

Weighted Turn Numbers

3 if unassigned and no direct fires.

2 if assigned but no direct fires. (2 is the max possible at night.)

1 if direct fires.

Command Prep Table

Type	Weighted Turns Elapsed					
Prepared Defense	1-12	13-26	27-41	42-55	56-70	71+
Attack	1-6	7-12	13-27	28-42	43-60	61+
Hasty Defense	1-4	5-7	8-16	17-25	26-38	39+
Move	1-3	4-6	7-15	16-21	22-33	34+
1 or less	10	8	6	4	3	3
2	10	9	7	5	4	3
3	11	10	8	6	5	4
4	12	11	9	7	6	5
5	12	11	10	8	7	6
6	np	12	11	9	8	7
7-8	np	12	11	10	9	8
9 or more	np	np	12	11	10	9

Notes:

= Roll or more on two dice to implement.

np = Not Possible.

Tactical Combat Series: v.3.1 Charts & Tables

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Basic Terrain Effects on Combat and Movement Chart

Game Specific Charts (if any) take precedence over this generic one.

Terrain	Type	Foot Movement	Vehicle/Carrier Mvt (not Truck)	Truck Movement
Open	Open	1	1	2
Swamp	Partly Pro	3	4	P
Woods	Partly Pro	1	2	3
Hedge Hexside	Partly Pro	NE	+1	+2
Buildings	Partly Pro	NE	NE	NE
Forest	Partly Pro	2	3	4
City/Village	Protective	1/2	1/3	1/3
Beach	Billiard Table	1	1	2
Bocage	Partly Pro	+2	P	P
Cliff Hexside	ot	P	P	P
Primary Road	ot	1/2	1/3	1/3
Secondary Road	ot	1/2	1/2	1/2
Railroad	ot	1/2	1/2	1/2
Stream	ot	+1	+3	+5
Creek/River	ot	P	P	P
Shingle	Partly Pro	+2	P	P

Notes:

ot= Other Terrain

P= Prohibited

NE= No Effect

Spotting Range Chart

1) SFA, Artillery Spotting, Fire-based Overwatch Trigger Fires:
Spotting Range is **UNLIMITED**

2) Movement-based Overwatch Triggers:
Target is Infantry or Weapons Unit

<i>Terrain of Target⁽¹⁾ is...</i>	<i>Spotting Range</i>
Billiard Table or Moving on ROAD	UNLIMITED
Open	3 Hexes
Partly Protective, or Protective	ADJACENT ONLY

(1) Use Terrain of unit OR

(in the case of Movement-based Overwatch)

that of the center of the hexside crossed during movement.

Target is Vehicle or Carrier Unit: Spotting Range is UNLIMITED

BUTTONED UP FIRERS or SPOTTERS:

Above OR (if they have a Point Weapon) **NOMINAL RANGE** (whichever is less).

If the firer does not have a Point Weapon, only apply the above.

Area Fire Table

Total all applicable modifiers (column shifts to get a net shift before applying any). Resolve fires shifted off either edge of the table on the last table column.

The Terrain:

Class	Regular	Some Units Dug In	All Units Dug In	Notes
Billiard Table	+2	0	-1	(applies to Sortie Attacks)
Open	0	-1	-2	(applies to Sortie Attacks)
Partly Protective	-1	-2	-2	(applies to Sortie Attacks)
Protective	-2	-3	-3	(applies to Sortie Attacks)

Ignore P-type units when determining the Dug In quality of the target hex.

- 1 if Fire is at Night in an Lighted Area Do Not Apply to Artillery Fires
- 2 if at Night, not in an Lighted Area Do Not Apply to Artillery Fires

The Target:

- +1 if any unit in hex is in MOVE MODE (applies to Sortie Attacks)
- 1 if all or some units in the hex are already SUPPRESSED or PARALYZED (applies to Sortie Attacks)
- 1 if the Target Hex is in Smoke or an Artillery Attack Zone (Do not apply to Artillery Fire Resolution) (applies to Sortie Attacks)
- 2 if at least one of the units in the hex have a P-type DEFENSE of 2 or more (applies to Sortie Attacks)
- +2 Overwatch Fires vs ROAD MOVING target
- +1 CROSSFIRE (See 11.2)

Range: Applies to every weapon (including Mortars, use range of spotter) EXCEPT Artillery and Sortie attacks. Apply the longest range firing unit only for each fire.

+4	In hex
+2	1 hex
+1	2 hexes
0	3-4 hexes
-1	5 hexes
-3	6 or more hexes

Stacking (All apply to Sortie Attacks) (ignore P-types and anything riding a Half-track, COUNT things being towed)

+0	1 to 7 steps in hex
+1	8 to 12 steps in hex
+3	13 or more steps in hex

Suppressed Fires, Firers in Artillery Attack Hexes, or Buttoned Up Firers are x1/2 (these are cumulative)

Result	Total Firepower Directed at Hex																
	Less than 1	1	2	3	4	5	6-7	8-9	10-12	13-16	17-20	21-25	26-50	51-75	76-100	101-150	151+
No Effect	11..53	11..51	11..45	11..42	11..36	11..34	11..32	11..26	11..24	11..22	11..16	11..14	11..12	11	—	—	—
Morale Check	54..65	52..63	46..56	43..54	41..51	35..45	33..42	31..35	25..33	23..26	21..24	15..21	13..15	12	—	—	—
-1 Step ☼	66	64..66	61..66	55..66	52..65	46..63	43..61	36..55	34..53	31..51	25..45	22..43	16..41	13..35	11..33	11..31	11..25
One Die x1/2 ☼	—	—	—	—	66	64..66	62..66	56..65	54..63	52..61	46..54	44..52	42..46	36..43	34..42	32..35	26..33
Two Dice x1/2 ☼	—	—	—	—	—	—	—	66	64..66	62..66	55..66	53..65	51..61	44..55	43..52	36..46	34..43
Three Dice x1/2 ☼	—	—	—	—	—	—	—	—	—	—	—	66	62..66	56..66	53..66	51..66	44..66

Battalion Morale Additions:

- +1 if casualty result is 4 to 5 steps
- +2 if casualty result is 6 or more steps.

Add Battalion Morale addition to EACH Battalion in the hex (if more than one).

All results other than No Effect require a Morale Check.

Dice results require division by 2 and rounding.

☼ Any applicable units in the target hex must Button Up.

Artillery Barrage Fire Values

Size Ranges (mm)->	100 or less	101-120	121-130	131-200	201-300	301 or more
Common Sizes->	75	105	122	150,155	8 inch	16 inch
Battery Barrage Markers						
Good Shoot	8	12	15	18	30	120
Bad Shoot	4	5	6	8	14	54
Battalion Barrage Markers						
Good Shoot	11	16	20	25	43	167
Bad Shoot	5	7	9	11	19	75

Barrage Zone Sizes:

Battery: Target Hex only

Battalion: Target Hex and the Six Adjacent Hexes.

Units in or entering hexes **adjacent** to a Barrage Zone Hex are attacked with 1/2 the Barrage Zone's Firepower.

Fast Fire Missions:

Pay three times the ammunition. 122mm guns or smaller. Firepower above is x2.

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Morale Table

Modifiers

- +1 if the target of an Artillery Barrage Marker attack (ACTUAL Attack Zone Hex only) or Sortie
- +1 if checking unit is already PARALYZED
- +1 Night, not negated by lighted areas
- 2 One or more units in the hex is DUG IN
- 1 If Stack contains one or more P-type Targets in it.
- +2 CROSSFIRE (see 11.2)
- 1 if checking unit is in Partly Protective or Protective terrain.

Unit Morale (Unit Morale x2⁽²⁾ if in Assault-style Combat) plus Bn Morale plus Steps Lost and Modifiers from above

Result	1 or less	2	3	4	5	6	7	8	9	10	11	12	13+
No Effect	11..53	11..46	11..41	11..33	11..25	11..21	11..14	11	—	—	—	—	—
Suppressed	54..65	51..65	42..64	34..62	26..54	22..51	15..43	12..34	11..24	11..15	11..13	11	—
Paralyzed	—	—	65	63..64	55..63	52..61	44..55	35..53	25..46	16..42	14..34	12..31	11..23
SYR (1)	66	66	66	65..66	64..66	62..66	56..65	54..64	51..63	43..61	35..53	32..45	24..41
Surrender	—	—	—	—	—	—	66	65..66	64..66	62..66	54..66	46..66	42..66

Notes:

- (1) Paralyzed units cannot SYR. On an SYR result, they remain paralyzed.
- (2) Do not apply this multiplier when making a Morale Check in an Overrun Combat in Partly Protective or Protective terrain.

Adjustment Table

(Do not use for Rocket Artillery Fires)

Range from Spotter to Target Hex is 3 Hexes or less

Nationality	No Shoot	Scatter	Bad Shoot	Good Shoot
1. US	11..14	15..16	17..32	33+
2. Commonwealth, Germans	11..16	21..23	24..36	41+
3. Other	11..22	23..26	31..44	45+
4. Japanese, Soviets	11..23	24..32	33..52	53+

Range from Spotter to Target Hex is 4 to 6 Hexes

Nationality	No Shoot	Scatter	Bad Shoot	Good Shoot
1. US	11..16	21..22	23..36	41+
2. Commonwealth, Germans	11..22	23..25	26..44	45+
3. Other	11..24	25..32	33..52	53+
4. Japanese, Soviets	11..25	26..34	35..61	62+

Range from Spotter to Target Hex is 7 Hexes or more (OR AT NIGHT...NOT negated by Illum)

Nationality	No Shoot	Scatter	Bad Shoot	Good Shoot
1. US	11..23	24..25	26..44	45+
2. Commonwealth, Germans	11..24	25..31	32..53	54+
3. Other	11..31	32..35	36..61	62+
4. Japanese, Soviets	11..31	32..36	41..65	66

Save Yourself Retreat Table

One Die + Unit Morale, Bn Morale, and Steps Lost

Steps Lost	Result
8 or less	Retreat 3 Hexes
9-11	Retreat 4 Hexes, -1 step (1)
12-14	Retreat 5 Hexes, -2 steps (1)
15 or more	Unit Disintegrates, destroy all steps (2)

- (1) Do not apply losses to units which could not roll for an SYR themselves. Apply step losses per stack, NOT per unit.
- (2) If any units are in the hex to which (1) applies, those units retreat 7 hexes.

Minefield Costs and Attacks

By Force...

- ...MP cost +2
- ...Area Fires Attack with 18 firepower,
- ...Point-target roll of 8 or more to kill.

By Breaching...

- ...MP cost +3
- ...Area Fires Attack with 9 firepower.

Mortar & Infantry Gun Smoke Scatter Table

Die Roll	Result
1	No Smoke placed, unit is still Fired Marked
2-3	Smoke scatters out 1 hex, roll die for direction
4-6	Smoke lands in intended hex

Point Fire Table

Modifiers (Total determines table row used)

The Terrain:

Class	Modifier
Billiard Table	+3
Open	+2
Partly Protective	0
Protective	-1

The Target:

- 2 Target is an AT or Inf Gun
- 1 If target is DUG IN
- 1 Target is in FIRE MODE (*do not apply to AT Guns*)
- +2 Overwatch fires vs ROAD MOVING target
- 1 Target is in a SMOKE or in ARTILLERY ATTACK ZONE hex

The Firer:

- +1 AT Gun is the firing unit
- +2 Fires are an SFA
- 2 Firer is BUTTONED UP, SUPPRESSED, or in an ARTILLERY ATTACK ZONE Hex

Other:

- 2 NIGHT (negated in Lighted Area)

Firing Differential (Attack minus Defense)

Net Mod	+5 or more	+4,+3	+2	+1	0	-1	-2	-3	-4
+4 or more	12, 16, 42	14, 22, 44	16, 23, 45	22, 25, 45	23, 31, 46	33, 43, 52	41, 46, 61	46, 56, 64	54, 62, 66
+3	14, 22, 44	16, 24, 46	22, 25, 51	24, 31, 51	25, 33, 52	35, 45, 54	43, 52, 63	52, 62, 66	56, 66, P
+2	16, 24, 46	22, 26, 52	24, 31, 53	26, 33, 53	31, 35, 54	41, 51, 56	45, 54, 65	54, 64, P	64, P, P
+1	21, 25, 51	23, 31, 53	25, 32, 54	31, 34, 54	32, 36, 55	42, 52, 61	46, 55, 66	55, 65, P	66, P, P
0	22, 26, 52	24, 32, 54	26, 33, 55	32, 35, 55	33, 41, 56	43, 53, 62	51, 56, P	56, P, P	P, P, P
-1	23, 31, 53	25, 33, 55	31, 34, 56	33, 36, 56	34, 42, 61	44, 54, 63	56, 66, P	P, P, P	P, P, P
-2	26, 34, 56	32, 36, 62	34, 41, 63	36, 43, 63	41, 45, 64	46, 61, 66	66, P, P	P, P, P	P, P, P
-3	34, 42, 64	36, 44, 66	42, 45, P	44, 51, P	45, 53, P	54, 65, P	P, P, P	P, P, P	P, P, P
-4 or less	44, 52, P	46, 54, P	52, 55, P	54, 61, P	55, 63, P	66, P, P	P, P, P	P, P, P	P, P, P

Notes:

Firing differential of -5 or less has an automatic no kill possible.

a,b,c = a is close range, b is nominal range, c is long range
(Close= 1/2x Printed Range, Nominal= Printed Range, Long= 2x Printed Range)

or more to kill at given range on two dice

P= Kill is impossible

If a kill results in a hex, the remaining applicable units in the hex must Button Up.

Artillery Point Fire Table

A modified roll of 10 or more destroys the target.

-1 if attack is from a Bad Shoot mission or Infantry Gun (100mm or greater)

+1 if the attack is from a Fast Fire Artillery Mission

Regardless of the success of the above roll, all applicable units in the hex rolled for are Buttoned Up.

AT Roll Table

Modifiers

- +1 Target in SMOKE
- +1 Target is BUTTONED UP
- 2 Target STACKED with INFANTRY
- 2 Firer SUPPRESSED
- 1 Target or Firer is in ARTILLERY ATTACK ZONE
- +1 VISIBILITY is 3 or less or at NIGHT (negated in Lighted Areas)
- +1 If against a ROAD MOVING target in Overwatch fires

Target Terrain	In Hex	One Hex Range
Billiard Table or Open	9	10
Partly Protective	8	9
Protective	7	8

Roll two dice. Modify the dice as below.

If the number rolled is greater than or equal to the above, destroy the target. Otherwise, no effect.

★ AT Roll Attacker Step Loss:

If an AT Roll is made with a RAW roll of 3 or less, destroy the step that made the attack.

Sortie Successful Attack Table

Die Roll

3-6

4-6

Conditions

Open with No Smoke or Billiard Table Terrain with No Smoke

Other than the Above

Sortie Point Fire Modification Chart

Modifier

-2

-1

+2

-1

Reason

Target in Smoke, Artillery Attack Zone, Partly Protective or Protective Terrain

Target in Move Mode

Target's Defense is 2 or less

Target is Dug In

Note: Even if a Sortie Point Fire is unsuccessful (provided the attack roll was made), the applicable units in the target hex must Button Up.