

## SEQUENCE OF PLAY

### COMMAND PHASE

Both players do the following:

- 1) Review Implemented Op Sheets for completion [6.11].
- 2) Accrue Weighted Turns [6.9d].
- 3) Make any implementation checks [6.9f].
- 4) Make any Reserve or Alternate Die Roll Check attempts [6.14d].
- 5) Add units to existing Op Sheets [6.13].
- 6) Create new Op Sheets [6.8].

On full hour turns (turns ending in -00), add the following:

- 7) Roll to reduce Battalion and Vehicle Morale if applicable [17.1d, 17.8d, 26.1d].
- 8) Roll for Weather if necessary [7.0a].

### AIRCRAFT & ARTILLERY PHASE

Roll to determine which player fires first [2.0]. The player who wins the roll chooses to be first or second for the duration of the Aircraft & Artillery Phase.

Each player conduct the following six subphases separately, in Initiative order.

- 1) Determine and execute Aircraft Sorties [25.0].
- 2) Execute any Pre-Plotted Barrages as per special rules in certain TCS games.
- 3) Remove own Continuous Fire Missions and place new Artillery Missions [18.0].
- 4) Adjust missions by rolling on the Artillery Adjustment Table.
- 5) Execute all new Missions.
- 6) Remove all Barrage markers that are not Continuous Fires.

### ACTION PHASES

Roll to determine who conducts his phase first [2.0]. Each player conducts his own separate Action Phase. Conduct them one right after the other, following the sequence described below:

- 1) Remove all Fired markers from the phasing player's units.
- 2) Remove Mortar and IG Smoke and Illum placed by the player during the previous turn.
- 3) Place Reinforcements on the appropriate map edge [27.2].
- 4) The phasing player may conduct Mode Change [4.1], Movement [20.0], Suppressive Fire Actions [13.0], Point Fire Actions [14.0], Vehicle Impulses [20.2], Assaults [22.0], Overruns [23.0], Minefield Breaches [21.3], and Minefield Crossings [21.2]. In either Action Phase both players can conduct appropriate Overwatch Fires [15.0].
- 5) Phasing player may remove Suppressed and reduce Paralyzed markers if desired. The non-phasing player may conduct Overwatch Fires at stacks recovering from being Suppressed or Paralyzed [17.7]. Resolve any overstacking [5.0].

### CLEAN UP PHASE [26.2c, 19.2]

Both players work together to do all of the following (ORDER is important):

- 1) Remove all Artillery Illum markers.
- 2) Remove all Level 1 Smoke markers.
- 3) Flip all Level 2 Smoke markers to Level 1 Smoke markers.

### TURN END

Advance Turn marker.

## COMMAND PREP TABLE

### WEIGHTED TURN NUMBERS [6.9d]

- 3 if Unassigned
- 2 if Assigned or Night
- 1 if fired or fired upon in any way
- x3 for Vehicle Op Sheets [6.9e]

Type	Weighted Turns Elapsed											
Prep.Defense	1	12	18	24	30	36	42	49	56	63	71	
Attack	1	6	9	12	16	22	28	34	42	52	61	
Hasty Defense	1	3	6	9	12	17	22	26	32	40	45	
Move	1	2	4	6	8	12	15	18	22	28	34	
Command Prep + Op Sheet Size	1	61	52	44	35	32	24	24	21	14	12	11
	2	63	56	52	44	35	32	25	22	21	14	12
	3	64	63	55	52	44	35	31	26	24	21	14
	4	65	64	63	55	52	44	36	32	31	24	21
	5	66	65	64	62	56	52	45	42	34	32	24
	6	-	65	65	64	62	56	52	46	43	34	32
	7	-	-	65	65	64	62	56	53	51	44	35
	8	-	-	-	65	65	63	62	56	54	52	46
	9	-	-	-	-	65	64	63	62	56	54	52

If # rolled is greater than or equal to the table value, implement the Op Sheet.

## SORTIE [25.1]

### SORTIE SUCCESS TABLE

Open/Billiard	Partly Prot/Prot	Full woods hex (no roads or trails)
3	5	7

#### Modifiers:

- +1 Vehicle or Carrier in hex
- +1 Move Mode unit in hex
- 1 AA gun [25.1e]
- 1 No spotter [25.2]

Roll one die. Modify the roll as above. If result is equal to or greater than number in the table execute sortie. Otherwise no effect. Sorties automatically fail in Smoke or Arty Attack Zone.

### SORTIE POINT FIRE TABLE

#### Modifiers:

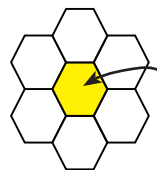
- 2 Partly Protective or Protective
- 1 Vehicle or Carrier in Move Mode
- +2 Defense Strength is 2 or less
- 1 Dug-in

Roll two dice. Modify total as above. If the result is greater than or equal to the Point Kill # for that Sortie, destroy the target.

Otherwise no effect.

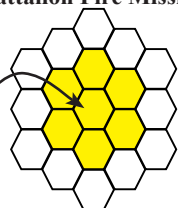
## ARTILLERY BARRAGE ZONE SIZES

Battery Fire Mission



Target Hex only

Battalion Fire Mission



Target Hex and the six adjacent hexes

## ARTILLERY ADJUSTMENT TABLE

1	2	3	4	5	6	7	8	9	10	11	12	13	Result
11-42	11-41	11-35	11-34	11-32	11-31	11-25	11-23	11-22	11-16	11-14	11-13	11-12	No Shoot
43-62	42-56	36-54	35-46	33-43	32-36	26-34	24-32	23-26	21-23	15-16	14-15	13-14	Scatter
63-65	61-65	55-65	51-65	44-65	41-65	35-61	33-52	31-44	24-36	21-32	16-26	15-25	Bad Shoot
66	66	66	66	66	66	62-66	53-66	45-66	41-66	33-66	31-66	26-66	Good Shoot

### Artillery Adjustment Table Modifiers

- +1 Observer on Prep. Defense Op Sheet
- 2 Observer Unassigned or on Move Op Sheet
- +1 Observer at least 40m higher than target hex
- 2 Twilight
- 4 Night (-2 if target hex illuminated)
- 1 Observer range 4+
- 1 Observer range 7+

All Shifts (including range) are cumulative.

### Starting Column (if not otherwise given)

US	CW, German	Other	Soviet, Japanese
11	10	9	8

## MORTAR & INFANTRY GUN SMOKE TABLE

- 1-3 No Smoke, unit Fired
- 4-6 Smoke successful

## ARTILLERY BARRAGE STRENGTH

Location	HE	Continuous Fire
Attack Zone	2 x Firepower	Firepower
Adj. to Attack Zone	Firepower	1/2 x Firepower

### FAST FIRE MISSIONS

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

## ARTILLERY POINT FIRE TABLE

- +1 Fast Fire
- 1 Bad Shoot
- 1 Target in Move Mode
- 1 Continuous Fire
- 1 90mm or smaller

Roll two dice and modify total as above.

A result of 10+ destroys target.

## ARTILLERY SCATTER TABLE

- 1-3 1 hex
- 4-5 2 hexes
- 6 Opposing player may put it in any hex w/i 3.

Roll two dice, one for direction (use diagram on game map) and one for distance.

## AT ROLL TABLE

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

### Modifiers:

- +1 Target in Smoke
- 3 Target stacked with Infantry (any morale state)
- 2 Firer Suppressed or Paralyzed
- 2 Target or Firer in Artillery Attack Zone
- +1 Visibility is 3 or less or at night (negated in illuminated areas)
- +1 Road Moving target
- +1 Target is B-type or P-1 or P-2

### Attacker Step Loss:

If AT Roll is RAW roll of 3 or less, destroy attacking step.

Roll two dice and modify as above. All modifiers are cumulative. If number is equal to or greater than number above, destroy the target.

## SPOTTING RANGE TABLE [7.1e]

		Range						
0	1	2	3	4	6	8	12	unlimited
			A-target AT	IG, AA Arty		Vehicle Carrier		

### Shifts:

Target	Firer
+2 Billiard	+1 Dug-in
-1 Partly Protective or Protective	
+4 Fired marker or Fire Trigger	Both (cumulative)
+2 Road Moving	-1 Smoke
+1 Move Mode	-1 Artillery Attack Zone
-3 Night (-1 if illuminated)	-1 Suppressed or Paralyzed
-1 Twilight	
-1 Dug-In	

## INF FIREPOWER

Range	Add to Fire Strength (not shifts!)
0	# Inf steps
1	1/2 Inf steps

## AREA TARGET STACKING

Steps	Modifier
1-2	-3*
3-4	-1*
5-7	0
8-9	+1
10-12	+3
13-19	+6
20+	+10

\*Applies to Artillery and unspotted SFAs.

## AREA FIRE RANGE

Range	0	1	2	3	4	5	6-8	9+
Inf	+4	+2	+1	0	-1	-2	-3	-6
Low	+4	+2	+1	0	0	-1	-2	-3
High	+4	+2	+1	0	0	0	0	0
Mortar	0	0	0	0	0	0	0	0

Does not apply to Artillery or Sortie

## POINT FIRE RANGE

Range	Modifier
Close	+5
Nominal	+3
Long	0

## OTHER MODIFIERS: TARGET...

-2	Night <sup>1</sup>
-1	Illuminated or Twilight <sup>1</sup>
+2	Road moving <sup>2</sup>
-2	All Suppressed or Paralyzed <sup>3</sup>
-2	P-2+ target in hex <sup>4</sup>

## FIRER...

-2	Any Suppressed or Paralyzed
+4	Cross fire [11.4]
-2	Arty Attack Zone <sup>1</sup>
-1	Smoke <sup>1</sup>

## BOTH... (cumulative)

-2	Arty Attack Zone <sup>1</sup>
-1	Smoke <sup>1</sup>

<sup>1</sup> Does not apply to Artillery

<sup>2</sup> Overwatch or moving through Artillery

<sup>3</sup> Not at range 0

<sup>4</sup> Low-Trajectory Area Fire only (tank cover)

## POINT FIRE DIFFERENTIAL

Lowest P-Fire strength  
minus **best**  
P-defense of defending units.

Differential	Modifier
+3 or higher	+3
+2	+2
+1	+1
0	0
-1	-2
-2	-4
-3	-8
-4	-12
-5 or lower	not allowed

## TARGET TERRAIN / POSTURE

Terrain	Move	Fire	Dug In
Billiard Table	+4*+2	+2* 0	-1 -3
Open	+2 0	0 -2	-2 -5
Partly Protective	0 -2	-2 -5	-4 -7
Protective	-1 -3	-3 -6	-5 -8

**Bold number** if any firer Low-Trajectory vs. unspotted target  
\*+2 Move, +4 Fire for Vehicles and Carriers

0	1	2	3	4	5	6	7-8	9-10	11-13	14-16	17-20	21-25	26-32	33-40	41-50	51-64	65-80	81-100	101+	A-Fire																			
																				P-Fire Steps																			
																				No Effect																			
11..53	11..51	11..45	11..43	11..41	11..35	11..33	11..26	11..24	11..22	11..16	11..14	11..12									Morale Check																		
54..65	52..63	46..62	44..61	42..56	36..54	34..53	31..51	25..51	23..45	21..41	15..35	13..26	11..23	11..16	11..14	11..13					-1 step																		
66	64..66	63..66	62..66	61..66	55..66	54..65	52..65	52..64	46..64	42..62	36..56	31..54	24..52	21..45	15..36	14..35	11..26	11..23	11..22	-2 steps																			
						66	66	65	65	63..64	61..63	55..61	53..56	46..53	41..46	36..45	31..36	24..33	23..33	-3 steps																			
										66	66	65	64	62..63	61..63	55..61	51..54	44..52	34..43	-4 steps																			
												66	65	64	62..63	61..63	55..61	51..54	44..52	34..43	-5 steps																		
														66	65	64	62..63	61..63	55..61	51..54	44..52	34..43	-6 steps																
																66	66	65	65	63..64	56..62	53..55	44..52	34..43	-7 steps														
																		66	66	65	65	63..64	61..63	61..63	56..62	53..55	44..52	-8 steps											
																				66	66	66	65	64.65	64.65	64.65	64.65	64.65	64.65	64.65	64.65	64.65	64.65	64.65	64.65	64.65	64.65	64.65	-9 steps

**For Area Fires:** Total Area Fire Strength Points.

**For Point Fires:** Total Point Fire STEPS, not Strength Points.

All results other than No Effect require a **Morale Check**

## MORALE MODIFIERS

+1 Arty Attack Zone
+1 Paralyzed
+1 Night
-2 Dug In
-1 P-2 or better target in hex
+2 Cross Fire [see 11.4]
-1 Partly Prot. or Protective
+1 No Low-Trajectory Firers
+2 Unassigned [6.3b]

## MORALE TABLE

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

## BASIC TERRAIN EFFECTS ON COMBAT AND MOVEMENT CHART

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

Terrain	Type	Foot	Tracked	Wheeled
Open	Open	1	1	2
Swamp	Partly Pro	3	4	P
Woods	Partly Pro	1	2	3
Hedge	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	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

ot = Other Terrain  
 P = Prohibited  
 NE = No Effect

## CHART OF COMMON GRAPHIC SYMBOLS AND THEIR USE

Symbol	Name	Description of Use and Remarks
	Lateral Boundary ...for a Battalion ...for a Company	Defines the limit of operations between adjacent units.
	Line of Departure Phase Line (PL Fish)	Designates the line at which operations begin: the jump-off point. Phase Lines are used to control the actions of several units. They can be used to coordinate the units, and to define different phases of the operation.
	Unit Location (here a Battalion)	Used to mark a unit's location on the map.
	Objective in this case, OBJ Green	Denotes the area to be taken by an attack or held by a defense. Obtainment of the objective is how operations succeed.
	Axis of Advance, in this case, Axis Red	Denotes the general course of movement of the assigned units. Units are free to move anywhere within the bounds of the axis of advance.
	Direction of Advance	Gives the exact path the movement must follow. This control measure is much more restrictive than the axis of advance as the units must take exactly the path under the arrow.
	Area to be screened by Smoke	Denotes the use of smoke. A good idea is to record the time to use it with the symbol—such as “Fire when advance reaches PL Cod Piece.”



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## MINEFIELD COSTS AND ATTACKS

**Moving...**  
 ... MP cost +2  
 ... Area Fire Attack with 18 Firepower  
 ... Point Target roll 8 or more to kill

**Breaching...**  
 ... Begin adjacent  
 ... Area Fire Attack with 9 Firepower

## ARTILLERY BARRAGE FIRE VALUES

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