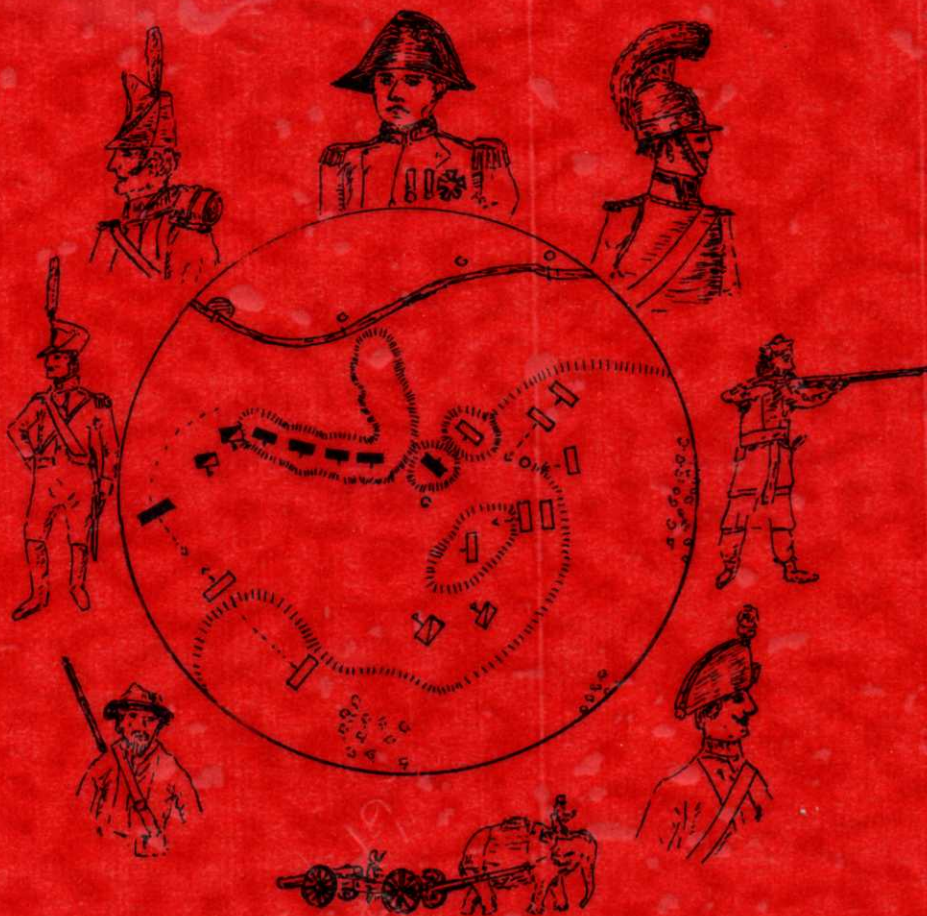


WAR GAMES RULES



1750

1850

JANUARY 1971

WAR GAMES
RESEARCH GROUP

WARGAMES RULES

1750 TO 1850

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WARGAMES RULES FOR 1750–1850

INTRODUCTION

These rules form one of a number of sets covering various periods based on the same mechanism as the very successful Ancient set produced by the Research Group, and used in three successive national conventions.

Our dates are set to include the first systematic use of light infantry and mobile artillery, and to exclude the expanding-bullet rifle. Where possible we have used sources from near the end of our period as these provide informed comment as well as facts.

The sources to which we have given most weight are:

Captain L. Nolan – *Cavalry: Its History and Tactics*. 1854

Baron de Jomini – *Summary of the Art of War*. 1836 (trans. 1879)

Colonel von Ewald – *A Treatise Upon the Duties of Light Troops*. (trans. 1803).

J.H. Payne – *Manuscript Artillery Notes*. 1835 (Birmingham Reference Library).

We have tried to minimise complication, for example by including only essential differences between types of troops. You will notice, for instance, that we do not distinguish between cuirassiers and other heavy cavalry. The explanation can be found in Nolan.

The reaction tests that form an essential part of our other rules have less application in this more disciplined period and hence appear in a much modified form. The popular quick reference sheets of our other rules have been retained.

We expect that these rules will be mainly used with Napoleonic Troops, and hope that we will now see the last of French Infantry attacking in line, instead of in columns covered by skirmishers and accompanied by horse artillery! Try it, it works!

We can also thoroughly recommend the American Revolution, the French Revolutionary Wars, and the South American Wars of Independence as alternative excuses for battle, while throughout the whole period there is ample scope in the wars on the Indian sub-continent for those so inclined.

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SCALES

Ground

This can be expressed as 1" = 10 paces (of 2½ feet or roughly 0.75m) or as 1mm = 1 foot. All distances in the text are given in paces, as this was the measure most commonly used by troops of all nationalities at the time.

To measure distances of the Wargamers Table, simply disregard the terminal 0 and measure in inches. Wargamers unfamiliar with the inch/foot system are advised to construct inch measures of their own, rather than translate the distances mentioned in the text into metric.

Figure

One 20, 25 or 30mm solid figure represents 15 men in 3 normal or 2 more tightly packed ranks. This compromise is necessary because of varying national formations and to give a satisfactory visual effect.

The frontage specified for the figure base, when related to the ground scale, is identical to the actual frontage of 15 men in that formation.

In the case of light infantry, including riflemen, who may at times be in close order or in extended order up to 12 paces apart, we have adopted as a compromise, the minimum extension specified by the drill books of the period, i.e. 2 paces.

A gun or vehicle model represents 2 actual pieces or vehicles.

Time

Each period of play contains action comparable with half a minute in real life.

As, when multiplied by the number of periods in an average game, this gives an unrealistically short time for a battle, we assume that each period also contains a variable amount of delay.

For campaign purposes then, we recommend that each period plus its associated delay should be regarded as occupying a quarter of an hour.

MOVEMENT TRAYS AND FRONTAGES

Figures should be mounted in company or squadron sized multiples on single rigid bases with the correct frontages.

These bases may be of sheet lead (ideal for plastic figures), stiff card, beer mat or other suitable materials.

Exceptions to this are brought about by the need to remove single figures when casualties occur.

One company or squadron in each battalion or regiment should therefore be split into smaller multiples for this purpose.

The same applies to sub-units which may be called upon to act semi-independently, i.e. out of base contact with main unit such as battalion light companies, and to all artillery crews.

Some native units do not have properly organised sub-units. These may be mounted in any convenient multiples.

Frontages per figure should be as follows:

Artillery pieces, including rocket launchers,	75mm
Generals and hussars, lancers, light dragoons, chasseurs and other light cavalry.	30mm
Medium and heavy cavalry, light infantry including riflemen, mounted gunners, camels and mules.	25mm
Other infantry and all gunners serving pieces.	15mm
Vehicles and elephants.	40mm

Base depths are less important, but we recommend 20mm for foot and 40mm for horsemen or artillery pieces.

Gunners may be positioned on top of the base of the piece they are serving.

We appreciate that the majority of Napoleonic players at present use frontages of ½" for infantry and ¾" for cavalry figures.

Unfortunately, many of the 25mm figures that are now tending to replace the old 20mm ranges, just will not fit on to bases of these sizes.

We have therefore made provision later in these rules to cover occasions when troops on the old standard bases may have to be used.

These special provisions deprive the troops on the smaller bases of any advantage from the greater number they can involve in a melee, and leaves them with slightly greater manoeuvrability and slight inferiority in outflanking.

This leaves the balance very slightly on the side of troops on the new bases, but insufficiently to have have real influence on the outcome of a game.

Artillery pieces must, however, use the new bases, though they need not be stuck to them.

CHOICE OF ARMY

Figures may be freely selected to make up an agreed total points value.
All troops are limited to arms and equipment actually used by their prototypes.

Points values for units and figures are as follows:

Commanding General's Figure	75
Subordinate General's Figure	50
Each cavalry regiment, infantry battalion or artillery battery with at least one sub-unit present	20
Each cavalry squadron or infantry company present	5
Each native force not divided into sub-units	75
Each siege piece model (18 pdr. or larger gun, equivalent Howitzers or Mortars)	25
Each heavy field or horse artillery piece (9 pdr. heavy 12 pdr. equivalent Howitzers)	20
Each light field or horse artillery piece (3, 4, 6 or 8 pdr., British light 12 pdr. equivalent Howitzers)	15
Each British or Indian rocket launcher * or rifle armed figure.	10
Each cavalry, horse artillery, or light infantry figure *armed with smoothbore.	5
Each infantry or field artillery figure	3
Extra for each grenadier or guard unit figure	+1
Reduction for each militia, recruit or other badly trained figure	- 1
Reduction for each figure of a unit mainly lacking fire arms	- 1
Each fighting or pack elephant	25
Each wagon and team	20
Each riding camel and mounted infantryman or pack camel and attendant	15
Each pack mule and attendant	10

Regimental officer, colour or musician figures count in all respects as ordinary rank and file.

Artillery who do not have model draught teams provided can only be moved with man handling. However, they may deduct 5 points from the points value of each piece.

Horse artillery detachments, and mounted troops who may be called upon to dismount, must be duplicated mounted and dismounted, at no extra points cost.

UNIT ORGANISATION

European Type

These should be as authentic as possible.

Organisations and establishments obviously varied with time and nationality and few units managed to maintain an establishment strength for long, in peace or war.

Players should either have the correct number of sub-units (i.e. companies, squadrons) in their units (battalions, regiments), or be prepared to justify their choice with actual examples from the history of their period.

Examples of permissible deviations are the grouping of light and grenadier companies during the American Revolution, and the use of independent companies of the 60th Rifles during the Napoleonic Wars.

Wide variations in sub-unit strengths are permissible, but all sub-units should have as nearly as possible the same strength. One sub-unit should contain officer, standard and musician figures. The optimum strength of a sub-unit under these rules is around 6, but this is not of critical importance.

Players should be prepared to research their own organisations, as generalisation is difficult. However, here are some typical Napoleonic formations for beginners.

	No. of Sub-Units		Figures per Sub-Unit	
	Close Order	Open Order	Establishment	Typical
British Line	9	1	6	3
Light and rifles	0	8	6	3
Cavalry	4	0	12	5
French Infantry	5	1	9	6
Cavalry	4	0	16	?
Prussian Infantry	10	4	12	6
Cavalry	4	0	12	6
Russian Infantry	3½	½	12	6
Cavalry	6	0	14	?

Artillery troops and batteries might have 3 or 4 pieces and 6 to 18 figures

Formations

Infantry units may be in line, (a single rank of figures)
column, (not more than 2 companies front and at least 2 figures depth)
or square, (facing out on 4 equal as possible sides)

A light infantry or rifle unit is assumed to be in open or skirmishing order when in line. ✱

Cavalry may be in line, (a single rank of figures)
column, (not more than 1 squadron front and at least 2 figures depth)
or succession of lines, (at least 10 paces between ranks of figures)

Artillery may be in line (all guns abreast) or in column.

Native Infantry of a type which does not have sub-units may not use line if close order, or square if light infantry.

Non European

Indian: Troops in the service of European Powers can be fully equivalent to European types, except for not being allowed guard status.

Troops in the service of Indian Potentates are limited to the following classes.

1. European type but badly trained close order infantry with muskets.
2. Badly trained close order infantry armed with muskets but not organised into sub-units.
3. As the last, but mainly lacking fire arms.
4. Well trained mercenary tribal light infantry armed with muskets but not organised into sub-units.
5. Badly trained light infantry armed with muskets but not organised into sub-units.
6. As the last, but mainly lacking fire arms.
7. Well trained light field guns manhandled to accompany class 1 as single models.
8. Well trained heavy field batteries with bullock draught, with rate of movement reduced to that of siege artillery.
9. Well trained siege batteries with elephant draught, moving at siege gun rate.
10. Well trained rocketeers in variable size units, manhandling their pieces.
11. Fighting elephants counting as badly trained and used singly at no extra points cost.
12. Badly trained lancers, mainly lacking fire arms, no sub-units.

North

American: Indians count as badly trained musket armed light infantry, no sub-units.

Militia count as badly trained European light infantry with muskets or rifles; may be mounted infantry.

Continental infantry count as well trained Europeans.

Cavalry is always badly trained.

Artillery can be well or badly trained.

Egyptian: Infantry can be equivalent to Indian types 1 or 6

Cavalry can be heavy or light, are badly trained, sabre armed, mainly lack fire-arms, and have no sub-units.

Artillery is badly trained and can be siege or field, but not horse.

Central and South

American: Badly trained European types, supplemented by equivalents of Indian types 5 and 12.

Maori: Equivalent of Indian type 4. Can be mounted infantry.

South and Central

Africa: Equivalent of Indian types 3, 5 and 6.

North Africa: Equivalents of Indian types 4 and 12. Type 4 can be mounted.

Rioters: Equivalents of Indian types 3 and 6.

ORDERS

Each player writes simple orders for each of his units which then control their actions until changed, or over-ridden by a forced reaction. Orders cannot be based on an event invisible from the position of the general's personality figure unless 3 complete periods have elapsed since for reports to arrive from a unit that has seen it.

Fresh orders should be written down, but will not be acted on until after one complete period if the unit can be seen by the general, two if it cannot, three if a detour is necessary to avoid enemy troops who are within 60 paces of the most direct route. Orders cannot be delivered at all unless there is some route which avoids passing within 60 paces of an enemy.

After a unit receives fresh orders, it may be required to take an obedience test. Figures need not be provided as messengers, as the general's figure represents himself and 14 aides and orderlies. If more than one general is used, a junior can only send orders to troops under his own command and the CinC must transmit all his orders to those troops through him. However, a general can personally order any unit he is with, which will obey next period.

Units with no orders and with no forced actions do nothing.

Orders should generally be in the following style, leaving units to adopt their own formations and tactics.

- 'Advance and attack enemy to your front'
- 'Demonstrate against the village on the left'
- 'Occupy and hold the round topped hill'
- 'Drive the enemy out of the wood'
- 'Support the Fusileers'
- 'Remain in reserve'
- 'Delay any enemy attack'
- 'Hold on to the last man' (But don't expect them to!)

Artillery will always operate in full batteries unless they have a specific order to the contrary. Initial order writing must be completed in 9 minutes. Subsequent changes must be written in 3 minutes *between* periods and at no other time (Use an egg timer).

SEQUENCE OF PLAY

At the start of the game:

1. Set out troops
2. Test for rain
3. Test for wind direction
4. Spend up to 9 minutes writing orders.

During each period:

1. Spend up to 3 minutes writing orders.
2. Test for rain if necessary.
3. Adjudicate any obedience tests.
4. Declare any charges to be made.
5. Declare any counter-charges.
6. Both players move troops simultaneously.
7. Adjudicate firing.
8. Adjudicate flinches.
9. Adjudicate Melee.
10. Adjudicate any further flinches.
11. Adjudicate breaks.
12. Adjudicate troop responses to losses.

At the end of the final period:

1. Adjudicate Victory.

OBEDIENCE TEST

This is taken by units receiving fresh orders by messenger, or by word of mouth from a general who is not in their normal chain of command. It does not apply to original orders, or to orders given personally by a general who has been placed over them, or personally by the Commanding General.

Procedure

Throw 2 dice.

These will be probability dice marked 2, 3, 3, 4, 4, 5 if the unit is well trained. If it is not well trained they will be normal dice marked 1, 2, 3, 4, 5, 6.

Add or subtract from the total as follows:

Add 1 for each of the following that apply:

Own unit advancing.

Any friendly unit (not sub-unit) advancing within 100 paces and in sight.

Each enemy unit or independent sub-unit retiring within 100 paces or charge reach and in sight.

Add 2 if the following applies:

Own unit is badly trained, mainly lacks firearms, and was advancing when the test was taken.

Deduct 1 for each of the following that apply:

Each enemy unit advancing within 200 paces and in sight.

Own unit retiring.

Each friendly unit retiring within 400 paces and in sight.

Ordered to leave, or advance against cover.

Own unit is badly trained, mainly lacks firearms, and was stationary or retiring when the test was taken.

Any friendly unit routing within 400 paces and in sight.

Under fire.

Infantry with enemy cavalry within 400 paces and in sight.

Resulting Total	Resulting Action
Less than 1	Retire for at least 2 periods, once halted, remain so.
1, 2, or 3	Halt and remain so.
4	Carry on with previous order
5 to 10	Obey current order.
More than 10	Advance towards nearest enemy in sight or towards sound of fire. Attack enemy within reach.

Resulting actions can be temporarily overridden by "Forced" actions (see later section).

MOVEMENT

Every period, both sides move any troops they wish, simultaneously, in accordance with their orders. Moves can be of any distance up to the maximum allowed. The basic move distances are modified by terrain factors, troops own actions and by reaction to enemy actions.

Light cavalry and light horse artillery normally move at the trot, heavier cavalry and horse artillery alternate trot and walk, and other artillery walk.

All cavalry also have a charge move which is intended to end in hand-to-hand combat with the enemy and which mainly takes place at the gallop. Artillery replace the charge move with an action move, which must either start or end with the guns deployed, unlimbered and ready to fire, and which includes provision for either limbering or unlimbering, but not both, and for a faster rate of movement. This is gallop for horse artillery, trot for field artillery, walk for siege artillery. Once unlimbered, guns can be manhandled.

Infantry slow march in line or square keeping careful dressing, quick march in column or skirmish lines, and break into a run when charging. Changes of formation are made in quick time or at the double.

	Normal Move	Charge or Action Move	Manhandled
Generals and light cavalry	140 paces	260 paces	—
Other horsemen and camel riding infantry	100 "	240 "	—
Riflemen and light infantry	80 "	80 "	—
Close order infantry in column	60 "	80 "	—
Close order infantry in line	40 "	80 "	—
All infantry in square	40 "	—	—
Pack mules or camels	60 "	—	—
Elephants	60 "	100 "	—
Wagons	40 "	—	10 paces
Light horse artillery Minimum	140 "	130 "	30 "
Heavy horse artillery Crew of	100 "	120 "	20 "
Light field or pack artillery 2 Figures Required	80 "	60 "	40 "
Heavy field artillery to Move	80 "	60 "	20 "
Siege artillery	60 "	30 "	10 "
Rocketeers unaccompanied by guns.. ..	140 "	130 "	60 "

Terrain Factors

Marsh and woods can be crossed by infantry only, counting double distance. Paths through them count as normal distance to infantry, double for pack and mounted, four times for wheels.

Low hills (under 40mm) impose no movement penalty. Other hills count double distance for infantry or pack, four times for others.

Crossing an obstacle such as a hedge, wall, ditch or stream takes ½ period for infantry, pack or light cavalry, a full period for other troops. Wider bodies of water count as a stream or as four times the distance, whichever causes the most delay.

Movement in buildings is infantry only at half skirmisher speed. Breaking down doors and entering defended buildings takes a full period. The building will accommodate 1 figure for each window or door it possesses.

3 periods of heavy rain makes any body of water wider than a stream, unfordable until the 3rd period without rain. Wagons and siege artillery will count all off-road movement as man-handled, other artillery except rockets or in the pack, twice the distance, until the end of the game.

A terrain factor applies to any sub-unit with part of its base in contact with the obstacle.

Road movement is restricted to formations 1 or 2 figures or 1 artillery piece wide.

OPTIONAL ACTIONS AFFECTING MOVE DISTANCE

Infantry firing deduct 20 paces from their move distance.

Artillery deduct 10 paces if manhandled, 80 if making an action move.

Cavalry may fire mounted during normal movement only, deducting 80 paces from their move distance.

Mounted troops with duplicated dismounted figures take a whole period to dismount and tell off horse holders who must be $\frac{1}{3}$ of their number. Horse holders may remain mounted. The remainder may then march off as infantry.

To resume mounted movement, the cavalry must rejoin its horse holders, or vice versa. Horse holders cannot gallop without losing their charges, and cannot cross any obstacle with them. A full period is needed to remount and form up.

Infantry facing about or turning to left or right, deduct 10 paces from their move distance, other troops 30 paces. There are no exceptions to this.

Except when in rout, all direction changes must be by wheeling the outer figure forwards at normal speed, or backwards at $\frac{1}{2}$ speed for infantry, $\frac{1}{4}$ speed others, while the inner figure remains stationary. Columns wheel faster than lines. If a charge move includes a wheel, it must be completed before normal move distance is exceeded. An artillery target switch must be treated as a wheel.

An infantry or cavalry unit may face about and counter march through itself.

Generals, skirmishers and artillery men without their pieces may also pass through friendly infantry units, counting double the distance and normal speed.

The only other instance in which passing through friendly infantry or cavalry units is possible is when routed troops with no alternative route open break through, causing the other unit to flinch. Artillery can be passed through by infantry or cavalry, disorganising both parties but causing no delay unless it is in column, when it must halt, and the passers count double distance.

It takes a whole period for troops other than artillery making an action move to form line from column, the front rank of the column remaining stationary and becoming the centre of the line.

The procedure is reversed in forming column from line.

Forming square from column takes $\frac{1}{2}$ period, from line, a period, the centre front company of the old formation becoming as far as possible the centre of the front face of the square. This company may pivot 45° without penalty, so as to present an apex of the square to the enemy. The procedure is reversed when abandoning square. ✱

Breaking formation to enter buildings takes $\frac{1}{2}$ period.

Forming up after leaving buildings takes a full period.

All movement reductions quoted above are doubled and all evolutions take twice as long for recruits, militia, and similar poor quality troops.

When a unit charges, that is, attempts to move into contact with an enemy unit, the charge move can be longer than a normal move because it includes an element of galloping or running.

However, all wheeling, turning and formation changes must be completed before the normal move distance is exceeded and the extra distance must be in a straight line at right angles to the units front. Except when attempting a compulsory counter charge, the target must be within reach at the start of the period.

A unit cannot initiate a charge while disorganised but can continue in a charge if it becomes disorganised part way.

Cavalry may only charge in line. A subsequent line may follow up only at normal speed.

Infantry can charge in any formation but square, but only at troops who last period flinched back beyond their position at the start of that period, or if they themselves are mainly lacking firearms, in which case they are treated for charge purposes as cavalry.

FORCED ACTIONS AFFECTING MOVE DISTANCE

Infantry in the open who sight enemy cavalry within charge reach of them and beyond $\frac{1}{2}$ period charge reach must form square, mounted infantry dismounting. They will remain in square until there are no unengaged enemy cavalry in sight within charge reach, or until a new or repeated order incompatible with remaining in square reaches them. ✱
Skirmishers in the open may instead move into cover or through or behind friends.

Cavalry sighting any enemy within charge reach must deploy into line and as far as possible face them. ✱

They must remain in line until a new or repeated order incompatible with this reaches them, in which case they have the option of obeying it, or until they are out of enemy charge reach. (Within charge reach normally means at least one of two sides can reach the other)

Infantry being charged by cavalry may only advance towards them if there is neutral cover within $\frac{1}{2}$ period move distance, and intervening.

Cavalry being charged by cavalry must attempt to deploy into line and countercharge. A countercharge cannot begin earlier than halfway through the period.

When a unit flinches (see later section) it moves directly away from the cause 30 paces for each flinch point.

If it is advancing, the 30 paces are deducted from its move, if retreating they are added.

If the cause lies on the flank of a moving unit, it will flinch away sideways as well as forward or back.

If there are causes on both flanks, there will be no flankward movement, but the unit will be disorganised.

If a unit's normal move is not enough for it to fulfill its flinch requirement, it must break and move at rout speed.

WEATHER

Throw one normal dice at the start of the game.

A score of 1 means that heavy rain has been falling for some time, and will continue for the entire game.

A score of 2 or 3 means the weather is changeable and rain may develop later.

A score of 4, 5 or 6 means the weather is set fair.

If the weather is changeable, then dice at the start of each period.

A score of 1 means rain is starting to fall

From then on, 5, or 6 means the rain stops.

Once rain has stopped, it will not start again.

Also throw for wind direction at the start of the game, the 6 permissible directions being directly to each flank, and from the centre of the table towards each corner.

When rain starts falling, the wind will move one position anticlockwise. When it ceases, the wind will move clockwise.

VISIBILITY

Vision extends the full length of the table, except where interrupted.

Troops in woods or among buildings, or infantry or artillery lining hedges or walls can only be detected if firing or by troops within 100 paces.

Troops behind hedges but not lining them are visible.

Troops more than 100 paces behind the crest of a low hill or a wood on low ground can be seen from the crest of a steep hill.

Troops cannot see over their like, except from rising ground, but horsemen including mounted regimental or staff officers can see over infantry who are within 50 paces. A single rank of infantry skirmishers or a deployed artillery unit does not block vision.

Vision by or over line infantry firing is reduced to 150 paces after the second period. Artillery, skirmisher and carbine fire produce less smoke and do not obscure the view. Smoke is cleared by the following period if firing stops.

Rain reduces all visibility to 500 paces, but reduces smoke to harmless proportions, by reducing the volume of fire.

FIRING

Each unit may fire once in each period, at its preferred moment and target (be warned that a unit that does not give reasonable attention to self-defence in its choice of targets will be driven off or destroyed).

Small arms fire is open to front rank figures facing within $22\frac{1}{2}^{\circ}$ of part of the target.

In artillery fire, each gunner or officer, but not driver, figure forming part of the battery, up to a total of 4 per gun model or 2 per rocket launcher model, is assumed to take part. Casualties among artillery personnel will therefore progressively reduce fire effect. ✱

Pieces must be pointed at the target. The necessary wheel must not exceed the permissible move distance if the piece is to fire.

The only overhead fire allowed is from or to high ground by artillery using ammunition other than cannister or rockets. There must in this case be no friendly troops within 100 paces of artillery or target and on the line of fire.

Artillery pieces operating in troop or battery, or figures belonging to the same company or squadron cannot split their fire between separate targets.

Specific orders may have been given for artillery detachments of individual gun models (i.e. 2 guns) to operate independently, in which case they count as a detached sub-unit for casualties per figure.

Mounted infantry must dismount to fire.

Only the leading rank of a column can fire without halting and facing out.

One quarter of the total troops forming a square can fire in each of the four cardinal directions.

Badly trained troops mostly lacking firearms count as if $\frac{1}{4}$ of them were armed with carbines.

This simulates occasional firearms plus more primitive missiles.

A fighting elephant and its crew fire as 3 mounted carbines if moving, 3 dismounted carbines if stationary.

Troops in buildings may fire one figure from each window or open door.

When a close order unit is screened by skirmishers, all enemy small arms fire will be concentrated on the skirmishers. If the two bodies are within 60 paces of each other and both are within range, artillery fire effect will be split between the two. If not, the artillery may concentrate its fire on either. To count as screening the skirmishers must *not* be in base contact with the main unit.

Casualties from Fire

Add the fire effect, tactical and chance factors given in the following sections. The total must be at least - 5 to fire at all. Read down the total factors column of the casualty table, then across to the column for the number of figures taking part. The number in the box gives the casualties in men. Divide by 15, remove that number of figures, and carry the remaining casualties forward.

A fighting elephant and its crew count as a single figure for casualty purposes, as are also a wagon, driver and draught team, or a mule and driver.

Artillery draught teams do not have casualties recorded, but are removed completely when unit falls below 2 gunner or officer figures per piece.

WEAPONS USED		Range in paces of Nearest Approach up to:	TARGET TYPES				
			All columns and squares. Close order and cavalry lines fired on from with 22½° of flank	Close order and cavalry lines	Broken troops skirmish lines artillerymen or any troops in soft cover	Any troops behind hard cover or trees. Generals.	
All Muskets		60	5	5	4	3	Only if target half exposed as if firing
Line infantry Muskets		120	3	2	—	—	
Light infantry Muskets			4	3	1	0	
Rifles		300	3	3	2	1	
Carbines of cavalry other than lancers		60	3	2	1	0	
Guns or Howitzers firing cannister		300	5	4	2	0	
Mixed batteries of guns and howitzers firing round shot, spherical case or shell.	Light	1,200	3	2	1	0	
	Heavy	1,300					
	Siege	1,500					1
Heavy field or horse howitzer batteries or Congreve rockets.		1,300	3	1	0	1	

Note: Skirmishers are assumed to always use what soft cover is available.
 Artillerymen have guns, waggons etc. as cover, routed troops move at very high speed!
 Although Howitzer canister has far more balls than that of guns, this is cancelled out by the effects of smaller balls and lower velocity.

Tactical Factors

Heavy mixed field, or siege, artillery firing shot and shell at artillery	+1
Disorganised (See later section)	-1
Badly trained troops firing	-1
Badly trained troops firing at an advancing enemy within 60 paces	-2
Cavalry firing mounted	-1
Small arms firing within 45° of into wind or in still air for the 3rd or subsequent consecutive period, unless rain is falling	-1
Rockets and small arms fired out of doors during rain	-2
Artillery firing from a steep hill, thus not obtaining grazes	-1
✱	-2

Chance Factor

Throw one probability dice marked 2, 3, 3, 4, 4, 5. This should be of some distinctive colour, preferably red, and counts minus.

Throw a second dice counting plus.

This should also be a probability dice if firing is at more than 60 paces, or if British regulars or guard infantry of other nationalities are firing muskets at less than 60 paces. Otherwise use a normal 1, 2, 3, 4, 5, 6 dice.

If the two dice scores have a minus total, chance factor is -1. If plus, the chance factor is +1. It applies to all the figures of a unit, regardless of their targets.

Casualty Table

The table on page 16 is used to calculate both fire casualties and those resulting from shock action.

Logistics

For campaign purposes, take one pack mule as able to carry enough ammunition to supply a 9 pdr. model or 25 infantry figures for an hours fighting.

A pack camel has an equivalent load to 2 mules, a pack elephant or wagon to 4 mules.

DISORGANISATION

A unit is disorganised in the following circumstances:

1. Troops other than light infantry or riflemen, during a period in which they have crossed an obstacle or moved through woods, marsh or buildings, or up a steep hill, or passed through artillery.
2. Troops other than riflemen or light infantry fighting in or from woods, marsh or buildings
3. Troops which have not yet rallied after a charge, melee or rout.
4. Cavalry or badly trained non-Indian troops during any period when they have been within 30 paces of the line of flight of rockets, or within 60 paces of elephants.
5. Horseholders, or mounted mounted infantry, either of which has enemy within 60 paces
6. Troops who flinched this period or last.
7. Troops who have failed to complete a forced response to an enemy charge in time.
8. Lancers in a continued melee, or who are charging cavalry beyond normal move distance.

Disorganisation continues as long as one of these causes still applies.

Flinching

A flinch is an involuntary movement away from an enemy, or slowing of movement towards them. Flinch points are accumulated as follows:

Infantry lines or columns, or gunners, in the open, being charged by cavalry	3
Each casualty per figure suffered during the period	1
Each casualty per figure from shot, shell, spherical case and rockets suffered by troops in hard cover, during the period.	1
Badly trained troops being charged	1
Charged or fired on by previously invisible enemy from within 30 paces	1
Friends of similar or better quality (i.e. regulars would not count militia, or guards count line) broken within 60 paces that period	1
Enemy behind flank and within charge reach or firing range	1
Cavalry with elephants within 60 paces.	2
Infantry or gunners with an enemy infantry column advancing on them within 60 paces	2

Guards and troops behind hard cover, or well trained artillery who have flinch points against them for fire casualties only, ignore one flinch point.

Add up flinch points for opposed units, and subtract lesser from greater. The one unit then moves backwards, still facing the enemy, or reduces its forward move, by 30 paces for each *net* flinch point, as described under "Forced actions affecting move distance".

Fire on or by a unit that flinches out of range still counts. (Either effective fire was opened at longer range than normal or they came forward into range before recoiling). Troops who flinch while in square, or behind cover do not count as in square or cover in melee, but do count it for firing purposes.

SHOCK ACTION

This covers all use of lance, sword, bayonet and point-blank fire.

Cavalry Charging Cavalry

Work out melee casualties. If one side has 2 more flinch points than the other, it breaks. Otherwise continue next round, following up any flinches. Alternatively, the side that has made the other flinch may withdraw unmolested.

Cavalry Charging Infantry or Artillery

Work out fire casualties. If defenders have 1 more flinch point against them than the cavalry at this point, they break. If the cavalry have enough extra flinch points against them to prevent them making contact, they will withdraw next period. If the cavalry make contact with unbroken defenders, work out melee casualties. If the defenders then have 1 more flinch point, they break. If not, the cavalry will withdraw.

~~Infantry Charging Flinched Troops~~

~~The defenders break immediately without firing.~~

~~Infantry who mainly lack firearms count as cavalry but with infantry melee factors.~~

~~When troops break from a contact, the other side immediately has a melee hack, even if it has already had one that period.~~

~~It counts going forward, but may be disorganised if it has an obstacle to its front.~~

~~A force which is breaking and abandoning square or cover cannot claim benefit from them.~~

~~Mounted infantry do *not* count as cavalry.~~

Melee Hacks

Figures in frontal base contact with an enemy or serving an artillery piece in base contact may take part.

Troops with narrower bases will have more figures in contact.

A charge contact will usually be along a straight line, which, however, may be angled from the line of approach.

Lines overlapping enemy flanks may be wheeled inwards during the second and subsequent periods of a melee, but this must be done by squadrons or companies rather than by individual figures.

Fighting elephants in melee count as 3 cavalry figures.

Casualties from Melee

Add melee, tactical and chance factors.

If the resultant is less than -5, the unit routs without attempting to use its weapons.

Otherwise, calculate in the same way as "Casualties from Fire".

MELEE FACTORS

Attackers	TARGETS			
	Cavalry	Infantry in Square	Any Troops behind hard or soft cover	Others, including all Broken Troops
Lancers	5	1	1	5
Other Cavalry	4	0	0	5
Other Troops	1	3	2	3

Tactical Factors

Open order infantry in square (in compensation for increased frontage)	+1
At least 3 figures overlapping or bent round enemies flank. (Note — a square has no flanks)	+1
Uphill from melee opponents, or moving towards them on level, having been uphill at the start of the period	+1
Charging or following up retiring troops.	+1
Cavalry in a formed melee who have just been reinforced by a fresh squadron, some of whom are in action.	+1
Disorganised	-2

Special Factors for Troops on Non-Standard Bases

Infantry on ½" Frontage Bases or light infantry on ¾"	-1
Heavy and medium cavalry on ¾" Frontage	-1
Light cavalry on ¾" Frontage	-2

Chance Factors

Throw one probability dice marked 2, 3, 3, 4, 4, 5, counting minus, as in "Fire Change Factor".

Throw a second dice counting plus.

This should also be a probability dice if troops are well trained infantry of any nationality, but a normal 1, 2, 3, 4, 5, 6 dice if they are cavalry, artillery or badly trained.

Add the two dice. The total is the chance factor for all the troops of one side in a melee who are of appropriate type.

CASUALTY TABLE

Total
of
Factors

NUMBER OF OWN FIGURES

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
-5	0	0	0	0	0	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3
-4	0	0	0	0	1	1	1	1	2	2	2	2	2	2	3	3	3	3	4	4
-3	0	0	1	1	1	2	2	2	3	3	3	4	4	4	5	5	5	5	6	6
-2	0	1	2	2	2	3	3	3	4	4	4	5	5	6	6	6	7	7	8	8
-1	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
0	1	1	2	3	3	4	4	5	6	6	7	7	8	9	9	10	10	11	12	12
1	1	2	2	3	4	5	6	6	7	8	9	10	10	11	12	13	14	14	15	16
2	1	3	4	5	6	8	9	10	11	13	14	16	17	18	19	21	22	23	24	26
3	2	3	5	6	8	9	11	13	14	16	18	19	21	22	24	25	27	29	30	32
4	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
5	3	5	8	10	13	15	18	20	23	25	28	30	33	35	38	40	43	45	48	50
6	3	6	9	13	16	19	22	25	28	32	35	38	41	45	48	51	54	57	60	64
7	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80
8	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
9	6	13	19	25	32	38	44	50	57	63	69	76	82	88	95	101	108	114	120	126
10	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120	128	136	144	152	160
11	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
12	13	25	38	50	63	76	88	101	114	126	139	151	164	176	189	207	214	227	240	252

If number of figures involved exceeds 20, read chart in multiples of 10+ remainder, i.e. 32 figures at factor of 3 is $3 \times 16 + 3 = 51$.

BROKEN TROOPS, ROUT, PURSUIT AND PRISONERS

In addition to the circumstances referred to under "Shock Action", troops will also break in certain other conditions.

1. Badly trained troops receiving 1 casualty per figure from rocket fire in a single period.
2. Infantry who have 2 net flinch points against them after being fired on by other infantry within 60 paces, and having lost 1 man per figure to their fire.
3. Troops who must break and move at rout speed to carry out a compulsory flinch.

Casualties to troops breaking while in contact with the enemy are described under "Shock Action".

Broken Troops flee in any direction offering safety, moving at charge speed less 20 paces, reducing by a further 20 paces each period. They continue until their move has been reduced to nil, or until they have had one period without casualties. They can then start to rally.

Enemy troops may pursue at charge speed less 30 paces, reducing by a further 30 paces each period. They continue giving melee hacks as long as the fugitives are within reach. The fugitives will not fight at all, even to escape. If pursuers are still in contact when the fugitives are forced to halt, then they will be taken prisoner after a final melee hack. Prisoners will be marched to the rear under an escort of one sub-unit or one-tenth their own strength whichever is the less. They can be rescued, but will not fight again in the same battle. ★

Pursuit is optional for foot troops, and also for artillery, who interpret pursuit as following up firing with their pieces.

All cavalry must pursue for at least one period, and British light cavalry other than the Kings German Legion for at least two.

~~Cavalry other than Kings German Legion for at least two.~~

Casualties to Generals

If the General is fighting in a melee or is exposed to fire while with a unit or on his own, he and his entourage must take a proportionate share of the casualties. He must be 60 paces clear to be a separate target.

If his figures share for the period, plus the score of a normal dice, exceeds the number of men his figure has left, he is wounded and must leave the field. If his figure has no more men left, he is dead.

In either of these cases, a message must then go to his successor to tell him to take over. This may be one of the unit commanders, to be decided then and there by dice, or another general figure.

Until time has elapsed for the successor to be informed, no orders may be given.

Rallying

Troops who have charged and been driven off, routed, pursued or who have been in melee may not charge, counter-charge or advance until they have rallied.

In order to rally, they must remain stationary for a full period without suffering 1 casualty per figure. If their present position is unsuitable, they may go elsewhere.

Troops leaving the Field

Figures leaving the table for any other reason than pursuit of the enemy will not return.

Pursuers will return at the same spot one period later.

Rallying off the table is not permitted.

Effect of Losses

Units having lost 3 men per figure in a single period, or $\frac{1}{3}$ of their original figures since the battle started, are severely shaken and will not advance again until they have been visited by a General.

Units having lost $\frac{1}{2}$ their original figures will make no further advance.

Units who have routed for 3 periods, or lost 5 men per figure in a single period, will disperse past rallying and leave the field.

Casualties per Figure

Except when a sub-unit is operating alone, the figure total to be used is that for the whole unit.

Awarding Victory

Each army scores half the points of those of its own troops who are neither dead nor prisoner, plus half the points of enemy who are dead, prisoner, dispersed beyond rallying, or who have left the field other than while pursuing, plus points for objectives controlled.

An objective is controlled if friendly troops other than skirmishers in the open, staff, or artillery, are in sole occupation, or are blocking direct enemy access during the next period.

In National Convention games, the winner needs only a simple points superiority. We suggest that friendly games should be considered a draw if neither side has a 10% superiority at the end.

NOTES ON PLAY

Under these rules an attacking player will usually do well providing he can co-ordinate movement and fire power in the attack, and have supporting units ready to keep up the momentum and exploit any break, or to contain any counter attack. Piecemeal attacks, evenly spread, will almost certainly fail unless against only light opposition. A defender should try to use the terrain to his best advantage, but always try to keep some reserve in hand, to strengthen a threatened point, or mount a counter-attack.

We obviously have no space here to go into any detail as to the best use of particular types of troops under varying circumstances. The rules themselves will suggest this, i.e. light infantry will be best employed where there is difficult terrain, as they have great mobility and are not subject to disorganisation by the-terrain.

To all who are starting Wargaming in this period we can offer some general advice:-

- (i) Read up accounts of encounters, from full scale battles down to skirmishes – our period is well documented and an inquiry at your public library will always elicit help and advice on sources.
- (ii) Do not be daunted by the apparently large number of figures that need to be purchased and painted. Try starting up with light troops, light cavalry and a horse gun detachment, and set up skirmishes and encounters by opposing light forces, these will provide valuable experience in playing the rules and enjoyment and interest while the 'Big Battalions' are being assembled and painted.

Examples of these small scale encounters can be British and French patrols meeting in the Peninsular Wars, or French light cavalry meeting scouting Cossacks, or encounters in the American War of Independence between American militia with Indians against a patrol of British regulars.

A few notes on aspects of Flinching:-

The Flinch rules embody a test of nerve and morale. Remember that adjudication of flinches first takes place *after* firing, and it is *net* flinch points that are counted.

A straightforward example is two stationery infantry lines firing at each other at short range. Each scores 1 per figure = 1 flinch point each, so no net balance and no actual flinching.

Now assume one unit collects another flinch point, say from artillery fire. The ratio is 2 to 1 so 1 net flinch point, and the opposing unit, if its orders permit, may then charge next period and its flinched opponents will break without firing. Note that if one of the opposing units is guard then in a straight fire its opponents will have to shoot much better than the guard, who always deduct 1 flinch point!

As a further example, assume an unsupported column advancing within 60 paces of an infantry unit in line. Each unit has 36 figures. The line will have two flinch points against it, but has yet to fire. Ignoring dice effect, 36 figures on 5 factor gives = 90 casualties on the column, i.e. 2 per figure. The column then has two flinch points against it, so flinch points are equal, therefore neither side flinches, and the column will not charge in against unflinched opponents. It then has two options, apart from retreat:-

- (i) carry on a fire fight with its front companies only, against the full line.
- (ii) attempt to deploy to get more muskets in action.

If (i) is adopted it will be outshot, and will eventually have to retire, or be broken.

If (ii) the line is no longer menaced by an advancing column and will still have a musketry advantage during the deployment period, causing the column to flinch – if the lines' orders so permit, it can then charge, and the column will break.

Now assume the column is supported by cavalry – the line will form square, thereby cutting down its effective fire. If then enough skirmisher, or close artillery fire can be brought against the square, it can be made to flinch, and next period either the column or the cavalry may go in and break the unit. If it is the cavalry who do this they carry out their pursuit, they are then disorganised, and must rally. It is likely that their pursuit will have placed them under fire from a further unit, so in order to rally successfully they will have to retire to a safer position, covered (it is hoped!) by further units or sub-units of cavalry who should be moved up ready to exploit the original success.

Notes on Play continued

We hope these small examples will help players to sense the basic logic of the built in reactions and responses embodied in the rules. This aspect will also be of value to those enthusiasts who have to play solo games. We suggest that they draw up plans of their proposed encounter, working out the weather and give a number of alternative sets of orders for the 'enemy'. These orders should be put away in envelopes, and left for a week or more. When the game is set up the solo player should then give orders to 'his' forces, and choose at random one of the sets of orders previously prepared for the other side, the game then being played out in accordance with these orders.

MODELS AND BOOKS

Our period, which includes The Napoleonic Wars, has a vast literature, and the Wargamer is well served by the model soldier suppliers, with a larger range of figures than for any other period. For these reasons, we cannot attempt to give hints on forming armies, painting and converting, as we have done with the rules for Ancient Warfare. What we will do, is set out the sources of figures, and the magazines which cater for the Wargamer and Military Modeller.

"20"mm Figures

This is an elastic term, and covers Wargame Figures to a scale of 4mm to 4.5mm to the foot, giving an infantry figure height of around 25mm. "True" 20mm figures will look out of place amongst these. In the following lists all other than true 20mm figures will be referred to as "25mm".

The two suppliers in this country with the largest range of figures in our period are:-

Miniature Figurines Ltd. 5, Northam Road, Southampton Hants. SO2 ONZ.	—	Basically 25mm Figures Catalogue 3/6
Hinton Hunt Figures Dept. M.M. 'Rowsley' River Road, Taplow, Maidenhead, Berks SL6 OBE	—	Basically 25mm Figures Catalogue 2/6

Hinton Hunt Figures can also supply painting instructions and have bulk purchase schemes giving reduced prices for orders of 100 upwards.

Miniature Figurines give basic painting information within the catalogue and also undertake to despatch orders by return of post.

In the United States, one firm has for many years provided an ever increasing range of Wargames Figures, in true 20mm, 25mm & 30mm scales:-

Jack Scruby's Military Miniatures,
2044, South Linwood Avenue,
Visalia, California 93277, U.S.A.

All the above are metal castings, with prices for foot soldiers from 6p. to 9p. with cavalry about 2½ times that.

The boxed sets of Plastic Figures in 20/25mm sizes produced by Airfix, are of course much cheaper, costing from 1p to 2p per figure, but the Wargamer will have to be prepared to use time and skill in converting models from other periods to his chosen type, as at present there are two sets only of Napoleonic Troops, plus French Artillery, although sets of American War of Independence period Troops and British Grenadiers of the same period will be available later. Fortunately, conversion of plastic figures is covered regularly in the Wargaming and Modelling Magazines, and this can be a most satisfying and inexpensive pursuit. These plastic figures can be mixed with metal types and it is told that there is a Wargamer who makes all his light troops from plastic figures, while the line infantry and heavy cavalry are metal!

"30"mm Figures

Two firms produce figures to this scale, which gives a foot figure nearer to 33/34mm on average:-

Edward Suren — "Willie" Figures 60, Lower Sloan Street, London, S.W.1.	—	Catalogue 4/-
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AMENDMENTS TO WAR GAMES RULES 1750–1850.

- Page 3. Add after “rocket launcher” “, or rifle-armed figure.”
Add after “light infantry figure” “armed with smoothbore.”
- Page 4. FORMATIONS. Add after “skirmishing order when in line” “, except that if desired, some companies of a light infantry battalion can be mounted on line bases, shooting and moving as lights, but meleeing and shot at as line.”
- Page 5. Alter “Egyption” to “Egyptian”.
- Page 9. Paragraph 5. Add at end “Bodies of more than 60 figures take 2 periods to change between line and either a single column or square, or the reverse.”
- Page 10. Paragraph 1. Add after “reaches them”. “This does not apply before 1785.
Paragraph 2. After “face them” add “Priority must be given to enemy cavalry.”
At end of forced action section, add “Moving troops flinch during the same period, stationary troops flinch next period.”
- Page 11. Paragraph 3. After “reduce fire effect” add “Count the piece as an extra figure.”
- Page 12. Add new tactical factor.
“Firing at over 60 paces on cavalry who moved at least 50 paces or into melee contact”.
- Page 14. Replace “INFANTRY CHARGING FLINCHED TROOPS” section by 2 new sections.
INFANTRY CHARGING.
Infantry can only charge in the following circumstances.
(a) Before 1785.
(b) When the heads of two columns meet without giving way.
(c) Among buildings or in woods.
(d) When opposed only by artillery.
(e) When opponents have flinched, even if the flinch takes them out of charge range.
(f) If the troops mainly lack firearms.
Except in the case of (e) when the opponents automatically break without firing or fighting, the side with most casualties during the period from all causes, including melee, will break.
Mounted infantry do NOT count as cavalry.
TROOPS BREAKING FROM CONTACT.
Insert ahead of present 3rd paragraph of section.
- Page 16. Add after “same battle” “They cannot be slaughtered.”
Delete last line of page.

WARGAMES RULES 1750-1850

QUICK REFERENCE SHEET – CHECK WITH MAIN RULES WHEN IN DOUBT

TROOP TYPES	Front mm.	Move – Paces			POINTS VALUES	
		Normal	Action	Manhand		
Generals & Light Cav.	30	140	260	–	Command General – 75. Sub. Gen. – 50	
Other Horsemen and Camels	25	100	240	–	Siege gun – 25, Heavy gun – 20 Light gun – 15	
Riflemen & Light Infantry	25	80	80	–	Rocket launcher – 10, Lt/Inf. (Rifle)	
Close order Inf. – column	15	60	80	–	Cavalry, Horse Arty. or Light Inf. Figure	5
Close order Inf. – line	15	40	80	–	Infantry or Field Arty. figure	3
All Infantry in square	–	40	–	–	Elephant	25
Pack Camels or Mules	25	60	–	–	Wagon & Team	20
Elephants	40	60	100	–	Riding Camel and mounted Inf. or Pack Camel	15
Wagons	40	40	–	–	Pack Mule	10
Light Horse Artillery) Min.	75	140	130	30	Each Regt. Battalion, or Battery	20
Heavy Horse Artillery) Crew	75	100	120	20	Each Squadron or Coy.	5
Light Field or Pack Art.) 2	75	80	60	40	Native Force	75
Heavy Field Artillery) Figs.	75	80	60	20	Extra for Grenadier or Guard figure	+1
Siege Artillery)	75	60	30	10	Reduction for badly trained figure	-1
Rocketeers unaccompanied by guns	30	140	130	60	Reduction few firearms	-1
					No extra points for duplicated figs. dismounted etc.	
OBEDIENCE TEST – TAKEN WHEN FRESH ORDERS RECEIVED BY MESSENGER, OR STRANGE GENERAL						
+1		-1			Throw 2 dice 233445 well trained	
Own unit advancing	Each enemy advancing. (200 paces)			123456 not well trained – add or		
Friend unit advancing (100 paces)	Own unit retiring			Subtract factors on left – obey chart: –		
Each enemy retiring	Each friend unit retiring			Final Score	Resulting Action	
+2		Orders to leave/advance against cover			Under 1	Retire 2 periods, then halt
Own unit badly trained, lacks	Badly trained, no firearms, halted/retiring			1, 2, 3	Halt	
Firearms & advancing	Friends routing (400 paces)			4	Carry on with previous order	
	Under fire			5 – 10	Obey current order	
	Infantry can see enemy Cav. (400 paces)			Over 10	Advance and attack	
EFFECT OF TERRAIN ON MOVEMENT				EFFECT OF MANOEUVRE ON MOVEMENT		
Marsh & Woods	Infantry only, distance x 2			Firing	Inf. – 20, others – 80	
Low Hills	No effect if under 40mm			Manhandled	– 10	
Steep Hills	Inf. x 2, others x 4			Form square	From Col. ½p. from line 1p.	
Hedge, ditch, wall, stream	½ period Inf. or Lt. Cav. full period others			Face around	Inf. 10p. others 30p.	
River	Distance x 4			Line from Col.	Period (and Col. from line)	
Buildings	Inf. only half skirmisher rate			Wheel forward	Inside halt, outside normal	
Entering buildings	Full period			Wheel Back	Outside ½ speed Inf. ¼ others	
Heavy rain – 3 periods	Rivers unfordable, siege Arty. ¼			Pass friends	Generals, skirmishers ½ speed	
	Other Arty. except rockets ½ off roads			Badly trained	Double all penalties	
FLINCH POINTS				CAUSES OF DISORGANISATION		
Inf. lines/columns, or gunners in open, charged by Cav.				3	Troops (not Lt. Inf.) crossing bad terrain	
Inf. or gunners with Inf. column advancing within 60 paces				2	Same troops fighting in bad terrain	
Each casualty per figure during period				1	Troops requiring to rally	
Each cas. per fig. from non cannister Arty. on troops in cover.				1	Cav. or badly trained non-Indians exposed to	
Badly trained troops being charged				1	Rocket fire or within 60 paces or EL.	
Surprise charge or fire from within 30 paces				1	Horseholders, mounted Inf. with enemy	
Friends of equal or better type breaking within 60 paces				1	within 60 paces	
Enemy behind flank able to charge or fire				1	Troops who flinched this period or last	
Cavalry with elephants within 60 paces				2	Troops too slow responding to charge	
Guards, and troops behind hard cover, ignore 1 flinch point					Lancers in melee or charging too fast	
Well trained Artillery ignore 1 fire flinch point.					Disorg. ceases when all causes removed	
Cav. break Cav. if 2 net FP after melee					Troops who have charged & been driven	
Foot break if 2 net FP after 1 per fig. to Inf. Fire – 60p.					off, routed, pursued, or been in melee	
Cav. break other troops who have 1 net FP after					Need to rally before further advance	
Charge, or after melee					Must be stationary 1 period without	
Flinched foot, charged by foot, don't fire – break (see exceptions)					losing 1 per figure	
Badly trained break after 1 per fig. from rockets						
EFFECT OF LOSSES						
Unit losing 3 per fig. or 1/3 of original, halts and						
Needs general before further advance						
When ½ strength – no further advance						
3 periods routed, or lost 5 per fig. – break and leave field.						

FIRE POWER FACTORS																				
WEAPONS	RANGES & TARGETS		Range in paces of nearest approach up to	All columns squares, & close order C Cav. lines fired on 2 1/2° of flank	Close Order and Cavalry Lines	Broken troops Skirmish Lines Artillery Men or any troops in soft cover.	Any troops behind hard cover or trees - Generals													
All Muskets			60	5	5	4	3	Only if target half exposed as in firing												
Line Infantry Muskets			120	3	2	-	-													
Light Infantry Muskets				4	3	1	0													
Rifles			300	3	3	2	1													
Carbines of Cav. other than Lancers			60	3	2	1	0													
Guns or Howitzers Firing Cannister			300	5	4	2	0													
Mixed Batteries of Guns or Howitzers Firing round shot,	Light	1,200	3	2	1	0	0													
Spherical case or shell	Heavy	1,300																		
	Siege	1,500																		
Heavy field or horse Howitzer Batteries or Congreve Rockets			1,300	3	1	0	1													
FIRE TACTICAL FACTORS										FIRE CHANCE FACTORS										
Heavy mixed field, or Siege Artillery, Firing at Artillery										+1										
Disorganised										-1										
Badly Trained Troops Firing										-1										
Cavalry Firing Mounted										-1										
Small Arms firing into 45° into wind, or 3 consec periods still air										-1										
Artillery firing from steep hill										-1										
Badly trained firing at advancing enemy within 60 paces										-2										
Rockets & small arms out of doors in rain Cav. moving 60 paces										-2										
MELEE FACTOR'S										MELEE TACTICAL FACTORS										
Attacker	Target	Cavalry	Squares	In cover	Others	Uphill	+1	Charging/Following Up		+1										
Lancers		5	1	1	5	Disorg.	-2	O/Order Inf. in square.		+1										
Other Cavalry		4	0	0	5	Cavalry in melee just reinforced				+1										
Other troops		1	3	2	3	Enemy outflanked by 3 figures				+1										
MELEE CHANCE FACTORS	Plus dice is 233445 for well trained infantry, 123456 for all others. Minus dice is 233445, add or subtract full difference. Score applies to all units of right type in Melee.																			
NUMBERS OF OWN FIGURES																				
TOTAL OF FACTORS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
-5	0	0	0	0	0	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3
-4	0	0	0	0	1	1	1	1	2	2	2	2	2	2	3	3	3	3	4	4
-3	0	0	1	1	1	2	2	2	3	3	3	4	4	4	5	5	5	5	6	6
-2	0	1	2	2	2	3	3	3	4	4	4	5	5	6	6	6	7	7	8	8
-1	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
0	1	1	2	3	3	4	4	5	6	6	7	7	8	9	9	10	10	11	12	12
1	1	2	2	3	4	5	6	6	7	8	9	10	10	11	12	13	14	14	15	16
2	1	3	4	5	6	8	9	10	11	13	14	16	17	18	19	21	22	23	24	26
3	2	3	5	6	8	9	11	13	14	16	18	19	21	22	24	25	27	29	30	32
4	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
5	3	5	8	10	13	15	18	20	23	25	28	30	33	35	38	40	43	45	48	50
6	3	6	9	13	16	19	22	25	28	32	35	38	41	45	48	51	54	57	60	64
7	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80
8	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
9	6	13	19	25	32	38	44	50	57	63	69	76	82	88	95	101	108	114	120	126
10	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120	128	136	144	152	160
11	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
12	13	25	38	50	63	76	88	101	114	126	139	151	164	176	189	202	214	227	240	252

