

WWII Battles in France

Rules for Fighting Small WWII Battles with 6mm to 15mm Miniatures

1. Scope

WWII Battles in France covers two distinct battles; the fighting in France and southern Belgium in May of 1940 and the fighting in Normandy, France during July of 1944. Each player assumes the role of a battalion commander with two or more companies under their command (see 20. Battalion Org.). The game is designed for one or two players per side with 250 build points (see 19. Unit Data) a side if defending, 375 points if a meeting engagement and 500 points if attacking.

2. Scale

1 turn = up to 10 minutes (3 minutes of action).
1 inch = 80 yards (approximately 1/3000 scale).
A vehicle miniature = a platoon or a company HQ section or SP company mortar section.
A gun miniature mounted on a 1 inch x 1 inch stand = a 4 gun platoon.
A gun miniature mounted on a ¾ inch x ¾ inch stand = a 2 gun section (infantry gun).
A 1 inch x 1 inch Infantry stand = a Rifle, machinegun (MG) or mortar platoon or a company HQ section.
A ¾ inch x ¾ inch Infantry stand = A Rifle, machinegun (MG) or company mortar section.
Base sizes are approximate, ±¼ inch.
Sections cost half as much as an equivalent platoon.

3. Equipment Required

In addition to miniatures the following are required:
Three 10-sided dice
A 20-sided die
Deck of playing cards
Tape measure graduated in inches ("")
Kill markers (a platoon with a kill is always shaken)
Broken marker (yellow, place on a broken company)
1" Dia. Numbered Artillery Request/FFE markers
.5" Dia. Numbered FFE markers (mortar sections)
Two Artillery Record sheets and a pen or pencil
Four 1" x 1" Objective markers
One inch cotton balls (smoke)
Pea-sized cotton balls (fired marker)
Suppression markers (S1 and S2 on reverse)
A 4 ft wide x 4 ft deep gaming table with terrain

4. HQs and Casualties

Platoons are grouped into companies with an attached HQ section designated by an antenna.

Armed vehicle platoons that are over **ten** inches away from their company HQ are out of command control range (CCR). Other platoons over **three** inches away from their HQ are out of CCR. Non-HQ units out of CCR may only make a half-move unless broken and withdrawing.

When in combat platoons take damage in the form of kills. All non-HQ sections are eliminated on the first kill. All platoons and HQ sections become **shaken** on the first kill and are eliminated on the second kill.

5. Battle Type and Deployment

Decide on the year and location of the battle and have each side roll a die with the high die setting up terrain for the battle and the low roller orienting the 4 ft. x 4 ft. battlefield as they see fit, re-roll ties.

Next each side simultaneously chooses to either attack or defend (e.g. two dice in the fist means attack, one means defend). If both attack the battle is a **meeting engagement** between equal forces, each entering from their respective edges. Otherwise it is a **hasty attack** where the attacker gets twice as many points as the defender who starts set-up on the far half of the table, may be dug-in and may use concealment markers while the attacker enters from their table edge. If both choose defend each rolls a die with the high roll becoming the attacker, re-roll ties.

6. Morale

Attacking units that start their move shaken may only move half or less when advancing toward the enemy table edge. Defending units that start their move shaken may not advance at all.

A company which starts the turn with 50% or more casualties (kills) out of the total possible, excluding transport, becomes **broken**. An attacking broken company must **halt** and may not advance toward the enemy board edge. A broken defending company must **withdraw** to within 6 inches of the friendly table edge moving at least a half-move per turn if possible. Withdrawing troops may not reaction fire until within 6 inches of the friendly table edge. A limber (truck, etc.) that is up to ½ inch from a broken gun of the same company may advance to limber up the gun before withdrawing. Broken unlimbered guns are eliminated (abandoned) at the end of their action phase if defending.

7. Objectives and Initiative

At the start of the game the Allied and Axis sides are each given two 1 inch square objective markers.

First the Allied side places an objective marker then the Axis side places theirs then the Allied side places their second marker then the Axis their second. Objective markers may be placed on any terrain except in a river or marsh unless on a road.

If a hasty attack all objectives should be on the defenders table half and at least 3 inches from a table edge, another objective or the line dividing the Axis and Allied table halves. They start in the defender's possession.

If a meeting engagement the Allied side places their objective on the Axis players table half and at least 6 inches from a table edge, another objective or the line dividing the Axis and Allied table halves. The Axis do the same on the Allied players table half. They start in no one's possession.

Playing cards are used to determine which side is the 1st player and to keep track of turns played. Create a deck of six black and six red cards and shuffle them. Draw a card at the end of each turn's artillery phase and if its black the Axis player decides who is the 1st player or if it is red the Allied player decides who is the 1st player for that turn. In 1940 the Allied player replaces one of their cards with a Joker card. The Joker or Blitzkrieg card is a special turn in which the Allied player has the initiative but cannot move more than a pivot.

8. Spotting

Targets are spotted up to the following ranges:

| Spotting Table | |
|--|----------------------|
| Target | Range (inches) |
| Dug-in troops on foot or dug-in AT guns | 6 |
| Stationary troops on foot, other AT guns, dug-in large guns or hull-down vehicles | 12 |
| Moving troops on foot or small vehicles | 18 |
| Other vehicles or large guns | 24 |
| Spotter is suppressed | $\frac{2}{3} \times$ |
| Target in Partial concealment terrain | $\frac{1}{2} \times$ |
| Target in Full concealment terrain | $\frac{1}{4} \times$ |
| Firing mortars up to 82mm are temporarily spotted for the remainder of the turn up to 3 inches away regardless of terrain if LOS exists. | |
| Firing small arms up to 15mm are temporarily spotted for the remainder of the turn up to 12 inches away regardless of terrain if LOS exists. | |
| Firing guns up to 49mm are temporarily spotted for the remainder of the turn up to 18 inches away regardless of terrain if LOS exists. | |
| Firing 50mm or larger guns are temporarily spotted for the remainder of the turn up to 24 inches away regardless of terrain if LOS exists. | |

Maximum spotting range is 24" due to terrain.

A defender may use concealment markers, allowing any unit in full or partial concealment terrain, dug-in troops on foot in the open and dug-in AT guns in the open to place a numbered marker on the table instead of the actual miniature, with the miniature instead placed out of sight of the enemy on a sheet of paper in a numbered box corresponding to the number on the marker (You should be able to mark 24 2" x 3½" boxes on two sheets of paper).

The concealment marker is replaced with the miniature if it moves, fires, takes a casualty or is spotted.

9. Sequence of Play

Each game consists of 12 turns. Each turn is broken down into 4 phases.

1. Artillery Phase.

Remove all S1 suppression markers. Targets suppressed in phases 1-3 get an S1 marker. Determine which formations have broken and if so mark a unit of that formation accordingly. Maintain or cancel existing FFEs.

Move Artillery Requests up to 3 inches and convert to FFE/Smoke.

Place Artillery Request markers and aircraft.

Resolve artillery fire against any unit touching an FFE marker (both 1st and 2nd player).

Draw a card to determine 1st Player.

2. 1st Player Action Phase.

The 1st player activates one unit (either a platoon, section or flight of aircraft) and states if they are going to Fire or Move with that unit (aircraft must move so stating is redundant) or that they are Done and have no more units to move or fire.

The 2nd player then may conduct reaction fire with any number of units at the 1st players active unit as it moves or after it fires. The 1st player then activates another unit or says they are Done.

3. 2nd Player Action Phase.

The 2nd player activates one unit which has not reaction fired and states if they are going to Fire or Move with that unit or that they are Done and have no more units to move or fire.

The 1st player then may conduct reaction fire with any number of stationary units (which have not yet fired) at the 1st players active unit as it moves or after it fires. The 2nd player then activates another unit or says they are Done.

4. Final Fire Phase.

Remove all S2 suppression markers. Targets suppressed in phase 4 get an S2 marker.

Resolve artillery fire against any unit touching an FFE marker (both 1st and 2nd player).

The 1st player may fire with any one stationary or half-moving unit or say Pass.

The 2nd player may fire with any one stationary or half-moving unit or say Pass.

If both say Pass one right after the other the turn is over and remove all fired markers otherwise repeat firing units as above.

10. Terrain

In addition to open ground terrain types are:

Stream – A ¼ inch wide watercourse. Costs a half move for infantry, half-tracks and fully tracked vehicles to cross. Costs a full move for wheeled vehicles to cross.

Small River – A 1 to 2 inch wide watercourse with a ford or bridge. Impassible to all except at a ford or bridge, exception: infantry including heavy weapons which start and end the turn within 2 inches of an Assault Boat Carrier may cross the river but this takes a full move. Treat a ford as if a stream.

Marsh – An area of shallow water, mud, tall grass and reeds connected to a stream or river. Impassible to vehicles and guns. Infantry have their move halved while in a marsh. Full concealment terrain. A unit in a marsh must be touching the edge of it to see out of it and to be seen from outside of it. Visibility to another unit in a marsh is ½ inch. HE fire into a Marsh suffers a -1 PK modifier.

Orchard – An area containing regularly spaced trees with little underbrush. Move as if open ground. Partial concealment terrain. A unit in an orchard must be within 2 inches of the edge of it to see out of it and to be seen from outside of it. Visibility to another unit in the orchard is 4 inches.

Woods – An area containing trees and underbrush. It takes half of a unit's total move to move 1 inch in woods. Full concealment terrain. See soft target cover table. A unit in woods must be touching the edge of it to see out of it and to be seen from outside of it. Visibility to another unit in woods is ½ inch.

Hedgerows – Hedges grown over earthen walls enclosing fields 2 to 4 inches across, typical of the *bocage* country of Normandy, only available if 1944. Impassible to wheeled vehicles, half-tracks, Carriers and manhandled or towed guns except at a breach. Other fully tracked vehicles take an entire turn to cross over, may not use reverse and front armor is temporarily reduced to flank armor. Infantry on foot take a half turn to cross. Engineers and fully tracked vehicles with a hedgerow cutter attachment may create a breach in the hedgerow by spending a turn adjacent to it. Hedgerows block all line of sight except to/from units actually **touching** them unless a height advantage exists. Units touching and behind hedgerows receive hard cover or hull-down status and are sighted as if in full concealment terrain for point fire across the hedgerow.

Hills – An area of significant elevation gain. Level 1 hills are 1 contour in height (50 ft. but represented by 1 scale inch) and level 2 hills are 2 contours in height. Hills have a slope and are flat topped. Units on foot deduct one inch and vehicles deduct two inches of movement if moving up or across a hill's slope per contour of elevation change. A unit on a hill must be touching the edge of the flat portion to have line of sight down the hill.

Road – A unit that spends the entire turn on a road increases their Move to 3x that listed if a wheeled vehicle other than motorcycles or wagons, 2x if a motorcycle or half-track, 1½x if a fully tracked vehicle and by +1 inch if troops on foot or a wagon.

Towns – A Town is an area connected to one or more roads that contains alley ways and 1 contour high masonry buildings typical of France. Move as open ground. Partial concealment terrain to vehicles, guns and mortars and full concealment terrain for other troops on foot. See soft target cover table. A unit in a town must be touching the edge of it to see out of it and to be seen from outside of it. Visibility to another unit in a town is 1 inch.

Dug-in positions – A platoon size area containing improvised fighting positions offering hard cover to soft targets and hull down status to armored vehicles. May not be placed in a Marsh.

11. Movement

Units which have fired (have a fired marker) may not move or pivot during their action phase. Units which move or pivot may not conduct reaction fire. Exception: if the first player on turn one attacking self-propelled or foot anti-aircraft units may move onto the friendly board edge and still conduct AA reaction fire during the 2nd player action phase.

Units can move through other friendly units but not enemy units. Exception: moving through other friendly units while using road or track movement costs an extra three inches per unit moved through.

Moving platoons and sections move straight ahead and can pivot around their center as they see fit as they move. Units using road or track movement and which moved over half their allotted move may not pivot at the end of their move but must end their move facing down the road/track. Units can go ¼ speed in reverse but treat roads and tracks as open ground if they do so and get no movement bonus.

Vehicle transport capacity is given in the data section. Two infantry sections equal one platoon for transport capacity.

It takes a **half move** to load and unload from adjacent the vehicle. Most unloaded guns may pivot but not move. While being transported cargo takes the same casualties as the transport and cannot fire.

Instead of attacking the hard target, infantry riding on a tank can be targeted separately, area fire affects both. Other towed cargo or troops riding in a vehicle cannot be targeted separately.

12. LOS and Combat Basics

Units can see into or out of a certain amount of terrain as noted by the visibility distance under the terrain description. Any intervening woods, town hedgerow, hill or more than 1 inch or orchard blocks **Line of Sight** (LOS) and is checked by straight edge from the center of the attacking unit to the center of the target unit. Units don't block LOS. Intervening **friendly** infantry block small arms fire from infantry direct firing on enemy infantry unless a height advantage exists allowing fire over the intervening infantry.

A Marsh is slightly lower than surrounding terrain and does not block LOS "over" it. Woods, towns and level 1 hills are one contour high LOS obstacles and can be seen over from any level 2 hill with a **blind zone** behind the obstacle equal to half the distance from the observer to the obstacle. Orchards and hedgerows are half contour high and can be seen over from a level 1 hill with a blind zone as above and from a level 2 hill with a blind zone equal to a quarter of the distance from the observer to the obstacle.

Units have a front and flank. The front arc is $\pm 60^\circ$ of straight ahead (see Figure 1, page 10). Non-turreted vehicles and unlimbered towed guns can only fire at targets in the front arc unless noted, others can fire all around. Armored targets use the front armor value for fire originating in the front arc, center to center. Only one unit may be targeted per phase per firer (exception: Area Fire). Distances are measured edge of hull or stand to edge of hull or stand.

Who can fire and when is described in section 9. Sequence of Play. Reaction fire on moving targets occurs as they move. Targets that fire in an action phase may be spotted and fired at in the same action phase. Place a fired marker on all units immediately after they fire.

Immediately place an S1 suppression marker on **unarmored units** suppressed in the Artillery, 1st Player or 2nd Player Action Phase and an S2 marker on those suppressed in the Final Fire Phase. Suppressed soft targets fire with one less die. Suppressed troops on foot may not move and are not considered moving. Suppressed tank riders immediately dismount. All suppressed units have their spotting distance reduced by $\frac{1}{3}$ (including spotting firing weapons). The suppression lasts a complete turn (see Sequence of Play for when to remove S1 and S2 markers). If placing an S1 marker, remove any S2 marker and vice-versa.

Units may only fire at spotted targets in their LOS. **Units with a fired marker may only fire a second time in the Final Fire Phase.** A pivot counts as a half-move. Aircraft are considered half-moving.

Combat uses the concept of probability of a kill (PK). Rolling the adjusted PK or less causes a kill on the target. Targets are classified as soft or hard.

Point fire attacks a specific target unit. Area fire attacks all units within or touching a .5 inch or 1 inch diameter (see artillery) fire for effect circle and is used for mortar and off-board artillery fire. If an on table mortar or howitzer is eliminated any on-table FFE marker associated with it is removed at the end of the phase it was eliminated in.

13. Soft Target Combat

Soft targets are designated as infantry on foot, guns and unarmored vehicles such as trucks.

| Soft Target Cover | | |
|-------------------|--|---------------------------|
| | Light Cover | Hard Cover |
| Point Fire | woods, gun shield**, directly behind AFV* | hedgerows, dug-in, town * |
| Area Fire | hedgerows, town*, gun shield, suppression* | dug-in |

* for troops on foot except mortars

** against fire from front only

Targets cannot claim any cover if in contact with the firer. Targets cannot claim both light and hard cover.

Infantry and heavy weapons that move half or less only count as moving during reaction fire, those that move over half count as moving the entire turn unless suppressed.

Number of ten sided dice to roll for point fire:

Base = 2, modify as follows:

Quad MG or Quad AC, +1 (except versus aircraft)

Firer is a section, -1

Firer is a suppressed soft target type, -1

Firer is shaken, -1

If the number of dice is exactly 0, roll a twenty-sided die instead, with 11-20 indicating no effect.

| Small Arms Base PK | | | | |
|--------------------------|-----------------------|---|---|----|
| | Range (inches), up to | | | |
| Weapon: | 1 | 3 | 6 | 12 |
| Mortar or Gun Crew | 1 | 0 | - | - |
| Rifle or Engineer (Engr) | 3 | 2 | 1 | - |
| Para or PzGren | 4 | 3 | 1 | - |
| MG, Vehicle MG | 3 | 3 | 2 | 1 |

MG = Machinegun, - = no attack possible

| HE Base PK | | |
|---------------------|----|-----------------------|
| Weapon: | PK | Range (inches), up to |
| 20-25mm AC (HE) | 2 | 12 |
| 37-49mm HE | 1 | 18 |
| 37-49mm AC (HE) | 2 | 18 |
| 50-74mm HE | 2 | 24 |
| 75-99mm HE | 3* | 24 |
| 100-149mm HE | 4 | 24 |
| 150-160mm HE | 5 | 24 |
| 1,000 lb. bomb load | 7 | Aircraft |

AC = autocannon, HE = High Explosive

*75-76mm L46 or longer gun HE has a PK of 2.

PK modifiers:

1. Light cover or HE fire into a marsh, -1
2. Hard cover, -2
3. Infantry moving on foot, +1
4. Tank riders, +1 front arc, +2 flank and area fire
5. Unarmored vehicle, +2 (use +3 if point fire HE)
6. Point fire HE at >12" range, -1

A roll of 1 backed by a second ten-sided die roll of 1-5 is treated as a roll of 0.

A roll of:

adj. PK+3, = Suppression if base PK was at least 4
adj. PK+2, = Suppression if base PK was at least 2
adj. PK+1 = Suppression if base PK was at least 1
adjusted PK or less = a Kill and Suppression

14. Hard Target Combat

Hard Target Combat is fire directed at armored targets. A fire phase represents one to three rounds being fired. Weapon penetration values (in centimeters of steel) are given in section 18 and vehicle armor thickness with armor slope taken into account (in centimeters) is given in section 19.

Number of dice is the same as Soft Target point fire.

First determine if the range to target is within short, medium or long range bands. MGs, HMGs (Heavy Machineguns) and Infantry AT (Anti-Tank) weapons always use medium range.

For 20-25mm guns and the French 37L21 Effective Range (ER) is 6"

For other 37-40mm guns, French 47L30, 57mm APDS and on-table howitzers Effective Range is 9"

For other guns over 40mm Effective Range is 12", Exception: The German 75L70 and 88L56 have an ER of 15" and the 88L71 has an ER of 18"

Compare the weapon's penetration to the target's armor. A penetration two or more greater than the target armor has no modifier. A penetration less than half the target armor has no chance of a kill.

Base Hard Target PK =

- 6 at Short range which is $\leq \frac{1}{2} \times \text{ER}$
- 5 at Medium Range which is $> \frac{1}{2} \times \text{ER}$ but $\leq \text{ER}$
- 3 at Long Range which is $> \text{ER}$ but $\leq 2 \times \text{ER}$

PK Modifiers:

1. Firer is 1-man turret non-AC, -2 at short and medium range and -1 at long range.
French 37-47mm tank guns are in 1-man turrets.
2. Target is a hull-down AFV or Tiger II front, -1
3. Penetrate one more than target armor, -1
4. Penetrate equal to target armor, -2*
5. Penetrate one less than target armor and at least one, -4*
6. Penetrate two less than target armor or less but at least half, PK=0

* Minimum PK=0

A roll of 1 backed by a second ten-sided die roll of 1-5 is treated as a roll of 0.

A roll of adjusted PK or less = a Kill

Tank riders become suppressed and dismount on a roll of 7 or less if short range, 6 or less if medium range and 4 or less if long range.

Infantry Anti-Tank

Rifle (including Engr, Para and PzGren) HQ sections and platoons contain an intrinsic AT section allowing them to fire at soft targets and as a section at hard targets. The weapons available to attack hard targets varies.

AT sections may attack by **close assault** with grenades if in contact with a hard target.

Base close assault PK = 2

PK Modifiers:

1. Attackers are Engineers, +2
2. Target is in woods or town terrain, +1
3. Non-Engineer and target is open topped, +1
4. Target is a Churchill, Matilda II or Tiger, -1
5. Target has tank riders, -1
6. Attacking vehicle front, -1

A roll of 1 backed by a second ten-sided die roll of 1-5 is treated as a roll of 0.

A roll of adjusted PK or less = a Kill

In 1940 the AT section in the UK and German Rifle HQs and the first Rifle platoon (mark on bottom) each contain Anti-Tank Rifles (ATR) which the AT section may use.

The 1944 US and UK Rifle platoon sections may use an AT Rifle Grenade.

In 1944, the AT section in the Rifle HQs and the first Rifle platoon contain, based on nationality, the US Bazooka, UK PIAT or German Panzerschreck. In addition the AT sections of all US Armored Infantry platoons may use a Bazooka and of all German Rifle platoons may use a Panzerfaust.

Special Ammunition

At the start of the game each player is dealt one **ammo card** per HQ section or platoon that can fire APDS or HEAT special ammo (excludes all infantry AT weapons which have unlimited ammo). The exception to this is that UK players are dealt two ammo cards per 57mm AT gun platoon. Use of these types of rounds in a fire phase expends an ammo card. When all cards are gone no special ammo may be used by that player.

15. Artillery

On-table guns and howitzers may use point fire at soft targets in LOS and up to 24 inches away and at hard targets in LOS up to 18 inches away with HE. Some units have HEAT ammo. See section 18. for penetration values.

All mortars and off-table guns and howitzers use **area fire**, affecting all targets within or touching a .5 inch diameter circle if a 2-tube section or a 1 inch circle if a 3 or 4 tube troop, platoon or battery. Note the actual impact is ¼" larger but this ensures that a portion of the target unit is actually in the impact area. Area fire may be pre-plotted area fire, spotter corrected area fire or direct area fire by on-table mortars. Spotter corrected area fire is only available to Germans in 1940 and everyone in 1944.

To use **pre-plotted area fire**, prior to the start of the game write down the location, the turn and the duration of each batteries map fire bombardment. When that turn arrives place an artillery request on that location for each firing battery, roll for deviation and convert to an FFE. First roll a ten-sided for direction with a 9 or 10 on target and 1-8 the direction (1=North, 2=North-East, 3=East, etc, Axis player edge is North in 1940 and Allied player edge in 1944). If not on target roll again with distance from the intended target equal to the second die roll x ½ inch if attacking and x ¼ inch if defending.

The Germans have a spotting team embedded into each Company HQ section which can request the fire of any one platoon or battery. 1944 UK and US have a spotting team embedded into each Company HQ which can request the fire of two troops if 1944 UK and three platoons or batteries if 1944 US. To use **corrected area fire** place an artillery request marker within 3 inches of an enemy target spotted last turn by the HQ during the current Artillery phase. Next turn the same spotting HQ may move this artillery request up to 3 inches to a visible (in LOS) location and convert to a fire for effect (FFE) HE fire mission or cancel the fire mission. The turn after this the spotter may choose to maintain the FFE or cancel the fire mission, if cancelled they may place another artillery request.

To use **direct area fire** the firer must be mortars, must not move this turn and have LOS to the target. The firer then places an FFE marker in the Artillery phase with no artillery request required. Note that all artillery may fire out from the edge of a woods but not from within a woods.

Area fire cannot be called down within 1½ inches of a friendly unit. Roll against any unit touching an area fire FFE marker at the end of the Artillery request phase and the start of the Final Fire phase.

Number of ten sided dice to roll for area fire:

Base = 1, modify as follows:

Firer is suppressed, -1

Firer is shaken, -1

If the number of dice is exactly 0, roll a twenty-sided die instead, with 11-20 indicating no effect.

| Artillery Categories |
|--|
| 60mm mortars are considered Very Light Artillery with a minimum range of 2", a maximum range of 20" and are located on-table, move = 4, Build cost: 6 pts per platoon. |
| 76-82mm mortars are considered Light Artillery with a min. range of 3", a max. range of 30" and are located on-table, move =3. (exception: Fallschirmjager 81mm has a min. range of 2", a max. range of 15" and a move of 4) Build cost: 5 points per section, 10 points per platoon. |
| 75-76mm howitzers (infantry guns, less than L30) are considered Light Artillery, are located on-table and in addition to point fire can use area fire at a min. range of 20" up to a max. range of 40" (as corrected area fire). Build cost: 6 points per section, 12 points per platoon. |
| 75-76mm guns (e.g. French 75) and 88mm howitzers (25 pdr) firing indirectly are considered Light-Medium artillery and are located off-table. Build Cost: 10 points per 4-tube battery or troop (UK). |
| 100-120mm mortars, guns and howitzers firing indirectly are considered Medium Artillery and are located off-table. Build Cost: 12 points per battery. |
| 122-140mm guns and howitzers firing indirectly are considered Medium-Heavy Artillery and are located off-table. Build Cost: 14 points per 4-tube troop (UK). |
| 150-160mm guns and howitzers firing indirectly are considered Heavy Artillery and are located off-table. Build Cost: 16 points per battery. |

UK 25pdr and 5.5" batteries consist of two 4-tube troops.

In order for artillery to affect **hard targets** with area fire roll a 20-sided die, a roll of 1 is a kill if the **flank armor** is 1 for Very Light, 2 or less for Light and Light-Medium artillery, 3 or less for Medium artillery, 4 or less for Medium-Heavy artillery and 5 or less for Heavy artillery.

Smoke missions are limited to one call per battery. Place a 1 inch diameter cotton ball per pair of tubes firing, adjacent to each other in the Artillery phase. The smoke will last the duration of the turn. Remove the smoke at the end of the turn. Smoke blocks all line of sight through it and limits sighting into or out of it to a half inch.

Each artillery section or battery is limited to 4 turns of FFE per game. Use an artillery record sheet to keep track of battery number (same as on artillery request), pre-plotted fires and number of FFEs and smoke used.

16. Close Air Support

A side with air superiority may place aircraft that turn. Each flight of aircraft is allowed one attack pass. If a side has air superiority and has unused attack passes place an aircraft model on a stand on the friendly board edge to represent aircraft flying about.

In 1940 France the German player has air superiority. Aircraft available: JU-87B Stukas with a 1,000 lb bomb load.

In 1944 France the Allied player has air superiority. Aircraft available: P-47s with six M8 rockets if US or Typhoons with eight RP-3 rockets if UK.

A flight of JU-87B aircraft costs 8 build points, a flight of P-47s costs 10 build points and a flight of Typhoons costs 12 build points.

A flight of aircraft is activated just like any other unit except it may both move and attack. First find an eligible target that is not a concealment marker, has a spotting distance of 10 inches or more (which means a vehicle in woods without a fired marker can not be targeted) and is not within 3 inches of friendly troops. There are no LOS blind zones for aircraft. Aircraft do not reveal concealed units. Next place the aircraft model 3 inches in front of the target, attacking from any direction, this is the weapon release point (RP). The opposing player may now conduct anti-aircraft reaction fire as point fire. Number of dice is the same as Soft Target point fire.

| AA Base PK | | |
|------------------|----|-----------------------|
| Weapon: | PK | Range (inches), up to |
| AAMG | -1 | 12 |
| AAHMG, Quad AAMG | 0 | 12 |
| 20-25mm AA AC | 1 | 18 |
| Quad 20mm AA AC | 2 | 18 |
| 37-40mm AA AC | 1 | 24 |

AA AC = anti-aircraft mount autocannon

AA PK modifiers:

Target is a JU-87B, +1

A roll of PK or less is a kill.

A flight of aircraft is considered damaged after taking one kill and is eliminated after taking two kills.

If the flight was not eliminated, the active aircraft attacks immediately after the AA reaction fire with bombs or rockets and is then removed from play.

Resolve rocket attacks as point fire. Roll four dice if UK and three dice if US, halving dice if damaged by AA (a half die rolls a 20-sided die instead of a 10-sided die when resolving attacks). Resolve as if 100mm point fire HE at > 12" for M8 rockets and 150mm HE for RP-3 rockets. Against hard targets roll a 10-sided die, a roll of 1 is a kill regardless of target armor and a roll of 2 is a kill only if the facing armor is 5 or less for M8 rockets and 8 or less for RP-3 rockets. A roll of 3 or less suppresses any tank riders.

To resolve bomb attacks place a 1" FFE marker on the target to represent the bomb impact area. A full flight gets two attack rolls and a damaged flight one attack roll against any unit touching the marker as if artillery area fire. Use 1,000 lb bomb load PK for soft targets. In order for bombs to affect **hard targets** with area fire roll a 20-sided die, a roll of 1 is a kill regardless of target armor and a roll of 2 is a kill if the flank armor is 1.

17. Determining the Victor

At the end of turn 12 each side determines their victory points as follows:

1 victory point for each enemy **unarmored** (Rifle, MG, Mortar, Gun stand, Wagon, Truck, Unarmored Halftrack, Command Car, Jeep/VW and Motorcycle) section or platoon eliminated.

2 victory points for each enemy **lightly armored** vehicle (Armored Halftrack, Scout Car, Armored Car, French FT-17, UE tractor, AMR-33/35, UK MkVI or Carrier, German Pz IB, PzJg IB, Pz IIC) section or platoon eliminated.

3 victory points for each enemy **medium armored** tank and tank destroyer section or platoon eliminated.

4 victory points for each enemy **heavily armored** tank and tank destroyer (German Panther, JagdPanther, Tiger I or II) section or platoon of 45 or more tons eliminated.

5 victory points for each **objective** in possession. Possession means being the last to pass through or to currently occupy the objective.

In a hasty attack the attacker gets **double** victory points for each defending enemy eliminated.

The side with the most victory points wins.

18. Weapon Penetration

| French Armor Penetration Table | | | | | |
|--------------------------------|-----------------------|---|----|----|----|
| | Range (inches), up to | | | | |
| Weapon: | 3 | 6 | 12 | 18 | 24 |
| MG | 1 | - | - | - | - |
| HMG | 2 | 1 | - | - | - |
| 15mm HMG | 3 | 2 | - | - | - |
| 25mm AC | 4 | 3 | 2 | - | - |
| 25L47 & L72 | 5 | 4 | 2 | - | - |
| 37L21 (Mle 1937 AP) | 3 | 2 | 1 | - | - |
| 37L33 & 47L30 | 4 | 3 | 2 | 1 | - |
| 47L34 | 5 | 4 | 3 | 2 | 2 |
| 75L17 | 5 | 4 | 3 | 3 | - |
| - means no attack possible. | | | | | |

| UK and US Armor Penetration Table | | | | | |
|---|-----------------------|----|----|----|----|
| | Range (inches), up to | | | | |
| Weapon: | 3 | 6 | 12 | 18 | 24 |
| MG | 1 | - | - | - | - |
| HMG | 2 | 1 | - | - | - |
| ATR | 2 | 1 | - | - | - |
| 15mm HMG | 3 | 2 | - | - | - |
| 37L52 | 6 | 5 | 4 | 3 | - |
| 40L50 (2 pdr) | 7 | 6 | 5 | 4 | - |
| 57L52 (6 pdr) | 10 | 9 | 8 | 7 | 6 |
| 57L52 APDS | 14 | 13 | 11 | 9 | - |
| 75L40 | 9 | 8 | 7 | 6 | 5 |
| 76L52/55 | 12 | 11 | 10 | 9 | 8 |
| 76L60 (17 pdr) | 16 | 15 | 13 | 12 | 11 |
| - means no attack possible. | | | | | |
| 57mm APDS is available to both UK and US. | | | | | |

| German Armor Penetration Table | | | | | |
|--------------------------------|-----------------------|----|----|----|----|
| | Range (inches), up to | | | | |
| Weapon: | 3 | 6 | 12 | 18 | 24 |
| MG | 1 | - | - | - | - |
| ATR | 2 | 1 | - | - | - |
| 20mm AC | 4 | 3 | 2 | - | - |
| 37L40 & 37mm AC | 5 | 4 | 3 | 2 | - |
| 37L46/48 | 5 | 5 | 4 | 3 | - |
| 47L53 | 7 | 6 | 5 | 4 | 3 |
| 50L60 | 9 | 8 | 6 | 5 | 4 |
| 75L24 | 5 | 5 | 4 | 4 | - |
| 75L46 | 14 | 13 | 11 | 10 | 8 |
| 75L48 | 13 | 12 | 10 | 9 | 8 |
| 75L70 | 17 | 16 | 14 | 13 | 11 |
| 88L56 (1940) | 13 | 12 | 11 | 10 | 9 |
| 88L56 (1944) | 15 | 14 | 13 | 12 | 11 |
| 88L71 | 22 | 21 | 20 | 19 | 17 |
| - means no attack possible. | | | | | |

| Howitzer Armor Penetration Table | |
|--|--|
| Weapon | Penetration (up to 18 inches range) |
| 75mm HE | 3 |
| 75mm HEAT | 8 |
| 88mm HE | 4 |
| 100-105mm HE | 5 |
| 105mm HEAT | 10 |
| 150mm HE | 8 |
| HEAT ammunition only available in 1944. Howitzer Effective Range is 9". | |

| Infantry AT Weapon | Range (inches) | Penetration (up to listed range) |
|-----------------------|-------------------|-------------------------------------|
| AT Rifle Grenade | 1 | 6 |
| Bazooka | 2½ | 11 |
| PIAT | 1½ | 10 |
| Panzerschreck | 2 | 16 |
| Panzerfaust | ½ | 20 |

19a. Unit Data France 1940

| Type | Move (inches) | Front Armor | Flank Armor | Main Weapon | Notes | Build Points |
|--------------------------------------|------------------|----------------|----------------|------------------------|-------|-----------------|
| Common | | | | | | |
| Rifle platoon | 4 | | | Small Arms | | 5 |
| MG platoon, *German MG Move is 4 | 3* | | | Small Arms | | 7 |
| Motorcycle platoon | 18 | | | capacity 1 platoon | 2, 5 | 5 |
| Light Truck platoon | 10 | | | capacity 1 platoon | 1 | 4 |
| Medium Truck platoon | 10 | | | capacity 2 platoons | 1 | 5 |
| Horse drawn wagon/limber platoon | 4 | | | capacity 1 platoon | 1 | 3 |
| Assault Boat Carrier platoon | 10 | | | Truck target type | | 10 |
| France | | | | | | |
| Renault FT-17 platoon | 4 | 2 | 2 | MG or 37L21 | | 10 |
| AMR 33 platoon | 16 | 2 | 1 | MG | | 10 |
| AMR 35 ZT platoon | 16 | 2 | 1 | HMG | | 12 |
| FCM 36 | 8 | 4 | 3 | 37L21 | | 14 |
| R-35 platoon | 8 | 5 | 4 | 37L21 | | 17 |
| H-35 platoon | 10 | 5 | 4 | 37L21 | | 18 |
| H-39 platoon | 12 | 5 | 4 | 37L33 | | 20 |
| Char D2 (early) platoon | 8 | 4 | 3 | 47L30 | | 16 |
| Char D2 (late) platoon | 8 | 4 | 3 | 47L34 | | 18 |
| S-35 Somua platoon | 14 | 5 | 5 | 47L34 | 14 | 24 |
| Char B1-bis platoon | 10 | 7 | 6 | 47L34 + 75L17 (hull) | 15 | 30 |
| Panhard 178 armored car platoon | 12 | 3 | 2 | 25L47, No HE (use MG) | | 16 |
| UE tractor platoon | 10 | 1 | 1 | capacity 1 section | 1, 5 | 6 |
| Light AA Gun platoon | Towed | | | 25mm AC | 4, 7 | 8 |
| Light AT Gun platoon | Towed | | | 25L72, No HE | 3 | 8 |
| UK (BEF) | | | | | | |
| Mk VI B light tank platoon | 16 | 2 | 1 | HMG | | 9 |
| Mk VI C light tank platoon | 16 | 2 | 1 | 15mm HMG | | 10 |
| A10 Cruiser Mk II platoon | 12 | 3 | 2 | 40L50, No HE (use MG) | | 16 |
| A13 Mk IV platoon | 14 | 3 | 2 | 40L50, No HE (use MG) | | 17 |
| Matilda I platoon | 6 | 7 | 6 | MG | | 20 |
| Matilda II platoon | 8 | 8 | 8 | 40L50, No HE (use MG) | | 30 |
| Carrier platoon | 16 | 1 | 1 | MG or ATR | 1, 5 | 7 |
| Medium AT Gun platoon | Towed | | | 40L50, No HE | 7 | 12 |
| Medium AA Gun battery | Towed | | | 40mm AC | 5, 9 | 12 |
| German | | | | | | |
| Command Car pl. (Kfz 15) | 12 | | | capacity 1 section | | 4 |
| Sdkfz 221 armored car platoon | 12 | 2 | 1 | MG | | 8 |
| Sdkfz 222 armored car platoon | 12 | 2 | 1 | 20mm AC | | 12 |
| Sdkfz 231 armored car platoon | 12 | 2 | 1 | 20mm AC | | 12 |
| Panzer IB platoon | 12 | 2 | 2 | MG | | 10 |
| PzJg IB platoon | 12 | 2 | 2 | 47L53 | 10 | 16 |
| Panzer IIC platoon | 12 | 2 | 2 | 20mm AC | | 14 |
| Panzer 35(t) platoon | 10 | 3 | 2 | 37L40 | | 17 |
| Panzer 38(t)A platoon | 12 | 3 | 2 | 37L48 | | 19 |
| Panzer IIIE platoon | 12 | 3 | 3 | 37L46 | | 20 |
| Panzer IVD platoon | 12 | 3 | 3 | 75L24 howitzer | | 22 |
| Sdkfz 251/1 Halftrack platoon | 14 | 2 | 1 | MG, capacity 1 platoon | | 8 |
| Light Gun section (2x cost if a pl.) | Towed | | | 75L24 howitzer | 3, 4 | 6 |
| Light AT Gun platoon | Towed | | | 37L46 | 3 | 8 |
| Heavy AA/AT gun section | Towed | | | 88L56 | 6, 7 | 9 |
| Sdkfz 7 halftrack section | 14 | | | capacity 1 section | | 3 |

19b. Unit Data Normandy 1944

| Type | Move (inches) | Front Armor | Flank Armor | Main Weapon | Notes | Build Points |
|--|------------------|----------------|----------------|---------------------------|--------|-----------------|
| Common | | | | | | |
| Rifle platoon (a section is half cost) | 4 | | | Small Arms | | 5 |
| Paratroop (Para) or Engineer platoon | 4 | | | Small Arms | | 6 |
| MG platoon, *UK MG Move is 3 | 4* | | | Small Arms | | 7 |
| US/UK Recon Jeep platoon | 12 | | | MG | 5 | 6 |
| US/UK Jeep platoon | 12 | | | capacity 1 section | 1, 5 | 4 |
| Light Truck platoon | 10 | | | capacity 1 platoon | 1 | 4 |
| Medium Truck platoon | 10 | | | capacity 2 platoons | 1 | 5 |
| Assault Boat Carrier platoon | 10 | | | Truck target type | | 10 |
| US | | | | | | |
| M8 Armored Car platoon | 12 | 3 | 2 | 37L52 | | 12 |
| M20 Scout Car platoon | 12 | 3 | 2 | HMG + Bazooka | | 8 |
| M5 Stuart platoon | 20 | 6 | 3 | 37L52 | | 18 |
| M4A3(75) Sherman platoon | 16 | 9 | 5 | 75L40, capacity 1 platoon | | 24 |
| M4A3(76) Sherman platoon | 16 | 9 | 5 | 76L52, capacity 1 platoon | | 28 |
| M4(105) Sherman platoon | 14 | 9 | 5 | 105mm howitzer | 8 | 26 |
| M8 HMC platoon | 20 | 5 | 3 | 75mm howitzer | 8 | 20 |
| M10 Tank Destroyer platoon | 16 | 7 | 4 | 76L55 | | 24 |
| M18 Tank Destroyer platoon | 22 | 3 | 3 | 76L52 | | 20 |
| M3 Halftrack platoon | 16 | 1 | 1 | HMG, capacity 1 platoon | | 8 |
| M16 GMC Halftrack platoon | 16 | 1 | 1 | Quad AAHMG | | 14 |
| M21 Mortar platoon | 16 | 1 | 1 | 81mm mortar | | 18 |
| Light-Medium AT Gun platoon | Towed | | | 57L52 | | 10 |
| UK | | | | | | |
| Daimler Armored Car platoon | 12 | 2 | 1 | 40L50, No HE (use MG) | | 14 |
| Daimler Scout Car platoon | 12 | 3 | 1 | MG | 5 | 8 |
| M4A4 Sherman V platoon | 14 | 9 | 5 | 75L40, capacity 1 platoon | | 24 |
| M4A4 Sherman VC Firefly platoon | 14 | 9 | 5 | 76L60, capacity 1 platoon | | 32 |
| Cromwell IV platoon | 18 | 8 | 5 | 75L40, capacity 1 platoon | | 24 |
| Churchill IV (75mm) platoon | 8 | 9 | 8 | 75L40, capacity 1 platoon | | 26 |
| Churchill VII platoon | 8 | 15 | 9 | 75L40, capacity 1 platoon | | 36 |
| Achilles 17 pdr M10 | 16 | 7 | 4 | 76L60 | | 28 |
| Carrier platoon | 16 | 1 | 1 | MG, capacity 1 section | 1, 5 | 7 |
| M3 Scout Car platoon | 12 | 1 | 1 | MG, capacity 1 platoon | | 7 |
| Light-Medium AT Gun platoon | Towed | | | 57L52 | | 10 |
| German | | | | | | |
| Panzergrenadier (PzGren) platoon | 4 | | | Small Arms | | 6 |
| VW platoon (Kubelwagen) | 10 | | | capacity 1 section | 5 | 4 |
| Sdkfz 10/4 SP Flak platoon | 14 | | | 20mm AC | | 8 |
| Sdkfz 7/1 SP Flak platoon | 14 | | | Quad 20mm AC | 17 | 12 |
| Sdkfz 222 Armored Car platoon | 12 | 2 | 1 | 20mm AC | | 12 |
| Sdkfz 223 Armored Car section | 12 | 2 | 1 | MG | | 4 |
| Sdkfz 232 Armored Car platoon | 12 | 4 | 1 | 20mm AC | | 14 |
| Sdkfz 234/2 Armored Car platoon | 12 | 4 | 2 | 50L60 | | 18 |
| Sdkfz 250/9 Armored Car platoon | 14 | 2 | 1 | 20mm AC | | 12 |
| Panzer IVH platoon | 12 | 7 | 4 | 75L48, capacity 1 platoon | 13 | 24 |
| Panzer VA Panther platoon | 16 | 13 | 5 | 75L70, capacity 1 platoon | 11 | 40 |
| Panzer VIa Tiger I platoon | 12 | 12 | 8 | 88L56, capacity 1 platoon | | 40 |
| Panzer VIb Tiger II (early) platoon | 10 | 12 | 9 | 88L71, capacity 1 platoon | 16 | 46 |
| Marder IIIM platoon | 12 | 3 | 2 | 75L46 (PaK 40) | | 20 |
| StuG IIIG platoon | 12 | 8 | 3 | 75L48 | 13, 18 | 24 |
| JgPz IV platoon | 12 | 9 | 3 | 75L48 | 12 | 26 |
| JgPz V JagdPanther platoon | 16 | 14 | 6 | 88L71 | 12 | 44 |
| Sdkfz 250/1 & 251/1 Halftrack platoon | 14 | 2 | 1 | AAMG, capacity 1 platoon | | 8 |
| Sdkfz 250/7 & 251/2 section | 14 | 2 | 1 | 81mm mortar | | 9 |
| Sdkfz 251/9 platoon | 14 | 2 | 1 | 75L24 howitzer | 8 | 18 |
| Light Gun section (2x cost if a pl.) | Towed | | | 75L24 howitzer | 4, 8 | 6 |
| Grille SP Heavy Infantry Gun section | 12 | 3 | 2 | 150L12 howitzer (HE only) | | 12 |
| Medium AT Gun platoon | Towed | | | 75L46 (PaK 40) | | 12 |

Unit Data Notes:

1. All Jeep, Truck, UE tractor, Carrier and horse drawn wagon/limber platoons can tow a light gun, light, light-medium or medium AT gun platoon instead of personnel.
2. Motorcycle move is 0 if unloaded.
3. Unlimbered light and light-medium guns (except AA) may be manhandled and move (and are spotted) as troops on foot with a move of only 2 inches in open ground and moving 1 inch in woods expends all of the units total move.
4. AT gun sized for spotting.
5. Small vehicle (1.5m hgt) sized for spotting (hull-down if dug-in).
6. Large gun sized for spotting.
7. 360° mount allows firing all around.
8. Limited High Explosive Anti-Tank (HEAT) ammunition available.
9. UK 40mm AA fires HE only which can penetrate 2 cm of armor out to 18 inches.
10. PzJg IB has an unarmored flank which allows small arms and HE to affect the crew as stationary with light cover.
11. Well sloped front hull, add 1 to front armor versus APDS.
12. Well sloped front hull and upper superstructure, add 2 to front armor versus APDS.
13. Shurtzen (skirts) add 1 to flank armor versus HMGs and ATRs and add 7 to flank armor versus HEAT rounds from Bazookas and PIATs, etc.
14. The S-35 Somua had a 1½ man turret allowing the radio operator to assist in loading, this alters the one man turret PK modifier to -1 at all ranges.
15. The Char B1-bis cannot use its 75mm hull howitzer while dug-in (hull-down).
16. Early Tiger II had a large turret with significantly weaker front armor than the hull. Firers targeting the front, target the turret as if hull-down and use the turret front armor value shown.
17. Sdkfz 7/2 Self-Propelled Flak similar except mounting a single 37mm AC and may be used in place of the Sdkfz 7/1. Armored cab versions of both the Sdkfz 7/1 and 7/2 exist, if the miniature has both an armored cab and a gunshield it qualifies for the light cover PK modifier.
18. StuH 42 similar except mounting a 105mm howitzer in place of the 75L48, limited HEAT ammo available. One StuH 42 platoon may be used in place of a StuG IIIG platoon per game.

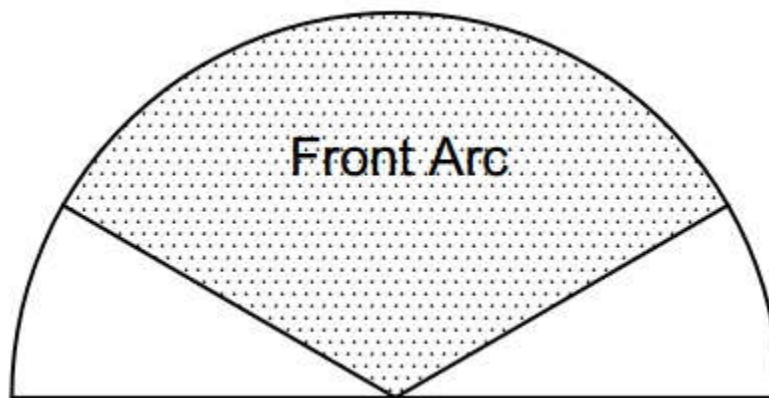


Figure 1 Angle Tool

20a. Battalion Org. 1940

Variation Note: Companies may be short a platoon, battalions may be short a company and a company from a different battalion may be attached to your battalion. One battalion asset platoon may be attached to a company.

French DLM Light Tank Bn.

2x Light Squadron
Squadron HQ (H-39)
1x Light Tank platoon (H-39)
3x Light Tank platoon (H-35)

French DLM Medium Tank Bn.

2x Medium Squadron
Squadron HQ (S-35)
4x Medium Tank platoon (S-35)

French DLM Motorized Dragoon Bn.

1x AMR squadron
Squadron HQ (AMR)
4x AMR platoons (AMR)
1x Motorcycle squadron
Company HQ Rifle section (+truck)
4x Rifle platoons (+motorcycles)
2x Rifle squadrons
Company HQ Rifle section (+truck)
3x Rifle platoons (+truck)
1x MG platoon (+truck)
1x Support squadron
Company HQ Rifle section (+truck)
AAMG platoon (+truck)
Note: AAMG same as MG except for AA mount.
1x Medium Mortar platoon (+truck)
1x Light AT Gun platoon (+truck)

French DLM Recon Group

1x AMD squadron
Company HQ (Panhard 178)
4x AMD platoons (Panhard 178)
1x Motorcycle squadron
Company HQ Rifle section (+truck)
4x Rifle platoons (+motorcycles)

French DCR Light Tank Bn.

3x Light Tank Companies
Company HQ (H-39)
1x Light Tank platoon (H-39)
2x Light Tank platoon (H-35)
May substitute Char D2 (early) for H-35 and Char D2 (late) for H-39 (4th DCR).

French DCR Heavy Tank Bn.

3x Heavy Tank Companies
Company HQ (Char B1-bis)
3x Heavy Tank platoon (Char B1-bis)

French DCR Mech. Chasseurs Bn.

1x Motorcycle squadron
Company HQ Rifle section (+truck)
4x Rifle platoons (+motorcycles)
2x Rifle squadrons
Company HQ Rifle section (+truck)
3x Rifle platoons (+truck)
1x MG platoon (+truck)
1x Support squadron
Company HQ Rifle section (+truck)
AAMG platoon (+truck)
1x Medium Mortar section (+truck)
2x Light AT Gun platoons (+truck)

French Infantry Bn.

3x Rifle Companies
Company HQ Rifle section
4x Rifle platoons
1x Support Company
Company HQ Rifle section
3x Heavy MG platoons (+wagon)
1x Light Mortar platoon (from Rifle Companies)
1x Medium Mortar section (+wagon)
1x Light AT Gun section (+wagon)
Attached tank company (see DCR, may use either FT-17, R-35 or FCM-36)
Attached Light AA platoon (+wagon)

BEF Cavalry Regiment

3x Cavalry Squadron
Squadron HQ (Mk VIB)
1x Light tank platoon (Mk VIB)
1x Carrier platoon (MG armed)
1x Carrier platoon (ATR armed)

BEF Infantry Bn.

1x Carrier platoon (MG armed)
1x Carrier platoon (ATR armed)
1x Mortar platoon (76mm +truck)
1x attached Heavy MG platoon (+truck)
1x French Light AT Gun platoon or BEF Medium AT Gun platoon (+truck)
4x Rifle Companies
Company HQ Rifle section (+truck)
3x Rifle platoons (+truck)

BEF RTR Squadron

Company HQ (Matilda I)
2x Heavy Tank platoon (Matilda I)
1x Heavy Tank platoon (Matilda II)

BEF Armored Squadron

Company HQ (A10)
1x Cruiser Tank platoon (A10)
1x Cruiser Tank platoon (A13)
1x Light Tank platoon (Mk VIB)
1x Light Tank platoon (Mk VIC)
Attached Medium AA Gun bty (+truck)

German Panzer Bn. (3rd & 4th Pz Divs)

2x Light Tank Company
Company HQ (Pz IB)
1x Recon Tank platoon (Pz IB)
2x Light Tank platoon (Pz IIC)
1x Medium Tank Company
Company HQ (Pz IB)
1x Recon Tank platoon (Pz IB)
1x Medium Tank platoon (Pz IIIE)
1x Support Tank platoon (Pz IVD)

German Panzer Bn. (7th Pz Div)

2x Light Tank Company
Company HQ (Pz IB)
1x Recon Tank platoon (Pz IIC)
2x Light Tank platoon (Pz 38(t)A)
Use Pz 35(t) instead if 6th Pz Div
1x Medium Tank Company
Company HQ (Pz IB)
1x Recon Tank platoon (Pz IIC)
2x Support Tank sections (Pz IVD)

German PzJg Co. (PzJg Abt 521)

Company HQ section (PzJg IB)
2x PzJg platoons (PzJg IB)

German Heavy AA/AT Battery

Company HQ Rifle section (+car)
2x Heavy AA/AT sections (+Sdkfz 7)
Maximum of two batteries per game.

German Motorized Shutzen Bn.

1x Motorcycle Infantry Company
Company HQ Rifle section (+car)
3x Rifle platoons (+motorcycles)
1x MG section (+motorcycles)
Optional: replace motorcycles and trucks with 251/1 halftracks.
2x Motorized Infantry Companies
Company HQ Rifle section (+car)
3x Rifle platoons (+truck)
1x MG platoon (+truck)
1x Support Company
Company HQ Rifle section (+car)
1x Medium Mortar platoon (+truck)
1x Light AT gun platoon (+lt truck)
2x Light Gun section (+lt truck)

German Motorized Recon Bn.

1x Motorcycle Infantry Company
Company HQ Rifle section (+car)
3x Rifle platoons (+motorcycles)
1x MG section (+truck)
2x Armored Car Companies
Company HQ section (+car)
2x Light platoon (Sdkfz 221)
1x Light platoon (Sdkfz 222)
1x Heavy platoon (Sdkfz 231)
1x Heavy Company
Company HQ Rifle section (+car)
1x Pioneer (Engr) platoon (+truck)
1x Light AT gun platoon (+lt truck)
1x Light Gun section (+lt truck)

German Infantry Bn.

3x Rifle Companies
Company HQ Rifle section
3x Rifle platoons
1x MG section
1x Machine Gun Company
Company HQ Rifle section
2x MG platoons
1x Medium Mortar platoon (+wagon)
1x Light AT gun section (+wagon)
Attached Light Gun section (+wagon)
Attached Light AT Gun pl. (+wagon)
Attached Assault Boat Carrier platoon

French DLM Div artillery Bn.

2x Light-Medium artillery Bty
1x Medium artillery Bty

French DCR Div artillery Bn.

3x Medium artillery Bty

BEF RHA artillery Rgt.

2x Light-Medium artillery Bty (25 pdr)

German Panzer Div artillery Bn.

3x Medium artillery Bty

20b. Battalion Org. 1944

See Variation Note under 20a.

US Infantry Bn.

- 3x Infantry Company
 - Company HQ section + Jeep
 - 3x Rifle platoon
 - 1x MG platoon
 - 1x Lt. Mortar platoon
- 1x Heavy Weapons Company
 - Company HQ section + Jeep
 - 2x MG platoon
 - 1x Med. Mortar platoon
- 1x Lt-Med. AT Gun platoon + Med. Truck
- optional Assault Boat Carrier platoon

US Armored Infantry Bn.

- 3x Armored Infantry Company
 - Company HQ section + M3 h/t
 - 3x Rifle platoon + M3 h/t
 - 1x MG platoon + M3 h/t
 - 1x Lt Mortar platoon (3-tube) + M3 h/t
 - 1x Lt-Med. AT Gun platoon + M3 h/t
- 1x Arm. Mortar platoon (M21)
- 1x Assault Gun platoon (M8 HMC)
- 1x Halftrack MG platoon (M3 h/t)
- 1x Recon Jeep platoon

US Parachute Infantry Bn.

- 3x Parachute Infantry Company
 - Company HQ section
 - 3x Rifle (Paratroop) platoons
- Note: 2 squads with LMG per platoon
- 1x Lt Mortar platoon
- 2x MG platoon
- 1x Med. Mortar platoon

US Tank Bn.

- 3x Medium Tank Company
 - Company HQ (M4A3(75) sec.)
 - 3x Tank platoon (M4A3(75))
- Note: One platoon can be M4A3(76)
- 1x Light Tank Company
 - Company HQ (M5)
 - 3x Tank platoon (M5)
- 1x Arm. Mortar platoon (M21)
- 1x Assault Gun platoon (M4(105))
- 1x Recon Jeep platoon
- Attached Armored Engineer Company
 - Company HQ section + M3 h/t
 - 3x Engineer platoons + M3 h/t
- Attached SP AA platoon (M16)

US Tank Destroyer Bn.

- 3x TD Company
 - Company HQ sec. (M3 h/t)
 - 3x TD platoon (M10)
 - 1x Scout platoon (M20)
- Note: M18 may replace M10 in July
- 1x Recon Company
 - Company HQ sec. (M3 h/t)
 - 1x Engineer platoon + Med. Truck
 - 1x Armored car platoon (M8 AC)
 - 2x Recon Jeep platoon

UK Motor Rifle Bn.

- 3x Motor Infantry Company
 - Company HQ section + M3 Scout Car
 - 3x Rifle platoon + M3 h/t
 - 1x Medium Mortar section + M3 h/t
 - 1x Scout platoon (Carrier)
- 1x Support Company
 - Company HQ section + M3 Scout Car
- 3x Lt-Med. AT Gun platoon + Carrier
- 2x MG section + Carrier
- Attached Achilles or M10 AT platoon

UK Infantry Bn.

- 4x Infantry Company
 - Company HQ section + Lt. Truck
 - 3x Rifle platoon
 - 1x Med. Mortar section + Carrier
- 1x Support Company
 - Company HQ section + Lt. Truck
 - 2x Rifle **section** (with PIAT) + Carrier
 - 1x Lt-Med. AT Gun platoon + Carrier
 - 1x Engineer platoon + Lt. Truck
- Attached MG platoon + Lt. Truck
- optional Assault Boat Carrier platoon

UK Parachute Bn.

- 3x Parachute Infantry Company
 - Company HQ section
 - 4x Rifle (Paratroop) platoons
- 1x Support Company
 - Company HQ section
 - 1x Med Mortar platoon
 - 1x Recon Jeep platoon
 - 1x Engineer platoon
- 1x AA & AT Company
 - 2x Lt-Med. AT gun platoon + Jeep
 - 2x MG platoon

UK Armored Regiment

- 3x Tank Squadron
 - Company HQ (Sherman V sec.)
 - 3x Tank troop (Sherman V pl.)
 - 1x Tank troop (Sherman VC pl.)
- Note: Cromwell IV can replace Sherman V and in Churchill squadrons the Churchill VII replaces the HQ section and the Sherman VC platoon and the Churchill IV replaces the Sherman V
- 1x Reece troop (2x M5 Stuart pl.)
- 1x Attached Armored Car troop (Daimler Armored Car platoon and a Daimler Scout Car platoon)

German Infantry Bn.

- 3x Infantry Company
 - Company HQ section + VW
 - 3x Rifle platoon
 - 1x Med. Mortar section
- Note: redeployed from Heavy Company
- 1x MG section
- 1x Heavy Company
 - Company HQ section + VW
 - 1x MG platoon
 - 1x Offboard 120mm mortar btt

German Panzergrenadier (PzGren) Bn.

- Two versions exist Armored and Motorized
- 3x Panzergrenadier Company
 - Company HQ section + VW
 - 3x Rifle (Panzergrenadier) platoon
 - 1x SP Medium Mortar section (251/2) if Armored or Med. Mortar section if Motorized
 - 1x MG section
 - 4x Sdkfz 251/1 halftracks if Armored or 2x Medium Trucks if Motorized
- 1x Heavy Company
 - Company HQ section + VW
 - 1x Med. AT Gun platoon + Lt. Truck
 - 1x Offboard 120mm mortar btt (2 section)
 - 1x Self-propelled 75mm howitzer platoon (Sdkfz 251/9) if Armored
 - 1x Engineer platoon + Sdkfz 251/1 if Armored
- Attached SP AA Company
 - Company HQ section + VW
 - 3x Sdkfz 10/4 SP 20mm AA platoons
- Attached SP Heavy Infantry Gun section

German Fallschirmjager (FJ) Bn.

- 3x Fallschirmjager Company
 - Company HQ section
 - 3x Rifle (Paratroop) platoon
 - 1x Med. Mortar section
- 1x Heavy Company
 - Company HQ section
 - 2x MG platoon
 - 1x Med. Mortar platoon
 - 1x Light Gun section + Lt. Truck
- Note: The Fallschirmjager Med. Mortar is a shortened and lighter 81mm mortar with a move of 4 inches, a min range of 2 inches and a max range of 15 inches.

German Panzer Bn.

- 3x Medium Tank Company
 - Company HQ (Pz IV or Pz V sec.)
 - 3x Tank platoon (Pz IV or Pz V)
- Note: If PzIV may have a 4th platoon
- 1x Recon platoon (Pz IV or Pz V)
- 1x Engineer platoon + Sdkfz 251
- Note: If Pz IV equipped may replace a Company with StuG IIIGs
- 1x AA platoon (Sdkfz 7/1 quad 20mm)

German Heavy Panzer Bn.

- 3x Heavy Tank Company
 - Company HQ (Pz Via sec.)
 - 3x Tank platoon (Pz VIa)
- One company may be Pz VIb if against UK
- 1x AA platoon (Sdkfz 7/1 quad 20mm)

German Panzerjager Bn.

- 3x Medium SPAT Company
 - Company HQ (StuG IIIG sec.)
 - 3x Tank platoon (StuG IIIG)
- Note: May replace a company with Marder IIIM, JgPz IV or if against UK, a two platoon company of JgPz Vs.
- 1x AA platoon (Sdkfz 7/1 quad 20mm)

German Armored Recon Bn.

- 1x Armored Car Company (wheeled)
 - Company HQ (Sdkfz 223 sec.)
 - 3x AC platoon (Sdkfz 222)
 - 1x Heavy AC platoon (Sdkfz 232)
- Note: Panzer Lehr and 1st SS Panzer Divisions used all Sdkfz 234/2 Puma
- 1x Armored Car Company (halftrack)
 - Company HQ + Sdkfz 250/1
 - 4x AC platoon (Sdkfz 250/9)
- 2x Armored Recon Company
 - Company HQ + Sdkfz 250/1
 - 3x Rifle platoon + Sdkfz 250/1
 - 1x SP Medium Mortar section (250/7)
- 1x Heavy Company
 - Company HQ + Sdkfz 251/1
 - 1x SP 75mm how. pl. (Sdkfz 251/9)
 - 1x Med. AT Gun platoon + Sdkfz 251/1
 - 1x Engineer pl. + Sdkfz 251/1

US Armor Div. Artillery Bn.

- 3x Medium Arty Btty

US Infantry Div. Artillery Bn.

- 3x Medium Arty Btty, 1x Heavy Arty Btty

UK Field Artillery Rgt.

- 3x Light-Medium Arty Btty (25 pdr)

UK Medium Artillery Rgt.

- 2x Medium-Heavy Arty Btty (5.5")

German Infantry Div. Artillery Bn.

- 3x Medium Arty Btty, 1x Heavy Arty Btty

German Panzer Div. SP Artillery Bn.

- 2x Medium Arty Btty, 1x Heavy Arty Btty

WWII Battles in France Quick Reference Sheet

Sequence of Play

1. Artillery Phase.

Remove all S1 suppression markers. Targets suppressed in phases 1-3 get an S1 marker.
Determine which formations have broken and if so mark a unit of that formation accordingly.
Maintain or cancel existing FFEs.
Move Artillery Requests up to 3 inches and convert to FFE/Smoke.
Place Artillery Request markers and aircraft.
Resolve artillery fire against any unit touching an FFE marker (both 1st and 2nd player).
Draw a card to determine 1st Player.

2. 1st Player Action Phase.

The 1st player activates one unit (either a platoon, section or flight of aircraft) and states if they are going to Fire or Move with that unit (aircraft must move so stating is redundant) or that they are Done and have no more units to move or fire.
The 2nd player then may conduct reaction fire with any number of units at the 1st players active unit as it moves or after it fires. The 1st player then activates another unit or says they are Done.

3. 2nd Player Action Phase.

The 2nd player activates one unit which has not reaction fired and states if they are going to Fire or Move with that unit or that they are Done and have no more units to move or fire.
The 1st player then may conduct reaction fire with any number of stationary units (which have not yet fired) at the 1st players active unit as it moves or after it fires. The 2nd player then activates another unit or says they are Done.

4. Final Fire Phase.

Remove all S2 suppression markers. Targets suppressed in phase 4 get an S2 marker.
Resolve artillery fire against any unit touching an FFE marker (both 1st and 2nd player).
The 1st player may fire with any one stationary or half-moving unit or say Pass.
The 2nd player may fire with any one stationary or half-moving unit or say Pass.
If both say Pass one right after the other the turn is over and remove all fired markers otherwise repeat firing units as above.

Number of ten sided dice to roll for point fire:

Base = 2, modify as follows:

Quad MG or Quad AC, +1 (except versus aircraft)

Firer is a section, -1

Firer is a suppressed soft target type, -1

Firer is shaken, -1

Number of ten sided dice to roll for area fire:

Base = 1, modify as follows:

Firer is suppressed, -1

Firer is shaken, -1

If the number of dice is exactly 0, roll a twenty-sided die instead, with 11-20 indicating no effect.

Spotting Table

| Target | Range (inches) |
|---|----------------------|
| Dug-in troops on foot or dug-in AT guns | 6 |
| Stationary troops on foot, other AT guns, dug-in large guns or hull-down vehicles | 12 |
| Moving troops on foot or small vehicles | 18 |
| Other vehicles or large guns | 24 |
| Spotter is suppressed | $\frac{2}{3} \times$ |
| Target in Partial concealment terrain | $\frac{1}{2} \times$ |
| Target in Full concealment terrain | $\frac{1}{4} \times$ |
| Firing mortars up to 82mm are temporarily spotted for the remainder of the turn up to 3 inches away regardless of terrain if LOS exists. | |
| Firing small arms up to 15mm are temporarily spotted for the remainder of the turn up to 12 inches away regardless of terrain if LOS exists. | |
| Firing guns up to 49mm and mortars larger than 82mm are temporarily spotted for the remainder of the turn up to 18 inches away regardless of terrain if LOS exists. | |
| Firing 50mm or larger guns are temporarily spotted for the remainder of the turn up to 24 inches away regardless of terrain if LOS exists. | |

Maximum spotting range is 24" due to terrain and haze.

Soft Target Combat

| Small Arms Base PK | | | | |
|--------------------------|-----------------------|---|---|----|
| Weapon: | Range (inches), up to | | | |
| | 1 | 3 | 6 | 12 |
| Mortar or Gun Crew | 1 | 0 | - | - |
| Rifle or Engineer (Engr) | 3 | 2 | 1 | - |
| Para or PzGren | 4 | 3 | 1 | - |
| MG, Vehicle MG | 3 | 3 | 2 | 1 |

MG = Machinegun, - = no attack possible

| HE Base PK | | |
|---------------------|----|-----------------------|
| Weapon: | PK | Range (inches), up to |
| 20-25mm AC (HE) | 2 | 12 |
| 37-49mm HE | 1 | 18 |
| 37-49mm AC (HE) | 2 | 18 |
| 50-74mm HE | 2 | 24 |
| 75-99mm HE | 3* | 24 |
| 100-149mm HE | 4 | 24 |
| 150-160mm HE | 5 | 24 |
| 1,000 lb. bomb load | 7 | Aircraft |

AC = autocannon, HE = High Explosive

*75-76mm L46 or longer gun HE has a PK of 2.

PK modifiers:

1. Light cover or HE fire into a marsh, -1
2. Hard cover, -2
3. Infantry moving on foot, +1
4. Tank riders, +1 front arc, +2 flank and area fire
5. Unarmored vehicle, +2 (use +3 if point fire HE)
6. Point fire HE at >12" range, -1

A roll of:

- adj. PK+3, = Suppression if base PK was at least 4
- adj. PK+2, = Suppression if base PK was at least 2
- adj. PK+1 = Suppression if base PK was at least 1
- adjusted PK or less = a Kill and Suppression

Hard Target Combat

For 20-25mm guns and the French 37L21

Effective Range (ER) is 6"

For other 37-40mm guns, French 47L30, 57mm

APDS and on table howitzers Effective Range is 9"

For other guns over 40mm Effective Range is 12",

Exception: The German 75L70 and 88L56 have an ER of 15" and the 88L71 has an ER of 18"

Base Hard Target PK =

6 at Short range which is $\leq \frac{1}{2}xER$

5 at Medium Range which is $>\frac{1}{2}xER$ but $\leq ER$

3 at Long Range which is $> ER$ but $\leq 2xER$

PK Modifiers:

1. Firer is 1-man turret non-AC, -2 at short and medium range and -1 at long range.
French 37-47mm tank guns are in 1-man turrets.
2. Target is a hull-down AFV or Tiger II front, -1
3. Penetrate one more than target armor, -1
4. Penetrate equal to target armor, -2*
5. Penetrate one less than target armor and at least one, -4*
6. Penetrate two less than target armor or less but at least half, PK=0

* Minimum PK=0

A roll of adjusted PK or less = a Kill

Base close assault PK = 2

PK Modifiers:

1. Attackers are Engineers, +2
2. Target is in woods or town terrain, +1
3. Non-Engineer and target is open topped, +1
4. Target is a Churchill, Matilda II or Tiger, -1
5. Target has tank riders, -1
6. Attacking vehicle front, -1

A roll of adjusted PK or less = a Kill

Tank riders become suppressed and dismount on a roll of 7 or less if short range, 6 or less if medium range and 4 or less if long range.

For hard and soft target combat, a roll of 1 backed by a second ten-sided die roll of 1-5 is treated as a roll of 0.

Artillery

60mm mortars - min. range 2", max. range 20"

76-82mm mortars - min. range 3", max. range 30"

GE FJ 81mm mortar - min. range 2", max. range 15"

75-76mm howitzers - direct fire and max. range of 40"

In order for artillery to affect **hard targets** with area fire roll a 20-sided die, a roll of 1 is a kill if the **flank armor** is:

- 1 for Very Light artillery (60mm)
- 2 or less for Light and Light-Medium artillery (75-88mm)
- 3 or less for Medium artillery (100-120mm)
- 4 or less for Medium-Heavy artillery (122-140mm)
- 5 or less for Heavy artillery (150-160mm)

Terrain

| Soft Target Cover | | |
|-------------------|--|--------------------------|
| | Light Cover | Hard Cover |
| Point Fire | woods, gun shield**, directly behind AFV* | hedgerows, dug-in, town* |
| Area Fire | hedgerows, town*, gun shield, suppression* | dug-in |

* for troops on foot except mortars

** against fire from front only

Targets cannot claim any cover if in contact with the firer. Targets cannot claim both light and hard cover.

Movement and Visibility

Hills - Troops on foot deduct 1 inch and vehicles deduct 2 inches moving up or across per contour.

Orchard - Move as open. Must be within 2 inches of edge to see out or within 4 inches to see within.

Woods - Half move per inch moved through. Must be at edge to see out and within $\frac{1}{2}$ inch to see within.

Marsh - Foot only allowed to enter, costs 2 inches per inch moved through. Visibility same as woods.

Stream - Costs a half move for infantry, half-tracks and fully tracked to cross and a full move for wheeled vehicles to cross.

Small River - Impassible except at a ford or bridge.

Hedgerows - Impassible to wheeled vehicles, half-tracks, Carriers and manhandled or towed guns except at a breach. Other fully tracked vehicles take an entire turn to cross over. Infantry on foot take a half turn to cross. Units touching and behind hedgerows are sighted as if in full concealment terrain for point fire across the hedgerow and vehicles gain hull-down status unless a firer height advantage exists.

Towns - Move as open ground. Partial concealment terrain to vehicles or guns and full concealment terrain for infantry. A unit in a town must be touching the edge of it to see out of it and to be seen from outside of it. Visibility to another unit within is 1 inch.

Road - A unit that spends the entire turn on a road increases their Move to 3x that listed if a wheeled vehicle other than motorcycles or wagons, 2x if a motorcycle or half-track, $1\frac{1}{2}x$ if a fully tracked vehicle and by +1 inch if troops on foot or a wagon.

Anti-Aircraft

| AA Base PK | | |
|------------------|----|-----------------------|
| Weapon: | PK | Range (inches), up to |
| AAMG | -1 | 12 |
| AAHMG, Quad AAMG | 0 | 12 |
| 20-25mm AA AC | 1 | 18 |
| Quad 20mm AA AC | 2 | 18 |
| 37-40mm AA AC | 1 | 24 |

AA AC = anti-aircraft mount autocannon

AA PK modifiers:

Target is a JU-87B, +1

A roll of PK or less is a kill.

A flight of aircraft is considered damaged after taking one kill and is eliminated after taking two kills.