

BIG BOARD PORTABLE WARGAME: MODERN

Unit Strength Points (SP)

Type of Unit	Strength Point Value	Rules
Infantry	4	a) Units are allocated a Strength Point value (SP) before the battle begins, although these <u>may</u> be adjusted in order to take into account the Unit's strength, equipment, and training.
Infantry Anti-tank	2	
Engineers	4	
Dismounted Cavalry	3	b) Units lose Strength Points as a result of enemy action, and these reductions must be recorded (i.e. on a roster, by the use of markers, or by the removal of individual figures).
Mounted Cavalry	3	
Machine Guns	2	c) When a Unit's Strength Point value is reduced to 0, the Unit is destroyed, and is removed from the battlefield.
Mortars	2	
Artillery	2	
Armoured Cars	3	
Light Tanks	3	
Tanks	3	
Assault Guns	3	
Self-propelled Artillery	2	
Half-tracks	2	
Trucks	2	
Horse-drawn Transport	1	
Artillery Spotters	2	
Commanders	2	

Turn Sequence

1. Artillery Fire Phase (N.B. Artillery does not need to be activated in order to fire).
2. Dice for Initiative.
3. Side A throws its D6 Unit Activation Dice to determine how many Units it may activate this turn. Side A then moves, fires, and conducts Close Combats with each of their activated Units in turn, subject to any restrictions laid down in the rules.
4. Side B throws its D6 Unit Activation Dice to determine how many Units it may activate this turn. Side B then moves, fires, and conducts Close Combats with each of their activated Units in turn, subject to any restrictions laid down in the rules.
5. Both sides check to see if they have reached their Exhaustion Point.

Artillery Fire

Type of Artillery	Range	Rules	
Heavy Artillery *	12 hexes	a) Artillery fire is simultaneous, and the effect of artillery fire upon targets is determined after all Artillery Units have fired. b) All ranges are measured through the edges of the hexes, <u>not the corners</u> . c) Each Artillery Unit <u>may</u> fire only once each turn. d) Artillery fire can destroy any type of Ground Unit. e) Artillery Units fire have an arc of fire that is 120° forward of the direction in which they are facing (i.e. in an arc sweeping from one 60° diagonal line of hexes to the other). f) Artillery Units that can fire indirectly (those Units indicated by *) may fire over other Units that are in front of them. g) Artillery Units can fire <u>into</u> woods, built-up areas, and fortifications. h) Artillery Units can fire <u>out</u> of woods, built-up areas, and fortifications <u>if</u> they are in a hex that is on the edge of the woods, built-up areas, or fortifications (i.e. the adjacent hex in the direction they are firing <u>does not</u> contain woods, built-up areas or fortifications). i) If a Unit can be seen by an Artillery Unit that is firing at it (i.e. there is a direct line-of-sight between the target and the Artillery Unit firing at it), the artillery fire is direct fire. j) If a Unit <u>cannot</u> be seen (i.e. there is a <u>no</u> direct line-of-sight between the target and the Artillery Unit firing at it) <u>or</u> it is in cover, the artillery fire is indirect fire. k) The target hex is identified. Roll one D6 die for each Unit firing – Die score = 5, 6 or more: Artillery fire lands on the target hex. Die score = 2 or 4: Artillery fire lands in the hex immediately in front of the target hex. Die score = 1 or 3: Artillery fire lands in the hex immediately behind the target hex. Die score = Less than 1: Artillery fire has been totally ineffective. Reduce the D6 die roll score by 1 if the target is in cover or fortifications. Increase the D6 die score by 2 if the Artillery Unit <u>or</u> a friendly Artillery Spotter has a direct line-of-sight to the target hex. Increase the D6 die roll score by 1 if the Artillery Unit has fired at the same target during the previous turn. Increase the D6 die roll score by 1 if a friendly Commander is in the same hex as the firing Unit or in an adjacent hex. Any Unit or Units in the hex that the artillery fire lands in are hit, and a D6 die is rolled for each to determine the effectiveness of the artillery fire upon each Unit. (See RESOLVING HITS ON UNITS)	
Medium Artillery *	10 hexes		
Field Artillery *	8 hexes		
Mountain Artillery *	6 hexes		
Infantry Guns *	4 hexes		
Anti-tank Guns	4 hexes		
Anti-aircraft Guns	4 hexes		
			l) A non-Self-propelled Artillery Unit may not be moved if it has fired.

Dicing for initiative and Unit activation

Rules

- Both sides roll a D6 die; the side with the highest score can move, fire (but not if the Unit is an Artillery or Self-propelled Artillery Unit), and conduct Close Combats with each of their activated Units in turn, first. Once they have finished, the other side follows the same procedures.
- When it is its turn to activate Units, a side throws a number of D6 Unit Activation Dice to determine how many Units it may activate during that turn.
- The total score thrown on the D6 Unit Activation Dice is the number of Units a side may activate
- The number of D6 Unit Activation Dice a side may throw is determined using a simple formula; each side is allocated one D6 Unit Activation Dice for their Commander plus one D6 Unit Activation Dice for every five of that side's other Units rounded up.
- As a side loses Units, the number of D6 Unit Activation Dice that side may throw will decrease in line with this formula (e.g. If a side loses its Commander, they immediately lose a D6 Unit Activation Dice; they will also lose a D6 Unit Activation Dice every time the number of their side's Units is reduced to a number that is evenly divisible by five).

Movement

Type of Unit	Movement	Rules
Infantry	2 hexes	a) All movement is measured through the edges of the hexes <u>not the corners</u> .
Engineers	2 hexes	b) A Unit may be moved only once each turn.
Dismounted Cavalry	2 hexes	c) Artillery Units (other than those that are Self-propelled) may not be moved if they have fired.
Mounted Cavalry	3 hexes	d) A Unit that is firing (or has fired) this turn reduces its movement by 1 hex.
Machine Guns	2 hexes	e) A Unit may change its direction of movement any number of times during its move but <u>must</u> end its move facing the edge of the hex <u>not the corner</u> .
Mortars	2 hexes	f) With the exception of a Transport Unit (those Units indicated by #), Artillery Spotters, and Commanders, a Unit <u>may not</u> start or end its move in the same hex as a friendly Unit.
Artillery	2 hexes	g) No Unit may start or end its move in the same hex as an enemy Unit.
Armoured Cars	4 hexes	h) A Unit <u>must</u> stop as soon as it enters a hex that is adjacent to the front, flank or rear of enemy Unit, and <u>must</u> turn to face the enemy Unit <u>at once</u> .
Light Tanks	4 hexes	i) If a Unit is being faced by an enemy Unit that is in an adjacent hex <u>and</u> the Unit has not yet moved this turn, it <u>may</u> move (i.e. it may withdraw to away from the enemy Unit) providing that it does not move into a hex that is adjacent to the front of another enemy Unit.
Tanks	3 hexes	
Assault Guns	3 hexes	
Self-propelled Artillery	3 hexes	
Half-tracks #	4 hexes	
Trucks #	4 hexes	
Horse-drawn Transport #	2 hexes	
Artillery Spotters	2 hexes	
Commanders	3 hexes	

Firing (Non-Artillery Units)

Type of Weapon	Range	Rules
Infantry Small Arms	3 hexes	a) All ranges are measured through the edges of the hexes <u>not the corners</u> .
Infantry Anti-tank Weapons	2 hexes	b) Each Unit <u>may</u> fire only once each turn.
Machine Guns	3 hexes	c) Infantry Small Arms and Machine Guns <u>cannot</u> destroy Tank Units.
Mortars	4 hexes	d) Infantry Anti-tank Weapons <u>can</u> destroy Tank Units.
Armoured Car Guns	3 hexes	e) With the exception of Armoured Car and Tank Units, Non-Artillery Units fire have an arc of fire that is 120° forward of the direction in which they are facing (i.e. in an arc sweeping from one 60° diagonal line of hexes to the other).
Light Tank Guns	3 hexes	f) Armoured Car and Tank Units have a 360° arc of fire.
Tank Guns	4 hexes	g) With the exception of Mortar Units, Non-Artillery Units may only fire at targets that are in direct line-of-sight.
Assault Guns	See Artillery Ranges	h) Mortar Units may fire over Units that are in front of them.
		i) Mortar Units may only fire at targets that are in direct line-of-sight <u>or</u> are in direct line-of-sight from friendly Units that are in adjacent hexes <u>or</u> from friendly Artillery Spotters or Commanders that are in the same hex as the Mortar Unit or are in adjacent hexes.
		j) Non-Artillery Units can fire 1 hex <u>into</u> woods, built-up areas, and fortifications.
		k) Non-Artillery Units can fire <u>out</u> of woods, built-up areas, and fortifications if they are in a hex that is on the edge of the woods, built-up areas, or fortifications (i.e. the adjacent hex in the direction they are firing <u>does not</u> contain woods, built-up areas or fortifications).
		l) The target hex is identified. Roll one D6 die for each Unit firing <u>except</u> for Machine Gun Units, which roll three D6 dice – A 5 or 6 is a hit on all enemy Units that are in the target hex. (See RESOLVING HITS ON UNITS) Reduce the D6 die roll score by 1 if the target is in cover or fortifications. Increase the D6 die roll score by 1 if the firing Unit has not moved this turn. Increase the D6 die roll score by 1 if a friendly Commander is in the same hex as the firing Unit or in an adjacent hex.

Close Combat

Type of Unit	D6 Die score required <u>not to be hit</u> if		Rules
	Unit is front on to the enemy	Unit is flank or rear on to the enemy	
Infantry	3, 4, 5, 6	5, 6	<p>a) A Unit must stop if it enters a hex that is adjacent to one occupied by an enemy Unit, and turn to face the enemy Unit.</p> <p>b) A rear or flank attack is one made directly on the side or rear of an enemy Unit.</p> <p>c) Both sides throw a D6 die <u>for their Unit</u> involved in a Close Combat and read the result from the appropriate column. Increase the D6 die roll score by 1 if a friendly Commander is in an adjacent hex. Increase the D6 die roll score by 1 if the Unit is in cover or fortifications.</p> <p>d) Infantry, Engineers, Cavalry, and Tank Units that win a Close Combat (i.e. because the enemy Unit has been destroyed <u>or</u> has retreated 1 hex) may move forward and occupy the hex that was occupied by the enemy Unit and may conduct further Close Combats if this makes them adjacent to a hex occupied by an enemy Unit.</p>
Engineers	3, 4, 5, 6	5, 6	
Dismounted Cavalry	3, 4, 5, 6	5, 6	
Mounted Cavalry	2, 3, 4, 5, 6	4, 5, 6	
Machine Guns	3, 4, 5, 6	5, 6	
Mortars	3, 4, 5, 6	5, 6	
Artillery	4, 5, 6	5, 6	
Armoured Cars	3, 4, 5, 6	5, 6	
Light Tanks	3, 4, 5, 6	4, 5, 6	
Tanks	3, 4, 5, 6	4, 5, 6	
Assault Guns	3, 4, 5, 6	4, 5, 6	
Self-propelled Artillery	3, 4, 5, 6	5, 6	
Half-tracks	3, 4, 5, 6	5, 6	
Trucks	4, 5, 6	5, 6	
Horse-drawn Transport	5, 6	6	
Artillery Spotters	3, 4, 5, 6	4, 5, 6	
Commanders	3, 4, 5, 6	3, 4, 5, 6	

Resolving hits on Units

Unit Status	Results	Rules
Elite Units 1 or 2 = Unit loses 1 SP.	3, 4, 5, or 6 = Unit survives but must retreat 1 hex <u>or</u> lose 1 SP.	<p>a) Any Unit that is hit as a result of Artillery Fire, Non-Artillery Fire, or Close Combat throws a D6 die to resolve what happens.</p> <p>b) Any Unit unable or unwilling to retreat 1 hex loses 1 SP.</p>
Average Units 1, 2, or 3 = Unit loses 1 SP.	4, 5, or 6 = Unit survives but must retreat 1 hex <u>or</u> lose 1 SP.	
Poor Units 1, 2, 3, or 4 = Unit loses 1 SP.	5, or 6 = Unit survives but must retreat 1 hex <u>or</u> lose 1 SP.	

Special Rules

Exhaustion Point	<p>Before the battle begins, both sides calculate their Exhaustion Point. This is one third of the side's total initial Strength Points, rounded up.</p> <p>When a side has lost that proportion of initial Strength Points, it has reached its Exhaustion Point.</p> <p>A side that has reached its Exhaustion Point must immediately stop taking aggressive action (i.e. it will continue to fight to defend its existing position, but will not continue any movement towards the enemy).</p> <p>When both sides have reached their Exhaustion Point, the battle ends.</p>
Engineers	<p>An Engineer Unit can lay a minefield that fills a hex by remaining in a hex that is adjacent to the minefield hex for 3 turns.</p> <p>An Engineer Unit can remove a minefield that fills a hex by remaining in a hex that is adjacent to the minefield hex for 5 turns.</p>
Transport	<p>A motorised Transport Unit (i.e. Half-track or Truck Unit) may carry an Infantry, Engineer, Dismounted Cavalry, Machine Gun, Mortar or Command Unit, or tow an Artillery Unit.</p> <p>A horse-drawn Transport Unit may tow an Artillery Unit.</p> <p>It takes one turn for a Unit to be loaded into or unloaded from a motorised Transport Unit. During that turn both Units must be in the same hex.</p> <p>It takes one turn to limber or unlimber an Artillery Unit. During that turn both Units must be in the same hex.</p> <p>Transport Units that are towing Artillery Units move at their normal movement rate.</p> <p>Any hit on a Transport Unit is also deemed to be a hit on any Unit that it might be carrying or towing.</p>
Roads	Units on roads move at normal movement rate, <u>plus</u> 1 hex if the <u>entire</u> move is made along a road.
Hills	In Close Combat a Unit that is attacking uphill against an enemy Unit reduces the D6 die score they throw by 1.
Rivers	<p>When using a ford in a river a Unit moves into the river on turn A and stops, then moves 1 hex out of the river on turn B.</p> <p>Units in rivers may not fire.</p> <p>In Close Combat a Unit that is in a river reduces the D6 die score they throw by 1.</p>
Woods	<p>A Unit must stop as soon as it enters a wood.</p> <p>A Unit moving through a wood has a maximum movement rate of 1 hex per turn.</p> <p>The range of all weapons fired <u>within</u> a wood is reduced to 1 hex.</p> <p>In Close Combat a Unit that is in a wood increases the D6 die score they throw by 1.</p>
Minefields	A Unit may move through a minefield without stopping but in doing so it is automatically hit. (See RESOLVING HITS ON UNITS)
Barbed Wire	<p>A Unit can lay barbed wire in a hex by remaining in the hex for 1 turn.</p> <p>A Unit can remove barbed wire from a hex by remaining in the hex for 1 turn.</p> <p>Tank, Assault Guns, and Self-propelled Artillery Units can move through a barbed wire without stopping; all other Units <u>must</u> stop and remove the barbed wire next turn <u>or</u> stop and not resume their movement until the next turn.</p>
Trenches	<p>When crossing a trench a Unit moves into the trench on turn A and stops, then moves 1 hex out of the trench on turn B.</p> <p>Units crossing trenches may not fire.</p> <p>In Close Combat a Unit that is crossing a trench reduces the D6 die score they throw by 1.</p>

Definitions

Adjacent	Any hex that touches the side of another hex is defined as being adjacent to it.
Cover	Cover is any natural or man-made terrain feature that can hide or obscure a target from view.
Direct line of sight	Direct line-of-sight is a straight line from the centre of one hex to the centre of another that is not obscured by cover or a vertical or horizontal obstacle.
Fortifications	Fortifications are any man-made defences built to strengthen a position. They include bunkers, dugouts, trenches, and fieldworks.
Line-of-sight	Line-of-sight is a straight line from the centre of one hex to the centre of another.
Retreat	A retreating Unit may withdraw into an adjacent empty hex that is not adjacent to a hex occupied by an enemy Unit. If it is unwilling or unable to do so, it loses 1 SP.

Optional Ground Combat Rules

Cyclists	Cyclist Units are Infantry Units mounted on bicycles, and are treated as Cavalry for the purposes of Movement and Infantry or Dismounted Cavalry for the purposes of Firing and Close Combat.
Tank Riders	A Tank Unit may carry an Infantry Unit. It takes one turn for an Infantry Unit to be loaded onto or unloaded from a Tank Unit. During that turn both Units must be in the same hex. If a Tank Unit that is carrying an Infantry Unit is hit – even by weapons that cannot destroy the Tank Unit – the Infantry Unit is deemed to be hit as well. If a Tank Unit that is carrying an Infantry Unit is destroyed, the Infantry Unit is deemed to be destroyed as well.
Gas	Artillery Units may be allocated 1 Gas Shell each that can be fired during a battle. Gas Shells are fired in the same way as normal Artillery fire, and any hex in which a Gas Shell lands is marked appropriately with a marker that represents the resultant Gas Cloud. Gas Clouds persist for 3 turns before they disperse and the Gas Cloud marker is removed. During that time they may move during the Artillery Fire Phase. Roll one D6 die for each Gas Cloud – Die score = 5 or 6: Gas Cloud remains in the hex it currently occupies. Die score = 2 or 4: Gas Cloud moves to the hex immediately in front of the hex it currently occupies. Die score = 1 or 3: Gas Cloud moves to the hex immediately behind the hex it currently occupies. Any Unit that is in a hex in which a Gas Shell lands or through which the resultant Gas Cloud passes is automatically hit. (See RESOLVING HITS ON UNITS)

Optional Air Combat Rules – Aircraft Strength Points

Types of Aircraft	Strength Point Value	Rules
Reconnaissance Aircraft	2	a) Aircraft are allocated a Strength Point value (SP) before the battle begins, although these <u>may</u> be adjusted in order to take into account the Aircraft's strength, equipment, and level of pilot training. b) Aircraft lose Strength Points as a result of enemy action, and these reductions must be recorded (i.e. on a roster or by the use of markers). c) When an Aircraft's Strength Point value is reduced to 0, the Aircraft is destroyed, and is removed from the battlefield.
Single-seater Fighter Aircraft	3	
Two-seater Fighter Aircraft	4	
Two-seater Bomber Aircraft	4	

Optional Air Combat Rules – Aircraft Movement

Types of Aircraft	Movement	Endurance	Rules
Reconnaissance Aircraft	8 hexes	6 turns	a) All movement is measured through the edges of the hexes <u>not the corners</u> . b) Once deployed, Aircraft <u>must</u> be activated each turn they remain over the battlefield. c) Failure to activate an Aircraft during a turn will result in that Aircraft's immediate destruction, as it will be deemed to have crashed due to mechanical failure or pilot error. d) An Aircraft may be moved only once each turn. e) An Aircraft that is firing or dropping bombs this turn reduces its movement by 1 hex. f) An Aircraft may change its direction of movement any number of times during its move but <u>must</u> end its move facing the edge of the hex <u>not the corner</u> . g) Because Aircraft 'fly' over the battlefield – They are not affected by obstacles on the ground and may fly over woods, hills, and built-up areas. They can move through hexes occupied by ground Units. They may occupy a hex that is already occupied by a ground Unit, even if that Unit is an enemy Unit. h) No Aircraft may start or end its move in the same hex as another. i) If an Aircraft moves into a hex that is adjacent to a hex occupied by an enemy Aircraft or ground Unit it is <u>not</u> required to stop.
Single-seater Fighter Aircraft	12 hexes	6 turns	
Two-seater Fighter Aircraft	10 hexes	6 turns	
Two-seater Bomber Aircraft	8 hexes	6 turns	

Optional Air Combat Rules – Air-to-Air Combat

Types of Aircraft	Weapon Range	Rules
Reconnaissance Aircraft	4 hexes	a) All ranges are measured through the edges of the hexes <u>not the corners</u> .
Single-seater Fighter Aircraft	4 hexes	b) Each Aircraft <u>may</u> fire only once each turn, and that fire must be directed at the same target.
Two-seater Fighter Aircraft	4 hexes	c) Reconnaissance Aircraft are armed with a rearward-firing Machine Gun and may engage an enemy Aircraft within a 120° arc to the rear of the Reconnaissance Aircraft (i.e. in an arc sweeping from one 60° diagonal line of hexes to the other).
Two-seater Bomber Aircraft	4 hexes	d) Single-seater Fighter Aircraft are armed with two forward-firing Machine Guns and may engage an enemy Aircraft within a 120° arc to the front of the Single-seater Fighter Aircraft (i.e. in an arc sweeping from one 60° diagonal line of hexes to the other).
		e) Two-seater Fighter Aircraft are armed with: A forward-firing Machine Gun and may engage an enemy Aircraft within a 120° arc to the front of the Two-seater Fighter Aircraft (i.e. in an arc sweeping from one 60° diagonal line of hexes to the other). A rearward-firing Machine Gun and may engage an enemy Aircraft within a 120° arc to the rear of the Two-seater Fighter Aircraft (i.e. in an arc sweeping from one 60° diagonal line of hexes to the other).
		f) Two-seater Bomber Aircraft are armed with a rearward-firing Machine Gun and may engage an enemy Aircraft within a 120° arc to the rear of the Two-seater Bomber Aircraft (i.e. in an arc sweeping from one 60° diagonal line of hexes to the other).
		g) An Aircraft may only fire at an enemy Aircraft that is in direct line-of-sight.
		h) The target is identified. Roll a D6 dice for each Aircraft Machine Gun firing – A 5 or 6 is a hit on the enemy Aircraft, and each hit causes the loss of 1 SP.

Optional Air Combat Rules – Air-to-Ground Combat

Types of Aircraft	Weapon Range	Rules
Single-seater Fighter Aircraft	1 hex	a) Single-seater and Two-seater Fighter Aircraft may only fire at Ground Units with their forward firing machine guns; Two-seater Bomber Aircraft attack Ground Units with their bombs.
Two-seater Fighter Aircraft	1 hex	b) Single-seater and Two-seater Fighter Aircraft may only fire at Ground Units that are in the adjacent hex directly to the front of the hex occupied by the Fighter Aircraft.
Two-seater Bomber Aircraft	-	c) Two-seater Bomber Aircraft bomb Ground Units that are in the hex directly beneath them (i.e. the Bomber Aircraft must occupy the same hex as the target).
		d) Two-seater Bomber Aircraft Units carry three bomb loads which can be dropped together <u>or</u> separately.
		e) For the purposes of resolving Air-to-Ground Combat: Fighter Aircraft are regarded as having the same capabilities as a Machine Gun Unit (i.e. they <u>cannot</u> destroy Tank Units). Each bomb load carried by a Two-seater Bomber Aircraft Unit is regarded as having the same capabilities as Artillery (i.e. they can destroy all types of Ground Unit).
		f) The target hex is identified. Roll one D6 die for each Air-to-Ground Combat – A 5 or 6 is a hit on all enemy Units that are in the target hex. (See RESOLVING HITS ON UNITS) Reduce the D6 die roll score by 1 if the target is in cover or fortifications. Increase the D6 die roll score by 1 if the attacker is a Bomber Aircraft.

Optional Air Combat Rules – Ground-to-Air Combat

- Rules
- Only Anti-aircraft Artillery and Machine Gun Units can engage Aircraft that are 'flying' above the battlefield.
 - Anti-aircraft Artillery Units fire during the Artillery Fire Phase of the Turn Sequence.
 - Machine Gun Units fire during the Firing (Non-Artillery Units) Phase of the Turn Sequence.
 - The target is identified.
- Roll a D6 dice for each Anti-aircraft Artillery or Machine Gun Unit firing –
A 5 or 6 is a hit on the enemy Aircraft, and each hit causes the loss of 1 SP.
Increase the D6 die roll score by 1 if the firing Unit has not moved this turn.
Increase the D6 die roll score by 1 if a friendly Commander is in the same hex as the firing Unit or in an adjacent hex