**WW1 BBB Modifiers**

V1.1 – 2/4/18

# Intro

These are intended for the more mobile battles of the era. They may be OK for trench warfare but are not intended for it. They are aimed at much smaller engagements than Chris’s rules mods (<https://uk.groups.yahoo.com/neo/groups/BBB_wargames/files/1914-1918%20WWI/> )

# Scale

6” = 1km

1 turn is a minimum of 1 hr depending on the tempo of the battle

Units represent battalions. A “standard” battalion is about 1000 men, but only has about 850 frontline rifles. It is represented by is 6 stands (so c.150 rifles to a base base). An MG base is 8 MMGs. A gun base is a battery of 4-6 (usually 4) guns. A tank or armoured car base is 4 AFVs

Armoured cars are usually armed with 1 vehicle MG. Light tanks (FT-17 and Whippet) have one vehicle MG. Medium tanks have 1 vehicle MG and 1 vehicle gun, or 2 vehicle MGs

For bigger battles a 1 unit = 1 regiment scale will probably need to be developed

# Line of Sight (LOS)

LOS is generally limited to 6” for units on the same level. If there is an elevation difference, LOS is 24”

In some desert scenarios, if mirage conditions do not exist, LOS may extend to 12”. This must be explicitly stated in the scenario briefing.

Artillery observation posts (OP’s) are treated as level 1 in a town (not village). Other units are treated as level zero.

# Firepower

Units have the following firepower

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Unit | 0” | 6”[[1]](#footnote-1) | 12” | 24”/IDF |
| Infantry[[2]](#footnote-2) | 2 | 1 | 0.5 | - |
| Dismounted Cavalry | 2 | 1 | - | - |
| MGs[[3]](#footnote-3) | 4 | 2 | 1 | - |
| Vehicle MGs | 3 | 1 | 0.5 | - |
| Vehicle Gun | 4 | 4 | 2 | - |
| Field Artillery[[4]](#footnote-4) | 6 | 6 | 4 | 2 |
| Aircraft | 6 | - | - | - |

Units stopped at 0” will be moved back 1” so they are no longer in contact.

Units can be rated as tactically competent (TC) or tactically incompetent (TI). TI gets a left shift when firing. When fired at the attacker gets a right shift. TC is the other way around.

Heavy Artillery (14cm+) has the same factors a field artillery but ignores one left shift of any cover modifiers

# Infantry MGs

Infantry MGs must be attached to an infantry unit.

When the battalion is moved, the MG is placed pointing to the rear and cannot fire. MGs can only be rotated to a firing position when a unit does not move. This does not require a successful movement roll.

# Tanks and Armoured Cars

## Movement

Armoured cars move like cavalry (i.e. 18”), however any obstacle is impassable as is difficult ground. They evade as cavalry.

Tanks move like infantry (i.e. 12”). They do NOT get a road bonus

## AFVs as Targets

When shot at tanks and armoured cars get the following bonuses. Tanks and armoured cars do NOT get cover bonuses

|  |  |
| --- | --- |
|  | Shooter |
| Target | Small Arms | Vehicle Gun or Field Artillery | Heavy Artillery |
| Armoured Car | 2L | 1L | No penalty |
| Tank | 3L | 2L | 1L |

## AFVs and Close Assaults

No unit may initiate a close assault against an AFV, if it is in the open.

AFVs may initiate close assaults against any non-armoured unit. Tanks get a +3 bonus verses infantry (not cavalry) that are not in cover or fortifications. Armoured cars give a +1 bonus under the same circumstances

# Cavalry

This is for the most part treated as cavalry in BBB. However, it may dismount (and remount) at any point in its movement, though it may only do one action not both. If at any point in its move the cavalry is dismounted it moves as infantry for the entire move.

Mounted cavalry does not shoot effectively and may not shoot in game terms.

Dismounted Cavalry is marked by replacing one cavalry stand with a horse holder stand. This does not shoot and does not participate in close assaults. Dismounted cavalry moves in all ways like infantry and shoots as dismounted cavalry. It may take advantage of cover bonuses.

# Close Combat

The supported line modifier no longer applies[[5]](#footnote-5). The supporting line no longer fires. The supporting line does contribute to mass.

The attacker, if they moved to contact immediately before the roll, gets a +1 modifier[[6]](#footnote-6)

Tactically competent units get a +1 modifier; tactically incompetent units get a -1 modifier

# Indirect Artillery Fire

Note indirect fire never counts as flanking fire.

Low on ammo units may not indirect fire

There are two types of indirect fire, Aiming Point Fire (AP) and Target Observer Battery (TOB)[[7]](#footnote-7)

## Aiming Point Fire (AP)

A gun battery within 3” of a hill, embankment or ridgeline may draw a line of sight to a target from any point on the hill, embankment or ridge within 3” of the guns. The guns do not have to be in LOS of the target.

## Target Observer Battery (TOB)

For TOB the guns have to be able to see their Observation Post (OP).

This requires the battery to send out an OP team. The OP must have LOS to the target in order to call fire or may draw a line of sight to a target from any point on the hill, embankment or ridge within 3” of his position.

There must be LOS from the guns to the OP team or if a gun, battery is within 3” of a hill, embankment it may draw a line of sight to the OP from any point on the hill, embankment or ridge within 3” of the guns.

Only the OP allocated to the battery can call the guns. This call may not succeed, roll 1d6, on a 4-6 the call succeeds and the guns’ firepower may be added to the fire point total. If the roll fails then the guns may not fire at any other targets this phase.

## Observation Posts (OPs)

OPs move as infantry. They are represented by a single small stand with no firepower and no close assault value. If shot at the OP counts as a single stand. If contacted by an enemy stand they are removed from play and the attacking unit continues to move unimpeded (this does not count as a close assault). OPs cannot be regrouped.

OPs use the movement roll of the parent battery. However unless the OP is touching the battery stand either the OP or the gun stand may move, not both. If the OP is touching the gun stand both may move but must remain touching at the end of the move.

# Aircraft

From the point of view of the ground commander arrival of ground attack aircraft is essentially random. The scenario will specify what is available, and the chance, each turn, of aircraft being available to each side.

Ground attack aircraft are placed adjacent to the unit they are attacking during their movement phase. This does not require a movement roll.

Ground attack aircraft have an attack factor of 6. However when aircraft are attacking a target on their own (i.e. there are no other attackers other than aircraft) they can only disrupt. All casualty causing results are converted into disruptions.

Aircraft may not attack enemy units in contact with friendly units[[8]](#footnote-8)

Units with an “Archie” (AA) factor give a left shift to attacks involving aircraft. Dedicated Archie units touching another stand give that stand an “Archie” factor

A unit that is touching an aircraft gets -1 on its activation roles.

Aircraft models are removed from the table at the end of the enemy movement phase.

# Trenches and Wire

## Trenches

Trenches are treated as entrenchments per the BBB rules. However they are extensive enough they count as difficult terrain to those touching them.

## Wire Entanglements

Any unit touching wire is halted, except tanks. A unit may cross a wire entanglement if it rolls a full advance. If it does not it may not move through the wire. Once a unit has moved through the wire (Including tanks), it becomes a standard linear obstacle.

Close assaulting through wire gives the attacker a -2 penalty.

Tanks always treat wire as a linear obstacle

1. The rules assume that a unit is distributed 500m (3”) around the stands representing it. Thus, 6” range is 500m from the lead elements of the unit. In theory, small arms can fire over 500m. However the Evaluation of Small Arms Effectiveness Criteria, Volume II Appendices: <http://www.dtic.mil/dtic/tr/fulltext/u2/b004383.pdf> indicates that actual small arms engagement ranges are pretty much all at 500m or less. None the less, riflemen were trained to fire at longer ranges though evidence suggests it had little more than a harassing effect at that range. ‘Shooting Power’: A Study of the Effectiveness of Boer and British Rifle Fire, 1899-1914 by Spencer Jones <https://bjmh.org.uk/index.php/bjmh/article/viewFile/5/5> has an interesting discussion on this. The British regarded 600yds as the maximum effective range, but did on occasion fire out to 1600yds. [↑](#footnote-ref-1)
2. This is less than BBB. The numbers in BBB may be correct relative to those using smooth bore muskets, but we are not modelling battles with modern arms vs SB muskets. Both sides have modern arms. Dupuy and others have proven that casualty percentages have dropped as time goes on, so we would expect WW1 to produce less casualties than a Napoleonic battle (on average) see <http://www.au.af.mil/au/awc/awcgate/gabrmetz/gabr0022.htm> [↑](#footnote-ref-2)
3. After much analysis it seems a water cooled MG is equivalent to 28 riflemen (see authors forthcoming essay on the rules of infantry combat) A stand has roughly 150 rifles, which if we assume a 2-up 1-back formation that’s would be 100 rifles firing. 8 MGs are equivalent to 224 rifles. So roughly, and very handily, 1 MG stand has the same firepower as 2 rifle stands. This is mostly, WW2 data. Infantry fought in dispersed formations in WW2 . Infantry tactics in most of WW1 were poor when close assaulting, leading to densely packed targets. From <http://www.dtic.mil/dtic/tr/fulltext/u2/a437022.pdf>: “At a distance of 150 meters . . . all available reserves close up closely for the assault. At a signal from the colonel the drums beat, the bugles sound the advance, and the entire battalion charges forward with cries of ‘en avant, a la baionnette’”. Taking <http://tacticalwargamer.com/articles/squad/infantrysquad.htm> as an example of a densely packed target and running a few calculations it becomes apparent that the men are so densely packed that it’s almost impossible to miss. 100 defending riflemen would get 100 kills under such circumstances in a minute (taking the 10% participation rate from Rowland). 8 Maxim MGs would get 358 kills (talking a 20% participation rate from Rowland). That’s 3.5 times as effective. These are both overestimates, as accuracy declines when the enemy gets to within 100m, to the point some defenders will be firing over the heads of the incoming soldiers. However this effect is consistent for both rifles and MGs so has no effect on the relative performance. Almost certainly, the MG overkills and hits single targets multiple times. I have no way of quantifying this but it will reduce the effectiveness of the MG. When not assaulting units were in fairly well dispersed skirmish lines (see <https://ospreypublishing.com/forum/french-infantry-tactics-1914-1918/?p=1> ) At that point our MGs or 100 infantry have to start aiming, the target is not sufficiently dense to “spray and pray” [↑](#footnote-ref-3)
4. See my essay on firepower: <http://www.testofbattle.com/upload/bob/Firepower.htm>. Artillery is roughly 3 times as effective as an average MG. However as noted above the tripod mounted water-cooled MGs of WW1 are better than the WW2 average. In the slightly revised data (to be published) artillery is twice as effective as an MMG and an MG. A stand represents 8 MGs but only 4 artillery pieces so they should have the same level of effectiveness when fired. Because IDF artillery is only called 50% of the time and the casualty figures do not take this into account, the game firepower for IF artillery will be equivalent. Direct fire is many times as effective as IDF. Dispersion figures suggest the dispersion is about half IDF figure for direct fire. As dispersion is in both width and depth the area is one quarter of the size, thus fire is theoretically four times as effective. Direct artillery fire at close ranges relies on the use of ricochet fire (which depends on the type of ground) or timed fuses (notoriously inaccurate), so I have arbitrary reduced direct fire effectiveness to reflect this. Vehicle guns are not as effective as artillery pieces as artillery has access to timed shrapnel and ricochet fire than vehicle guns will not have. [↑](#footnote-ref-4)
5. <http://www.dtic.mil/dtic/tr/fulltext/u2/a437022.pdf>: “At a distance of 150 meters . . . all available reserves close up closely for the assault” [↑](#footnote-ref-5)
6. There is some evidence to suggest that the attacker (if they get in) is at a considerable advantage in a close assault (see Roland). The modifier also encourages historical tactics, which were basically to get stuck in with the bayonet. [↑](#footnote-ref-6)
7. These are British terms: <http://nigelef.tripod.com/fc_pre1914.htm> [↑](#footnote-ref-7)
8. This is a game artifice to save complex rules for fratricide. It also means that friendly units might not be in position to exploit the disruption caused by air attack [↑](#footnote-ref-8)