BIG BOARD PORTABLE WARGAME: MODERN

Unit Strength Points (SP)

Type of Unit	Strength Point Value
Infantry	4
Infantry Anti-tank	2
Engineers	4
Dismounted Cavalry	3
Mounted Cavalry	3
Machine Guns	2
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

Rules

a) Units are allocated a Strength Point value (SP) before the battle begins, although these may be adjusted in order to take into account the Unit's strength, equipment, and training.

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).

c) When a Unit's Strength Point value is reduced to 0, the Unit is destroyed, and is removed from the battlefield.

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
Heavy Artillery *	12 squares
Medium Artillery *	10 squares
Field Artillery *	8 squares
Mountain Artillery *	6 squares
Infantry Guns *	4 squares
Anti-tank Guns	4 squares
Anti-aircraft Guns	4 squares

Rules

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 orthogonally (i.e. through the edges of the squares, not the corners).

c) Each Artillery Unit may 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 90° forward of the direction in which they are facing (i.e. in an arc sweeping from one 45° diagonal line of squares 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 into woods, built-up areas, and fortifications.

h) Artillery Units can fire out of woods, built-up areas, and fortifications if they are in a square that is on the edge of the woods, built-up areas, or fortifications (i.e. the orthogonally adjacent square in the direction they are firing does not 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 cannot be seen (i.e. there is a no direct line-of-sight between the target and the Artillery Unit firing at it) or it is in cover, the artillery fire is indirect fire.

k) The target square is identified.

Roll one D6 die for each Unit firing –

Die score = 5, 6 or more: Artillery fire lands on the target square.

Die score = 2 or 4: Artillery fire lands in the square immediately in front of the target square.

Die score = 1 or 3: Artillery fire lands in the square immediately behind the target square.

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 or a friendly Artillery Spotter has a direct line-of-sight to the target square.

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 square as the firing Unit or in an orthogonally adjacent square.

Any Unit or Units in the square 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)

l) A non-Self-propelled Artillery Unit may not be moved if it has fired.

Dicing for initiative and Unit activation

Rules

a) 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.

b) 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.

c) The total score thrown on the D6 Unit Activation Dice is the number of Units a side may activate

d) 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.

e) 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
Infantry	2 squares
Engineers	2 squares
Dismounted Cavalry	2 squares
Mounted Cavalry	3 squares
Machine Guns	2 squares
Mortars	2 squares
Artillery	2 squares
Armoured Cars	4 squares
Light Tanks	4 squares
Tanks	3 squares
Assault Guns	3 squares
Self-propelled Artillery	3 squares
Half-tracks #	4 squares
Trucks #	4 squares
Horse-drawn Transport #	2 squares
Artillery Spotters	2 squares
Commanders	3 squares

Rules

a) All movement is measured orthogonally (i.e. through the edges of the squares not the corners).

b) A Unit may be moved only once each turn.

c) Artillery Units (other than those that are Self-propelled) may not be moved if they have fired.

d) A Unit that is firing (or has fired) this turn reduces its movement by 1 square.

e) A Unit may change its direction of movement any number of times during its move but must end its move facing the edge of the square not the corner.

f) With the exception of a Transport Unit (those Units indicated by #), Artillery Spotters, and Commanders, a Unit may not start or end its move in the same square as a friendly Unit.

g) No Unit may start or end its move in the same square as an enemy Unit.

h) A Unit must stop as soon as it enters a square that is orthogonally adjacent to the front, flank or rear of enemy Unit, and must turn to face the enemy Unit at once.

i) If a Unit is being faced by an enemy Unit that is in an orthogonally adjacent square and the Unit has not yet moved this turn, it may move (i.e. it may withdraw to away from the enemy Unit) providing that it does not move into a square that is orthogonally adjacent to the front of another enemy Unit.

Firing (Non-Artillery Units)

Type of Weapon	Range
Infantry Small Arms	3 squares
Infantry Anti-tank Weapons	2 squares
Machine Guns	3 squares
Mortars	4 squares
Armoured Car Guns	3 squares
Light Tank Guns	3 squares
Tank Guns	4 squares
Assault Guns	See Artillery Ranges

Rules

a) All ranges are measured orthogonally (i.e. through the edges of the squares not the corners).

b) Each Unit may fire only once each turn.

c) Infantry Small Arms and Machine Guns cannot destroy Tank Units.

d) Infantry Anti-tank Weapons can destroy Tank Units.

e) With the exception of Armoured Car and Tank Units, Non-Artillery Units fire have an arc of fire that is 90° forward of the direction in which they are facing (i.e. in an arc sweeping from one 45° diagonal line of squares to the other).

f) Armoured Car and Tank Units have a 360° arc of fire.

g) With the exception of Mortar Units, Non-Artillery Units may only fire at targets that are in direct line-of-sight.

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 or are in direct line-of-sight from friendly Units that are in orthogonally adjacent squares or from friendly Artillery Spotters or Commanders that are in the same square as the Mortar Unit or are in orthogonally adjacent squares.

j) Non-Artillery Units can fire 1 square into woods, built-up areas, and fortifications.

k) Non-Artillery Units can fire out of woods, built-up areas, and fortifications if they are in a square that is on the edge of the woods, built-up areas, or fortifications (i.e. the orthogonally adjacent square in the direction they are firing does not contain woods, built-up areas or fortifications).

l) The target square is identified.

Roll one D6 die for each Unit firing except 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 square. (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 square as the firing Unit or in an orthogonally adjacent square.

Close Combat

Type of Unit	D6 Die score required not to be hit if	
	Unit is front on to the enemy	Unit is flank or rear on to the enemy
Infantry	3, 4, 5, 6	5, 6
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

Rules

a) A Unit must stop if it enters a square that is orthogonally adjacent to one occupied by an enemy Unit, and turn to face the enemy Unit.

b) A rear or flank attack is one made directly on the side or rear of an enemy Unit.

c) Both sides throw a D6 die for their Unit 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 orthogonally adjacent square.
>
> Increase the D6 die roll score by 1 if the Unit is in cover or fortifications.

d) Infantry, Engineers, Cavalry, and Tank Units that win a Close Combat (i.e. because the enemy Unit has been destroyed or has retreated 1 square) may move forward and occupy the square that was occupied by the enemy Unit and may conduct further Close Combats if this makes them orthogonally adjacent to a square occupied by an enemy Unit.

Resolving hits on Units

Unit Status		Results
Elite Units	1 or 2 = Unit loses 1 SP.	3, 4, 5, or 6 = Unit survives but must retreat 1 square or lose 1 SP.
Average Units	1, 2, or 3 = Unit loses 1 SP.	4, 5, or 6 = Unit survives but must retreat 1 square or lose 1 SP.
Poor Units	1, 2, 3, or 4 = Unit loses 1 SP.	5, or 6 = Unit survives but must retreat 1 square or lose 1 SP.

Rules

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.

b) Any Unit unable or unwilling to retreat 1 square loses 1 SP.

Special Rules

Exhaustion Point	Before the battle begins, both sides calculate their Exhaustion Point. This is one third of the side's total initial Strength Points, rounded up. When a side has lost that proportion of initial Strength Points, it has reached its Exhaustion Point. 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). When both sides have reached their Exhaustion Point, the battle ends.
Engineers	An Engineer Unit can lay a minefield that fills a square by remaining in a square that is orthogonally adjacent to the minefield square for 3 turns. An Engineer Unit can remove a minefield that fills a square by remaining in a square that is orthogonally adjacent to the minefield square for 5 turns.
Transport	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. A horse-drawn Transport Unit may tow an Artillery Unit. 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 square. It takes one turn to limber or unlimber an Artillery Unit. During that turn both Units must be in the same square. Transport Units that are towing Artillery Units move at their normal movement rate. Any hit on a Transport Unit is also deemed to be a hit on any Unit that it might be carrying or towing.
Roads	Units on roads move at normal movement rate, plus 1 square if the entire 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.
Woods	A Unit must stop as soon as it enters a wood. A Unit moving through a wood has a maximum movement rate of 1 square per turn. The range of all weapons fired within a wood is reduced to 1 square. In Close Combat a Unit that is in a wood increases the D6 die score they throw by 1.
Rivers	When using a ford in a river a Unit moves into the river on turn A and stops, then moves 1 square out of the river on turn B. Units in rivers may not fire. In Close Combat a Unit that is in a river reduces the D6 die score they throw by 1.
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	A Unit can lay barbed wire in a square by remaining in the square for 1 turn. A Unit can remove barbed wire from a square by remaining in the square for 1 turn. Tank, Assault Guns, and Self-propelled Artillery Units can move through a barbed wire without stopping; all other Units must stop and remove the barbed wire next turn or stop and not resume their movement until the next turn.
Trenches	When crossing a trench a Unit moves into the trench on turn A and stops, then moves 1 square out of the trench on turn B. Units crossing trenches may not fire. In Close Combat a Unit that is crossing a trench reduces the D6 die score they throw by 1.

Definitions

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 square 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 square to the centre of another.
Orthogonally adjacent	Any square that touches the side of another square is defined as being orthogonally adjacent to it.
Retreat	A retreating Unit may withdraw into an orthogonally adjacent empty square that is not orthogonally adjacent to a square 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 square.
	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 square 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 square it currently occupies.
	Die score = 2 or 4: Gas Cloud moves to the square immediately in front of the square it currently occupies.
	Die score = 1 or 3: Gas Cloud moves to the square immediately behind the square it currently occupies.
	Any Unit that is in a square in which is 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
Reconnaissance Aircraft	2
Single-seater Fighter Aircraft	3
Two-seater Fighter Aircraft	4
Two-seater Bomber Aircraft	4

Rules

a) Aircraft are allocated a Strength Point value (SP) before the battle begins, although these may 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.

Optional Air Combat Rules – Aircraft Movement

Types of Aircraft	Movement	Endurance
Reconnaissance Aircraft	8 squares	6 turns
Single-seater Fighter Aircraft	12 squares	6 turns
Two-seater Fighter Aircraft	10 squares	6 turns
Two-seater Bomber Aircraft	8 squares	6 turns

Rules

a) All movement is measured orthogonally (i.e. through the edges of the squares not the corners).

b) Once deployed, Aircraft must 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 square.

f) An Aircraft may change its direction of movement any number of times during its move but must end its move facing the edge of the square not the corner.

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 squares occupied by ground Units.

They may occupy a square 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 square as another.

i) If an Aircraft moves into a square that is orthogonally adjacent to a square occupied by an enemy Aircraft or ground Unit it is not required to stop.

Optional Air Combat Rules – Air-to-Air Combat

Types of Aircraft	Weapon Range
Reconnaissance Aircraft	4 squares
Single-seater Fighter Aircraft	4 squares
Two-seater Fighter Aircraft	4 squares
Two-seater Bomber Aircraft	4 squares

Rules

a) All ranges are measured orthogonally (i.e. through the edges of the squares not the corners).

b) Each Aircraft may fire only once each turn, and that fire must be directed at the same target.

c) Reconnaissance Aircraft are armed with a rearward-firing Machine Gun and may engage an enemy Aircraft within a 90° arc to the rear of the Reconnaissance Aircraft (i.e. in an arc sweeping from one 45° diagonal line of squares to the other).

d) Single-seater Fighter Aircraft are armed with two forward-firing Machine Guns and may engage an enemy Aircraft within a 90° arc to the front of the Single-seater Fighter Aircraft (i.e. in an arc sweeping from one 45° diagonal line of squares to the other).

e) Two-seater Fighter Aircraft are armed with:

A forward-firing Machine Gun and may engage an enemy Aircraft within a 90° arc to the front of the Two-seater Fighter Aircraft (i.e. in an arc sweeping from one 45° diagonal line of squares to the other).

A rearward-firing Machine Gun and may engage an enemy Aircraft within a 90° arc to the rear of the Two-seater Fighter Aircraft (i.e. in an arc sweeping from one 45° diagonal line of squares to the other).

f) Two-seater Bomber Aircraft are armed with a rearward-firing Machine Gun and may engage an enemy Aircraft within a 90° arc to the rear of the Two-seater Bomber Aircraft (i.e. in an arc sweeping from one 45° diagonal line of squares 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
Single-seater Fighter Aircraft	1 square
Two-seater Fighter Aircraft	1 square
Two-seater Bomber Aircraft	-

Rules

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.

b) Single-seater and Two-seater Fighter Aircraft may only fire at Ground Units that are in the orthogonally adjacent square directly to the front of the square occupied by the Fighter Aircraft.

c) Two-seater Bomber Aircraft bomb Ground Units that are in the square directly beneath them (i.e. the Bomber Aircraft must occupy the same square as the target).

d) Two-seater Bomber Aircraft Units carry three bomb loads which can be dropped together or 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 cannot 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 square 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 square. (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

a) Only Anti-aircraft Artillery and Machine Gun Units can engage Aircraft that are 'flying' above the battlefield.

b) Anti-aircraft Artillery Units fire during the Artillery Fire Phase of the Turn Sequence.

c) Machine Gun Units fire during the Firing (Non-Artillery Units) Phase of the Turn Sequence.

d) 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 square as the firing Unit or in an orthogonally adjacent square