

# ROAD TO THE RHINE



Game Designers' Workshop

# ROAD TO THE RHINE

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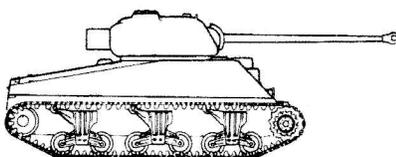
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## ROAD TO THE RHINE

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# ROAD TO THE RHINE



SEPTEMBER 1, 1944

The German army has been beaten in the cataclysmic battle of the Falaise Pocket, and chased back across France in disorder. In the south of France, American and French troops of the 6th Army Group have stormed ashore and driven the remnants of the German 19th Army north toward the border. The war can perhaps be over by Christmas, if only the momentum can be maintained...

**Road To The Rhine** is a simulation of the Allied drive against the German Western Front, from September, 1944 through April, 1945. The game covers the initial attempts by the Allies to maintain the pace of their advance in the face of a rapidly deteriorating logistical situation, the German recovery culminating in the Battle of the Bulge, and the final Allied drive across the Rhine.

For ease of comprehension, the rules have been divided into four sections. Section I includes several introductory rules necessary to understanding the general course of play. Section II explains the major actions which take place during a normal game turn, presented in the order in which they appear in the sequence of play. Section III covers a number of special rules (such as the function of special units) which are better explained after the basic mechanics of the game are understood. Section IV details the victory conditions, set-up procedures, and special rules for the campaign game and the two scenarios.

## SECTION I: INTRODUCTION

### 1. UNITS

The counters included in the game represent the forces which fought over

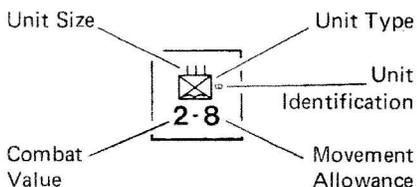
the area covered by the map. Each counter is either a functional marker or represents a single unit which was present in the conflict.

Counters are printed with a variety of information which is then used by the players during the course of the game. These data may easily be read by reason of the consistent format used; the Counter Format Examples indicate the arrangement of the data.

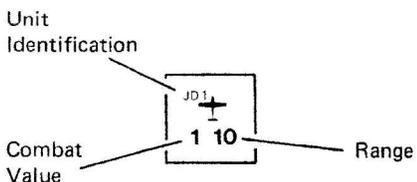
The ground combat unit shown is the 2nd Parachute Division, with a combat value of 6 and a movement allowance of 15. The air combat unit shown is the 100th Fighter Bomber Wing, with a combat value of 2 and a range of 11. The air transport unit shown is the 52nd Wing.

Unit type symbols, unit sizes, and the abbreviations used in the unit identifications can be read using the following tables.

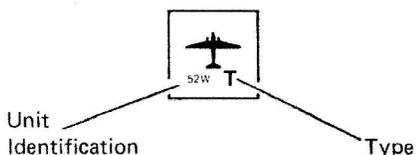
#### COUNTER FORMAT EXAMPLE GROUND COMBAT UNIT



#### COUNTER FORMAT EXAMPLE AIR COMBAT UNIT



#### COUNTER FORMAT EXAMPLE AIR TRANSPORT UNIT



#### UNIT TYPE SYMBOLS

Symbol	Definition
<b>Markers:</b>	
▲	Finished Movement
○	Maneuver Supply
⬡	Reserve
✱	Out of General Supply
☯	Airdrop
☒	Replacement Track Marker
☒	Can
☒	Allied Supply
☒	Month
☒	Turn Record Marker
<b>Air Units:</b>	
✈	Bombers
✈	Fighter Bombers
✈	Transports
☒	Ground Elements

## Ground Units:

	Armor (German <i>Panzer</i> )
	German <i>Panzer</i> grenadier
	Allied Specialized Armor
	Assault Gun
	Armored Cavalry
	Motorized Infantry
	Infantry
	Mountain
	Parachute
	Air Landing
	Static Infantry
	Police
	Security
	Training
	Commando

## UNIT SIZE SYMBOLS

Symbol	Definition
XX	Division
X	Brigade (U.S. Combat Command, French Groupment)
III	Regiment
II	Battalion
KG	<i>Kampfgruppe</i> (Battle Group)
Group	Group

Counters are also color coded for fast recognition of nationality or arm of service. American units are printed black on olive. British units are black on light brown. British Royal Marines are black on red. Canadians are white on brown. French are black on light green. Polish are white on red. Other Allies are black on brown.

German Army units are black on *feldgrau* (gray-green). German naval units are printed white on dark blue. German *Luftwaffe* units are black on light blue. German SS units are white on black.

Allied markers are white on olive. German markers are white on *feldgrau*. Neutral markers and those of both sides used only on record tracks are black on

white.

## 2. ZONES OF CONTROL

Each ground unit in the game has a zone of control (ZOC) consisting of the six hexagons on the map immediately surrounding the hexagon it occupies. Adjacent hexes separated from the hex a unit occupies by either a full sea hexside or major river hexside (either bridged or unbridged) are referred to as being in the are referred to as being in its *primary* negates its effects on the final 8 hexes of a supply line (only), but does not negate its effect on movement and retreat.

During movement, a unit which enters the primary ZOC of an enemy unit must stop and may not move any farther that turn. Units forced to retreat into the primary ZOC of an enemy unit are eliminated. Supply may not be traced through an enemy primary ZOC. A unit which begins its movement in an enemy primary ZOC may freely exit that hex and later reenter the primary ZOC of that enemy unit or any other enemy unit. A unit may never move directly from one enemy primary ZOC to an adjacent enemy primary ZOC, however. The presence of a friendly unit in an enemy primary ZOC negates its effects on retreats and supply, but does not negate its effects on movement.

Secondary ZOCs do not affect supply or retreats, and generally do not affect movement. However, a unit may not cross a full sea hexside or an unbridged major river hexside while moving directly from the secondary ZOC of an enemy unit to the primary ZOC of that or any other enemy unit.

## 3. STACKING

More than one ground unit may be placed in a single hex on the map, using a process called *stacking*. Certain limitations do apply to this process.

Only units from the same side may occupy a hex (exception: see Rule 20, Dunkirk); each player may place up to three ground combat units in a hex, no more than two of which may be divisions. Thus, a player could stack two divisions and one other ground unit in a hex, or one division and two non-divisions, or three non-divisions. Stacking limits are in effect at the end of each movement phase, reserve movement phase, combat phase, and reserve combat phase. Thus, units may move through hexes containing friendly units already stacked to the limits of the rule, but

must end their movement, their retreats, and their advances after combat within the stacking limits. Units forced to retreat in violation of stacking are retreated additional hexes until a hex is reached where they are not in violation of stacking. If no such hex is available, the unit is eliminated.

One air combat unit and its associated ground element (the ground element bearing the same unit identification) may be placed in each city or town hex on the map. Air units and their ground elements do not count against ground combat unit stacking.

## 4. SEQUENCE OF PLAY

*Road to the Rhine* is played in game turns, each representing approximately one week of the actual campaign. Each game turn consists of a weather determination segment and two identical player-turns: a German player-turn followed by an Allied player-turn. Each player-turn consists of an initial segment, several impulses, and a terminal segment. The specific order of events within a turn is outlined below and detailed in subsequent rules. All actions in a game turn must be conducted in this sequence.

## GAME TURN

## Weather Determination Segment

## German Player-Turn

## Initial Segment

## First Impulse

Supply Determination Phase  
Movement Phase  
Air Support Phase  
Combat Phase  
Reserve Movement Phase  
Reserve Air Phase  
Reserve Combat Phase

## Second Impulse

(identical to first)

## Additional Impulses as Needed

## Terminal Segment

## Allied Player Turn

(identical to German player-turn)

**Initiative:** The rules will often make reference to *the player with the initiative* and *the opposing player*. In the German player-turn, the German is the player with the initiative and the Allied player is the opposing player. In the Allied player-turn, the roles are reversed.

**Impulses:** Each player-turn includes a variable number of impulses, with the exact number being determined by the player with the initiative. In each player-turn, every ground combat unit of the

player with the initiative may move and/or attack once, but all units need not do so at the same time. In the first impulse the player with the initiative moves and attacks with as many units as he desires. In the second impulse, the player with the initiative moves and attacks with any units he desires except for those which have already moved and/or attacked. This continues until the player with the initiative has moved and/or attacked once with all of the units he desires. After the last impulse, players conduct the terminal segment, thus completing one player-turn.

## SECTION II: SEQUENCE RULES

### 5. MANEUVER SUPPLY

**A. General:** During the initial segment of each player-turn, the player with the initiative receives a number of Maneuver Supply Points (MSPs) which can be used for a variety of purposes. MSPs for the most part represent gasoline, but are also a more general gauge of the logistical capabilities of each side overall. Players will expend MSPs for the operational use of air units and for ground units which rely on motor vehicles for their primary mobility. Additionally, the player with the initiative must pay one MSP for each impulse that is used in his player-turn, after the first, and must pay one MSP to attack across certain obstacles.

**B. German Maneuver Supply:** The German player receives 10 MSPs per turn each turn in 1944 through the last turn of November. The German player receives 14 MSPs per turn in each turn of December, 1944. The German player receives 6 MSPs per turn in each turn of 1945. MSPs may be used in that player-turn or may be accumulated for later use. MSPs are accumulated by placing the German supply markers at the correct location on the track provided in the on-map chart box.

**C. Allied Maneuver Supply:** The Allied player receives MSPs from four sources: the invasion ports, the southern ports, the on-map ports, and airlifts. Each is explained below.

**1. The Invasion Ports:** The invasion ports are off-map to the west. On the first turn, the Allied player begins to receive MSPs from the invasion ports at a rate of 25 per turn. On the September IV turn, the rate changes to 20 per turn. On the October II turn, the rate changes to 14 per turn. On the October IV turn, the rate changes to 20 per turn. On the

December II turn, the rate falls back to 14 a turn. On the March I, 1945 turn, the rate climbs to 24 per turn and remains at that level for the remainder of the game.

MSPs from the invasion ports may be used for any purpose or accumulated using the Allied player's on-map track and the two Allied supply markers.

**2. The Southern Ports:** the southern ports are off-map to the south. On the first turn the Allied player begins receiving MSPs from the southern ports at a rate of 3 per turn. On the September IV turn, this rate increases to 5 per turn. On the October II turn, this rate increases to 7 per turn. On the October III turn, the rate increases to 9 per turn. On the November III turn, the rate increases to 10 per turn and remains at that level for the remainder of the game.

MSPs from the southern ports may only be used to supply ground units and air units on the southern map or to make attacks across major river hexsides on the southern map. They may not be used to supply units on the north map, attack across major river hexsides on the north map, or purchase additional impulses in which units on the north map move and/or attack. If MSPs from the southern ports are accumulated, they must be kept track of separately (because of the limits on their use) by using the two markers labeled *Allied South*.

**3. On-Map Ports:** The ports of Dunkirk, Ostende, and Antwerp may be used to bring additional MSPs into play, as detailed in Rule 19, Port Capture. MSPs brought into play from on-board ports may be used identically to MSPs from the invasion ports.

**4. Airlifts:** Allied air transport units may be used to bring MSPs into play. No actual physical movement of counters is required, the Allied player instead simply declaring during the initial segment of his player turn which of his transports are airlifting MSPs. Each transport unit airlifts one MSP, which may be treated identically to MSPs from the invasion ports. Transports used to Airlift MSPs may not be used for any other purpose that player-turn or in the immediately following German player-turn.

#### D. Uses of Maneuver Supply:

**1. Ground Units:** All ground units with a movement allowance of greater than 10 require maneuver supply to function at full effectiveness. Each MSP places one division or two non-divisional units in maneuver supply. MSPs are

allocated to ground units during the initial segment of the player turn. Only the player with the initiative allocates MSPs to ground units during his player turn. The player with the initiative designates which units are in maneuver supply by placing a maneuver supply marker on top of the unit.

A ground unit with a movement allowance greater than 10 which has not had maneuver supply allocated to it has its movement allowance halved. Additionally, such a unit may not attack if it moves at all. If the unit moves instead of attacking, the unit may not enter the primary ZOC of an enemy unit unless entering the ZOC hex is the only move the unit makes. That is, the unit must begin its impulse adjacent to the hex containing the enemy primary ZOC to be able to enter the hex.

Units which require maneuver supply but do not receive it defend with their printed combat value and attack with half their printed combat value. Units with an odd number retain the fraction caused by halving their combat value. Thus, a unit with a combat value of 5 would attack with a strength of 2½.

**2. Air Units:** Allied transports do not require or use MSPs. All other aircraft (bombers and fighter-bombers) require maneuver supply to fly missions.

Air units may be allocated MSPs during the supply determination phase of each impulse. Both players may allocate MSPs to air units in each impulse. When an air unit is allocated maneuver supply, the air unit is placed on top of its associated ground element to indicate that it is operational. It may fly a mission during that or any subsequent impulse. Once it flies a mission, it is returned to its associated ground element and placed under it, indicating that it is non-operational. It may not fly again until additional maneuver supply has been allocated to it.

Air units must have one MSP per air combat value point allocated to them to become operational during the first impulse of a player-turn. On any subsequent impulse of a player-turn, two MSPs per air combat value point are required to make the air unit operational. Thus, an Allied bomber unit with an air combat value of 2 would require 2 MSPs on the first impulse of a player-turn, but would require 4 MSPs on the second, third, fourth, and subsequent impulses.

**3. Purchasing Impulses:** Each player may execute one impulse (the first) in

his player-turn at no cost. Thereafter, each impulse executed requires the expenditure of one MSP in the supply determination phase of the impulse. During storm, winter storm, and thaw weather turns (see Rule 17, Weather) the cost for additional impulses is increased to two per impulse after the first.

**4. Water-borne Assaults:** For each attack made across an unbridged major river hexside, the attacking player must expend one additional MSP. For each attack across a full sea hexside, the Allied player must pay one additional MSP. (The German cannot attack across full sea hexsides; see Rule 22, Special Units).

**5. General Restrictions:** In addition to the restrictions on the use of MSPs listed above, no ground or air unit may be allocated maneuver supply unless a general supply path can be traced to it as detailed in Rule 6, General Supply. Units in general supply by means of airdrops may not receive MSPs.

## 6. GENERAL SUPPLY

To operate at full effectiveness, ground combat units must be in general supply. Air units are not affected directly by lack of general supply (although air units to which a general supply path cannot be traced may not receive MSPs).

**A. When to Determine General Supply:** General supply is determined for both sides at the beginning of each impulse during the supply determination phase. Units in general supply at that time are considered to be in supply for the entire impulse. Units out of general supply at that time suffer the effects of non-supply throughout the entire impulse. Units out of supply at the beginning of the impulse are so designated by placing an *Out of General Supply* marker on them.

**B. How Units Trace General Supply:** A unit is in general supply if a line can be traced *from* a map edge along a road *to* a point which is eight hexes from the unit to be supplied. The eight hexes from the road to the unit may be through any full or partial land hex other than through Switzerland. The line may cross full sea hexsides and unbridged major river hexsides, but may not extend farther than four hexes past the *first* unbridged major river hexside crossed or the *last* full sea hexside crossed. No part of either the road segment of the line or the final eight hexes of the line may pass through a hex containing an enemy unit or the primary ZOC of an enemy unit. A friendly unit present in a hex negates the effect

of an enemy primary ZOC on the final 8 hexes (only) of the supply line.

Friendly map edges for the Allies are the west edge of both maps and the south edge of the southern map west of Switzerland. Friendly map edges for the Germans are the north edge of the northern map and the east edge of both maps, including the edge of the charts in the southeast corner of the map. The presence of a road to a friendly map edge is not necessary if the unit is within eight hexes of the map edge.

**C. Effects of Non-Supply:** Units out of general supply have their movement allowances and combat values halved, retaining fractions. If a unit is out of supply for the owning player's entire player-turn (that is, out of supply during the supply determination phase of *each* impulse) the unit is reduced one strength level during the terminal segment of the player-turn. Full strength units with a back-printed reduced strength are flipped over. Units without a backprinted strength and units already at their reduced strength are removed from the map and placed in the owning player's *Units Destroyed* box.

Any unit which would normally be placed in the *Cadre* box due to combat losses (see Rule 11, Ground Combat) and which is out of supply at the time is instead placed in the *Units Destroyed* box.

**D. Allied Airlifts:** Allied transports not engaged in any other mission during an impulse and not committed to airlifting MSPs may instead be used to place units in general supply. Each transport unit may place one ground combat unit in general supply. Supply airdrops are flown during the supply determination phase, and the ability of transports to fly the mission is based on the air visibility condition (see Rule 17, Weather) of the previous impulse. Thus, if the second impulse of a player-turn was cloudy, no units could be placed in general supply by airdrops on the third impulse.

**E. Cumulative Supply Effects:** Units with a movement allowance greater than 10 which are out of both general and maneuver supply suffer the effects of both. That is, such units would have their movement allowances quartered, their attack values quartered, and their defense values halved. They would be unable to enter an enemy primary ZOC unless that was their only move and would be unable to attack an enemy unit if they moved at all.

## 7. GROUND MOVEMENT

Ground movement takes place during the movement phase of each impulse. Only the player with the initiative may move ground units during the movement phase.

Each ground combat unit moves by expending *movement points* (MPs) for each hex it enters, paying additional MPs for crossing certain hexsides. The printed movement allowance of a unit is the number of MPs it may expend in a movement phase.

Units are moved individually during a movement phase, each unit tracing its path through hexes entered and expending MPs as it does so. Once a unit has completed its movement, a *Finished Movement* marker is placed on the unit to indicate that it may not move in later impulses of the player-turn.

No ground unit may ever move out of general supply during the movement phase. That is, no unit which begins the impulse in general supply may end its movement phase in a hex to which a general supply path cannot be traced. A unit which begins the impulse out of general supply is not obligated to attempt to move back into general supply.

## 8. TERRAIN AND MOVEMENT

Units pay a cost in MPs to enter each type of hex on the map, and pay an additional cost to cross certain types of hexsides. These costs are listed on the *Terrain Effect Chart* (TEC), and are generally self-explanatory. A few special types of terrain require a more detailed explanation.

**Unbridged Major River Hexsides:** A unit may not cross an unbridged major river hexside unless the unit began the impulse adjacent to the hexside. A unit expends half of its printed movement allowance to cross an unbridged major river hexside; round fractions up.

**Full Sea Hexsides:** Allied units treat full sea hexsides as unbridged major river hexsides for movement purposes. German units may not cross full sea hexsides except in accordance with the procedures outlined in Rule 25, German Naval Movement.

**Western Holland:** The blue shaded hexes in Western Holland have no effect on movement of ground units. All such hexes are treated as clear or road hexes.

**Road Hexes:** Units which move along roads pay the movement cost of a road hex *instead* of that for the terrain of the hex the road passes through, not *in*

*addition* to the terrain in the hex. Units moving on roads also ignore any additional costs for crossing hexsides crossed by the road. To use the road movement rate, a unit must move along the road, moving from hex to hex connected by the road. A unit is not required to spend its entire movement phase on a road to receive the benefits of the road, but uses the road movement rate only for those hexes moved through while on the road.

### 9. RESERVE CREATION

At the conclusion of each movement phase, the player with the initiative may create reserve units.

**A. Which Units May Be Reserves:** Any ground unit which has completed its ground movement may become a reserve provided it was not in an enemy primary ZOC at any time during the movement phase, it was in supply during the impulse, and it did not expend more than half of its MPs in the movement phase. Units with a movement allowance greater than 10 must also have been in maneuver supply to become reserves.

**B. Functions of Reserves:** Units which become reserves are so designated by placing a *Reserve* marker on top of them instead of a *Finished Movement* marker. Reserves may not attack in the combat phase, but may move and attack in the enemy player-turn, as explained in Rule 13, Reserve Movement and Rule 15, Reserve Combat.

**C. Losing Reserve Status:** Any reserve unit which is placed in an enemy primary ZOC due to enemy movement, retreats, or advances after combat loses its reserve status. Any reserve unit out of supply during the supply determination phase of an impulse loses its reserve status. Once a reserve moves and/or attacks during the enemy player-turn, it ceases to be a reserve.

### 10. AIRCRAFT

**A. Combat Aircraft:** Air combat units can be differentiated from air transports by the fact that air combat units have an air combat value and range while transports have only a transport type code (see sample units in Rule 1). There are two types of air combat units: bombers and fighter bombers. Bombers are represented by multi-engine silhouettes and all have ranges in excess of 30.

Air combat units are made operational by the expenditure of MSPs (as explained in Rule 5, Maneuver Supply). Operational

aircraft may fly one of four missions. Since air combat units may have additional MSPs allocated to them each impulse, it is possible for an air unit to fly one mission each impulse, provided the owning player has a sufficient supply of MSPs. The following four missions are possible:

**1. Offensive Support:** Bombers and fighter bombers may both fly offensive support. Only one aircraft flying within its normal range or two aircraft flying at extended range (see below) may fly offensive support over any one hex. Offensive support air units are placed on a hex containing enemy units which will be attacked by friendly ground units that impulse. The ground attack is increased a number of odds columns on the Combat Results Table equal to the air combat value of the air unit flying offensive support.

**2. Defensive Support:** Defensive support is flown in the same manner and with the same restrictions as offensive support with two exceptions: Defensive support may not be flown to a hex which already has an enemy air unit flying offensive support in it, and defensive support lowers the odds column used instead of raising it.

**3. Interception:** Only fighter bombers may fly interception. Only enemy air units flying offensive or defensive support may be intercepted. Only one fighter bomber unit may fly interception against a hex.

An air unit flying interception may attempt to shoot down or abort an enemy air unit in the hex it occupies. The player who owns the interceptor rolls the die once per combat value point of the interceptor. On a roll of 5, the enemy aircraft is aborted. On a roll of six, the enemy aircraft is destroyed. If there are two enemy aircraft in the hex, the intercepting player must decide which aircraft he is attacking before he rolls the die. If he is entitled to roll the die more than once, he must indicate whether he is dividing the rolls between the two enemy aircraft or concentrating on one of them.

After the interceptor has fired, the defending aircraft may return fire. All defending aircraft in the hex which were fired at may return fire, regardless of whether they were shot down, aborted, or unaffected by the fire of the interceptor. The owning player rolls one die per air combat value point, as did the intercepting player, and shoots down

the enemy air unit on a roll of six.

Aborted air units are returned to their associated ground element, placed under it, do not complete their mission, and may not be refueled (allocated additional MSPs) for the remainder of that player-turn. Air units which are shot down are removed from play, along with their associated ground element, and may not be returned to play except through the provisions of Rule 18, Replacements.

**4. Transfers:** Any air combat unit may fly a transfer mission. The air unit and its associated ground element are moved to any other city or town on the map not already containing an air unit or its ground element. There is no limit to the range of a transfer mission. At the conclusion of the mission, the air unit is placed under its associated ground element to indicate that it has used its maneuver supply and is no longer operational.

**Movement of Air Combat Units:** Air combat units move during the air support phase in the following sequence:

1. The player with the initiative flies offensive support and transfer missions.

2. The opposing player flies defensive support, interception, and transfer missions.

3. The player with the initiative flies interception missions.

4. Both sides resolve air combat.

5. Both sides note surviving offensive and defensive support missions and return all air units to their associated ground elements.

**Extended Range Missions:** Only air combat units flying offensive or defensive support missions may fly at extended range. Extended range enables an air unit to fly to a target within *twice* its printed range. When flying extended range, two air units may fly to the same hex. The air values of all air units are halved, with each individual air unit retaining fractions but the total of air value points in the hex being rounded down.

**Overrunning Air Units:** Air units and their associated ground elements have no ZOC or combat value against ground units. If a ground unit moves into a hex containing an enemy air unit and its ground element, the air unit and its ground element are destroyed.

**B. Transports:** Only the Allied player has transports. Transports are always considered to be based in England, do not require maneuver supply to fly, have

unlimited range, and may not be intercepted. Each transport aircraft may fly one of three types of missions: MSP airlifts, general supply airdrops, or airborne troop airdrops.

**1. MSP Airlifts:** Transports are allocated to MSP airlifts during the initial segment of the Allied player-turn and may not be used for any other mission in either that player-turn or the immediately following German player turn, as explained in Rule 5, Maneuver Supply.

**2. General Supply Airlifts:** Transports not allocated to MSP airlifts may be used to put ground units in supply as detailed in Rule 6, General Supply. Each air transport unit may put one friendly unit in general supply each impulse of each player-turn.

**3. Airborne Troop Airdrops:** Each transport unit not allocated to MSP airlifts or general supply airdrops may airdrop one airborne unit each impulse of the Allied player-turn, as explained in Rule 21, Airborne Assaults. Transports may alternate dropping general supplies and airborne units in the Allied player-turn, provided each transport flies only one mission per impulse. That is, a transport could fly an airborne troop drop first impulse and then general supply airdrops in subsequent impulses.

### 11. Ground Combat

During the combat phase, the player with the initiative may attack enemy units with adjacent ground combat units. Attacks are not required, and it is not necessary that any specific number of units participate in any attack. All units in a defending stack, however, must be attacked together. So long as all are adjacent to the defending unit or stack, any number of attacking units may combine their combat values to attack.

It is not required that all units in a stack participate in an attack; if an adverse result affecting the attacker occurs, those units not participating are not affected.

In a combat phase, no one unit may attack or be attacked more than once. (Due to the nature of the impulse system, it is possible for one unit to be attacked more than once in a player-turn, but never more than once per impulse.)

Attacks are resolved one at a time in any order desired by the attacking player.

**A. Procedure:** Once an attack has been designated, total the combat strengths of all attacking units and of all defending

units. Where modifications to either the attacker's or the defender's values are called for due to supply status or terrain, implement them. Using these values, create a combat odds ratio expressing the attacker's strength first. Reduce the ratio to one of the odds ratios given on the Combat Results Table (CRT), always rounding fractions in favor of the defender.

Once the basic odds ratio has been arrived at, modify the odds column for any terrain effects or for the presence of offensive or defensive support air missions. Note the correct column on the CRT and roll one die. The intersection of the odds column and the die roll row indicates the results of the attack.

**B. Combat Results:** There are eight separate combat results possible on the CRT.

**NE — No Effect.** Neither side is required to retreat or take losses.

**AL — Attacker Loss.** The attacker must reduce one unit which participated in the attack by one strength level.

**ARL — Attacker retreat with a loss.** The attacker must reduce one unit which participated in the attack by one strength level and must retreat all units which participated in the attack two hexes.

**DX — Defender Exchange.** The defending player decides how many strength levels he wishes to lose. The attacker must lose one more strength level than does the defender. The defender may choose to lose no strength levels, in which case the attacker loses one. Following losses, the defender retreats two hexes and the attacker may advance.

**EX — Escalating Exchange.** Both the attacker and the defender each lose a strength level. The defender must retreat two hexes and the attacker may advance unless the defender chooses to *escalate* the exchange. If so, the defender loses two strength levels, the attacker loses one, and there are no retreats or advances. The attacker may then in turn escalate his loss to two strength levels as well, thus reinstating the retreat and advance. This continues until one side declines to escalate further.

If the defender escalates to the point that, after taking losses, there are no defending units remaining in the hex, the attacker may still not advance after combat without escalating his losses to the level of the defender's.

**DR — Defender retreat.** The defender retreats his units two hexes. The

attacker may advance. Neither side suffers losses.

**DRL — Defender retreat with a loss.** As with DR, but the defender must also reduce one of the defending units by one strength level.

**DM — Defender Mauled.** The defender must retreat all defending units two hexes and must reduce each defending unit one strength level. The attacker may advance.

**Losses:** All losses in the game are taken in terms of strength levels. A unit has from one to three strength levels. All units have a full strength level (the value printed on the face of the counter). All units which are backprinted have a reduced strength level (the value on the back of the counter). All *divisions* which are backprinted also have a *cadre* strength level. A unit which loses its last strength level is placed in the units destroyed box.

A unit may not voluntarily lose its cadre strength level (by bidding it away in an escalating exchange or a defender exchange). A unit may not lose its cadre strength level as the result of any normal combat result. The cadre strength level is only lost when a unit is reduced below its reduced strength level and is out of general supply, or when the unit is forced to retreat into an enemy primary ZOC, across a full sea hexside, or off the map.

**Retreats:** Whenever a unit is called on to retreat, it retreats two hexes. The owning player chooses the first hex of the retreat; the enemy player chooses the second hex of the retreat. The second hex must be two hexes from the hex originally occupied by the retreating units. A stack of units is not required to remain stacked together during the retreat. Units may not retreat into an enemy primary ZOC hex, off the map, or across a full sea hexside, or in violation of stacking unless no other retreat path is available. Units forced to retreat in violation of stacking must be retreated additional hexes until in a hex no longer in violation of stacking. Units forced to retreat off the board, into an enemy primary ZOC, or across a full sea hexside are instead eliminated (placed in the Units Destroyed box).

**Advances After Combat:** The defender may never advance as a result of combat. The attacker may advance as a result of combat if the attack vacates the defending hex of enemy units, either through retreats or loss (exception: see Escalating Exchange above). The attacker may

advance up to two hexes, but the first hex entered must be the hex vacated of defending units by the attack. The second hex of the advance may be in any direction. Units advancing after combat must stop immediately upon entering an enemy primary ZOC. Units may not advance across an unbridged major river hexside or a full sea hexside except to occupy the hex vacated by combat, and may not advance any farther than that hex. Units advancing after combat may, by placing an enemy reserve unit in their own primary ZOCs, remove the reserve status of such a unit.

**Which Units May Attack:** Any unit which has not yet moved, or which moved in the movement phase of an impulse, may attack in the combat phase of that impulse. Units which moved and/or attacked in prior impulses may not attack. A unit which has not moved, but which attacks, may not move or attack in subsequent impulses, and should be marked with a *Finished Movement* marker.

## 12. TERRAIN AND COMBAT

Different types of terrain affect combat, either by affecting the combat value of the attacker or the defender, or by modifying the odds column used. The effects of terrain on combat are summarized on the Terrain Effects Chart (TEC), but are explained in detail below.

**A. Hexes:** Clear terrain hexes, and the presence of roads or the blue shading indicating Western Holland (Rule 29, Western Holland), have no effect on combat.

**Town:** If the defending units are in a town hex, the odds column of the attack is lowered by one. Thus, a 3:1 would become a 2:1, a 2:1 would become a 1.5:1, etc.

**City:** All units defending in a city are doubled.

**Fortified Hex:** All defending German units in a fortification hex are doubled. All defending Allied units treat fortification hexes as rough terrain.

**Rough:** If the defending units are in a rough terrain hex (or, if Allied, in a fortified hex or rough terrain hex), the attack is conducted at one odds column lower.

**Mountain:** Mountain hexes are treated as rough terrain for combat. In addition, armored units, armored cavalry, assault gun, and specialized armor may not attack into mountain hexes. All other units, except for moun-

tain units, are halved when attacking into mountain hexes.

**B. Hexsides:** International borders and army boundary hexsides have no effect on combat.

**Canal:** If all attacking units in an attack are attacking across canal hexsides, or a combination of canal, minor river, and/or major river hexsides, the odds are lowered by two odds columns.

**Minor River Hexside:** All units attacking across minor river hexsides have their combat values halved.

**Unbridged Major River Hexsides:** No unit may attack across an unbridged major river hexside unless it began the impulse adjacent to the hexside. (Exception: see Rule 22, Special Units.) All armored units, assault gun units, and armored cavalry are quartered when attacking across unbridged major river hexsides. All other units are halved.

**Bridged Major River Hexsides:** No unit may attack across a bridged major river hexside unless it began the impulse adjacent to the hexside or it is attacking from a town or city hex. All units attacking across a bridged major river hexside are halved.

**Causeway:** Armor, armored cavalry, assault gun, and specialized armor units may not attack across causeway hexsides. All other units are halved attacking across causeways.

**Dams:** No unit may attack across a dam hexside until the dams have been blown (see rule 24, The Roer Dams).

## 13. RESERVE MOVEMENT PHASE

After the player with the initiative conducts all attacks and advances after combat, the opposing player may move reserves. Reserves move in the reserve movement phase of an impulse, following the same rules as for movement in a movement phase.

Only units designated as reserves and belonging to the opposing player may move during the reserve movement phase. As many or as few reserves may be moved in any one reserve movement phase as desired, but each reserve unit may move only once per player-turn. Thus, once a reserve unit moves, the reserve marker is removed from it and it loses its reserve status.

**Non-Moving Reserve Units:** Any unit with a movement allowance greater than 10 must have been allocated maneuver supply to be in reserve, as explained in Rule 9, Reserve Creation. If such a reserve unit does not move or attack, and

does not lose its reserve status on account of lack of general supply or enemy units moving adjacent), then the unit does not consume its maneuver supply, and is automatically in maneuver supply for the next player-turn of the owning player.

## 14. RESERVE AIR SUPPORT PHASE

Both sides may fly operational aircraft during the reserve air support phase. Any mission may be flown, exactly as in the air support phase, except that the sequence in which missions are flown is altered to reflect the fact that the opposing player, rather than the player with the initiative, is about to conduct ground attacks. The specific sequence followed is:

1. The opposing player flies offensive support and transfer missions.

2. The player with the initiative flies defensive support, interception, and transfer missions.

3. The opposing player flies interception missions.

4. Both sides resolve air combat.

5. Both sides note surviving offensive and defensive support missions and return all air units to their associated ground elements.

## 15. RESERVE COMBAT PHASE

During the reserve combat phase, all reserve units of the opposing player may attack if they have moved that impulse *or* if an enemy unit has moved adjacent to them that impulse. Thus, if a unit of the player with the initiative advanced after combat adjacent to a reserve unit, that unit would lose its reserve status and be unable to move, but could attack in the reserve combat phase of that impulse (only).

The purpose of reserve movement and combat is to counter the offensive thrusts of the player with the initiative; it is not to enable the opposing player to launch simultaneous offensives elsewhere. Thus, reserve units may *only* attack units of the player with the initiative which have already moved and/or attacked (and thus have a *Finished Movement* marker on them) that player-turn.

## 16. FINAL IMPULSE

At the end of the combat phase of any impulse, the player with the initiative may declare that impulse to have been his *final impulse*. The three reserve phases which normally follow the combat phase are omitted from that impulse and the terminal segment of the player-

turn is conducted, thus completing the player-turn.

### SECTION III: SPECIAL RULES

#### 17. WEATHER

Weather is determined for the complete game turn during the weather determination segment. A die is rolled (by either player) and the resulting die roll referenced to the appropriate column of the weather table. A separate column is provided for each month of the game. There are six types of weather listed below with an explanation of their effects. These effects are recapitulated on the weather chart.

**Clear:** Clear weather has no effect on movement, combat, or supply.

**Rain:** All movement allowances of ground units are reduced by two. Aircraft are subject to the air visibility table (see below).

**Storm:** All movement allowances of ground units are halved, retaining fractions. All minor rivers are in flood (see below). All attacks into mountain hexes are reduced by one additional odds column. Aircraft are subject to the air visibility table. Each impulse after the first impulse of a player-turn requires the expenditure of two MSPs instead of one. No amphibious attacks may be made.

**Frost:** All movement allowances of ground units are reduced by one. All attacks into mountain hexes are reduced by one additional odds column. No attacks are allowed across unbridged major river hexsides, except during the month of November. Aircraft are subject to the air visibility table.

**Winter Storm:** All movement allowances of Allied units are reduced by two. All movement allowances of German units are reduced by one. No air units may conduct any air missions. All attacks into mountain hexes are reduced by two additional odds columns. No attacks across unbridged major river hexsides are allowed, except during the month of November. Each impulse after the first impulse of the player-turn requires the expenditure of two MSPs instead of one. No amphibious attacks may be made.

**Thaw:** All movement allowances of ground units are halved. Aircraft are subject to the air visibility table. All attacks into mountain hexes are reduced by two additional odds columns. No attacks are allowed across unbridged

major river hexsides. All minor rivers are in flood. Each impulse after the first impulse in the player-turn requires the expenditure of two MSPs instead of one.

#### Special Weather Conditions:

**1. Minor Rivers In Flood:** Whenever the weather result calls for minor rivers in flood, all minor river hexsides are treated as unbridged major river hexsides for all purposes except tracing general supply. During thaw turns, minor river hexsides are not subject to the prohibition against attacks across unbridged major river hexsides.

**2. Air Visibility Table:** During certain weather conditions (rain, storm, frost, and thaw) the weather for air purposes is variable throughout the turn. To simulate this and provide a measure of operational uncertainty, the air visibility table is used.

At the beginning of the air support phase of each impulse, the player with the initiative rolls the die and consults the proper column of the table. Two results are possible: clear and cloudy. A clear result indicates that air units may fly missions that impulse normally. A cloudy result indicates that air units may not fly at all that impulse. This die roll determines the ability of air units to fly throughout that impulse, including in the reserve air support phase. Allied transport aircraft which conduct missions prior to the air support phase use the weather of the immediately preceding impulse to determine their ability to fly. In the first impulse of a player-turn, this would be the final impulse of the previous player-turn. Transports flying MSP airlifts are never affected by air visibility (but are prohibited from flying during winter storm turns).

#### 18. REPLACEMENTS

Units will become reduced in strength as a result of combat and supply attrition. Replacements may be used to build units back up to strength.

**A. Types of Replacements:** There are four types of replacements: infantry, armor, parachute, and *panzergrenadier*. The German player receives all four types; the Allied player receives only the first three types.

Units may only be rebuilt using replacements of the corresponding type, with exceptions as noted below. Infantry replacements may be used to rebuild infantry, mountain, air landing, static infantry, police, security, training, and commando units. Armor may be

used to rebuild armor, assault gun, armored cavalry, and specialized armor units. *Panzergrenadier* replacements may be used to rebuild *panzergrenadier* and motorized infantry units and, under the special circumstances noted below, may rebuild *panzer* units.

**B. Using Replacements:** The player with the initiative receives replacements each turn during the initial segment of his player-turn. The numbers and types of replacements received are noted on the replacement chart. The four lines of the replacement chart correspond to the four weekly turns of each month. For example, the Allied player would receive, during the second week of each month in 1944, one U.S. infantry replacement, one U.S. armor replacement, one British armor replacement, and one Canadian replacement (which can be used to replace either armor or infantry).

Replacements can be used immediately or accumulated for later use. Markers are provided to record the total number of replacements of each type and nationality accumulated. Place the markers on the correct boxes of the scales provided on the map.

A player may only use replacements in the initial segment and the terminal segment of his own player-turn. Replacements may not be used during an opponent's player-turn. The Allied player may use only replacements of the correct nationality to rebuild units, except as noted below under special cases. No unit may receive more than one replacement per player-turn.

#### C. Effects of Replacements:

**1. Divisions:** Each replacement raises a division one strength level. Divisions in the Units Destroyed box are moved to the Cadre box. Backprinted divisions in the Cadre Box are placed on the map at reduced strength. Non-backprinted units in the cadre box are placed on the map at full strength. Reduced strength divisions on the map are flipped to full strength. Divisions moved from the cadre box to the map appear as do new units (see Rule 23, New Units).

**2. Non-Divisional Units:** Each replacement raises one non-divisional unit (brigade, regiment, battalion, or *kampfgruppe*) from the Units Destroyed box to full strength on the map (regardless of whether or not the unit is backprinted). Alternatively, one replacement can be used to raise two non-divisional units at reduced strength on the map to full

strength. Non-divisional units moved from the Units Destroyed box to the map appear as do new units (see Rule 23, New Units).

#### D. Special Cases:

1. **Canadians:** All Canadian replacements may be taken as armor or infantry. If accumulated, they are accumulated as raw replacements. The decision as to whether they are armor or infantry is not made until they are used.

2. **French:** The French receive only infantry replacements; all French armored units may be rebuilt using the armored replacements of any Allied power. French infantry replacements may only be used to rebuild French non-divisional units and to raise French infantry divisions from reduced strength to full strength. Infantry replacements from another Allied power (Britain, Canada, or the United States) must be used to raise French infantry divisions and mountain divisions from the Units Destroyed box to the Cadre box, and from the Cadre Box to reduced strength.

3. **Dutch and Belgians:** The Dutch and Belgian infantry brigades do not require replacements to be rebuilt. Each brigade may be rebuilt *once* during the game at no cost. If destroyed a second time, the units are permanently lost.

3. **Czechs:** The Czech armored brigade may be rebuilt using British armored replacements.

4. **Poles:** The Polish armored division may be rebuilt using British armored replacements. The Polish parachute brigade may be rebuilt *once* at no cost in the same manner as the Dutch and Belgian brigades. If lost a second time, the brigade is permanently lost.

5. **Aircraft:** The aircraft of both sides are infinitely replaceable at no cost. However, no more than one air unit (and its associated ground element) may be replaced per turn. An air unit may not be replaced sooner than two complete game turns after its destruction. For example, a German air unit lost during the September II turn could not be replaced before the October I turn.

6. **U.S. Armored Cavalry:** The United States fielded several more armored cavalry groups (regiments) than are included in the game, but many of them were broken up to create new groups or to replace losses, and thus all were not in action at the same time. To represent this, the U.S. player may rebuild one armored cavalry regiment per

month each month of 1945. This may be done at any time during the month and does not require the expenditure of any replacements. This is also in addition to any armored cavalry regiments rebuilt using the standard replacement procedure.

E. **Cannibalization:** Both sides may create additional replacements by cannibalizing units. The German player may cannibalize any non-divisional unit on the board or any division in the cadre box. The Allied player may cannibalize any British or French division on the board or in the cadre box. Players cannibalize units during their initial segment, but may not use the replacements received from the cannibalization that segment. Only units in general supply may be cannibalized. Allied units in general supply by means of an airlift may not be cannibalized.

A player receives one replacement per full strength non-divisional unit or divisional cadre cannibalized. Two replacements are received for each reduced strength division or full strength non-backprinted division cannibalized. Three replacements are received for each full strength backprinted division cannibalized. One replacement is received for each two reduced strength non-divisional units cannibalized. In other words, as many replacements are received for cannibalizing a unit as it would take to raise that unit to its current strength from the Units Destroyed Box.

When a unit is cannibalized, it is removed from play and placed in the Units Cannibalized box. Once a unit has been cannibalized, it may never be returned to play.

#### 19. PORT CAPTURE

Two small ports (Dunkirk and Ostende) and one large port (Antwerp) may be used by the Allies to bring in additional MSPs. Before these ports can be used, however, they must be captured and cleared.

**Dunkirk and Ostende:** As soon as the Allied player is the only player with units in either Dunkirk or Ostende, the port has been captured. Two complete game turns later, the Allied player begins receiving one MSP per turn per port. Thus, if Ostende were captured on the September III turn, the Allied player would begin receiving an additional MSP in the initial segment of his player-turn of the October II turn. The Allied player must hold the port for the entire

two game turns before receiving the supplies. If the port is recaptured, the Allied player does not receive the additional MSP until he has again captured the port and again waited two complete turns.

**Antwerp:** In order to begin using Antwerp, the Allied player must have captured all three hexes of Antwerp and all sixteen hexes of the Scheldt Estuary. (All hexes of the Scheldt Estuary are marked on the map with the notation SE.) The port of Antwerp begins to operate three complete game turns after the last of the listed hexes is captured. On the first turn of operation the Allied player receives four additional MSPs. On the second turn of operation, the Allied player receives eight additional MSPs. On the third turn of operation, the Allied player receives twelve additional MSPs. On the fourth and every subsequent turn of operation, the Allied player receives sixteen additional MSPs.

If the port of Antwerp itself is recaptured by the German player, the Allied player may not use Antwerp until he has repeated the entire above procedure. If a hex of the Scheldt Estuary is recaptured by the German player, it merely interrupts operation of Antwerp until the estuary hex is recaptured. At that point, Antwerp resumes operation at its former level.

#### 20. DUNKIRK

Due to the accumulated stocks of supplies in Dunkirk, German units in Dunkirk are always considered to be in general supply. Unlike other fortification hexes, the Allies may *invest* Dunkirk. Any Allied unit (exception: see Rule 22-D, Dutch and Belgian Units) which moves adjacent to Dunkirk may move one hex farther into the Dunkirk hex. Once an Allied unit has moved into the Dunkirk hex, the fortress of Dunkirk is invested. Any German units in the fortification (stacked under the Allied unit) lose their ZOC and may not attack so long as they are invested. Such units do not lose their ZOC until the end of the impulse in which Dunkirk is invested.

Allied units investing Dunkirk may switch off investing duties. That is, an Allied unit may move to the Dunkirk hex and allow the Allied unit already there to move away, so long as a unit is in the Dunkirk hex at the end of the impulse.

The presence of enemy units in the Dunkirk hex does not limit the ability of friendly units to stack in the hex.

The Allies may not invest Dunkirk if there is a German unit or its ZOC adjacent to the Dunkirk hex.

## 21. AIRBORNE ASSAULTS

Both sides may conduct airborne assaults during the game. Different rules are used by the Allied player and the German player. Certain general rules apply to both, however.

### A. General:

**1. The Drop Impulse:** Airborne units may be dropped during any impulse of the owning player's player-turn. On the impulse of the drop, airborne units may not move or attack (exception noted below), and have no ZOC. To designate airborne units during their impulse of drop, place an Airdrop marker on top of them. The drop impulse does not count as the impulse of movement. Thus, airborne units may move and/or attack in any impulse after the impulse of drop.

**2. Immediate Assault:** An airborne unit which drops directly on top of an enemy unit must immediately attack it. This attack is conducted during the combat phase but must be the first attack conducted. Normal combat rules apply. However, if the hex attacked is not vacated of enemy units, each airborne unit in the hex must be reduced one strength level and retreated *one* hex by the owning player. The primary ZOCs of enemy units in the hex under attack do not interfere with the ability of the airborne unit to retreat, but the primary ZOC of any other enemy unit does. Airborne units forced to conduct immediate assaults are considered to have completed their movement and combat for the player-turn.

**3. Supply:** Airborne units are in general supply the *impulse* they are dropped. In subsequent impulses, they are treated as normal units.

**4. Terrain:** Airborne units may not be dropped in major city hexes or in fortification hexes. On the first turn of the game Allied airborne units may not be dropped in Holland or Germany.

**5. Planning:** Airborne operations require advanced planning. Both players plot their airborne assaults during the weather determination segment of the game turn, immediately after weather has been determined. Plotting consists of noting on a separate piece of paper the identification of each unit the player intends to airdrop and the hex number the unit will be dropped in. It is not necessary to plot which impulse the unit

will be dropped. A unit need not be dropped even if a plot is made for it, but no unit may be dropped in any hex except the one plotted.

**6. Movement:** Airborne units have their movement allowances halved (retaining fractions) the player turn they are dropped.

### B. Allied Airborne Assaults:

**1. Airlift:** Each airborne unit must be airlifted to the target hex. There is no limit to the number of hexes moved through, but there is a limit to how many units may be airlifted in any one impulse. Each Allied transport may airlift one airborne unit per impulse. Allied transports airlifting airborne units may not fly any other mission that impulse.

**2. Airborne Units:** All Allied parachute units are airborne, as is the British 52nd Air Landing Division. Allied parachute divisions are used normally and follow all rules listed above. The 52nd Air Landing division is treated as a normal airborne division except that it may only be dropped into a hex containing an Allied parachute unit dropped into that hex during a previous impulse. The 52nd Air Landing division does not require maneuver supply the turn it is used in an airborne role.

**3. Regrouping:** Once an Allied airborne unit has been dropped, it may not be airdropped again until it has been *regrouped*. An airborne unit has been regrouped once it has spent a total of six consecutive turns not in an enemy primary ZOC. Airborne units may be placed in reserve while regrouping, but moving them into an enemy primary ZOC would interrupt the regrouping process.

**4. Basing:** Allied airborne units are normally based in England, and placed in the Units in England box to so designate. Units on the map may be transferred to England by exiting them from the west map edge. They appear in England one turn later.

Airborne units in a major city on the map may also conduct airborne assaults, but only one such unit per turn may do so. Airborne assaults may consist of a combination of the unit based on the map and one or more units based in England.

**C. German Airborne Assaults:** The German player has only one unit capable of conducting airborne assaults: the 1-8 parachute regiment *v.d.H. (von der Heydte)*. This unit may only be dropped once per game. Unlike the Allies, the German player must plot

both the hex and the *impulse* in which the unit will be dropped. The unit must begin the impulse of drop stacked with a German air unit. No air unit actually flies to the drop hex but the unit may only be dropped up to ten hexes away from the friendly air unit. Unlike Allied airdrops, the German airdrop may only take place in an impulse with weather normally prohibiting air missions (either cloudy or winter storm). If the impulse plotted is a clear weather impulse, the drop is aborted. Another drop may be plotted for a subsequent player turn.

## 22. SPECIAL UNITS

Certain units in the game have special abilities or limitations over and above those applying to normal units.

**A. Breakdown Units:** The counters provided which bear the identification **BD** to the left of the unit box are breakdown counters. These counters may be used to break down full strength divisions to cover a broader front. Sufficient breakdown counters are provided to break down one U.S. infantry division, one U.S. armored division, one British infantry division, one British armored division, and one German *Panzergranadier* Division. British armored divisions and German *Panzergranadier* divisions break down into two counters each. All other divisions break down into three counters each.

**1. When Units Break Down:** A unit can break down into its components at any time while it is moving. That is, it can break down during the movement phase, the reserve movement phase, while advancing after combat, and while retreating. It may not break down while stationary (to facilitate taking losses, for example).

**2. When Units Can Recombine:** A unit broken down can recombine at any time during movement, reserve movement, advance after combat, or retreats, when all *surviving* breakdown counters of the unit are in the same hex.

**3. Lost Breakdown Counters:** Breakdown counters are non-divisional units and are not backprinted. Thus, any breakdown counter which suffers a loss is placed in the Units Destroyed box. Such a counter may be rebuilt at the normal replacement cost.

If a broken down division is recombined while one or more of the component breakdown counters is in the Units Destroyed box, all such breakdown counters are removed from the box

and are available to break down a different division. The recombined division is placed on the map reduced in strength a number of levels equal to the number of breakdown counters destroyed. Thus, a US infantry division with one breakdown counter destroyed would be recombined at reduced strength. The same division with two breakdown counters destroyed would be recombined in the cadre box. (Such a recombination would be accomplished merely by removing the one remaining breakdown counter from play.)

If all of the breakdown counters of a division are destroyed, the division is automatically recombined in the appropriate box on the map and the destroyed breakdown counters are immediately available to break down a different unit. Divisions with two breakdown counters would be recombined in the Cadre box in this event; divisions with three breakdown counters would be recombined in the Units Destroyed box.

**Changes in Strength:** In a number of cases, breaking a division down into its components may cause it to increase or decrease its strength. This does not effect the ability of the unit to break down, nor does it alter the strength of the breakdown counters. Any full strength division of the correct nationality and type may break down using the provided counters.

**Stacking and Supply:** Breakdown counters are treated as non-divisional units for all purposes. They may not be considered to count as one division when stacked together, nor may all three breakdowns of a single division be placed in maneuver supply by the expenditure of a single maneuver supply point.

**B. Allied Commandos:** The Allied player receives four commando units during the game. Commandos have two special abilities as detailed below:

**1. Crossing Water Barriers:** While commando units pay half of their movement allowance to cross a full sea hexside or unbridged major river hexside, as do other units, they need not begin their impulse adjacent to the hexside to do so. Thus, a commando brigade with fifteen movement points could expend up to 6½ MP to move adjacent to an unbridged major river hexside, then expend 7½ MP to cross the river and 1 MP to enter the hex on the opposite side (assuming it is a clear terrain hex). Alternatively, it could spend 2½ MP to move adjacent, 7½ MP to cross, 1 MP to enter the opposite hex, and have 4 MP remaining for further movement.

**2. Amphibious Assaults:** Commandos may conduct amphibious assaults. Two types of such assaults are possible.

**a. Full Sea Hexsides:** Commandos may attack across full sea hexsides by moving adjacent to them and conducting a normal attack. The presence of the full sea hexside has no effect upon combat.

**b. River Hexsides:** Commandos need not begin their impulse adjacent to an unbridged major river hexside to attack German units across it. Additionally, commandos are not halved when attacking across major or minor river hexsides, and do not suffer the odds column reductions resulting from canal attacks if attacking alone or exclusively in conjunction with other units conducting amphibious assaults.

**C. Allied Specialized Armor:** Four brigades of specialized armor of the British 79th Armoured Division are provided in the counter mix. These units have several special functions.

**1. Factors and Coding:** The four brigades have a letter code instead of a normal combat factor. This code will consist of either the letter S, A, or B. The letter A indicates that the brigade has amphibious capabilities. The letter S indicates that the brigade has support capabilities. The letter B indicates that the brigade has *both* amphibious and support capabilities. In addition to, and regardless of, the special capabilities indicated, each of the four brigades of specialized armor has an understood combat factor of 1.

**2. Stacking:** Only one brigade of specialized armor may be placed in any hex, but the brigade does not count against stacking in that hex. Thus, it may be added to a normal stack of three ground units. Specialized armor may not stack with US or French units.

**3. Support:** Brigades capable of support actions shift the odds by two columns in favor of the attacker when attacking major cities, fortifications and fortified towns and cities. Only one brigade per attack may be used in this function.

**4. Amphibious Assaults:** Each brigade capable of amphibious operations may convert up to two infantry brigades (including breakdown counters) to amphibious troops. These units (the specialized armor brigade and the two associated infantry brigades) must begin the impulse stacked together, and must remain stacked together throughout the impulse. The three brigades assume all of the characteristics of commandos. If the

specialized armored brigade begins the impulse stacked with a British infantry division, the division may break down into brigades and any two of the breakdowns may accompany the armored brigade and conduct amphibious assaults and/or water barrier crossings. The specialized armored brigade need not have infantry present to carry out this function, and may conduct water barrier crossing or amphibious crossing assaults by itself at any time. The brigade capable of both support and amphibious functions may only function in one such role per turn.

**5. Reserve:** Specialized armored brigades may not use their special functions while serving as reserves. While serving as reserves, they function as ordinary units.

**D. Dutch and Belgian Brigades:** For political reasons associated with the liberation of their home countries, the Dutch and Belgian brigades may not be used to invest Dunkirk. Additionally, they have their combat factors halved when outside of Holland or Belgium. (Note: The Dutch brigade functions at full effectiveness in Belgium, and vice versa.)

**E. 30th SS Division:** The 30th SS Infantry Division begins the game in Belfort, where it was being reformed after having mutinied, and its reliability was in considerable doubt. The first time that the German player moves the 30th SS Division into an Allied primary ZOC, but after all German movement for the impulse is completed, the German player rolls a die. On a roll of 1-3, there is no effect, and the unit behaves normally for the remainder of the game. On a roll of 4-6, the division *mutinies*. The unit is immediately reduced one strength level and retreated 2 hexes as if it had suffered a DRL result. From that point on, the division may not enter an enemy primary ZOC.

**F. 150th SS Panzer Brigade:** The 150th SS Panzer Brigade was partially equipped with captured US vehicles and was intended to act as an infiltration/surprise spearhead force. The 150th brigade, on the first impulse that it comes adjacent to an Allied unit, may be used in one of two ways, provided all Allied units it is adjacent to are U.S. units.

**1. Surprise Attack:** If the brigade is used in the attack, its factors are included in the total German factors attacking and the odds are increased one odds column due to the confusion caused by the appearance of the unit.

**2. Subsequent Infiltration:** If the

150th brigade is stacked with German units which attack, but does not participate in the attack, it may participate in the advance after combat and may ignore all Allied ZOCs while doing so.

**G. 501st SS Tiger Battalion:** The German 501st SS Tiger battalion requires maneuver supply, even though it has a movement allowance of only 10.

### 23. NEW UNITS

New units appear as called for by the Allied and German Orders of Appearance. New units are always considered to be in general supply the impulse they enter the map, and units requiring maneuver supply may have maneuver supply allocated to them.

**A. German Units:** New German units may enter the map on the north edge, paying the cost to enter the first hex on the map edge. German units may not enter a hex occupied by an Allied unit, but may enter a hex in an Allied primary ZOC, ending their movement when they do so. Alternatively, German units may appear in any city or town in Germany so long as there are no Allied units in general supply in Germany. (Allied units supplied by airdrops and Allied units which entered Germany during the final impulse of the Allied player-turn do not count for this purpose.) On any turn that there is an Allied unit in Germany at the beginning of the German player-turn (except as noted above), new German units may only appear on the north edge as specified above or in any German city or town east of the Rhine River not in the primary ZOC of an Allied unit, occupied by an Allied unit or last passed through by an Allied unit, and to which a general supply path may be traced.

Units noted as entering on the west or south map edges must do so, and may not alternatively be brought in in Germany or the north map edge. Units which enter on the south map edge must do so in France (not Germany or Switzerland). Units scheduled to enter the map on the west edge on turn 2 but unable to do so due to the presence of Allied units are instead destroyed.

**B. Allied Units:** All units listed as appearing on the south edge enter the map on the south edge west of Switzerland, paying to enter the first hex on the map edge. All other U.S. units may enter any hex on the west edge of either map. All British, Canadian, Belgian, Dutch, Czech, and Polish units enter on

the west edge of the northern map. All Allied airborne units may appear in England.

**C. Maneuver Supply:** All Allied ground units which require maneuver supply must be allocated maneuver supply to enter the map. While units need not enter the map the turn indicated on the order of appearance, delaying the entry of a unit until a later turn does not eliminate the requirement that when it does enter, it must be in maneuver supply.

German units may be allocated maneuver supply on their turn of entry, but need not be.

**D. Air Units:** Air units enter the map by means of a transfer mission (see Rule 10, Aircraft), consuming one MSP in so doing. No other mission may be flown the impulse of transfer, as the air unit has exhausted its maneuver supply. German air units enter free of cost, and although they may only fly the transfer mission the impulse of entry, the MSP used to enter the map is not charged against the total of accumulated German MSPs.

### 24. THE ROER DAMS

The two dam hexsides on the map are the Roer dams. At the conclusion of any phase in either player-turn in which the German player has a unit in hex 2522, 2622, or 2523, he may destroy the Roer dams. For the rest of that game turn and all of the next game turn, all hexsides of the Roer River, beginning with the hexside between hexes 2522 and 2621 and ending where the Roer River empties into the Maas River, are treated as unbridged major river hexsides for all purposes, including supply. Additionally, no unit may retreat across any of these hexsides. If forced to do so, the unit is instead eliminated.

From the time the dams are destroyed until the end of the game the two dam hexsides are treated as minor river hexsides.

### 25. GERMAN NAVAL MOVEMENT

German units may *only* cross full sea hexsides by using naval movement. The German player conducts naval movement by using *naval movement points*. Each turn during September, the German player receives eight naval movement points. Each turn during October the German receives four naval movement points. The German does not receive any naval movement points after the end of October. Naval movement points may only be used the turn they are received;

they may not be accumulated.

For the expenditure of one naval movement point, one German unit may cross a full sea hexside, paying the normal terrain costs (the cost to enter the hex plus one half of the unit's printed movement allowance) to do so. For the expenditure of two naval movement points, the German player may transfer one unit from either Flushing or Breskens to either The Hague, Rotterdam, or Dordrecht. This naval transfer costs half of the unit's printed movement allowance, but does not require the expenditure of movement points to enter the destination hex. Units conducting a transfer from one port to another must be able to trace a path of hexes through partial sea hexes which do not contain enemy units or their primary ZOCs. Naval movement takes place during any movement phase or phases of the German player-turn.

### 26. GERMAN FIRST TURN

#### DISORGANIZATION

During the first week of September, (the first turn of the game) the German armies in the west, especially in the northwest, were in considerable disorder. Consequently, the German player has several special constraints the first turn of the game. No German unit may enter an Allied primary ZOC during the German player-turn, nor may any German unit end its movement adjacent to the west or south board edge. No German unit may attack during the German player-turn. All Allied attacks during the Allied player-turn are raised one column on the CRT.

During the Allied player-turn, the German player is also restricted in his ability to utilize reserves on the north map. At the beginning of each reserve movement phase, the German player must indicate which reserve he wishes to attempt to move. After designating all such units, he rolls the die once for each unit. On a roll of 1 or 2, the unit may move and function as a normal reserve. On a roll of 3-6, the unit may not move.

All units enabled to move by the die roll lose their reserve status at the end of the impulse, regardless of whether the German player actually moves them or not. All units with a movement allowance of 10 or less which fail the required die roll immediately lose their reserve status. All units with a movement allowance greater than 10 do not lose their reserve status and the German player may again attempt to release them on subsequent

impulses.

The requirement that a reserve unit must be rolled for to be released applies only to reserves on the north map and to those reserves on the south map which the German player intends to move onto the north map. Reserves on the south map which will remain on the south map need not be rolled for, and function normally.

## 27. NATIONAL FRONTS

For both political and logistical reasons, the Allies tended to form national fronts (although units were occasionally loaned to neighboring armies of different nations). To reflect this, the following rules are in effect.

**A. National Groups:** For the purposes of this rule, there are three national groups. U.S. units form one national group, French units form a second national group, and all other Allied nationalities form a third national group.

**B. Front Limitations:** French troops, with the exception of the French 2nd Armored Division, may only be used on the south map. U.S. troops may be used on either map. All other Allied troops may only be used on the north map.

**C. Air Support:** Air units may only support an attack in which the majority (or exactly half) of the attacking units are of the same national group as the air unit. Air units may only fly defensive support over a hex if it contains at least one unit of the same national group.

## 28. WESTERN HOLLAND

The part of Holland shaded light blue is Western Holland. Much of Western Holland lies below sea level, protected from inundation by extensive dikes. Had the Allies attempted to sieze Western Holland, the Germans planned to open the dikes and conduct extensive flooding. While this would have added to the defensibility of the region, of far more concern to Allied planners were the economic effects of such a move.

Had Western Holland been flooded, Dutch agriculture would have been ravaged for years to come, and a considerable amount of Allied shipping tonnage during the rest of the campaign (and for some time after the war) would by necessity have been devoted to importing food to Holland. Every time that the Allies appeared to be moving into Western Holland, the Germans began flooding which invariably caused an Allied with-

drawal to their previous positions.

In the game, at the end of every Allied player-turn in which there is an Allied unit in Western Holland, and at least one German unit in Amsterdam, The Hague, or Hoek van Holland, the Allied level of incoming MSPs from the invasion ports is permanently reduced by two per turn. Allied units forced to retreat into Western Holland may instead surrender and are eliminated.

## 29. THE MAP

The game map is a schematic representation of the terrain in Western Europe over which the campaign was fought. Terrain and its effect on the game has been generally covered in previous rules. Several special items of information also require mention.

**A. The Hex Grid:** Each hex covers an area approximately 7 miles across (measured from hexside to hexside). The numbers in each hex have been included to ease set-up and enable precise plotting of airdrops. Each hex can be identified by the letter N or S (referring to the north or south map) followed by the distinct four-digit code of the hex.

**B. Switzerland:** Switzerland was, throughout the campaign, a neutral. No unit may move into Switzerland. No air unit may fly over Switzerland. Ground units forced to retreat into Switzerland are eliminated instead.

**C. The Chart Box:** The chart box in the southeastern corner of the south map is not intended as an impassable barrier on which defense lines can be anchored. Thus, any unit which exits the board on the western edge of the chart box may, in the next turn, reenter the map on the north edge of the chart box, and vice versa. The area covered by the chart box does not count against the maximum allowed length of general supply lines.

## SECTION IV: SCENARIOS

### 30. GENERAL RULE

There are a total of five scenarios in *Road To The Rhine*: two battle games, two campaign games, and the full-length campaign game. Each scenario is covered by one rule heading below. Each scenario rule contains seven items of information.

**A. Scenario Length:** The rule will indicate on which turn the game begins and through which turn the game runs. In the case of the battle games the game length will be only one player-turn.

**B. Victory:** This section will explain

the levels of victory possible for each side and what actions are necessary to achieve them.

**C. Set-up:** This section will indicate where units may be placed initially. In general, a group of units will be listed followed by a group of hex numbers. The units may be set up in any of those hexes. They may be placed initially up to the stacking limit. Not all of the hexes listed need have units in them. Additionally, in some scenarios a group of units will have a listing indicating how many units of the total listed may be placed initially in reserve.

Units are generally identified by their strength, their type, and their unit identification, the last in parentheses. If the unit is at reduced strength, the printed strength of the unit will appear in parentheses after the unit's actual strength at the start of the scenario.

For example, the German 116th Panzer Division at reduced strength would appear as:

4-15(9-15) panzer division-116.

In the campaign game, a printed set-up chart is included showing the initial location of units.

**D. Supply:** This section will indicate how many MSPs each side has initially and how many each side receives each turn.

**E. New Units:** This section will explain what parts (if any) of the printed order of appearance are used in the scenario.

**F. Replacements:** This will detail what alterations (if any) are made to the normal replacement rate.

**G. Special Rules:** If any special rules are used in the scenario, they will be detailed in this section.

### 31. THE FULL CAMPAIGN GAME

**A. Game Length:** The game begins with the September 1, 1944 turn and proceeds until either April IV, 1945 or until the Allied player fullfills his victory conditions, whichever comes first.

**B. Victory Conditions:** To win, the Allied player must capture every German major city on the map and maintain it in supply at the conclusion of the Allied player-turn of any game turn. If the Allied player accomplishes this by the end of November, 1944, he has won an overwhelming victory. If he accomplishes this by the end of December, 1944, he has won a strategic victory. If he accomplishes this by the end of January, 1945, he wins a substantial victory. If he accomplishes this by the end of February,

1945, he wins a tactical victory. If he accomplishes this by the end of March, 1945, he obtains a marginal victory. If he accomplishes this by the end of April, 1945, the German player achieves a tactical victory. If the Allied player does not accomplish this at all, the German player wins a strategic victory.

**C. Set-up:** Initial set-up charts are provided for the full campaign game. German units set up in the hexes indicated on the chart. Units of the U.S. First and Third Armies set up anywhere within their army boundaries. The Allied airborne reserve is placed initially in England. All German units pictured inside a heavy line box start the game at half strength. (They are pictured at full strength to assist in sorting.) The German player sets up first.

**D. Supply:** Neither player has any MSPs accumulated initially. Both sides receive the normal number of MSPs each turn.

**E. New Units:** New units appear as called for by the campaign game order of appearance, and are placed in play according to the provisions of Rule 23, New Units. Units will be noted as explained in Rule 30-C above. Note that some units will appear at reduced strength.

**Withdrawals:** Some units are listed as being withdrawn at a certain time. These units should be withdrawn from the game during the initial segment of the owning player's player-turn on the turn indicated on the order of appearance. If the unit has been cannibalized, or if the unit is surrounded by enemy units and/or a combination of full sea hexes and enemy primary ZOCs, a different unit of the same type and size (although not necessarily strength) must be withdrawn. If the unit is destroyed or in the cadre box, the unit is removed from the box and play, and thus is not available for rebuilding. If a unit is not at full strength when it is withdrawn, sufficient replacements must also be withdrawn to bring it up to strength. If the player does not have sufficient replacements accumulated to do so, additional needed replacements are subtracted from those he receives in future turns. If there are not enough replacements scheduled to arrive for the rest of the game to replace losses among withdrawn units, the player does not suffer any additional penalty beyond losing those replacements.

**F. Replacements:** Replacements are received as per the replacement chart

and Rule 18, Replacements.

**G. Special Rules:** None.

### 32. BATTLE GAME: Market-Garden

**A. Scenario Length:** The battle game consists of the Allied player-turn of the September III turn.

**B. Victory Conditions:** If at the end of the scenario, the Allied player has at least one division east of the Waal River north of hex 2812 or east of the Roer River south of hex 2615 he has won a tactical victory. If the Allied player has at least one division across the Lek-Rhine River he has won a strategic victory. In either case, the division must be in general supply by means other than airdrop. Failing either of the above, the German player wins.

**C. Set-up:** The Allied player sets up in the following hexes:

#### Canadian 1st Army

8-20 armored division (Cnd 4)

9-20 armored division (Pol 1)

3-20 armored brigade (Br 6 Gds)

2-15 infantry brigade (Dutch PI)

*Location:* N-0809, 0911, 1514, 1614, 1714, 0912, 0913, 1013, 1114, 1214, 1314, 1412.

#### Dunkirk

6-20 infantry division (Cnd 2)

*Location:* N-0209.

#### British 2nd Army

9-20 armored division (Br Gds)

8-20 armored division (Br 7)

8-20 armored division (Br 11)

6-20 infantry division (Br 3)

5-20 infantry division (Br 15)

6-20 infantry division (Br 43)

6-20 infantry division (Br 53)

3-20 armored brigade (Br 4)

3-20 armored brigade (Br 8)

5-20 spec. arm. bde. (Br 79/30)

2-15 infantry brigade (Belg 1)

*Location:* N-1814, 1914, 2014, 2115, 2116, 2117, 1915, 2015, 2016.

#### U.S. 1st Army

9-20 armored division (US 2)

9-20 armored division (US 3)

7-20 armored division (US 5)

6-15 infantry division (US 1)

5-15 infantry division (US 4)

5-15 infantry division (US 9)

5-15 infantry division (US 28)

5-15 infantry division (US 30)

5-15 infantry division (US 79)

2-25 arm. cav. regt. (US 4)

2-25 arm. cav. regt. (US 102)

2-25 arm. cav. regt. (US 113)

*Location:* N-2118, 2119, 2219, 2220, 2221, 2222, 2223, 2224, 2125, 2025, 2026, 2027.

#### Air Units

2-40 bomber (Allied 2G)

2-12 fighter bomber (Cnd 83G)

2-12 fighter bomber (Br 84G)

2-35 bomber (US 97W)

2-35 bomber (US 98W)

2-11 fighter bomber (US 100W)

*Location:* Any city or town west of the front line.

#### Allied Airborne Reserve

5-10 parachute division (US 82)

5-10 parachute division (US 101)

4-10 parachute division (Br 1)

5-20 airlanding division (Br 52)

2-10 parachute brigade (Pol 1)

Transport (US 52W)

Transport (US 53W)

Transport (Br 38/46G)

*Location:* England

The German player sets up in the following hexes:

#### 1st Parachute Army (up to 7 res.)

3-6 infantry division (719)

3-8(5-8) infantry division (85)

2-8(4-8) parachute division (LW 7)

2-8(4-8) infantry division (604)

1-8(3-8) infantry division (84)

2-8(5-8) infantry division (353)

2-8(4-8) infantry division (180)

2-8(4-8) infantry division (190)

3-8 parachute KG (LW Walt.)

4-8 infantry division (176)

2-8 parachute regiment (LW 6)

1-8 security regiment (26)

*Location:* N-1812, 1813, 1912, 2012, 2013, 2114, 2211, 2213, 2214, 2215, 2216, 2218, 2313, 2316, 2317, 2318, 2407, 2416, 2417, 2509, 2512, 2516, 2517, 2616.

#### 15th Army (Right Wing)

3-8 infantry division (331)

4-6 static division (344)

6-6 static division (64)

*Location:* N-0910, 1110, 1111, 1211, 1311, 1312, 1411, 1412.

#### Flushing

1-6(3-6) static division (70)

*Location:* N-1109.

#### Dunkirk (invested)

3-6 static division (226)

*Location:* N-0209.

#### 15th Army (Left Wing - up to 3 res)

4-6 static division (346)

4-6 static division (711)

4-6 static division (59)

5-6 static division (245)

2-6(4-6) static division (712)

*Location:* N-1511, 1512, 1513, 1611, 1612, 1711, 1712, 1810, 1811, 1909.

#### Hoek van Holland

2-6 infantry brigade (HvH/249)

*Location:* N-1805.

**7th Army (up to 5 res.)**

- 3-6 infantry division (526R)
- 3-8 infantry division (183VG)
- 4-6 static division (347)
- 1-6 infantry KG (172)
- 3-15 panzer brigade (105)
- 3-15(6-15) parachute division (LW 3)
- 1-6(3-6) static division (49)
- 5-15(10-15) panzer division (9)
- 4-15(9-15) panzer division (116)
- 5-15(10-15) panzer division (2)
- 6-15(11-15) panzer division (SS 1)
- 6-15(11-15) panzer division (SS 2)

*Location:* N-2319, 2320, 2321, 2322, 2323, 2324, 2325, 2225, 2126, 2127, 2227, 2418, 2419, 2421, 2422, 2424, 2518, 2523, 2524, 2617, 2619, 2621, 2622, 2718.

**Resting**

- 5-15(10-15) panzer division (SS 9)
- 5-15(10-15) panzer division (SS 10)
- 3-15 panzer brigade (107)

*Location:* Any one unit may be in hex N-2710. All others must be in cities or towns in Germany.

**Air Units**

- 1-10 fighter bomber (JK II)
- 1-10 fighter bomber (JD 1)

*Location:* Any city or town in Germany.

**In Cadre Box**

- 5-8 parachute division (LW 6)
- 4-8 airlanding division (91)
- 4-8 infantry division (275)
- 5-8 infantry division (89)
- 10-12 panzer division (SS 12)

**In Destroyed Units Box**

- 3-6 static division (47)
- 4-6 static division (708)
- 1-6 infantry KG (136)
- 1-8 security regiment (80 LS)

**D. Supply:** The Allied player has a total of 22 MSPs to expend. The German player has a total of 4 MSPs to expend.

**E. New Units:** The Allied player receives as new units all those shown on the campaign game order of appearance for the September III turn except those that enter the south edge of the map. The German player does not receive any new units.

**F. Replacements:** Neither side receives any replacements during the scenario.

**G. Special Rules:**

**1. Weather:** The weather for the turn is considered to be rain, with the air visibility condition of the impulse immediately before the first Allied impulse considered to have been clear.

**2. Airborne Planning:** The Allied player sets up first and must plan all

airborne assaults before the German player sets up. (The Allied player does not get to plan his assault based on foreknowledge of the German dispositions.)

**3. Optional Victory:** The battle game's victory conditions are structured to recreate the actual Market-Garden operation, or a similar operation aimed at a rapid penetration across the Rhine. In retrospect, it has become obvious that an operation against the Scheldt Estuary, while less spectacular, would have been far more productive. To reflect this, if the Allied player manages to capture all hexes of the Scheldt Estuary, his final level of victory is raised one level. A German victory becomes an Allied tactical victory. An Allied tactical victory becomes an Allied strategic victory. An Allied strategic victory becomes an Allied miraculous victory.

**4. Map:** Only the north map is used.

**33. MARKET-GARDEN CAMPAIGN**

**A. Scenario Length:** The scenario lasts from the Allied player-turn of the September III, 1944 turn through the end of the December II, 1944 turn.

**B. Victory Conditions:** If at the end of the scenario the Allied player has captured 18 or more cities in Germany, he has won a strategic victory. If he has captured 12 or more cities in Germany he has won a substantial victory. If he has captured 6 or more cities he has won a tactical victory. If he has captured 3 or more cities, the scenario is a draw. If he has captured less than three cities, the German has won.

**C. Set-up:** Both players set up the same as in the Market-Garden Battle Game.

**D. Supply:** The German player has 3 MSPs accumulated initially and receives an additional 7 per turn throughout the scenario. The Allied player receives all MSPs from airlifts, captured ports, and the invasion ports. He does not receive any MSPs from the southern ports. Each turn, the Allied player subtracts 3 MSPs from the number he is receiving that turn to represent the supplies sent to the U.S. 3rd Army (off-map to the south).

**E. New Units:** Players receive the following new units:

**September III**

*Allied:*

- 6-20 infantry division (Br 49)
- 3-20 armored brigade (Br 34)
- 2-15 commando brigade (Br 4)

2-25 arm. cav. regt. (US 14)

**September IV**

*German:*

- 2-8(4-8) infantry division (256 VG)
- 1-8 infantry division (406)
- 2-15 aslt. gun brigade (280)

*Allied:*

- 6-15 infantry division (US 2)
- 5-15 infantry division (US 83)
- 2-25 arm. cav. regt. (US 15)
- 3-20 armored brigade (Cz 1)
- A-20 spec. arm. brigade (Br 79/33)

**October I**

*German:*

*withdraw:* 1-10 fighter bomber (JD 1)

*Allied:*

- 5-15 infantry division (US 29)
- 2-25 arm. cav. regt. (US 106)
- 6-20 infantry division (Br 51)
- 6-20 infantry division (Cnd 3)
- 3-20 armored brigade (Cnd 2)
- S-20 spec. arm. brigade (Br 79/31)
- B-20 spec. arm. brigade (Br 79/1AE)

**October II**

*German:*

2-8(5-8) infantry division (246 VG)

*Allied:*

- 5-15 infantry division (US 26)
- 4-10 parachute division (US 17)
- 2-25 arm. cav. regt. (US 2)

**October III**

*German:*

3-8 infantry division (363VG)

*withdraw:* 1-10 fighter bomber (JK II)

*Allied:*

1-15 infantry regiment (US 24)

**October IV**

*German:*

none

*Allied:*

- 7-20 armored division (US 9)
- 5-15 infantry division (US 104)

**November I**

*German:*

4-8 infantry division (606)

2-15 aslt. gun brigade (341)

*Allied:*

- 5-15 infantry division (US 84)
- 5-15 infantry division (US 102)

**November II**

*German:*

5-8 infantry division (272VG)

1-10 fighter bomber (JK II)

*Allied:*

- 5-15 infantry division (US 99)
- 4-10 parachute division (Br 6)

**November III**

*German:*

4-8 infantry division (26VG)

2-15 aslt. gun battalion (654)

*Allied:*

5-15 infantry division (8)

**November IV****German:**

- 4-8 infantry division (18VG)
- 1-10 fighter bomber (JD 1)

**Allied:**

none

**December I****German:**

- 5-8 infantry division (212VG)
- 4-8 infantry division (47VG)
- 4-8 infantry division (277VG)
- 2-10 panzer battalion (SS 501T)

**Allied:**

none

**F. Replacements:** Each turn the Allied player receives one less replacement (of a type of his choice) than shown on the replacement chart. Each turn the German player receives two less replacements (of a type of his choice) than shown on the replacement chart.

**G. Special Rules:**

**1. Weather:** The same weather rule for the first turn is used as for the Market-Garden Battle Game. In subsequent turns weather is rolled for normally.

**2. Airborne Planning:** The Allied players sets up before the German player and must plan any first turn assaults before the German player sets up.

**3. Map:** Only the north map is used.

**34. BATTLE GAME — The Bulge**

**A. Scenario Length:** The battle game consists of the German player-turn of the December III game turn.

**B. Victory Conditions:** If at the end of the game the German player has captured (was the last to pass over) any of the bridge hexsides at Liege, Namur, or Huy, he wins a marginal victory. If the German player has units (in or out of supply) in Liege, Namur, and Maastricht, he wins a tactical victory. If he has a unit, in or out of supply, in Antwerp at the end of any impulse, he wins a strategic victory. Failing any all of the above, the Allied player wins. If at the end of the game, there are no Allied units between the Waal and Lek Rivers, the level of German victory is increased by one. An Allied victory becomes a German tactical victory, etc.

*Note:* This battle game is included for historical interest; it is not intended as a balanced scenario. There is virtually no hope of even attaining a marginal German victory, and only by great good fortune can the German player hope to equal the German historical gains (the

capture of St. Vith, Houffalize, and Marche).

**C. Set-up:** The German player sets up first in the following hexes:

**25th Army**

- 3-8 parachute KG (LW Walt.)
  - 2-8(4-8) infantry division (604)
  - 2-15 aslt. gun brigade (280)
  - 5-8 parachute division (LW 6)
  - 2-8 parachute regiment (LW 6)
  - 4-6 static division (712)
  - 4-6 static division (711)
  - 2-6 infantry brigade (HvH/249)
  - 1-8 security regiment (26)
  - 2-6(4-6) static division (346)
- Location:* N-1308, 1408, 1608, 1708, 1809, 1804, 1907, 1909, 1910, 2010, 2104, 2110, 2209, 2210, 2306, 2310, 2407, 2409, 2410, 2510, 2710, 2911, 2912.

**1st Parachute Army**

- 4-8 infantry division (606)
  - 4-8 parachute division (LW 7)
  - 2-8(4-8) infantry division (180)
  - 3-8 infantry division (84)
  - 4-8 infantry division (190)
- Location:* N-2712, 2713, 2714, 2615, 2716, 2616, 2517.

**15th Army**

- 5-8 infantry division (272VG)
  - 2-8(5-8) infantry division (246VG)
  - 5-8 infantry division (85)
  - 2-8(5-8) infantry division (353)
  - 2-6(4-6) static division (344)
  - 4-8 infantry division (47VG)
  - 3-8 infantry division (363VG)
  - 3-8 infantry division (183VG)
  - 2-6(4-6) static division (59)
  - 4-8 infantry division (176)
  - 5-15(10-15) panzer division (SS 10)
  - 2-15 aslt. gun brigade (341)
- Location:* N-2417, 2518, 2618, 2619, 2620, 2621, 2622, 2523, 2718, 2722, 2723.

**6th Panzer Army**

- 4-8 infantry division (326VG)
  - 4-8 infantry division (277VG)
  - 10-15 panzer division (SS 12)
  - 6-15 *panzergrenadier* div (3)
  - 2-15 aslt. gun battalion (654)
  - 4-8 infantry division (12VG)
  - 11-15 panzer division (SS 1)
  - 6-15 parachute division (LW 3)
  - 2-10 panzer battalion (SS 501T)
  - 11-15 panzer division (SS 2)
  - 10-15 panzer division (SS 9)
- Location:* N-2324, 2423, 2424, 2524, 2525, 2623.

**5th Panzer Army**

- 6-15(12-15) panzer division (Lehr)
- 4-8 infantry division (26VG)
- 2-15 aslt. gun brigade (911)

- 10-15 panzer division (2)
  - 9-15 panzer division (116)
  - 4-8 infantry division (560VG)
  - 4-8 infantry division (18VG)
  - 4-8 infantry division (62VG)
- Location:* N-2126, 2225, 2226, 2325.

**7th Army**

- 5-8 infantry division (212VG)
  - 4-8 infantry division (276VG)
  - 4-8 infantry division (352VG)
  - 5-8 parachute division (LW 5)
- Location:* N-2128, 2127.

**1st Army**

- 6-15 *panzergrenadier* div (25)
  - 4-15(8-15) *panzergrenadier* div (SS 17)
  - 4-8 infantry division (36VG)
  - 2-6(4-6) static division (347)
  - 4-8 infantry division (19VG)
  - 3-6 infantry division (719)
  - 3-8 infantry division (416)
  - 3-6 infantry division (526R)
  - 4-15(9-15) panzer division (21)
  - 5-15(10-15) panzer division (11)
  - 4-8 infantry division (256VG)
  - 4-8 infantry division (361VG)
  - 5-6 static division (245)
- Location:* S-2003, 2102, 2103, 2104, 2105, 2202, 2205, 2206, 2302, 2307, 2402, 2407, 2504, 2505, 2507, 2508, 2608, 2609, 2710, 2810, 2911, 2912.

**19th Army**

- 4-15 panzer brigade (FHH/106)
  - 4-8 infantry division (198)
  - 4-8 infantry division (189)
  - 4-8 infantry division (708VG)
  - 2-8(4-8) infantry division (16VG)
  - 5-8 infantry division (269)
  - 4-6 static division (338)
  - 3-8 infantry division (SS 30)
  - 3-6 infantry division (716)
  - 3-6 infantry division (159R)
- Location:* S-2121, 2120, 2019, 2018, 1918, 1917, 1916, 2015, 2116, 2117, 2215, 2316, 2416, 2516, 2615, 2614, 2714, 2813, 2413.

**General Reserve**

- 2-8(5-8) infantry division (340VG)
  - 10-15 panzer division (9)
  - 6-15 *panzergrenadier* division (15)
  - 4-15 panzer brigade (SS 150)
- Location:* Anywhere behind the front.

**Air Units**

- 1-10 fighter bomber (JK II)
  - 1-10 fighter bomber (JD 1)
  - 1-10 fighter bomber (JD 2)
  - 1-10 fighter bomber (JD 5)
- Location:* Any city or town behind the front.

**In Cadre Box**

- 5-8 infantry division (257VG)
- 4-8 infantry division (553VG)

**In Units Destroyed Box**

3-6 static division (49)  
 3-6 static division (70)  
 6-6 static division (64)  
 5-8 infantry division (89)  
 1-8 infantry division (406)  
 5-6 infantry division (462)  
 3-15 panzer brigade (112)  
 3-15 panzer brigade (113)  
 1-6 infantry KG (136)  
 1-6 infantry KG (172)  
 2-6 infantry KG (Otter.)  
 1-8 infantry regiment (LW 19)  
 1-8 parachute regiment (LW 3R)

**Dunkirk** (invested)

3-6 static division (226)

*Location:* N-0209.

The Allied player sets up after the German player in the following hexes:

**Canadian 1st Army** (up to 4 res)

9-20 armored division (Pol 1)  
 8-20 armored division (Cnd 4)  
 6-20 infantry division (Cnd 2)  
 6-20 infantry division (Cnd 3)  
 6-20 infantry division (Br 49)  
 2-15 commando brigade (Br 4)  
 2-15 infantry brigade (Dutch PI)  
 2-15 infantry brigade (Belg 1)  
 2-10 parachute brigade (Pol 1)  
 3-20 armored brigade (Cnd 2)  
 S-20 spec. arm. brigade (Br 79/30)  
 S-20 spec. arm. brigade (Br 79/31)  
 B-20 spec. arm. brigade (Br 79/1AE)  
*Location:* N-1609, 1710, 1810, 1811, 1911, 2011, 2012, 2111, 2211, 2311, 2313, 2411, 2511, 2512, 2611, 2612, 2711.

**Dunkirk**

3-20 armored brigade (Czeck 1)

*Location:* N-0209

**British 2nd Army** (less 30 Corps) (up to 2 res)

8-20 armored division (Br 7)  
 6-20 infantry division (Br 3)  
 5-20 infantry division (Br 15)  
 5-20 airlanding division (Br 52)  
 3-20 armored brigade (Br 4)  
 3-20 armored brigade (Br 8)  
 4-20 armored group (Br BD)  
*Location:* N-2415, 2416, 2514, 2516, 2613, 2614, 2615.

**British 30 Corps** (all in res)

9-20 armored division (Br Gds)  
 6-20 infantry division (Br 43)  
 6-20 infantry division (Br 51)  
 5-20 infantry division (Br 53)  
 3-20 armored brigade (Br 6 Gd)  
 3-20 armored brigade (Br 34)  
 A-20 spec. arm. brigade (Br 79/33)  
 4-20 armored group (Br BD)  
*Location:* N-1816, 1717, 1616, 1617.

**US 1st Army** (less 8 Corps)

## (up to 4 in res.)

5-15 infantry division (US 36)  
 5-15 infantry division (US 83)  
 5-15 infantry division (US 104)  
 6-15 infantry division (US 1)  
 5-15 infantry division (US 9)  
 5-15 infantry division (US 8)  
 5-15 infantry division (US 78)  
 5-15 infantry division (US 99)  
 6-15 infantry division (US 2)  
 9-20 armored division (US 3)  
 2-25 arm. cav. regt. (US 4)  
 2-25 arm. cav. regt. (US 102)  
 2-25 arm. cav. regt. (US 113)  
 3-20 armored brigade (US BD/B)  
 1-15 infantry regiment (US 24)  
*Location:* N-2521, 2522, 2421, 2321, 2422, 2323, 2322, 1820.

**US 9th Army** (up to 2 in res)

5-15 infantry division (US 84)  
 5-15 infantry division (US 102)  
 5-15 infantry division (US 29)  
 5-15 infantry division (US 30)  
 9-20 armored division (US 2)  
 7-20 armored division (US 7)  
 2-25 arm. cav. regt (US 2)  
 2-25 arm. cav. regt. (US 103)  
*Location:* N-2318, 2418, 2319, 2519, 2520, 2419.

**US 8th Corps**

2-25 arm. cav. regt. (US 14)  
 hex N-2223  
 5-15 infantry division (US 106)  
 hex 2224  
 2-15(5-15) infantry division (US 26)  
 hex N-2025  
 2-20 armored brigade (US BD/R)  
 hex N-1825 (in reserve)  
 3-20 armored brigade (US BD/A)  
 hex N-2027  
 2-15 infantry regiment (US BD)  
 hex S-2101  
 2-15 infantry regiment (US BD)  
 hex S-2001  
 2-15 infantry regiment (US BD)  
 hex S-2002

**US 3rd Army** (up to 5 res)

5-15 infantry division (US 90)  
 5-15 infantry division (US 95)  
 5-15 infantry division (US 5)  
 5-15 infantry division (US 26)  
 5-15 infantry division (US 35)  
 5-15 infantry division (US 87)  
 5-15 infantry division (US 80)  
 7-20 armored division (US 10)  
 7-20 armored division (US 6)  
 2-25 arm. cav. regt. (US 3)  
 2-25 arm. cav. regt. (US 6)  
*Location:* S-2004, 2005, 2106, 1905, 1906, 2207, 2108, 2308, 2408, 1909.

**US 7th Army** (up to 3 in res)

7-20 armored division (US 12)

7-20 armored division (US 14)

5-15 infantry division (US 44)

5-15 infantry division (US 45)

5-15 infantry division (US 79)

5-15 infantry division (US 100)

5-15 infantry division (US 103)

2-25 arm. cav. regt. (US 15)

*Location:* S-2510, 2610, 2711, 2811, 2812, 2713, 2613, 2514, 2515, 2412.

**French 1st Army** (up to 2 in res)

7-20 armored division (Fr 1)

7-20 armored division (Fr 2)

6-15 infantry division (Fr 1 Mar)

5-10 infantry divisions (Fr 2M)

5-10 infantry division (Fr 3AI)

5-10 mountain division (Fr 4M)

5-10 infantry division (Fr 9C)

1-10 infantry brigade (Fr 1MT)

1-10 infantry brigade (Fr 2 MT)

1-10 infantry brigade (Fr 3MT)

2-15 commando brigade (Fr AF)

2-15 commando brigade (Fr FR)

6-20 infantry division (US 3)

*Location:* S-2415, 2315, 2214, 2115, 2014, 1915, 1815, 1816, 1817, 1818, 1919, 1920, 2020, 2114, 1717.

**Allied Airborne Reserve**

4-10 parachute division (US 17)

Transport (US 52W)

Transport (US 53W)

Transport (Br 38/46G)

*Location:* England

**US 18th Corps** (all in res)

5-10 parachute division (US 82)

5-10 parachute division (US 101)

*Location:* N-0528

**Air Units**

2-40 bomber (Allied 2G)

2-35 bomber (US 97W)

2-35 bomber (US 98W)

2-35 bomber (US 99W)

2-35 bomber (US 42W)

2-12 fighter bomber (Cnd 83G)

2-12 fighter bomber (Br 84G)

2-11 fighter bomber (US 100W)

1-11 fighter bomber (US 70W)

1-11 fighter bomber (US 29PTAC)

1-11 fighter bomber (US 64W)

*Location:* Any city or town west of the front.

**Broken Down**

5-15 infantry division (US 4)

7-20 armored division (US 9)

8-20 armored division (Br 11)

**In Cadre Box**

4-10 parachute division (Br 1)

**Cannibalized**

6-20 infantry division (Br 50)

**D. Supply:** The German player has 14 MSPs accumulated initially, in addition to those he will receive at the beginning of his player turn. In addition,

up to six units which are not initially placed in an enemy ZOC may be considered to be in maneuver supply as former unmoved reserves.

The Allied player has 5 MSPs accumulated.

**E. New Units:** The German player receives as new units all those shown on the order of appearance for the December III turn. The Allied player does not receive any new units.

**F. Replacements:** Neither side receives any replacements during the scenario.

**G. Special Rules:**

1. **Weather:** The weather for the turn is considered to be winter storm.
2. **Airborne Planning:** If the Ger-

man player intends to airdrop the von der Heydte regiment during the scenario, the target hex and drop impulse must be recorded before the Allied player sets up.

### 35. THE BULGE CAMPAIGN GAME

**A. Scenario Length:** The scenario lasts from the German player-turn of the December III turn, 1945, through the normal end of the game.

**B. Victory Conditions:** The victory conditions are the same as in the full campaign game.

**C. Set-up:** The same set-up instructions are used as in the Bulge battle game.

**D. Supply:** The same level of accumulated supply is available to each side as

in the Bulge battle game.

**E. New Units:** New units appear and are withdrawn according to the campaign game rules and order of appearance, beginning with the December III turn.

**F. Replacements:** neither side begins with any accumulated replacements. Both sides receive replacements at the standard rate for the full campaign game.

**G. Special Rules:**

The same special rules are in effect for the Bulge campaign game as for the Bulge battle game. Note, however, that both rules are relevant only to the first turn of the game.

## DESIGNER'S NOTES – ROAD TO THE RHINE

### I. An Informal Bibliography

The orders of battle for **Road To The Rhine** were compiled from a variety of sources. The British ground order of battle was drawn primarily from Joslin (the British government's official published order of battle for the Second World War) but was supplemented extensively from operational accounts as to actual arrival times at the front. The German order of battle was drawn exclusively from Georg Tessin's **Verbände und Truppen der deutschen Wehrmacht und Waffen SS im Zweiten Weltkrieg**, which is at least the most readily useable source available. The German air OB was drawn from Tatum and Hoffschmidt's **The Rise and Fall of the German Air Force** while the Allied air OB's are from the appendices to **Victory in the West** volume II (L. F. Ellis - the official British history).

As is too-often the case, the United States orders of battle proved the most frustratingly elusive, as the Office of the Chief of Military History several years ago decided that there was insufficient demand for an order of battle work to justify its publication. Fortunately, Capt. Shelby Stanton (ret.) has been compiling the research material for such a project

for some time and was gracious enough to make available the considerable fruits of his labor.

The volume of the U.S. official history of the European Theatre of Operations dealing with the rearmament program of the French was the primary source for the French order of battle and details of the French Metropolitan program.

In addition to order of battle sources, a large number of operational accounts were consulted in preparing the game, but the ones relied upon most heavily were the three volumes of the U.S. official history of the ETO dealing with the Lorraine campaign, the 1944 fighting in the West Wall, and the final assault across the Rhine. For the Market-Garden operation and the clearing of the Scheldt Estuary, the British official history (Ellis) was relied on heavily. Finally, the volume of the U.S. history of the ETO dealing with the logistical side of the campaign was invaluable, even though the final supply rules are heavily abstracted.

### II. Units

A variety of decisions were made throughout the design process that prompted questions from the play-testers. These and other items of interest

concerning the units are covered below.

#### A. German Units:

A number of questions were raised about the widely varying strengths of German units, especially the infantry and static infantry divisions. When researching the German order of battle, I made a conscious effort to avoid stereotyping units by their official designation. This is not to say that there is a wealth of hard data behind every factor assignment; only that I felt it justified to depart from the normal convention that German infantry is good, static divisions are bad, etc. when information seemed to warrant it. Several examples come to mind. The 64th *Bodenstandige* (static infantry) Division was only formed in June of 1944 and was barely organized when it was caught up in the retreat from the Pas de Calais. By rights, it should have disintegrated, but a good NCO and junior officer cadre not only held the division together, but turned it into one of the best divisions on the western front. (The Canadian official history claims that it was *the* best division Canadian troops fought against.) Contrast this with the 70th *Bodenstandige*, a "white bread" or stomach division charged with the defense of Walcheren island, which

collapsed almost immediately.

As a general rule, I took a strength of four combat factors as a starting point for the average German division and varied the strength of units from that norm if information as to its composition or performance warranted it. In many cases, the very fact that a division survived (or failed to) was basis for change.

Several selected German units constitute special cases. The 654th Assault Gun battalion is included in the game with the same strength as a standard assault gun brigade primarily because it was equipped with Jagdpanthers. The 100th Motorized brigade appears as it was referred to in the U.S. history of the Lorraine campaign. Its actual designation was the 100th Panzer Brigade, although it would appear that the unit was no more than a motorized infantry force by the beginning of September. The designation of the 80th *Landeschützen* regiment is a fabrication on my part. There was a security regiment formed of *landeschützen* companies operating in the German 80th Corps sector in early September, but I have been unable to trace the exact designation of this regiment, hence the conventionalized one appearing in the game. The 249th infantry brigade was officially a division, but only nominally so. The 249th was actually a shadow division, the division number being given to the fortress troops in the Hook of Holland as an intelligence ruse. The troops were never organized as a division, but instead fought as the *Hoek van Holland* group, hence the double identification on the counter.

#### B. Allied Units:

Strength assessments of Allied units are fairly straightforward. Several special cases are present, however. All divisions of the French Metropolitan program are included in the counter mix, although due to equipment and manpower shortages only about half of them actually became operational during the period covered by the game. They were included because the possibility of lighter Allied casualties in the game makes raising them a possibility. The requirement that French units be raised from cadres using Allied replacements stems from the French equipment shortage and the reluctance of the Allied powers to sacrifice too great a proportion of their shipping tonnage to equipment earmarked for the French when their own troops were also in need of it.

Several U.S. infantry regiments were

excluded from the counter mix, primarily due to the fact that they were engaged exclusively in line of communication duty. The purists may wish to include these regiments in their Allied OB. They are the 65th, 118th, 156th, and 159th regiments. The armored cavalry groups excluded from the counter mix by the special US armored cav replacement rule are the 11th, 16th, 101st, 114th, and 115th.

The four U.S. divisions which arrive at reduced strength do so to represent the fact that in each case only part of the division was available at the listed arrival time, and in each instance that element of the division fought alone for several weeks (and in some cases for several months) before the main body of the division joined. For the curious, only Combat Command A of the 8th Armored Division was initially available, while the advanced elements of the 42nd, 63rd, and 70th Infantry Divisions fought for some time as Task Force Linden, Task Force Harris, and Task Force Aaron, respectively.

The U.S. 66th Infantry Division is an entirely different story. The division is available only on a roll of 1 or 2, any other result meaning that it is sunk in transit. On the 24th of December, the 66th Division boarded ship in England for the trip across the channel to France. In mid-channel the convoy was attacked by German E boats and three large transports were sunk. Casualties ran into the thousands and the division was permanently ruined for combat, relegated to containment duties in Brittany for the remainder of the war.

#### III. Rules

The first thing that struck me about the campaign in the west starting in September was the incredible gains made in relatively short time periods. When you consider that Antwerp was taken historically on the first turn by the Guards Armored Division, that the entire Market Garden operation took place within the span of about one turn, and that most of the German gains in the Bulge were made in the first week, it becomes obvious that either a turn scale of less than a week is necessary or the traditional one or two impulse turn has to be scrapped.

The multiple-impulse system used in **Fall of Tobruk** was the starting point for the system. The increased mobility of units, increased importance of geographic objectives, and clearer preponderance of

force on one side mandated the reserve system as a means of plugging holes. The dividend was the aspect of continuing combat without bookkeeping problems. The prohibition of reserve movement in the final impulse is primarily a means of nullifying a game artifact that exposed itself — the ability of the defender to use his reserves to pinch off a salient *after* the attacker had committed all of his units.

The use of MSPs in the game to represent the Allied logistical problems was settled on because it was a fairly easy game rule to deal with. Actual truck convoys and physical movement of supplies would certainly be a better simulation of the process at work, but that was not the type of complexity I was searching for in the design. With the existing system I could impose reasonably realistic constraints on both players and also use the system to tinker with game balance.

The decline in Allied MSPs in the winter months represents the increased amount of tonnage taken up with coal to meet French civilian needs in '44-'45. The initial decline represents the eating up of forward stocks of supplies and the lengthening of the Allied supply line. Admittedly, it is possible that the Allied supply lines will not get longer in the game, but I considered this a sufficiently remote possibility to discount its effect. The cost in MSPs to conduct attacks across unbridged major river hexsides is an attempt to take into account both the logistical strain caused by funneling units through a small assault bridgehead and the cost of bringing forward the necessary engineering equipment.

Of all the rules in the game, the most difficult to develop was the first turn German disorganization rule, and this rule went through more different versions than any other. Several considerations seemed to work at cross-purposes. On one hand, the British and U.S. spearheads cut through the German defenders north of the Meuse as if they weren't there. The difficulty with a general first turn disorganization rule was that, given the relatively low troop density in the south, with even a little extra gas Patton ran wild and usually was in Germany the first turn. Some argue that this would have happened under these circumstances, but I personally don't think so. Beyond that, and more important than my opinion, is the fact that it made for a short, lousy game. German

resistance did coalesce faster in the south, especially south of the Moselle River, and thus the current rule was developed.

One final point in the game that has raised a few eyebrows is the ability to infinitely replace aircraft. Actually, the rule is not as outlandish as it seems. For most of the game, the Germans have relatively few air units in play, and thus the loss of one of them will seriously reduce their operational strength while it is being replaced. Furthermore, throughout this time period (except toward the very end) German fighter production was very high and the *Luftwaffe* suffered not from a shortage of planes, but rather from a shortage of pilots. Thus, the constraints on replacing lost aircraft are more of a training lag than any shortage of machines, and in the final analysis the number of aircraft will have much less impact on the balance of force than will the amount of MSPs available to make aircraft operational.

#### IV. The Game As History

While I do not believe that designers should be heavy handed in their attempts to force historical outcomes, I do believe that one of the hallmarks of minimum acceptability of a historical game is that it at least be *possible* to approximate history with it. As a general rule, I try to walk through several historical events with a game early on in the design process, both to make sure I know what's going on historically and also to provide a check on the ability of the system to reflect that historical reality, in at least approximate terms. Normally, these exercises end up buried in my research notes and eventually misplaced or forgotten. Recently, however, a number of people have expressed interest in this sort of thing, and as a result the following is experimentally presented as a combination historical overview and example of play.

In order to follow the explanation, sort the counters specified for the Bulge battle game by army. It is not necessary to sort the counters of the French 1st Army, U.S. 7th Army, or German 19th Army. This example will give the approximate initial positions of all units of the British 21st and U.S. 12th Army Groups and of the German units facing them. Air units will not be dealt with as they cannot fly during the battle game. Following the set-up information, there is a step by step explanation of the game

moves that approximate the actual Ardennes Counteroffensive.

#### German Set-up:

##### 25th Army

88th Corps: KG Walter in hex 2912, 604 inf div and 280 aslt gun bde in hex 2710, 6 para div in hex 2510, 6 para regt in hex 2410, 712 static div in hex 2210, 711 static div in hex 2010.

30th Corps: HvH/249 inf bde in hex 1804, 26 sec regt in hex 2104, 346 static div in hex 1809.

##### 1st Parachute Army

2nd Parachute Corps: 606 inf div in hex 2517, 7 para div in hex 2616.

86th Corps: 180 inf div in hex 2715, 84 inf div in hex 2713, 190 inf div in hex 2712.

##### 15th Army

67th Corps: 272 VG div in hex 2523, 246 VG div in hex 2622.

74th Corps: 85 and 253 inf divs in hex 2621, 344 static div in hex 2722.

81st Corps: 47VG div in hex 2620, 363VG div in hex 2619.

12th SS Corps: 183 VG div and 59 static div in hex 2518, 176 inf div in hex 2417.

Army Reserve: 10 SS pnz div in hex 2723, 341 aslt gun bde in hex 2718.

##### 6th SS Panzer Army

68th Corps: 326VG and 277VG divs in hex 2423.

1st SS Panzer Corps: 12 SS pnz, 3 pnz gren div, and 654 aslt gun bn in hex 2324, 12VG div in hex 2424, 1 SS pnz div, 3 para div, and 501 SS tiger bn in hex 2524.

2nd SS panzer Corps: 2 SS pnz and 9 SS pnz divs in hex 2623.

##### 5th Panzer Army

47th Panzer Corps: Pnz Lehr div, 26 VG div, 911 aslt gun bn in hex 2126, 2 pnz div in hex 2226.

58th Panzer Corps: 116pnz and 560 VG divs in hex 2225.

66th Corps: 18VG and 62VG divs in hex 2325.

##### 7th Army

80th Corps: 212VG and 276VG divs in hex 2128.

85th Corps: 352VG and 5 para div in hex 2127.

##### 1st Army

90th Corps: 25 pnz gren div in hex 2508, 17 SS pnz gren div in hex 2507, 37VG div in hex 2307.

13th SS Corps: 559VG and 347 static divs in hex 2206, 19VG and 719 inf divs in hex 2105.

82nd Corps: 416 inf div in hex 2003, 526R inf div in hex 2102.

Army Reserve: 21 pnz div in hex 2505, 11 pnz div in hex 2202.

89th Corps: 256VG, 361VG, and 245 inf divs facing U.S. 7th Army.

#### Canadian 1st Army

British 1st Corps: 1 Belg inf bde in hex 1810, 4 Br cdo bde in hex 2211, 30, 31, and 1AE spec arm bdes in hex 2012 (reserve), 4 Cnd arm div in hex 2111, 1 Pol arm div in hex 1911, 1 Dutch inf bde in hex 2311, 1 Pol para bde in hex 2313 (reserve).

Canadian 2nd Corps: 2 Cnd arm bde in hex 2511, 49 Br inf div in hex 2711, 2 Cnd inf div in hex 2611, 3 Cnd inf div in hex 2612.

#### British 2nd Army

British 30th Corps: 33 spec arm bde and 43 Br inf div in hex 1816 (reserve), Br Gds arm div and arm grp BD in hex 1717 (reserve), Br 51 inf div and Br 6 Gds arm bde in hex 1616 (reserve), Br 53 inf div and Br 34 arm bde in hex 1617 (reserve).

British 12th Corps: Br 52 air Indg div and Br 4 arm bde in hex 2416, Br 7 arm div in hex 2516, Br 8 arm bde in hex 2415 (reserve).

British 8th Corps: Br arm group BD in hex 2615, Br 3 inf div in hex 2613, Br 15 inf div in hex 2514 (reserve).

#### U.S. 9th Army

13th Corps: 84 inf div in hex 2318, 102 inf div and 2 arm cav regt in hex 2418, 7 arm div in hex 2319 (reserve).

19th Corps: 2 arm div and 103 arm cav regt in hex 2519, 29 inf div in hex 2520, 30 inf div in hex 2419 (reserve).

#### U.S. 1st Army

7th Corps: 36 and 83 inf divs and 102 arm cav regt in hex 2521, 104 inf div and 4 arm cav regt in hex 2522, 1 inf div in hex 2421 (reserve), 3 arm and 9 inf divs in hex 2321 (reserve).

5th Corps: 8 and 78 inf divs and 113 arm cav regt in hex 2422, 2 and 99 inf divs in hex 2323, combat command B (BD) in hex 2322 (reserve).

24 inf regt in hex 1820.

8th Corps: As listed in scenario.

#### U.S. 3rd Army

20th Corps: 3 arm cav regt in hex 2004, 90 inf div in hex 2005, 95 inf div in hex 2106, 10 arm div in hex 1905 (reserve), 5 inf div in hex 1906 (reserve).

3rd Corps: 6 arm div and 6 arm cav regt in hex 2207, 26 inf div in hex 2108 (reserve).

12th Corps: 35 inf div in hex 2308, 87 inf div in hex 2408, 4 arm div and 80 inf div in hex 1909 (reserve).

**Allied Theater Reserve**

18th Airborne Corps: 82 and 101 para divs in hex 0528.

**German New Units and Reserves**

340VG div in hex 2329, 79VG div, FG pnz gren bde, and FB pnz bde in hex 3126. v.d.H. para regt in hex 3021. 9 pnz, 15 pnz gren divs, and 150 SS pnz bde in hex 2327.

**THE BATTLE****First Impulse**

*German Attacks:* The German player has scheduled a parachute drop on hex 2222 on the second impulse. In the mean time, four attacks will be run.

The Panzer Lehr Division, the 26th Volks Grenadier Division, and the 911th Assault Gun Brigade attack the U.S. 26th Division at 2:1. The result of the attack is a DX. The U.S. player chooses not to lose the already-reduced 26th Division and retreats to hex 1826. The German player must reduce one unit and chooses the 26th Volksgrenadiers, which then advances to hex 1925. The Panzer Lehr Division advances to hex 1926 while the 911th Assault Gun Brigade moves into hex 2024. The U.S. 106th Division is now surrounded.

The 352nd Volksgrenadier, 212th Volksgrenadier, and the 276th Volksgrenadier divisions attack Combat Command A (CCA) of the 9th Armored Division at 2:1. Again the result is a DX. CCA retreats without a loss to hex 1827. The 276th Volksgrenadiers are reduced and advance to hex 2027. The 352nd Volksgrenadiers advance to hex 1928. The 212th Volksgrenadiers remain in position.

The 3rd Panzergrenadier Division and the 654th Assault Gun Battalion attack the U.S. 14th Armored Cavalry at 3:1 odds at roll an EX. Both the 14th Armored Cavalry and the 654th Assault Gun Battalion are eliminated, the 3rd Panzergrenadiers advancing to hex 2223.

The last attack is by the 18th and 62nd Volksgrenadiers against the U.S. 106th Division at 1:1 surrounded. The result is an EX. The U.S. player escalates to two strength levels and the German player follows suit. The 106th Division is destroyed and both German Volksgrenadier divisions are reduced. Both advance to hex 2124.

*Allied Reserves:* The U.S. 1st Division moves to hex 2222, the U.S. 7th Armored Division moves to hex 2023, the U.S. 82nd Airborne Division moves to hex 2022, the U.S. 101st Airborne

Division moves to hex 1825, and the U.S. 10th Armored Division moves to hex 1901 on the south map.

**Second Impulse**

*German Movement:* The 1st SS Panzer Division and 3rd Parachute Division move to hex 2124. The 12th SS Panzer Division and 150th SS Panzer Brigade move to hex 2223. The von der Heydte Regiment drops on hex 2222, now occupied by the U.S. 1st Division, and is eliminated.

*German Combat:* The 1st SS Panzer Division and 3rd Parachute Division attack the U.S. 7th Armored Division at 1.5:1 and roll a DX. The 7th Armored Division retreats without loss to hex 1922. The 3rd Parachute Division is reduced and remains in place. The 1st SS Panzer Division advances to hex 2023.

The 12th SS Panzer Division attacks the 1st U.S. Division at 1:1. The 150th SS Panzer Brigade, though stacked with the 12th SS Panzer, does not join the attack, instead intending to exercise its option to advance after combat through U.S. primary ZOCs. The result of the attack is NE.

*Allied Reserves:* The U.S. player moves his 30th Division to hex 2123 and CCB of the 9th Armored Division to hex 1823.

**Third Impulse**

*German Movement:* The 116th Panzer Division and the 580th Volksgrenadier Division move to hex 1924. The 9th SS Panzer Division moves to hex 2124 while the 2nd SS Panzer Division moves to hex 2023. The 5th Parachute Division moves to hex 1926.

*German Attacks:* The 116th Panzer and the 580th Volksgrenadier Division attack CCB of the 9th Armored Division at 3:1 and achieve a DR result. CCB retreats to hex 1722, the 116th Panzer Division advances to hex 1721, and the 580th Volksgrenadiers advance to hex 1923.

The 2nd SS Panzer Division attacks the U.S. 82nd Airborne Division at 1.5:1 and rolls a DX. The 2nd SS Panzer Division is reduced one level. The 82nd Airborne also reduces itself one level to avoid retreating.

The 9th SS Panzer Division attacks the 30th Division at 1.5:1 odds also and rolls a DR result. The 30th Division retreats to hex 2221 while the 9th SS Panzers advance to hex 2123.

Finally, the 5th Parachute Division attacks the reduced strength U.S. 28th Division at 2:1 odds and rolls a DR. The 28th Division retreats to hex 1626 and the 5th Parachute Division advances to hex 1826.

*Allied Reserves:* The U.S. 5th Division moves to hex 1901 on the south map and the U.S. 3rd Armored Division moves to hex 1623.

**Fourth Impulse**

*German Movement:* The German 2nd and 9th Panzer Divisions move to hex 1724.

*German Attacks:* The two German panzer divisions attack the U.S. 3rd Armored Division at 1.5:1 and roll an EX result. The U.S. player does not choose to escalate the result and instead reduces the 3rd Armored division and retreats to hex 1522. The German player reduced the 9th Panzer Division and advances it to hex 1622. Bastogne is surrounded. 2nd Panzer Division advances to hex 1622.

*Allied Reserves:* The British 43rd Division moves to hex 1920. The British Guards Armored Division moves to hex 1520. The armored breakdown of the British 11th Armored Division (actually the 29th Armored Brigade of that division) moves to hex 1322. The British 53rd Division moves to hex 1219. The U.S. 4th Armored Division moves to hex 1525.

**Fifth (Final) Impulse**

*German Movement:* A number of units move into the line or assume reserve status. Additionally, the 15th Panzergrenadier Division moves to hex 1725.

*German Attacks:* The 15th Panzergrenadiers attack Bastogne (the 101st Airborne Division and CCR of the 9th Armored Division, both at half strength due to supply) at 1:1 odds. The German player rolls a DX. The 15th Panzergrenadiers are reduced; the U.S. player removes CCR to avoid retreating.

These are the approximate positions reached at the German high water mark. At this point, the German player discontinues his attack, having no hope for success.

## Expanded Sequence Of Play And Rule Index

### Weather Determination Segment

- Determine weather (Rule 17)*
- Plot Airborne Assaults (Rule 21)*

### German Player—Turn

#### Initial Segment

- Receive and Use Replacements (Rule 18)*
- Receive Maneuver Supply and Allocate to Ground Units (Rule 5)*
- Conduct Withdrawals (Rule 31E)*

#### First Impulse

##### Supply Determination Phase

- Determine General Supply Status for Ground Units (Rule 6)*
- Allocate Maneuver Supply Points To Air Units (Rule 10)*
- Pay MSPs For Impulse (after first impulse) (Rule 5)*

##### Movement Phase

- Player With The Initiative Moves Ground Units (Rules 7 and 8)*
- Player With The Initiative Creates Reserves (Rule 9)*
- Player With The Initiative Conducts Airborne Assaults (21)*
- Player With The Initiative Declares Attacks (Rule 11)*

##### Air Support Phase (Rule 10)

- Consult Air Visibility Table (Rule 17)*
- Player With The Initiative Flies Support and Transfer Missions*
- Opposing Player Flies Support and Interception Missions*
- Player With The Initiative Flies Interception Missions*
- Conduct Air Combat*

##### Combat Phase

- Player With The Initiative Conducts Attacks (Rules 11 and 12)*

##### Reserve Movement Phase

- Opposing Player Moves Reserves (Rule 13)*

##### Reserve Air Support Phase (Rule 14)

- Opposing Player Flies Support and Transfer Missions*
- Player With The Initiative Flies Support and Interception Missions*
- Opposing Player Flies Interception Missions*
- Conduct Air Combat.*

##### Reserve Combat Phase

- Opposing Player Conducts Attacks With Reserve Units (Rule 15)*

### Second and Additional Impulses – as First Impulse

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### Final Impulse (Rule 16)

#### Terminal Segment

- Player With The Initiative Uses Replacements (Rule 18)*
- Player With The Initiative Reduces Unsupplied Units (Rule 6C)*
- Player With The Initiative Removes Finished Movement Markers*

### Allied Player—Turn

- Identical To German Player—Turn*

## ABBREVIATIONS

### German Army:

VG	<i>Volksgrenadier</i>
R	<i>Reserve</i>
FB	<i>Fuehrer Begleit</i>
FG	<i>Fuehrer Grenadier</i>
FHH	<i>Feldherrnhalle</i>
BD	<i>Breakdown</i>
Otter.	<i>Otterbeck</i>
LS	<i>Landeschuetzen</i>
HvH	<i>Hoek van Holland</i>

### German SS:

T	<i>Tiger</i>
Nieb.	<i>Niebelungen</i>

### German Luftwaffe:

Walt.	<i>Walter</i>
v.d.H.	<i>von der Heydte</i>
R	<i>Replacement</i>
JK	<i>Jagd Korps</i>
JD	<i>Jagd Division</i>

### U.S.:

BD	<i>Break Down</i>
A	<i>Combat Command A</i>
B	<i>Combat Command B</i>
R	<i>Combat Command R</i>
W	<i>Wing</i>
PTAC	<i>Provisional Tactical Air Command</i>

### French

C	<i>Colonial</i>
Mar	<i>Marche</i>
M	<i>Moroccan</i>
Al	<i>Algerian</i>
AC	<i>Air Corps</i>
MT	<i>Moroccan Tabor</i>
AF	<i>Africa</i>
FR	<i>France</i>

### Other Allies

Gds	<i>Guards</i>
BD	<i>Break Down</i>
G	<i>Group</i>
Belg.	<i>Belgian</i>
AE	<i>Armoured Engineer</i>