Voice of the Guns

European Land Warfare 1850 - 1916

By

Ray Lucas

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Introduction

Voice of the Guns is a wargames system for European Land Warfare for the period from 1850, when the muzzle-loading rifle became widely adopted, to 1916, when the tank made its appearance on the European battlefield. In that time the cavalry lost its pre-eminence on the battlefield, the artillery developed the art of indirect fire thanks to the introduction of the recoil mechanism, and the machine-gun evolved into a weapon to fear.

The period runs from the Crimean War, up through the wars of Italian Unification, the Austro-Prussian and Franco Prussian Wars, the Russo-Turkish War and on to the early days of the First World War. The system may also be successfully used to re-fight the American Civil War and the Russo-Japanese War of 1904

The system is intended for large-scale actions up to corps and army level. The basic manoeuvre units are the infantry battalion, the cavalry squadron and the artillery battery. With the possible exception of independent machine-gun companies, further subdivision of forces is not considered.

The system may be used for any scale of figures from 5-6 mm through 10-12 mm and 15 mm up to 25-28 mm and is not dependent upon specific numbers of figures per unit.

Morale and combat systems have been streamlined to cut down calculation as far as feasible. Where possible, outcomes are automatic. While at the same time, command and control is sophisticated and designed to present players with the sort of tactical and practical problems encountered by real-life generals.

Note that movement and range distances are given for 5/6/10mm figures. Games using 15mm figures may increase all distances by 25% (figures given in square brackets). For games using 25/28mm figures read all distances as inches.

Unit Compositions

Figures are based in "elements" on square bases. The number of figures per base is entirely the preference of the gamer. Each element represents approximately 100 infantry, 50 cavalry or two rapid-fire weapons with their crews and close-escorts.[1] The rules are intended for large-scale actions up to and including army level, and the basic units considered are the infantry battalion, the cavalry squadron and the artillery battery. An infantry battalion may be composed of, perhaps, six to ten elements, while a cavalry squadron will comprise two to four elements. Refer to the prototype units for the correct number of elements, bearing in mind that campaign strengths were often much less than the paper establishment.

Rapid-fire weapons could be fielded, depending on the prototype army organisation, in sections, batteries, companies or entire battalions.

No army may field any unit or combination of units that was not present in the prototype army.
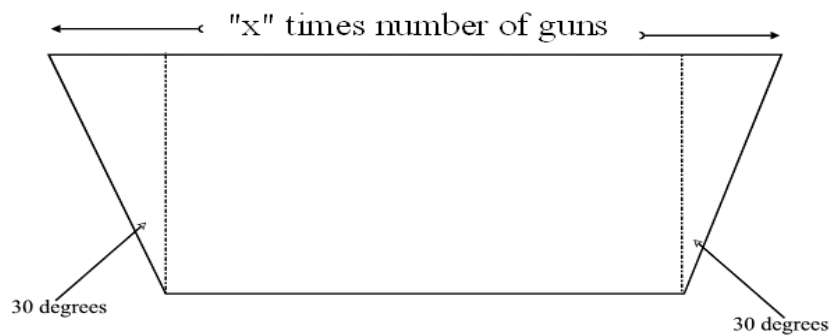
Element sizes in each scale are:

5/6/10mm figures…………………………	2cm x 2cm.
15mm figures……………………………	2.5cm x 2.5cm.
25/28mm figures………………………...	4 cm x 4 cm

Artillery is based on a frontage of "x" mm per gun in the battery. The depth of the base should be long enough to accommodate the model(s) and crew. The value of "x" is as follows:

5/6/10mm figures………………………..	2 mm.
15mm figures……………………………	5 mm.
25mm figures……………………………	10 mm.

Since the angle of traverse for any battery is 30 degrees either side of the perpendicular, the player may wish to shape his bases with the sides at 30 degrees, thus:

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[1] Early carriage-mounted rapid-fire weapons like the Mitrailleuse, Gatling gun, Gardner-gun etc may be based as artillery if preferred and prototype organisation permits.

Rapid-fire Weapons

Rapid-fire weapons are divided into two categories:

1) mechanically operated, and
2) gas-operated.

Examples of mechanically-operated rapid-fire weapons are: French mitrailleuses, Gatling-guns, Gardner-guns, Nordenfeldt-guns etc. These were cumbersome (often mounted on artillery-style carriages), unreliable and slow to reload. They could, however, in the right circumstances, lay down a significant weight of fire.

Gas-operated rapid-fire weapons are the true machine-guns, such as the Vickers, Maxim 05, Browning etc. These were, in the main, reliable and effective weapons, limited only by their weight and the quantity of ammunition required to feed them.

Both types of weapon are mounted on a base of the same dimensions as the equivalent infantry element. Such a base represents two guns, their crews and their infantry escort.

Combat Status

Each unit in a force starts off with a Combat Status. This is a sequence of figures that looks like this:

10 9 8 **7** 6 5 **4** 3 2 1

As damage points are suffered the values on the Combat Status are marked off, until none remains, at which point the unit is finished as a fighting force. The first underlined value represents the last point at which the unit will charge into the enemy. The second underlined value represents the last point at which the unit will advance against the enemy. For notes on how Combat Status is arrived at for any given unit, refer to Appendix 2.

Combat Status can be recorded either on paper or on small labels attached to the command stands of each unit (base markers). If the base markers are covered with clear sticky tape, or varnished, and a spirit pen is used for marking, they can be re-used repeatedly.

Note that no elements are actually removed during the course of the game.

Order

Infantry may adopt one of three orders – close, loose and extended. Most formed troops in the early part of the period would operate in close-order. Certain specially trained units, such as French colonial troops, chasseurs, jagers, rifles etc., could operate in loose order.

As the period progressed line troops began to operate in loose order when engaged (although it should be noted that some armies, like that of Russia, maintained the close order right up until the First World War). Loose order is also the order in which troops defend cover, buildings, woods etc.

Extended order is the order in which skirmishers operated right through the era.

Mounted cavalry may adopt the same formations: close, loose and extended. In extended order cavalry may skirmish at distance, provided they are equipped with some form of long arm (carbine, musketoon, rifle etc). Otherwise cavalry must close to contact in order to inflict casualties.

Artillery is considered to be in close order whilst limbered for movement. When deployed in battery artillery is considered to be in extended order.

<u>Depiction of Order on the Table</u>

Close order troops are fielded with all of their elements in base to base contact.

Note that columns of route and columns of assault are always in close order.

Troops in **loose order** leave a gap of half an element's width between each element.

Troops in **extended order** leave a gap of a full element's width between each element – thus effectively doubling the unit's frontage.

If, for any reason, gaps between elements lessen below the required spacing then the unit is considered to be in the next order down. For example, extended order with less than one full element's width between elements will be considered to be in loose order. Loose order troops with a gap of less than half an element between elements will be considered to be in close order. Units may, however, maintain their order by contracting their frontage by pulling elements back into a second or subsequent rank.

Players may wish to provide specialist figures for loose or extended order troops. This is perfectly acceptable provided the bases are of the correct frontage.

<u>Skirmish Screens</u>
The rule of thumb for formations wishing to throw out a skirmish screen is one extended order base per infantry battalion in the brigade. Note that skirmish screens become a de-facto unit in any brigade. They must operate as a coherent screen, although losses are allocated to their parent units.

Order of Play

1. Activate orders for all formations that require them.
2. Place ranging markers for any indirect artillery fire.
3. Carry our any forced movements, retreats etc.
4. Throw for movement and move any charging troops to the point at which a flinch test is required.
5. Make all other movement as desired. All movement is simultaneous.
6. Carry out all direct and indirect artillery combat.
7. Carry out all musketry including rapid-fire weapons action.
8. Carry out any flinch tests and make any movement required by the results of the tests.
9. Move forward any units that have passed a flinch test.
10. Rally any units that have completed their reforming.

Command & Control

As a general rule initial orders for an action always emanate from the highest command level possible. For our purposes this is always the highest command level present on the table. Further orders may be issued during the course of an action in response to circumstances. Any level of command may issue these. The circumstances prompting the order must be within the zone of command of the general officer issuing the order, and he must be in a position to see and appreciate the factors giving rise to the order. He may not, for example, issue orders to counter events taking place on the other side of a hill, or in the middle of a built-up area.

Zones of Command

These are the areas within which a general officer may influence the actions of units and formations under his command. **A general must be in a position to see and appreciate a situation in order to be able to issue orders to affect that situation.** This applies even if the situation exists within that general's zone of command. It is a strict rule that generals will not take notice of events outside of their zones of command.

Zones of command radii are as follows:
    Brigade Commanders ………………………………… 30 [40] cm.
    Divisional Commanders……………………………. 40 [50] cm.
    Corps Commanders………………………………… 60 [75] cm.
    Army Commander…………………………………….. 100 [125] cm*

Units outside of a general's command radius will subtract –1 from the activation die roll to respond to any order he issues.

* Up until the introduction of the field telephone, when the command radius becomes unlimited.

Ability of Generals

Each brigade commander in a command must be allocated a level of competence from the table below. These can be based on historical data, or diced for using a D10, reading off the result as follows:

    0 – Inspired: 9, 8 – Able: 7, 6, 5, 4 Average: 3, 2 – Inept: 1 – Incompetent:

A. Inspired
    A general of high ability with a sound grasp of tactics and strategy and an instinctive feel for timing. Command rating: 2+
B. Able
    Experienced and competent, a general who can be trusted with independent command of large numbers. Command rating: 3+
C. Average
    A good brigade or divisional general, but limited in vision and scope. Good so long as well supervised. Command rating: 4 +

D. Inept

Inexperienced or unlucky, or promoted beyond his abilities. Command rating: 5+

E. Incompetent

An elderly time-server or privileged aristocrat promoted through interest rather than ability. Command rating: 6

Tactical Factors

Divisional commander is present with the brigade………add 1 to die roll
Corps commander is present with the brigade………….. add 2 to die toll
Unit is out of command range………………………... subtract 1 from die
Brigade commander disabled in combat………………… subtract 1 from die
Divisional commander disabled in combat……………… subtract 2 from die

Method

Roll a D6 for each brigade the player wishes to move. Equal or beat the score required in order to activate the brigade. The player may allocate his dice to whichever units he desires. For example:

A player wishes to move three of his four brigades. Two brigade commanders are rated "average" and the third as "Inept". He rolls three D6 and scores 6, 4, and 3. He therefore allocates the 6 to his inept commander and the 4 to one of his average commanders, gambling that he can get the remaining brigade moving on the following bound. The three, which is inadequate to mobilise a brigade, is discarded.

Note that any activated die **must** be allocated to a nominated brigade, which **must** move at least half a move towards the enemy's baseline. This is to deter players from rolling every possible dice in order to increase the chances of a favourable result.

Note also that any brigade that is not activated may still fight and fire from its existing position if it wishes.

Disordered troops will not respond to any order until they have been rallied.

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Movement

All movement is simultaneous. Where opposing troops are in close proximity and there is doubt as to how far each will move before contact occurs, carry out movement by quarter-bound increments.

Movement Distances

Note that where units of a group are in different formations the group must move at the speed of the slowest.

Infantry in line……………………………………..	20 [30] cm
Infantry in assault column…………………………	30 [45] cm
Infantry in column of route or loose order………..	40 [50] cm
Infantry in extended order……………………….	50 [75] cm
Cavalry in line of squadrons ……………………...	50 [75] cm
Cavalry in column of squadrons/column of route...	60 [85] cm
Cavalry in extended order…………………………	60 [85] cm
Foot artillery…………………………………………..	20 [30] cm
Horse artillery……………………………………	50 [75] cm
Generals……………………………………….	60 [85] cm

Terrain Modification Distances (in cm. - deduct from full move)

	Inf	Cav	Art
Wading streams up to man thigh deep (per cm wide)	5 [8]	5 [8]	8 [12]
Crossing rough ground or marsh (per cm wide)	3 [5]	8 [12]	N/A
Crossing linear obstacles (walls, fences,etc)	8 [10]	N/A	N/A
Moving through woods or scrub (per cm wide)	5 [8]	Roads	Roads
Moving through built-up areas (per cm wide)	3 [5]	Roads	Roads

Formation Changes (deduct distances in cm. from full move)

Column of route to assault column or column of squadrons	- 10 [15]
Column of route to line or line of squadrons	- 20 [30]
Column of route to loose order or skirmish order	- 10 [15]
Assault column or column of squadrons to line	- 15 [20]
Assault column to loose order or skirmish order	- 20 [30]

Units moving wholly on a road add 50% to their move distance.

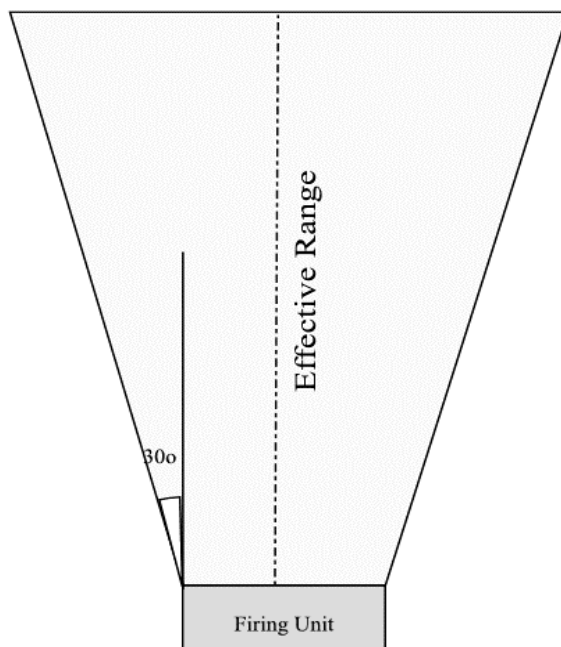NB – all evolutions require the same deductions to reverse them.

Combat

Combat includes all distance firing, artillery fire and close combat. The mechanism is the same in all cases.

Where a unit wishes to charge to close quarters it must first take a Flinch Test (see Morale). If it passes the test the opponents being charged will retire (the distance will be determined by the relevant die roll for unit formation plus 10 [13] cm) unless they are defending an obstacle or built-up area. In which case close combat will ensue. If the defenders retire and are still within the charge move of the attackers they will retire a second time.

Units Eligible

To be eligible to fire or fight an element must have at least one enemy element partly within its combat zone. The combat zone is defined as an area the length of the effective range of the weapon being used (see Appendix 1 for effective ranges), measured perpendicularly from the front edge of the firing element, and thirty degrees outward from each flank (see fig. below). Only the first rank of elements is eligible to fire or fight, except where a column of assault makes base-to-base contact with the enemy, when the first two ranks of the column may participate.

Rapid-Fire Weapons

Rapid-fire weapons are divided into two categories:
a) mechanically-operated.
b) Gas-operated.

Mechanically operated rapid-fire weapons count as **two rifle-elements** when calculating casualties: gas-operated rapid-fire weapons count as **four rifle elements**.

Cavalry

Mounted cavalry must come to base to base contact in order to inflict casualties, unless skirmishing. Otherwise the combat mechanism is the same as for infantry. Dismounted cavalry may operate as skirmishers or in line so long as they are armed with rifles, carbines, musketoons or other longarms.

Artillery

Artillery also has an effective and a short range. The method of employing artillery fire is the same as for infantry fire, except that instead of counting elements the player counts the number of guns in the battery.

Operating sequence for all artillery is as follows:

Move – unlimber – fire – limber – move.

Horse artillery may perform any three of these evolutions (in strict order) per bound. Field artillery may perform any two of these evolutions per bound. Medium artillery may only perform one evolution per bound. Heavy and super-heavy artillery takes two moves to unlimber or limber.

> **Example:** A battery of field artillery has moved on the previous bound. On the current bound the player may either, move again and unlimber or unlimber and fire full effect.

Close Quarters Fighting

When units in close order come to base to base contact the attacker must arrange his elements so that each is lined up with one of the enemy. An overlap of one element on either or both sides is permitted to the force with the greater number of elements. Where the two sides are in different orders, centre the attacking unit on one of the defender's elements and then space the attackers appropriately.

Note that where the attackers are in **column of assault** the column may fight with the two leading ranks.

Ambushes

Where one body of troops is ambushed from cover they may not reply during the initial move. This means that the ambushers get one free round of firing before the ambushed unit can fire back on the following move.

Indirect Artillery Fire

The invention of the artillery recoil mechanism, followed by the telephone land-line, enabled the development of indirect or observed artillery fire whereby guns, sited well to the rear out of small-arms range, could be directed on to targets that were not visible by line-of-sight.

In order to carry out indirect fire the battery must have an observer on the table who is able to see the target. A counter will depict the observer. The observer may not be fired upon but may be over-run by enemy forces.

The first bound of firing will be considered as ranging and the appropriate deduction will be made using the tactical factors (see below). Thereafter the guns may fire upon the target in the normal way. If the target moves more than 30 [45] cm the guns will have to re-range, provided that the observer can still see the target. If the observer is over-run all indirect fire from his unit will cease until another observer can be established. Note that any artillery unit may fire line-of-sight ("over open sights") at any time provided the unit is deployed in battery.

Blast Areas

Whilst firing indirectly the various artillery types produce blast areas of differing sizes. These are:

	Length	Width
Field & Horse Artillery …………	4[6]	4[6] x number of guns.
Medium Artillery ………………	6 [8]	4[6] " " " "
Heavy Artillery …………………	8 [10]	4[6] " " " "

The basic "blocks" may be joined together in whatever combination the gamer wishes, provided that they all touch face-to-face.

No army may use indirect artillery fire unless it did so historically in the period being fought.

Note that guns firing direct do not require blast areas since they can pick their targets.

Direct Fire Ranges

No artillery piece may fire direct at any target over 100 [120] away.

<u>Method</u>

Count up the number of eligible elements (or guns if artillery) on the firing side. Read off the current Combat Status for the unit. Add or subtract any tactical factors that are relevant and throw one D10. The total factor is adjusted by reference to the die roll as follows:

1 = minus 1;   2 = minus .8;   3 = minus .4;   4 = minus .2;   5 & 6 = 0;   7 = plus .2; 8 = plus .4;   9 = plus .8;   0 = plus 1.

Add or subtract from the total as indicated. Cross reference against the number of elements or guns participating on the table below. All figures to the right of the decimal point are ignored. The resulting integer (whole number) is deducted from the target's Combat Status.

Combat Factors																
	Number of Elements															
Factors	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
12	1.5	1.7	1.8	2.0	2.2	2.4	2.7	2.9	3.2	3.5	3.9	4.3	4.7	5.2	5.7	6.3
11	1.4	1.5	1.6	1.8	2.0	2.2	2.4	2.6	2.9	3.2	3.5	3.9	4.2	4.7	5.1	5.6
10	1.2	1.3	1.5	1.6	1.8	2.0	2.2	2.4	2.6	2.9	3.2	3.5	3.8	4.2	4.6	5.1
9	1.1	1.2	1.3	1.5	1.6	1.8	1.9	2.1	2.3	2.6	2.8	3.1	3.4	3.8	4.2	4.6
8	1.0	1.1	1.2	1.3	1.4	1.6	1.7	1.9	2.1	2.3	2.6	2.8	3.1	3.4	3.7	4.1
7	0.9	1.0	1.1	1.2	1.3	1.4	1.6	1.7	1.9	2.1	2.3	2.5	2.8	3.1	3.4	3.7
6	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.6	1.7	1.9	2.1	2.3	2.5	2.8	3.0	3.3
5	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.7	1.9	2.0	2.3	2.5	2.7	3.0
4	0.6	0.7	0.8	0.9	0.9	1.0	1.1	1.3	1.4	1.5	1.7	1.8	2.0	2.2	2.5	2.7
3	0.6	0.6	0.7	0.8	0.9	0.9	1.0	1.1	1.2	1.4	1.5	1.7	1.8	2.0	2.2	2.4
2	0.5	0.6	0.6	0.7	0.8	0.8	0.9	1.0	1.1	1.2	1.4	1.5	1.6	1.8	2.0	2.2
1	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.9	1.0	1.1	1.2	1.3	1.5	1.6	1.8	2.0
0	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.9	1.0	1.1	1.2	1.3	1.5	1.6	1.8
-1	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.6
-2	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4
-3	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.6	0.7	0.7	0.8	0.9	1.0	1.1	1.2	1.3
-4	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.8	0.9	1.0	1.1	1.2
-5	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.9	0.9	1.0

Die Roll Random 1 = **-1**; 2 =**-.8**; 3 = **-.4**; 4 = **-.2**; 5 & 6 = **0**; 7 = **+.2**; 8 = **+.4**;
9 = **+.8**; 0 = **+1**

Tactical factors:

Target is infantry prone	}		
Target is infantry in hard cover (not to artillery)	}	For any of these:	
Target is infantry in skirmish order	}	Half result	
Firers have moved more than ½ move this bound	}	(round down)	
Firers are artillery ranging indirect fire	}		
Target is deployed artillery (artillery fire only)	}		

Firers under artillery fire	- .5	}	
Firers under skirmish fire (not skirmishers)	- .5	}	
Target charging	- .5	} For each of these	
Target is infantry in loose order	- .5	}	
Loose order troops in close combat with close order Troops	- .5	}	
Target is in soft cover	- .5	}	
Target is beyond short range	- .5	}	
Target is mounted cavalry	+.5	}	
Firer is armed with breech-loaders	+.5	}	

Firers armed with magazine weapons	} Double result	
Howitzers v. entrenched troops	}	

Firers are disordered   Half result, after all other modifiers.

Apply factors in list order. Those factors noted "for any of these" apply only once.
Those noted "for each of these" apply as many as are relevant.

Results of Combat

When the Combat Status drops below the first highlighted value the unit will no longer charge at the enemy. This means that infantry will only advance to effective range and then will shake out into a firing line. Cavalry will not close to contact with formed infantry or cavalry. When the CS drops below the second highlighted value the unit will not advance against an enemy but will only hold its position or retire (die roll permitting).

Counter Battery Fire

When artillery batteries are fired upon they lose CS points as other units do. For every point lost they also lose a gun from the battery.

Results of Close Combat

Calculate the losses for each side as above. The winner is the side that inflicts at least one point more than their opponents overall. The outcome of these combats is as follows:

Infantry v. infantry defending cover/buildings.
 Defenders win; attackers held at defensive perimeter. Attackers take second flinch test.
Attackers win; attackers break into defensive perimeter. On the following move the two sides fight again, but without the defensive advantage to the defenders.

Cavalry v. cavalry
Winners may break through losers and on the following move continue on to contact fresh enemy if desired. The losers are disordered and must stand and reform on the spot for one move. If they are contacted by fresh enemy whilst reforming and beaten again they will break and retire 10mm [15] + 5 times die roll.

Cavalry or infantry v. artillery
Where cavalry or infantry contact artillery the gunners will be treated as dispersed and/or captured, unless they have retired to cover or friendly troops, abandoning their guns.

These are the only circumstances when close combat will ensue.

Example.

Unit A fires at Unit B. Unit A has 4 elements that are eligible. Its Combat Status is 7. Reading from the table the combat factor is 1.2. Unit B is charging, which deducts .5 from the factor giving a modified factor of .7. Unit A's player throws a 9 on the die which adds .8 to the score so that the final result is 1.5. The .5 is discarded and Unit A has thus inflicted 1 damage point on Unit B.

Note that no elements are removed as a result of combat.

Artillery Fire on Buildings

Where artillery fires on troops in buildings the occupying troops suffer casualties as usual. However, the buildings also suffer damage. Each building or group of buildings will be allocated a points value calculated on its base dimensions. Multiply its length by its width and divide by ten. The result is the CS of the building(s). Deduct damage points each time artillery score points (additional to those of the occupying troops). When the CS is exhausted the building is ablaze and must be evacuated.

> **Example.**
>
> Battery X is firing on a unit of infantry holding a complex measuring 10 x 15 cm. The complex's CS is therefore 10 x 15 = 150/10 i.e. 15. The battery scores 2 damage points, which are deducted from the unit's CS total *and is also deducted from the complex's CS,* leaving a current CS of 13.

Disorder

Disorder is a temporary loss of control by a unit's officers and NCOs. It normally lasts until the unit can regroup and reform.

Disorder occurs when:

- Troops have fought at **close quarters** in the previous move**.**

- Close order troops move in built-up areas, woods, broken ground or other **difficult going**. Note however that once the unit is entirely clear of the difficult going it will automatically re-form without penalty.

- Close-order or loose order troops are **wading streams** or rivers and for a quarter bound after they emerge from the water. If any part of the unit is still in the water the entire unit is deemed to be disordered. Note that once the quarter bound has elapsed the unit is reformed.

- A **charging unit** fails to make contact with the enemy or a unit undertakes a second successive move of charging.

- When a defending unit **retires** away from charging enemy.

- When cavalry **fail a flinch test** and retire.

- When cavalry are **ridden through** by opposing cavalry

Reforming

In order to regain its order and cohesion a unit must remain stationary for at least **one move**. During that move it may neither fire nor fight, and if enemy forces move to within 15cm it will automatically retire, remaining disordered.

Risk to Generals

Generals who lead attacks or expose themselves within range of enemy musketry, or who are within 10 [13] cm of an artillery target that is under fire, must dice for injury. Throw one D10. A result of 9 or 0* means the general is disabled.

*Note, 0 counts as 10.

Where a general is disabled the units under his command will, on the next bound, deduct the following from the command and control die roll:

Brigadier disabled…………………………..   -1
Divisional commander disabled………………   -2
Corps commander disabled……………………   -3

Morale

Flinch Test

Taken before an attempt to charge home on formed enemy. Unit's Combat Status **must** be on or above the first highlighted value. Use the CS as a starting point. Add or subtract as follows:

	Inf	Cav
Unit is cavalry charging for the first time	N/A	+3
Unit is in column of assault	+2	
Unit led by own general	+2	+3
Unit in loose order	+2	
Attackers outnumber defenders by at least 20%	+2	+3
Defending a barricade or BUA	+2	N/A
Received fire this bound from formed enemy infantry	-1	-2
Attacking across a stream or rough ground	-1	-2
Under artillery fire	-1	-1
Under skirmish fire	-1	-1
Each damage point suffered	-1	-1
For each move unit has retired	-1	-1
Unit is disordered	-3	-2

Throw 1 x D10. Roll equal or less than the score obtained from the above in order to continue.

Failed Flinch-Tests

Where a unit fails a flinch test it will halt at the point the test was taken. If it is infantry in column of assault it will, if possible, shake out into a firing line. If the unit is armed with breech-loading small arms it may go prone.

Cavalry, either formed or in loose order, will fall back out of range and spend one bound regrouping. This is in addition to the bound required to disengage. Until regrouped they will be considered disordered. If the movement obtained by the die roll is insufficient to take the unit out of small-arms range they will retire for a second bound.

An infantry unit may not move again, forwards or backwards, unless either:
    a) its immediate opponents retire before it, or
    b) it passes another flinch test, or
    c) friendly troops (not disordered) pass through it, interposing between it and the enemy, and the unit follows on behind.

Successful Flinch Tests

Where a unit(s) passes a flinch test it will continue up to the position or unit it is assaulting. If the enemy are holding a defensive perimeter in cover close combat will ensue. However, if the assaulting troops are already within the defensive perimeter, or

their enemy are in the open, any enemy troops holding that position will immediately retire a distance of 5 [10] cm + 4 x die roll. A defensive perimeter is assumed to be a built-up area, man-made cover or a trench system, but not woods or hedges.

Skirmishers may not hold a defensive position against charging formed or loose-order troops. They will, instead, fire and evade back as far as is necessary to disengage.

Losses to Retiring Troops

Troops that retire before contact will receive fire from the attackers exactly as they would if they had stood to receive it at the point at which they were standing. They will then retire, through friendly troops if necessary. Their attackers may then continue on against any further enemy in their path, movement permitting, whereupon the process will be repeated.

Troops Retired Through

When a unit(s) retires through supporting friendly troops the supports must also test for a break if their starting CS was equal to or less than the starting CS of the broken unit. Roll one decimal die. A roll of an odd number will signify that the supports will retire also. Supports having a starting CS greater than the starting CS of the broken unit do not need to test.

Rally Test

Troops that break when its attackers pass the flinch test must attempt to rally at the end of the move , provided they have retired out of move distance of the enemy or friendly troops interpose. Throw one decimal die. The score thrown must be less than or equal to the remaining Combat Status of the unit.

If the unit fails the rally test it will continue to retire. Any unit that retires on three successive moves will be considered dispersed and finished as a fighting force.

Appendix 1

Example Statistics for Major European Wars 1850 – 1914
S = Short Range; E = Extreme Range

<u>Crimean War (1853 – 1856)</u>

Britain/France	Minié Rifle ML	S :10 [13]cm	E: 30 [35] cm.
Sardinians/Russians	Smoothbore musket	S: 5 [7] cm	E: 10 [13] cm.
	Smoothbore artillery	S: 10 [13]cm	E: 50 [60] cm.

<u>Franco-Austrian War (1859)</u>

French	Minié Rifle ML	S: 10 [13] cm	E: 30 [35] cm.
	Rifled ML 4 pr	S: 20 [25] cm	E: 100 [125]cm.
Austrian	Lorenz Rifle ML	S: 10 [13] cm.	E: 30 [35] cm.
	Smoothbore 6 pr	S: 10 [13] cm.	E: 50 [60] cm
	Smoothbore 12 pr	S: 15 [19] cm	E: 60 [75] cm

<u>Austro-Prussian War (1866)</u>

Austrians	Lorenz ML Rifle	S: 10 [13] cm	E: 30 [35] cm
	4 pr Rifled ML	S: 30 [35] cm	E: 110 [120] cm
	8 pr Rifled ML	S: 40 [40] cm	E: 120 [135] cm
.			
Prussians	Dreyse BL Rifle	S: 10 [13] cm	E: 20 [25] cm
	BL Krupp 4 pr Rifle	S: 50 [60] cm	E: 120 cm
	12pr Smoothbore	S: 15 [19] cm	E: 60 cm
Bavarians			
	Podewils MLR	S: 10[13] cm	E: 30[35] cm
	Artillery	As for Prussians	
Saxons	Rifles as for Austrians.		
	Artillery as for Prussians.		

<u>Franco-Prussian War (1870 – 1871)</u>

French	Chassepot BL	S:15 [18] cm	E: 50 [60] cm
	Rifled ML 4 pr	S: 20 [25] cm	E: 100 [125]cm
Prussians	Dreyse BL	S:10 [13] cm	E: 20 [25] cm
	BL Krupp 4 pr Rifle	S: 50 [60] cm	E: 120 [150] cm
	BL Krupp 6 pr Rifle	S: 60 [75] cm	E: 150 [175] cm
Bavarians	Poderil BL	S: 10 [13] cm	E: 30 [40] cm.
	BL Krupp 4 pr Rifle	S: 50 [60] cm	E: 120 [150] cm

BL Krupp 6 pr Rifle   S: 60 [75] cm E: 150 [175] cm

Russo-Turkish War (1877 - 1878)

Russians	Krenck BL	S: 10 [13] cm	E: 30 [40] cm.
	Berdan BL	S: 15 [18] cm	E: 50 [60] cm.
	Bronze 4 pr BL Rifle	S: 30 [38] cm	E: 100 [125] cm
Romanians	Peabody BL	S: 15 [18] cm	E: 50 [60] cm
	BL Krupp 4 pr Rifle	S: 50 [60] cm	E: 120 [150] cm
	BL Krupp 6 pr Rifle	S: 60 [75] cm	E: 150 [175] cm
Turks	Peabody BL	S: 15 [18] cm	E: 50 [60] cm
	Winchester Repeater	S: 10 [13] cm	E: 20 [25] cm
	BL Krupp 4 pr Rifle	S: 50 [60] cm	E: 120 [150] cm
	BL Krupp 6 pr Rifle	S: 60 [75] cm	E: 150 [175] cm

First World War (1914)*

All nations	Magazine BL	S: 20 [25] cm	E: 50 [60] cm
	Machine-gun	S: 20 [25] cm	E: 60 [75] cm.
	Field Artillery	S: 50 [60] cm	E: 250 [312] cm
	Medium Artillery	S: 50 [60] cm	E: 350 [430] cm
	Heavy Artillery	S: 50 [60] cm	E: 500 [625] cm

*These distances have been calculated on the reduced scale of 1 mm = 2 metres.

These statistics are not exhaustive or complete. However, they will provide a guide for those gamers wishing to try other periods.

ML = Muzzle-Loader
BL = Breech-Loader

Appendix 2
Combat Status

Combat Status is intended to reflect a combination of the morale state and the fighting strength of the unit in question. It consists of three elements, a numerical value that erodes as losses are suffered, a Charge Limiter that prevents a unit charging when it is exceeded, and an Advance Limiter that does the same for advances. The Combat Status can be calculated using the following formula:

Number of elements in the unit, plus or minus the quality factor.

The **quality factor** is allocated to each unit on the following basis:

Elite: Troops of the highest quality. Guards, Highlanders, Rifles, Zouaves, Kaiserjagers etc.   + 4

Experienced: Veteran line, colonial troops of warlike races, Cossacks, etc. +2

Regulars: The bulk of the line infantry, jagers, fusiliers etc.   0

Conscripts: Inferior line, raw regulars, partly trained volunteers etc.   -2

Militia: Disaffected or part-time soldiers, irregulars etc.   -4

Intermediate values can be used for those troops who do not fit exactly into any of the categories.

Artillery batteries use the same system, except that the number of guns in the battery forms the basis of the calculation, and the quality factor is added to that.

Charge and Advance Limiters

The Charge Limiter, and the associated Advance Limiter are calculated as values below the highest value of the Combat Status. Thus, if a unit has a CS of 10, and the Charge Limiter is – 4, the limiter will be positioned at **6**. Likewise, if the Advance Limiter is – 8, the limiter will be positioned at **2**. Note that the Advance Limiter may not be positioned lower than **1**.

It will be observed that the lower the limiters are positioned , the better the morale of the unit in question and vice versa. The **positioning of the Limiters** uses the same categories as the Combat Status, viz:

Elite: Charge: -5   Advance: -8

Experienced: Charge: -4   Advance: -7

Regulars: Charge: -3   Advance: -6

Conscripts: Charge: -2   Advance: -5

Militia: Charge: -1   Advance: -4