Brigade Level Combat - Western Front 1916
Version 9-9-2006

This is the combat resolution system for a command post game about commanding brigades and divisions in WW1 – particularly focussed on 1916. The rules are intended to be run in real time, and by umpires – who then write messages to the HQ players in the form they would have been historically, and subject to the delays and inaccuracies that would have existed at the time.

The players never see the rules at all, and must work from a map (ideally in a smelly cellar by the light of a flickering oil lantern while umpires chuck buckets of earth at then).

A cellar!! You were lucky. We just had a wooden dugout – and it leaked – and the gas curtain had holes in it.

Players must not be allowed to use game counters, plastic overlays or any modern aids. If a telephone is available it must be unreliable.

The basic player team is probably a Brigade HQ – but with a few more players it can be expanded to a division of 2-3 brigades.

The rules are simplistic and built around a few, hopefully easy to remember, die rolls – because umpires will need to spend time writing as well as adjudicating. Verbal reports from junior officers are possible, but rarely happened – the HQ builds its picture of the battle from a collection of highly unreliable information sources.

'I know from long experience all my men have the artistic talent of a cluster of colour-blind hedgehogs in a bag.' Captain Blackadder

Unit Resolution and Scale

Resolution
Infantry Company (though some exceptions occur with strong points and support weapons) (can be broken down into 4 x 'platoons' to reflect casualties / defensive deployment)

CROSSING THE WIRE

MG Sections (1 or 2 guns)
Trench Mortar Section (1 or 2 tubes)
Artillery – Battery (of 6 guns British or 4 Guns German)
Tanks – single tank

Time Scale
The rules are expressed in 5 minute time-slices for convenience – though there is no reason why these cannot be multiplied up – especially when the circumstances are not changing for a time. Sometimes you can work on 'critical event' – adjudicating a long period in one go – say 30 minutes or more at a time, remembering to time reports appropriately.

Ground Scales
Actually any scale can be used, as the rules express distances in metres. The maps I use are 1:2,500, so the cm equivalents at that scale are also quoted.

Ground scale   1:2,500
                    1cm = 25m
                    4cm=100m
Company frontage = 200m (8cm)
Battalion frontage = c.500m (c.20cm)

Rates of advance

metres per 5 minutes	Wire intact	Wire cut / gapped or friendly wire	No wire
Unopposed (no fire at all)	1d6 minutes delay per level (see Wire Cutting rule)	250m (10cm)	250m (10cm)
Opposed (any fire at all)	2d6 minutes delay per level.	100m (4cm)	125m (5cm)
Non tactical movement through empty trenches	n.a.	n.a.	400m (16cm)
Non tactical movement through crowded/blocked trenches	n.a.	n.a.	100m (4cm)
Advance in trench system on winning melee	n.a.	n.a.	100m (4cm)
Tank (speed based on SS135 figures)	150m (6cm)	150m (6cm)	150m (6cm)

Rough or badly cut up ground x1/2
By night x1/2

Weight of Fire

The main measure of the effect of firing is expressed in terms of the weight of fire on a given area of the map. A Weight of Fire (WOF) factor is noted in, say no-man's land, or enemy trenches etc.

CROSSING THE WIRE

WOF (per 5 minutes)

TARGET:	Troops in open	Troops manning parapet / Woods / buildings	Troops in strongpoint	Troops in dugout
Unit of:				
Rifle platoon	1	0	0	0
MG section	2	1	0	0
MG barrage (needs two sections)	1	1	0	0
TM section* At this level we should have the possibility of Medium TMs being grought up to blow up bunkers – it's somewhere in SS135	1	1	0	0
Concentrated Field Arty	2	1	1	0
Heavy Arty	2	3	1	0
V. Heavy Arty	3	3	2	1
Tank	1	1	1	0
Interdicting Field Arty	1	0	0	0

Fire swept zones
Rifles – 300m (12cm) to front of firing unit (because we are dealing with lots of riflemen I wonder if this should be up to, say, 500m).
MG Direct Fire – 500m (20cm) to front over 45° arc
MGs Barrage fire in 1500m (60cm)
Tank – 300m (12cm) all round
Artillery and TM see below.

Reaction
Roll 1d6 – score Weight of Fire or less to pin unit - no forward movement.
If within 25m (1cm) of enemy trench, +1, for each box of losses –1

Casualties
Roll 1d6 WOF or less to take 1 box of casualties (or remove 1 'platoon')

On losing all four boxes the unit remains where it is inactive (representing a handful of survivors). If in NML may filter back to own lines in due course.
If in enemy trenches, will abandon the trenches for own lines

Damage to strong points and bunkers
Roll 1d6 score WOF or less to damage.
All units inside take damage too.
A strong point can take 2 hits before ruined.
A bunker takes 4 hits before collapsing (killing all inside).

Leaving bunkers

If a bunker has been under effective fire (i.e. had to roll for possible damage), then when fire lifts, troops in bunkers roll 1d6, score 1 **not** to leave. Keep rolling each 5 minutes until they do leave.

Bombing up the Saps (Melee)

On reaching the trenches there is, in effect a melee phase. This uses bombs and bayonets mainly.

Roll 1d6 per side involved highest score wins, losers lose 1 strength box and must retreat. Winner can advance and occupy ground.
Draws represent confused fighting and nothing decided.

Outnumbered   -2
Outnumbered 2-1 or more   -3
Tank present   +4
Fighting to leave bunkers -3
No bombs left   -2 (See Logs below)
Elite troops   +2
Raw troops   -3

Communications

Telephone – assumed between Bde and Div, and occasionally between Bde and Bn (but only as far as Bn HQ in main trench).

If phone line is under artillery bombardment roll WOF or less to be cut. +1 to die if deeply buried.

Runners – risky, but can carry long messages.
Moves at 100m (4cm) per 5 minutes if crossing NML, 200m (8cm) per 5 minutes in communications trenches.
If under fire in NML roll WOF or less to become a casualty.
Chance of getting lost 1/6 (delay 10 minutes to journey).

Carrier Pigeon – short written messages. Usually used on capture of objective. Limited numbers carried, and these go to specific points. Flight time 1000m in 5 minutes. Chance of getting lost/killed 1/6

Flares – pre-agreed signals should be simple and unambiguous – i.e. "5 red flares means enemy trenches captured".
Chance of not being seen 1/6

Other sources of information
Players should be told about major things like artillery fire (Bde HQ is usually close to the front).
Div and Corps players might get RFC reports, though these are of variable quality.

Artillery

Command and control
Each battery is given a fire plan, which a plot of the movement of its beaten zone by time. This can be done on a separate map.

Fire plans cannot easily be changed – it takes approx 2 hours to change the plan – though a shoot can be cancelled, but it is then cancelled in its entirely and a new one set up.

Pre-prepared contingency plans (for example in defence of own trenches) are assumed, though it will take about 10-20 minutes after receipt of the message for the fire to arrive.

Beaten Zones
Artillery can fire in *Concentration* or *Interdiction* role.

In **Concentration** role, each battery has a beaten zone of 250m (10cm) x 100m (4cm).
This is placed on the target area and WOF calculated as appropriate (see above). It represents concentrated fire aiming to do damage.

TM Sections have a beaten zone of 50m (2cm) x 50m (2cm)

In **Interdiction** role, the artillery is roving about more – typically the practice of firing into no man's land to prevent troops and supplies following up is an example of interdiction – as is firing on the approaches to the battlefield.
In interdiction role, each battery covers a larger area:

Interdicting NML: 750m (30cm) of frontage, conforming with the trench line , and a depth of 250m (10cm) into NML.

Interdicting roads/approaches – a strip 750m (30cm) long along the road / railway / route, and 50m (2cm) either side.

Artillery Reach
Field Artillery is low trajectory and therefore ineffective against targets in ravines or on steep reverse slopes.

Heavy artillery and howitzers can engage most such targets.

Wire Cutting
This is highly problematic.
Artillery is expected to cut the enemy wire, while friendly wire will have pre-prepared gaps.
The preliminary bombardment is normally a given (though it ought to be possible to game it using these rules) and so is the degree to which the enemy wire is gapped.

CROSSING THE WIRE

If you want to test for artillery gapping – use the WOF roll above for 'Troops manning defences' – but roll only once for every 20 minutes of concentrated fire.

Wire is gapped in stages:

Uncut – impassable to infantry.

Gapped – delayed as in the movement rules above

Well Gapped – slight obstacle, halve crossing time

Destroyed – no obstacle

Each successful WOF roll by artillery reduces the wire by one level.

This means a field artillery battery will take, on average about 6 hours to completely 'Destroy' the wire under a concentrated bombardment – or 2 hours to gap it.

Counter Battery Fire

Artillery tasked to CB must do so for the entire battle. This is at Corps level so outside the scope of this game. The scenario brief will rule as to the timing and effect of CB on the battle.

Logistics and Ammunition

Bombs – each infantry company carries enough bombs for an assault.

After the second and subsequent rounds of melee, roll 1d6, score 1 to run out of bombs.

Artillery ammo – subject to scenario, guns will usually have enough ammo for their fire plan. It usually takes days to run out.

Water & Rations – troops occupying captured enemy trenches will need water and rations brought up.

Failure to bring up water / rations within 12 hours will have an adverse effect on their fighting spirit.

CROSSING THE WIRE

Trench Digging

	Type	Speed	Resources needed
Tunnels	normal digging	150m per month (6cm)	platoon of sappers
	quiet digging	25m per month (1cm)	platoon of sappers
Russian Saps – shallow tunnels with thin overhead cover		200m (8cm) per month	
Bunkers / Dugouts	bunkers/dugouts sufficient for a platoon	48 hours	1 platoon of sappers and 1 platoon of infantry
Firing trenches	per 100m (4cm)	48 hours from scratch. 36 hours from Russian sap. 24 hours from communication trench.	1 company of infantry plus 1 platoon of sappers
Communication trenches – shallower that firing trenches and no firing step	per 100m (4cm)	24 hours from scratch. 8 hours from Russian sap.	1 company of infantry plus 1 platoon of sappers
Strong point		3 hours	1 section of pioneers plus on platoon of infantry

All the above times are doubled under fire.

Tanks
Breakdown rate – Prior to operations 1/3 break down en route to start line, 1/3 break down on the start line. Of those that leave the start line, roll 1d6 per 30 minutes, score 1 to break down.

Risk from Arty – treat as 'troops in strong point'.

Bogging down – on crossing cut up ground, or crossing trench line, roll 1d6, score 1 to bog down (no further movement).

Morale

Sometimes units just break and run away from the battlefield when it 'all got too much'. Attacking troops tend not to get the option as they generally die or stagger back to front trenches in small numbers.
We use the traditional wargaming '50% rule'? – thus

In defence, when a battalion has lost 50% of its strength, it must roll every 30 minutes for morale – Roll 1d6

5 or 6 = carry on regardless
3 or 4 = Remain in current position and ignore any order that increases the risk
2 or less = run away - abandon current positions and head for the rear areas.

+2 for Brilliant Leadership

+1 for Good Leadership
-1 for Weak leadership
+1 if veteran troops
-2 if raw troops
-2 if less than 25% strength.
-2 if hungry or thirsty

In attack units do not roll for morale. However, if counter-attacked they are, obviously at that moment defending – so if weakened are vulnerable to being forced to run away using the above morale rules.

Game Structure

Brigade Game Structure
German Team (1-2 players)
German Control – writes messages to players
Game Control – works out combat results / movement etc on main map.
British Control – writes message to players
British Team (2-4 players)

Total
3 Control
3 – 6 players)

Divisional Game
3 Brigades as above
Div HQ – (2-3 players)
Div Control – feeds back information from corps and other sources.

Total
10 Control
11 – 21 players