COVERING TERRAIN [1.1.3]

MOVEMENT Covering Terrain	COMBAT Covering Terrain	OBSERVATION Covering Terrain	SUPPLY PATH Covering Terrain
Fort Woods Forest Town City NIGHT [1.1.3]	Fort Woods Forest Town City Location Village IP ET NIGHT [1.1.3]	Fort Woods Forest Town City Location Village Rough at 3 NIGHT [1.1.3]	Fort Woods Forest Town City
			Night is NOT automatic Cover for tracing supply path [16.4.4]

- Active, attack designated units and Inactive units adjacent to attack-designated units are not considered to be in (any kind of) covering terrain for any purpose for the remainder of the Combat Phase starting the instant the units are designated as attackers.
- Engineer building bridge are never in Cover [CSW 1598]

BARRAGE LIMITS (12.3.0) ◄ Special Rules-Barrage Segm.

GE Parent formation = Corps/Army
US parent formation = Corps

OBSERVED LIMITS		Same form.	Parent form.	One other form.
PA [12.3.2a] (not 1 step units) ET (not Att.) (Also 1 step units) [12.3.2b] Fort (not Att.) (Also 1 step units) [12.3.2b]	US	Unlimited	Unlimited	Unlimited
	GE	Unlimited	3	---
Improved Position (not Attacking) (also 1 step units) [12.3.2c]	US	Unlimited	2	---
	GE	Unlimited	1	---
Other mode [12.3.2d] Air Observed (only US) [12.3.4]	US	3/2	0/1	---
	GE	2/1	0/1	---
1 step units [12.3.2e] (unless IP/ET/Fort)	US GE		1	
UNOBSERVED LIMITS [12.3.3] No friendly unit has LOS to hex [12.2.0]	US		1	
	GE	(GE limit DEC16 Pre dawn = 3)		

- Units are **"attacking"** if marked with Attack (or PA mode) marker 12.3.2]
- Units in **Strategic Mode** can not act as observers [12.3.2g]
- Artilley barraging adjacent hex do not count against barrage limits [12.3.0]
- Units **not** assigned to Formation (corps- and army-level assets not assigned to a Formation) are considered to be a Formation unto themselves [12.3.2]
  +1 artillery unit if **Observer on a VP** (also 1 step units)) [12.3.2f].
    - Not if Air Observed [12.3.4]

CHECK LINE OF SIGHT (LOS)

1) Draw imaginary line between center of Observation hex and target hex [8.1.0]

2) Check range (include target hex not observer hex) [Observation Range] [8.2.0]

3) Check for Blocking terrain between Observer hex and Target hex (none of the hexes included) (8.1.1) [Observation Range] [8.2.0]

4) If Observer within range of target and no blocking terrain, the observer has LOS to target hex and it is an observed barrage.

Observed Barrage Definitions
a) A barrage is observed if there is a friendly

Air observed: If atmospheric condition is Clear, GE units that are not in Combat Covering Terrain is Observed. Units in Strat Mode are always observed [8.5.0]

- If a hex contains **Air Observed** GE units, a Barrage targeting that hex are considered observed if there is a US unit (assigned to a Formation) within five hexes of target hex.

- US player picks one such unit as his observing unit of that barrage
- Barrage Limit is that given in [12.3.2d]
- Barrage limit is not modified if observer is on a Vantage Point.
- If no such unit exists, the barrage is unobserved.

OBSERVATION RANGE [8.2.1]

Weather or Night \ Observer Hex	Clear/ Par. Overcast	Overcast	Night
Vantage point	3	2	1
City, Town, Village, Location	2	2	1
Woods, Forest, Rough etc.	1	1	1

- LOS throug/or into one or more Rough, range reduced by 1 [8.3.1]. Do not count Observer hex for this.
- Nebelw./Rocket that fires can be observed from one hex further than units usual observation range (cover terrain has no effect). Max range still 3. (8.3.2)

BLOCKING TERRAIN	TERRAIN IN LOS	RESULT
Town, City	City, Vantage Point	Blocked
Vantage Point	Vantage Point	Blocked
Any other terrain	Woods, Forest, Vantage Point, City	Blocked

LOS running along hexside in parallel fashion is only blocked if both hexes of that hexside contains blocking terrain (8.1.1 2nd sentence)

BARRAGE DIE ROLL MODIFIERS TABLE

Terrain

**-6	Westwall (Fortification)	*Not this DRM if target is in PA or Attack Designated [9.1.1a])	**Not this drm if all target units are either SP artillery or pure armor [12.5.1b]	Not cumulative with urban
**-4	Entrenchment			
*-3	Improved Position			Not cumulative with West Wall
*-3	City			Not cumulative with West Wall
*-2	Town			Not cumulative with West Wall
*-2	Village			
*-1	Location			Names without "circle" is only reference

Observer

-4	Unobs. target ◄ Special Rules - Barrage Segm.	No friendly unit has LOS to hex [12.2.0]
-1	Night Turn	
-1	DEC 16 Predawn/AM (US only) ◄ Special Rules	
+1	Observer in Vantage Point (not if Air Observed)	+0 if target in Vantage point

Target units and Pozit fuze ammo

-2	All target units are pure armor	
-1	Pure Arm. and other units or only SP art [12.5.1b]	SP Arty and Arm Inf/PzGr is mixed [CSW 1380]
-1	Target hex has active, not attack designated units	Active means a unit of phasing player CSW1851]
+1	US fires Pozit Fuse shells (DEC27 AM) [CSW732]	Ignore if units in urban or IP/ET/Fort, not attacking
+4	All target units in Strategic Mode	

Stacking - unit density in hex in target hex

-1	Two or less Company equivalents in target hex	- When deciding unit density in hex, all units in hex are counted for (not only observed) [CSW #1818]
+1	5 or more Company equivalents in target hex	- Only apply one of these.
+2	2 Bn + one unit in target hex (Bn not on last step)	

BARRAGE RESULTS TABLE

Result \ BF	1	2	3	4	5	6	7	8
AS	8	6 - 7	5 - 6	4 - 5	3 - 4	2 - 3	1 - 2	0 - 1
1	9 - 10	8 - 10	7 - 9	6 - 9	5 - 8	4 - 6	3 - 4	2 - 3
1AS	11 - 14	11 - 12	10 - 12	10 - 11	9 - 10	7 - 8	5 - 6	4 - 5
2	15	13 - 14	13 - 14	12 -13	11 - 12	9 - 10	7 - 9	6 - 8
2AS	-	15 +	15+	14 – 15+	13 - 14	11 - 12	10 - 11	9 - 10
3	-	-	-	-	15+	13 - 14	12 -13	11 - 12
4	-	-	-	-	-	15+	14 – 15+	13 – 15+

APPLY BARRAGE RESULT [12.6.0]

- Each HIT requires a step loss or a one hex retreat [12.6.1]
- Barrage result applies to all enemy units in barraged hex
- If Bridge Construction markers in hex which takes barrage result increase construction time one GT (Ace of Spade), unless Engineers are retreated or eliminated (18.1.1a) in the latter case construction marker is removed
- FW construction is halted if constructing units retreats because of a Barrage [19.2.4]
  - Remove the construction marker immediately.

Step loss (12.6.1a)
- Even distribution (max 1 hit pr. unit)
- Remember Barrage Magnitude [Barrage Magnitude]
- Record Step Loss on ARMY TRACK for recycling of step losses [24.1.2]
- LEADER: 1d100 <= 5 = leader eliminated [25.4.0]

Retreat 1 hex (12.6.1b)
- Forced if hits > units
- Max 1 hit satisfied by retreats (All units in hex must be retreated)
- Use rules for "Retreat after combat" [Retreat box on GA sheet]
- Retreated units receives AS automatically
- Units in PA revert to Tactical Mode and are Attack Designated

Overkills (12.6.1d)
- If Step Loss and retreats can not satisfy hits, target units are Fatigued

Artillery Shift (AS) (12.6.2) (Max one pr. barrage)

Advance after barrage [12.7.0]
- After barrage during a friendly Combat phase adjacent attack-designated unitsmay advance into abandoned hex (but no further)
- If hex contains Cover for movement purpose PA may be removed or kept.
- This unit may not observe for later artillery barrages

BARRAGE MAGNITUDE [12.6.1c]

For each Barrage, no affected unit can be forced to lose more than one step.

Exceptions:
(1) If no retreat is possible to begin with the units involved must take the step losses
(2) When units retreat into open terrain adjacent to enemy units step losses due to this retreat condition must be taken

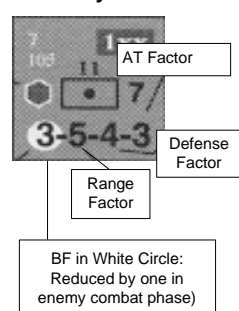- Hits not satisfied by step loss or retreats are Overkills.
- If Overkill occurs surviving units are marked with a Fatigue marker.
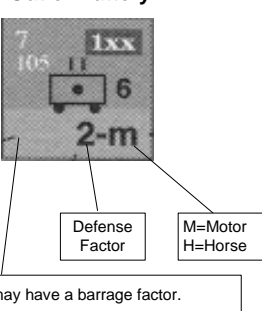
AMMO DEPLETION [12.8.0]

If Artillery in Low Supply performs barrage it is automatic Ammo Depleted

1) Find Ammo Depletion Value
   - [SCENARIO]
   - [DEC 16 SPECIAL RULES – Barrage]
   - Start DEC 20: ARMY TRACK
2) Adjust Ammo Depletion Value for Pocket Supply [ADMINISTRTAIVE PHASE SUPPLY - Pocket Supply]
   - GE depletion value = depletion marker
   - US depletion value = depletion marker + 3
3) Roll 1d10 => DR - Depletion Number = Number of In-Supply firing units depleted
   +2 Drm if Korps use Extended Supply Path
4) Place Ammo Depleted-marker on Ammo Depleted units

In Battery

AT Factor
Range Factor
Defense Factor
BF in White Circle: Reduced by one in enemy combat phase)

3-5-4-3

Out of Battery

Defense Factor
M=Motor H=Horse
SP artillery may have a barrage factor.

2-m

ARMOR STANDOFF [14.5.3h]

- Before combat strengths are revealed both attacker and defender may declare that **all** his armor units are in a standoff role during upcoming assault
- Attacker <u>must</u> either pick one unit with Armor factor (if any are present) as his A-Lead unit or declare that all armor units will Stand off [14.5.3a]
- Defender <u>must</u> either pick one unit with Armor factor (if any are present) as his A-Lead unit or declare that all armor units will Stand off [14.5.3a]

Eligibility
- Both Pure Armor and Hybrid units are allowed
- Armor standoff can not be declared if:
  - Defending hex has either only Clear or only Rough (applies to both attacker and defender)
  - Attacker assaults with only pure armor units and/or only hybrid units (applies to attacker only)
    - May use only pure armor/hybrids if attacking with infantry from other hexes [CSW #1342]
  - Attacking into a hex with impassable terrain for Armor

- Armor may "Standoff Attack" across a bridge or Ford hexside, not river-hexside [CSW #1375]
  - Armor attacking across bridge in Armor Standoff do not trigger bridge collapse [CSW #1306]

- Unit in Armor standoff can not be chosen as P-lead unit for PR-rating
- Unit in Armor standoff can not be chosen as A-Lead unit for Armor/AT-bonus
- Unit in Armor Standoff are not eligible for/contribute to Armor/AT-bonus

- <u>Combat strength</u> is halved for a unit that Stands-off [14.3.3a]

UNIT STRENGTH TABLE

- A units strength is never reduced to less than ¼ of its strength [14.3.3b]
  (exception: Ammo depleted artillery 14.3.3c)

Obliged halved GA Strength [14.3.3a] (round fractions upwards) [1.4.0]
- Any unit type attack across river (not Stream). Bridge and Ford makes no difference [14.3.3a]
  - If units eligible to assault across river, attacker may choose not to use bridge [CSW #1861]
  - Armor strength are not halved again if att. in Armor Standoff (across bridge/ford) [CSW #1342]
- Pure Armor not stacked with inf. attacking into/out of or defending in Woods, Forest, Town or City
- Hybrid or pure Armor units attack into, out of, or defending in Marsh/Soft Ground hex
- Units is resting (has a resting marker)
- Unit is OOS (has a OOS marker)

Voluntarily halved GA strength [14.3.3a]
- If unit "On Hand Supply" and desires not to go OOS [16.5.0]
- During Extended Night Activity defending unit avoids resting status [15.0]
- Any AFV/Hybrid unit that chooses Armor Standoff during GA (round up) [14.5.3h]
  - Only halved once if attacking across a bridge [csw #1342]

Quarter GA strength [14.3.3b] (round upwards)
- Unit is fatigued (fatigue marker)
- Any combination of halved strength conditions

Unit strength on last step
- Strength: value on reduced side [4.2.1]
  - Strength >= 7   Halve print strength
  - Strength 4,5,6   Two from print strength
  - Strength <= 3   One from print strength

Artillery
Defending alone	Normal Defence Factor
Defending in stack	Halved Defence Factor [14.3.3a]
Ammo Depleted	Defence Strength = 1 [14.3.3c]

CORPS AND ARMY LEADERS

GERMAN

Leader Name and Command	Condition	Influence on combat
Kreuger 58th Pz Korps [25.2.4e]	- Starts AM GT stacked with a Div. HQ	- One attack with divisions units receives 1 shift
Manteuffel 5h PzArmy [25.2.4b]	- Starts AM GT stacked with a Korps HQ	- One combat pr. day (Att/Def) receive 1 shift. May not add that shift to combat shift received from other leader
vLuettwitz 47Pz Korps [25.2.4d]	- Starts AM GT stacked with a Div HQ	- Units of Division receive 1 shift in their favour twice a day (AM or PM)
Brandenburg 7th Army [25.2.4c]	- Starts AM GT stacked with a Div HQ	- Any Div. HQ he is stacked with receives 2 L shifts per GT. May be used for same GA or two differnt GA.
Dietrich 6th PzA [25.2.4a]	- Starts AM GT stacked with SS HQ	- Converts PR-hits to Discretionary hits during GA resolution - Attacker loose extra step if any losses occur

ALLIED

Leader Name and Command	Condition	Influence on combat
Collins VIII Corps [25.2.5b]	- Starts AM GT stacked with a Div HQ	
Patton 3rd Army [25.2.5a]	- Starts AM GT stacked with HQ	- Advance one additional hex after GA. - Units must be in PA - Max adv. rules still apply

PROFICIENCY RATING BONUS [14.5.1]

Eligibility
- Any unit can be designated as the P-Lead unit except units in Armor Standoff
- Both attacker and defender chooses his P-Lead unit.

Note:
The P-Lead unit takes the first Step Loss unless Armor using their Armor-value to get Armor/AT-bonus.

If lead unit is a breakdown unit use the PR from the table below [17.3.1]

Breakdown unit type	Attack	Defense
German Leg units	5	6
German Mech. Units	6	7
US Leg companies	6	6
US Mech. Companies	6	7

- +2 PR if defender in Fort (never above 9)
- -x Attack PR-rating of all attacking units in a GA are decreased by the number of formations involved, unless only one formation is involved
- -1 PR if more than one formation is involved, but all units are either inherent to one formation or attached to that formation, the Attack Proficiency rating of all attacking units is reduced by one

a) Compare Net PR of both attacker and defender P-Lead units.
b) The PR bonus (Difference x 5) is awarded to the player with superiority.

COMBAT RESERVE BONUS (CRB) [14.5.4]

Eligibility
- Only units in <u>Combat Reserve mode</u> can generate CR Bonus during GA.
  - At least one unit from same Formation as CR-unit is involved in the combat [14.5.4a]
  - If GA is within 3 hexes of CR-unit (attacker or defender) [14.5.4a]
  - CR-unit could hypotetically move into the same hex as a unit in its Formation in one Move Phase using regular movement [14.5.4a]

Note: Eligibility to enter Combat Reserve Mode [MODE DETERMINATION PHASE - Mode Determination Table]

- Both attacker and defender receives 1 x 5 drm bonus for each of their qualified CR-unit
- Max 3 x 5 drm bonus each player each Ground Assault

- One CR-bonus each CR-unit each Ground Assault (remove CR-marker when unit has contributed)

REGIMENTAL INTEGRITY BONUS (RIB) [14.5.2]

- Each eligible <u>attacking</u> unit of a sub-formation awards one RIB to the attacking side [14.5.2a]
- Each eligible <u>defending</u> unit of a sub-formation that are not being attacked in any GA this GT awards one RIB to the defending side [14.5.2a]

Eligibility
- If two or more units of the same sub-Formation are in or adjacent to the defending hex, that sub-Formation's side may be eligible for a RIB.

- Only units with an Infantry symbol are eligible [CSW 1342]
- Units must belong to the same sub-formation (Regiment/Brigade/CC/Kampfgruppe). [14.5.2a]
  - Units <u>attached</u> to Formation/Sub-formation are considered part of that Formation/Sub-formation for this rule [14.5.2a]

- <u>German div units</u>: Engineers, Recon and Fusiliers may be used to provide RIBs to any sub-formations of division (not ersatz units or companies broken down from divisional assets). [14.5.2d]
- German divisional assets from other Formation attached to a Formation cannot confer RIBs [9.3.0]

Units in the following situations are <u>not</u> qualified:
- Units in Strategic Mode, Fatigued units, Resting units, units OOS
- Units stacked with units from another Formation
- Breakdown units are not eligible

- Each player receives 1 x 5 drm for each qualified unit <u>beyond</u> the first
- A unit can only contribute a RIB once per GA segment
- Max 3 RIB drm to each side each ground assault
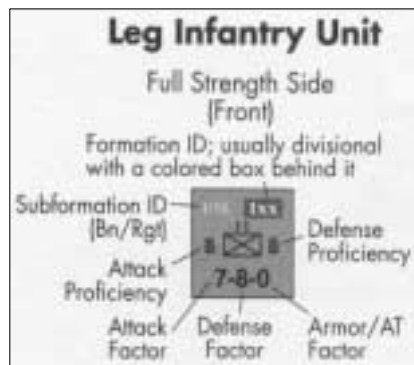 - (may use more than one sub-formation to get those RIB's)

DIVISIONAL, BRIGADE AND KAMPFGRUPPE LEADERS [25.2.2]

BOTH ALLIED AND GERMAN

Event	Condition	Unit benefit
Combat	Combat [25.2.2c] - Only Divisional, Brigade and KG leaders may benefit units in combat. - Any such Leader adjacent to attacking subordinate units gives a one column shift on the GAT [CSW 1459] - Only one such bonus each GA segment	One column shift in subordinate units favour on GAT

Dietrich, 6th Pz Armee

Leg Infantry Unit

Full Strength Side (Front)

Formation ID; usually divisional with a colored box behind it

Subformation ID (Bn/Rgt)

7-8-0

Defense Proficiency

Attack Proficiency

Attack Factor

Defense Factor

Armor/AT Factor

Armor/AT Bonus [10.5.1]

DEFINITIONS

1. An unit has an **Armor-value** if it contains armor (classified as AFV; [See 1.5.0])
2. Units that don't have an Armor-value, have an **AT-value** (Anti-Tank value)

Note: All units (except AFV) have a built-in AT-value, even those with AT-value = 0 on the unit counter.

3. When units with an Armor-value attack or defend they may generate **Armor-bonus** for the owning side
4. Units with an AT-value may offset the other side's Armor factors, reducing or reversing the Armor/AT-bonuses.

PROCEDURE

1. If no unit with AFV-silhouette participates in GA, no Armor/AT-bonus is awarded
- If no units with AFV silhouette participates in GA, either as attacker or defender there are no Armor-bonus nor AT-bonus awarded. Skip the Armor/AT-bonus procedure [CSW #284]

2. Has any of the players declared Armor Standoff?
a. If the attacking armor units stand-off, the defending side does **not** get any bonus due to units with AT factors (although they may still get one due to units with Armor factors.) [14.5.3h]
b. If the defending armor units stand-off, the defender may choose as his A-Lead unit a unit with an AT factor, which will presumably reduce or eliminate the Armor/AT bonus the attacker would have received had the defender led with his best armor unit [14.5.3h]

3. For a unit to contribute with its full Armor factor, it has to be qualified
3.1) Players selects a qualified A-lead unit (choose either Armor or AT)
  a) **Armor unit** (AFV silhouette) qualifies for **Armor bonus** if:
    - Unit participates in GA (not in Armor Standoff Role)
    - Hybrid and Armored Recon units qualify alone [14.5.3b]
  b) Qualifies as combined arms units:
    - Pure Armor needs one step of Infantry for each two step of Pure armor [14.5.3b]
    - Infantry in this case is: Infantry, engineer, and any Mech recon type (not M5 LtTk) [see 7.4.0] for definitions of Recon type units [14.5.3b]
    - Infantry part of Hybrid units qualifies for itself and one step of Pure armor [14.5.3b]
    - Pure Armor alone, if unit attacks into, or defends in Clear terrain (**unless at night**)
  c) A-lead unit no adequately supported has armor factor reduced to 1 [14.5.3b]
  d) **AT-Units** qualifies for **AT bonus** if:
    - Unit participates in GA (even if AT-value (rightmost) number is zero)

4. Calculate AT-value (if any eligible AT-units)
4.1) Adjust AT-value due to unit status
Unit OOS	AT-value x 0.5 (after applying all other modif.) [14.5.3g]
Ammo depl. Artillery	AT-value = 1 [14.5.3d]
OOB and not SP	AT-value = 0 [14.5.3e]
OOB and SP	Use value on counter [14.5.3e]

4.2) AT-terrain-modifier
a) Use [Who gets armor/AT-Bonus] to find wich table to use on TEC
b) Use [Armor/AT-value Terrain Effects Chart] to decide modifier
  - If unit is Towed AT (use the Towed AT column) [14.5.3f]
  - If unit is Artillery or Heavy Flak it is never modified [14.5.3f]
  - AT factor of all other units (use Leg column) [14.5.3f]

Note: AT-modifiers for underlined infantry units in IP/ET/Fort are cumulative with the single largest terrain modifier in the hex

4.3) Calculate AT-value
AT-value = adjusted AT-value + AT-terrain-modifier

5. Calculate Armor-value (if any eligible Armor-units)
5.1) Adjust Armor-value due to unit status
- Not qualif. for combined arms Armor value = 1 [14.5.3b]
- Unit OOS Armor-value x 0.5 (after applying all other modif.) [14.5.3g]
- Underlined Armor value Armor-value reduced by 1 when attacking [14.5.3c]
- Pure armor not stacked with infantry def. in/att. into
  Forest, Town or City Armor-value = 1

5.2) Armor-terrain-modifier
a) [Armor/AT-value Terrain Effects Chart - Use Armor column]

5.3) Calculate Armor-value
- Armor-value = adjusted Armor-value + Armor-terrain-mod. (+ Armor-modifier for IP/ET/Fort)
  - Armor values may never be reduced below one.
  - Armor-value are never reduced by just terrain or Fieldworks below 50% [PlayAid]

6. Decide which player that gets the Armor/AT-bonus
- Use "Who Gets Armor Bonus Table" on next page

7. Adjust final Armor/AT-bonus
- Use [Final adjustments to Armor/AT-bonus]

WHO GETS ARMOR/AT BONUS

DEF \ ATT	Armor	AT *	None	Standoff
Armor	USE TABLE A Att. > Def. -> Att. diff x 10 Att. < Def. -> Def. 1 x 10 Att. = Def. -> None	USE TABLE C Att. > Def. -> None Att. < Def. -> Def. 1 x 10 Att. = Def. -> None	Defender 1 x 10	Defender 1 x 10
AT	USE TABLE B Att. > Def. -> Att. diff x 10 Att. < Def. -> Def. 1 x 10 Att. = Def. -> None	None	None	None
None	Att Armor x 10	None	None	None
Standoff	Att Armor x 10 Def. get 0 if not using AT.	None. Def. armor avoids Att. armor effects	None.	None.

* Def. Armor > any printed, unmod. AT-value among attacking units, def. get 1x10 Armor-bonus [10.5.2]

ARMOR/AT VALUE TERRAIN EFFECTS CHART [14.5.3f]

Terrain	TABLE A Att. Armor	TABLE A Def. Armor	TABLE B Att. Armor	TABLE B Def. AT Towed	TABLE B Def. AT Leg	TABLE C Att. AT Towed	TABLE C Att. AT Leg	TABLE C Def. Armor
Clear	x	x	x	x	x	x	x	x
Rough	-1	-1	-1	x	x	x	x	-1
Marsh/Soft gr.	-2	-2	-2	x	+2	x	x	-2
Woods	-1	-1	-1	x	+2	x	x	-1
Forest	-1	-1	-1	x	+3	x	x	-1
Constricted	x	x	x	x	x	x	x	x
Major river	x	x	x	x	x	x	x	x
Minor river	x	x	x	x	x	x	x	x
Stream	-1	x	-1	x	x	x	x	x
Bridge	x	x	x	x	x	x	x	x
Ford	-1	x	-1	x	x	x	x	x
IP	-1	x	-1	x	+2+OT	x	x	x
ET	-1	x	-1	+1	+3+OT	x	x	x
Fort	-2	x	-2	x	+3+OT	x	x	x
Location	x	x	x	+1	x	x	x	x
Village	-1	-1	-1	+1	+1	x	x	-1
Town	-1	-1	-1	+1	+2	x	x	-1
City	x 0,5	x 0,5	x 0,5	+1	+2	x	x	x 0,5

Artillery and Heavy Flak used for AT-bonus are never modified [14.5.3f]

FINAL ADJUSTMENTS TO ARMOR/AT-BONUS

- **Night:** Max 1x10 Armor/AT-bonus
- **Defender in Fort, Woods, Forest, Town or City:** Max 2x10 Armor/At-bonus to attacker
- **None of the limitations above:**
  - Attacker max 4x10
  - Defender max 1x10 Armor/AT-bonus

Unit Type Symbology

AFVs MA = 12	AFV silhouette (see below for full description) Hvy AFVs have a MA of only 9	
Other MA = 12	Armored Infantry/Panzer Grenadier	
	Unit is Armored/Tracked	
	Unit is wheeled-meaning it is mechanized	
	Heavy Anti-Tank	
	Anti-Tank	Armored Engineers/ Gepanzert Pionere
	Heavy Flak	
Artillery MA = 12	Self-Propelled Artillery	still has a Barrage Strength on OoBatt side
	Motorized Towed Artillery	signified with an "m"
Recon MA = 14	Armored Recon	
	M8, M5, Brit Armored Cars	

Mechanized Units

Combat Shifts Table

Defender

Defender in intact West Wall hex (Fort)	3 L
Defender in Entrenchment (ET) (not if Overrun)	2 L
Defender in Improved Position (IP) (not if Overrun)	1 L
Defending hex is Vantage Point	1 L
Assault takes place during night	1 L
Attacker in Exploit Mode (Overrun)	1 L
Defender in Marsh/Soft Ground conditions	1 L
Attack acrosses bridge hexside. - Max one attacking unit may assault across bridge	1 L

Attacker

Attacker in Prepared Assault Mode	1 R
Engineer assault benefits [14.4.1] - If defender occupies Fieldwork, Fort, Town or City attacker can use an engineer to shift the GA value. - For each stack of attacking units with an engineer unit in PA-mode the attacker gains one right shift, up to max two shifts - Max one shift against IP or Town	1R or 2R
Attacker eligible for Maneuver Reserve Bonus	1 R
Defending units in Strategic Mode	2 R
Defending units in Exploitation Mode	1 R
Defending units in Combat Reserve Mode	1 R
DEC 16 Surprise shift German receives one shift in their favour on each GA when attacking US units except US 4th Inf division, during DEC 16 Predawn and AM GT (not when defending [CSW #1839]).	1 R

Both players

Units in GA under Artillery shift	1 X
Opponent is overstacked	1 X
Opponent is OOS	1 X
Divisional HQ used more than 6 MP previous Move Phase [14.4.1a] NOTE: Remember to remove Ace of Spades marker on HQ unit	1 X
Active Divisional/KG/Regimental leader within one hex of defending hex	1 X
Kreuger [25.2.4e] [GA TABLES AND INFORMATION (1) - Leader influence table]	1 X
Manteuffel [25.2.4b] [GA TABLES AND INFORMATION (1) - Leader influence table]	1 X
vLuettwitz [25.2.4d] [GA TABLES AND INFORMATION (1) - Leader influence table]	1 X
Brandenburg [25.2.4c] [GA TABLES AND INFORMATION (1) - Leader influence table]	1 X
Army Boundary violation	1 X

OPTIONAL: 2 x Doubles = Random Event

RANDOM EVENTS (STARTS DEC 17 AM) (ref: Original Rulebooks)

- No RE until 17 AM [CSW #44]
- No more than two RE-markers per side may be on the map [23.1.2]
- Both players roll doubles during GA (before DRM)
- Affects only side generating the RE (highest dr)

When RE occurs [23.1.0]
1) Place RE marker in the hex the defender was located (this is the RE hex)
2) Determine if Combat or Movement RE
   - 1d10, 0-4=Combat, 5-9 = Movement

Combat Random Event [23.1.1a]
- Immidiately affects the combat that generated the RE
- Must be resolved before combat itself are resolved
- 1d100 (apply mod) and check RE table (left side)
- Immidiately apply effect and remove RE marker

Movement Random Event [23.1.1b]
- Affects units that are in or adjacent to the RE hex
- Not determine effect until affected units are about to be moved
- 1d100 (apply mod) and check RE table (right side)
- After all units that could have been affected are moved, remove RE marker

PROFICIENCY CHECK (PR) [4.3.1a]

- Player which Combat result calls for PR Check (CRT-result contains an asterisk) performs PR dr.
- Always lead unit in combat that takes Proficiency Check

- 1d10 >= Proficiency Rating = fail (0=0, not 10) [CSW #557]
   -2 drm if in Fortification (not IP/ET)

- Failure of PR Check results in an additional discretionary hit.
- Success nothing happens

GROUND ASSAULT TABLE – [MAX DRM = 45] – [Dr 00 = 0, not 100 (CSW #1342)]

City	1:2	2:3	1:1	+4	3:2	2:1	3:1	4:1	5:1	6:1	7:1	8:1	-	
Forest/Twn/RghWds	1:3	1:2	2:3	1:1	+3	3:2	2:1	3:1	4:1	5:1	6:1	7:1	8:1	
Rough/Wds/Village	1:4	1:3	1:2	-3	1:1	+2	3:2	2:1	3:1	4:1	5:1	6:1	7:1	
Clear	1:5	1:4	1:3	1:2	-2	1:1	+1	3:2	2:1	3:1	4:1	5:1	6:1	

Attacker die rolls – Defender results

*	95 - 99	85 - 94	75 - 84	55 - 74	45 - 69	30 - 64	25 - 54	20 - 39	10 - 29	5 - 14	00 - 4	(-8) – (-1)	(-16) – (-12)	*
1	100 - 114	95 - 109	85 - 94	75 - 89	70 - 84	65 - 79	55 - 74	40 - 54	30 - 39	15 - 24	5 - 14	00 - 4	(-11) – (-1)	1
*1	115 - 119	110 - 114	95 - 105	90 - 99	85 - 95	80 - 89	75 - 83	55 - 74	40 - 59	25 - 44	15 - 34	5 - 29	00 - 14	2
1(1)	120 - 125	115 - 120	106 - 115	100 - 109	96 - 99	90 - 95	84 - 91	75 - 85	60 - 81	45 - 69	35 - 59	30 - 49	15 - 31	1(1)
(2)	126 - 139	121 -129	116 - 121	110 - 114	100 - 105	96 - 99	92 - 95	86 - 91	82 - 89	70 - 81	60 - 77	50 - 65	32 - 55	*1(1)
*1(1)	>= 140	130 - 139	122 -131	115 - 119	106 - 111	100 - 105	96 - 101	92 - 96	90 - 94	82 - 87	78 - 83	66 - 79	56 - 66	2(1)
1(2)	-	>= 140	132 - 139	120 - 124	112 - 115	106 - 109	102 - 106	97 - 102	95 - 99	88 - 95	84 - 91	80 - 85	67 - 79	2(2)
*1(2)	-	-	>= 140	125 - 139	116 - 120	110 - 121	107 - 115	103 - 107	100 - 105	96 - 100	92 - 97	86 - 91	80 - 87	*2(2)
2(2)	-	-	-	>= 140	121 -134	122 - 129	116 - 123	108 - 119	106 - 111	101 - 109	98 - 105	92 - 101	88 – 97	3(2)
3(2)	-	-	-	-	>= 135	>= 130	>= 124	>= 120	>= 112	>= 110	>= 106	>= 102	>= 98	3(3)

Defender die rolls – Attacker results

*2(3)	<= 4	<= 2	<= 0	<= (-4)	<= (-8)	<= (-12)	< (-16)	<= (-20)	<= (-25)	<= (-30)	<= (-35)	-	-	*1(3)
*2(2)	5 - 10	3 - 8	2 - 6	(-3) - 3	-7 - 00	(-11) – (-7)	(-15) – (-10)	(-19) – (-15)	(-24) – (-21)	(-29) – (-25)	(-34) – (-30)	<= (-35)	-	2(2)
2(2)	11 - 25	9 - 14	7 - 12	4 - 9	1 - 4	(-6) - 00	(-9) – (-6)	(-14) – (-10)	(-20) – (-15)	(-24) – (-21)	(-29) – (-25)	(-34) – (-30)	<= (-35)	*1(2)
*1(2)	26 - 39	15 - 28	13 -24	10 - 18	5 - 13	01 - 06	(-5) - 00	(-9) – (-5)	(-14) – (-10)	(-20) – (-13)	(-24) – (-20)	(-29) – (-25)	(-34) – (-30)	1(2)
1(2)	40 - 49	29 - 45	25 - 39	19 - 30	14 - 24	07 - 20	1 - 14	(-4) - 10	(-9) - 5	(-12) - 00	(-19) – (-6)	(-24) – (-12)	(-29) – (-20)	*1(1)
2(1)	50 - 80	46 – 70	40 - 60	31 - 40	25 - 31	21 - 25	15 - 20	11 - 16	6 - 12	1 - 8	(-5) - 00	(-11) – (-5)	(-19) – (-10)	1(1)
1(1)	81 - 99	71 - 85	61 - 75	41 - 60	32 - 45	26 - 40	21 - 35	17 - 30	13 - 20	09 - 15	1 - 10	(-4) - 00	(-9) – (-5)	*(1)
*(1)	100 - 120	86 - 100	76 - 90	61 - 80	46 - 75	41 - 65	36 - 55	31 - 45	21 - 40	16 - 30	11 - 20	1 - 10	(-4) - 00	*1
1	121 - 130	101 - 120	91 - 110	81 - 96	76 - 90	66 - 86	56 - 80	46 - 60	41 - 50	31 - 40	21 - 30	11 - 20	1 - 10	1
*	131 - 140	121 - 135	111 - 130	97 - 120	91 - 110	87 - 100	81 - 90	61 - 80	51 - 70	41 - 50	31 - 40	21 - 30	11 - 20	*

How to read GAT: * = Proficiency Check; # = Discretionary Step Loss; (#) = Mandatory Step Loss : 2xdoubles = Random Event

APPLYING GA RESULTS [14.7.0]

1) Random Event (Optional)
- If a Random Event is generated (both players rolled doubles) effect of the event is immediate (Ref. Random Events Table on original Play Aid)

2) Satisfy Loss obligations
- Attacker satisfies his combat results first [14.7.0]
- Each attacker retreat-hex reduces defenders loss obligation by one.
  - First mandatory steps by one, then reduce discretionary hits [14.7.1]

a) Remove IP/ET-markers
- Defending units with IP/ET Constr.-markers must remove markers
- Construction may be restarted in a subsequent phase [19.2.3]

b) Each side takes Proficiency Checks [4.3.1a]
- Leader Dietrich: [25.2.4a]
  [GA TABLES AND INFORMATION (1) - Leader influence table]

  i) P-Lead unit takes Proficiency Check
  ii) 1d10 < Proficiency Rating = Success (0=0, not 10) [CSW #557]
  iii) Failure results in one additional discretionary step loss.

c) Defending Mech Recon [14.7.2] ◀ Offensive Begins-Special Rules
- May convert a mandatory step loss into a retreat
- All defender units must be Mechanized Recon units

d) Take mandatory losses [14.7.0]
- If unit Constructing bridge, remove Construction marker [18.1.1a]
- [Step Loss]

e) Decide how discretionary hits will be satisfied [14.7.0]
- Either by retreat or step loss.
- Number of Discr. hits assigned to retreat is length of retreat in hexes
- These two items may force some/all discr. hits to be taken as retreat
  - GA Magnitude
  - Artillery units cannot take discretionary hits as step losses [14.7.3].

f) Suffer step losses from Discr. hits chosen to be step losses
- LEADER Dietrich: [25.2.4a]
- [GA TABLES AND INFORMATION (1) - Leader influence table]
- [Step Loss below]

g) Carry out retreats [Retreat]
- Max retreat distances may prevent units to retreat chosen distance
  - If so the force loses one additional step for each hex of the retreat not satisfied by at least one unit
  - Losses must come from units that did not retreat the full amount.
  - If these losses can't be satisfied due to GA Magnitude limitations, units that do not retreat the full distance become Fatigued
  - **Exception:** if a retreat was called for and a unit was unable to retreat at all GA Magnitude does not apply to that unit and it may take more than one step loss.

3) Attacker (at end of defender sequence) advance eligible units
- Unless any attacking units retreated [Advance After Ground Assault]

4) Markers
- No friendly units left in def. Hex, ET/IP markers are removed 19.1.2]

5) Record losses on Army Track [24.1.2]
- Record eliminated units on ARMY TRACK with Inf or Arm Losses Marker EXCEPT:
  - Unit is eliminated while OOS
  - Unit is eliminated when isolated
  - Unit is eliminated due to surrender
  - Unit is not able to trace a hypotetical supply path when eliminated

6) Eliminated HQ
- Eliminated HQ are brought back into play after 3 GT
  - Place eliminated HQ unit on GT-track 3 GTs later [24.3.3]

7) Not rebuildable units
- Do not place these units in dead-pile with units to be rebuildt
  - US Parachute/Glider may not be rebuildt [24.3.4]
  - German SS Infantry units may not be rebuildt [24.3.4]
  - A unit that was eliminated while unable to trace a supply path (of any length) to its HQ may not be rebuilt [24.3.0]

STEP LOSS

1) Check for Combat Magnitude [14.8.1]
No unit can lose more than one step as a result of a GA
Except: A unit may have to take more than one step loss if:
  (1) a retreat and unit is unable to retreat even one hex **OR**
  (2) it is in a stack retreating into open terrain adjacent to enemy

2) If Combat Magnitude (steps not taken are converted to retreats)

3) If max retreat distance is reached and GAT result is not "satisfied" overkills existand unit are marked with a Fatigue-marker [14.10.0]

4) Take Step Losses
- Step Losses are evenly shared between units in assaulted hex
- Flip unit, place Ace of Spades under unit or Remove unit

5) Choose unit - Step loss priority: [14.8.2]
- First step loss must come from the A-Lead unit if:
  a) one was selected **and**
  b) it is an Armor unit (it has an Armor factor).
- Next step loss must come from the P-Lead unit.

6) Leader casualties
- If leader is stacked with units participating in GA
- If unit survives GA: 1d100, dr <= 5, leader eliminated
- If all units are eliminated: Leader is eliminated [CW 745]
- Leader alone is eliminated if overrun or attacked

RETREAT

Who retreats [14.9.1]

All units in hex must retreat if: [14.9.1]
- Inflicted by barrage
  - Even if Observed barrage on hex with unobserved units
  - Retreating unit in PA-mode must remove marker [12.6.1b]
- In a defending hex against a GA
- Inactive units in Mandatory Combat situation [36.1.5]

Only participating attacking units must retreat: [14.9.1]
- If GA attacker receives a retreat result

Units with ?Retreat Marker [14.9.1]
- Still adjacent to enemy unit (retreat one hex)
- Remove the marker after retreat

How to retreat [14.9.2]

Owning player conducts all retreats
- Each affected stack are moved as a group
- Units may have to drop out (due to max retreat length)
- Units of same stack must follow the same Retreat Path
- It is allowed to retreat into overstack

Retreat priorities [14.9.3]

Each hex of retreat must end at least one hex farther:
- From the originally occupied hex [14.9.2]
- From the enemy-hexes involved in the combat [14.9.2]

Stacks must retreat according to following priorities:
1. Into a hex that is not adjacent to an enemy unit
2. Into a hex that is not observable by the enemy
3. Toward friendly supply
4. Along a road if possible
5. To hex that is the max distance from an enemy unit
6. Not into overstack (is allowed [14.9.2])

Maximum retreat distances: [14.9.4]

Mech units	3 hexes [14.9.4]
Leg units	2 hexes [14.9.4]

If attacking subtract one hex from max retreat distance.

US Towed artillery, in-battery	1 hex [14.9.4a]
US SP artillery in-battery	3 hex [14.9.4a]
GE Towed artillery in-battery	Eliminated [14.9.4a]
GE SP-artillery in-battery	1 hex [14.9.4a]

- Artillery are eliminated if forced to retreat further than their "max retreat length" allowance [CSW284]
- If max retreat distance is reached and GAT result is not "satisfied" overkills exist (11.6.2)
  - Mark unit with Fatigue Marker

Retreat restrictions

- May retreat into overstack (adjusted in next MPh) [14.9.2]

Never retreat into:
- A hex with enemy units
- Hex/hexside prohibited during movement [14.9.5]

Retreat into hex adjacent to enemy unit without Covering Terrrain for movement purpose [14.9.5c]:
- Loose one step from one unit, each such hex
- Ignores enemy units in Exploit Mode and Strat Mode
- GA-magnitude does not apply here

Mechanized units (14.9.5a)
- Never retreat through more than one forest, woods, mars/soft ground without using road (may use road either before or after this one hex)
- If retreat into Constricted terrain must stop after entering the first such hex, unless retreating along a road (direction of contour makes no difference)

Unit in STRATEGIC MODE [5.3.1]
- Retreat through non-road hexside, enter Tactical Mode

US Units retreat off Southern Map edge [28.1.0]
- May enter game 2 GT later within 3 hexes of where it left.
- Not enter East of DEC 16 frontline
- Units retreating off **Scenario border** may not re-enter scenario-map [33.2.0]

Path of Retreat [14.11.2]

- Consists of the vacated defender hex and all hexes passed through as the defender retreated
- If defender is eliminated before satisfying all remaining obligations, the defender will declare a path of retreat (within retreat priorities [see 14.9.3]) equal in distance to the unfullfilled obligations.

ADVANCE AFTER GROUND ASSAULT

Who advances after combat [14.11.1]

- All of the units in attacking force may advance.

- Only units from attacking force may advance
  - Not units merely stacked with them
  - This excludes Artillery, HQ and "not participating" units

- Voluntarily advance as many/few of the force as desired

- If attacker in PA least one unit MUST advance

- Defending units may never advance after combat (14.1.1)

How to advance after Combat [14.11.4]

- Units advance individually
- Stacking limit must be observed at all times [14.11.0]
- A unit cannot advance across a hexside or into a hex prohibited to its movement classification [14.11.0]

- First hex must always be one of the hexes attacked
- Thereafter:
  a) **Leg** units must follow Path of Retreat [14.11.4]
    - Units following Path of Retreat may ignore other adjacent enemy units (if not in fort, unit must stop)

  b) **Mech.** units may follow Path of Retreat **OR** Deviate from it into Clear/hexes with connecting roads
    - Mech units that deviate from Path of Retreat must stop when moving adjacent to enemy unit

- Mech units can not advance into more than one Forest, Woods, Marsh/Soft Ground or Constricted Terrain hex without using roads. May use road before or after advancing one hex into this terrain [14.11.5]

- Leg unit that advances over a river must stop after crossing the river hexside, unless an intact bridge exist through that hexside [14.11.5]

Maximum length of advance [14.11.3]

An advancing unit may advance the same amount of hexes as defender retreated, following the restrictions below:

- If all defenders are eliminated, attacker create hypotetical Path of Retreat (according to retreat priorities) based on remaining loss obligations from GAT

- Units not in PA	1 hex [14.11.3]
- Leg unit in PA	2 hexes [14.11.3]
- Mech unit in PA	4 hexes [14.11.3]
- Mech. units without fuel	1 hex [14.11.3]

- Mech Recon unit may adv. one additional hex beyond the length of retreat (still max 4) as long as on the road for the whole distance [14.11.3]
- LEADER Patton: [25.2.5a]
  [GA TABLES AND INFORMATION (1) - Leader influence table]

COVERING TERRAIN [1.1.3]

Movement Covering Terrain	Combat Covering Terrain	Observation Covering Terrain	Supply path Covering Terrain
Fort Woods Forest Town City NIGHT [1.1.3]	Fort Woods Forest Town City Location Village IP ET NIGHT [1.1.3]	Fort Woods Forest Town City Location Village Rough at 3 NIGHT [1.1.3]	Fort Woods Forest Town City
			Night is NOT automatic Cover for tracing supply path [16.4.5]

- Active, attack designated units and Inactive units adjacent to attack-designated units are not considered to be in (any kind of) covering terrain for any purpose for the remainder of the Combat Phase starting the instant the units are designated as attackers.
- Engineer building bridge are never in Cover [CSW 1598]