# TERRAIN CHART V1.0

Terrain Type			n Defense Roll Modif		Moveme	ent cost fo		ovement	Vehicle from T	Damage errain	LOS mod	Elevation (LOS relevant)
Terrain	Турс	K	-	with	1	-	0	00		00		
Shallow Water		•	-	-	2	Blocked	Blocked	Blocked	•	-	-	0
Beach				-	1	2	3	1		-	-	0
Clear				-	1	1	2	1	•	•	-	0
Rocky	ed.				1	2	3	2			+	0
Brush	id.			-	1	1	3	2	•	-	+	0
Olive & Vine Grove					1	2	Blocked	2	-	•	+•	0
Light Forest					1	1	2	2	-	-	+•	1*
Heavy Forest					2	2	Blocked	4	-		Blocked	1*
Single-storey Buildings (9.6.2.1)	50	* <sup>2</sup> wher	rect firing f	ng if they h	2 ninder LOS	2	Blocked	3	-		+	<b>1*2</b>
Muti-storey Buildings (9.6.2.2)		Artillery	n determini y and vehic rect firing f	le units on	elevation I	<b>2</b> . Infantry u evel 0.	<b>Blocked</b> nits occupy	4 ying this he	<b>-</b> ex are cons	idered to b	e on elevar	2* <sup>2</sup>
Large Building (9.6.2.2)	W.	Large b	building cov determining and vehice	vers two or	<b>2</b> more hex			-			Blocked on elevation	2* on level 1.
Bridge					1	2	2	2	ı	ı	+•	0
Hill: Level 2 Level 1 (9.6.1) Slope (9.6.5.2)	Level 0	*2For A	+) the defe ach level o	felevation	climbed to	enter the	+2*2 hex. Is during th	+2*2	<b>-</b> ctivation.	•	Blocked	1-2
Covered Trail (9.6.3.3)		*During	-	<b>-</b> nt action, i	<b>1</b> f a unit foll	Hex*2	Hex*2	Hex* <sup>2</sup>	<b>-</b> d trail, ene			<b>Hex</b> In fire get -1

#### **Terrain Chart v1.0** LOS **Terrain Defense Bonus** Movement cost for each movement Vehicle Damage **Elevation** from Terrain mod type **D6 Roll Modifiers** (LOS relevant) **Terrain Type** 00 00 Λ **Narrow Road** 1 1 1\* Hex Hex (9.6.3.2)**Urban Alley** \*+1 Movement cost for changing direction (any number of vertices) to follow the narrow road path. 1\* 1 1 Hex Hex **Main Road** (9.6.3)\*No movement costs for changing direction. +• Blocked. **Blocked** Hex+1\*2 Hex + • Hex Stone Wall (9.6.3.2.1)\*If LOS accross the wall and defending units adjacent to stone wall. \*<sup>2</sup>If attempting to move across the wall. It is prohibited for artillery an wheeled vehicles. + + **Blocked Blocked Blocked** Hex (11) **Steep Slope** (9.6.5.2) \*When firing unit and defending unit are adjacent to the same steep slope.Vehicles and artillery units adjacent to a steep slope can see but not attack units adjacent to the same steep slope. Hex+1\* **Blocked** Hex Hex Hex+1\* **Barbed Wire** (Obstacle) (9.6.5.3)\*If movement accross the wire. \*\*2Cannot crossed with fast action. **Blocked Blocked Blocked** Hex Hex Tank Barricades (Obstacle) \*If defender is adjacent to a tank barricade. \*2Vehicle and artillery units cannot cross a tank barricade. (9.6.5.4)2 **Smoke** \*For each smoke marker on the hex. LOS is considered blocked by 3 or more smoke markers. River **Blocked Blocked Blocked Blocked** Hex Hex Delayed Action Swampy Blocked **Blocked Blocked** 0 (0) Craters and Ruins Terrain Chart (12.4.6.2 and 12.5) • 2 2 1 1 0 **Craters** • Brush, trees & 1 2 2 3 0



Ruins

Dertrauliches Kartenmaterial

•

1

2

**Blocked** 



+•

3

•

#### **FORTIFICATION CHART V1.0** Vehicle Damage from Terrain **Terrain Defense Bonus** Movement cost for each LOS **Elevation** movement type **Terrain Type** mod (LOS relevant) for fortifications (Inf/Art) **Fortification** 00 00 (9.6.4)Front Flank Rear Above Front Flank Rear Above Hex+ Hex Hex Hex Hex Hex Hex Hex+1 Sandbag Position (9.6.4.1)\* Infantry & artillery units end their movement in the sandbag position; vehicles in the hex terrain. Hex+1 Hex+1 Hex+ Hex Hex Hex Trench (9.6.4.2)\* Infantry units end their movement in the trench; vehicles and artillery in the hex terrain. \*2 If movement across the trench. Gun Hex Hex Hex+1 Hex+1 Hex Hex Hex Hex Position (9.6.4.3)\* Infantry & artillery end their movement in the gun position; vehicles in the hex terrain.

\* Infantry units always end their movement in the bunker. Infantry units have 360° arc of fire.

Vehicles and artillery units end their movement in the hex terrain.

\* Artillery units can placed in bunker during setup, only. See 9.6.3.2 for artillery arc of fire.

Pillbox (9.6.4.5)





<sup>\*</sup> Infantry units always end their movement in the pillbox; vehicles and artillery in the hex terrain.

## **Experience Levels (4.2.3)**

Level	Marker	Effect (cumulated)		
Recruit	AECH UNA	Attacker gains automatically one "X" symbol when attacking this unit		
Regular	No marker	No effects		
Hardened		+1 blue defense die		
Veteran		+1 blue attack die		
Elite	ELITE SILITE	This unit ignores suppressed symbols		

## Minefields (9.6.6)

Hex

Hex

Hex

Hex

Hex

Hex

Scouting Unit	D6 Base Result for Success	D6 Roll Modifying abilities	D6 Roll Modifiers
Infantry	5+	Scout	+1
Artillery / Vehicle 6+		Mine Detection	+2
		Unhidden Minefield	+1
		Command Card Effect	+Effect
		Fallback Action	-1

Uni Inside Minef	the	Minefield Attack Dice	Units Defense
Infant Artille	ry / ery		•
Vehic	cle	•	

Result of Attack	Effect on Infantry / Artillery	Effect on Vehicles				
	+1 Damage*	+1 Damage and Immobilzed*				
0	+1 Damage	+1 Damage and Immobilzed				
X	Suppressed	Suppressed				



## CLOSE COMBAT AID (11.0)

## **ATTACK DICE IN CLOSE COMBAT (11.1.2)**



Both players get the attack dice in close combat, as listed on the unit card.

### The following modifications are applied to the assaulting and defending unit:



**Half-strength:** If the assaulting unit has half-strength, only half success symbols count (10.8.1).



Special abilities and attributes: (see unit card): Modifications can also occur because of unit abilities and attributes.



**Unit experience level (4.2.3):** All veteran and elite units gain a blue attack die.



Check **Support Unit (11.1.1.1):** The assaulting unit can re-roll one of his attack dice once if he is supported.





Immobilized vehicles: The assaulting unit gains one re-roll in every close combat round. Regardless of their facing, immobilized units are always treated as outflanked. This reflects the greater mobility of their opponents.



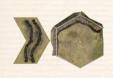
Vehicles do not have a double success roll applied when attacking infantry during close combat. Only the strongest symbol is counted.



Command cards (8.3): Command cards will state their effects. Check carefully in case the use of any of those abilities or attributes are conditional.

Important: Additional modifications for the <u>initial</u> close combat round:

#### Assault Units Dice Modification



Crossing **barbed wire** or **stone walls**: If a close combat is initiated across obstacles such as barbed wire or stone walls, the assaulting unit loses the weakest attack die in the first round of close combat.



**Outflanked**: If the close combat is initiated against the defending unit from a hex outside its arc of fire (10.6.) the assaulting unit gains one re-roll of one of its attack dice.

### **DEFENSE UNITS DICE MODIFICATION**



Action Status Marker: If the defending unit was already activated, only half success symbols count. If the defending unit was half-strength and already activated, he also loses the weakest attack die.

Suppressed: If the defending unit is marked with suppressed, then it cannot attack in the first close combat round.

**Note:** The action marker penalty does not apply to units with hide action markers (9.12.1).

## **DEFENSE DICE IN CLOSE COMBAT (11.1.3)**



Both players get the defense dice in close combat, as listed on the unit card.

### The following modifications are applied to the assaulting and defending unit:

Rattenmater		Terrain Defense Bonus D6 Roll Modifiers			
Ten an Type	X	-4	-		
Shallow Water					
Beach		•			

**Terrain bonus: (10.9.1):** Both units get the strongest die for the terrain bonus of the target hex.



Fortifications (secondary terrain, 9.6.4): If the defending unit is in a fortification such as sandbag position, trench, gun position, bunker or pillbox, both units always receive the strongest terrain defense bonus.



Vehicles get no terrain defense bonus in close combat.



Special abilities and attributes: (see unit card): Modifications can also occur because of unit abilities.



Unit experience level (4.2.3): All hardened, veteran, and elite units gain a blue defense die.



Check **Support Unit (11.1.1.1):** The defending unit can re-roll one of his attack dice once if he is supported.



Command cards (8.3): Command cards will state their effects. Check carefully in case the use of any of those abilities or attributes are conditional.

Important: Additional modifications for the <u>initial</u> close combat round:

#### DEFENSE UNITS DICE MODIFICATION

Aartenmateri		Terrain Defense Bona D6 Roll Modifiers			
Terrain Type	K	-	-		
Shallow Water		-	-		
Beach			Г		

**Terrain bonus:** (10.9.1): Both units get the strongest die for the terrain bonus of the target hex.



Fortifications (9.6.4): If the defending unit is a fortification such as sandbag position, trench, gun position, bunker or pillbox, the unit always receives the terrain defense bonus of the side from which the assaulting unit is attacking.



Defending unit's inherent defense dice and the area of Impact (10.9.3): Area of attack: For vehicles, the area of attack must be considered (11.3)

#### Assault Units Dice Modification

Aartenmateri		n Defense Roll Modi	
Terrain Type	*	-	-
Shallow Water	-		-
Beach			

**Terrain bonus: (10.9.1):** The assaulting unit gets no dice for the terrain bonus, but instead receives one blue die for its defense.



Fortifications (9.6.4): If the defending unit is in a fortification such as sandbag position, trench, gun position, bunker or pillbox, the assaulting unit always receives the strongest die of the terrain defense bonus.



Action Status Marker: If the assaulting unit moves into close combat with fast action, it loses the weakest defense die during the first round of close combat.



## TACTICAL AIR SUPPORT (TAS, 12.3)

**TAS Sequence:** 

Request TAS (12.3.1) --> Timing of TAS (12.3.2) --> ID Target (12.3.3) --> Defense against TAS (12.3.4) --> TAS Defense against AA Fire (12.3.5) --> TAS attack resolution (12.3.6):

- » TAS spotting (12.3.6.1) --> TAS Accuracy (12.3.6.2) --> TAS attack result (12.3.6.3)
- » TAS destroying buildings or terrain (12.3.6.4) --> (12.5)
- » TAS second attack run (12.3.6.5)

## AA Units Attack (12.3.4)

### **Range Factor**

		3	
Blast	Close	Medium	Long
Z Z	•		
Z Z		•	
70 g			•
Z Z		•	

## **TAS Unit Spotting (12.3.6.1)**

Result	Defending unit is in a hex with						
TAS rolls D6	No terrain bonus	Terrain bonus					
1	Accuracy -1	Acquirect 2					
2		Accuracy -2					
3	0	Accuracy -1					
4	Success	Success					
5		Success					
6	Accuracy +1						

Chapter 10.5. must be considered.

The only exceptions to this are vehicles in **clear, narrow, main road or in bridge** hexes. They are automatically spotted (10.5.1). Some results on the table will also give a modifier to the accuracy roll that follows so players should make a note on any modifiers received.

### AA RESULTS TABLE (12.3.5)

Result	Effect
Ş	TAS crashes and is destroyed. TAS does not attack. Remove the TAS card from the game.
0	TAS is damaged. TAS does not attack. Place the TAS card in discard pile.
0	TAS is slightly damaged, so TAS attack is inaccurate. Add a -1 to the accuracy roll. Place the TAS card in discard pile after use.
X	TAS turns away. TAS does not attack. Return the TAS to the player's hand after use. Card can be played again from the next turn onwards.

## TAS Units Accuracy (12.3.6.2)

		Defender unit status							
TAS accuracy	Action		Immobile Suppl	Delayed Action	Other status				
roll	with	X-	with.	1-	with	1-			
1	+	+•	+•	+	+	+•			
2	+	+	+	+	+•	+•			
3	+	+	+	-	+•	+			
4	+•	-	-	-	+	+			
5	+	-	-	-	+	+			
6	+	-	-	-	-	-			

#### FRIENDLY FIRE:

If the TAS Accuracy roll is a 1 or less, after any relevant modifiers have been applied, and there are one or more friendly units in any hexes adjacent to the hex of the target unit, a friendly fire attack will take place.

After the TAS has rolled its attack dice against the targeted hex, any of those which do not score at least a suppression result are put to one side. These attack dice are then rolled in an attack against one, (only), of the friendly units that are adjacent to the targeted hex. This friendly unit is chosen by the non-active player. This friendly unit receives all the normal defense dice set out in 10.9-10.9.8 except the failed spotting roll 10.9.5.



## **Off-Board Artillery Support (OAS, 12.4)**

**OAS Sequence:** 

Support phase: Request OAS (12.4.1) --> Spotting the target hex (12.4.2.1) --> Firing exploratory shells (12.4.2.2)

Action phase: Start artillery strike (12.4.3) --> OAS fire mode (12.4.3.1) --> OAS impact area (12.4.3.2) --> Attack result (12.4.3.3):

- » OAS destroying buildings (12.4.3.4 and 12.5)
- » Craters due to OAS attacks (12.4.3.5)

## FIRING EXPLORATORY SHELLS (12.4.2.2)

For this action the player owns the OAS rolls two dice. A green combat die to determine the drift distance to the primary target hex and a D6 to determine the direction of the deviation.

Apply the following results and move the waypoint marker to the new hex.

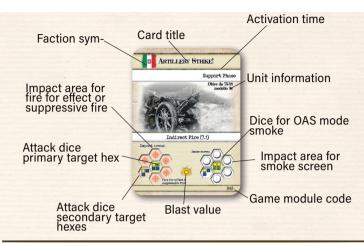
Result of	of Effect			
<b>A</b>	Primary target hex confirmed - add a blue attack die for the upcoming attack			
<b>o o</b>	Primary target hex confirmed			
X	Primary target hex NOT confirmed - shift waypoint marker by 1 hex			
Blank	Primary target hex NOT confirmed - shift waypoint marker by 2 hexes			

Result of D6	Direction					
1						
2	6 1 Primary target hex					
8						
4	Secondary target hexes					
5	4 B hexes					
6						

## **OAS FIRE MODES (12.4.3.1)**

#### The three modes of OAS fire are:

- ► Smoke Screen (12.4.3.1.1)
- ► Suppressive Fire (12.4.3.1.2)
- ► Fire For Effect (12.4.3.1.3)



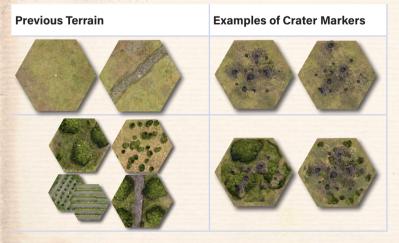
## **BLAST VALUES VS BUILDINGS (12.5)**

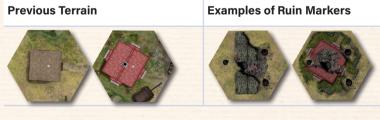
Result	Effect				
Ş	Building or fortification collapses - all units inside this hex are flipped to half strength				
0	Building or fortification collapses - all units inside this hex gain one damage				
0	Building or fortification not collapsed - all units inside this hex perform a fallback				
X	Building or fortification not collapsed - all units inside this hex are suppressed				

- ► If a **building** collapses, the defending player must take a ruin marker and place it on the hex.
- ▶ If a **bunker, pillbox or gun position** collapses, the defending player must flip the marker of these obstacles to their trench side.
- ▶ If a trench or sandbag position collapses, the defending player removes the marker.

## CRATERS DUE TO OAS ATTACKS (12.4.3.5)

In the case of a critical hit that isn't cancelled out during an OAS attack roll a crater marker is placed on that hex. This applies to any hexes which are **roads, tree alleys, clear, light forest, olive & vine groves, or brush terrain**. The active player places a crater marker according to the following illustration. The terrain changes its character due to the crater marker. This hex has now all effects shown in the table below.







# Ranged Fire Aid (10.0)

### Modifications to Attack Dice



Identify Target Type A and Range Factor (10.1)



Check Line of Sight (LOS, 10.2): Check if LOS is clear, hindered or blocked by using the 'Line of Sight Modification' column on the players aid.



Check Joint Fire (10.8.4): Activate 1 adjacent unactivated unit as fire support unit (FSU) and gain one additional attack die.





Mark the attacking unit/s with status marker:



- Firing, Move and Fire or Fire and Move.
  - Turret fire [if firing outside the arc of fire (10.6 and 10.9.4)].
- Mark **FSU** with firing (10.8.4)



If necessary, perform **Spotting Roll** (10.5 and 10.9.5):

- Check Special abilities and attributes (4.2) Attacker and Defender.
- Apply Hide Action, Hidden or Ambush status maker modifiers.



Check Arc of Fire (10.6), Range (10.1), grab attack dice depending on range (4.2)



Unit experience level (4.2.3): All attacking units with the experience level of veteran or elite gain a blue attack die.



Unit experience level (4.2.3): Attacks on recruit level units receive 1 automatic suppression result.





Attack Die -1, Hidden: Attacking unit loses its weakest attack die when it has an attack die -1 or hidden status marker.



Attacker with ambush status marker gains automatically one "X" symbol (suppression) when firing,





Special abilities and attributes: (see unit card): Unit cards will state any special abilities or attributes for the attacking unit. Check carefully in case the use of any those abilities or attributes are conditional.



Attacking unit at half-strength: (10.8.1): A half-strength attacking unit treats all double success rolls as a single success. They only count the strongest symbol (critical hit/ damage/suppressed).



Command cards (8.3): Command cards will state their effects. Check carefully in case the use of any of those abilities or attributes are conditional.

## SPOTTING ROLL TABLE (10.5)

#### Roll 1d6 for spotting

Attacker's Unit Type	<b>6</b>	Target is in the arc of fire		Target is not in the arc of fire		
		No Terrain bonus	Terrain Bonus	No Terrain Bonus	Terrain Bonus	
	*	-	2+	*	*	
			2+	3+	4+	
	with	-	4+	4+	5+	

- Automatically spotted (10.5.1): Units marked with any fire status (exception fire and move), fast action, delayed action, unit in adjacent hexes and units in clear or road hexes. All infantry units have a 360 degree arc of fire, so they never use the last two columns.
- Hindered LOS: Subtract 1 from the result if there are one or more hindering terrain types in the LOS.

## **CRITICAL HITS**

For each critical hit result that remains after the defense roll by the infantry/artillery unit, the attacking player is given a green die and the defending player is given a blue die. This is used to perform a comparison roll (10.7.2).

## CRITICAL HITS VERSUS INFANTRY AND ARTILLERY UNITS (10.7.5):

Critical Hit: No damage points are applied. The infantry/ artillery unit immediately performs a fallback (14.3). This will eliminate an artillery unit. If the infantry unit was already marked fallback before resolving the critical hit in 10.7.5, it is also eliminated.

Damage Point: No damage points are applied. The infantry/artillery unit is suppressed. Mark it suppressed. If it was supressed before resolving the critical hit in 10.7.5, it immediately performs a fallback. This will eliminate an artillery

Suppression: Use exactly the same procedure as if the attacker's strongest symbol was a damage point. (see above).

#### CRITICAL HITS VERSUS VEHICLE UNITS (10.7.6):



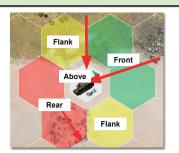
Critical Hit: No damage points are applied. The vehicle is immobilized. If the vehicle is already immobilized the unit is eliminated.

Damage Point: No damage points are applied. The vehicle immediately performs a fallback. If it is an immobilised vehicle it is eliminated. If it was already marked fallback before resolving the critical hit in 10.7.6, it is eliminated.

X Suppression: The vehicle is suppressed. If it was supressed before resolving the critical hit in 10.7.6, it immediately performs a fallback. If it is an immobilised vehicle it is eliminated.

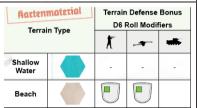
# RANGED FIRE AID (10.0)

#### MODIFICATIONS TO DEFENSE DICE



Defender's Inherent defense dice and the Area of Impact (10.9.3): The base defense dice

The base defense dice gained by a defending unit, (as stated on the unit card 4.2), will depend on the area of impact. Indirect fire always uses above.



Terrain: (10.9.1): Check
Terrain Dense Bonus column
on the Terrain Chart for the
defense dice received by
the defending unit for the
terrain they occupy. This
bonus is specific for each
unit type.

**Hindered LOS (10.3):** Check Terrain Chart for the defense dice received by the defending unit for any LOS hindrances between them and the attacking unit when using direct fire. Defense dice for hindrances are cumulative. Up to two hindrances for indirect fire are ignored. However, a third hindrance will completely block LOS and prevent both direct and indirect ranged fire.

**Exception:** If unit uses a spotter for indirect fire.

Attacking Unit's Fire Status (10.9.4): The fire status of the attacking unit may cause the defending unit to gain a defense die. This is noted on the first two columns of the Ranged Fire Modifications Chart (10.9.5). The second column applies to vehicles marked with a fast action status marker. The first applies to all other enemy targets.



Failed Spotting Roll (10.5 and 10.9.5): Failing to spot an enemy will cause the defending unit to gain a defense dice. The strength of this defense die is modified by the fire status of the attacking unit. This is noted on the third and fourth column of the ranged fire modifications chart.



Digging In (13.2): Defending unit loses its weakest defense die when it has a digging in status marker. However, they will always retain a minimum of one defense die.



**Dug-in (13.1):** Defending unit gains a green defense die when it has a dug-in status marker.



Infantry, Artillery and Vehicle Fast Action (13.2): Defending infantry and artillery units lose their weakest defense die when they have a fast action status marker. However, they will always retain a minimum of one defense die. Vehicles gain 1 die see Ranged Fire Modification Table.



**Suppressed (13.3):** Defending infantry and artillery units gain a green defense die when suppressed.







**Hidden, Hide Action, Ambush** (13.1 or 13.2): Defending units with status hidden or hide action marker gain a blue defense die.



Unit experience level (4.2.3): All defending units with the experience level of hardened, veteran or elite gain a blue defense die.



Half-Strength Defending Unit (10.8.1): A half-strength defending unit receives no penalties because it is half-strength.



Special abilities and attributes: (see unit card): Unit cards will state any special abilities or attributes for the defending unit. Check carefully in case the use of any those abilities or attributes are conditional.



Attacker Status

Command cards (8.3): Command cards will state their effects. Check carefully in case the use of any of those abilities or attributes are conditional.

## Ranged Fire Modification Table (10.9.5)

#### **Defender Status**

Attacker spotting roll failed

Firing

Turret
Fire & Move & Fire & Move & Move

