An Historical Simulation Game

the time is: 0500 hours, 16 December 1944

The Ardennes Offensive

THE BATTLE OF THE BULGE, DECEMBER 1944



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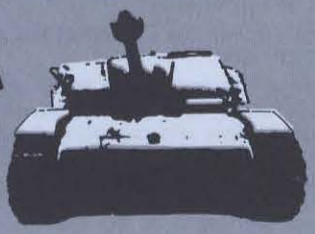
"ARDENNES OFFENSIVE" is SPI's name for its WW II Battle of the Bulge game. T.M. applied for.

The Ardennes Offensive



THE BATTLE OF THE BULGE, DECEMBER 1944

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[1.0] INTRODUCTION

The *Ardennes Offensive* is an historical simulation of the German attempt to break through the Allied front in the Ardennes in December 1944. The historical scenario covers the period December 16th through January 2nd, and portrays the actual forces which converged on the battlefield. Several optional scenarios permit the "What if?" possibilities of the battle to be simulated.

[2.0] GENERAL COURSE OF PLAY

The *Ardennes Offensive* is basically a two-player game. It is played in sequenced turns, called Game-Turns, during which the Players move units on the map, have combat and attempt to achieve certain objectives. The German Army is attempting to destroy the Allied forces and achieve a penetration to unhinge the entire Allied front in Western Europe. The German objective is to eliminate Allied units and occupy "exit" hexes on the northern, western and southern edges of the map. The Allied objective is to prevent the Germans from achieving a significant penetration, while shattering the last remaining German strategic reserve, by eliminating units.

In the initial Game-Turns the German has a marked superiority of force and an inherent tactical advantage. He must exploit these factors and realize his objectives by Game-Turn 7 (December 22) or he will probably lose the game. The Allied Player starts in a weak position. He must concentrate on holding the "shoulders" while blocking the vital cross-roads in the center. Time is on his side as reinforcements become available.

The game is won by scoring Victory Points. The exit hexes are worth a certain amount of Victory Points to the German Player. Casualties inflicted upon the opposing army are worth points to each Player.

[2.1] GAME LENGTH

Each complete Game-Turn represents one day of real time. The game extends eighteen Game-Turns from December 16, 1944 to January 2, 1945.

[2.2] GAME SCALE

Each hex represents 3.15 kilometers of land. Each regiment sized unit represents 1,000 to 6,000 men.

[3.0] GAME EQUIPMENT

[3.1] THE GAME MAP

The 22"x28" mapsheet portrays the Ardennes, an area where Germany, France and Luxembourg meet, and through which the Germans launched their attack. A hexagonal grid is superimposed upon the mapsheet to regularize the movement and position of the playing pieces.

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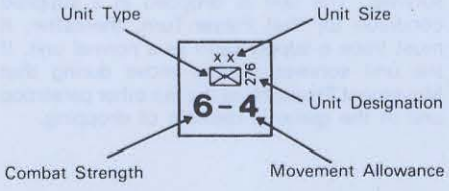
[3.2] GAME CHARTS AND TABLES

Various visual aids are provided for the players to simplify and illustrate certain game functions. The Combat Results Tables illustrate the resolution of combat, and give the actual combat results. The Terrain Effects Chart summarizes all Movement Points cost expenditures and details the effects of terrain on combat. The Supply Effects Chart details the effects of Supply Status on units for their offensive and defensive Combat Strength, and Movement Allowance. The Turn Record/Reinforcement Chart records the progress of the game, and details when reinforcing units arrive. The Victory Points Charts indicate the cumulative total of the Player's towards winning the game.

[3.3] THE PLAYING PIECES

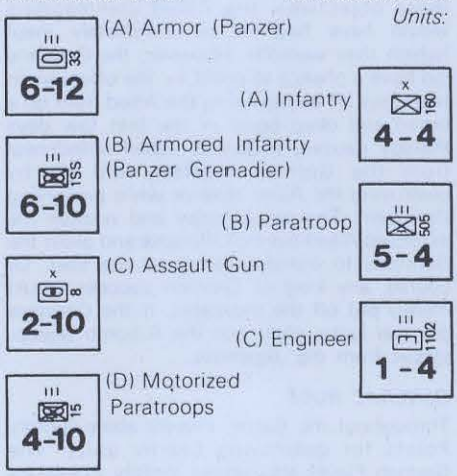
Two differently colored sets of playing pieces (henceforth known as units) are supplied. These units represent the actual forces controlled by each side in the original battle. There are a number of different types of units; various markers are also supplied to record certain game functions. The playing pieces are distinguished by color, type, strength and mobility, as represented by the various numbers and symbols on the face of each piece. It is recommended that Players sort and store their units by type and color; this greatly reduces set-up time.

[3.31] SAMPLE UNIT



[3.2] SUMMARY OF UNIT TYPES

Unit type is used to determine the general classification of the unit (Mechanized or Non-Mechanized). These classifications are of major importance in the game.



[3.33] DEFINITION OF TERMS

Unit Size is used to determine Stacking capabilities.
XX – Division (9,000 to 14,000 men)
X – Brigade (2,000 to 6,000 men)
III – Regiment (2,000 to 6,000)

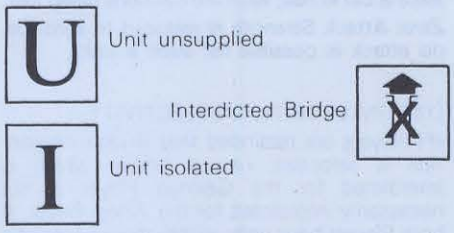
Unit Designation is the nationality and specific name of the historical formation represented.
Gd. = Guard
cca,ccb,ccr = combat command A, combat command B, combat command Reserve
Fr. Lt. = French Light Infantry
SS = Schutz Staffel
F.E. = Fuhrer Escort
F.G. = Fuhrer Guard

Combat Strength is the basic fighting power of a unit. It is a numerical expression of the effectiveness of the unit (see Combat) in terms of Combat Strength Points. A unit with a Combat Strength of "7" has seven Combat Strength Points.

Movement Allowance is the basic maximum number of hexagons which a unit may move in one Movement Phase. A unit expends one or more Movement Points in moving one hex (see the Terrain Effects Chart).

[3.34] UNIT AND BRIDGE STATUS MARKERS

These counters are used to illustrate units affected by certain Supply and Movement Rules, and to identify Interdicted bridges.



[3.4] GAME EQUIPMENT INVENTORY

A complete game of *The Ardennes Offensive* should contain:
one Game Map
one set of die-cut counters
one set of Rules
Turn Record/Reinforcement Schedule
one die

[4.0] SEQUENCE OF PLAY

Ardennes Offensive is played in turns. Each *Game-Turn* is composed of two *Player-Turns,* the first German, the second Allied. Each Player-Turn is composed of six *Phases.* The Player executing the phase of his Player-Turn is called the "Phasing Player." A typical Game-Turn will proceed as outlined below:

[4.1] SEQUENCE OUTLINE

A. GERMAN PLAYER-TURN

1. *Reinforcement Phase:* the Phasing Player places all new units on the game map, in accordance with the rules of Reinforcement.

2. *Supply Judgment Phase:* the Phasing Player determines the supply condition of all his units, placing "unsupplied" and "isolated" markers as necessary. Place Bridge Interdiction markers.

3. *Initial Movement Phase:* the Phasing Player may move all his units, as allowed by the Movement rules.

4. *Combat Phase:* the Phasing Player may attack Enemy units adjacent to his own, at his option. At the start of each attack, the supply condition of the defending Enemy units is determined.

5. *Mechanized Movement Phase:* the Phasing Player may move (again) only his *Mechanized* units. This movement is in *addition* to that of the Initial Movement Phase. No combat occurs during or after this phase. (See the unit type symbol on each unit to determine if it is mechanized or not). See Movement, case K.

6. Remove all supply condition markers.

B. ALLIED PLAYER TURN

The Allied Player executes Phases 1 through 6, becoming the Phasing Player.

C. The Game-Turn marker is advanced on the Game-Turn track, signalling the start of a new Game-Turn.

Note: Phases 3, 4 and 5 are critical ones in each Player-Turn. The play of the game essentially centers around each Player moving, having combat and then moving mechanized units again.

The above sequence is repeated eighteen times at which point the game ends. At that time, the Player's performances are evaluated in light of the Victory Conditions.

[4.2] SPECIAL DEPLOYMENT AND FIRST GAME-TURN RULES

GENERAL RULE:

Each Player sets up his forces as called for in the scenario chosen.

The Allied Player always deploys first. The German Player deploys second and then starts the first Game-Turn.

PROCEDURE:

Players mutually agree on a scenario. The Allied Player deploys as indicated in the scenario. The German Player deploys as indicated. The German Player begins the first Player-Turn subject to the following Special Case:

GERMAN PLAYER-TURN, Nr. One

German Reinforcement Phase: The German places his reinforcements on the map edge.

German Supply Judgment Phase: All German units are considered in supply for this *first Game-Turn.*

German First Movement Phase: The German Player loses this phase on the first Game-Turn.

German Combat Phase: The German Player allocates his attacks. On this Game-Turn German units have their combat strengths tripled (but *never* more than tripled)

German Mechanized Movement Phase: The German Player may move those mechanized units which were not involved in combat on the previous phase.

ALLIED PLAYER-TURN, Nr. One

Allied Reinforcement Phase: There are no Allied reinforcements.

Allied Supply Judgment Phase: The Allied Player places supply judgment counters on affected units.

Allied First Movement Phase: The Allied Player loses this phase.

Allied Combat Phase: The Allied Player allocates his atttacks. German units are tripled in defense.

Allied Mechanized Movement Phase: The Allied Player moves those mechanized units which were not involved in combat on the previous phase.

Remove all supply condition markers.

[5.0] MOVEMENT

GENERAL RULE:

During the Movement Phase, the Phasing Player may move as many or as few of his units as desired. Units move hex by hex through the

grid. Entering a hex requires a unit to expend one or more Movement Points.

PROCEDURE:

Move each unit individually, tracing the path of movement through the hexagonal grid. The unit may not be moved again or the path retraced and/or changed during that Movement Phase.

CASES:

[5.1] HOW TO MOVE UNITS

(A) Movement is never required, it is always voluntary. The Phasing Player may move all, some, or none of his units. During a Movement Phase only the Phasing Player's units are moved. No Enemy movement, and no combat may occur.

(B) Each hex contains ("represents") a certain type of terrain. The number of Movement Points a unit must expend to enter a hex varies with the Terrain. See the Movement section of the Terrain Effects Chart for a full list of these different "entry costs."

(C) Units may be moved as many or as few hexes as the owning Player desires, as long as the unit's Movement Allowance is not exceeded during the Movement Phase. Unused Movement Points may not be accumulated from Phase to Phase, nor transferred from unit to unit.

(D) A unit may move over different types of terrain in the same Movement Phase, provided the unit has enough Movement Points to expend when entering each type of hex. Terrain effects are cumulative, i.e., an Allied armor unit seeking to enter a West Wall hex through a non-road hexside situated in rough terrain would expend two additional Movement Points for the West Wall hex and four Movement Points for the rough terrain, for a total of six Movement Points.

(E) Each unit must be moved individually, though units may begin and end their movement in a stack. Stacks may not be moved together as a group.

[5.2] MOVEMENT PROHIBITIONS AND INHIBITIONS

(F) Units may never enter a hex occupied by an Enemy unit.

(G) A unit may only voluntarily leave a hex which is in an Enemy Zone of Control as permitted by the stacking rules (See Stacking and Zone of Control Rules).

(H) You may move into a hex containing a Friendly unit by paying the stacking Movement Point costs. However, in effect this prohibits moving through Friendly units since no unit in the game has sufficient Movement Points to stack and unstack with another Friendly unit in the same Movement Phase.

(J) Units which do not have the Movement Points to enter a given hex may not enter that hex.

(K) Only those mechanized units which did not participate in the immediately preceding Combat Phase may move during the Mechanized Movement Phase (see the Sequence of Play).

[5.3] ALLIED MAP EDGE HEXES

(L) The single row of tinted hexes running around the south, west, and north edges of the map are the Allied Map Edge hexes. These hexes may only be entered by Allied units and only under special circumstances. German units may never enter these hexes under any condition.

(M) Allied units may only enter Map Edge hexes when such a hex is the only open retreat route available when performing a retreat mandated by the Combat Results Table. Allied units in such hexes are in a "dormant" state, i.e., they have no Zone of Control, may not move, may not attack nor be attacked, and are not considered lost for Victory Point purposes (even if they never actively re-enter play). Such dormant units in Map Edge hexes can only be re-activated by bringing an "in-play" Allied unit adjacent to them on the "live" part of the map. At the beginning of any Allied Movement Phase in which this is so, the "dormant" unit(s) may reenter the game and operate in the normal manner.

(N) German units do exert a Zone of Control into Allied Map Edge hexes for the purpose of blocking retreat. German units which are themselves forced to retreat off the edge of the "live" map area, are eliminated instead.

(P) See the Zone of Control Rule, Stacking Rule, Retreat Rule, and the Reinforcement Rule for further characteristics of the Allied Map Edge hexes.

[6.0] ROAD MODE MOVEMENT

[6.1] COMMENTARY

The following rules simulate the effects of placing a unit in road march formation. Such a formation substantially increases the speed with which a unit may move along a road. A unit deployed in the road march formation cannot fight as effectively, however, and for this reason its Combat Strength is reduced.

A unit may move along a road regardless of whether or not it is in road march formation. Road march formation has certain benefits and certain restrictions not found in normal movement along a road. These will be explained more fully in the following rules.

The deployment of a unit into or out of road march formation takes time. On the scale of this game (basically, a regimental level), a unit consumes the better part of a day deploying into or out of road march formation (hereinafter referred to as "Road Mode"). Thus, to simulate time expended, the Road Movement rules call for the expenditure of Movement Points when units change their mode of deployment.

GENERAL RULE:

Units may be deployed and moved in two fashions: the normal (or "standard") mode, and the road march formation mode (referred to as the "Road Mode"). A unit does not have to be in Road Mode in order to move along a road. Note that a unit that is in "standard" mode may still ignore terrain effects when moving along a road (that is, when it moves from road hex to road hex by connecting hexsides crossed by road terrain symbol).
Any unit may enter into Road Mode. The Road Mode increases mobility, at a cost to combat effectiveness and deployment capability.

CASES:

[6.2] WHEN TO USE ROAD MODE

(A) Non-mechanized units may enter into, leave, or move, in Road Mode only during the Initial Movement Phase of a Friendly Player-Turn.

(B) Mechanized units may enter into, leave, or move, in Road Mode during the Intial Movement Phase of their Friendly Player-Turn. In addition, *if they have not engaged in Combat* during their *Friendly* Combat Phase, they may enter into, leave, or move, in Road Mode again in the Mechanized Movement Phase of their Friendly Player-Turn.

[6.3] MOVEMENT POINT COST TO CHANGE MODE

(C) When a unit enters the Road Mode, it pays *three* Movement Points if it is non-mechanized, and *six* Movement Points if it is mechanized. (Obviously, a unit must also be on a Road hex to enter Road Mode.) It then is turned face-down and is in Road Mode. To leave the Road Mode, the unit is turned face-up and pays a cost of *three* Movement Points if it is non-mechanized, or *six* Movement Points if it is mechanized.

[6.4] DURATION OF ROAD MODE

(D) Any unit in Road Mode remains in Road Mode until it is removed from Road Mode, either voluntarily or as a result of having attacked or defended in Combat (See Case L, below).

(E) A unit that is not in the Road Mode can only enter into Rode Mode volunatrily. It can never be forced to enter Road Mode.

[6.5] MOBILITY AND RESTRICTIONS IN ROAD MODE

(F) Units in Road Mode are restricted to Road and Bridge hexes. Furthermore, they may move only through Road and/or Bridge hexsides, and they may not move through an *interdicted* Bridge hexside. They ignore the effect of any other terrain in Road hexes.

(G) A unit in Road Mode may not stack with, nor be adjacent to, any other unit on that Road hex, or adjacent connected Road hexes regardless of whether or not the other unit is in Road Mode. (Sole exception: see Case N.)

(H) Units in Road Mode may move through a greater number of hexes per Movement Point, according to the folllowing formulae:

1. *All* mechanized units in Road Mode may move up to *two* Road hexes for each Movement Point expended while in Road Mode.

2. Allied non-mechanized units that are in Road Mode may move up to *ten* Road hexes for each Movement Point expended while in road Mode.

3. German non-mechanized units in Road Mode may move up to *two* hexes for each Movement Point expended while in Road Mode.

Note that a unit in Road Mode is not required to expend all of its Movement Points, nor is it required to move the full number of hexes allowed for the expenditure of one Movement Point.

[6.6] EFFECT ON COMBAT STRENGTH AND ZONES OF CONTROL

(J) Units in Road Mode have no Zone of Control other than the hex they occupy. Enemy units may move through any hex adjacent to units in Road Mode, and Enemy units may trace Supply paths through any hexes adjacent to units in Road Mode, assuming that the Road Mode unit is the only Friendly unit in the vicinity.

(K) Units in Road Mode have their Combat Strength halved. Fractions are rounded upwards. For example, a unit with a Combat Strength of "9" would be reduced to a Combat Strength of "5" (half of "9" is "4½" which would be rounded up to "5").

[6.7] COMBAT AND RETREAT IN ROAD MODE

(L) If a unit in Road Mode attacks or is attacked, it must leave the Road Mode at the beginning of the *Initial Movement Phase* of the *next* Friendly Player-Turn (Note that mechanized units in Road Mode that attack *do not* leave the Road Mode in the Mechanized Movement Phase). Unless they have exceptionally good memories, Players should make

note of the unit designation and hex-number of those units which must mandatorily leave the Road Mode.

If a unit does not have sufficient Movement Points available to make a required conversion out of Road Mode, then the unit is eliminated at the time that it should have converted out of Road Mode.

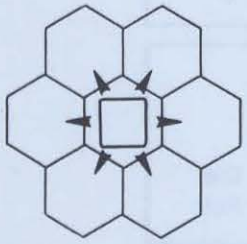
(M) In addition to other retreat restrictions, units in Road Mode that are forced to retreat as a result of Combat must be retreated along a road, and may not be stacked (at any point during the retreat) as a result. Road Mode units that are retreating as a result of Combat may not "bump" other units back in order to avoid elimination. Units in Road Mode that would have to stack in order to retreat are eliminated.

(N) A unit in Road Mode that is retreated as a result of Combat, and which ends its retreat adjacent to another unit on the Road, is not eliminated; however, one or both of the units must be moved at the beginning of the next Friendly Initial Movement Phase, in order to conform to Case G, above.

[7.0] ZONES OF CONTROL

GENERAL RULE:

The six hexagons immediately surrounding a given unit (or stack of units) constitute that unit's Zone of Control. These Zones of Control have an inhibiting effect upon Enemy movement, but do not affect Enemy combat. Hexes upon which a unit is exerting its Zone of Control are called controlled hexes.



CASES:

[7.1] EFFECT ON MOVEMENT

(A) All units must cease movement upon entering an Enemy Zone of Control. A unit may never voluntarily leave an Enemy controlled hex.

[7.2] NEGATION OF ZONES OF CONTROL

(B) Friendly units negate Enemy Zones of Control for all purposes. One Friendly unit in a stack negates all Enemy Zones of Control extending into the hex, thus freeing other units in the stack to move.

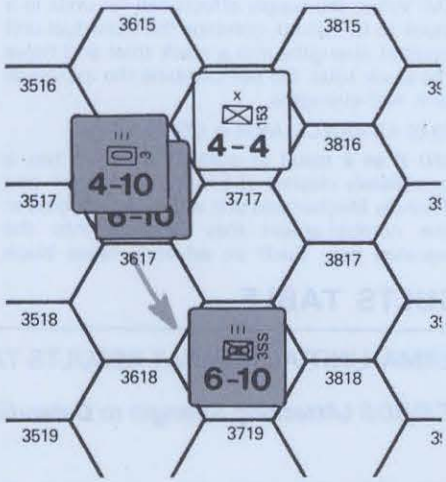
[7.3] EFFECT ON RETREATS

(C) Units may retreat out of an Enemy Zone of Control as a result of combat.

(D) Units may not retreat (due to combat) into an Enemy controlled hex. Zones of Control have no other effect upon combat. Supply Paths may not be traced through an Enemy controlled hex (see Supply Case A).

[7.4] MOVING THROUGH ZONES

(E) Case B bears directly on the movement rule prohibiting leaving an Enemy controlled hex (or moving from one Enemy controlled hex to another). The unit or units remaining in a stack are considered to absorb the Enemy Zone of Control so that the unit(s) moving from the stack are freed from the prohibition. Upon entering another Enemy controlled hex the unstacking unit must stop. In effect, the stacking rules allow infiltration through an Enemy "line."



In the example shown above the chain of movement has allowed the German 6-10 to leave the Allied 4-4's Zone of Control.

[7.5] OFF-MAP ZONES

(E) The Zone of Control of German units extends into Allied Map Edge Hexes, even though the physical entry of German units into these hexes is prohibited. Allied units, when resting on Map Edge hexes, have no Zone of Control (for any purpose).

[8.0] STACKING

(More than one unit per hex)

GENERAL RULE:

A maximum of one "division equivalent" (one German infantry division, or any three regiments or brigades) may be stacked in a given hex. This limitation applies at ALL times during the Game-Turn. Thus, units that would violate stacking limits when retreating due to combat are eliminated instead (see Explanation of Combat Results on the Combat Results Table). *Stacking* is defined as any action that any time puts more than one Friendly unit in a given hex.

PROCEDURE:

During the Movement Phase, the Phasing Player places units on top of one another to form a stack, or removes units to destack.

CASES:

[8.1] MOVEMENT POINT COSTS

(A) Moving into a hex with other Friendly Unit(s) (stacking) costs Mechanized units six additional Movement Points and non-Mechanized units two additional Movement Points. Destacking costs are the same. These costs are *additional* to the normal costs of entering or leaving the hex.

(B) Units may not be moved together in a stack. Units in a stack must be moved individually, paying the appropriate destacking cost.

[8.2] STACKING RESTRICTIONS AND EXCEPTIONS

(C) German infantry divisions may not stack, nor may other units stack with them.

(D) The various status markers do not effect stacking; they are ignored for these purposes.

[8.3] STACKING POSITION

(E) The relative position of units in a stack has no bearing on their ability to destack. Thus, it is not necessary to destack the top unit in a stack in order to move a lower unit off the stack; a Player might simply remove the unit from underneath.

(F) There is no stacking limitation on Allied units in Map Edge hexes (these hexes represent larger areas off the map).

[9.0] COMBAT

GENERAL RULE:

Combat occurs between adjacent opposing units at the discretion of the Player whose Combat Phase it is; this Player is considered to be the Attacker, while the other Player is considered to be the Defender, regardless of the overall strategic positions of the two Players.

PROCEDURE:

Total up the Combat Strengths of the Attacking units involved in a specific attack, and compare it to the total Combat Strength of the defending units in the hex under attack. State the comparison as a probability ratio: Attacker's Strength to Defender's Strength. Round off the ratio downward to the nearest "whole" number, to yield the simplified odds found on the *Combat Results Table;* roll the die and read the result under the appropriate odds column for that die result. Apply the result of the combat *immediately* before going on to resolve any other combat.

CASES:

[9.1] WHICH UNITS MAY ATTACK

(A) During the Combat Phase of his Player-Turn, a Player may only attack those units to which Friendly units are adjacent. Only those Friendly units directly adjacent to a given Enemy unit may participate in the attack upon that Enemy unit.

(B) Units adjacent to Enemy units are not compelled to attack, nor does the attacking Player have to use every adjacent unit if he does decide to attack. Attacking is completely voluntary. However, all units in the defending hex(es) *must defend.*

(C) No unit may attack more than once per Combat Phase. No Enemy unit may *be* attacked more than once per Combat Phase.

[9.2] MULTIPLE UNIT AND MULTI-HEX COMBAT

(D) More than one Enemy-occupied hex may be attacked by a given attacking unit (or group of attacking units); that is to say, different defending units on different hexes may be treated as objects of attacks which might be made by a one-hex group of attacking units if the attacking units happen to be adjacent to two or more Enemy-occupied hexes.

(E) An Enemy-occupied hex may be attacked by as many attacking units as can be brought to bear. Conceivably, as many as six stacks of units could be brought to bear against a single Enemy-held hex.

(F) Defending units stacked in the same hex must be attacked as a single combined Combat Strength, i.e., you may not individually attack individual units which are stacked together.

(G) If one unit in a stack is used in an attack, the other units in the stack need not participate in the same attack nor in any attack at all during that Combat Phase.

(H) Units in a stack may make separate attacks on separate Enemy-occupied hexes.

[9.3] COMBAT RESOLUTION

(J) Terrain and supply effects upon Combat Strength are cumulative. Supply effects are always calculated first. When Combat Strength is "halved" any fractions are rounded *upward* (i.e., "half" of nine is five).

(K) Combat odds are rounded-off in favor of the Defender. For example: an attack with a total Combat Strength of 26 against a hex defended by a total Combat Strength of 9 (26-9) would round-off to a "2-1" odds situation, and the 2-1 column on the Combat Results Table would be used.

[9.4] VOLUNTARY REDUCTION OF COMBAT ODDS

(L) The Attacker has the option of *decreasing* the odds of his attack before rolling the results of the Combat. All units originally involved in the attack follow the results of the combat-action, at the *reduced* odds (i.e., the Attacker may voluntarily make an attack at 3-1 instead of 5-1).

[9.5] HALVING UNITS AND STACKS

(M) When the supply effects call for units in a stack to be halved, combine the individual unit combat strengths into a stack total and halve the stack total. Do not combine the individual unit half-strengths.

[9.6] ADVANCE AFTER COMBAT

(N) If as a result of combat action, a hex is completely cleared of Enemy units, then one Friendly Mechanized unit which participated in the combat-action may advance into the vacated hex. Such an advance takes place immediately during the Combat Phase before any other combat actions are resolved. This may be done by either the Attacker or Defender.

[9.7] OFF-MAP RETREAT

(P) Allied units which have no other path of retreat may retreat onto Allied Map Edge hexes. Such retreated units are not considered eliminated. They do not count towards the German Victory Points. However, such units must remain on the Allied Map Edge hex that they first entered. They may return to the map and to play if and when an Allied unit enters the hex adjacent to their position.

[10.0] ARDENNES COMBAT RESULTS TABLE

GERMAN INITIAL COMBAT RESULTS TABLE

COMBAT ODDS (Attacking Strength to Defending Strength)

Die Roll	1-2	1-1	2-1	3-1	4-1	5-1	6-1	7-1	8-1	9-1	Die Roll
1	Ar1	Dr1	Dr2	Dr3	Ex	Ex	De	De	De	De	1
2	Ar1	Dr1	Dr1	Dr2	Ex	Ex	Ex	De	De	De	2
3	Ar1	Dr1	Dr1	Dr2	Dr3	Dr3	Ex	De	De	De	3
4	Ar2	Ar1	Dr1	Dr1	Dr2	Dr3	Dr3	Ex	De	De	4
5	Ar2	Ar2	Dr1	Dr1	Dr2	Dr2	Dr3	Dr3	Ex	De	5
6	Ar2	Ar2	Dr1	Dr1	Dr1	Dr2	Dr3	Dr3	Ex	De	6

Odds less than 1-2 are treated as 1-2. Odds greater than 9-1 are treated as 9-1.

STANDARD COMBAT RESULTS TABLE

COMBAT ODDS (Attacking Strength to Defending Strength)

Die Roll	1-2	1-1	2-1	3-1	4-1	5-1	6-1	7-1	8-1	9-1	Die Roll
1	Ar1	Dr1	Dr1	Dr2	Dr3	Ex	Ex	Ex	De	De	1
2	Ar2	Dr1	Dr1	Dr1	Dr3	Dr3	Ex	Ex	Ex	De	2
3	Ar2	Ar1	Dr1	Dr1	Dr2	Dr2	Dr3	Ex	Ex	De	3
4	Ar3	Ar2	Ar1	Dr1	Dr2	Dr2	Dr2	Dr3	Ex	De	4
5	Ar3	Ar2	Ar2	Ar1	Dr2	Dr2	Dr2	Dr3	Dr3	Ex	5
6	Ar3	Ar3	Ar2	Ar1	Dr1	Dr1	Dr1	Dr2	Dr3	Ex	6

[10.1] EXPLANATION OF COMBAT RESULTS

Ar1,Ar2,etc.: The attacking unit(s) must retreat the number of hexes given in the result. See Retreat and Advance Case below.

Dr1,Dr2,etc.: The defending units must retreat the number of hexes given in the result.

EX: The defending units are completely eliminated (removed from the map). The attacker must eliminate unit(s) whose Combat Strengths total at least that of the eliminated defending units. In calculating the strength of the eliminated defending units, count only the face value of the unit(s); disregard terrain effects and supply effects. Record Victory Points for eliminated units.

De: All defending unit(s) are eliminated. They are removed from the game map and placed on the Attacker's Victory Point Record Chart.

[10.2] HOW TO RETREAT AND ADVANCE AFTER COMBAT

Due to an "Ar" or "Dr" Combat Result, units will retreat after combat. Units may not retreat into an Enemy controlled hex. The victor determines the path of the retreating units according to the following priorities:

1. to or along a road and non-interdicted bridge hex-sides;
2. to or through clear terrain;
3. through rough terrain and ford hex-sides;
4. through interdicted bridge hex-sides;
5. through unbridged river hex-sides;
6. onto or through the least number of Friendly units;
7. toward Enemy supply and away from Friendly Supply.

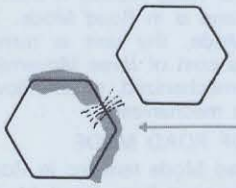
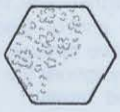
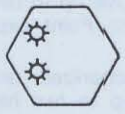
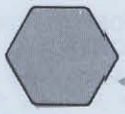
Units may not move into an Impassable hex when retreated.

The retreated unit must come to rest the full number of hexes away from its initial position called for in the result as traced by the most direct path. Units which are unable to retreat safely, because of the interposition of Enemy-controlled hexes, the position of Impassable hexes, and/or because the violation of Stacking limitations, are eliminated and placed in the victor's Victory Point Record Chart.

[10.3] GERMAN INITIAL COMBAT RESULTS TABLE

The German Player uses the German Initial Combat Results Table from Game-Turn 1 to Game-Turn 5. At the beginning of Game-Turn 6, the German Player rolls the die. If he rolls a "1" he commences using the Standard Combat Results Table. Any other result and he continues to use the Initial Table. On every Game-Turn thereafter, the German Player repeats the die roli until he rolls a "1" when he switches to the Standard Table.

[11.0] ARDENNES TERRAIN EFFECTS CHART

	TYPE OF TERRAIN	MOVEMENT POINT (MP) COST TO ENTER OR CROSS	EFFECT ON COMBAT
	Clear hex	1 MP	None
	Ford hex-side	Mechanized units:3 additional MPs to cross Non-Mechanized units:1 additional MP to cross	None
	River hex-side	Mechanized units: 6 additional MPs to cross Non-Mechanized units: 3 additional MPs to cross	None
	Bridge hex-side	No additional cost for river hex-side (see Bridge rules)	None
	Rough Terrain hex	Mechanized units: 4 MPs Non-Mechanized units: 2 MPs	None
	Town hex	Same as other terrain in hex.	Ar & Dr Combat results have no effect on units in town hex
	Impassable hex	Entry prohibited	Not applicable
	West Wall hex	German units: No additional MPs. Allied units: 2 additional MPs. May not enter in Road Mode.	Defending German units in the hex tripled; doubled if attacking out of the hex; Ar & Dr results have no effect on German unit. Allied units do not receive any benefits.
	"Cleared" West Wall hex	no additional MPs	German units doubled on defense; Ar & Dr results have no effect on German unit. Allied units do not receive any benefits.
	Road hex	1 MP regardles of terrain. Units do not have to be in road mode for roads to negate terrain.	None
	Allied Map-Edge hex	Enter only by mandated retreat.	Prohibited

[12.0] SUPPLY

GENERAL RULE:

Units must be "supplied" to use their full Combat Strength or Movement Allowance; if they are unsupplied or isolated, they are penalized with respect to movement and combat value.

PROCEDURE:

The supply condition of all Friendly units is determined during the Supply Judgment Phase, and applies through the rest of that Friendly Player-Turn. Enemy units attacked during a Friendly Player-Turn have their supply condition determined at the moment of combat. Thus, the effect of supply on Movement Allowance and Combat Strength for attacks occurs at the start of each Player-Turn, while the effect on Combat Strength for defense occurs at the moment of combat.

In order to distinguish which units are unsupplied or isolated, markers have been provided. Whenever a unit is in an unsupplied or isolated condition, place the appropriate marker on top of the unit. Remove the markers whenever the unit's supply status changes.

CASES:

[12.1] TRACING SUPPLY

(A) Supply is traced along a line of continuous hexes stretching from the unit to a supply source, counting no more than three hexes from the unit to a road hex, which road must then run uninterrupted by interdicted bridge hex-sides or Enemy occupied or controlled hexes, to a supply source. This supply path may be traced through a Friendly unit in an Enemy Zone of Control.

(B) Any number of units may be supplied from the same supply path.

(C) The first three hexes of the supply path may transit any type of terrain except Impassable hexes. It may not trace through Enemy Zones of Control or Enemy occupied hexes.

[12.2] SUPPLY SOURCES

(D) German supply is traced to any road hexside on the East edge of the map.

(F) Allied supply is traced to any road hexside from the other map edges.

[12.3] SUPPLY STATES

(G) Units are *unsupplied* when they are unable to trace a supply path.

(H) Units are *isolated* when they are unable to trace a supply path, are totally surrounded on all six adjacent hexes by Enemy units or Enemy controlled hexes *and* are more than three hexes from any Supplied Friendly unit.

(J) Units which are within three hexes of a road exit hexside on their respective map edges can never be isolated, even if cut off by terrain or Enemy presence.

[12.4] EFFECTS OF SUPPLY

(K) The effect of supply on Combat Strength for attack and Movement Allowance is determined during the Supply Judgment Phase, and applies to all Friendly units throughout the Initial Movement Phase, the Combat Phase and the Mechanized Movement Phase of that Friendly Player-Turn. The effect of supply on Combat Strength for defense is determined at the moment of combat, during the Enemy Combat Phase. See the Supply Effects Chart for a summary of conditions and effects of the various Supply states.

[12.5] UNITS NOT LOST DUE TO SUPPLY STATES

(L) Units may remain unsupplied or isolated indefinitely; i.e., units are never lost through lack of supply alone.

[12.6] SUPPLY EFFECTS CHART

	SUPPLIED	*UNSUPPLIED*	*ISOLATED*
COMBAT STRENGTH ON DEFENSE	Normal	Normal	Halved
COMBAT STRENGTH ON ATTACK	Normal	Halved	Zero
MOVEMENT ALLOWANCE	Normal	Halved	Halved

EXPLANATION OF SUPPLY CHART

Normal: No effect

Halved: Combat Strength for attack and defense is cut in half rounding up fractions. The total Combat Strength of a stack is computed and then halved. Movement Allowance is cut in half, with the fractions being lost.

Zero: Attack Strength is reduced to zero (i.e. no attack is possible for such a unit).

[13.0] BRIDGES AND INTERDICTION



GENERAL RULE:

Bridges allow movement across river hex-sides (on roads) at no additional cost. Bridge hex-sides may be rendered temporarily inoperative ("interdicted") for movement and supply by the presence of an Enemy unit. This is an automatic condition determined during the phasing Player's supply Judgment Phase.

CASES:

[13.1] WHEN BRIDGE INTERDICTION OCCURS

(A) During the Player's Supply Judgment Phase the condition of bridge hex-sides is determined and Bridge Interdiction counters of the appropriate color are placed where necessary (point the marker at the interdicted Bridge). All bridge hex-sides within three hexes of an Enemy unit are considered to be interdicted for Friendly Movement and Supply. Only one of the two hexes which share the bridge hex-side need be within three hexes of the Enemy unit for the Bridge to be considered interdicted. Bridges remain interdicted for the entire Player-Turn, regardless of any results of combat or movement.

[13.2] INTERDICTION EFFECTS AND DURATION

(B) The road crossing an interdicted bridge is considered cut. This road hex-side may not be used for supply or movement purposes (see Road Movement Case (F).

(C) At the very end of each Player-Turn, remove the Enemy Bridge Interdiction counters from those bridges which are no longer within three hexes of an Enemy unit. Such bridges are now once again fully operative.

[13.3] UNITS WHICH DO NOT INTERDICT

(D) Units in Road Mode do not interdict bridges.

[13.4] SPECIAL GAME-TURN 1 RULE

(E) All bridges on the German side of the start line are not affected by Allied units within three hexes until Game-Turn 2.

[13.5] INTERDICTION SELECTIVITY

(F) Players are reminded that Bridge interdiction is selective: i.e., a bridge which is interdicted for the German Player is not necessarily interdicted for the Allied Player. If both Players have units within three hexes of a given Bridge, then the Bridge is interdicted from the point of view of both Players. In such a case, if the interdiction effect with regard to one Player is subsequently removed, this does not in itself affect the interdiction effect with regard to the other Player. Use the differently colored interdiction markers to indicate who is interdicting a given Bridge.

[14.0] REINFORCEMENTS

GENERAL RULE

Reinforcements come into the game as indicated on the Turn Record and Reinforcement Chart. They appear on the indicated map edge section.

CASES

[14.1] WHERE REINFORCEMENTS ARE PLACED

(A) Allied Reinforcements are placed on *Map Edge* hexes adjacent to a road hex-side. They appear in Road Mode and their appearance may not be voluntarily delayed. German Reinforcements appear on any map edge hex adjacent to a road hex-side on the East edge of the map; also in Road Mode.

Allied reinforcements appear on any map edge hex adjacent to a road hex-side on the designated map edge section. If the German Player has occupied or controls all of the road exit hexes on the map edge segment that Allied reinforcements are due, those reinforcements are delayed one Game-Turn and then enter on the adjacent map edge segment (if possible). The Allied side of the map is divided into five sections: Northeast, Northwest, West, Southwest and Southeast. If the German Player occupies two successive sections of the map on which reinforcements are due, the reinforcements are delayed for a second Game-Turn, and must then appear in the next clear section. Reinforcements may never be brought on the map through an Enemy occupied or controlled hex.

[14.2] SIMULATANEOUS ENTRY ON THE SAME HEX

(B) Reinforcements which choose to use the same entry road hex must "stage" onto the map and lose two road hexes in movement for every unit which preceded them onto the map in that same Phase.

[14.3] RESTRICTED BRITISH REINFORCEMENTS

(C) Allied reinforcements labeled "WB" on the Reinforcement Chart enter on the West section of the map. They may not cross the Meuse River until the German Player accumulates 25 or more Victory Points. They may attack Enemy units which cross the Meuse and those Enemy units adjacent to it.

[15.0] GERMAN PARADROP



On Game-Turn 2 the German Player must drop his paratroop unit (Von der Heydte).

PROCEDURE

The paradrop occurs at the start of the Initial German Movement Phase before any other movement takes place. The unit may be dropped on any hex which is not occupied by an Allied unit or in an Allied Zone of Control, with the exception of Impassable hexes. The German Player rolls the die for the survival of the unit; a "one" or a "two" and the unit survives. The unit is dropped in a supplied condition for that Player-Turn; thereafter, it must trace a supply path as a normal unit. If the unit survives it may move during that Movement Phase. Note that no other paratroop unit in the game is capable of dropping.

[16.0] VICTORY CONDITIONS

COMMENTARY

Hitler ordered the Ardennes Offensive with the objective of breaking through the Allied line, seizing Antwerp and cutting off the Allied 21st Army Group. In order for the Germans to have even an *un*reasonable chance of reaching these objectives, the Allied commanders would have had to be completely inept (which they weren't). However, the Germans did have a chance to profit by the offensive in two ways (1) by rupturing the Allied front on a broad and deep basis in the first few days thereby causing a general Allied withdrawal from the German frontier, and (2) by destroying the Allied reserve while preserving their own. This would delay and weaken the expected Allied Spring Offensive and allow the Germans to transfer forces to the East. Of course, any kind of German success would merely put off the inevitable. If the Germans get *real* lucky, they win the A-bomb sweepstakes from the Japanese.

GENERAL RULE

Throughout the Game, Players score Victory Points for destroying Enemy units. The German Player also scores Victory Points for occupying road exit hexes. The Players keep track of Victory Points with the Victory Point Chart. The German Player must score at least 35 Victory Points at the end of the Game or the Allied Player automatically wins. Assuming the German Player does score 35 points, the total Victory Points for each side are compared and the ratio of Points obtained is used to determine the Victor (if any) and the level of victory.

PROCEDURE:

When a unit is destroyed, it is recorded as one Victory Point for the Enemy Player. Players use the Victory Point Records printed on the map as per the instructions given with them. In addition to Points-for-destroyed-Enemy-units, the German Player gains Victory Points for occupying Road Exit hexes. These Points are recorded using the arrowhead markers on the Victory Point Record.

CASES

(A) All units count as one Victory Point, irrespective of size or type.

(B) The Victory Point(s) for a Road Exit hex are shown in that hex.

(C) The German Player occupies these hexes by the physical presence of his unit or his unit's Zone of Control. One unit can occupy more than one exit hex. If the exit hex is in the Zone of Control of both an Allied unit and a German unit, it is considered occupied by the German unit. If the Allied unit is in the exit hex, it negates any German Zone of Control and the hex is not occupied by the German Player.

(D) The Victory Point(s) for the Road Exit hexes on the Southeast and Southwest segments of the map count only while the German Player has a unit in supply in Bastogne.

(E) Victory Points are tabulated at the end of a complete Game-Turn.

(F) The German Player must remain in control of a road exit hex in order to get the Victory Points. He does *not* get Victory Points for being the last to occupy a Road Exit hex. Unoccupied Road Exit hexes are considered to be controlled by the Allied Player and may be used for reinforcements and supply.

(H) German units in Road Mode may occupy a Road Exit hex by being physically on the road exit hex.

(G) German units must be in supply in order to receive Victory Points for occupying road exit hexes.

[16.1] HOW TO CALCULATE VICTORY

Compare the number of German Victory Points to the number of Allied Victory Points expressed as a ratio: German Victory Points divided by Allied Victory Points.

German Victory	1.5 or greater
Allied Victory	Less than 1.0
Draw	1.0 to 1.4999

[16.2] GERMAN IMMEDIATE VICTORY

If the German Player scores 35 Victory Points by the end of Game-Turn 6, he wins an immediate victory and the Game ends.

[16.3] ALLIED CUMULATIVE VICTORY

If the German Player scores less than 35 Victory Points by the end of Game-Turn 18, the Allied Player wins regardless of the Victory Points Ratio.

[17.0] SET-UP AND REINFORCEMENT VARIATIONS

Various set-ups and reinforcement rates are called for in the Scenarios. They are as follows:

German Historical Set-up: This represents the actual German deployment at the beginning of their offensive. At the beginning of the Game the German Player places his units as shown on the map.

Allied Historical Set-up: This represents the actual Allied deployment at the beginning of the German offensive. At the beginning of the Game, the Allied Player places his units as shown on the map.

German Free Set-up: This assumes the Germans were not as rushed to begin the offensive as they were by events in the East, and had time to deploy their units rather than simply running them up to the front. The German Player places his units as shown on the Historical Set-up. He may then rearrange those units in the front line in any fashion he desires so long as these units remain on the front line and so long as he does not stack these units. He then rearranges those units deployed behind the front line in any fashion he desires so long as these units do not enter the front line and so long as he does not stack them.

Allied Free Set-up: This assumes that the Allies had acknowledged the possibility of a German offensive and changed their deployment to a defensive rather than an offensive posture. The Allied Player places his units as shown on the Historical Set-up. He then rearranges those units on the front line in any fashion he desires so long as these units remain on the front line and so long as he does not stack these units. He then rearranges those units deployed behind the front line in any fashion he desires so long as these units do not enter the front line and he does not stack them.

The Historical Reinforcement Rate (for both the Allied and the German Player) represent the actual reinforcements during the battle.

German Accelerated Reinforcement Rate: This assumes the Germans had launched a total all-out effort against the Allies.

Allied Slowed Reinforcement Rate: This assumes that the Allied Command did not react as quickly as it did.

[18.0] SCENARIOS

#	Allied Set-up	Allied Reinforc.	German Set-up	German Reinforc.
1	hist.	hist.	hist.	hist.
2	hist.	hist.	hist.	hist.
3	hist.	hist.	free	hist.
4	free	slow	hist.	hist.
5	free	slow	free	hist.
6	free	slow	free	accel.
7	hist.	slow	hist.	accel.
8	hist.	slow	free	accel.
9	hist.	hist.	free	accel.
10	free	hist.	free	accel.

Scenario #1; favors a draw or an Allied victory.
Scenario #2; favors a German victory.
Scenario #3; favors a German immediate victory
Scenario #4; 50-50
Scenario #5; favors German
Scenario #6; strongly favors German
Scenario #7; very strongly favors German
Scenario #8; very bad news for the Allies
Scenario #9; very strongly favors German
Scenario #10; Germans either win early or not at all.

[19.0] DESIGNER'S NOTES

The Battle of the Bulge. There is probably no other subject that has been covered so often in games. Avalon Hill first did it in 1965. Then we did it again in 1970. In addition, there have been numerous variations, revisions and what have you. So why another game? Mainly because there's a demand for it. And it was felt that the subject had not yet been done justice in a game form. How, therefore, have done any better with the *Ardennes Offensive?*

First of all, before designing a game on the Battle of the Bulge, you must choose which of the many critical factors in the campaign you wish to stress. The Battle of the Bulge was a very complicated campaign. Many factors which are simply present in other campaigns were potentially decisive in the Battle of the Bulge. Take, for example, the roads. In any battle these are a factor. But in the Ardennes, the roads acquire critical importance. Mainly because of the terrain. And so the terrain also becomes of "more than usual" importance. The weather is critical. Bad weather was essential for the Germans in order to keep the American air power neutralized. From these few factors just mentioned we can derive numerous other complications. The following are the ones we feel were most necessary, while at the same time not complicating the game to the point where it was not enjoyable to play.

We picked the road net as one of the major critical factors. The road net shown was originally developed for our *Bastogne* (1970) game. Compiling that road net on a hex grid was a major project, so here we use a modified (simplified) version of it. The road net itself also includes much information about the terrain. Thus we didn't have to add much in order to obtain a quite accurate terrain analysis. To make this road business even more effective we added a rule for "road movement" of units. That, we felt, would take care of the road problems.

Next there was a problem, of sorts, with the order of battle. Particularly the German one. Their infantry divisions varied enormously in quality. The solution was to represent those Volksgrenadier divisions the Germans described as "armed mobs" as divisions, while all other units were represented as regiments or brigades. Otherwise, order of battle wasn't much of a problem. The enormous German superiority in artillery during the first few days of the campaign was represented by giving the Germans more offensive punch on the first turn. This also accounted for the surprise factor, which was considerable on the first day.

The combat system was made rather bloodless. Even so, the Germans are able to really chew up the American line during the first few days. That's the critical period. Ten days at the most. All of that which came after the ten days (including the famous "siege of Bastogne") was anti-climactical. It was a ten day battle. Off to a fast start and peaking out very early. That's how we've tried to re-create in a game form.

[20.0] DESIGN CREDITS

DESIGN CREDITS

Game Design and Research:
James F. Dunnigan

Physical Systems Design and Graphics:
Redmond A. Simonsen
and Manfred F. Milkuhn

Game Development and Rules Composition:
Terry Hardy and John Young

Production:
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The Ardennes Offensive



THE BATTLE OF THE BULGE, DECEMBER 1944

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[1.0] INTRODUCTION

The *Ardennes Offensive* is an historical simulation of the German attempt to break through the Allied front in the Ardennes in December 1944. The historical scenario covers the period December 16th through January 2nd, and portrays the actual forces which converged on the battlefield. Several optional scenarios permit the "What if?" possibilities of the battle to be simulated.

[2.0] GENERAL COURSE OF PLAY

The *Ardennes Offensive* is basically a two-player game. It is played in sequenced turns, called Game-Turns, during which the Players move units on the map, have combat and attempt to achieve certain objectives. The German Army is attempting to destroy the Allied forces and achieve a penetration to unhinge the entire Allied front in Western Europe. The German objective is to eliminate Allied units and occupy "exit" hexes on the northern, western and southern edges of the map. The Allied objective is to prevent the Germans from achieving a significant penetration, while shattering the last remaining German strategic reserve, by eliminating units.

In the initial Game-Turns the German has a marked superiority of force and an inherent tactical advantage. He must exploit these factors and realize his objectives by Game-Turn 7 (December 22) or he will probably lose the game. The Allied Player starts in a weak position. He must concentrate on holding the "shoulders" while blocking the vital cross-roads in the center. Time is on his side as reinforcements become available.

The game is won by scoring Victory Points. The exit hexes are worth a certain amount of Victory Points to the German Player. Casualties inflicted upon the opposing army are worth points to each Player.

[2.1] GAME LENGTH

Each complete Game-Turn represents one day of real time. The game extends eighteen Game-Turns from December 16, 1944 to January 2, 1945.

[2.2] GAME SCALE

Each hex represents 3.15 kilometers of land. Each regiment sized unit represents 1,000 to 6,000 men.

[3.0] GAME EQUIPMENT

[3.1] THE GAME MAP

The 22"x28" mapsheet portrays the Ardennes, an area where Germany, France and Luxembourg meet, and through which the Germans launched their attack. A hexagonal grid is superimposed upon the mapsheet to regularize the movement and position of the playing pieces.

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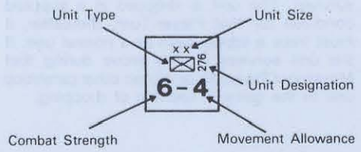
[3.2] GAME CHARTS AND TABLES

Various visual aids are provided for the players to simplify and illustrate certain game functions. The Combat Results Tables illustrate the resolution of combat, and give the actual combat results. The Terrain Effects Chart summarizes all Movement Points cost expenditures and details the effects of terrain on combat. The Supply Effects Chart details the effects of Supply Status on units for their offensive and defensive Combat Strength, and Movement Allowance. The Turn Record/Reinforcement Chart records the progress of the game, and details when reinforcing units arrive. The Victory Points Charts indicate the cumulative total of the Player's towards winning the game.

[3.3] THE PLAYING PIECES

Two differently colored sets of playing pieces (henceforth known as units) are supplied. These units represent the actual forces controlled by each side in the original battle. There are a number of different types of units; various markers are also supplied to record certain game functions. The playing pieces are distinguished by color, type, strength and mobility, as represented by the various numbers and symbols on the face of each piece. It is recommended that Players sort and store their units by type and color; this greatly reduces set-up time.

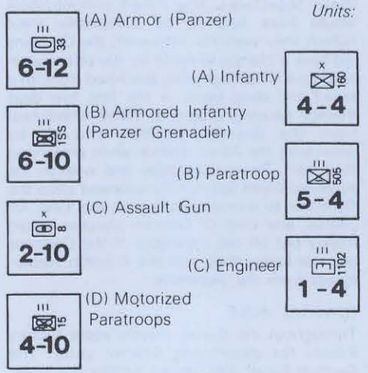
[3.31] SAMPLE UNIT



[3.32] SUMMARY OF UNIT TYPES

Unit type is used to determine the general classification of the unit (Mechanized or Non-Mechanized). These classifications are of major importance in the game.

Mechanized Units: *Non-Mechanized Units:*



[3.33] DEFINITION OF TERMS

Unit Size is used to determine Stacking capabilities.
XX – Division (9,000 to 14,000 men)
X – Brigade (2,000 to 6,000 men)
III – Regiment (2,000 to 6,000)

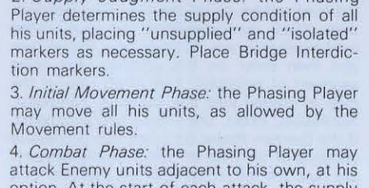
Unit Designation is the nationality and specific name of the historical formation represented.
Gd. = Guard
cca,ccb,ccr = combat command A, combat command B, combat command Reserve
Fr. Lt. = French Light Infantry
SS = Schutz Staffel
F.E. = Fuhrer Escort
F.G. = Fuhrer Guard

Combat Strength is the basic fighting power of a unit. It is a numerical expression of the effectiveness of the unit (see Combat) in terms of Combat Strength Points. A unit with a Combat Strength of "7" has seven Combat Strength Points.

Movement Allowance is the basic maximum number of hexagons which a unit may move in one Movement Phase. A unit expends one or more Movement Points in moving one hex (see the Terrain Effects Chart).

[3.34] UNIT AND BRIDGE STATUS MARKERS

These counters are used to illustrate units affected by certain Supply and Movement Rules, and to identify Interdicted bridges.



[3.4] GAME EQUIPMENT INVENTORY

A complete game of *The Ardennes Offensive* should contain:
one Game Map
one set of die-cut counters
one set of Rules
Turn Record/Reinforcement Schedule
one die

[4.0] SEQUENCE OF PLAY

Ardennes Offensive is played in turns. Each *Game-Turn* is composed of two *Player-Turns*, the first German, the second Allied. Each Player-Turn is composed of six *Phases*. The Player executing the phase of his Player-Turn is called the "Phasing Player." A typical Game-Turn will proceed as outlined below:

[4.1] SEQUENCE OUTLINE

A. GERMAN PLAYER-TURN

1. *Reinforcement Phase:* the Phasing Player places all new units on the game map, in accordance with the rules of Reinforcement.

2. *Supply Judgment Phase:* the Phasing Player determines the supply condition of all his units, placing "unsupplied" and "isolated" markers as necessary. Place Bridge Interdiction markers.

3. *Initial Movement Phase:* the Phasing Player may move all his units, as allowed by the Movement rules.

4. *Combat Phase:* the Phasing Player may attack Enemy units adjacent to his own, at his option. At the start of each attack, the supply condition of the defending Enemy units is determined.

5. *Mechanized Movement Phase:* the Phasing Player may move (again) only his *Mechanized* units. This movement is in *addition* to that of the Initial Movement Phase. No combat occurs during or after this phase. (See the unit type symbol on each unit to determine if it is mechanized or not). See Movement, case K.

6. Remove all supply condition markers.

B. ALLIED PLAYER TURN

The Allied Player executes Phases 1 through 6, becoming the Phasing Player.

C. The Game-Turn marker is advanced on the Game-Turn track, signalling the start of a new Game-Turn.

Note: Phases 3, 4 and 5 are critical ones in each Player-Turn. The play of the game essentially centers around each Player moving, having combat and then moving mechanized units again.

The above sequence is repeated eighteen times at which point the game ends. At that time, the Player's performances are evaluated in light of the Victory Conditions.

[4.2] SPECIAL DEPLOYMENT AND FIRST GAME-TURN RULES

GENERAL RULE:

Each Player sets up his forces as called for in the scenario chosen.

The Allied Player always deploys first. The German Player deploys second and then starts the first Game-Turn.

PROCEDURE:

Players mutually agree on a scenario. The Allied Player deploys as indicated in the scenario. The German Player deploys as indicated. The German Player begins the first Player-Turn subject to the following Special Case:

GERMAN PLAYER-TURN, Nr. One

German Reinforcement Phase: The German places his reinforcements on the map edge.

German Supply Judgment Phase: All German units are considered in supply for this *first Game-Turn.*

German First Movement Phase: The German Player loses this phase on the first Game-Turn.

German Combat Phase: The German Player allocates his attacks. On this Game-Turn German units have their combat strengths tripled (but *never* more than tripled)

German Mechanized Movement Phase: The German Player may move those mechanized units which were not involved in combat on the previous phase.

ALLIED PLAYER-TURN, Nr. One

Allied Reinforcement Phase: There are no Allied reinforcements.

Allied Supply Judgment Phase: The Allied Player places supply judgment counters on affected units.

Allied First Movement Phase: The Allied Player loses this phase.

Allied Combat Phase: The Allied Player allocates his atttacks. German units are tripled in defense.

Allied Mechanized Movement Phase: The Allied Player moves those mechanized units which were not involved in combat on the previous phase.

Remove all supply condition markers.

[5.0] MOVEMENT

GENERAL RULE:

During the Movement Phase, the Phasing Player may move as many or as few of his units as desired. Units move hex by hex through the

grid. Entering a hex requires a unit to expend one or more Movement Points.

PROCEDURE:

Move each unit individually, tracing the path of movement through the hexagonal grid. The unit may not be moved again or the path retraced and/or changed during that Movement Phase.

CASES:

[5.1] HOW TO MOVE UNITS

(A) Movement is never required, it is always voluntary. The Phasing Player may move all, some, or none of his units. During a Movement Phase only the Phasing Player's units are moved. No Enemy movement, and no combat may occur.

(B) Each hex contains ("represents") a certain type of terrain. The number of Movement Points a unit must expend to enter a hex varies with the Terrain. See the Movement section of the Terrain Effects Chart for a full list of these different "entry costs."

(C) Units may be moved as many or as few hexes as the owning Player desires, as long as the unit's Movement Allowance is not exceeded during the Movement Phase. Unused Movement Points may not be accumulated from Phase to Phase, nor transferred from unit to unit.

(D) A unit may move over different types of terrain in the same Movement Phase, provided the unit has enough Movement Points to expend when entering each type of hex. Terrain effects are cumulative, i.e., an Allied armor unit seeking to enter a West Wall hex through a non-road hexside situated in rough terrain would expend two additional Movement Points for the West Wall hex and four Movement Points for the rough terrain, for a total of six Movement Points.

(E) Each unit must be moved individually, though units may begin and end their movement in a stack. Stacks may not be moved together as a group.

[5.2] MOVEMENT PROHIBITIONS AND INHIBITIONS

(F) Units may never enter a hex occupied by an Enemy unit.

(G) A unit may only voluntarily leave a hex which is in an Enemy Zone of Control as permitted by the stacking rules (See Stacking and Zone of Control Rules).

(H) You may move into a hex containing a Friendly unit by paying the stacking Movement Point costs. However, in effect this prohibits moving through Friendly units since no unit in the game has sufficient Movement Points to stack and unstack with another Friendly unit in the same Movement Phase.

(J) Units which do not have the Movement Points to enter a given hex may not enter that hex.

(K) Only those mechanized units which did not participate in the immediately preceding Combat Phase may move during the Mechanized Movement Phase (see the Sequence of Play).

[5.3] ALLIED MAP EDGE HEXES

(L) The single row of tinted hexes running around the south, west, and north edges of the map are the Allied Map Edge hexes. These hexes may only be entered by Allied units and only under special circumstances. German units may never enter these hexes under any condition.

(M) Allied units may only enter Map Edge hexes when such a hex is the only open retreat route available when performing a retreat mandated by the Combat Results Table. Allied units in such hexes are in a "dormant" state, i.e., they have no Zone of Control, may not move, may not attack nor be attacked, and are not considered lost for Victory Point purposes (even if they never actively re-enter play). Such dormant units in Map Edge hexes can only be re-activated by bringing an "in-play" Allied unit adjacent to them on the "live" part of the map. At the beginning of any Allied Movement Phase in which this is so, the "dormant" unit(s) may reenter the game and operate in the normal manner.

(N) German units do exert a Zone of Control into Allied Map Edge hexes for the purpose of blocking retreat. German units which are themselves forced to retreat off the edge of the "live" map area, are eliminated instead.

(P) See the Zone of Control Rule, Stacking Rule, Retreat Rule, and the Reinforcement Rule for further characteristics of the Allied Map Edge hexes.

[6.0] ROAD MODE MOVEMENT

[6.1] COMMENTARY

The following rules simulate the effects of placing a unit in road march formation. Such a formation substantially increases the speed with which a unit may move along a road. A unit deployed in the road march formation cannot fight as effectively, however, and for this reason its Combat Strength is reduced.

A unit may move along a road regardless of whether or not it is in road march formation. Road march formation has certain benefits and certain restrictions not found in normal movement along a road. These will be explained more fully in the following rules.

The deployment of a unit into or out of road march formation takes time. On the scale of this game (basically, a regimental level), a unit consumes the better part of a day deploying into or out of road march formation (hereinafter referred to as "Road Mode"). Thus, to simulate time expended, the Road Movement rules call for the expenditure of Movement Points when units change their mode of deployment.

GENERAL RULE:

Units may be deployed and moved in two fashions: the normal (or "standard") mode, and the road march formation mode (referred to as the "Road Mode"). A unit does not have to be in Road Mode in order to move along a road. Note that a unit that is in "standard" mode may still ignore terrain effects when moving along a road (that is, when it moves from road hex to road hex by connecting hexsides crossed by road terrain symbol). Any unit may enter into Road Mode. The Road Mode increases mobility, at a cost to combat effectiveness and deployment capability.

CASES:

[6.2] WHEN TO USE ROAD MODE

(A) Non-mechanized units may enter into, leave, or move, in Road Mode only during the Initial Movement Phase of a Friendly Player-Turn.

(B) Mechanized units may enter into, leave, or move, in Road Mode during the Intial Movement Phase of their Friendly Player-Turn. In addition, *if they have not engaged in Combat* during their *Friendly* Combat Phase, they may enter into, leave, or move, in Road Mode again in the Mechanized Movement Phase of their Friendly Player-Turn.

[6.3] MOVEMENT POINT COST TO CHANGE MODE

(C) When a unit enters the Road Mode, it pays *three* Movement Points if it is non-mechanized, and *six* Movement Points if it is mechanized. (Obviously, a unit must also be on a Road hex to enter Road Mode.) It then is turned face-down and is in Road Mode. To leave the Road Mode, the unit is turned face-up and pays a cost of *three* Movement Points if it is non-mechanized, or *six* Movement Points if it is mechanized.

[6.4] DURATION OF ROAD MODE

(D) Any unit in Road Mode remains in Road Mode until it is removed from Road Mode, either voluntarily or as a result of having attacked or defended in Combat (See Case L, below).

(E) A unit that is not in the Road Mode can only enter into Rode Mode volunatrily. It can never be forced to enter Road Mode.

[6.5] MOBILITY AND RESTRICTIONS IN ROAD MODE

(F) Units in Road Mode are restricted to Road and Bridge hexes. Furthermore, they may move only through Road and/or Bridge hexsides, and they may not move through an *interdicted* Bridge hexside. They ignore the effect of any other terrain in Road hexes.

(G) A unit in Road Mode may not stack with, nor be adjacent to, any other unit on that Road hex, or adjacent connected Road hexes regardless of whether or not the other unit is in Road Mode. (Sole exception: see Case N.)

(H) Units in Road Mode may move through a greater number of hexes per Movement Point, according to the following formulae:

1. *All* mechanized units in Road Mode may move up to *two* Road hexes for each Movement Point expended while in Road Mode.
2. Allied non-mechanized units that are in Road Mode may move up to *ten* Road hexes for each Movement Point expended while in road Mode.
3. German non-mechanized units in Road Mode may move up to *two* hexes for each Movement Point expended while in Road Mode.

Note that a unit in Road Mode is not required to expend all of its Movement Points, nor is it required to move the full number of hexes allowed for the expenditure of one Movement Point.

[6.6] EFFECT ON COMBAT STRENGTH AND ZONES OF CONTROL

(J) Units in Road Mode have no Zone of Control other than the hex they occupy. Enemy units may move through any hex adjacent to units in Road Mode, and Enemy units may trace Supply paths through any hexes adjacent to units in Road Mode, assuming that the Road Mode unit is the only Friendly unit in the vicinity.

(K) Units in Road Mode have their Combat Strength halved. Fractions are rounded upwards. For example, a unit with a Combat Strength of "9" would be reduced to a Combat Strength of "5" (half of "9" is "4½" which would be rounded up to "5").

[6.7] COMBAT AND RETREAT IN ROAD MODE

(L) If a unit in Road Mode attacks or is attacked, it must leave the Road Mode at the beginning of the *Initial Movement Phase* of the *next* Friendly Player-Turn (Note that mechanized units in Road Mode that attack *do not* leave the Road Mode in the Mechanized Movement Phase). Unless they have exceptionally good memories, Players should make note of the unit designation and hex-number of those units which must mandatorily leave the Road Mode.

If a unit does not have sufficient Movement Points available to make a required conversion out of Road Mode, then the unit is eliminated at the time that it should have converted out of Road Mode.

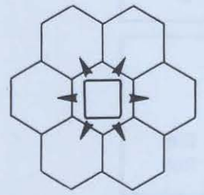
(M) In addition to other retreat restrictions, units in Road Mode that are forced to retreat as a result of Combat must be retreated along a road, and may not be stacked (at any point during the retreat) as a result. Road Mode units that are retreating as a result of Combat may not "bump" other units back in order to avoid elimination. Units in Road Mode that would have to stack in order to retreat are eliminated.

(N) A unit in Road Mode that is retreated as a result of Combat, and which ends its retreat adjacent to another unit on the Road, is not eliminated; however, one or both of the units must be moved at the beginning of the next Friendly Initial Movement Phase, in order to conform to Case G, above.

[7.0] ZONES OF CONTROL

GENERAL RULE:

The six hexagons immediately surrounding a given unit (or stack of units) constitute that unit's Zone of Control. These Zones of Control have an inhibiting effect upon Enemy movement, but do not affect Enemy combat. Hexes upon which a unit is exerting its Zone of Control are called controlled hexes.



CASES:

[7.1] EFFECT ON MOVEMENT

(A) All units must cease movement upon entering an Enemy Zone of Control. A unit may never voluntarily leave an Enemy controlled hex.

[7.2] NEGATION OF ZONES OF CONTROL

(B) Friendly units negate Enemy Zones of Control for all purposes. One Friendly unit in a stack negates all Enemy Zones of Control extending into the hex, thus freeing other units in the stack to move.

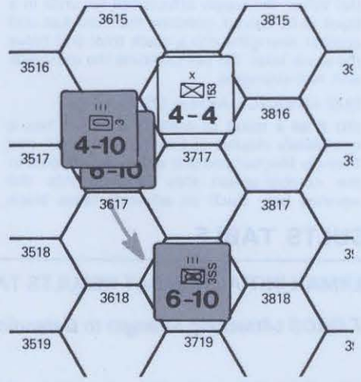
[7.3] EFFECT ON RETREATS

(C) Units may retreat out of an Enemy Zone of Control as a result of combat.

(D) Units may not retreat (due to combat) into an Enemy controlled hex. Zones of Control have no other effect upon combat. Supply Paths may not be traced through an Enemy controlled hex (see Supply Case A).

[7.4] MOVING THROUGH ZONES

(E) Case B bears directly on the movement rule prohibiting leaving an Enemy controlled hex (or moving from one Enemy controlled hex to another). The unit or units remaining in a stack are considered to absorb the Enemy Zone of Control so that the unit(s) moving from the stack are freed from the prohibition. Upon entering another Enemy controlled hex the unstacking unit must stop. In effect, the stacking rules allow infiltration through an Enemy "line."



In the example shown above the chain of movement has allowed the German 6-10 to leave the Allied 4-4's Zone of Control.

[7.5] OFF-MAP ZONES

(E) The Zone of Control of German units extends into Allied Map Edge Hexes, even though the physical entry of German units into these hexes is prohibited. Allied units, when resting on Map Edge hexes, have no Zone of Control (for any purpose).

[8.0] STACKING

(More than one unit per hex)

GENERAL RULE:

A maximum of one "division equivalent" (one German infantry division, or any three regiments or brigades) may be stacked in a given hex. This limitation applies at ALL times during the Game-Turn. Thus, units that would violate stacking limits when retreating due to combat are eliminated instead (see Explanation of Combat Results on the Combat Results Table). *Stacking* is defined as any action that any time puts more than one Friendly unit in a given hex.

PROCEDURE:

During the Movement Phase, the Phasing Player places units on top of one another to form a stack, or removes units to destack.

CASES:

[8.1] MOVEMENT POINT COSTS

(A) Moving into a hex with other Friendly Unit(s) (stacking) costs Mechanized units six additional Movement Points and non-Mechanized units two additional Movement Points. Destacking costs are the same. These costs are *additional* to the normal costs of entering or leaving the hex.

(B) Units may not be moved together in a stack. Units in a stack must be moved individually, paying the appropriate destacking cost.

[8.2] STACKING RESTRICTIONS AND EXCEPTIONS

(C) German infantry divisions may not stack, nor may other units stack with them.

(D) The various status markers do not effect stacking; they are ignored for these purposes.

[8.3] STACKING POSITION

(E) The relative position of units in a stack has no bearing on their ability to destack. Thus, it is not necessary to destack the top unit in a stack in order to move a lower unit off the stack; a Player might simply remove the unit from underneath.

(F) There is no stacking limitation on Allied units in Map Edge hexes (these hexes represent larger areas off the map).

[9.0] COMBAT

GENERAL RULE:

Combat occurs between adjacent opposing units at the discretion of the Player whose Combat Phase it is; this Player is considered to be the Attacker, while the other Player is considered to be the Defender, regardless of the overall strategic positions of the two Players.

PROCEDURE:

Total up the Combat Strengths of the Attacking units involved in a specific attack, and compare it to the total Combat Strength of the defending units in the hex under attack. State the comparison as a probability ratio: Attacker's Strength to Defender's Strength. Round off the ratio downward to the nearest "whole" number, to yield the simplified odds found on the *Combat Results Table;* roll the die and read the result under the appropriate odds column for that die result. Apply the result of the combat *immediately* before going on to resolve any other combat.

CASES:

[9.1] WHICH UNITS MAY ATTACK

(A) During the Combat Phase of his Player-Turn, a Player may only attack those units to which Friendly units are adjacent. Only those Friendly units directly adjacent to a given Enemy unit may participate in the attack upon that Enemy unit.

(B) Units adjacent to Enemy units are not compelled to attack, nor does the attacking Player have to use every adjacent unit if he does decide to attack. Attacking is completely voluntary. However, all units in the defending hex(es) *must defend.*

(C) No unit may attack more than once per Combat Phase. No Enemy unit may *be* attacked more than once per Combat Phase.

[9.2] MULTIPLE UNIT AND MULTI-HEX COMBAT

(D) More than one Enemy-occupied hex may be attacked by a given attacking unit (or group of attacking units); that is to say, different defending units on different hexes may be treated as objects of attacks which might be made by a one-hex group of attacking units if the attacking units happen to be adjacent to two or more Enemy-occupied hexes.

(E) An Enemy-occupied hex may be attacked by as many attacking units as can be brought to bear. Conceivably, as many as six stacks of units could be brought to bear against a single Enemy-held hex.

(F) Defending units stacked in the same hex must be attacked as a single combined Combat Strength, i.e., you may not individually attack individual units which are stacked together.

(G) If one unit in a stack is used in an attack, the other units in the stack need not participate in the same attack nor in any attack at all during that Combat Phase.

(H) Units in a stack may make separate attacks on separate Enemy-occupied hexes.

[9.3] COMBAT RESOLUTION

(J) Terrain and supply effects upon Combat Strength are cumulative. Supply effects are always calculated first. When Combat Strength is "halved" any fractions are rounded *upward* (i.e., "half" of nine is five).

(K) Combat odds are rounded-off in favor of the Defender. For example: an attack with a total Combat Strength of 26 against a hex defended by a total Combat Strength of 9 (26-9) would round-off to a "2-1" odds situation, and the 2-1 column on the Combat Results Table would be used.

[9.4] VOLUNTARY REDUCTION OF COMBAT ODDS

(L) The Attacker has the option of *decreasing* the odds of his attack before rolling the results of the Combat. All units originally involved in the attack follow the results of the combat-action, at the *reduced* odds (i.e., the Attacker may voluntarily make an attack at 3-1 instead of 5-1).

[9.5] HALVING UNITS AND STACKS

(M) When the supply effects call for units in a stack to be halved, combine the individual unit combat strengths into a stack total and halve the stack total. Do not combine the individual unit half-strengths.

[9.6] ADVANCE AFTER COMBAT

(N) If as a result of combat action, a hex is completely cleared of Enemy units, then one Friendly Mechanized unit which participated in the combat-action may advance into the vacated hex. Such an advance takes place immediately during the Combat Phase before any other combat actions are resolved. This may be done by either the Attacker or Defender.

[9.7] OFF-MAP RETREAT

(P) Allied units which have no other path of retreat may retreat onto Allied Map Edge hexes. Such retreated units are not considered eliminated. They do not count towards the German Victory Points. However, such units must remain on the Allied Map Edge hex that they first entered. They may return to the map and to play if and when an Allied unit enters the hex adjacent to their position.

[10.0] ARDENNES COMBAT RESULTS TABLE

GERMAN INITIAL COMBAT RESULTS TABLE

COMBAT ODDS (Attacking Strength to Defending Strength)

Die Roll	1-2	1-1	2-1	3-1	4-1	5-1	6-1	7-1	8-1	9-1	Die Roll
1	Ar1	Dr1	Dr2	Dr3	Ex	Ex	De	De	De	De	1
2	Ar1	Dr1	Dr1	Dr2	Ex	Ex	Ex	De	De	De	2
3	Ar1	Dr1	Dr1	Dr2	Dr3	Dr3	Ex	De	De	De	3
4	Ar2	Ar1	Dr1	Dr1	Dr2	Dr3	Dr3	Ex	De	De	4
5	Ar2	Ar2	Dr1	Dr1	Dr2	Dr2	Dr3	Dr3	Ex	De	5
6	Ar2	Ar2	Dr1	Dr1	Dr1	Dr2	Dr3	Dr3	Ex	De	6

Odds less than 1-2 are treated as 1-2. Odds greater than 9-1 are treated as 9-1.

STANDARD COMBAT RESULTS TABLE

COMBAT ODDS (Attacking Strength to Defending Strength)

Die Roll	1-2	1-1	2-1	3-1	4-1	5-1	6-1	7-1	8-1	9-1	Die Roll
1	Ar1	Dr1	Dr1	Dr2	Dr3	Ex	Ex	Ex	De	De	1
2	Ar2	Dr1	Dr1	Dr1	Dr3	Dr3	Ex	Ex	Ex	De	2
3	Ar2	Ar1	Dr1	Dr1	Dr2	Dr2	Dr3	Ex	Ex	De	3
4	Ar3	Ar2	Ar1	Dr1	Dr2	Dr2	Dr2	Dr3	Ex	De	4
5	Ar3	Ar2	Ar2	Ar1	Dr2	Dr2	Dr2	Dr3	Dr3	Ex	5
6	Ar3	Ar3	Ar2	Ar1	Dr1	Dr1	Dr1	Dr2	Dr3	Ex	6

[10.1] EXPLANATION OF COMBAT RESULTS

Ar1,Ar2,etc.: The attacking unit(s) must retreat the number of hexes given in the result. See Retreat and Advance Case below.

Dr1,Dr2,etc.: The defending units must retreat the number of hexes given in the result.

EX: The defending units are completely eliminated (removed from the map). The attacker must eliminate unit(s) whose Combat Strengths total at least that of the eliminated defending units. In calculating the strength of the eliminated defending units, count only the face value of the unit(s); disregard terrain effects and supply effects. Record Victory Points for eliminated units.

De: All defending unit(s) are eliminated. They are removed from the game map and placed on the Attacker's Victory Point Record Chart.

[10.2] HOW TO RETREAT AND ADVANCE AFTER COMBAT

Due to an "Ar" or "Dr" Combat Result, units will retreat after combat. Units may not retreat into an Enemy controlled hex. The victor determines the path of the retreating units according to the following priorities:

1. to or along a road and non-interdicted bridge hex-sides;
2. to or through clear terrain;
3. through rough terrain and ford hex-sides;
4. through interdicted bridge hex-sides;
5. through unbridged river hex-sides;
6. onto or through the least number of Friendly units;
7. toward Enemy supply and away from Friendly Supply.

Units may not move into an Impassable hex when retreated.

The retreated unit must come to rest the full number of hexes away from its initial position called for in the result as traced by the most direct path. Units which are unable to retreat safely, because of the interposition of Enemy-controlled hexes, the position of Impassable hexes, and/or because the violation of Stacking limitations, are eliminated and placed in the victor's Victory Point Record Chart.

[10.3] GERMAN INITIAL COMBAT RESULTS TABLE

The German Player uses the German Initial Combat Results Table from Game-Turn 1 to Game-Turn 5. At the beginning of Game-Turn 6, the German Player rolls the die. If he rolls a "1" he commences using the Standard Combat Results Table. Any other result and he continues to use the Initial Table. On every Game-Turn thereafter, the German Player repeats the die roli until he rolls a "1" when he switches to the Standard Table.

[11.0] ARDENNES TERRAIN EFFECTS CHART

TYPE OF TERRAIN	MOVEMENT POINT (MP) COST TO ENTER OR CROSS	EFFECT ON COMBAT
Clear hex	1 MP	None
Ford hex-side	Mechanized units:3 additional MPs to cross Non-Mechanized units:1 additional MP to cross	None
River hex-side	Mechanized units: 6 additional MPs to cross Non-Mechanized units: 3 additional MPs to cross	None
Bridge hex-side	No additional cost for river hex-side (see Bridge rules)	None
Rough Terrain hex	Mechanized units: 4 MPs Non-Mechanized units: 2 MPs	None
Town hex	Same as other terrain in hex.	Ar & Dr Combat results have no effect on units in town hex
Impassable hex	Entry prohibited	Not applicable
West Wall hex	German units: No additional MPs. Allied units: 2 additional MPs. May not enter in Road Mode.	Defending German units in the hex tripled; doubled if attacking out of the hex; Ar & Dr results have no effect on German unit. Allied units do not receive any benefits.
"Cleared" West Wall hex	no additional MPs	German units doubled on defense; Ar & Dr results have no effect on German unit. Allied units do not receive any benefits.
Road hex	1 MP regardles of terrain. Units do not have to be in road mode for roads to negate terrain.	None
Allied Map-Edge hex	Enter only by mandated retreat.	Prohibited

[12.0] SUPPLY

GENERAL RULE:

Units must be "supplied" to use their full Combat Strength or Movement Allowance; if they are unsupplied or isolated, they are penalized with respect to movement and combat value.

PROCEDURE:

The supply condition of all Friendly units is determined during the Supply Judgment Phase, and applies through the rest of that Friendly Player-Turn. Enemy units attacked during a Friendly Player-Turn have their supply condition determined at the moment of combat. Thus, the effect of supply on Movement Allowance and Combat Strength for attacks occurs at the start of each Player-Turn, while the effect on Combat Strength for defense occurs at the moment of combat.

In order to distinguish which units are unsupplied or isolated, markers have been provided. Whenever a unit is in an unsupplied or isolated condition, place the appropriate marker on top of the unit. Remove the markers whenever the unit's supply status changes.

CASES:

[12.1] TRACING SUPPLY

(A) Supply is traced along a line of continuous hexes stretching from the unit to a supply source, counting no more than three hexes from the unit to a road hex, which road must then run uninterrupted by interdicted bridge hex-sides or Enemy occupied or controlled hexes, to a supply source. This supply path may be traced through a Friendly unit in an Enemy Zone of Control.

(B) Any number of units may be supplied from the same supply path.

(C) The first three hexes of the supply path may transit any type of terrain except Impassable hexes. It may not trace through Enemy Zones of Control or Enemy occupied hexes.

[12.2] SUPPLY SOURCES

(D) German supply is traced to any road hexside on the East edge of the map.

(F) Allied supply is traced to any road hexside from the other map edges.

[12.3] SUPPLY STATES

(G) Units are *unsupplied* when they are unable to trace a supply path.

(H) Units are *isolated* when they are unable to trace a supply path, are totally surrounded on all six adjacent hexes by Enemy units or Enemy controlled hexes *and* are more than three hexes from any Supplied Friendly unit.

(J) Units which are within three hexes of a road exit hexside on their respective map edges can never be isolated, even if cut off by terrain or Enemy presence.

[12.4] EFFECTS OF SUPPLY

(K) The effect of supply on Combat Strength for attack and Movement Allowance is determined during the Supply Judgment Phase, and applies to all Friendly units throughout the Initial Movement Phase, the Combat Phase and the Mechanized Movement Phase of that Friendly Player-Turn. The effect of supply on Combat Strength for defense is determined at the moment of combat, during the Enemy Combat Phase. See the Supply Effects Chart for a summary of conditions and effects of the various Supply states.

[12.5] UNITS NOT LOST DUE TO SUPPLY STATES

(L) Units may remain unsupplied or isolated indefinitely; i.e., units are never lost through lack of supply alone.

[12.6] SUPPLY EFFECTS CHART

	SUPPLIED	*UNSUPPLIED*	*ISOLATED*
COMBAT STRENGTH ON DEFENSE	Normal	Normal	Halved
COMBAT STRENGTH ON ATTACK	Normal	Halved	Zero
MOVEMENT ALLOWANCE	Normal	Halved	Halved

EXPLANATION OF SUPPLY CHART

Normal: No effect

Halved: Combat Strength for attack and defense is cut in half rounding up fractions. The total Combat Strength of a stack is computed and then halved. Movement Allowance is cut in half, with the fractions being lost.

Zero: Attack Strength is reduced to zero (i.e. no attack is possible for such a unit).

[13.0] BRIDGES AND INTERDICTION

GENERAL RULE:

Bridges allow movement across river hex-sides (on roads) at no additional cost. Bridge hex-sides may be rendered temporarily inoperative ("interdicted") for movement and supply by the presence of an Enemy unit. This is an automatic condition determined during the phasing Player's supply Judgment Phase.

CASES:

[13.1] WHEN BRIDGE INTERDICTION OCCURS

(A) During the Player's Supply Judgment Phase the condition of bridge hex-sides is determined and Bridge Interdiction counters of the appropriate color are placed where necessary (point the marker at the interdicted Bridge). All bridge hex-sides within three hexes of an Enemy unit are considered to be interdicted for Friendly Movement and Supply. Only one of the two hexes which share the bridge hex-side need be within three hexes of the Enemy unit for the Bridge to be considered interdicted. Bridges remain interdicted for the entire Player-Turn, regardless of any results of combat or movement.

[13.2] INTERDICTION EFFECTS AND DURATION

(B) The road crossing an interdicted bridge is considered cut. This road hex-side may not be used for supply or movement purposes (see Road Movement Case (F).

(C) At the very end of each Player-Turn, remove the Enemy Bridge Interdiction counters from those bridges which are no longer within three hexes of an Enemy unit. Such bridges are now once again fully operative.

[13.3] UNITS WHICH DO NOT INTERDICT

(D) Units in Road Mode do not interdict bridges.

[13.4] SPECIAL GAME-TURN 1 RULE

(E) All bridges on the German side of the start line are not affected by Allied units within three hexes until Game-Turn 2.

[13.5] INTERDICTION SELECTIVITY

(F) Players are reminded that Bridge interdiction is selective: i.e., a bridge which is interdicted for the German Player is not necessarily interdicted for the Allied Player. If both Players have units within three hexes of a given Bridge, then the Bridge is interdicted from the point of view of both Players. In such a case, if the interdiction effect with regard to one Player is subsequently removed, this does not in itself affect the interdiction effect with regard to the other Player. Use the differently colored interdiction markers to indicate who is interdicting a given Bridge.

[14.0] REINFORCEMENTS

GENERAL RULE

Reinforcements come into the game as indicated on the Turn Record and Reinforcement Chart. They appear on the indicated map edge section.

CASES

[14.1] WHERE REINFORCEMENTS ARE PLACED

(A) Allied Reinforcements are placed on *Map Edge* hexes adjacent to a road hex-side. They appear in Road Mode and their appearance may not be voluntarily delayed. German Reinforcements appear on any map edge hex adjacent to a road hex-side on the East edge of the map; also in Road Mode.

Allied reinforcements appear on any map edge hex adjacent to a road hex-side on the designated map edge section. If the German Player has occupied or controls all of the road exit hexes on the map edge segment that Allied reinforcements are due, those reinforcements are delayed one Game-Turn and then enter on the adjacent map edge segment (if possible). The Allied side of the map is divided into five sections: Northeast, Northwest, West, Southwest and Southeast. If the German Player occupies two successive sections of the map on which reinforcements are due, the reinforcements are delayed for a second Game-Turn, and must then appear in the next clear section. Reinforcements may never be brought on the map through an Enemy occupied or controlled hex.

[14.2] SIMULATANEOUS ENTRY ON THE SAME HEX

(B) Reinforcements which choose to use the same entry road hex must "stage" onto the map and lose two road hexes in movement for every unit which preceded them onto the map in that same Phase.

[14.3] RESTRICTED BRITISH REINFORCEMENTS

(C) Allied reinforcements labeled "WB" on the Reinforcement Chart enter on the West section of the map. They may not cross the Meuse River until the German Player accumulates 25 or more Victory Points. They may attack Enemy units which cross the Meuse and those Enemy units adjacent to it.

[15.0] GERMAN PARADROP

1-4

On Game-Turn 2 the German Player must drop his paratroop unit (Von der Heydte).

PROCEDURE

The paradrop occurs at the start of the Initial German Movement Phase before any other movement takes place. The unit may be dropped on any hex which is not occupied by an Allied unit or in an Allied Zone of Control, with the exception of Impassable hexes. The German Player rolls the die for the survival of the unit; a "one" or a "two" and the unit survives. The unit is dropped in a supplied condition for that Player-Turn; thereafter, it must trace a supply path as a normal unit. If the unit survives it may move during that Movement Phase. Note that no other paratroop unit in the game is capable of dropping.

[16.0] VICTORY CONDITIONS

COMMENTARY

Hitler ordered the Ardennes Offensive with the objective of breaking through the Allied line, seizing Antwerp and cutting off the Allied 21st Army Group. In order for the Germans to have even an *un*reasonable chance of reaching these objectives, the Allied commanders would have had to be completely inept (which they weren't). However, the Germans did have a chance to profit by the offensive in two ways (1) by rupturing the Allied front on a broad and deep basis in the first few days thereby causing a general Allied withdrawal from the German frontier, and (2) by destroying the Allied reserve while preserving their own. This would delay and weaken the expected Allied Spring Offensive and allow the Germans to transfer forces to the East. Of course, any kind of German success would merely put off the inevitable. If the Germans get *real* lucky, they win the A-bomb sweepstakes from the Japanese.

GENERAL RULE

Throughout the Game, Players score Victory Points for destroying Enemy units. The German Player also scores Victory Points for occupying road exit hexes. The Players keep track of Victory Points with the Victory Point Chart. The German Player must score at least 35 Victory Points at the end of the Game or the Allied Player automatically wins. Assuming the German Player does score 35 points, the total Victory Points for each side are compared and the ratio of Points obtained is used to determine the Victor (if any) and the level of victory.

PROCEDURE:

When a unit is destroyed, it is recorded as one Victory Point for the Enemy Player. Players use the Victory Point Records printed on the map as per the instructions given with them. In addition to Points-for-destroyed-Enemy-units, the German Player gains Victory Points for occupying Road Exit hexes. These Points are recorded using the arrowhead markers on the Victory Point Record.

CASES

(A) All units count as one Victory Point, irrespective of size or type.

(B) The Victory Point(s) for a Road Exit hex are shown in that hex.

(C) The German Player occupies these hexes by the physical presence of his unit or his unit's Zone of Control. One unit can occupy more than one exit hex. If the exit hex is in the Zone of Control of both an Allied unit and a German unit, it is considered occupied by the German unit. If the Allied unit is in the exit hex, it negates any German Zone of Control and the hex is not occupied by the German Player.

(D) The Victory Point(s) for the Road Exit hexes on the Southeast and Southwest segments of the map count only while the German Player has a unit in supply in Bastogne.

(E) Victory Points are tabulated at the end of a complete Game-Turn.

(F) The German Player must remain in control of a road exit hex in order to get the Victory Points. He does *not* get Victory Points for being the last to occupy a Road Exit hex. Unoccupied Road Exit hexes are considered to be controlled by the Allied Player and may be used for reinforcements and supply.

(H) German units in Road Mode may occupy a Road Exit hex by being physically on the road exit hex.

(G) German units must be in supply in order to receive Victory Points for occupying road exit hexes.

[16.1] HOW TO CALCULATE VICTORY

Compare the number of German Victory Points to the number of Allied Victory Points expressed as a ratio: German Victory Points divided by Allied Victory Points.

German Victory	1.5 or greater
Allied Victory	Less than 1.0
Draw	1.0 to 1.4999

[16.2] GERMAN IMMEDIATE VICTORY

If the German Player scores 35 Victory Points by the end of Game-Turn 6, he wins an immediate victory and the Game ends.

[16.3] ALLIED CUMULATIVE VICTORY

If the German Player scores less than 35 Victory Points by the end of Game-Turn 18, the Allied Player wins regardless of the Victory Points Ratio.

[17.0] SET-UP AND REINFORCEMENT VARIATIONS

Various set-ups and reinforcement rates are called for in the Scenarios. They are as follows:

German Historical Set-up: This represents the actual German deployment at the beginning of their offensive. At the beginning of the Game the German Player places his units as shown on the map.

Allied Historical Set-up: This represents the actual Allied deployment at the beginning of the German offensive. At the beginning of the Game, the Allied Player places his units as shown on the map.

German Free Set-up: This assumes the Germans were not as rushed to begin the offensive as they were by events in the East, and had time to deploy their units rather than simply running them up to the front. The German Player places his units as shown on the Historical Set-up. He may then rearrange those units in the front line in any fashion he desires so long as these units remain on the front line and so long as he does not stack these units. He then rearranges those units deployed behind the front line in any fashion he desires so long as these units do not enter the front line and so long as he does not stack them.

Allied Free Set-up: This assumes that the Allies had acknowledged the possibility of a German offensive and changed their deployment to a defensive rather than an offensive posture. The Allied Player places his units as shown on the Historical Set-up. He then rearranges those units on the front line in any fashion he desires so long as these units remain on the front line and so long as he does not stack these units. He then rearranges those units deployed behind the front line in any fashion he desires so long as these units do not enter the front line and he does not stack them.

The Historical Reinforcement Rate (for both the Allied and the German Player) represent the actual reinforcements during the battle.

German Accelerated Reinforcement Rate: This assumes the Germans had launched a total all-out effort against the Allies.

Allied Slowed Reinforcement Rate: This assumes that the Allied Command did not react as quickly as it did.

[18.0] SCENARIOS

#	Allied Set-up	Allied Reinforc.	German Set-up	German Reinforc.
1	hist.	hist.	hist.	hist.
2	hist.	hist.	hist.	hist.
3	hist.	hist.	free	hist.
4	free	slow	hist.	hist.
5	free	slow	free	hist.
6	free	slow	free	accel.
7	hist.	slow	hist.	accel.
8	hist.	slow	free	accel.
9	hist.	hist.	free	accel.
10	free	hist.	free	accel.

Scenario #1; favors a draw or an Allied victory.
Scenario #2; favors a German victory.
Scenario #3; favors a German immediate victory
Scenario #4; 50-50
Scenario #5; favors German
Scenario #6; strongly favors German
Scenario #7; very strongly favors German
Scenario #8; very bad news for the Allies
Scenario #9; very strongly favors German
Scenario #10; Germans either win early or not at all.

[19.0] DESIGNER'S NOTES

The Battle of the Bulge. There is probably no other subject that has been covered so often in games. Avalon Hill first did it in 1965. Then we did it again in 1970. In addition, there have been numerous variations, revisions and what have you. So why another game? Mainly because there's a demand for it. And it was felt that the subject had not yet been done justice in a game form. How, therefore, have done any better with the *Ardennes Offensive?*

First of all, before designing a game on the Battle of the Bulge, you must choose which of the many critical factors in the campaign you wish to stress. The Battle of the Bulge was a very complicated campaign. Many factors which are simply present in other campaigns were potentially decisive in the Battle of the Bulge. Take, for example, the roads. In any battle these are a factor. But in the Ardennes, the roads acquire critical importance. Mainly because of the terrain. And so the terrain also becomes of "more than usual" importance. The weather is critical. Bad weather was essential for the Germans in order to keep the American air power neutralized. From these few factors just mentioned we can derive numerous other complications. The following are the ones we feel were most necessary, while at the same time not complicating the game to the point where it was not enjoyable to play.

We picked the road net as one of the major critical factors. The road net shown was originally developed for our *Bastogne* (1970) game. Compiling that road net on a hex grid was a major project, so here we use a modified (simplified) version of it. The road net itself also includes much information about the terrain. Thus we didn't have to add much in order to obtain a quite accurate terrain analysis. To make this road business even more effective we added a rule for "road movement" of units. That, we felt, would take care of the road problems.

Next there was a problem, of sorts, with the order of battle. Particularly the German one. Their infantry divisions varied enormously in quality. The solution was to represent those Volksgrenadier divisions the Germans described as "armed mobs" as divisions, while all other units were represented as regiments or brigades. Otherwise, order of battle wasn't much of a problem. The enormous German superiority in artillery during the first few days of the campaign was represented by giving the Germans more offensive punch on the first turn. This also accounted for the surprise factor, which was considerable on the first day.

The combat system was made rather bloodless. Even so, the Germans are able to really chew up the American line during the first few days. That's the critical period. Ten days at the most. All of that which came after the ten days (including the famous "siege of Bastogne") was anti-climactical. It was a ten day battle. Off to a fast start and peaking out very early. That's how we've tried to re-create in a game form.

[20.0] DESIGN CREDITS

DESIGN CREDITS

Game Design and Research:
James F. Dunnigan

Physical Systems Design and Graphics:
Redmond A. Simonsen
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Game Development and Rules Composition:
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CONSOLIDATED ERRATA & ADDENDA (as of 31 May 73) for *Ardennes Offensive, Red Star/White Star*

Ardennes Offensive

As a result of post-publication playtesting and questions or comments received from SPI customers, the following errata has been assembled to clarify play of this simulation:

MAPSHEET

1. As depicted, the Allied Map Edge Hexes extend beyond the flanks of the German side of the front-line. This is an error. Hexes nrs. 0101 thru 0108 inclusive and hexes nrs 3701 and 3702 are not Allied Map Edge Hexes and may not be entered by any unit of either side for any purpose.

2. The river hexside shown between hex nr. 2311 and hex nr. 2211 is a mistake. Ignore it.

3. The bridge between hex nr. 3111 and hex nr. 3010 was left out by mistake. Draw it in.

4. Hexes nrs. 1107, 2819 and 1016 are tainted with rough terrain. They should be considered clear terrain.

5. The "front-line" or "start line" is the line of dotted hexsides running from hex nr. 0108 to hex nr. 3702 exclusive.

6. The towns of Monschau and St. Vith have an American unit deployed in them. The unit is shown in an adjacent hex with an arrow pointing into the town.

7. Hexes nrs. 1516, 1506, 3505 and 3612 should be impassable terrain.

RULES

[5.0] MOVEMENT

It is suggested that all units on a side maintain a common facing. Note that the initial deployment has all the Germans facing west and all the Americans facing east. Whenever a Friendly mechanized unit attacks its facing can be turned sixty degrees. Then the Friendly Player can easily recognize which of his mechanized units are eligible to move during the Mechanized Movement Phase. At the completion of the Player-Turn all units can be returned to the original facing.

[6.0] ROAD MODE

Section 6.7 Case L – The opening sentence should read "If a *Friendly* unit in Road Mode attacks or is attacked it must leave the Road Mode at the beginning of the Initial Movement Phase of the next Friendly Player-Turn...." Players should note that any unit with a Movement Allowance of less than twelve cannot leave Road Mode if it is unsupplied or isolated. If such an unsupplied unit is required to leave Road Mode it is eliminated. The elimination takes place before any other activity in the Initial Movement Phase. It is entirely conceivable that the strongest German Panzer unit would have to self-destruct if it was attacked while in Road Mode by an American engineer regiment and then found itself unsupplied at the start of the German Player-Turn.

[13.0] BRIDGES AND INTERDICTION

1. The Bridge Interdiction Rules simulate the effect of artillery fire on bridge approaches as well as the bridge itself being inoperative. The presence of Friendly units can never negate the interdiction of a bridge by an Enemy unit. Do not confuse Zones of Control with Bridge Interdiction.

2. Sect. 13.4 Case E refers to all bridges which are entirely behind the German side of the start line. Bridges which are bisected by the start line are interdicted by Allied units on Game-Turn 1.

3. Sect. 13.1.Case A establishes what bridges are interdicted for the Friendly Player. The bridges so established remain interdicted for the entire Friendly Player-Turn. Even if the interdicting Enemy unit(s) are eliminated or displaced as a result of Friendly unit attacks, the interdicted bridges would remain to affect the Friendly Player Mechanized Movement Phase. By the same token an Enemy Unit which has been retreated (or advanced) to within range of a bridge does *not* interdict the bridge for the Mechanized Movement Phase.

4. During the Friendly Player-Turn the interdiction of bridges by Friendly units is determined for the Enemy units at the moment of combat.

[12.0] SUPPLY

1. Supply status markers on Friendly units should be removed from Friendly units at the conclusion of the Friendly Player-Turn. During the Enemy Player-Turn the supply status of Friendly units will be determined at the moment of combat.

2. Once the supply status of a Friendly unit has been determined during the Supply Judgment Phase of the Friendly Player-Turn it is determined for the entire Player-Turn. No combination of movement and combat can change that status for that Player-Turn.

REINFORCEMENT TRACK

The Allied Reinforcement Track is accurate in terms of unit Combat Strength, Movement Allowance and direction of appearance. It is *not* accurate in terms of unit size and type. Players can use units of the same Combat Strength and Movement Allowance interchangeably without regard for unit size and type. It is suggested that the British units be reserved to represent West-Bank reinforcements as it is easier to visually keep track of them. For those intersted, the actual unit designations for reinforcements for both Players are detailed below.

[10.2] RETREATING UNITS

The first priority for retreating units should be: toward Friendly Supply and away from Enemy Supply.

[9.0] COMBAT

1. Section 9.2 Case F refers to a stack of defending units which was intact at the beginning of the Combat Phase. If in a given Combat Phase a unit is retreated into a stack it does not add to the Defensive Strength of that stack during that phase. It does however suffer any combat results applied to that stack.

2. Section 9.4 Case L, add "The German Player may never voluntarily reduce the odds of his attacks below 2-1."

[4.2] SPECIAL DEPLOYMENT AND FIRST GAME-TURN RULES

On the first Game-Turn the German Player MUST attack every American unit adjacent to German units on the start line, and every German unit adjacent to an American unit must participate in an attack.

[11.0] TERRAIN EFFECTS CHART

The chart states that "Ar & Dr Combat results have no effect on units in town hexes." This is a *voluntary* immunity which may be waived by the Player whose unit is in the town hex. However, the immunity must be waived ***before*** the die is rolled and the Combat results known.

This same voluntary immunity extends to German units in West Wall hexes.

[18.0] SCENARIOS

Scenario Nr. 2 should be played with German *accelerated* reinforcements.

Allied Historical Reinforcement

Game-Turn 2:
(NE): cca7, ccb7, ccr7, 39 i, 47 i, 26 i, 517 pi
(SE): caa10, ccb10, ccr10
Game-Turn 3:
(NE): 117 i, 119 i, 120 i
(W): 504 pi, 506 pi, 325 (G), 401 pi, 327 pi, 502 pi, 505 pi, 501 pi
Game-Turn 4:
(NE): 16 i, 18 i
Game-Turn 5:
(NE) 32 a, 33 a, 36 ai
(SE): cca4, ccr4, ccb4
(WB): 56Gds, 32Gds, 129 i (X), 130 i (X), 214 i (X), 152 i (X), 153 i (X), 154 i (X), 71 i (X), 158 i (X), 160 i (X), 33 a (X), 29 a (X)
Game-Turn 6:
(NE): ccr5, 333 i, 334 i, 335 i
(SE): 2 i, 10 i, 11 i, 101 i, 104 i, 238 i, 317 i, 318 i, 391 i
Game-Turn 7:
(NE): 24 i, 60 i, 66 a, 67 a, 41 ai
(SE): 6 ac
Game-Turn 8:
(NE): 289 i, 290 i, 291 i
(SE) 4 ac
(WB): FR. LT., 1102e, 1107e, 1111e, 1128e, 354e, 342e
Game-Turn 11:
(NE): 329 i, 330 i, 331 i, 401G (II)
(SE): 134 i, 137 i, 320 i
(WB): 508 pi, 551 pi
Game-Turn 12:
(SE): cca6, ccb6, ccr6
(WB): 34 a (X)
Game-Turn 14:
(SE): cca11, ccb11, ccr11
Game-Turn 16:
(W): 68 i (X), 151 i (X), 231 i (X)
Game-Turn 17:
(W): 513 pi, 507 pi, 193G, 194G

Allied Slowed Reinforcements

Game-Turn 2:
(NE): cca7, ccb7, ccr7
(SE): cca10, ccb10, ccr10
Game-Turn 3:
(NE): 39 i, 47 i, 16 i, 18 i, 26 i, 517 pi
Game-Turn 4:
(NE): 117 i, 119 i, 120 i
Game-Turn 5:
(W): 327 pi, 401 pi, 502 pi, 501 pi, 506 pi, 504 pi, 505 pi, 325G pi
Game-Turn 8:
(NE): 32 a, 33 a, 36 ai
(SE): cca4, ccb4, ccr4
Game-Turn 9:
(W): 129 i (X), 130 i (X), 214 i (X), 152 i (X), 153 i (X), 154 i (X), 56 GD, 32 GD
Game-Turn 10:
(W): 34 a, 29 a, 71 i, 158 i, 160 i

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Game-Turn 11:
(NE): 289 i, 290 i, 291 i
(SE): 6 a cav
Game-Turn 12:
(SE): 2 i, 10 i, 11 i, 101 i, 104 i, 328 i
(NE): 66 a, 67 a, 41 ai
Game-Turn 13:
(SE): 317 i, 318 i, 319 i
(NE): 329 i, 330 i, 331 i
Game-Turn 14:
(W): 354 e, 342 e, 392 e, 366 e, 1308 e, 1313 e, Fr. Lt. i. (Brig)
Game-Turn 15:
(SE): 134 i, 137 i, 320 i
(NE): 24 i, 60 i, 401 G
Game-Turn 16:
(W): 34 a
(SE): cca6, ccb6, ccr6
Game-Turn 17:
(SE): cca11, ccb11, ccr11
Game-Turn 18:
(W): 68 i (X), 151 i (X), 231 i (X)
(SE): 513 pi, 193 G, 507 pi, 194 G

German Historical Reinforcements

Game-Turn 1:
1 a (x)
Game-Turn 2:
2 a (x), Von Der Hedyte
Game-Turn 3:
3 a (x)
Game-Turn 4:
4 a (x), 2ss a (III), 3ss ai (III), 4ss ai (III), 9ss a (III), 19ss ai (III), 20ss ai (III), 8 ai (III), 29 ai (III), FE (x)
Game-Turn 5:
5 a (x), 1130 i (III)
Game Turn 6
6 a (x)
Game-Turn 7:
7 a (x)
Game-Turn 8:
8 a (x), 33 a (III), 10 ai (III), 11 ai (III), 104 ai (III), 115 ai (III), FG (x), 79 i (XX)
Game-Turn 9

Game-Turn 10:
167 i (XX)
Game-Turn 11

Game-Turn 12:
246 i (XX)
Game-Turn 13:
9 i (XX)
Game-Turns 14, 15, 16, 17:

Game-Turn 18:
340 i (XX)

German Accelerated

Game-Turn 1:
1 a (x)
Game-Turn 2:
2 a (x), Von der Heydte, 2 ss a (III), 3ss ai (III), FE (x)
Game-Turn 3:
3 a (x), 4ss ai (III), 9ss a (III), 19ss ai (III), 20ss ai (III), 8 ai (III), 29 ai (III), 10ss a (III), 21ss ai (III), 22ss ai (III), 15 a (III), 110 ai (III), 111 ai (III), FG (x)
Game-Turn 4:
4 a (x)
Game-Turn 5:
5 a (x), 33 a (III), 10 ai (III), 11 ai (III), 104 ai (III), 115 ai (III), 1130 i (III)

Game-Turn 6:
6 a (x), 79 i (XX)
Game-Turn 7:
7 a (x)
Game-Turn 8:
8 a (x), 167 i (XX)
Game-Turn 9:
246 i (XX)
Game-Turn 10:
—
Game-Turn 11:
9 i (XX)
Game-Turn 12:
—
Game-Turn 13:
340 i (XX)

Red Star/White Star

As a result of post-publication playtesting, the following errata has been assembled to clarify and correct various errors or ambiguities in the original game components.

COMBAT

(A) *Should read* – You may not attack the same unit more than once per phase using the same Weapon Class (exception: see Zones of Control).

FIRE COMBAT

(H) *Should read* – Only HE units may use Indirect Fire. To use Indirect Fire a unit need *not* have a Range Allowance of "7" or greater.

(J) *Should read* – Direct Fire may never be used at ranges greater than ten hexes. Direct Fire *never* requires Spotting. Direct Fire may be applied into, but not through, Blocking or Covering Terrain hexes.

(L) *Should read* – For Direct Fire purposes a firing unit may trace a Line of sight into, but not through, Blocking or Covering Terrain hexes.

(M) *Should read* – If the Line of Sight at any point BETWEEN (BUT NOT INCLUDING) the hex of the firing unit and the target hex, passes through Blocking Terrain, the Line of Sight is blocked and Direct Fire is prevented. A unit may use Direct Fire against a unit in Covering Terrain, without the target hex being spotted, if the firing unit can trace a Line of Sight (no longer than ten hexes) into the target hex.

(P) *Should read* – Spotting is a necessary precondition only for Indirect Fire. Spotting is never required for Direct Fire. Because Direct Fire cannot be employed at ranges greater than ten hexes, and because a firing unit will always be able to trace a Line of Sight into (but not through) Blocking or Covering Terrain hexes (assuming the firing unit is within ten hexes range, and that there is no intervening Blocking or Covering Terrain) Direct Fire will never require Spotting.

(Q) *Should read* – Indirect Fire may only be used by HE units. To use Indirect Fire HE units need not have a Range Allowance of "7" or greater. Indirect Fire may be used at any range, subject to the firing unit's Range Allowance. The two prerequisites for using Indirect Fire are:

1) Only HE units may use Indirect Fire.

2) The target hex must be spotted (as in Case P).

CLOSE ASSAULT

(W) *Should read* – An Enemy unit making a Close Assault upon a defending Friendly unit may be fired on by the defending Friendly unit (and any other Friendly units within range, using Direct or Indirect Fire) only if the hex from which the Close Assaulting unit enters the defending Friendly unit's hex, is in a Friendly Zone of Control (i.e. Enemy units Close Assaulting from Woods or Town hexes may not be fired on during the Close Assault by the defending Friendly unit or any other Friendly units).

ZONES OF CONTROL

(D) *Should read* – Targets in Woods or Town hexes must always be spotted for Indirect Fire only. If a firing unit can trace a Line of Sight into a Woods or Town hex, it may use Direct Fire against Enemy units in that hex without requiring the hex to be spotted.

(E) *Should read* – No Friendly unit may fire more than *once* during the Enemy Movement Phase. Non-Phasing units may each fire only once during an Enemy Movement Phase at Enemy units which attempt to leave Friendly Zones of Control. Once a unit fires during an Enemy Movement Phase it may not fire again during that phase regardless of how many Enemy units attempt to leave its own, or any other Friendly Zone of Control. Units which do fire during the Enemy Movement Phase may not fire during the ensuing Fire Phase.

HELICOPTERS

General Rules – Helicopters do possess a normal Zone of Control. Soviet ground units are affected by helicopter Zones of Control and must announce their intention to leave such a Zone, and are subject to fire when they attempt to leave a helicopter Zone of Control. Note also, in any Game-Turn in which a helicopter remains stationary in a Soviet Air Defense Zone, the Soviet unit(s) may fire at the helicopter (using the Soviet Air Defense Table) in the Soviet Offensive Fire Phase. This fire is in addition to any normal ground fire the Soviet unit wishes to employ during his Offensive Fire Phase.

UNIT IDENTIFICATION CHART

The quantity of the following units is correct in the counter-mix but wrongly noted on the Unit Identification Chart.

US M 125 Platoons – (6) is the correct quantity.

US M 106 Platoons – (4) is the correct quantity.

US OTOW/APC Platoons – (12) is the correct quantity.

THE SCENARIOS

Scenario # 8 – The counter-mix is lacking one ARCv Platoon. In this scenario Players should make up the unit from spare counters.

•••

Soviet units entering the mapsheet (rather than being initially deployed) may never employ Indirect Fire.

The Ardennes Offensive

THE BATTLE OF THE BULGE, DECEMBER 1944

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INITIAL GERMAN FORCES:

5-4 x3 | 6-4 x1 | 7-4 x1
4-4 x1 | 7-10 x1 | 6-10 x3
5-10 x2 | 4-10 x8 | 3-10 x6
5-4 x1 | 4-4 x2 | 3-4 x3
2-4 x11

GERMAN REINFORCEMENTS (HISTORICAL)

GERMAN REINFORCEMENTS (ACCELERATED)

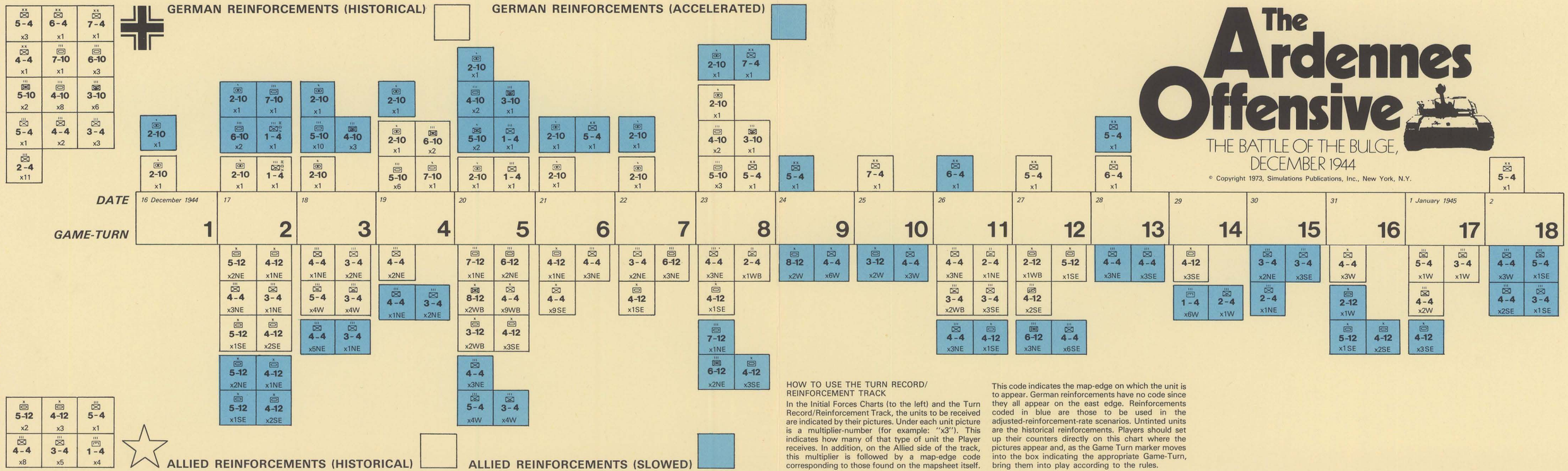
INITIAL ALLIED FORCES:

5-12 x2 | 4-12 x3 | 5-4 x1
4-4 x8 | 3-4 x5 | 1-4 x4

ALLIED REINFORCEMENTS (HISTORICAL)

ALLIED REINFORCEMENTS (SLOWED)

DATE	16 December 1944	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1 January 1945	2
GAME-TURN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18



HOW TO USE THE TURN RECORD/ REINFORCEMENT TRACK

In the Initial Forces Charts (to the left) and the Turn Record/Reinforcement Track, the units to be received are indicated by their pictures. Under each unit picture is a multiplier-number (for example: "x3"). This indicates how many of that type of unit the Player receives. In addition, on the Allied side of the track, this multiplier is followed by a map-edge code corresponding to those found on the mapsheet itself. This code indicates the map-edge on which the unit is to appear. German reinforcements have no code since they all appear on the east edge. Reinforcements coded in blue are those to be used in the adjusted-reinforcement-rate scenarios. Untinted units are the historical reinforcements. Players should set up their counters directly on this chart where the pictures appear and, as the Game Turn marker moves into the box indicating the appropriate Game-Turn, bring them into play according to the rules.

ARDENNES OFFENSIVE

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AMERICAN

395 4-4	23 4-4	38 4-4	424 4-4	109 4-4	110 4-4	8 4-4
12 4-4	39 4-4	17 4-4	117 4-4	16 4-4	18 4-4	26 4-4
2 4-4	10 4-4	11 4-4	101 4-4	104 4-4	328 4-4	317 4-4
318 4-4	319 4-4	333 4-4	334 4-4	335 4-4	289 4-4	290 4-4
291 4-4	329 4-4	330 4-4	331 4-4	393 3-4	394 3-4	422 3-4
423 3-4	112 3-4	60 3-4	119 3-4	120 3-4	24 3-4	134 3-4
137 3-4	320 3-4	505 5-4	504 5-4	327 5-4	401 5-4	513 5-4
193G 4-4	194G 4-4	517 3-4	551 3-4	508 3-4	507 3-4	325G 3-4
501 3-4	502 3-4	506 3-4	401G 2-4	526 2-4	599 2-4	32 7-12

33 6-12	66 6-12	67 6-12	cca7 5-12	ccb7 5-12	cca10 5-12	cca6 5-12	cca9 5-12
ccb9 5-12	ccr7 4-12	ccb10 4-12	ccr10 4-12	ccr9 4-12	cca4 4-12	ccb4 4-12	ccr4 4-12
ccr5 4-12	ccb6 4-12	ccr6 4-12	cca11 4-12	ccb11 4-12	ccr11 4-12	14 4-12	102 4-12
6 4-12	4 4-12	1102 1-4	1107 1-4	1111 1-4	1128 1-4	354 1-4	342 1-4
392 1-4	366 1-4	1308 1-4	1313 1-4	36 6-12	41 6-12	9 5-4	
U	U	U	U	U	U	U	U
U	U	I	I	I	I	I	Game Turn

FRENCH

34 2-12	Fr.Lt. 2-4

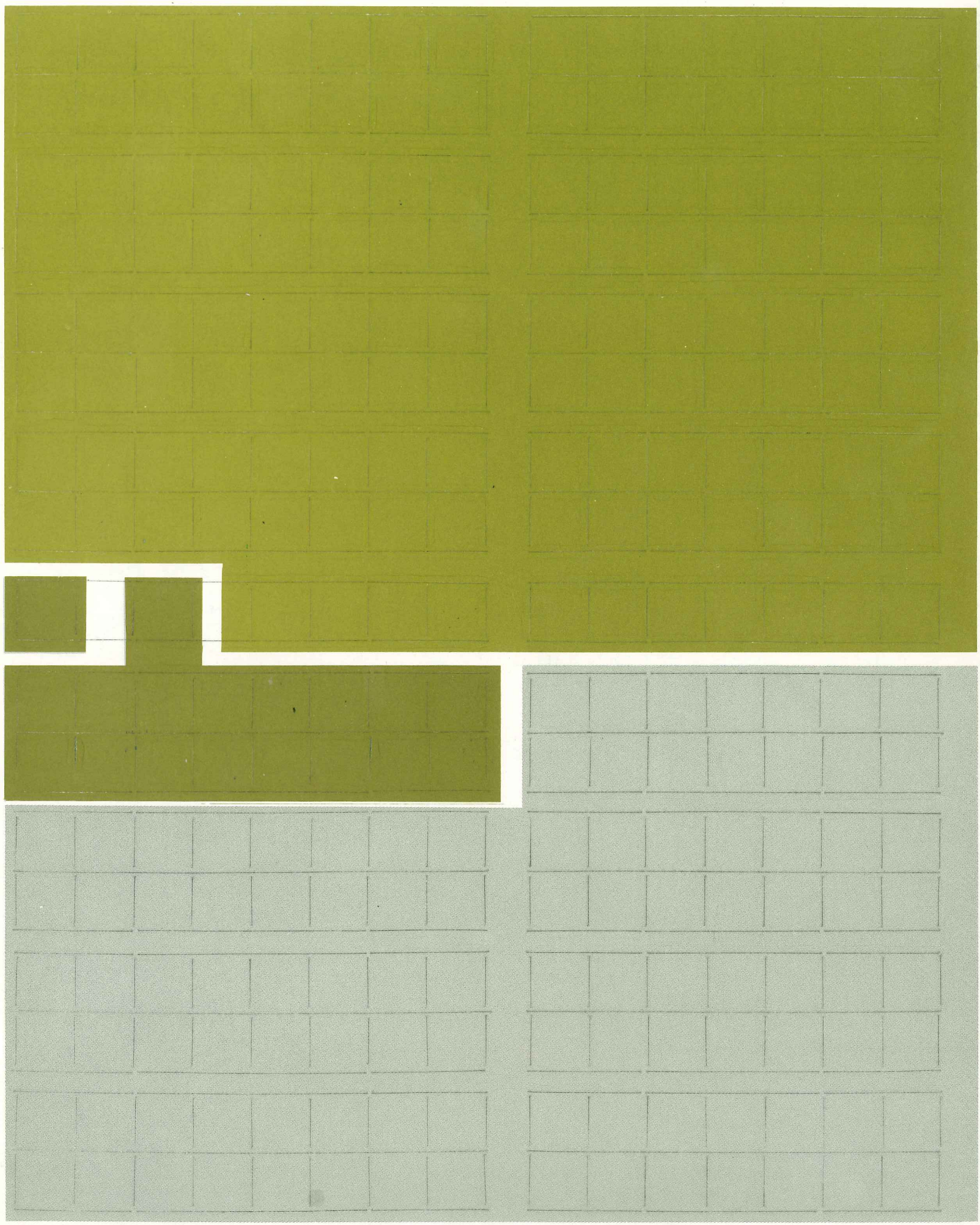
BRITISH

352 7-4	167 7-4	276 6-4	9 6-4	326 5-4	277 5-4	560 5-4	
79 5-4	246 5-4	340 5-4	272 4-4	27 2-4	48 2-4	69 2-4	
129 4-4	130 4-4	214 4-4	152 4-4	153 4-4	154 4-4	71 4-4	168 4-4
160 4-4	68 4-4	151 4-4	231 4-4	56Gds 8-12	32Gds 8-12	33 3-12	29 3-12

GERMAN

293 2-4	294 2-4	295 2-4	164 2-4	183 2-4	190 2-4	316 2-4
423 2-4	320 3-4	38 5-4	77 4-4	78 4-4	1130 1-4	13 3-4
14 3-4	15 4-10	5 3-10	8 3-10	9 3-10	1SS 7-10	2SS 6-10
125SS 6-10	9SS 5-10	10SS 5-10	16 4-10	3 4-10	33 4-10	15 4-10
1 2-10	2 2-10	3 2-10	4 2-10	5 2-10	6 2-10	7 2-10
8 2-10	F.E. 7-10	F.G. 5-10	150 3-10	1SS 6-10	3SS 6-10	28SS 6-10

2SS 5-10	4SS 5-10	19SS 5-10	20SS 5-10	21SS 5-10	25SS 5-10	8 5-10	29 5-10
104 5-10	115 5-10	22SS 5-10	11 3-10	902 3-10	903 3-10	V.D.H 1-4	
2 4-10	10 4-10	60 4-10	110 4-10	111 4-10	156 4-10	304 4-10	901 4-10
I	I	I	I	I			



The Ardennes Offensive

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GERMAN VICTORY POINT RECORD

Each Allied unit destroyed counts as one Victory Point for the Germans. Victory Points for units destroyed are recorded on the scale at right by using the two markers with the large German crosses on them. For example, if the Germans had destroyed 38 Allied units, there would be a marker in the "30" box and one in the "8" box. Road exit Victory Points are on the same scale using the markers with the cross and arrow combination. The Victory Points held by the German Player at the end of any given Game-Turn is the total recorded on both sets of markers.

ALLIED VICTORY POINT RECORD

Each German unit destroyed counts as one Victory Point for the Allies. Victory Points are recorded by using the two star markers on the scale at right. For example, if the Allies had a current total of 27 Victory Points, there would be a marker in the "20" box and in the "7" box.

Namur
Dinant
Celles
Givet
Meuse River
Marche
Rochefort
St. Hubert
Neufchateau
Sedan
Bastogne
Wiltz
Spa
Trois Ponts
Stavelot
Houffalize
Vielsam
Monschau
Elsenborn
St. Vith
Clervaux
Vianden
Diekirch
Echternach