First, I believe the fact that four different game companies, Avalon Hill, Multi-Man Publishing, L2 Design Group, and Compass Games, marketed successive editions represents a strong vote of confidence. Second, the gaming community, itself, continues to favorably acknowledge the game, particularly through active tournament play. And, lastly, game designer and historian Danny Parker's review of *Bitter Woods*, "Without question one of the finest regimental level Battle of the Bulge games ever produced. Carefully researched and beautifully executed. Highly recommended."



GAME CREDITS

Game Design: Randy Heller

Game Development: Bruno Sinigaglio

Special Assistance: Bob Ryan

Order of Battle: Bruno Sinigaglio, Danny Parker, and Randy Heller

Map Research: Danny Parker and Bruno Sinigaglio

Map, Player Aid Cards, Rules Layout and Counter Graphics: Mark Mahaffey, Mark Simonitch

Booklet Layout: Knut Grünitz

Box Cover Art: David Pentland

Box Design: Mark Mahaffey and Brien Miller

Historical Proofing: John Devereaux

Playtesters: Phil Evans, John B. Grant, Jr., Tom Gregorio, Paul Koenig, Brian Laskey, Steve Likevitch, Forrest Pafenberg, Bob Ryan, Eric Seadale, Bruno Sinigaglio, Daniel Tierney

Produced by: Ken Dingley and Bill Thomas

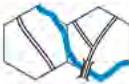
SPECIAL THANKS: To Pam, Reagan, and Courtney Heller who graciously allowed me the time to pursue my passion for "The Bulge."

Compass Games, LLC

P.O. Box 271
Cromwell CT 06416
U.S.A.

www. <http://compassgames.com>

Effects Summary Chart

Item	Movement Cost <small>non-mech / mech and artillery</small>	Combat Effect	Notes
 Clear	1 MP	<i>Combined Arms Bonus Possible</i>	2 MPs for all mechanized and artillery units during Mud.
 Light Woods	1 MP / 2 MPs	<i>Combined Arms Bonus Possible</i>	1 MP for all units during Ground Freeze.
 Broken	2 MPs	1 Shift Left	-
 Forest	2 MPs	1 Shift Left	Armor units may not enter except on roads.
 Town	1 MP	Defender Doubled 1 shift left if all attacking units are across river	Artillery units are not doubled.
 Road	1/3 MP = German Inf. & Rockets 1/2 MP = German Corps Artillery 1/4 MP = All others	-	-
 Rivers	Units must start adjacent to river before they may cross. Armor, armored cavalry and artillery must stop upon crossing. +1 MP if entering forest or broken terrain hex.	Defender Doubled if all attacking units are across river	Artillery units are never doubled. Panther, Tiger, or Jagdtiger units may never cross unbridged river.
 Out of Supply	Movement Allowance Halved (rounded up)	Attack strength halved (rounded up) ER reduced by 1	Affected units may not build improved positions or fortifications and may not attempt to blow or build a bridge. Artillery may not provide offensive support.
 Improved Position	-	Negates attacker's ER advantage and <i>Combined Arms Bonus</i>	Has no benefit if defender already has an ER advantage.
 Fortification	-	Same as an Improved Position plus units may ignore CA results <i>-1 to bombardment die rolls and negates flanking attack bonus</i>	May only be built by Allied units in St.Vith, Bastogne and Marche.
 Artillery	Must stop upon crossing an unbridged river	Halved in defense (rounded up) if attacked by adjacent enemy unit	May provide Artillery support. Range is variable.
 Meuse River	Cost a unit its entire Movement Allowance	Same as river <i>negates flanking attack bonus</i>	Only infantry and armored infantry may cross unbridged Meuse River hex-sides.
 Army Boundary	-	For the first 3 days, mechanized units of the 5th Panzer Army, 6th Panzer Army and 7th Army may not violate Army Boundaries.	
 Interdiction	+1 or +2 MPs <i>Optional: Rule 22</i>	-	Allied player only.
 Ground Support	-	1 Shift	No more than one per combat.