







Weapons Effects on Ground Combat		
The weapons effects listed in the Table below are not affected by terrain.		
Attacker	Defender	Effect on Combat
German attack Surprise on 16MO	American defenders except those of the 4ID	1R
Tiger Scare: 16PM-17EV turn	Any	1R
Any Front Line Units	No Front Line Units	1R
Includes AFV with Infantry	AFV without Infantry	1R
Any	Includes a unit out of comm	1R
Any	Includes a unit out of supply ¹	1R
Any	Includes American and British units	1R
Tiger in the Mist Attack	Any	1R
Includes Infantry and Engineer ²	Any	−1 drm
Front Line Attackers in 3 hexes ³	Any - Defender is Flanked	−1 drm
Includes  on Fog/Snow/Night turn	Any	−1 drm
Includes  for Ardennes 44 attack (57.1)	Any	−1 drm
Includes  in Tigers in the Mist attack (57.2)	Any	−2 drm
ER - See Step 9 of Combat Procedure	ER - See Step 9 of Combat Procedure	+1/−1
Any	Tiger Scare: 16PM-17EV turn	1L
No Front Line Units	Any Front Line Units	1L
AFV without Infantry	Includes Infantry	1L
Includes a unit out of comm	Any	1L
Includes a unit out of supply	Any	1L
Infantry with no AFV	Any Front Line Unit with Light AA or AW	1L
Includes combat factors provided by aircraft	Includes one or more AA units of any type	+1 drm
Any	Includes Engineer	+1 drm
Any	Includes  on Fog/Snow/Night turn	+1 drm
Any	Includes  vs Ardennes 44 attack (57.1)	+1 drm
Any	Includes  vs Tigers in the Mist attack (57.2)	+2 drm
Includes AFV vs defenders described to the right (total CF of attacking AFV, halve, round up).	Includes Front Line unit and TD, AT Gun or Heavy AA unit in a Constructed Feature ⁴	See attacker column of Chart
¹ Column Shift does not apply for units occupying a strong point in a town or city.		1R = 1 column-shift right
² At least one attacking Engineer must not be attacking across a stream or river.		2R = 2 column-shifts right
³ The attack must include front line units in three hexes not attacking across a river or stream.		2L = 2 column-shifts left
⁴ Constructed Feature includes city, town, village, fort, strong point, roadblock or improved position.		1L = 1 column-shift left


Effects of Defensive Positions on Ground Combat					
Access the Defensive Positions Chart below to determine column shifts and drm for ground combat.					
	IP (ER5)	IP (ER6)	Road Block †	Strong Point	Fort
Building Unit	Front Line unit	Engineer	Engineer	Engineer	Cannot be built
Builder Mobility	May not move	May not move	May not move	May not move	Cannot be built
Hex	any hex	any hex	Road hex	hex with IP ER6	At start only
Time Required	one turn	one turn	one turn	one turn	Cannot be built
Subject to Combined Arms	No	No	No	No	No
Subject to Flank Attack	Yes	Yes	Yes	Yes	Yes
Subject to Inf-Stg Assault	Yes*	Yes*	Yes*	Yes*	Yes*
Overrun	Yes	Yes	no overrun	no overrun	no overrun
ER	Defenders are ER5	Defenders are ER6	ER not affected	Defenders are ER6	Defenders are ER6
Field Artillery (FA)	FA not affected	FA not affected	FA not affected	FA Halved	FA Halved
Nebelwerfers (NW)	NW not affected	NW not affected	NW not affected	NW Quartered	NW Quartered
Time on Target (ToT)	ToT not affected	ToT not affected	ToT not affected	FA Halved	FA Halved
CRT	Not affected	Not affected	Defender hit at 5-1	Shift 1 Left	Shift 2 Left
Ignore CA	No	No	No	Yes	Yes
Retreat	No effect	No effect	No effect	No effect	No effect
Advance	No effect	No effect	Stop in Road Block	Basic Advance	Basic Advance
* See Terrain Effects Chart. Possible vs. defenders in broken or woods. Defensive Positions will still impart benefits to defenders.					
† A Roadblock is removed before the combat dice roll if it does not contain at least one Front Line Step or AFV Step.					

A TIME FOR TRUMPETS

Play-Aid Card 4A Combat Segment

Living Play Aid Card April 2022

Terrain Effects on Ground Combat								
Normal Combat					German Night Combat Superiority - PD and EV Turns			
Defense Terrain	Day Turn MO or AF	Night Turn PD or EV	Combined Arms ¹	Inf-Stg III Assault ²	Defense Terrain	Combined Arms ¹	1SS, 2SS or 2Pz Attack ³	1SS, 2SS or 2Pz Defense ⁴
Clear	-	1L	2R	-	Clear	2R	1R	2L
Woods	-	1L	1R	-1	Woods	1R	1R	2L
Broken	1L	2L	-	-1	Broken	-	-	3L
Forest	1L	2L	-	-	Forest	-	-	3L
Marsh	-	1L	-	-	Marsh	-	1R	2L
Stream ⁵	1L	2L	-	-	Stream ⁵	-	-	3L
River ⁵	2L	3L	-	-	River ⁵	-	1L	4L
Village	+1	+1	-	+1 ⁶	Village	-	+1	+1
Town	DFx2	DFx2 & 1L	-	-	Town	-	DFx2 & 1R	DFx2 & 2L
City	DFx3	DFx3 & 1L	-	-	City	-	DFx3 & 1R	DFx3 & 2L
Notes: ¹ Possible when defender occupies clear or woods. Attack must include arty, plus infantry and tanks not attacking across a stream/river. Prevented by constructed feature - see Note 4, Weapons Effects Chart. ² Possible if defender occupies woods or broken and attackers include an assault gun and an infantry unit attacking from the same woods/broken hex and which are not attacking across stream or river. Negated if defender includes AFV, AT Gun or Heavy AA. Also, see interaction on last row of Weapons Effects. ³ If at least one of the attackers is a front line unit from the respective Panzer Division. See section 41.0. ⁴ If one or more of the defenders is a front line unit from the respective Panzer Division. See section 41.0. ⁵ All attackers must be attacking across stream or river hex sides. ⁶ The Village +1 drm negates the Inf-Stg III Assault -1 drm, so the resultant drm is zero.							All Effects are cumulative. +1 Combat die roll modifier -1 Combat die roll modifier 1L Shift 1 column left on the CRT 2L Shift 2 columns left on the CRT 3L Shift 3 columns left on the CRT 4L Shift 4 columns left on the CRT 1R Shift 1 column Right on the CRT 2R Shift 2 columns right on the CRT	

 Blitzkrieg Attack Table					
Die	2-1	3-1	4-1	≥ 5-1	
−2	Adv3	Adv3	Adv4	Adv4	Ardennes 44 attacks may be conducted during Clear Day Turns using this Table (57.1).
−1	Adv2	Adv3	Adv4	Adv4	
0	Adv2	Adv2	Adv3	Adv4	
1	Adv1	Adv2	Adv3	Adv3	Tigers in the Mist Attacks may be conducted during Fog, Snow or Night Turns using this Table (57.2) and the attack receives a column Shift Right.
2	Adv1	Adv1	Adv2	Adv3	
3	-	Adv1	Adv2	Adv2	
4	-	-	Adv1	Adv2	Apply all drm and column shifts obtained from the Weapons Effects Chart, the Terrain Effects Chart and the Defensive Positions Chart.
5	Eng	-	Adv1	Adv1	Defenders never retreat due to this Table.
6	A1	Eng	-	Adv1	The Adv 1,2,3 or 4 result is the number of hexes the attacker may advance after the combat as a result of a roll on this Table.
7	A1	A1	-	-	See other side for advance after combat options involving recon advance or road advance. A1/A2 result: Retreat 1 or 2 hexes as indicated.
8	A2	A1	Eng	-	
9	A2	A2	A1	Eng	



Play-Aid Card 4B
Combat Segment

Living Play Aid Card April 2022

Ground Combat Results Table [CRT]												
Dice	1-4	1-3	1-2	1-1	3-2	2-1	3-1	4-1	5-1	6-1	7-1	Dice
−3	/DR2	/DR3	/DR4	/1DR1	/1DR1	/1DR2	/1DR3	/DE	/DE	/DE	/DE	−3
−2	/DR1	/DR2	/DR3	/DR4	/DR4	/1DR1	/1DR2	/1DR4	/DE	/DE	/DE	−2
−1	1/CA	/DR1	/DR2	/DR3	/DR3	/DR4	/1DR1	/1DR3	/1DR4	/DE	/DE	−1
0	1•/1	1/CA	/DR1	/DR2	/DR2	/DR3	/DR4	/1DR2	/1DR3	/1DR4	/DE	0
1	/Eng	1•/1	1/CA	/DR1	/DR1	/DR2	/DR3	/1DR1	/1DR2	/1DR3	/1DR4	1
2	−	/Eng	1•/1	1/CA	/CA	/DR1	/DR2	/DR4	/1DR1	/1DR2	/1DR3	2
3	/AR1	−	/Eng	1•/1•	1/1	1/CA	/DR1	/DR3	/DR4	/1DR1	/1DR2	3
4	/1AR1	/AR1	−	/Eng	1•/1•	1•/1•	1/CA	/DR2	/DR3	/DR4	/1DR1	4
5	/AR2	/1AR1	/AR1	−	/Eng	/Eng	1•/1•	/DR1	/DR2	/DR3	/DR4	5
6	/AR3	/AR2	/1AR1	/AR1	−	−	/Eng	1/CA	/DR1	/DR2	/DR3	6
7	/AE	/AR3	/AR2	/1AR1	/AR1	/AR1	−	1•/1•	1/CA	/DR1	/DR2	7
8	/AE	/AE	/AR3	/AR2	/1AR1	/1AR1	/AR1	/Eng	1•/1•	1/CA	/DR1	8
9	/AE	/AE	/AE	/AR3	/AR2	/AR2	/1AR1	−	/Eng	1•/1•	1/CA	9
10+	/AE	/AE	/AE	/AE	/AR3	/AR3	/AR2	/1AR1	−	/Eng	1•/1•	10

Attrition affecting the Attacker

1/

1•/

Step Loss suffered by Attacker

AFV Step Loss suffered by Attacker

Combat Results affecting the Defender

/CA

/1

/1•

/DR1

/DR2

/DR3

/DR4

/1DR1

/1DR2

/1DR3

/1DR4

/DE

Counterattack

Step Loss suffered by Defender

AFV Step Loss suffered by Defender

Defender retreats one hex

Defender retreats two hexes

Defender retreats three hexes

Defender retreats four hexes

Defender suffers a Hit and retreats one hex

Defender suffers a Hit and retreats two hexes

Defender suffers a Hit and retreats three hexes

Defender suffers a Hit and retreats four hexes

Defender Eliminated

Combat Results affecting the Attacker and Defender

Eng

-

Engaged result applies to attacker and defender

A dash indicates combat result of No Effect

Combat Results affecting the Attacker

/AE

/1AR1

/AR2

/AR3

Attacker Eliminated

Attacker suffers a Hit and retreats one hex

Attacker retreats two hexes

Attacker retreats three hexes

Attacks are possible at 7-1 vs defenders in any type terrain.

Total the accumulated column shifts.

Odds greater than 7-1 are rolled on the 7-1 column. Odds worse than 1-4 are rolled on the 1-4 column.

Total the accumulated die roll modifiers.

A roll reduced less than -3 is resolved on the -3 row. A roll increased greater than +10 is resolved on the 10+ row.

Roll a red and white die. Both dice will be modified by the accumulated drm.

The red die determines attrition to the attacker; it is read to the left of the slash on the Combat Result Table.

The white die determines the combat result; it is read to the right of the slash on the Combat Result Table.

Note that the attacker can suffer losses as the result of both die rolls.

Attack Canceled: During the Battle of the Bulge, many attacks ended when the opponents lost sight of each other.

For Combat in Snow Squall areas, or during Dense Fog or Snow turns: Doubles on the dice results in attack canceled.

For Combat during Fog turns: "Boxcars" (double sixes) on the dice results in attack canceled.



Step loss priorities in descending order listed below. Owner choice when multiple units qualify.

AFV Hit Suffered by Attacker (52.3)

Priority

- 1st Front line AFV with the highest ER suffers 1 hit.
- 2nd Combat support AFV with the highest ER suffers 1 hit.
- 3rd Infantry unit with the highest ER suffers 1 hit.
- 4th Non-AFV combat support unit with highest ER suffers 1 hit.

Hit Suffered by Defender (52.6)

Priority

- 1st A TD, AT Gun or Hvy AA unit takes 1 hit if attacker has AFV and defender occupies constructed feature.*
- 2nd A defending front line combat unit suffers one hit.
- 3rd A defending combat support unit suffers one hit.
- 4th A defending artillery unit suffers one hit.**
- 5th A defending HQ suffers one hit.

Notes: * City, town, village, fort, strongpoint, roadblock or IP.
** If the unit is German Artillery Substitute, see 44.1n.

AFV Hit Suffered by Defender (52.4)

Priority

- 1st A TD suffers 1 hit if attacker has AFV and defender occupies constructed feature.*
- 2nd A defending AFV suffers 1 hit.
- 3rd A defending infantry unit suffers 1 hit.
- 4th A defending Non-AFV combat support unit suffers 1 hit.
- 5th A defending artillery unit suffers 1 hit.**
- 6th A defending HQ suffers 1 hit.

Notes: * City, town, village, fort, strongpoint, roadblock or IP.
** If the unit is German Artillery Substitute, see 44.1n.

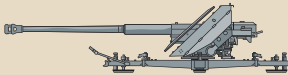
Hit Suffered by Attacker (52.5)

Priority

- 1st Front line unit with the highest ER suffers 1 hit.
- 2nd Combat support unit with the highest ER takes 1 hit.

Enhanced AFV Combat - German Anti Tank [Advanced Game]

German Anti-Tank Superiority for (1•/) or (/1•) Step Loss sustained by Allied AFV.
Allied AFV Step Loss increased to two steps when conditions met. See 53.1.



Enhanced AFV Combat - German Heavy Armor [Advanced Game]

Survivability of German Heavy Armor when (1•/) or (/1•) Step Loss sustained. See 53.2.
Step Loss precluded if no improved Allied Anti-Tank guns involved in the combat.



Advance After Combat Chart

Field Artillery and Nebelwerfer units may never advance after combat.
HQ other than the three special German HQ may never advance after combat.

Advance after attacks against Strong Points and Forts is always at the Basic Advance Rate.

Advance after attacks against properly manned Road Blocks is always limited to one hex.

Advances are given in hexes; however, units may not exceed their MF during an advance after combat.

Recon Advance

Units in the Recon Advance Column advance at double the basic advance with or without the use of roads.

Road Advance

The units must begin on a road and perform the entire advance along roads.
Units may switch roads at intersections, but they may not jump off-road.

Advance after combat on roads is always at 1MF per road hex, never ½MF per road hex.

Combat Result	Recon Advance (hexes) Armored Recon, Armored Cavalry, Motorized Ranger, KGP/KGC/FE HQ	Road Advance (hexes) Armored Infantry, Tank or Panzer must begin on road and remain on road	Basic Advance (hexes) All other Front Line and Combat Support units not listed in the previous two columns
D Elim due to DE	2	2	1
D Elim due to (1•) or (1)	2	2	1
DR1	2	2	1
DR2	4	4	2
DR3	6	6	3
DR4	8	8	4