STORM OVER
ARNHEM

AVALON HILL'S TRADEMARK NAME FOR ITS GAME OF THE BATTLE FOR ARNHEM BRIDGE

1. COMPONENTS—

STORM OVER ARNHEM contains the following component parts:

  A. Mounted 22″ × 32″ mapboard
  B. Sixteen page rulebook including Historical Commentary & Designer's Notes
  C. Two sheets of die-cut counters
  D. Four dice; two colored & two white

2. OBJECT—

2.1 *STORM OVER ARNHEM* is a two player game with one player commanding the German forces and the other player controlling the British. The object of the game is to control some or all of the six victory point areas on the mapboard for as long as possible. The winner is determined by the number of victory points the German player has managed to obtain by the end of the last game turn.

2.2 The game simulates the intense block by block street fighting for control of the important road bridge in the city of Arnhem during the fall of 1944. To the British it was the last bridge still spanning the Lower Rhine (Neder Rijn) River; the last objective and key to final success of Operation Market Garden. To the Germans, possession of the bridge meant not only the failure of the Allied offensive, but with its control they would be able to rush vital reinforcements to other threatened areas of the battle.

3. THE MAPBOARD—

3.1 The mapboard portrays portions of the city of Arnhem located around the northern end of the famous road bridge where elements of the British 1st Airborne Division fought for control of the bridge and their very survival in September of 1944. The map scale is approximately 1″ = 100′.

3.2 The mapboard itself is divided into 30 *areas* of various shapes and sizes by thick black border lines. Each area is said to be adjacent to another area if it has a common border, no matter how small that border may be. *EXCEPTION:* Areas that touch only at their corners (4/17, 5/18, 26/15 and 24/25) are not considered adjacent for any game purpose.

3.21 Included among the 30 numbered mapboard areas are six victory point areas (4, 5, 17, 18, 22, 23). Each victory point area is identified on the mapboard by the presence of the red letters "VP" preceded by the number of victory points awarded to the German player each turn for control of that area.

3.22 Included among the 30 numbered mapboard areas are three areas (2, 3, 4) where special artillery placement rules *(14.4)* apply. These areas are identified on the mapboard by the presence of a red letter "S".

3.3 In addition to the 30 numbered areas portrayed on the board there are five perimeter *zones* lettered 'A' through 'E' on the outskirts of the city. These perimeter zones are used to regulate the Strategic Movement *(see 10)* of units outside the immediate vicinity of the road bridge.

3.4 The *Turn Record Track* printed on the board is used to record the current game turn, whether that turn is a night or a day turn, the arrival of reinforcements, initial possession and mandatory turnover of the *Tactical Advantage (see 8.4)*, and the worsening British supply situation. At the end of each game turn the turn marker is advanced on the track one space to the right. Turns A and B are not used in the basic game and will be explained at a later time *(see 4.6)*. The basic game starts with the turn marker in space 1 of the Turn Record Track.

3.5 The *Victory Point Track* printed on the board is used to keep a cumulative total of the German victory points earned to date. Only the German player receives victory points and only for control of the six victory point areas and/or early control of the six additional British setup areas.

3.6 Many of the city areas on the mapboard are color coded to facilitate setting up the game for play *(see 5)*. These codes take two forms.

3.61 If a red Area designation number is printed on a white circular field that area may not contain units of either side during the initial setup. If a white Area designation number is printed on a black circular field that area may contain up to *five* German SS units during the initial setup. If a white Area designation number is printed on a red circular field that area may contain up to *ten* British units during the initial setup. Black letters in a square blue field indicate the starting zones of the German Bocholt Training Battalion.

3.62 All of the British setup areas also include one or more colored dots to further aid in initial setup of forces. Only British units containing one of the same colored dots or no colored dot at all on their white side may start the game in these areas.

3.7 Two artillery holding boxes, one for each side, are printed on the mapboard. Each player places his artillery counters in his respective box when not in use.

3.8 The Reformed Units box printed on the mapboard is used for the temporary holding of eliminated British units between Reformed Unit Phases *(see 6.1 and 19)*.

4. THE PLAYING PIECES—

4.1 Included within the game are two different colored sets of die-cut playing pieces (henceforth called units). Red units are British; blue/gray are German army units, and black are German SS units.

4.2 There are three basic types of combat units in the game: armor, artillery, and infantry. Note that each unit has a printed front and back side. At various times during the game units will be required to turn either their white or colored side face up. At any specific time during the course of the game a unit has only the factors and values shown on the side that is currently face up. For instance: units cannot attack or *move (other than to retreat)*, and non-armored units have a reduced defense factor when their white side is face up.

4.21 ARMOR units represent two to three armored fighting vehicles and their attendant crews: All armor units contain a silhouette of the specific vehicle to distinguish them from non-armor units. The "vehicle type" and "parent unit" information is provided for historical interest only—it has no bearing on the play of the game.

EXAMPLE:
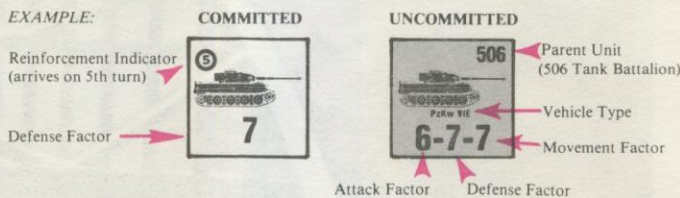
4.22 ARTILLERY units each represent the shelling effect of a battery of off-board guns and are most readily recognized by the "explosion" symbol on the front side.

EXAMPLE:

4.23 INFANTRY units represent 9 to 12 men (and in the case of Anti-Tank units; two to three guns). All units (including Headquarters units) which are not classified as armor or artillery pieces are considered infantry units.

EXAMPLE:
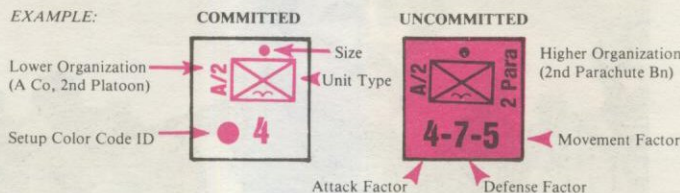
4.24 Unit size, unit types, and abbreviations are listed below. They have no effect on the game and are provided for historical interest only.

Unit Size:	Infantry Unit Type:	Abbreviations:
• Squad	Airborne	Bn HQ = Battalion Headquarters Company
I Company	Engineer	Hv Wp = Heavy Weapons Company
II Battalion	Infantry	AC = Armored Car
X Brigade	Headquarters	LR = Light Armored Recon Company
	Reconnaissance	AR = Armored Recon Company
	Armored Recon	Hzr KG = Harzer Kampfgruppe
	Training	Bohlt = Bocholt Training & Depot Bn
	Field Ambulance	Tp = Troop
	6 lb Anti-Tank Gun	Recon = Reconnaissance
	Royal Army Service Corps	Para = Parachute
		RA = Royal Artillery
		AL = Air Landing
		S Staff = South Staffordshire

4.3 The smaller counters are provided as playing aids and are identified as follows:

2
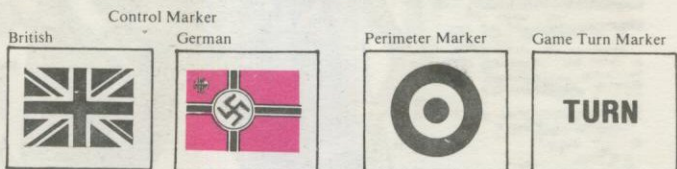
4.4 The small counters containing numbers from '2' through '12' are provided as an optional method of combat resolution in lieu of dice *(see 22)* and are not used in the basic game.

4.5 Not all the unit counters are necessarily used in the game. Those units containing a circled "B", "G", "A", or "C" symbol at the upper left of the committed side are used only if called for by the Random Events Table. Those containing a circled "R" symbol at the upper left of the committed side are used only in connection with the British Reformed Units rule *(see 19)*. Keep these counters separate from the others during game setup, but readily accessible should they enter the game during the course of play.

4.6 Some of the unit counters provided herein are for use only with a special variant version of the game to be printed in Vol. 19, No. 1 of the *GENERAL* magazine (not available before July, 1982). These counters are readily identifiable by the circled letter "V" printed at the upper left of the committed side of the counter. Do not remove these counters from the die-cut counter sheet until ready to play this variant. See the current Avalon Hill Parts Price List for ordering information pertaining to the *GENERAL* magazine.

5. GAME SETUP—

5.1 To prepare the game for play, place one Control counter (British side face up) in each Victory Point area. As the game progresses the control of each area may change from one player to the other. As the control changes, the Control counter is turned over to show the flag of the controlling player. Place one Perimeter marker in each of the six remaining British occupied areas. These counters remain in place until the area is captured by the Germans or the start of Turn 4, whichever comes first.

5.2 The Game Turn counter is placed on the Turn 1 space of the Turn Record Track, and the Victory Point counter is placed on the 0 space of the Victory Point Track.

5.3 The German and British artillery counters are placed face-up in the artillery boxes on their respective sides of the mapboard.

5.4 The British player sets up his units by sorting his counters according to the color coded setup dot found on the white side of most of his counters. Those counters not containing a setup dot are sorted into a separate pile. The British player may then place from 0 to 10 British units (committed side face up) in each British setup area *(3.61)* provided those units either have no setup dot or have a setup dot of the same color as that printed in the setup area *(3.62)*. In addition, each Victory Point area must be occupied by at least three British units during the initial setup.

5.5 The German player places the rulebook face down in the game box and then sets up his units on the facsimile map printed on the back page of the rulebook without seeing the British setup. He places his units on the facsimile map in any of the German setup areas *(3.61)* being careful not to place more than *five* SS units (including a maximum of three SS armor units) in any one area. Blue units must be placed in zones A and/or B. There is no limit to the number of blue units which can start in zones A and/or B. The game box lid can be used as a screen between the two players to help safeguard secrecy, or the German player can adjourn to another room until both sides have finished their initial setup and play is ready to begin. When both players have committed themselves to their initial starting positions, the respective setups are revealed and the German transfers his units from the rulebook facsimile map to the corresponding areas and zones of the mapboard. The two German Tiger tank armor units with the circled 5 symbol on the upper left of their white side are placed on the Turn 5 space of the Turn Record Track. They do not enter the game until Turn 5 when they are placed in zone C.

5.6 Once both players have finished their initial setup the counters are flipped so that their uncommitted side is face up and *STORM OVER ARNHEM* is ready to begin. Turn to the Sequence of Play and begin the first game turn.

6. SEQUENCE OF PLAY—

6.1 *REINFORCEMENT & REFORMED UNIT PHASE:* The German player consults the Turn Record Track and places any reinforcements scheduled to arrive during this game turn *(16.1)* in zone C. The British player determines any reformed units due him *(19.1)*, places them on board, and removes all previously eliminated units from the Reformed Units box. Both players check the Time Record Track to determine if the British are affected by a worsening ammunition supply situation *(see 20)*, or if the Tactical Advantage *(see 8.4)* has shifted to the German as symbolized by the Iron Cross on turns 3 and 6 of the Turn Record Track.

6.2 *RANDOM EVENTS DETERMINATION PHASE:* The British player rolls two dice and consults the Random Events Table printed on the board. Cross reference the number rolled with the current game turn number and perform the indicated result.

6.3 *MOVEMENT/FIRE PHASE:* Both players alternate "Movement" and/or "Fire" impulses (whichever player currently possessing the Tactical Advantage proceeding first) until both sides have "passed" consecutively *(8.16)*.

6.4 *CLOSE COMBAT PHASE:* Both players resolve Close Combat one area at a time in each area/zone occupied by units of both sides *(9)*. Following the resolution of any Close Combat attacks the British player rolls to extinguish any fires which may be present on the board *(see 18.9)*.

6.5 *VICTORY POINT DETERMINATION PHASE:* Each control marker is adjusted as needed to show the current player in control of each Victory Point area *(11.2)*. Add the value of all German controlled Victory Point areas and move the marker along the Victory Point Track an equal number of *numbered* spaces to reflect the total number of German Victory Points gained thus far.

6.6 Advance the turn marker one space to the right on the Turn Record Track and repeat steps 6.1 through 6.6 until the end of turn 8 or the Germans gain a Decisive Victory—whichever comes first.

7. OCCUPATION LIMITS—

7.1 Each player may have a maximum of ten infantry and three armor units occupying an *area* at the end of any Movement/Fire impulse. During the act of movement these limits may be temporarily exceeded as units move or retreat *through* an already occupied area provided they do not *end* their movement or retreat in an over-occupied area.

7.2 Any number of units regardless of type may occupy a perimeter *zone*.

7.3 If at the end of any impulse a player has more units occupying an *area* than allowed in 7.1, that player must remove enough units of his choice from that area to bring the total back to the maximum allowed. These units are permanently eliminated from the game *(see 19.22)*.

8. MOVEMENT/FIRE PHASE—

8.1 This phase is divided into a variable number of player *impulses*. These impulses are alternated between players with the player currently controlling the Tactical Advantage taking the first impulse in each game turn (i.e. German player impulse, British player impulse, German player impulse, etc.) until the end of the Movement/Fire Phase.

8.11 During a friendly impulse a player may *either* move *or* fire any number of uncommitted units currently occupying a single common area *(Exception: 8.32 & 13.21)*. He may move or fire as many or as few of the units in that area as he wishes. A player *cannot* move *and* fire units in the same *Movement/Fire (hereafter referred to as M/F)* impulse. However, he may return to the area in later impulses of that M/F Phase for additional actions so long as uncommitted units are still occupying the area.

8.12 Units from a common area that are to move *or* fire during the same M/F impulse may do so into different areas. However, such multiple attacks must be predesignated; they cannot await the result of the first fire before announcing a second attack on another area.

EXAMPLE: Assume the British player has three uncommitted units in an area and elects to use his current impulse to fire with one or more units in that area. He may fire with one unit at each of three adjacent areas, *or* fire one unit at one area and two units at another, *or* one, two, or three units at one area and refrain from firing any remaining units during this M/F impulse.

8.13 Only uncommitted units that have their colored side face up may move or fire during a M/F impulse. Such units are hereafter referred to as *uncommitted* units. Once a unit moves or fires, that unit is turned white side face up and becomes a *committed* unit. This process allows a unit to move *(Exception: retreats—8.355)* or fire only once during a M/F phase.

8.15 A player *must* declare a pass impulse if all his units have been committed.

8.16 Players alternate moving or firing groups of units until *both* players pass consecutively, at which time the M/F phase is immediately over *(Exception: see Tactical Advantage; 8.43)*.

8.17 *REACTION TIME:* Due to the large number of possible impulses, playing time can become excessively long if players are allowed to ponder their options after every impulse. Consequently after players have gained a degree of familiarization with the game system it is recommended that players adhere to a strict ten second time limit (or some other mutually agreed upon time increment) between the end of one impulse and the declaration of action to be taken in the next. Failure to so stipulate a move or fire impulse within the time limit results in an automatic "pass" impulse.

8.18 *PROCEDURE:* Players may not change their moves once their opponent has declared the action (including a pass declaration) that he will take during his impulse, *or* the agreed upon reaction time has elapsed. Players may not change their fire or Close Combat attacks once the dice have been thrown. *EXCEPTION:* A player can force an opponent who has made an illegal move or attack to redo his move/attack legally unless he has

already completed an impulse of his own in the interim. Illegal moves/attacks are valid if the opposing player does not challenge them prior to completing his own next M/F impulse or Close Combat die roll.

8.2 *MOVEMENT:* If a unit is to move during an impulse, that unit may only move into any adjacent area or zone which has a common boundary. This requires the expenditure of a certain number of movement factors during that game turn. The unit may continue moving into adjacent areas or zones until he lacks sufficient *Movement Factors (hereafter referred to as MFs)* to do so or the unit enters an area or zone occupied by an enemy unit. Units which begin movement as part of the same group do not necessarily have to end that movement in the same area/zone with the other original members of the group.

8.21 All non-armored units starting their move already in an enemy occupied area may only move *one* area or zone during that impulse and the *area* moved into may *not* be another *area occupied by enemy units (however, it could be an enemy occupied zone; see 10.4)*. Armor units may move from one enemy occupied area to another enemy occupied area during the M/F Phase, although they must still stop after moving into the new enemy-occupied area. Armor, unlike infantry, may exit an enemy occupied area and continue moving until it enters an enemy occupied area or lacks sufficient MFs to continue movement.

8.22 Each *area* moved into expends a number of MFs as follows:

A. 1 MF to enter any area *not* adjacent to or occupied by an enemy unit.

B. 2 MFs to enter any area adjacent to an enemy occupied area.

C. 2 MFs to enter any area unoccupied by enemy units *from* a connecting zone (if area moved into is occupied by enemy units, cases D or E apply instead).

D. 3 MFs to enter any area during a night turn which is occupied by an enemy unit.

E. 4 MFs to enter any area during a day turn which is occupied by an enemy unit.

Such costs are not additive; i.e. it costs 3 MFs—not 5 MFs—to enter an enemy occupied area at night which is also adjacent to an enemy occupied area.
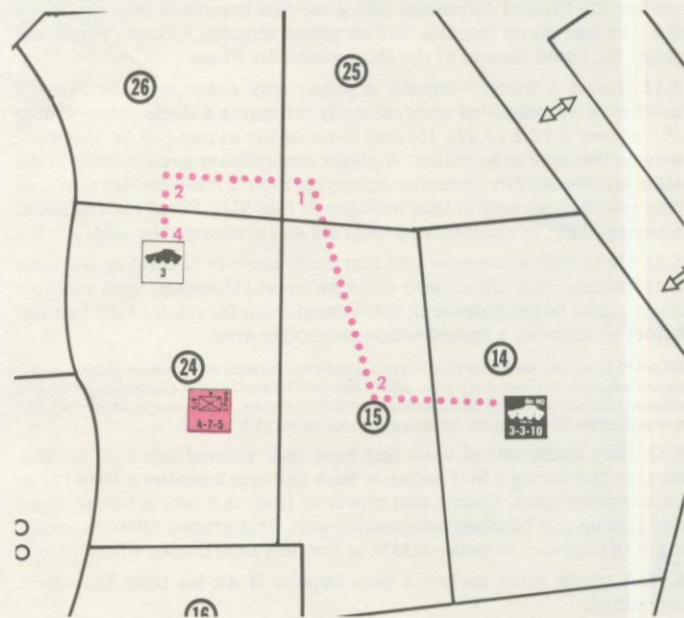
EXAMPLE: The MFs expended in moving into each area by the Armored Car unit are noted in red in each area moved into. Note that this movement is occurring during a day turn or the expenditure for entering area 24 would be only three MFs. Note also that area 25 is not adjacent to area 24.

8.3 *FIRE:* If a unit is to fire during an impulse that unit may direct its fire at any group of enemy units occupying the same *or* any adjacent area *(Exception: armor units; see 12.1)*.

8.31 The area fired into may also contain friendly units. Friendly units are never affected or considered *(Exception: Artillery Fire; 14.3)* when attacking enemy units within a common area. Note also that units in different areas may never combine to form one attack.

8.32 If a player chooses to fire more than one unit from an area, he may do so in any order he wishes. The only requirements are that any one defending area may be the subject of only *one* fire attack per impulse *(Exception: Anti-Tank units; see 13.21)* and no more than six infantry units (which may or may not include HQ units) *plus* one additional HQ unit *plus* three armor units may fire *into* the same area during the same impulse. *Exception:* Anti-Tank units do not count against the infantry limits as they do not combine fire with other types of units except in Close Combat.

8.33 Fire directed at an area affects all *enemy* units occupying that area which are of a common *group type (see 8.331)*. Before resolving the attack the firing player must designate which group type he is directing his fire against when more than one group type is present in an area.

8.331 There are two possible group types, although both types might not be present in all areas at all times. The groups are:

UNCOMMITTED: All units with their colored side face up.

COMMITTED: All units with their white side face up (i.e. units that have either fired or *moved (including units that have retreated)* during that M/F Phase.

8.34 Armor units may only be fired at by infantry units occupying the same area *(Exception: Anti-Tank units; 13)* or artillery. Therefore, armor units are *not* considered when determining the *Defense Value* for an area/zone against a non-artillery attack from outside that area, or used to satisfy the *casualty points* inflicted on that area when attacked by non Anti-Tank infantry units from an adjacent area.

8.35 Fire attacks are resolved by determining the *Attack Value* of the firing unit(s) and comparing it with the *Defense Value* of the defending unit(s).

8.351 The *Attack Value (hereafter referred to as AV)* is equal to the *Attack Factor (hereafter referred to as AF)* of any *one* firing unit of the attacker's choice plus:

A. +? (the sum of the roll of two dice).

B. +1 for each additional firing unit beyond the first.

C. +1 if *three* of the firing infantry units have the same *Lower Organization (see 4.23)*. This modifier can only be applied once per attack dice roll. Note that Battalion and Brigade level HQ units do not have a lower organization in common with any other and thus never qualify for this DRM. However, any company-level HQ units may substitute for any squad of the same company in earning the platoon integrity die roll modification. Only units eligible for this platoon integrity DRM have a lower organization printed on their committed side.

EXAMPLE: The LR Co HQ unit may combine to attack with two LR/4 squads, or two LR/5 squads, or two LR/6 squads to earn the +1 platoon integrity DRM for same lower organization.

8.352 The *Defense Value (hereafter referred to as DV)* is equal to the *lowest* face up *Defense Factor (hereafter referred to as DF)* of the group being fired on plus:

A. +? (the sum of the roll of two dice).

B. +1 if the firing unit(s) is in an adjacent area (not applicable to artillery attacks).

or +2 if the firing unit(s) is in an adjacent area during a night turn (not applicable to artillery attacks).

8.353 The fire attack is resolved as follows:

If the AV is equal to or less than the DV there is no effect.

If the AV is greater than the DV the difference between the AV and the DV is the *minimum* number of *casualty points* that must be removed from that area or zone by the defending player.

8.354 To satisfy his losses the defending player may remove casualty points in either or both of the following ways:

A. Each unit *retreated* out of the target area or zone is worth *one* casualty point toward satisfying the total. The unit becomes committed at the end of the retreat *(see 8.355)* regardless of its status prior to the retreat.

B. Each unit *eliminated* is worth up to *three* casualty points (four casualty points for armor) toward satisfying the total. Eliminated units are removed from the game *(Exception: see 19)*.

8.3541 The defender must remove at least the number of casualty points required by the difference between the AV and DV provided he has sufficient units in the attacked group to do so. All casualty points must be absorbed by the group type attacked. Any units in the attacked area/zone of the group type not attacked are not affected and cannot join in any resultant retreats. The defender may opt to retreat more than the number of units required to satisfy the combat result, but only from the attacked group type. Armor, which may have been immune to the attack, may participate in the retreat if of the attacked group type but could not be used to satisfy casualty point losses. All units which participated in the retreat become committed at the conclusion of the retreat.

8.355 *RETREATS:* Any unit called upon to retreat must move to an adjacent non-enemy infantry-occupied area or a connecting zone (see case H of 8.3551 for an exception for armor units). If the only area open to retreat is already occupied by the maximum number of units allowable *(see 7)* the unit must continue its retreat until it can end the retreat in an area not in excess of the Occupation limits and adjacent to the least number of enemy occupied areas. Otherwise the retreating units must end their retreat in the first available area or zone moved into. If an infantry unit cannot fulfill its retreat because of opposing infantry blocking all possible retreat routes, the player must take the elimination method to fulfill his casualty point losses. Note: The presence of friendly units in an area does *not* negate the

4

presence of enemy units in that area for purposes of movement cost and/or blocking retreats.

8.3551 If there is more than one area or zone open to retreat, the retreating player may choose the one retreated to based on the following order of priority:

    A. Area not adjacent to an enemy occupied area.

    B. Zone not occupied by enemy.

    C. Area not adjacent to the enemy occupied area which caused the retreat. (Areas containing a HQ unit which called in artillery fire causing the retreat are not considered to be an area which caused that retreat.)

    D. Zone occupied by enemy units.

    E. Area which is already fully or partially occupied, thus requiring a further retreat into yet another area or zone.

    F. Area adjacent to the enemy occupied area which caused the retreat. If there is more than one such area to choose from, the retreat must be to the area which is adjacent to the least number of enemy-occupied areas.

    G. Area containing enemy armor unit(s) but no enemy infantry units.

    H. Area containing enemy infantry unit(s) [only armor units may use this] and only if area does not contain enemy Anti-Tank gun units *(see 13.6)*.

8.3552 All units retreating due to the same fire impulse must retreat, as a group, to the same area or zone. If this causes an area to exceed its occupation limits, the maximum number of units must stay, with the remainder continuing their retreat from that area.
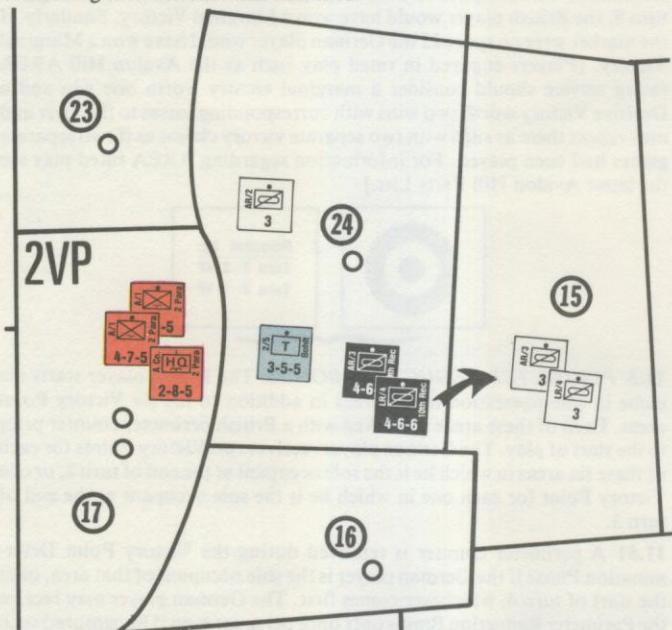
EXAMPLE: It is a day turn and the British player chooses to attack the German units in area 24 with his three units in area 17. He further chooses to fire at the three uncommitted units rather than the one committed unit. His AV for the attack is 4 (AF) +2 (two additional attacking units) +1 (three attacking units with same lower organization) +9 (dice roll) for a total of 16. The DV of the defenders is 5 (DF of weakest defending unit) +1 (attacked from adjacent area in day turn) +5 (dice roll) for a total of 11. The defender has suffered five casualty points (AV [16] – DV [11] = 5). The German player eliminates the 3-5-5 unit for three casualty points and retreats the other two units for one casualty point apiece to satisfy his losses. As an option the German could have eliminated any two of the units (three casualty points each) and left one uncommitted unit in area 24. Note that the defending units had to retreat into area 15 rather than area 16 because 16 is still adjacent to the British-occupied area 17.

8.3553 Groups receiving fire may retreat in whole or in part even if that attack does not cause a casualty point.

8.3554 Units which have already retreated during a turn may still be fired on and retreat again (or be eliminated) in their new area in a subsequent M/F impulse.

8.36 *THE DICE:* When resolving fire combat each player simultaneously throws his two dice into the box. The German player uses the colored dice, the British player uses the white dice. Only dice thrown into the box are counted. If one or more dice miss the box *all* four dice are rerolled. Should any die be *cocked (not lying flat on the surface of the box)* all *four* dice are rethrown.

8.4 *TACTICAL ADVANTAGE:* The Tactical Advantage represents in an abstract manner the fighting edge that one side may momentarily have over the other. The basis for such an advantage may include such things as changes in morale, position, surprise, leadership, and even the intervention of fate. One of the two players is always considered to have the Tactical Advantage. Possession of the Tactical Advantage is symbolized by placement of the Tactical Advantage counter with the controlling side's symbol

face-side up. The British player always starts the game with the Tactical Advantage. Regardless of who controlled it previously the Tactical Advantage belongs to the German player at the start of turns 3 and 6.

8.41 The player controlling the Tactical Advantage can use it to force a reroll of any one combat resolution be it a fire impulse or Close Combat attack provided he does so before any other subsequent action takes place. In the case of a Fire Impulse attack both players would have to reroll their respective dice. Note that although the player with the Tactical Advantage can force the die or dice to be rethrown he cannot guarantee that the subsequent reroll will generate a different result although that is likely. Whenever a player uses this option he loses control of the Tactical Advantage to his opponent until such time as his opponent uses the option (or the start of turns 3 or 6 dictate that the British player forfeit the Tactical Advantage). At that time he is free to use the Tactical Advantage again or refrain from its use in order to maintain the Tactical Advantage and thereby deny it to his opponent. The Tactical Advantage can also be used to force a reresolution of any combat situation using card or counter draws *(see 22)* or fire starting/extinguishing *(18)* attempts. It may not be used to change any other random number resolution.

8.42 A player who has just received the Tactical Advantage as a result of his opponent's use of it cannot use it to force a reroll of the same die (or dice) throw which resulted in his gaining of the Tactical Advantage.

8.43 The player with the Tactical Advantage may use it to force the continuation of a Movement/Fire Phase which would otherwise have been ended by two consecutive pass impulses. Of course, having done so, the player would then have to move or fire in his next impulse—he could not pass. Use of the Tactical Advantage in this manner also results in a change of possession of the Tactical Advantage.

8.44 Whoever controls the Tactical Advantage at the start of each turn has the first impulse in that turn and is also entitled to a favorable dice roll modification on the Random Events Table *(see 17.1)*.

8.45 Whoever controls the Tactical Advantage may choose the next Area/Zone containing Close Combat situations to be resolved (assuming there are more than one). The player controlling the Tactical Advantage at the start of the Close Combat Phase in each area/zone may designate his attacks after seeing the results of his opponent's Close Combat attacks in that area/zone.

9. CLOSE COMBAT PHASE—

9.1 At the beginning of the Close Combat Phase all combat units are flipped to their uncommitted side.

9.2 The only combat allowed during this phase is in areas and zones already containing units of both sides. Both players are allowed to attack during this phase with combat being resolved one area or zone at a time. The player controlling the Tactical Advantage may determine the order in which each area or zone with Close Combat is resolved. A unit may attack and/or be attacked only once during this phase. Although attacks are resolved one at a time, the results are assumed to occur simultaneously so that units eliminated during Close Combat always have a chance to attack in that Close Combat phase before being removed from the game.

9.3 All Close Combat must be predesignated (i.e. targets can't be switched after seeing the results of previous attacks) in that Close Combat Phase, although the player controlling the Tactical Advantage may observe the results of his opponent's Close Combat attacks in that area/zone before predesignating his own attacks.

9.4 One player lines up all his units in the contested area/zone and places each adjacent to the specific opposing unit he wishes to attack. After he has attacked, the player controlling the Tactical Advantage at the outset of the Close Combat in this area/zone rearranges his units in much the same manner, to attack the enemy units of his choice. Units that were eliminated as a result of Close Combat attacks are flipped to their white side as a reminder that they have been eliminated, but may still participate in and return Close Combat attacks yet to be resolved as all combat is considered simultaneous. After both players have finished all fire attacks, all eliminated units are removed from the game *(Exception: see 19)*.

9.5 Each unit can be attacked only once per Close Combat Phase but may be attacked by any number of enemy units during that attack provided all non-screened friendly infantry units are also going to be attacked. Each Close Combat attack may affect only one specific defending unit. All enemy units occupying an area do not have to be attacked, but armor units may only be attacked if *all* accompanying non-screened HQ and infantry units present are also *attacked (Exception: AT units; 13.5)*; note that the infantry units would not have to be eliminated, just attacked. A player may also "screen" one or more of his Headquarters units of his choice from Close Combat attacks provided he has at least one other infantry unit in the area for each attacking enemy unit. If a player cannot screen all of his Headquarters units from attack, he may choose those which will accept Close Combat attacks and thereby act as a screen for the others. He may

not screen any other type of unit in this fashion, nor may he screen armor from an Anti-Tank attack. Screened units may still attack in Close Combat, but must attack in conjunction with at least one screening unit in one combined attack. They may not attack separately.

EXAMPLE: The German player has eight 3-5-5 infantry units, a 2-6-5 Headquarters unit, a 2-6-4 Headquarters unit, and three Mk. III tank armor units in the same area with nine British units during the Close Combat Phase. The German, with ten infantry units, may attempt to screen one of his HQ units from attack and elects to protect the Battalion Headquarters unit by putting the Company Headquarters unit in the line. The British player may only attack the nine screening infantry units. However, assume the British had ten infantry units available. He could use the tenth one to either attack one of the German tanks, or avoid the infantry screen and attack the screened Battalion Headquarters unit.

9.6 Close Combat attacks are resolved by rolling *one* die for each attack. A die roll of '6' eliminates the defending unit.

9.61 The Close Combat attack die roll may be modified in one or both of the following ways:

    A. One is added to the die roll for each attacking unit beyond the first.

    B. If the AF of any one attacking unit is greater than the defending unit's AF (attack factor), then the difference is added to the attacker's die roll. When determining this modifier for attacks *against defending armor* units, the AF of the attacking unit is compared with the DF (defense factor) of the defending armor unit. Note that if the defending unit's AF is greater than the attacker's AF no additional advantage accrues to the defender.

EXAMPLES:

Defender:	Attackers:	Defender eliminated on die roll of:
4-7-5	3-5-5	6
3-5-5	4-7-5	5,6
3-5-5	4-7-5 + 2-8-5	4,5,6
4-7-5	6-3-10 + 3-5-5	3,4,5,6
4-5-8[A]	6-X-1 + 2-8-5 + 4-7-5	3,4,5,6
6-2-8[A]	3-7-5	5,6
4-5-8[A]	6-X-1	5,6
6-X-1	Any unit	6
6-X-1	Any two units	5,6

10. STRATEGIC MOVEMENT ZONES—

10.1 Strategic Movement is performed via the five perimeter zones around the outskirts of the section of the city containing the 30 battle areas. Each perimeter zone is connected via arrows to other perimeter zones and to certain city areas. Movement is possible in either direction but only between areas and/or zones with connecting arrows.

10.2 Units may *retreat* as a result of combat into any perimeter zone that could normally be entered by that unit. Units may even retreat into a zone occupied by enemy units.

10.3 An unlimited number of units may occupy a perimeter zone.

10.4 Each zone costs two MFs to enter unless occupied by enemy units. Zones occupied by one or two enemy units cost three MFs to enter regardless of whether it is a day or night turn. If a zone contains three to five enemy units it costs four MFs to enter, and if a zone contains six or more enemy units it costs five MFs to enter. A zone never costs more than five MFs to enter. Units may freely enter and exit zones during an impulse, limited only by the amount of MFs available and the normal rules governing movement. The cost of leaving a zone to enter an adjacent area is based solely on the costs for entering an area *(8.22)* except that it always costs at least two MFs.

10.5 The occupation of adjacent perimeter zones by opposing units has no effect on the movement cost of entering zones/areas connected to the occupied perimeter zone.

10.6 A unit may directly enter an enemy occupied area/zone from a connected zone (provided the unit has the MFs available to do so) even if both the area and/or zones are occupied by enemy units.

10.7 No fire combat (including spotting for artillery fire) is allowed from any zone into an adjacent area/zone and vice versa. Fire Combat is allowed only within the zone and is conducted normally as if the participants were all occupants of adjacent areas. Note that this allows artillery fire to be called into the same zone containing the spotting headquarters unit. Close Combat is resolved normally as if the opposing units in the zone were all occupying the same area.

10.8 Due to the greater area represented by the zones, combat is considered more of a hit and run affair then was the case closer to the bridge where each room of each house was often bitterly contested. German fire setting techniques *(see 18)* are therefore considered ineffective, and are not allowed in perimeter zones.

11. VICTORY POINT DETERMINATION PHASE—

11.1 During this phase the victory point marker is adjusted to show the current German cumulative victory point total. Only the German player receives victory points during the game.

11.2 At the beginning of the game a control marker, with the British side face up, is placed in each of the Victory Point areas noted on the mapboard even if no British units start the game in those areas. The control marker is turned German side face up if at the beginning of any Victory Point Determination Phase the German player is the *sole* occupant of any Victory Point area. If at the beginning of a subsequent Victory Point Determination Phase the British player becomes the *sole* occupant once again, the control marker is flipped to show the British side face up once more. Being the last side to have occupied a Victory Point area is not sufficient to change the control marker. The control marker is only changed when the *opposing* player is the sole occupant of the area during the Victory Point Determination Phase. British AT and Bren Carrier units are never considered for purposes of determining control of a Victory Point area. If neither side has units in a Victory Point area during the Victory Point Determination Phase the control counter remains unchanged.

11.3 After determining the control of all Victory Point areas, the victory point marker is now adjusted on the Victory Point Track for that turn. In each Victory Point area that the German player controls he receives the number of victory points printed in that Victory Point area.

11.4 The position of the victory point marker at the end of game turn 8 determines the winner of the game. The last victory block passed through on the Victory Point Track by the victory point marker indicates the winner (or a drawn [tied] game) and the level of victory attained. For example: if the marker were on space 15 of the Victory Point Track at the end of game turn 8, the British player would have won a Marginal Victory. Similarly, if the marker were on space 22 the German player would have won a Marginal Victory. [Players engaged in rated play such as the Avalon Hill AREA rating service should consider a marginal victory worth one win and a Decisive Victory worth two wins with corresponding losses to the loser and may report them as such with two separate victory claims as if two separate games had been played. For information regarding AREA rated play see the latest Avalon Hill Parts List.]

Removal by:
Turn 2: 2 VP
Turn 3: 1 VP

11.5 *PERIMETER REDUCTION BONUS:* The British player starts the game in sole possession of six areas in addition to the six Victory Point areas. Each of these areas is marked with a British perimeter counter prior to the start of play. The German player receives two Victory Points for each of these six areas in which he is the sole occupant at the end of turn 2, *or* one Victory Point for each one in which he is the sole occupant at the end of turn 3.

11.51 A perimeter counter is removed during the Victory Point Determination Phase if the German player is the sole occupant of that area, or at the start of turn 4, whichever comes first. The German player may receive the Perimeter Reduction Bonus only once per area; even if he captured such an area on turn 1 he would receive only two Victory Points for that area during the course of the game.

11.52 Once a Perimeter Reduction Bonus has been awarded it cannot be lost, even if the British were to become sole occupants of the area again.
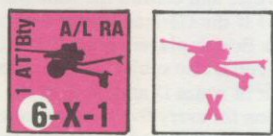

12. ARMOR UNITS—

12.1 Armor units may only be attacked by infantry units occupying the same area/zone, and/or Anti-Tank units occupying the same area/zone or an adjacent area, or artillery.

12.2 Armor units of the same group type (i.e. common side face up) as infantry units attacked from an adjacent area by non-Anti-Tank units (not artillery) must ignore any attack result during the M/F phase. They may not be used to satisfy the casualty point losses inflicted on that group or as a base for the DV of the group, although they may elect to voluntarily retreat out of an area in which infantry of the same group has just retreated or suffered losses.

12.3 During Close Combat all non-screened German infantry in the same area as armor units must be attacked before any non-Anti-Tank unit may attack an armor unit *(see 9.5)*.

12.4 Armor units are the only units which may retreat into an enemy infantry occupied area, although they may do so only if they have no other choice.

12.5 Eliminated armor units may absorb four casualty points as opposed to the three casualty points which can be absorbed by infantry units.

13. ANTI-TANK UNITS—

13.1 The only infantry units that may attack armor units from an adjacent area are *Anti-Tank* (hereafter referred to as *AT*) units.

13.2 AT units may *never* fire at infantry units and therefore have no AF against infantry units. They can never be included in attacks of any kind against infantry units—not even in the Close Combat Phase *(see 13.5)*. To signify this, AT units have their attack factor circled.

13.21 Either one or both of the AT units may fire (as a separate attack) from an area or zone in the same impulse in addition to the normal allowances of 8.32. In addition, AT units may also fire at any adjacent area (or its own area) that was the subject of another fire attack during the *same impulse* which would constitute a separate attack of their own. Both of these special allowances are exceptions to 8.32. Like all other units, however, an AT unit may fire only once per M/F Phase.

13.22 Non-AT units may not join in a fire impulse attack by an AT unit during the M/F phase.

13.3 When AT units attack any armor unit(s) the circled AF number is used. When an AT unit fires at an area or zone it attacks *only* the armor units of a common group type occupying that area or zone as per 8.331. Only the armor units are used to determine the DV and only they are affected by the attack result and can be used to satisfy the casualty point losses of that attack. However, non-affected infantry units of the same target group could elect to retreat as a result of the AT attack.

EXAMPLE: The British player wishes to clear the indicated area of German committed units. He first attempts to force the armor unit out by using his AT unit. The AV is 6 (AF) + 7 (dice roll) = 13. The DV is 5 (DF) + 6 (dice roll) = 11. The result of the attack is two casualty points (13 – 11 = 2). Since the German can't use infantry to satisfy losses sustained by an armor unit attacked by an AT unit and because there is only one armor unit to absorb the casualty point losses the armor unit is eliminated. His first attack was by an AT unit so he is allowed to attack the area again in the same M/F impulse with the other infantry unit occupying the same area. The AV of this attack is 4 (AF) + 5 (dice roll) = 9. The DV is 3 (weakest DF in area) + 8 (dice roll) = 11. The AV is not greater than the DV so there is no effect.
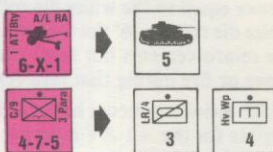
13.4 An AT unit (or units) may not be attacked in a M/F impulse unless it is the only unit in the attacked area in which case it is automatically eliminated, but may still count as a committed eliminated unit for purposes of the Reformed Unit rule *(19.21)*. *[If using the chit or card combat resolution system [see 22], a card/chit must still be drawn.]* AT units may be used to satisfy up to three casualty point losses inflicted on its group but only by eliminating the AT unit. AT units may never retreat. AT units may be attacked during the Close Combat Phase wherein they defend with an AF of 6 even against non-armored units, but are eliminated at the conclusion of any Close Combat Phase if they are the only friendly unit(s) occupying an area with a German unit of any type in the same area. To signify this, AT units have a printed DF of "X".

13.5 During Close Combat, AT units may *only* attack armor units, but enemy infantry units present do *not* need to be attacked. Note that this is an exception to 9.5. Two AT units may attack the same armor unit and receive the plus one DRM for multiple attacking units as per 9.61. However, if the British player wishes to add regular infantry units to the same attack, all enemy infantry units must be attacked also as per 9.5.

13.6 AT units do count against the infantry occupation limit of an area, but AT units alone cannot serve to block the retreat of enemy infantry if that is their only avenue of retreat. AT units, whether alone or not, can block the retreat of enemy armor into their area even if the AT unit has already been committed.

13.7 If an AT unit fires at a group composed of two or more different types of armor units in a Fire Impulse, it must specify the primary unit which it is firing at. It is the defense factor of this unit (not necessarily the lowest armor defense factor of the group) which is used to determine the DV of this group *(8.352)*. This unit would be the first unit eliminated if any units are to be eliminated, and the first to be retreated if any units are retreated unless it is eliminated instead. This rule does not apply to Close Combat, infantry fire impulses vs. armor in the same area, or artillery attacks vs. armor.

EXAMPLE: An AT unit fires on an armor group in an adjacent area containing three armor units (a 6-2-8, 3-3-10, and a 6-7-7) and elects to fire at the 6-2-8 as his principal target in an effort to score the most casualty points. The combat resolution dice roll is a tie, resulting in three casualty points. The defender has the option of retreating all three armor units or eliminating the 6-2-8. Had the fire impulse resulted in six casualty points he would have had to eliminate the 6-2-8 and retreat the other two units, or he would have to eliminate two of the three armor units in order to leave the third unaffected, but one of the eliminated units would have had to be the 6-2-8 which was the primary target.

13.8 *OPTIONAL:* Should both players agree beforehand, the British player may record the initial areas of his AT units rather than placing them in view on board. They may remain hidden until they fire, move, or are the only British unit(s) in an area.

14. ARTILLERY—

14.1 Artillery counters represent the fire from off-board indirect artillery fire. Each artillery counter is placed in the respective player's artillery box on the mapboard in the uncommitted mode until used.

14.2 Each player may place and attack with an artillery counter during any friendly M/F impulse provided he has uncommitted artillery remaining. This action takes the place of a normal movement or fire impulse on the mapboard. An artillery counter may only be used once per game turn. After an artillery attack, return the counter to its artillery box with the committed (FIRED) side face up to indicate that it has been used and may not be used again until the following game turn.

14.3 An artillery counter can be used in a zone *(see 14.7)*, or in any area *adjacent* to an area occupied by a friendly, uncommitted HQ unit capable of calling in that artillery. The area attacked may not be presently occupied by friendly units of any kind. In addition, the area occupied by the friendly HQ unit doing the spotting may *not* be occupied by any enemy units at the time of placement. Placement of the artillery unit does *not* constitute an attack by the HQ unit and therefore it does not become a committed unit.

14.31 Artillery counters may only be placed in areas adjacent to an uncommitted HQ unit of the proper "organization". For the German player any HQ unit with the same listed "Lower" or "Higher" organization *(see 4.23)* as that found on the artillery counter may satisfy this organizational requirement. For the British player, any HQ unit of battalion level organization or higher may satisfy this organizational requirement. To aid in quick recognition of which units may place which artillery counters, all qualifying HQ units contain a color coded triangle symbol which matches the symbol on the artillery counter(s) which they may place.

14.32 In addition to all other requirements for artillery the British player must roll a '4' or less on one die before placing his artillery counter. Failure of this die roll prevents the British player from using his artillery counter for that complete game turn but still counts as use of the British M/F impulse although it does not constitute a "pass". Turn the counter "Fired" side up to signify this.

14.33 Two of the German HQ units each have the capability to place two or more artillery counters per turn. Despite this, they may place only one uncommitted artillery counter per impulse. Note, however, that if two German HQ units each occupied the same area they could conceivably call in two different artillery barrages in the same impulse provided they called them down on different areas.

14.4 The German artillery counter marked "S Area Only" may be placed only in the areas marked with a red "S" on the mapboard. Although it is restricted in this manner for placement, it does *not* require any spotting unit to be present in an adjacent area. The area of placement must be free of all friendly units as usual.

14.5 A fire attack by an artillery counter is handled in much the same way as a normal fire attack *(8.3)*. The attacker designates the group type he is attacking, rolls two dice and adds the printed Attack Factor on the artillery counter. There are *no* modifiers to either the AF or DF other than the addition of the roll of two dice. Armor is vulnerable to artillery fire as if it were a fire attack from within the same occupied area.

14.6 Note that there are two different attack factors printed on an artillery counter. The higher AF is used during day game turns and the parenthesized AF value during night game turns.

14.7 Artillery fire into perimeter zones may only be placed by a qualifying HQ unit presently located in the zone to be attacked. Such fire has no effect on friendly units in the same zone.
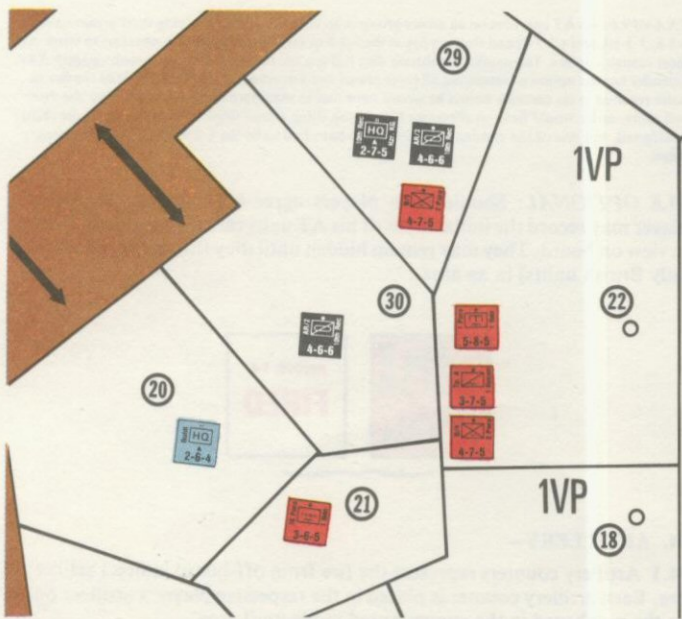
EXAMPLE: The German player has two artillery counters available to place but given the illustrated situation he may not place the 10th Recon artillery and the only area in which he could place the Hzr. KG artillery is in area 21. However, if the British unit was not present in area 29 he could place the 10th Recon artillery in area 22 or the Hzr. KG artillery in either area 21 or area 22.

15. NIGHT TURNS—

15.1 Night game turns (2, 5, 8) are identified on the Turn Record Track by a gray overprint and parentheses around the turn number.

15.2 The fire value of artillery during night game turns is reduced. The parenthesized AF on the artillery counter is used when calculating the AV of artillery attacks during night turns.

15.3 During night game turns the MF expenditure for moving into an enemy occupied area is reduced from 4 MFs to 3 MFs.

15.4 The DV modifier for fire attacks from adjacent areas and intra-zone attacks is increased from +1 to +2 during night turns.

16. REINFORCEMENTS—

16.1 Reinforcements are new units that enter the game during the course of play. There are only two such units guaranteed to arrive, both are German and both enter on game turn 5. At the start of game turn 5, during the Reinforcement Phase place the two Tiger tank units in perimeter zone C in an uncommitted mode. They are eligible for use during game turn 5 and thereafter.

16.2 Other reinforcements whose nationality, type, and number may differ enter per the dictates of the Random Events Table.

RANDOM EVENTS TABLE

Dice Roll	Game Turn Number							
	1	2	3	4	5	6	7	8
2.	G	G	A	G	G	G	G	G
3.	G	G	G	A	G	G	G	G
4.	G	G	G	G	A	G	G	G
5.	—	G	G	G	G	A	G	G
6.	—	—	G	G	G	G	A	G
7.	—	—	—	—	—	—	—	A
8.	—	—	—	—	—	—	—	—
9.	—	—	—	—	—	C	—	—
10.	—	—	B	B	—	C	—	—
11.	—	B	B	B	C	C	C	—
12.	B	B	B	B	B	C	C	—
13+.	B	B	B	B	C	C	C	—

— = No Random Event takes place during this game turn.
G = German infantry reinforcements arrive this game turn; see 17.2.
A = German Armor reinforcements arrive this game turn; see 17.3
B = British infantry reinforcements arrive this game turn; see 17.4
C = One British Bren Carrier arrives this turn; see 17.5

17. RANDOM EVENTS TABLE—

17.1 At the beginning of each game turn the player controlling the Tactical Advantage must roll two dice and consult the Random Events Table. This dice roll is modified by –1 if the German player controls the Tactical Advantage and by +1 if the British player controls the Tactical Advantage. The Random Events dice roll is also subject to a +1 modification for every three British units present in zones D and/or E at the time the dice roll is made and a –1 modification for every five German units present in zones D and/or E at the time the dice roll is made. This dice roll number after any due modification is cross referenced with the current game turn number to yield one of the following random events.
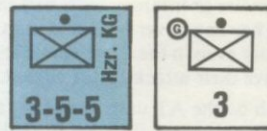
17.2 GERMAN REINFORCEMENTS [G]: German reinforcements represent the inflow of miscellaneous stragglers from other surrounding scratch units hurriedly assembled and committed as the battle progressed. German infantry reinforcements can only be drawn from a pool of up to twelve 3-5-5 infantry units. These units are identifiable by the circled letter 'G' on the left top corner of their committed side. No more than twelve infantry reinforcement units may be in play, and once eliminated these units may not be used again.

17.21 Once a 'G' result has been rolled on the Random Events Table, the German player rolls two dice (one colored and one white) to determine the amount, and entry point of the reinforcements. The number of reinforcements received is equal to half (fractions rounded up) of the colored die roll. The reinforcements thus generated are then placed uncommitted in a zone equal to the white die roll (1 = A, 2 = B, 3 = C, 4 = D, 5 = E). If the white die roll is a '6' the German player may select the zone(s) of arrival of the reinforcements but must place them in committed status—unable to move or fire during that turn (except for retreats and Close Combat).

17.22 Reinforcements have no lower organization and therefore are not eligible for the +1 AV modifier for platoon integrity (8.351; case C).

17.23 If the number of reinforcements called for should exceed the number available, the excess are considered lost.


17.3 GERMAN ARMOR [A]: The Germans had heavier armor elements available for use in the city but did not commit them due to misjudgement of the British strength at the bridge; preferring to employ them elsewhere in the battle. This random event assumes the German overall command had a change of priorities and commits its heavy armor to this sector of the battle. The German player has the option of declining an 'A' result and taking a 'G' result instead, but must make that decision prior to determining the amount and zone of arrival of that support. If he accepts the support there is a +1 dice roll modification to every future Random Events Table roll.

17.31 The German armor reinforcements are drawn from a pool of up to three STG III armor counters which are readily identifiable by the circled letter 'A' printed on the top left of their committed side. No more than three STG III counters may be in play, and once eliminated they may not be used again.

17.32 If an 'A' result occurs on the Random Events Table, the German player rolls two dice (one colored and one white) to determine the amount and entry zone of his armor reinforcements. The number of armor reinforcements is equal to half (fractions rounded up) of the colored die roll. The newly arrived armor units are then placed uncommitted in a zone equal to the white die roll (1 = A, 2 = B, 3 = C, 4 = D, 5 = E). If the white die roll is a '6' the German player may select the zone(s) of arrival of his armor reinforcements, but must place them in committed status—unable to move or fire during that turn (except for retreats and Close Combat).

17.33 If the number of STG III armor units called for should exceed the number available, the excess are lost.
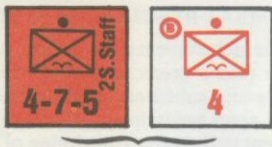
17.4 *BRITISH REINFORCEMENTS [B]:* British reinforcements represent units that might possibly have broken through to the British perimeter at the road bridge. These reinforcements take the form of two units each from the 1st Parachute Battalion, 3rd Parachute Battalion, and the 2nd South Staffordshire. These units are readily identifiable by the circled letter 'B' at the top left of their committed side.

17.41 Each time a 'B' result occurs on the Random Events Table, a number of units equal to one-half the roll of one die (fractions rounded up), arrive that game turn. The units are selected by the British player from those still available and placed in zone D or E at the British player's option.

17.42 The total number of British reinforcements received in a game can never exceed six units. If eliminated, they may not be used again, but do count towards British Reformed Units *(19)*.

17.43 British reinforcements do not have a lower organization and therefore are not eligible for the +1 AV modifier for platoon integrity *(8.351; case C)*.

17.5 *BREN CARRIERS [C]:* These 0-2-8 units represent Bren Carriers which were loaded with ammunition and attempted to run the gauntlet of Germans surrounding the British units at the north end of the road bridge. They are readily identifiable by the circled letter 'C' at the top left of their committed side.

17.51 Each time a 'C' result is rolled on the Random Events Table one Bren Carrier counter is placed uncommitted in zone D or E at the British player's option.

17.52 If a Bren Carrier unit should ever *begin* a game turn in a British controlled Victory Point area, the Bren Carrier is removed and placed on top of the Turn Record Track where it nullifies the effect of an ammunition shortage *(see 20)*.

17.53 Bren Carrier units may not attack—not even in Close Combat situations, nor can they control a Victory Point area by being the last sole occupant of such an area.

17.54 Despite their general classification as an armored vehicle, Bren Carriers are considered infantry targets and are vulnerable to infantry fire from an adjacent area. However, the British player may screen a Bren Carrier in Close Combat as if it were an armor unit. Bren Carriers defending against Close Combat attacks do so with their defense factor as if it were an armor unit. In all other respects, however, including area occupation limits and the movement or retreat from one enemy occupied area to another, Bren Carriers are considered infantry units.

18. SETTING FIRES—

During the bitter street fighting for the bridge, the Germans eventually resorted to purposely firing buildings in an effort to flush the well positioned British from their hiding places. This tactic is recreated as follows.

18.1 In any area containing "uncommitted" British and German infantry units the German player may attempt to force British units out of their positions within the same area indirectly by setting fire to the buildings they occupy. If successful, the British units *do not leave the area*, but some or all of them become *committed* and may have to retreat out of the area eventually if subsequent fire impulses succeed in inflicting casualty points on those committed units. This fire setting attempt replaces a normal M/F impulse in the Sequence of Play.

18.2 All German units attempting to set fires become committed whether their efforts are successful or not.

18.3 To set fires the German player rolls one die; if the number rolled is equal to or less than the number of German units committed to this fire-setting attempt, a number of uncommitted British units equal to the number showing on the die must be turned committed side face up until the end of that M/F Phase. When determining the number of *German* units committed to a fire-setting attempt, engineer types count as three units.

18.4 The British player may choose which of his uncommitted units in the area are to be committed as a result of fires. If the result calls for more British units to be committed than are present in the area, the excess is ignored.

EXAMPLE: Suppose two German units, a 5-7-6 engineer and a 3-5-5 training squad, are attempting to set fires in an area which also contains two uncommitted British units. On a die roll of '1', one British uncommitted unit would be flipped over to its committed side. On a die roll of '2', '3', or '4' both British units would become committed. A die roll of '5' or '6' would have no effect.

18.5 Other uncommitted German units in the same area, not making this form of attack may make normal attacks against *adjacent (see 8.12 and 8.32)* areas in the same impulse.

18.6 The German player may not attempt to set fires in the perimeter zones. The British player may not attempt to set fires anywhere.

18.7 There is no limit to the number of fire-setting attempts per area per turn other than that imposed by the number of eligible German units in an area to make the attempts, but such attempts are limited to once per impulse and the actual number of fire counters placed is limited to one per area.

18.8 If a fire-setting attempt is successful, place a fire counter with the '1' level side face up in the area. All future fire-setting attempts in that area may increase the "range" of acceptable die rolls for a fire setting attempt by one as long as the counter remains in the area. Note that the actual number of British units committed is still equal to the number showing on the die.

18.81 If a fire setting attempt in an area is successful while a '1' level fire counter is already in place in that area, the fire counter is flipped to its '2' level side. All future fire setting attempts in that area may increase the "range" of acceptable die rolls for a fire setting attempt by two as long as the fire counter remains in that area.

18.82 A fire can never grow beyond '2' level strength regardless of the number of successful attempts made in the area.

EXAMPLE: Two German units (one of which is an engineer unit) are attempting to set a fire in an area already containing a '1' level fire counter. If they roll any number other than a '6' they will be successful and that number of British units in the area will have to become committed.

18.9 *EXTINGUISHING FIRES:* At the conclusion of each Close Combat Phase the British player rolls one die in each area containing a fire counter regardless of whether he actually has a unit in that area or not. A level '1' fire counter is removed by a die roll of '5' or '6'; a level '2' fire counter is removed by a '6' die roll.
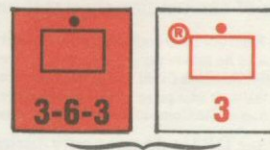
19. BRITISH REFORMED UNITS—

Due to a combination of their plight and the elan of their forces, the British paratroopers often rose to fight again after sustaining losses that would have shattered the effectiveness of most other fighting units. The lightly wounded time and again returned to man defenses after receiving whatever scant medical attention was available. By combining these lightly wounded men with various elements of other units which eventually broke through to the bridge in groups of two or three, the British were able to man ad hoc defenses around the bridge far beyond the expected breaking point.

19.1 At the start of each game turn during the Reinforcement & Reformed Units Phase the British player checks to determine how many units he has lost since the last Reformed Units Phase. For every six units lost during the preceding game turn he receives one 3-6-3 reformed unit. If he has lost a number of units less than a multiple of six, he may receive a 3-6-3 infantry replacement unit if he is able to roll a number less than or equal to the number of units lost less than that multiple of six.

EXAMPLE: It is the start of turn 2. The British player lost four units during turn 1. If he rolls a '1', '2', '3', or '4' he will receive a 3-6-3 infantry replacement unit. Now assume we are about to start turn 3 and the British player has lost seven additional units during turn 2. The British player gets one 3-6-3 infantry replacement unit and if he can roll a '1' he will receive a second 3-6-3.

19.2 To aid in determining which units have been eliminated in the preceding turn, eliminated British units should be placed in the British Reformed Units box pending determination of any British reformed units. At the conclusion of the Reinforcement & Reformed Units Phase all eliminated units are removed permanently.

9

19.21 British units which were eliminated by Close Combat or by virtue of having sustained three casualty points are placed in the Reformed Units box with their committed side face up. These units count as one unit each for purposes of determining reformed units.

19.22 British units which were eliminated due to inability to retreat or by virtue of having sustained *two* casualty points are placed in the Reformed Units box with their uncommitted side face up. Such a unit is counted as two eliminated units for purposes of determining replacements.

19.23 British units which were eliminated by virtue of having sustained four or more casualty points in fire combat (i.e. there were not enough units of the same group type in the area to absorb all the casualty points scored) are not placed in the Reformed Units box at all and are immediately removed from the game instead. Note that the British player does not have the option to give any unit four casualty points until all affected units in the fired-on group have each been assessed three casualty points.

19.3 Only Bren Carriers are not eligible for determination of reformed units. Even eliminated reformed units could be used to build new reformed units.

19.4 British reformed units must be placed in a British controlled Victory Point area (maximum of one per area per turn if possible) of the British player's choice before the start of that turn's M/F Phase. Note that this area may also contain German units. If the British player only controls one Victory Point area all reformed units must be placed there. If he no longer controls a Victory Point area he is not entitled to any reformed units.

19.5 Reformed units have no official lower organization and therefore do not qualify for the platoon integrity DRM.

19.6 If all eight British reformed unit counters have been used, the British are not able to receive additional reformed units. Eliminated reformed units may not be used again.

20. AMMUNITION SHORTAGES—

20.1 The British player automatically suffers from a worsening ammunition supply situation at the start of turn 6 and must deduct one from the AV of all non-Close Combat attacks (including artillery) that he makes thereafter.

20.2 At the start of turn 8 the British ammunition shortage worsens again and the British player must deduct two from the AV of all non-Close Combat attacks he makes that turn.

20.3 The presence of a Bren Carrier in a British controlled Victory Point area at the start of any game turn lessens the effect of ammunition shortages. Place the Bren Carrier unit on top of the Turn Record Track. For each Bren Carrier unit on the Turn Record Track the British player may ignore the effects of one '-1' ammunition shortage DRM up to the maximum of such penalties currently in effect. *EXCEPTION:* Bren carriers cannot reduce the effects of ammunition shortages on British artillery.

EXAMPLE: It is the start of turn 8 and normally the British player would suffer a –2 deduction from all of his non-Close Combat attacks he makes during this turn. However, the British player has succeeded in getting a Bren Carrier Random Event and getting the Bren Carrier unit to a British controlled Victory Point area at the start of a game turn. Consequently, the British player suffers only a –1 deduction to all of his non-Close Combat infantry attacks that turn.

20.4 Ammunition Shortage DRMs do not apply during the Close Combat phase.

21. SIDE DETERMINATION—

The following rule determines which player shall command each side and thereby gives vent to any player's preferences regarding the relative chances of each side. This rule should not be used until both players have played the game at least once.

21.1 Both players must simultaneously present a written, secret bid for command of the British forces. The bid takes the form of a number of Victory Points granted to the German opponent in exchange for command of the British side. Such a bid may consist of plus or minus Victory Points or even 0 Victory Points. The player who has presented the *highest* bid gets command of the British forces. His opponent becomes the German player.

21.2 A bid is paid for by advancing the Victory Point counter prior to the start of play along the Victory Point track a number of spaces according to the winning bid. For example, if the highest bid for command of the British forces was three Victory Points, the German player would start the game with the Victory Point counter already on the "3" space of the Victory Point Track. If, on the other hand, the highest bid was "–2" Victory Points the German player would start on the "–2" space and would have to earn two Victory Points before his Victory Point counter even reaches the "0" space of the Victory Point Track.

21.3 If the bid is a tie, both players continue to resubmit written bids for simultaneous unveiling until the bids are different. Subsequent bids may be higher, lower, or the same as the initial bid at the bidder's discretion.

22. ALTERNATE COMBAT RESOLUTION SYSTEM—

22.1 Players who feel the luck element is too strong, or who consider "card counting" a skill rather than a predictable (and therefore objectionable) alternative to dice rolling may substitute cards for dice when resolving fire impulses if both players agree beforehand. Although this system does not eliminate the luck element in the game (the timing of when the higher and lower numbers are drawn is still very important), it does insure that both players will have an "average" dice roll of '7' throughout the game. A die must still be used for Close Combat and fire setting/extinguishing attempts.

22.2 Four ordinary card decks are required, two each with the same reverse sides. Two special decks of cards are then constructed; each containing one 2, two 3s, three 4s, four 5s, five 6s, six 7s, five 8s, four 9s, three 10s, two Jacks, and one Queen. The Jack is considered the equal of an '11' dice roll; the Queen approximates a '12' dice roll.

22.3 Instead of rolling the dice, both players turn over one card at a time from their respective decks to resolve combat. Once all 36 cards have been used, the deck is reshuffled.

22.4 Players not wishing to construct their own card sets may substitute the two sets of 36 numbered half-inch counters (hereafter referred to as chits) provided in the game. Each player places his 36 numbered chits into a cup and draws them one at a time, sight unseen, in place of a fire impulse dice roll. Turn each used chit face down after use, or place in a separate cup to be used in turn after the initial supply of 36 random numbers are exhausted.

22.5 Should a player inadvertently draw more than one card or chit when resolving a fire combat, both players return their cards/chits to the unused deck/cup for a reshuffle. Should one player somehow end up with more cards/chits than the other, the remaining cards/chits are forfeit, and play is stopped at that point until the cards/chits are equally distributed into new piles of 36.

DESIGNER'S NOTES

STORM OVER ARNHEM was designed with playability foremost in mind. This should be quite obvious by the length and number of actual rules. What may not be so obvious is the detailed analysis that went into the design of each rule section. Although many factors have been abstracted, it in no way means that they were not considered or included in some form during the design of the game as I hope to demonstrate in the following paragraphs.

Much of the ability to use exact terrain came from the fact that the game uses *areas* rather than the traditional hexagonal grid to regulate movement and combat. Rather than having to distort the terrain to conform to a hexagonal grid as is done in most simulation games, the areas were drawn to fit the actual terrain. In point of fact, the areas were determined to a large extent by the city block configuration, lines of sight, and areas of maximum exposure. To illustrate this, let's look at areas 3 and 4. Movement between these two areas would require crossing a street or "area of exposure". To do so with any degree of assurance of actually getting to the other side would require some time and finesse, i.e. increased movement costs. The sheer physical size of many of the blocks posed another kind of problem. An example here would be the single block composing areas 2 and 3. Fire from area 3 could be directed at area 18 without much problem but certainly fire from most vantage points in area 2 could not. Area 11 illustrates yet another vantage point. One might wonder how a unit located here could fire effectively into area 12 and not into area 5. This becomes a line of sight question. Units defending area 11 are assumed to be located in the most advantageous buildings, the large multi-story factory at the west end of the area. From here the units could easily fire over the small sheds located in the eastern half of the area, but not over the large trees in area 6. Although every area depicted on the board is a little different, each followed a similar line of reasoning in determining its final boundaries.

There are many excellent accounts of the British units which fought at Arnhem so a complete order of battle was relatively easy to verify. One exception to this was obtaining the approximate number of men that actually made it to the bridge from Major Gough's recon squadron. Among other problems, the unit was ambushed on the way to the bridge and it is unknown just how many men eventually made it to the bridge. I made my estimates based on the total number of men noted at the bridge before Gough arrived and what was indicated as the maximum number of defenders at the bridge (600-700) after their arrival.

As long as we're counting heads, I'm sure most people have noticed a lack of any British and, to a lesser extent, German heavy weapons infantry units. Contrary to what one might think, they have been included in the game, although in a somewhat abstract manner. For the British these weapons come largely from the HQ Company, not to be confused with the actual company HQ units. Although no separate counters have been included in the game for this company, these forces have not been overlooked. Historically, these units were spread out among the other companies of the battalion for additional support at platoon and squad level. Therefore, when considering the attack factors of each squad, one was added if the unit in question had received support from any heavy infantry weapons.

The German order of battle proved to be more difficult given the state of refitting that the 9th and 10th SS Panzer Divisions were undergoing at the time. By this time, German units were always at reduced strength, especially when it came to armored vehicles. Careful study of available information resulted in an educated guess that the 10th Recon Battalion would have only 50% of their official listed AFV strength. The Heavy Weapons Company, like the British HQ Company noted previously, has its machine guns distributed among the infantry rifle companies of the battalion. Because the unit also included an engineer platoon, 81mm mortars and some self-propelled guns, these were represented by separate counters. One last point concerning the German OB is worth touching on, if only for the purists among us. At least one popular account of the battle makes reference to Mk IV tanks at the bridge. More importantly, a British battle action summary indicates enemy losses included Mk IVs. If all this is true, one might ask why there aren't any Mk IVs in the game. Let's examine the British report in a little more detail rather than accepting it at face value. The report in question lists German vehicle losses at six Mk IVs, one Tiger tank, and eight armored cars and halftracks. Nowhere does it mention any Mk III loss. This seems strange since it is known that the Bocholt Training Battalion had 10 obsolete Mk IIIs in action at the bridge. Why then aren't there any reports of some of these tanks being destroyed? Certainly they would be easier than a Mk IV to knock out. It would seem from this, that as was often the case, the Mk IIIs were mistakenly recorded as Mk IVs. It becomes even more plausible when one considers that many

of the British troops were in combat for the first time. For these reasons and the lack of any hard data on units at the bridge operating with Mk IVs, I went with using only the Mk IIIs in the game.

To assess the combat units in game terms, each unit (except artillery) was given three basic values. The AF was based on the type of weaponry and whether the unit was supported by heavy weapons. The DF was a little more involved, but for infantry included such things as morale, training, experience and terrain effects. The DF of armor units was based more on armor thickness than morale or training. Infantry units lose much of their terrain benefit by exposing themselves to return fire when moving or firing. British units generally have a higher terrain benefit because of the inherent advantage associated with the defensive position in street fighting. Each building occupied by the British was literally turned into a mini-fortress. With such a large potential for concealment, the Germans were often confused as to which buildings were dangerous, occupied strongpoints, and found it difficult to concentrate the required strength against these critical areas. Armor units are always at a disadvantage in urban areas and gain very little from the surrounding terrain and consequently lose comparatively little by moving or firing.

One point should also be made with respect to the increase in vulnerability of infantry (DF = 6) when subject to an artillery attack while jointly occupying an area with a self-propelled gun (DF = 2). First, it is assumed that the armor is drawing artillery fire to the otherwise unknown vicinity of the infantry. Secondly, and possibly more important, there is a morale dependency on armor whenever it is present. Loss of armor support, either by its destruction or withdrawal, could cause the infantry under attack by the same shelling to break and run, thereby causing further casualties.

The core of each game turn, indeed the very heart of the game, lies within the M/F Phase. Through it, I have tried to achieve a system with a feel of simultaneous movement while retaining the action-reaction sequence so characteristic of street fighting. The defender has the advantage, in that the attacker must chance exposure to move into position, allowing the defender to wait for the attacker to come to him. Command control also becomes an important problem inherent with urban fighting. Combat in these areas tends toward the fragmentary commitment of small assault groups which rapidly developes into a series of small scale actions at squad to, at most, company level. Units greeted by fire will turn away from action in piecemeal fashion as they encounter casualties or stiff opposition. This is well illustrated within the abstracted time/fire encounters of the multi-impulse M/F Phase.

During the close combat phase we see the crescendo of a full turn of intense, building M/F impulses. Here house-to-house fighting gives way to room-to-room combat and takes its toll on attacker and defender alike. Artillery cannot help the attacker once he has mingled with the defender. Only by throwing in one unit after another can a block be cleared. This, if for no other reason, was why Frost could not have won. Without reinforcements, the British would eventually be bled white by a numerically superior enemy.

In the final analysis, when one considers all of the compressed events of planning, execution, and results covered by each game turn, it becomes quite easy to accept the passage of six hours (12 during night turns) in a single game turn even in a tactical level game. Although most of the game is concerned with the six hour game turn, the longer night turn presents some interesting effects. The reduced movement cost for moving into an enemy occupied area is fairly obvious. Under cover of darkness, streets can be crossed more safely and small groups can infiltrate between defensive positions. To help deter this infiltration the British set fire to small unoccupied structures in an effort to illuminate the area. For this reason there is no loss in effectiveness for attacks made totally within a common occupied area. The Germans took this technique one step further and soon set fire to the buildings occupied by the British. The actual number of attacks does not increase because of the greater mobility darkness affords units coupled with the increased length of a night turn in real time. Artillery attacks as well as normal fire attacks from adjacent areas are reduced in effectiveness during night turns because of the difficulties in observation at any but the closest ranges. Finally, night turns allow the shifting of the tactical advantage to the German player on turns 3 and 6. The Germans showed considerable skill at infiltration tactics during the night hours. The German commander at the bridge, Major Brinkmann, was a veteran of Stalingrad and his experience was put to good use as the Germans repeatedly took advantage of darkness to position troops for the coming daylight attacks.

When I first set out to design *STORM OVER ARNHEM* I wanted to produce, above all else, a game that allowed its participants to concentrate on the strategies of *playing* the game, rather than memorizing endless rules and charts. To that end I feel I have succeeded.

GERMAN ORDER OF BATTLE
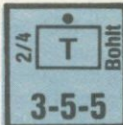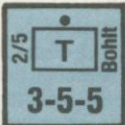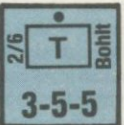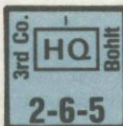
Start in any German area (maximum of five units per area): [No more than three armor units per area]

Battalion HQ
10th Rec / HQ / Hzr. KG / 2-7-5 ×1

Battalion HQ Company
Bn HQ / PSW 234/1 / 3-4-10 ×1
Bn HQ / PSW 231 / 3-3-10 ×1
Bn HQ / PSW 233 / 6-3-10 ×1

Armor Car Company
AC Co. / PSW 234/1 / 3-4-10 ×1
AC Co. / PSW 231 / 3-3-10 ×1

Armored Reconnaissance Company
AR/1 10th Rec / 4-6-6 ×3
AR/2 10th Rec / 4-6-6 ×3
AR/3 10th Rec / 4-6-6 ×3
AR HQ 10th Rec / 2-7-6 ×1

Remnants (–) 9th SS Armor Car Company
9th Recon / PSW 231 / 3-3-10 ×1

Light Armored Reconnaissance Company
LR/4 10th Rec / 4-6-6 ×3
LR/5 10th Rec / 4-6-6 ×3
LR/6 10th Rec / 4-6-6 ×3
LR Co. HQ 10th Rec / 2-7-6 ×1

Heavy Weapons Company
Hv Wp 10th Rec / 5-7-6 ×3
Hv Wp / SPW 250/8 / 6-2-8 ×2

Off-board as per Artillery Rules:

Artillery Support: Heavy Weapons Company
8 (6) 10th Rec ×1

Artillery Support: Arnhem Garrison Units
6 (4) Arnhem ×1

Artillery Support: Harzer Kampfgruppe
9 (7) Hzr. KG ×1
8 (6) Hzr. KG ×1

Start in Perimeter Zones A and/or B:
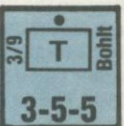
Battalion HQ
Bohlt / HQ / Hzr. KG / 2-6-4 ×1

1st Company
1/1 T Bohlt / 3-5-5 ×3
1/2 T Bohlt / 3-5-5 ×3
1/3 T Bohlt / 3-5-5 ×3
1st Co. HQ Bohlt / 2-6-5 ×1

2nd Company
2/4 T Bohlt / 3-5-5 ×3
2/5 T Bohlt / 3-5-5 ×3
2/6 T Bohlt / 3-5-5 ×3
2nd Co. HQ Bohlt / 2-6-5 ×1

Elements (—) Supply Company
Bohlt / PzKw III / 4-5-8 ×3

3rd Company
3/7 T Bohlt / 3-5-5 ×3
3/8 T Bohlt / 3-5-5 ×3
3/9 T Bohlt / 3-5-5 ×3
3rd Co. HQ Bohlt / 2-6-5 ×1

Reinforcements; Place in Zone C at start of turn 5:

Elements (–), 506th Tank Battalion
506 / 6-7-7 ×2

BRITISH ORDER OF BATTLE

Start in British areas containing matching setup colors (maximum of ten units per area):

[Must place at least three units in each Victory Point Area]

● (yellow) **1 Para / 1 Bde** — 5-8-5 ×4
1st Parachute Squadron Royal Engineers

● (green) **C/7 3 Para** 4-7-5 ×3 | **C/8 3 Para** 4-7-5 ×3 | **C/9 3 Para** 4-7-5 ×3
Company C, 3rd Parachute Battalion

● (red) **A/1 2 Para** 4-7-5 ×3 | **A/2 2 Para** 4-7-5 ×3 | **A/3 2 Para** 4-7-5 ×3
Company A, 2nd Parachute Battalion

● (black) **B/4 2 Para** 4-7-5 ×3 | **B/5 2 Para** 4-7-5 ×3
Company B (–), 3rd Parachute Battalion

● (blue) **Tp. A 1 Recon** 3-7-5 ×3 | **Tp. B 1 Recon** 3-7-5 ×2
Elements 1st Reconnaissance Squadron

● (blue) **9 Fd. Co. 1 Div** 5-8-5 ×2
Elements 9th Field Company, Royal Engineers

Start in any British area(s):

93 Co. RASC 3-6-5 ×3
93rd Company, Royal Army Service Corps

DEF 1 Bde 4-7-5 ×3
Defense Platoon

16 Para Fd.Am. 1 Bde 3-6-5 ×1
16th Parachute Field Ambulance

1 AT/Bty A/L RA 6-X-1 ×2
1st Air-Landing Anti-Tank Battery, Royal Artillery

A Co. HQ 2 Para 2-8-5 ×1 | **B Co. HQ 2 Para** 2-8-5 ×1 | **C Co. HQ 3 Para** 2-8-5 ×1
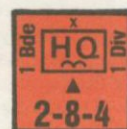
2 Para HQ 1 Bde 2-8-4 ×1 | **1 Recon HQ 1 Div** 2-8-4 ×1 | **1 Bde HQ 1 Div** 2-8-4 ×1

Off-Board as per Artillery Rules:

Access 1-4 1 LR RA 7 (5) ×1
1st Light Regiment, Royal Artillery

13
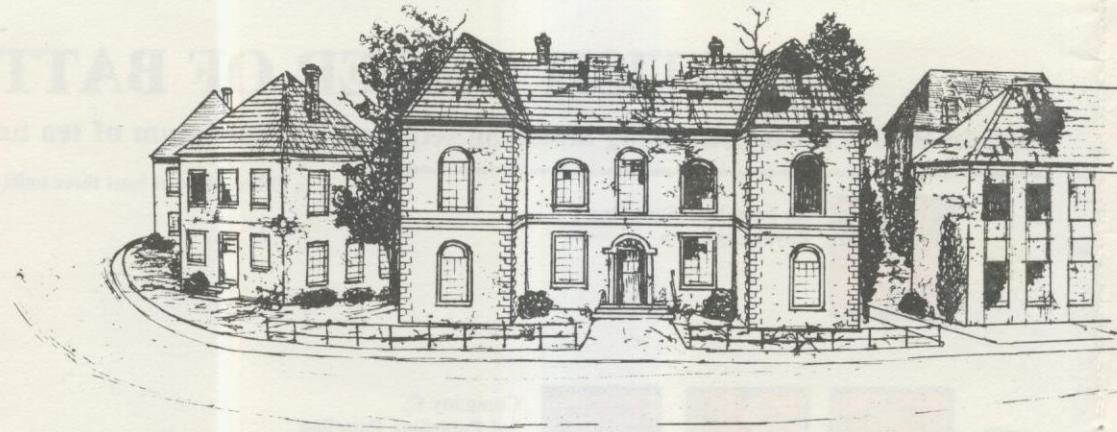
HISTORICAL NOTES

With the breakout from Normandy and the advance across France and Belgium behind them, the British 21st Army Group reached the Dutch border in the summer of 1944 with high hopes of ending the war by Christmas. To carry out what he felt would be the decisive stroke, Field Marshal Montgomery devised an ambitious plan to cross the Rhine at the Dutch town of Arnhem, drive southwards through the industrial area of the Ruhr and finally into Berlin for the coup de grace. Codenamed Market-Garden, the operation required that three airborne divisions, the U.S. 82nd and 101st, and the British 1st, be dropped in an attempt to seize five major bridges along a sixty-mile section of road until eventually relieved by ground elements of the British XXX Corps.

Although every bridge in the airborne corridor was important, the principal objective of the operation was the final arched road bridge at Arnhem. Two secondary bridges located on the outskirts of Arnhem to the west were also of importance, especially if the road bridge could not be secured. One was a railway bridge and the other a floating ship bridge. The capture of all three bridges, and particularly the massive road bridge, was assigned to the British 1st Airborne Division.

On Sunday, September 17th the airborne drop began with the first British troops landing virtually unopposed. Because of the rather large distances from their landing zones and their objectives, the 1st Airborne's reconnaissance squadron was organized to race to the main bridge in armored jeeps in hopes of seizing it by surprise. Engineers from the 9th Field Company were also to accompany the squadron in order to remove any demolition charges that might exist on the bridge. Upon landing, however, it was discovered that most of the gliders carrying the jeeps had failed to make the landing zones. It then became the responsibility of the 1st Parachute's 2nd Battalion, commanded by Lt. Col. John Frost to move out for the road bridge first, closely followed by the 3rd and 1st Battalions each proceeding along a parallel but somewhat different route.

As Frost's battalion advanced along the main road toward the outskirts of Arnhem, they reached the turnoff for the railway bridge. Although not the battalion's primary objective, it was nevertheless very desirable to gain possession of this crossing of the Lower Rhine intact. Frost dispatched C Company to secure the railway bridge while he pressed on with the remainder of the battalion. In addition to occupying the bridge, elements of C Company were to be sent along the south bank of the river to the road bridge and assist the remainder of the 2nd Battalion in capturing the primary objective. As C Company approached, however, a large explosion shook the bridge and the southern span collapsed into the Rhine. With little choice left, the company retraced their steps and moved on to their next assignment, the capture of the German commandant's headquarters in Arnhem.

Shortly after C Company had turned off for the railroad bridge the remainder of Frost's battalion came under its first heavy fire. The majority of this fire came from Germans emplaced near the high ground called Den Brink. Units occupying this position could dominate the western approaches to the town. Fully realizing this, Frost ordered B Company to neutralize the Germans occupying the heights and follow up with their main task of capturing the floating ship bridge located between the railway and road bridges. This bridge, though undamaged, was later found to have had its center section removed and towed to a dock east of Arnhem.

Meanwhile, Frost continued his march to the road bridge, keeping close to the river with A Company in the lead. It was about 2000 hours on the 17th when the first platoons of A Company reached the northern approaches to the bridge. They quickly took up positions under the large concrete roadway piers. Within a few minutes, Captain Mackay of the Royal Engineers had also reached the northern approaches by another route. His men were ordered to take up positions in the buildings on the east side of the road embankment. One of the buildings occupied was the Van Limburg Stirumschool (building #1 on the German setup map on page 16), located furthest south on the embankment. From here one would have a commanding view of the approach ramp, as well as the eastern approaches to the bridge. After moving to occupy additional buildings on the embankment, the engineers soon discovered that one of the buildings housed a German Headquarters (building #2). Heavy fighting soon erupted, which resulted in a deadly hand-to-hand contest throughout the remainder of the evening. The engineers were finally able to successfully rout the Germans from their position while suffering only light casualties.

By this time Frost and his headquarters personnel had also shown up at the bridge and were taking up a position on the west side of the road embankment at the corner of Oranjewachstraat (building #3). Looking out from his position at the north end of the bridge, Frost was amazed at the lack of enemy reaction, but only half of the prize was his. The southern end of the massive bridge had still to be occupied. Assuming that B Company must have by now cleared the enemy opposition at Den Brink and be at the floating ship bridge, Frost tried to radio orders instructing them to attack the south end of the road bridge. As during much of the operation, however, Frost found his radio communications with both B and C Companies failing. Patrols were therefore sent out to determine their locations and obtain B Company's assistance in storming the bridge. By this time, Major Gough and elements of his 1st Reconnaissance Squadron had also arrived at the bridge (building #6) having been delayed en route by a German ambush. By 2045 hours Frost decided not to wait any further and ordered a platoon from A Company to move onto the bridge and capture the southern end. The attack was quickly repulsed by automatic fire from a pillbox and armored car located on the bridge. Frost ordered a second attempt at crossing the bridge this time aided by engineers equipped with a flamethrower and PIAT. Although the attack was once again repulsed, the pillbox was successfully dealt with and the armored car forced to withdraw. Before any further attacks could be mounted, three German trucks loaded with infantry appeared on the bridge from the south in an effort to force their way across the bridge. Frost's men had little problem in dealing with these trucks and took most of the occupants prisoner. As the evening continued, elements from the 1st Brigade Headquarters unit and a RASC platoon filtered into the bridgehead (building #4). C Company of the 3rd Battalion had also arrived, having to fight their way through the German blocking forces set up between Frost's position and the rest of the 1st Division. Although weak at first, these German units now consisted of an effective continuous line.

By now, the patrols sent out to find B and C Companies had returned. C Company had been found but was discovered to be so completely surrounded that it could not be reached. B Company, although not located, eventually showed up at the bridge shortly before 0500 hours the next morning, minus one platoon.

Dawn of the 18th, the second day at the bridge, was accompanied by the sound of heavy vehicles approaching from the south. Expecting to see the lead elements of the British XXX Corps, Frost and his paratroopers were momentarily stunned to see armor units of a German SS reconnaissance battalion instead. This battalion of the 9th SS Panzer Division had crossed the road bridge at Arnhem one day earlier on its way to reconnoiter the road to the south from Arnhem to Nijmegen. The crossing was made only hours before the first units of Frost's battalion arrived at the bridge. Finding the Nijmegen area to be temporarily secure from the Allied paratroops, the commander of the battalion, Captain Grabner led part of his column back to Arnhem to smash what he felt was a lightly held British bridgehead. A German column of 16 vehicles extended across the bridge. The paratroopers held their fire until the last moment and then all hell broke

loose. At point blank range and from both sides of the bridge ramp, fire poured down on the hapless Germans from machine guns, PIATs, mortars and anti-tank guns. Grenades were lobbed at vehicles from rooftops and second story windows. Passengers were shot down by a murderous cross fire as they tried to escape from vehicles which caught fire. One halftrack was hit as it turned for the school on the east embankment and its crew gunned down as they dove for the surrounding brush. Unable to advance any further through the British gauntlet of fire the German survivors raced back to the southern end of the bridge. In less than two hours twelve German vehicles had been destroyed in what Frost was to term "a lovely action".

By late afternoon the Germans were once again trying to infiltrate the British positions but this time from the east using elements of the 10th SS Reconnaissance Battalion. (It is at this point that our basic game begins.) This battalion had only recently been transferred to the control of the 9th SS Panzer Division. With the remainder of the 9th SS Reconnaissance Battalion somewhat blocked to the south of Arnhem by Frost's battalion at the bridge, the unit was placed under the command of the 10th SS Panzer Division operating around Nijmegen. To compensate for this the 10th SS Reconnaissance Battalion was assigned to the 9th SS Panzer Division and given the primary task of eliminating the British bridgehead in Arnhem. To aid in its task the Bocholt Training and Depot Battalion was directed to assist them. In addition, a promise of a few Tiger Tanks from the 506th Heavy Tank Battalion, scheduled to arrive the next day, was also made.

With the arrival of the Bocholt Battalion, the intensity of fighting at the bridge markedly increased. Batteries of German artillery were called down on the British positions forcing the occupants, at times, into the cellars with the wounded. Attacks on Frost's headquarters (building #3) had progressed to the point where some German assaults had to be driven off with bayonets. Still, the morale of the British defenders remained high. Even so, the battle was quickly turning into a contest of endurance, a contest that Frost knew his men could not win without help. Finally, after managing to contact Divisional HQ, Frost was informed that reinforcements had been sent to the bridge. To aid their arrival, he sent out patrols in an effort to open a path for them to the bridge. These patrols were eventually defeated and turned back by armored elements of the German blocking force.

By late afternoon the Germans had scarcely penetrated Frost's perimeter despite their repeated assaults. With this in mind, Frost and Gough discussed a plan to send a mobile storming party across the bridge at last light. In the resulting surprise and confusion they hoped to open a passage to elements of the 1st Polish Parachute Brigade previously scheduled to drop south of the bridge. The plan was finally decided against for fear of a duplication of the German assault earlier that day.

The morning of the 19th brought renewed attacks from the east, many of which centered around the school (building #1) occupied by Captain Mackay's engineers. Even after parts of the building were destroyed, the engineers were able to beat off each renewed attack with grenades and machine guns. Other strategic buildings were also being contested. Many would change hands several times throughout the course of the day as both sides fought with grim determination. If attempts at blasting the paratroopers out of their buildings didn't work, the Germans would try routing the defenders by firing the building itself. The British responded by extinguishing the fires until the Germans cut off the water supply to the city. Still, the British managed to hold on until the very last moment before moving to another position.

At about 1530 hours a lone aircraft banked over the bridge and dove to the attack. Much to the annoyance of the British Red Devils, the plane turned out to be German. As the FW 190 approached from the south it dropped a bomb on the school with little effect, but as it banked to the left near the St. Walburgis Church (building #5) one wing hit the spire forcing the plane to crash into the small lake north of the road embankment to the robust cheers of the British onlookers. This emotional relief proved to be short lived. By 1930 hours the first Tiger Tanks had arrived at the bridge. Their target was once again the school occupied by Mackay's engineers on the east embankment. Down to a fighting strength of less than two dozen men, the engineers still held onto the school in spite of continual blasting from the Tigers' 88mm guns.

Toward evening it became obvious that the Germans were successfully reducing and compressing the British defensive perimeter. Houses were in flames, buildings had collapsed, and positions were being overrun. Casualties were now so high that all available space for housing them was exhausted. The men had now been fighting, without letup, for over fifty hours and could hardly be expected to endure such punishment much longer. Yet, Frost was determined to deny the Germans the bridge to the end.

At first light of the 20th, the Germans once again resumed their determined bombardment of the buildings occupied by Frost and his men. Ammunition shortages were now making it increasingly more difficult to thwart the German attacks. The number of paratroopers still able to fight was somewhere around 150. Over 300 wounded crowded the cellars and

basements of the rubble still held by the British. Shortly before noon Frost himself was wounded in both legs, requiring Major Gough to take over command.

Hand-to-hand fighting under the bridge pylons (building 7 & 8) grew more intense as tank movements increased along the river from the east. This necessitated continual counterattacks in this area by remnants of A Company who sought to prevent the Germans from successfully setting demolition charges on the piers.

To the engineers defending in the school, the end seemed to be near. Almost completely cut off from the rest of the battalion and under renewed attacks every hour, Captain Mackay finally issued orders for the wounded to surrender and the 14 remaining men to evacuate the burning building. For them the fighting would soon be over.

Late that afternoon the first German tanks since Sunday were finally able to cross the bridge from north to south. The British anti-tank guns which had prevented this movement earlier were now under continuous German fire making them impossible to man.

By now, Frost's headquarters building (building #3) was burning out of control and the lives of the wounded sheltered there, were in extreme jeopardy. There was nowhere remaining where the wounded could be safely evacuated so Frost regrettably surrendered to the Germans. The men still capable of fighting were not to surrender, however. They were to move to other buildings and continue the fighting from there. With that, the Red Cross flag was hung out and the wounded removed. During the truce the Germans were able to infiltrate a large number of men into positions which they had been previously unable to reach. Once the last of the wounded were out of the way, the shooting started once again.

An attempt was made at this time, under Gough's command to break out toward the west in small parties in hopes of linking up with the rest of the 1st Division. But the move was spotted before they had covered fifty yards. Many were wounded or killed. Even so, the remaining paratroopers fought on throughout the night amidst the rubble, outnumbered, surrounded, and with little ammunition.

The morning of the 21st saw the last German operation to clear out the paratroopers from the remaining buildings. By 0900 the area surrounding the bridge had been completely cleared of British troops. It would be hours though before the wreckage on the bridge could be cleared and normal vehicular movement across the bridge resumed. During the final hours, one last message was radioed from somewhere near the bridge. Although not received by British headquarters, it was picked up by the 9th SS Divisional headquarters. The garbled transmission ended with the words: "Out of ammunition. God Save the King".

It had originally been estimated that the 1st Airborne Division would have to hold the bridge for only 24 hours. By that time contact with relief elements from the XXX Corps, advancing from the south was expected. For three days and four nights, against increasingly hopeless odds and without help or reinforcements one battalion had survived a task assigned to an entire division. Although Market-Garden proved to be a costly Allied defeat, the performance of the British paratroopers at Arnhem proved to be the most gallant and determined action of British arms in the war.

DEDICATION

To my wife Martine, daughter Stephanie, and son Nicolas, whose hours it fought to share.

STORM OVER
ARNHEM

BATTLE LANDMARKS:
1. Van Limburg Stirumschool
2. German HQ Building
3. Building used by Frost; 2nd Battalion HQ
4. Building used by Brigade HQ
5. St. Walburgis Church
6. Waterworks Building
7. A. Co. Strongpoint
8. A. Co. Strongpoint
9. Prison
10. Pillbox
11. Pedestrian Bridge