

# THUNDER AT CASSINO

## 1. COMPONENTS

**THUNDER AT CASSINO** consists of the following components. Replacements can be purchased from TAHGC, 4517 Harford Rd, Baltimore, MD 21214 by sending a stamped, self-addressed envelope and requesting a current Replacement Parts Price List.

- One 22"×24" mapboard
- Two 8"×11" OB/Scenario charts and one 11"×16" Strategic Movement card
- Two sheets of die-cut playing pieces
- One rulebook
- Four six-sided dice; two colored and two white

Two introductory two-turn scenarios are printed on the back of the Strategic Movement card so that players will have a quick play alternative to the lengthy play of the basic game as well as the opportunity to familiarize themselves with the mechanics of the game system before attempting the larger commitment of an entire game. It is recommended that all players play these basic scenarios before attempting the longer and more involved full-scale version.

## 2. OBJECT

**2.1 THUNDER AT CASSINO** is a two-player game with one player commanding the German forces, and the other player controlling the Allies. The object of the game is to control as many of the 16 Victory Point Areas on the mapboard as possible by game end. The winner is determined by the number of Victory Points earned by the Allied player at the end of the last Game Turn.

**2.2 GLOSSARY:** Before proceeding further, the reader should familiarize himself with the use of the following terms which will be used throughout this rulebook.

*dr:* (die roll). A roll of one die.

*DR:* (dice roll). A roll of two dice with the results of each added to form one combined number; e.g., a dr of 4 and a dr of 3 equals a DR of 7.

*drm:* (die roll modifier). An artificial addition to an original *die* roll due to an applicable rule or condition; e.g., a dr of 3 and a +1 drm equals a final dr of 4.

*DRM:* (dice roll modifier). An artificial addition to an original *dice* roll due to an applicable rule or condition; e.g., a DR of 7 and a -1 DRM equals a final DR of 6.

>: Greater Than

<: Less Than

≥: Greater Than or Equal To

≤: Less Than or Equal To

## 3. THE MAPBOARD

**3.1 SCALE:** The mapboard portrays Monastery Hill in Central Italy and the town of Cassino nestled at its base. Over this ground the third battle of Cassino was waged during the spring of 1944. The map scale of the overall map (Areas 23 through 68) is approximately 1"=300' with the insert map of the town (Areas 1 through 22) shown at approximately 1"=200'.

**3.2 AREAS:** The mapboard itself is divided into 68 numbered Areas of various shapes and sizes by thick red or white border lines. The white border lines contain red dashes but will be referred to herein as white. Each Area is said to be adjacent to another Area if it has a common border or if there is a connecting arrow between them.

**3.21 IDENTITY:** Each Area contains a circle divided into two hemispheres. The number in the top hemisphere is the Area Designation Number that identifies that Area. **EXAMPLE:** Area 9 contains Castle Hill.

**3.22 ELEVATION:** Any exponent of the ID Number summarizes the height of that Area above 99 meters in increments of 50 meters for game purposes. **EXAMPLE:** The height of Castle Hill (Area 9) for game purposes is level 2 (150m.-199m.). See 8.352D.

**3.23 TEM:** The number in the lower hemisphere of each Area circle (ranging from +1 to +4) is that Area's *Terrain Effects Modifier* (hereafter referred to as *TEM*). See 8.352C.



**3.24 SETUP:** Each Area's circle is color-coded to facilitate initial setup and movement of the German units (see 5.3/19.12).

**3.25 VICTORY POINT AREAS:** Included among the 68 numbered mapboard Areas are 16 worth Victory Points: (9, 11, 15, 16, 17, 18, 19, 21, 22, 25, 26, 29, 31, 57, 65, 66). Each Victory Point Area is identified on the mapboard by the presence of the red/orange letters "VP" preceded by the number of Victory Points awarded to the Allied player for control of that Area.

**3.3 ZONES:** In addition to the 68 numbered Areas portrayed on the board, there are 11 perimeter Zones lettered "A" through "K" which surround the mapboard and are printed on the Strategic Movement Chart. These perimeter Zones are used to regulate the Strategic Movement (see 10) of units outside the immediate vicinity of the battle around the fringes of the actual mapboard.

**3.4 TURN TRACK:** The Turn Track printed on the Strategic Movement Chart is used to record the current Game Turn and to note the arrival of reinforcements/withdrawal of Allied reserves. Any Game Turn with a ♣ or ⊙ symbol in its box indicates the arrival during that turn of that side's reinforcements. The game starts with the Turn marker in the first space of the Game Turn Track. At the end of each Game Turn, the Turn marker is advanced on the track one space to the right. Normally the game ends at the end of Game Turn 9, but the game can be extended to the end of Game Turn 15 at the option of the Allied player if the Victory Point Track shows a "draw" at that time (see 11.4).

**3.5 VICTORY POINT TRACK:** The Victory Point Track printed on the Strategic Movement Chart is used to keep a total of the Allied Victory Points earned to date. Only the Allied player receives Victory Points and only for current control of the 16 Victory Point Areas/early control of the four "Quisling Line" Areas (see 11.5).

**3.6 SETUP:** All of the Areas on the mapboard contain an Area Designation Number in a color-coded circular field. Only German units start the game on the mapboard and only in Areas with an Area Designation Number printed on a yellow, blue, or red circular field. Only German units containing a matching colored dot on their white side may start the game in these Areas.

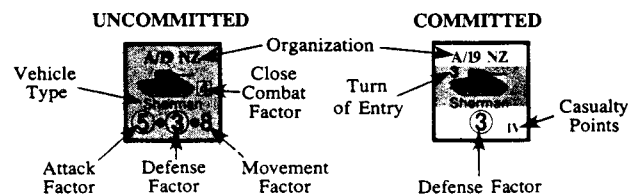
**3.7 ARTILLERY HOLDING BOX:** Two Artillery Holding Boxes, one for each side, are printed on the Strategic Movement Chart. Each player places his Artillery units and available smoke markers in his respective box when not in use.

## 4. THE PLAYING PIECES

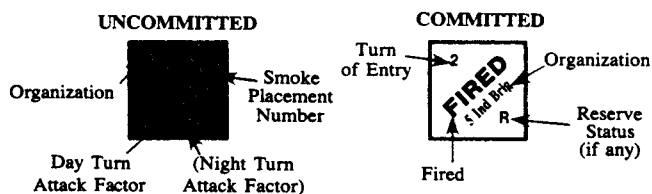
**4.1 UNITS:** The game contains two different colored sets of die-cut playing pieces. Those representing the men that actually fought in the battle are called *units*. The Allied units are red (British), light green (New Zealand), dark green (U.S.), and tan (Indian). German units are blue.

**4.2 TYPES:** There are three basic types of combat units in the game: Armor, Artillery, and Infantry. 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 one time 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.

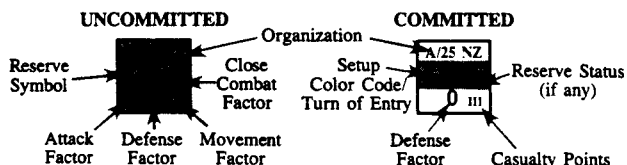
**4.21 ARMOR:** Armor units represent a troop of three to five armored fighting vehicles and their attendant crews. All Armor units are on ⅔" pieces and contain a silhouette of the specific vehicle to distinguish them from non-Armor units. The "vehicle type" information is provided for historical interest only—it has no bearing on play of the game.



**4.22 ARTILLERY:** Artillery units are on  $\frac{3}{8}$ " pieces and represent the prolonged shelling effect of a battery or more of offboard guns and are most readily recognized by the "explosion" symbol on the front side.

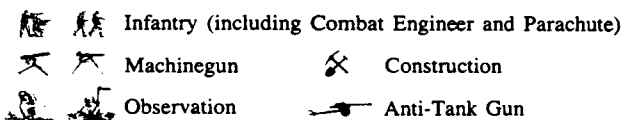


**4.23 INFANTRY:** Each Infantry unit represents a platoon of approximately 30 men (and in the case of Anti-Tank units; three to five guns). All units (including Machinegun, Anti-Tank, Observation and Construction units) which are not classified as Armor or Artillery units are considered Infantry units. However, Observation/Construction units are *not* Combat units. All Infantry units are on  $\frac{1}{2}$ " pieces except Anti-Tank units which are on  $\frac{3}{8}$ " pieces.



**4.24 ORGANIZATION:** Unit types and abbreviations are listed below. In addition to their historical relevance, they also define the unit's abilities during play. Whenever three Infantry platoons of the same Company (i.e., three Infantry units with identical Organization markings) attack together, they are eligible for a combined AV bonus (8.351). Units do not have to have identical strengths to be part of the same Organization; e.g., any three of the four 3/1MG units may combine for the Combined Company bonus even though two of them are 4-4-5 MG units and two are 2-4-5 Infantry units.

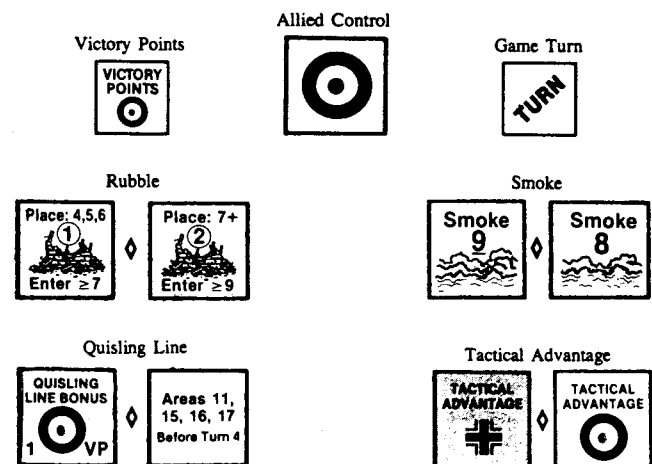
**4.241 INFANTRY UNIT TYPE:** The following symbols found on the units define the type of Infantry unit depicted.



**4.242 ABBREVIATIONS:** The following abbreviations are used to identify various units. They play no role in the game beyond their historical relevance.

NZ	New Zealand	Ind	Indian
Raj	Rajputana Rifle	Div	Division
Ken	Kensingtons	F	Field Company
MG	Machinegun	Bufs	The Buffs
Eng	Engineer	Gur	Gurkha Rifles
Rec	Reconnaissance	Maori	New Zealand Maori
A/T	Anti-Tank	Esx	Essex
Pz Gr	Panzer Grenadier	Kents	Royal West Kents
Reg	Regiment	Para	Parachute
MATAF Mediterranean Allied Tactical Air Force			

**4.3 MARKERS:** The other playing pieces are called Markers and are provided as playing aids. They are identified as follows:



## 5. PREPARE FOR PLAY

**5.1 GAME TURN:** The Game Turn marker is placed on the Turn 1 space of the Turn Track and the Victory Point marker is placed on the 0 space of the Victory Point Track.

**5.2 ARTILLERY:** The German and Allied starting Artillery units are placed face down in the Artillery boxes of their respective sides of the Strategic Movement Chart.

**5.3 GERMAN UNITS:** The German player sets up his pieces by sorting his units according to the coded setup circle found on the white side of his units. Those units with colored dots are setup at the start of the game on the mapboard. Those with a number in the circle will arrive during that Game Turn as reinforcements and should be sorted and placed on the German Reinforcement Chart. The German player may then place up to four German units (Uncommitted side up) in each Area having an Area Designation circular field of the same color as the circle on their unit's white side. [EXCEPTION: Armor/Anti-Tank units may not set up in Area 20 which is surrounded by red boundary lines.]

**5.4 ALLIED UNITS:** No Allied units start the game setup on the mapboard. Sort Allied units by the circled number on their white side and place them in their respective sections of the Allied Reinforcement Chart.

**5.5 RUBBLE:** Make a dr for each Area on the *Cassino town insert map (Areas 1-22)* except Areas 9 and 20, and add the TEM for that Area. On a final dr of  $\geq 7$ , place a Rubble 2 marker in the Area. On a final dr of 4-6, place a Rubble 1 marker in the Area. On a final dr of 2 or 3, place no Rubble marker. In addition, place a Rubble 2 marker in Area 66 and a Rubble 1 marker in Zone E.

**5.6 INITIAL GERMAN CASUALTIES:** Each occupied Area in the *Cassino town insert map* must now check for casualties caused by the pre-game bombardment. Make a dr for every two (or fraction thereof) German units in the Area and subtract the TEM of that Area from the dr/DR. The final dr/DR in each occupied Area is the *minimum* number of Casualty Points that must be inflicted on German units in that Area prior to the start of play (8.354). [EXCEPTION: During setup, units are not retreated from an Area to satisfy Casualty Point losses, but are instead flipped over (at a cost of one Casualty Point apiece) so their Committed side is face up. Resolve these initial German casualties one Area at a time in the order of their Area Designation Number.

The initial placement is now completed and the game is ready to begin. Consult the Sequence of Play and begin the first Game Turn.

## 6. SEQUENCE OF PLAY

**6.1 REINFORCEMENT PHASE:** Both players consult the Turn Record Chart and place any appropriate reinforcements scheduled to arrive during this Game Turn in their respective Zones on the Strategic Movement Chart/note any Allied units due for Withdrawal to Reserve status (18).

**6.2 MOVEMENT/FIRE PHASE:** The players alternate "Movement" or "Fire" impulses (the player currently possessing the Tactical Advantage proceeding first) until both sides have "Passed" consecutively (8.15). Remove all Smoke markers in play at the end of the Phase.

**6.3 CLOSE COMBAT PHASE:** Both players resolve Close Combat one Area at a time in each Area occupied by units of both sides (9).

**6.4 VICTORY POINT DETERMINATION PHASE:** An Allied Control marker is placed in each Victory Point Area newly controlled by the Allied player this turn. Remove the Allied control marker from any Victory Point Area newly controlled by the German player this turn. Add the value of any Victory Point Area newly controlled by the Allied player this turn to the total displayed on the Victory Point Track. Subtract the value of any Victory Point Area newly controlled by the German player this turn from the total displayed on the Victory Point Track.

**6.5 END OF TURN:** Advance the Turn marker one space to the right on the Turn Record Chart and repeat steps 6.1-6.5 until the end of turn 9. If, at the end of turn 9, the Victory Point Track indicates a Draw result, the Allied player may choose whether to end the game with a tie or continue until Turn 15 in an attempt to win (11.4).

## 7. OCCUPATION LIMITS

**7.1 AREA:** Each player may have a maximum of ten Infantry and three Armor units plus one additional Observation unit 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/retreat in an over-occupied Area.

**7.2 ZONE:** Any number of units regardless of type may occupy a perimeter Zone. However, German units may not enter Zones A, B, C, D, E, or F.

**7.3 VIOLATION:** If, at the end of any impulse, a player has more units occupying an Area than allowed in 7.1, that player must eliminate enough units of his choice from that Area to bring the total back to the maximum allowed.

## 8. MOVEMENT/FIRE PHASE

**8.1 IMPULSES:** 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., Allied player impulse, German player impulse, Allied player impulse, etc) until the end of the Movement/Fire Phase.

**8.11 MOVEMENT OR FIRE:** During a friendly impulse, a player may either move or fire any number of Uncommitted units currently occupying a single common Area/Zone [EXCEPTION: Maximum Attack; 8.32]. He may move or fire as many or as few of the Uncommitted units in that Area/Zone as he wishes. A player cannot move and fire units in the same impulse. However, he may move or fire currently Uncommitted units in the same Area/Zone in a later impulse of that same Movement/Fire Phase so long as Uncommitted units are still occupying it. A player may move units totally within their currently occupied Area as a means of changing an Uncommitted unit to a Committed unit during his Movement Phase.

**8.12 MULTIPLE ATTACKS:** Units from a common Area that are to move or fire during the same impulse may do so into different Areas. Multiple attacks do not have to be pre-designated; the attacker can await the result of the first attack before announcing a second attack on another Area in the same impulse by other units of the same Group. No Area/Zone may be attacked more than once in the same impulse.

**EXAMPLE:** Assume the Allied 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 impulse.



**8.13 COMMITMENT:** Only Uncommitted units (those with their colored side face up) may move or fire during an impulse. Once a unit moves or fires, that unit is flipped to its white side and becomes a Committed unit. This process allows a unit to move or fire only once [EXCEPTION: Retreats; 8.355] during a Movement/Fire Phase.

**8.14 PASS:** A player must declare a Pass impulse if all his units are Committed or he does not wish to fire or move any of his units during that impulse.

**8.15 END OF PHASE:** Players alternate moving or firing a Group of units until both players Pass consecutively, at which time the Movement/Fire Phase is over [EXCEPTION: see Tactical Advantage: 8.43].

**8.16 REACTION TIME:** Due to the number of possible impulses, playing time can become excessive if players are allowed to ponder their options after every impulse. Consequently, once you have become familiar with the game, it is recommended that players adhere to a strict 60 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.

**8.17 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/attack to redo that 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 impulse or Close Combat dr.

**8.2 MOVEMENT:** If a unit is to move during an impulse, that unit may only move into any adjacent Area/Zone that has a common boundary or a connecting arrow (e.g., Areas 11 and 33). This requires the expenditure of a certain number of Movement Factors (hereafter referred to as MF) during that Game Turn. The unit may continue to move into adjacent Areas/Zones until it lacks sufficient MF to do so or the unit enters an Area 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. Nor do all moving units during an impulse have to move simultaneously; a player can observe the movement of one or more units in a Group through one or more Areas/Zones before committing other units from that same Group to move to the same or other Areas/Zones. However, this does not mean that each moving unit must finish its move before another begins; a player may move numerous units into the same Area and make any required Rubble Entrance DR for all of them before deciding whether to continue on with one or more of them.

**8.21 EXIT OF ENEMY-OCCUPIED AREA:** All non-Armored units starting their impulse already in an enemy-occupied Area may only move one Area/Zone during that impulse and any 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 Movement/Fire Phase provided they do not move directly from an Area containing enemy Armor/Anti-Tank units into an Area containing enemy Armor/Anti-Tank units, 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 MF to continue movement.

**8.22 ARMOR/ANTI-TANK MOVEMENT NA:** Armor/Anti-Tank units may only enter Areas/Zones by crossing white borders or borders connected by a white arrow. All other Infantry units may cross borders/arrows regardless of color.

**8.23 MF COSTS:** Each Area moved into costs the following number of MF:

- A. 1 MF to enter any Area not occupied by an enemy Combat unit or adjacent to an enemy Machinegun unit.
- B. 2 MF to enter any Area adjacent to an enemy Machinegun unit.
- C. 3 MF to enter any Area containing any non-Machinegun enemy Combat unit.
- D. 4 MF to enter any Area containing an enemy Machinegun unit.

The special extra MF costs caused by enemy Machinegun units are not applicable during Night conditions. Such costs are not additive; i.e., it costs three MF—not five MF—to enter an Area containing an enemy Combat unit which is also adjacent to an Area containing an enemy Machinegun unit.



**8.24 NONCOMBAT UNITS:** Observation and Construction units (which are not Combat units) do not affect movement costs or retreat priorities of enemy units in any way.

**8.3 FIRE:** If a unit is to fire during an impulse, that unit may direct its fire at any Group of enemy units which is occupying the same or an adjacent Area [EXCEPTION: adjacent Armor units; 12.1].

**8.31 FRIENDLY UNITS:** 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. Units in different Areas may never combine to form one attack.

**8.32 MAXIMUM ATTACK:** 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 each defending Area may be the subject of only one fire attack per impulse and no more than six Infantry units (which may or may not include Machinegun units) plus two additional Machinegun units, plus three Armor units may fire into that Area during that impulse. This remains true even if the attackers are firing within their own Area.

**8.33 FIRE DIRECTED AT AN AREA:** Fire directed at an Area affects all vulnerable enemy units occupying that Area which are of a common "Group type" (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 the defending Area.

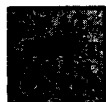
**8.331 GROUP TYPES:** There are two possible Group types, although both types might not be present in all Areas at all times. The Groups are:



**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 Movement/Fire Phase.



**8.34 ARMOR VULNERABILITY:** Infantry units [EXCEPTION: Anti-Tank units] may not attack Armor units in an adjacent Area. Therefore, Armor units are not considered when determining the Defense Value for an Area against an Infantry attack from outside that Area, or used to satisfy the Casualty Points inflicted on that Area when attacked solely by non-Anti-Tank Infantry units from an adjacent Area. Armor of an attacked Group is always vulnerable to Artillery fire.

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

- A. +? a DR;
- B. +1 for each additional firing unit beyond the first;
- C. +1 if three of the firing Infantry units have the same "Organization" (see 4.24). This modification can only be applied once per attack DR. [It is recommended that players move intact companies together as a three-unit stack as long as they remain in the same Area/Zone to aid in recognition of the availability of this bonus.]

**8.352 DV:** The Defense Value (hereafter referred to as DV) is equal to the lowest vulnerable (see 12.2) face up Defense Factor of the Group being fired on plus:

- A. +? a DR;
- B. +1 if the firing unit(s) is in an adjacent Area (or the same Zone) [not applicable to Artillery attacks]
- C. +? (the TEM of the defender's Area/Zone);
- D. +1 if the defending unit occupies an Area at a higher elevation level than the firing unit (not applicable to Artillery attacks). The highest elevation level of each Area for this purpose is listed as a one-digit exponent of the Area Designation Number. This exponent is used to determine the relative elevation differences of adjacent Areas even if an Area contains a higher listed point.
- E. +1 if the Attacker is firing into/from an Area/Zone containing Smoke or during Night.

**8.353 RESOLUTION:** The fire attack is resolved as follows:

If the AV is  $\leq$  the DV there is no effect.

If the AV is  $>$  the DV the difference between the AV and DV is the minimum number of Casualty Points that must be removed from that Area/Zone by the defending player.

**8.354 CASUALTY POINTS:** To satisfy his losses the defending player may remove Casualty Points in either or both of the following ways:

A. Each combat unit retreated out of the target Area/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 the number of Casualty Points listed on its Committed side in Roman Numerals; i.e.:

- 4 (IV) Casualty Points for an Armor unit;
- 3 (III) Casualty Points for an Infantry unit other than a MG, Observation, or Construction unit;
- 2 (II) Casualty Points for a Machinegun unit;
- 1 (I) Casualty Point for an Observation or Construction unit.

**8.3541 LOSS FULFILLMENT:** 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 part of the attacked Group type but could not be used to satisfy Casualty Point losses (even if eliminated by failing a resulting Rubble Entrance DR). All units which participated in the retreat become Committed at the end of the retreat.

**8.355 RETREATS:** Any unit called upon to retreat must move to an adjacent Area not containing enemy Infantry or a connecting Zone (see 8.3551G for Armor Exception). 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/Zone moved into. If a unit cannot fulfill its retreat because of opposing forces blocking all possible retreat routes, the player must take the elimination method to fulfill his Casualty Point losses. Friendly units in an Area do not negate the presence of enemy units in that same Area for purposes of movement cost/blocking retreats.

**8.3551 RETREAT PRIORITY:** If there is more than one Area/Zone open to retreat, the retreating player must choose the one retreated to based on the following order of priority:

- A. Area not adjacent to an Area containing an enemy Combat unit;
- B. Zone not occupied by enemy Combat unit;
- C. Area not in or adjacent to the enemy-occupied Area which caused the retreat [Areas containing an Observation 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 Combat unit;
- E. 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.];
- F. Area containing enemy Armor but no enemy Infantry (not allowed to retreating Armor units);
- G. Area containing enemy Infantry [Only Armor units may use this option and only if Area does not contain enemy Anti-Tank Gun or Armor units; 12.5].

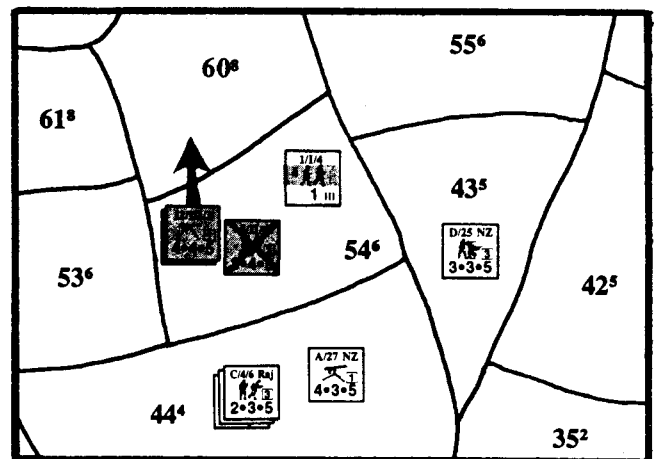
**EXCEPTION:** Armor (or Anti-Tank) units never retreat across red boundary lines/arrows, and if forced to retreat into Rubble must pass their Rubble Entrance DR (13.13) or be eliminated as a four (or three) Casualty Point loss. Regardless of the Retreat Priority, a unit can never retreat into the Area from which it was attacked.

**8.3552 UNISON:** All units retreating due to the same fire impulse must retreat as a Group, to the same Area/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.

**8.3553 OPTION:** Groups receiving fire may retreat in whole or in part at their option even if that attack does not cause a Casualty Point.

**8.3554 SUBSEQUENT ATTACKS:** Units which have already retreated during a Game Turn may still be fired on and retreated again (or eliminated) in their new Area/Zone in a subsequent attack of that Game Turn.

**8.3555 NON-COMBAT UNITS:** Observation and Construction units may only contribute to Casualty Point losses by their elimination. These units may still retreat with other units of the same Group type (i.e., common side face up), but in so doing contribute nothing to Casualty Point fulfillment.



**EXAMPLE:** It is a day turn and the Allied player chooses to attack the German units in Area 54 with his four units in Area 44. He further chooses to fire at the three Uncommitted units rather than the one Committed unit. His AV for the attack is 4 (Machinegun Attack Factor) + 3 (three additional attacking units) + 1 (Combined Company bonus) + 8 (DR) for a total of 16. The DV of the defenders is 4 (Defense Factor of weakest defending unit) + 1 (Area 54's TEM) + 1 (attacked from adjacent Area in day turn) + 1 (attacking higher elevation level) + 4 (DR) for a total of 11. The defender has suffered five Casualty Points (AV 16 - DV 11 = 5). The German player eliminates the 3-4-5 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 defending Infantry units and left one Uncommitted unit in Area 54. The defenders have to retreat into Area 60 rather than 53 or 55 due to Allied units in adjacent Areas.

**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 Allied 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 factors as changes in morale, position, weather, surprise, leadership, or fate. One of the players is always considered to have the Tactical Advantage as symbolized by placement of the Tactical Advantage marker with the controlling side's symbol face side up. The Allied player always starts the game with the Tactical Advantage. Whenever a player uses the Tactical Advantage, he forfeits possession of it to his opponent.

**8.41 COMBAT:** The player controlling the Tactical Advantage can use it to force a reroll of any one combat resolution (either 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 make a new DR. Although the player with the Tactical Advantage can force a new dr/DR, he cannot guarantee that the subsequent reroll will generate a more favorable result. 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 dr/DR which resulted in his gaining the Tactical Advantage.

**8.42 NIGHT MOVE DECLARATION:** The player with the Tactical Advantage may use it to declare Night conditions for the remainder of that Game Turn at the start of any friendly Movement/Fire impulse. The declaration alone does not constitute an impulse.

**8.43 GAME TURN CONTINUATION:** 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.

**8.44 INITIATIVE:** Whoever controls the Tactical Advantage at the start of each Game Turn has the first impulse of that Game Turn.

**8.45 CLOSE COMBAT:** Whoever controls the Tactical Advantage chooses the order in which Areas containing Close Combat situations is to be resolved. The player controlling the Tactical Advantage at the start of the Close Combat Phase in each Area designates his attacks after seeing the results of his opponent's Close Combat attacks in that Area.

## 9. CLOSE COMBAT

**9.1 SETUP:** At the start of the Close Combat Phase, all units are flipped to their Uncommitted side.

**9.2 SIMULTANEITY:** The only combat allowed during this phase is in Areas already containing units of both sides. Close Combat is not allowed in Zones. Both players are allowed to attack during this phase with combat being resolved one Area at a time. A unit may attack/be attacked only once during this phase. Although attacks are resolved one at a time, the results are considered simultaneous such that units eliminated during Close Combat still have a chance to attack in that Close Combat Phase before being removed from the game.



**9.3 PREDESIGNATION:** All Close Combat attacks must be predesignated (i.e., targets cannot be switched after seeing the results of previous attacks in that Area) although the player controlling the Tactical Advantage may observe the results of his opponent's Close Combat attacks in that Area before predesignating his own attacks.

**9.4 PAIRING OFF:** The player without the Tactical Advantage lines up all his Combat units in the contested Area and places each adjacent to the specific opposing unit he wishes it to attack. After he has attacked, the player with the Tactical Advantage rearranges his units in a like manner, to attack the enemy units of his choice. Units that were eliminated in Close Combat 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 their attacks, all eliminated units are removed from the game.

**9.5 NON-COMBAT UNITS:** Observation and Construction units do not take part in Close Combat in any way. If at the end of any Close Combat Phase (and only at the end of this phase), any Observation/Con-

struction units are the only friendly units occupying an Area containing enemy Combat units, those non-Combat units are eliminated.

**9.6 SCREENING:** Each unit can be attacked only once per Close Combat Phase but may be attacked by any number of enemy units during that single 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 Infantry combat units present are also attacked; the Infantry units would not have to be eliminated; just attacked. A player may also screen one or more of his Anti-Tank/Machinegun units of his choice from Close Combat attack provided he has at least one other Infantry Combat unit in the Area for each attacking enemy unit. If a player cannot screen all of his Armor, Anti-Tank, Machinegun 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 attack by Armor/Anti-Tank units. Screened units may still attack in Close Combat, but must attack in conjunction with at least one screening unit in a combined attack. They may not attack separately.

**EXAMPLE:** Assume both sides have three Infantry and a Machinegun unit confronting each other in Close Combat. If the player without the Tactical Advantage elects to screen his Machinegun unit, he hasn't enough units to attack the opposing Machinegun unit if it is screened. If he doesn't screen it, then he has one extra unit with which to attack the opposing Machinegun, regardless of what the player with the Tactical Advantage opts to do.

**9.7 RESOLUTION:** Close Combat attacks are resolved by making a dr for each attack. A final dr of "6" eliminates the defending unit. The Close Combat dr may be modified by one or both of the following ways:

**A. COMBINED ATTACK:** +1 is added to the dr for each Combat unit aiding the main attacking unit.

**B. ARMOR/CCF VARIATION:** If the *Close Combat Factor* (hereafter referred to as *CCF*) of any one attacking unit is > the defending unit's *CCF*, the difference is added to the attacker's dr. However, if the defending unit's *CCF* is > the attacker's *CCF* no additional advantage accrues to the defender. When determining this *drm* for attacks against defending Armor units, the *Attack Factor* of attacking Armor/Anti-Tank units—not the *CCF*—of the attacking unit is compared with the *Defense Factor*—not the *CCF*—of the defending Armor unit.

**EXAMPLE:** The German player has four 3-4-5 Infantry units, an Observer, an Anti-Tank unit, and a Machinegun unit in the same Area with three Allied Infantry and two Sherman Armor units during the Close Combat Phase. The German—with one more Combat Infantry unit than the Allies—may elect to screen either his Anti-Tank Gun or the Machinegun unit from attack by putting the other one in the line with his 3-4-5 Infantry units. The German decides to screen his Anti-Tank unit so that it cannot be attacked, and when it attacks—it must do so in combination with one of its screening units. Because the Allied player must attack all non-screened units in the Area before making a Combined attack, he is unable to attack any German unit with more than one unit. Even if the Allied player had more Infantry than the German player, the German Anti-Tank unit could not have been prevented from attacking one of the Allied Armor units with a +3 *drm*.

## 10. STRATEGIC MOVEMENT ZONES

**10.1 MOVEMENT:** Strategic Movement is performed via the 11 perimeter Zones on the Strategic Movement Chart. Each perimeter Zone is connected via arrows to other perimeter Zones and to certain map Areas. Movement is possible in either direction but only between Areas/Zones with connecting arrows.

**10.2 RETREATS:** 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 OCCUPATION LIMITS:** An unlimited number of units may occupy a perimeter Zone.

**10.4 MF COSTS:** Each Zone costs two MF to enter unless occupied by enemy Combat units. Zones occupied by one or two enemy Combat units cost three MF to enter. If a Zone contains three to five enemy Combat units it costs four MF to enter, and if a Zone contains six or more enemy Combat units it costs five MF to enter. Units may enter and exit Zones during an impulse regardless of the presence of enemy units, limited only by the amount of MF available. The cost of leaving a Zone to enter an adjacent Area is based solely on the cost for entering that Area (8.23). All MF costs for entering Zones are reduced by one MF during Night conditions.

**10.41** 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.

**10.42** A unit may directly enter an enemy-occupied Area/Zone from a connected Zone (provided it has sufficient MF) even if both the Area/Zones are occupied by enemy units.



**10.5 ARTILLERY:** No fire attack (including spotting for Artillery) is allowed from any Zone into any adjacent Area/Zone and vice versa. Fire attacks are allowed only within the Zone and are conducted normally as if the participants were all occupants of adjacent Areas. This allows Artillery fire to be called into the same Zone containing the spotting observation unit.

**10.6 TEM:** The TEM of all Zones is +1.

**10.7 ALLIED ZONES:** The Germans may never enter Zones A, B, C, D, E, or F.

## 11. VICTORY POINT DETERMINATION PHASE

**11.1 SUMMARY:** During this phase the Victory Point marker is adjusted to show the current Allied Victory Point total. Only the Allied player receives Victory Points during the game.



**11.2 SETUP:** At the beginning of the game all Victory Point Areas are controlled by the Germans. An Allied Control marker is placed in each Victory Point Area devoid of

a Control marker at the beginning of any Victory Point Determination Phase in which the Allied player is the sole occupant of that Area. If at the beginning of a subsequent Victory Point Determination Phase, the German player becomes the sole occupant once again, the Control marker is removed. Being the last side to have occupied a Victory Point Area is not sufficient to place/remove a Control marker. A Control marker is placed/removed only when the opposing player is the sole occupant of the Area during the Victory Point Determination Phase. Non-Combat units are not considered sufficient occupation to change Control of an Area. An Area can never contain more than one Control marker.



**11.3 SCORING:** After placement/removal of any Control marker, the Victory Point marker is adjusted as necessary on the Victory Point Track by adding Allied Victory Points or subtracting German Victory Points.

**11.4 GAME DURATION:** The position of the Victory Point marker at the end of Game Turn 9 determines if there is a winner at this time. The last victory block passed through on the Victory Point Track by the Victory Point marker indicates the winner (or a Draw); e.g., if the marker were on space 14 of the Victory Point Track at the end of Game Turn 9, the German player would have won. If at the end of Game Turn 9, the Victory Point Track indicates a Draw result, the game either ends in a tie or is continued for another six Game Turns. The Allied player makes the decision to accept a tie or to continue the game. However, if he elects to continue the game and doesn't have at least 22 Victory Points at game end he loses. If opting to continue the game, both players flip their Scenario OB cards to the side containing "The Final Days" scenario. The setup instructions and special rules for that scenario are ignored, but the reinforcements listed for that scenario are applicable to the continued game.



**11.5 QUISLING LINE BONUS:** The four Victory Point Areas printed in Orange (Areas 15, 16, 17, 11) are also Quisling Line Areas. If at the end of Game Turn 1, 2, or 3 the

Allied player has more Combat units than the German occupying a Quisling Line Area, he places a Quisling Line marker in that Area and receives one Victory Point for each such Quisling Line marker placed. The Quisling Line bonus can be earned only once per Area per game, and cannot be lost once earned.

## 12. ARMOR



**12.1 VULNERABILITY:** Armor units can be attacked from an adjacent Area only by Anti-Tank/Armor units, but are always vulnerable to Artillery attacks vs their Group. Armor units can be attacked from the same Area they occupy by any Combat unit.

**12.2 INVULNERABILITY:** Armor units in the same Group (i.e., common side face up) as Infantry units attacked from an adjacent Area by non-Anti-Tank/non-Armor units (not Artillery) must ignore any attack result during the Movement/Fire 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 been attacked. The Attack Factor and Defense Factor of Armor units (as well as the Attack Factor of Anti-Tank units) is circled as a reminder of their special capabilities.



**12.3 ANTI-TANK/ARMOR ATTACKS:** Armor units of the same Group type (i.e., common side face up) as Infantry units attacked from an adjacent Area by Anti-Tank/Armor units, which also include Infantry units, are vulnerable to fire normally. However, anytime the AV of an attack is based *only* on Anti-Tank/Armor units, the attacker *may* specify (prior to the attack resolution) that any resulting Casualty Points must be fulfilled first and to the maximum extent by any defending Armor units in the target Group. Only after all applicable Armor units in the target Group are eliminated are any excess Casualty Points fulfilled by Infantry units in the same target Group. When making such an attack, the base of the DV of the attacked Group is equal to the Defense Factor of a specific Armor unit in that Group (before modification by 8.352A, B, C, & D) pre-designated by the attacker as his main target. 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 (8.352) of the Group. This unit must 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, fire impulses vs Armor in the same Area, or Artillery attacks vs Armor.

**12.4 CLOSE COMBAT:** During Close Combat all non-screened Combat Infantry units in the same Area as Armor units must be attacked before any non-Anti-Tank/non-Armor unit may attack an Armor unit (see 9.6).

**12.5 RETREATS:** Armor units are the only units which may retreat into an Area containing an enemy Combat Infantry unit, although they may do so only if they have no other choice and only if the Area does not contain enemy Armor/Anti-Tank units. The presence of Rubble does not change retreat priorities (8.3551) although it may cause a retreating Armor unit to be eliminated instead (13.13).

## 13. RUBBLE

**13.1 EFFECT:** A Rubble marker in an Area/Zone can prevent the movement/retreat of Armor/Anti-Tank units into that Area/Zone. Other units are not affected in any way by Rubble.



**13.11 RUBBLE ENTRANCE DR:** There are two types of Rubble markers; i.e., Rubble 1 and Rubble 2. To enter an Area/Zone containing a Rubble 1 marker, an Armor/Anti-Tank unit must make a Rubble Entrance DR  $\geq 7$ . To enter an Area/Zone containing a Rubble 2 marker, an Armor/Anti-Tank unit must make a Rubble Entrance DR  $\geq 9$ . An Armor unit may move through numerous Areas/Zone containing Rubble provided it has sufficient MF and passes a Rubble Entrance DR in each Rubbled Area/Zone entered.

**13.12 FAILURE:** Failure of a Rubble Entrance DR flips the Armor/Anti-Tank unit to its Committed side and forces it to remain in its currently occupied Area/Zone. [EXCEPTION: Should failure of a Rubble Entrance DR leave an Armor unit in excess of an Area's occupation limits (7.1), that moving unit must retrace its route to its last legally-occupied Area/Zone (although it would not have to pass further Rubble Entrance DR)]. It may not perform any further action (other than possibly a subsequent retreat) during that Movement/Fire Phase.

**13.13 RETREAT:** An Armor/Anti-Tank unit retreating into an Area/Zone containing a Rubble marker must pass the required Rubble Entrance DR. Failure of the required Rubble Entrance DR during a retreat results in elimination. The defender may resolve such retreat attempts before deciding how many units he will eliminate to satisfy Casualty Point losses. However, once a retreat attempt is resolved, that unit must retreat; it cannot return as a result of the subsequent failure of another Armor/Anti-Tank unit's retreat attempt fulfilling the Casualty Point loss requirement.

**EXAMPLE:** Three Uncommitted Allied Armor units in Area 17 are attacked resulting in three Casualty Points. The Allied player decides to try to retreat all three Armor units rather than eliminate one. He retreats the first Armor unit into Area 16 which contains a Rubble 1 marker and makes a '7' Rubble Entrance DR allowing it to enter Area 16 as a Committed unit. One Casualty Point of the three Casualty Point loss has been fulfilled. The second Armor unit makes a '6' Rubble Entrance DR and is unable to enter Area 16—thus being eliminated and causing four Casualty Points. Although the five Casualty Points now paid exceed the three Casualty Point loss required, the Allied player may not retract the retreat of the first armored unit, although he may cancel his planned retreat of the third Armor unit.

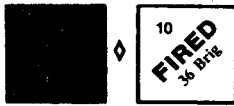
**13.2 REMOVAL:** Rubble markers may only be removed during play by Construction units. If an Uncommitted Construction unit occupies a Rubbled Area/Zone, the Allied player may use an impulse to flip

that Construction unit to its Committed side and remove the Rubble 1 marker in that Area/Zone (or flip a Rubble 2 marker to a Rubble 1 marker). Fire or movement cannot be performed in the same impulse that Rubble is removed.

**13.3 CONSTRUCTION UNITS:** Construction units have no Attack Factor and cannot attack or take part in Close Combat.

## 14. ARTILLERY

**14.1 OVERVIEW:** Artillery units represent the fire of offboard and on-board indirect artillery fire. Each Artillery unit is placed in the respective player's Artillery box on the Strategic Movement Chart in the Uncommitted mode until used.



**14.2 USE:** Each player may place (and attack with) one Artillery unit during any friendly Fire impulse provided he has Uncommitted Artillery and the required Uncommitted

Observation unit remaining. This action replaces a normal Movement or Fire impulse on the mapboard; no other unit (including another Artillery unit) may fire during the same impulse. An Artillery unit may only be used once per Game Turn. After an Artillery attack, return the unit 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 RANGE:** An Artillery unit can only be used in any Area adjacent to an Area occupied by the friendly, Uncommitted Observation unit capable of calling in that Artillery [EXCEPTION: Castle Hill and Monte Cassino]. The Area attacked may not be presently occupied by friendly units of any kind [EXCEPTION: Smoke placement; 16.1]. Placement of the Artillery unit also constitutes an action by the Observation unit and it consequently becomes Committed also.

**14.31 MONTE CASSINO:** Observers occupying Monte Cassino Abbey (Area 66) may place (and attack with) their Artillery unit in any Area on the mapboard that is not occupied by friendly units or in any Zone.

**14.32 CASTLE HILL:** Observers occupying Castle Hill (Area 9) may place (and attack with) their Artillery unit in any Area that is not occupied by friendly units and is within one or two Areas of Castle Hill; e.g., Areas 42 and 17 could be attacked by Artillery directed by an Observer in Area 9, but not Areas 3 or 20.

**14.33 RECIPROCITY:** The converse of rules 14.31 & .32 is also true; i.e., any Uncommitted Observer can direct fire vs Monte Cassino, and any Uncommitted Observer within two Areas of Castle Hill can direct fire vs Area 9.



**14.34 OBSERVATION UNITS:** Observation units have no Attack Factor and cannot attack or take part in Close Combat. Observation units which are eliminated, re-enter the game as reinforcements (17) on the Game Turn following their elimination [EXCEPTION: Observation units eliminated during setup (5.6) are not returned until Game Turn 2]. Replaced German Observation units are placed in the German player's choice of Zones G, H, I, J, or K. Replaced Allied Observation units are placed in the Allied player's choice of Zones A, B, C, D, E, or F.

**14.4 MATAF:** The Allied M.A.T.A.F. Artillery unit actually represents air strikes and does not require a qualifying Observer in order to attack. It may attack any Area (or Zone) not containing friendly units in the same Area. The MATAF unit has no Night Attack Factor and therefore cannot be used during Night conditions (including an Area/Zone containing Smoke). The MATAF unit is withdrawn from play before turn 7.

**14.5 RESOLUTION:** An attack by an Artillery unit is handled similarly to a normal fire attack (8.3). The attacker designates the Group type he is attacking, makes a DR, and adds the printed Attack Factor of the Artillery unit. There are no modifiers to the Attack Factor other than the attack DR. The TEM of the attacked Area/Zone and a DR is added to the Defense Factor of the weakest defending unit.

**14.6 NIGHT STRENGTH:** There are two different Attack Factors printed on an Artillery unit. The higher Attack Factor is used during daylight conditions and the parenthesized Attack Factor during Night conditions.

**14.7 ZONES:** Artillery fire into perimeter Zones may only be placed by a qualifying Observation unit presently located in the Zone to be attacked or in Area 66. Such fire has no effect on friendly units in the same Zone.

## 15. NIGHT

**15.1 DECLARATION:** The first Game Turn cannot be a Night turn. On Turn 2 and subsequent turns, however, the player controlling the Tactical Advantage (8.42) can trade it for the declaration of a Night turn at the start of any Movement/Fire impulse. Such declaration does not prevent other movement or fire during that impulse. Once declared, Night conditions exist until the end of the current Game Turn. A Night turn cannot be declared in a Game Turn immediately following a preceding Night turn.

**15.2 ARTILLERY:** The reduced (parenthesized) Attack Factor of Artillery is used during Night conditions (14.6). The MATAF Artillery unit cannot be used in Night conditions.

**15.3 MOVEMENT:** During Night conditions, the special MF costs of enemy Machinegun units are ignored (8.23) and the MF expenditure for entry of a Zone is one less than normal.

**15.4 FIRE DRM:** The DV modifier for fire attacks is increased by +1 during Night conditions [Not Applicable to Artillery].

## 16. SMOKE



**16.1 PLACEMENT:** Each player has a limited supply of Smoke markers which only he can use. The German player is limited to the two gray Smoke markers; the Allied player is limited to the eight white Smoke markers. Place each player's allotment of Smoke markers in his respective Artillery box. Each Smoke marker may be placed (including failed placement attempts) a maximum of once per game. Smoke is placed in an Area/Zone by Artillery units in lieu of a normal Artillery attack on that Area/Zone. To effectively place Smoke, the placing player must make a Smoke Placement DR  $\geq$  the Smoke Placement Number of that unit (5 for Allied Division/Corps level units, 6 for German Divisional and Allied Brigade units, 7 for German Regimental units). If the Smoke Placement DR  $<$  the Smoke Placement Number of that unit, no Smoke marker is placed. Regardless of the outcome of the Smoke Placement DR, the Artillery unit is flipped to its Committed (Fired) side and a Smoke marker is either placed in the Area/Zone or removed permanently from play. Unlike regular Artillery attacks, Smoke can be placed in an Area containing friendly units and can even be placed in the Area occupied by the Observation unit. All other Artillery rules apply except as amended herein.

**16.11 ELEVATION EFFECT:** There is a -2 DRM to the Smoke Placement DR if the target Area has an elevation level  $\geq$  1.

**16.12 MATAF:** The Allied air unit may not place Smoke markers or attack an Area/Zone containing one.

**16.2 EFFECT:** The placement of a Smoke marker in an Area/Zone creates Night conditions (15.2-.4) in that Area/Zone while that Smoke marker remains there. Smoke has no additional effect during Night turns. Multiple Smoke markers may be placed in an Area/Zone, but no additional effects are obtained.

**16.21 ARTILLERY:** Any Artillery attack resolved vs an Area/Zone containing a Smoke marker or directed by an Observer in such an Area/Zone must use its Night (parenthesized) Attack Factor.

**16.22 MOVEMENT:** Entrance of a Zone containing a Smoke marker costs one less MF than normal (to a minimum of one). Any Machinegun in an Area containing a Smoke marker is not considered adjacent to any other Area for enemy movement purposes.

**16.23 FIRE:** If either the attacking/defending unit is in an Area/Zone containing Smoke, the DV is increased by +1 (8.352E).

**16.3 DURATION:** An effectively placed Smoke marker remains in place until the end of the current Movement/Fire Phase or until the opposing player makes a fire attack resolution DR equal to the Smoke marker's Duration Number (whichever occurs first). The Smoke of Allied Division/Corps-level Artillery units have a Duration Number of 9; Allied Brigades have a Duration Number of 8. The German Divisional Artillery has a Smoke Duration Number of 8; German Regimental Artillery has a Smoke Duration Number of 7. For example, a single German fire attack resolution DR of 8 will immediately remove all Smoke markers with an 8 Duration Number currently in place, but does not prevent the Allied player from placing additional Smoke 8 markers from his remaining supply provided he has the necessary Uncommitted Artillery and qualifying Observation units with which to place them. The removal of a Smoke marker during a fire impulse does not decrease the DV of any Group during that fire impulse.

## 17. REINFORCEMENTS

**17.1 TURN OF ARRIVAL:** Reinforcements are new units that enter play as the game progresses. During the Reinforcement Phase of each Game Turn, both players consult the Turn Record Track. If a ♣ or ⊙ symbol appears, that side's reinforcements as noted on their respective OB Charts may be placed on the Strategic Movement Chart during that turn with their Uncommitted side face up.


**17.2 POINT OF ENTRY:** Units that have a choice of placement Zones may be placed in either/both Zones. However, all Infantry units of the same Company (having identical Organization) must enter in the same Zone.

**17.3 TURN 9:** The exact composition of the Allied reinforcements (if any) that arrive on Game Turn 9 are not known until the Reinforcement Phase of that turn. At the beginning of the Phase, the Allied player makes a dr and checks the number rolled against the dictates printed on the Allied Reinforcement chart.

## 18. ALLIED RESERVES

**18.1 WITHDRAWAL:** At the start of Game Turn 10, certain Allied Infantry units are withdrawn from the offensive for the duration of the game. Although these units remain in play, their offensive capabilities are severely curtailed. The 1/4 Essex, 1/6 Raj, 1/9 Gurkha, 24th, 25th, and 26th NZ Battalions go into reserve. Machinegun units of these withdrawn Battalions are not affected. The 6th NZ Brigade and 5th Indian Brigade Observation units are removed permanently from play. The units affected have a white "R" on their Uncommitted side and a black "R" on their Committed side.

**18.2 RESERVE STATUS:** Units in Reserve may not enter an enemy occupied Area/Zone, may not fire at Uncommitted units, may not be used to satisfy Casualty Point losses by the elimination method if other non-Reserve units which could possibly be affected by that attack remain in the same group unaffected (even if the Reserve unit's Defense Factor is the lowest in the Group; thus forming the basis for the Group's DV), and may not be used to screen other units in CC. However, all Reserve units in an Area must be the subject of a Close Combat attack before any other unit in that Area can be the subject of a Combined Close Combat attack.

 **18.3 MATAF WITHDRAWAL:** At the end of turn 6, the Allied MATAF Artillery unit is permanently removed from the game.

## 19. SPECIAL FIRST TURN RULES

**19.1** The following rules are in effect only during the first Game Turn.



**19.11 ARTILLERY:** No German Artillery attacks are allowed. All German Artillery units are turned Committed side face up before play begins.

**19.12 MOVEMENT:** All Allied units may ignore the special effects of German Machinegun units on movement (8.23B & D). No German units may enter an Area whose Designation Number is printed on a white circular field.



**19.13 TACTICAL ADVANTAGE:** The Allied player starts the game with the Tactical Advantage, but may not declare a Night turn during Turn 1.

## 20. SIDE DETERMINATION—OPTIONAL

This rule can be used to determine which side each player shall command and gives vent to any player's preferences regarding the relative chances of each side. This rule should not be used unless both players desire to play the same side.

**20.1** Both players simultaneously present a written, secret bid for command of the German forces. The bid takes the form of a number of Victory Points granted to the Allied opponent in exchange for command of the German 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 German forces. His opponent becomes the Allied player.



**20.2** A bid is paid for at the end of the 9th Game Turn by advancing the Victory Point marker along the Victory Point Track right or left the proper number of spaces in accordance



with the winning bid. For example, if the highest bid was -1 Victory Points, the Allied player would have to deduct one Victory Point from his total before deciding whether the game will continue or has ended. If, on the other hand, the highest bid was two Victory Points, the Allied player would have to add two Victory points to his total before deciding whether the game would continue or has ended.

**20.3 TIE BIDS:** If the written bid is a tie, sides are determined randomly by a die roll and the tied bid is awarded to the loser of the die roll.

## 21. ALTERNATE COMBAT RESOLUTION SYSTEM—OPTIONAL

**21.1 PRINCIPLE:** Players who feel the luck element is too strong, or who consider "card counting" a desirable skill rather than a predictable (and consequently objectionable) alternative to dice rolling may substitute cards for dice when resolving fire impulses if both players agree beforehand. Although this does not eliminate the luck element in the game, it does lessen it and insures that both players will have an "average" DR of 7 throughout the game. A dr/DR must still be used for Close Combat, initial setup, Rubble entry, and Smoke Placement. In addition, whenever a Smoke marker is in play, the use of cards to resolve fire impulses must be suspended until that Smoke marker is removed.

**21.2 THE DECK:** Four ordinary card decks are required; two each with the same reverse sides. Two special decks of 36 cards each are then made up; each containing one 2, two 3's, three 4's, four 5's, five 6's, six 7's, five 8's, four 9's, three 10's, two Jacks, and one Queen. The Jack is considered an 11 DR; the Queen equals a 12 DR. 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.

  **21.3 CHITS:** Players not wishing to construct their own card sets may substitute the two sets of 36 numbered pieces called chits included with 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 DR. 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.

**21.4 REDRAW:** Should a player inadvertently draw more than one card/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.

**21.5 FEINTS:** An allowable variation of the card/chit system placing even more emphasis on skill is to allow the players to knowingly (but secretly) choose which of their remaining cards/chits they will use in each fire impulse attack/defense. This version allows players the opportunity to control the strength of their attacks/defenses while attempting to feint the opponent into using his best resources at inopportune times.

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## DESIGNER'S NOTES

*THUNDER AT CASSINO* was designed, in part, because of many requests to wed the popular award-winning *STORM OVER ARNHEM* game system to a less one-sided situation. Consequently, the game shares many of the rationales, if not all of the actual rules, of its predecessor. Those familiar with the game system already will have to forgive me as I touch upon some of the same points mentioned in those earlier Designer's Notes.

As should be obvious, I designed the game with playability and appearance foremost in mind. The emphasis on playability should be given away by the absence of sophisticated charts and tables, but the stress on physical appearance may not be as obvious. As I searched for another subject, I not only looked for a battle that the *SOA* system could be adapted to, but I had to keep the physical appearance of the game always in mind as well. The commercial requirements of a mounted mapboard in the standard AH 22"x24" configuration limited the dimensions and scale of the battlefield to be covered. As it was, we had to reduce the size of my prototype map by a third and move the perimeter Zones to an offboard chart to keep the price within reason. Thus limited, the game had to be restricted to just one of the four battles for Cassino as the others taken together covered too much territory. Consequently, I chose the third battle which presented the most interesting situation with an assault on both the town and the hill above it. This required the use of two different scales; one for the block-to-block fighting encountered in the town, and a larger one for the greater ranges at which the fighting on the hilltop occurred. This decision was not entered into lightly as the absence of American units which took part in the earlier battles was considered a decided marketing weakness in the United States. Despite its lack of good "box-office" appeal in this country, the third battle was by far the most evenly matched and interesting of the four struggles for Cassino.

Many gamers have this thing about hexes. They tend to look down their noses at Area movement games. "If it hasn't got hexes, it can't possibly be realistic." Balderdash! A hex grid is nothing more than a common measure of area or range. If superimposed over a map without consideration for the consequences of the terrain it dissects, a case can easily be made that it is a less realistic format for the display of a battlefield than a carefully constructed Area movement map. In my game, the Areas are not haphazardly determined by a common grid. The terrain has been carefully studied to determine probable fields of fire and areas of exposure for the existing weaponry under the prevailing conditions. In the town insert map, the "areas of exposure" tend to correspond with the actual block outlines. If one were to move from Area 7 to Area 10 for example, you would have to cross a large street. To do so with any degree of assurance of actually getting to the other side would require time and finesse. This translates into MF in game terms. The presence of enemy units or machineguns complicates the matter further requiring more time—read MF—to get across that street safely.

The Areas outside the town map have a slightly different origin. Obstacles such as ravines and hill sides had to be considered. While these features would be considered impediments to movement in most games, they actually were the avenues of access and egress when moving on the hillside. Hillside Areas such as 44 and 52 were shaped in such a way that movement along the hillside is easier than going up the hill. The greater scale on the hillside Areas also allowed units to move faster than in the rubble-strewn town streets. This all contributes to the desired effect without burdening the player with rules to simulate the same thing on a hex grid and terrain chart.

Many players' first impression of movement in the game is that it is too fluid; the game takes on a sense of maneuver uncharacteristic of the battle with movements nearly the length of the board possible in the absence of opposition. However, if you stop to consider this movement against the context of the time and map scale, you'll soon realize that those galloping units are actually literally crawling across the map—making their moves under cover of darkness (with or without the declaration of an actual night turn), or through back alleys or out-of-sight ravines. Measured against the backdrop of 12 hour turns, those seemingly lightning moves of maneuver can actually be seen as the painful, cautious advances that they actually were. The use of alternating Impulses allows the players to act and react to each others moves in a more exciting manner and gives players the opportunity to move greater distances over the course of those 12 hour turns. A designer attempting to simulate this same battle on a hex grid might be tempted to use shorter turns and MF allowances with each side moving all of their forces a few inches at a time—an approach I find infinitely less interesting.

The perimeter Zones were my answer to the "edge of the world" phenomenon that plagues so many games. The physical edges of the

playing area should not be allowed to artificially anchor one's defense or prevent an advance unless the board design is predicated on sound rationale as to why movement in that direction was impractical. Although the battle was not fought in these outlying regions, reinforcements were moved through them. Their inclusion means that artificial blocking tactics become less effective and units are not eliminated for a lack of a rear to retreat to. The prohibition against German units in perimeter Zones A-F is based on the greater depth of the Allied defenses in this area as well as a need to prevent unrealistic German blocking tactics. Likewise, the limitation on German movement on turn 1 (as well as the more liberal Allied initial movement capabilities) is a reflection of the demoralizing effects of the battle's opening bombardment. German advances during the initial day would have been totally unrealistic, yet a good game tactic.

The core of each game turn, indeed the very heart of the system, lies within the alternating Impulses of 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 modern combat. The defender has the advantage in that the attacker must chance exposure to move into position. Command control, an inherent problem in urban fighting, is also reflected in the fragmentary commitment of small assault groups which rapidly develop into a series of small scale actions. Units greeted by fire will turn away from action in piecemeal fashion as they encounter casualties or stiff opposition. The abstracted time/fire encounters of the multi-impulse system model this well.

During the Close Combat Phase we see the crescendo of a full turn of intense M/F Impulses. Here ranged fire gives way to house-to-house combat and takes its toll on attacker and defender alike. Artillery cannot help either side once the attacker has mingled with the defender. Only by throwing in one unit after another can a block be cleared.

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 12 hours in a single game turn at this level of play. Although most of the game is expressed in terms of the normal daylight game turn, it is the occasional night turn on which the outcome of the game pivots. The rationale for the increased movement costs for entering an enemy-occupied Area or an Area adjacent to enemy machineguns should be obvious. In darkness, exposed areas can be crossed more safely and small groups can infiltrate between defensive positions. Smoke has a similar effect until a strong wind blows it away. The Allies used smoke extensively during the battle in an attempt to block the view of German observers in the Monastery, but this proved to be a two-edged sword as it allowed the Germans to move reinforcements down to the town. The Allies also found it difficult to maintain a good smoke screen on the hilltop due to the steep slope of the massif which made an even disposition of canisters difficult. Artillery, as well as normal fire attacks, are reduced in effectiveness at night due to the difficulties posed for observation at all but the closest ranges. Zone movement costs are also reduced to reflect the greater likelihood of large scale movements at night. The Germans, in particular, depended on night for the movement of men and material.

Aside from rubble and the ranged effects of Machineguns, it is the night turn treatment that most separates *THUNDER AT CASSINO* from its predecessor. In *STORM OVER ARNHEM* a night turn was scheduled every three turns and could not be avoided. The Germans routinely made their biggest assaults at night. In this game, night is assumed an inherent part of every 12 hour turn. It is only the special effects of a night turn that can be declared as part of a planned night offensive on which the entire game hinges. So potent is the effect of these "surprise" night attacks, that they are seldom repeated in the same game between experienced players. A veteran German player who has undergone a well conducted night attack would lose Heydrich himself before he gave back the Tactical Advantage and with it the opportunity for a second night attack. Consequently, most games see an Allied night attack declared on the second or third turn, and a German one on the 8th or 9th. Anything else is unusual, incompetent, or due to a cataclysmically devastating attack that simply must be reversed.

To assess the combat units in game terms, each was given four basic values. The AF was based largely on the number and type of weapons. The DF was based on morale, training, experience, and performance for infantry and on armor thickness for the tanks. Infantry units lose much of their defensive benefit when moving or firing—if for no other reason than calling attention to themselves. Observers lose much less of their defense value because they conduct their attacks from hidden positions by merely observing and reporting targets. Even when moving, as a few men they represent a small target less likely to be seen than an entire platoon of tanks. Armor relies primarily on its armor thickness for its protection and consequently has the same DF before and after movement or fire. The MF was based not only on a unit's

actual speed, but rather on its training, morale, and experience. Street fighting was a slow and deliberate process which the MF and movement costs seek to simulate. German engineers and certain Allied units have higher MF to reflect their experience in rapidly assaulting an area—not the relative foot speed of their men. Obviously, a vehicle's cross-country speed makes it a lot more mobile than any infantry unit in most games but this advantage has to be tempered here due to the conditions in which the vehicle had to operate. The narrow streets were clogged with rubble and pitted with bomb craters. Such obstacles, even after being "cleared" by engineers proved treacherous to the tankers who often had to negotiate them in a "buttoned up" mode.

It must also be remembered that urban combat is primarily an infantry battle. Without infantry support, armor fought at an extreme disadvantage and was under constant threat of ambush from any paratrooper with a panzerfaust or anti-tank mine—especially in the rubble-strewn streets of Cassino. Players should remember this when they see a Machinegun unit blow away tanks in the same Area—it is not the machineguns necessarily doing the damage, but their crews acting in close defense of their guns. Similarly, it is not hard to envision tanks being abandoned in bomb craters or rendered immobile in rubble in their haste to escape the attentions of nearby hidden enemy infantry. All of which brings us to a discussion of the CCF. The machinegun units are perhaps best illustrative of the importance of a combined arms approach in playing the game. The machinegun units may well be the most important units in the game; they play a vital role in leading fire attacks, cutting down opposing advances, and generally keeping enemy units at bay with their ranged effect of increased MF costs to adjacent enemy units. Yet, this most dominant of units is nearly helpless in close combat. Once the enemy has reached grenade range and penetrated the machinegun's available infantry screen, it is a sought after and hapless target. Similarly, the Gurkkas exact a fearsome toll with their famous long knives which more than make up for their AF deficiencies.

One area where the system has come in for some unwarranted abuse is the matter of calculating the defense value for an Area under fire attack. I've often heard players mistakenly claim that by using the DF of the weakest unit in an Area, it also weakens any stronger unit in that Area. This is simply not true. As an illustration, let's compare two different Areas, one occupied by a single 3-5-6 and another occupied by a 3-4-5 and a 3-5-6. Some contend that the second Area suffers due to the presence of the weaker 3-4-5, since it must be used to calculate the DV of the Area rather than the 3-5-6. Let's assume an attack with a net effect of 5 on each Area. The net casualty result in the first Area is zero. In the second Area, a net casualty result of 1 would require the retreat of the 3-4-5, but there has been no overall reduction in the defense of the Area; it still has a 3-5-6 in occupation. If we next assume an attack of 6, the 3-5-6 would have to retreat from the first Area, but in the second Area the defender has an option to either retreat both units or eliminate the 3-4-5. With an attack of 7, the 3-5-6 in the first Area must be eliminated to satisfy a two Casualty Point loss while in the second Area only the 3-4-5 need be eliminated; the 3-5-6 remains in control of the Area. It should be clear that the advantage gained in the inclusion of weaker units in an Area is the increase in potential Casualty Point absorption, easily offsetting the reduction in DV. There is one major exception: observers. Players must be careful not to leave observers in the same group and Area with a single infantry unit—especially a Committed one. Here the difference in DV greatly exceeds the increase in potential Casualty Point absorption with potentially crippling results. I would point out, however, that this is not at all unrealistic. An observer's DF is based on its anonymity, remember. Leave it in an Area alone and it can be very difficult to spot. Put it in the midst of a detectable target (such as a lone infantry platoon) and all of a sudden it is in the middle of a big red bulls eye and subject to the same pasting as the infantry drawing the fire in the first place.

The victory conditions require the Allied player to do slightly better than his historical counterpart. Doing less will end the game on turn 9 as was almost the case historically. The "Draw" result is the equivalent Allied position at the end of March 19th. By including the option to continue the game on a Draw result, the Allied player is given the same last chance to gamble for a win that his historical counterpart took. However, the final commitment of the Allied reserves without the breakout envisioned, can only be viewed as a failure. Once he continues to turn 10, the draw is irrevocably lost.

### RECOMMENDED READING:

Players are urged to order Vol. 24, No. 6 of the *GENERAL* magazine which will feature *THUNDER AT CASSINO* and be available approximately July, 1988. This issue will include extensive tips on strategy and tactics, the design of the game, a history of the battle, a contest on a game situation, and a replay of an entire sample game. Refer to the *GENERAL* advertisement for current ordering information.

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