

Chapter I — Setting Up

1. **SCALES:** The following set of scales has been used throughout:

Ground Scale - 1 millimeter on the table equals 1 meter on the ground.

Interval Scale - A 'gradual or gentle' contour equals two meters of elevation change. A 'steep' contour equals five meters of elevation change.

Time Scale - Each turn is taken to represent 15 minutes of elapsed time.

Constructions - Built up areas are represented on the tabletop by outlined subsections 100 mm square. Decorated with models, these represent areas of buildings, close walls, gardens, alleys, and so forth. A town consists of a number of such subsections, or town blocks. Walls outside of towns, trenches, bridges and other such constructions are represented by models. Troops entering or operating within these areas must abide by certain restrictions as detailed in the chapter on terrain.

Vegetation - Areas of predominantly one type of vegetation are represented on the table with an outline and appropriate models. Individual trees are not represented. Hedgelines and other linear features are represented by models.

2. **BASIC UNIT ORGANIZATION:** There is no fixed figure scale. All figures and models are mounted on bases of specific frontages and depths to represent the following basic units:

Infantry - A battalion is the basic playing unit. It consists of four stands each mounting three or four figures. Each stand is referred to in the rules as a 'company'.

Cavalry - A regiment is the basic playing unit. It consists of eight stands each mounting two figures. Each pair of stands is referred to in the rules as a 'squadron'.

Artillery - A battery is the basic playing unit. It has two separate organizations. When deployed for firing it is a single stand whose width depends on how many guns made up the historical battery. When deployed for moving it consists of two stands each complete with a gun, limber, and horses. The size of these stands depends on the type of battery.

3. STAND SIZES:

Width and depth for 15 mm figures (in mm)

Infantry	35 x 15
Cavalry	25 x 25
Artillery firing	
3 - 4 guns	60 x 35
6 - 8 guns	80 x 35
10 - 12 guns	100 x 35
Artillery moving	
light guns	25 x 75
all others	25 x 100

Each deployed artillery stand should have two gun models. Many players use a split stand for this to allow them to use their battery models for other sets of rules as well. To deploy a battery one simply replaces the limbered stand with the deployed stand and *vice versa* when preparing to move.

4. HIGHER ECHELON ORGANIZATIONS: Basic units must be organized into regiments, brigades, and divisions. The command and control rules (Chapter XII) will influence the players' ability to handle these units. Sample orders of battle for the various armies are given in Appendix I although any historical order of battle could also be used: these are guides only.

5. POINT SYSTEM: This set of rules was primarily designed for the recreation of battle situations, real or imaginary, using historical orders of battle from the period. The following point system will, however, allow players to choose forces for individual games as desired. The point system is directly related to the morale system so that while experienced units are more costly they are also more capable of withstanding adverse morale situations.

<u>Morale Grade</u>	<u>Infantry Bn Cost</u>	<u>Cavalry Regt Cost</u>
1	0.5	1.0
2	0.75	1.5
3	1.0	2.0
4	1.5	3.0
5	2.0	4.0

Each artillery battery is purchased at the same cost as an infantry unit of the same morale grade but with an additional cost for the type of battery as follows:

<u>Battery Type</u>	<u>Additional Point Cost</u>
Light or Horse	2
Medium	4
Heavy	6
Seige	12

6. **COMBAT STRENGTH:** Each basic unit as defined in the organization section above starts each game with a numerical value called its **Combat Strength**. This reflects the unit's ability to accept losses before the officers and non-coms lose adequate control over that unit and it ceases to be effective, at which time it must be removed from the combat area (i.e. it must leave the table for the day).

Start Strength - All basic units start with a base number which is increased by the roll of one decimal die (zero counts as ten) to give their start-of-battle strength.

<u>Unit's Morale Grade</u>	<u>Base Number for C.S.</u>
1	12
2	14
3	16
4	18
5	20

Infantry battalions and cavalry regiments take this total as it is. Artillery batteries take this number and halve it, rounding down. Sections and detachments not at full basic unit strength will figure as if they were a full basic unit and then take their percentage of that total (1/4, 1/2, or 3/4) for their start C.S.

Purpose - Combat Strength allows exact unit strengths to remain a secret from the enemy. He will never be absolutely sure as the game progresses which units are new to the battle and therefore strong or which have been roughly handled before and will break if attacked with vigour. In addition, combat strength can be increased or decreased to account for forced marches before a battle, inclement weather, having fought on a previous day, and so on. The possibilities are intriguing, and a few are mentioned in the Battles and Campaigns chapter.

Loss of all Combat Strength - Whenever during the course of play a unit is driven to zero remaining combat strength it becomes **routed** as described under the Morale rules. It must be removed from the battle for the rest of the day and must rally overnight in a secure area before it can fight again the next day.

Chapter II — Order of Operations

The Turn: Each game turn is divided for ease of play into eight phases as detailed below.

1. **Deployment phase** - Units may elect to change their formation and/or facing. Each of these actions counts as one **option** (see the Movement section for a full explanation).

2. **Movement phase** - this phase is divided into two sections for ease of play.

Charge section - All units which are going to try to charge into contact with the enemy this turn now announce this fact. Cavalry must declare at this time whether they are trotting or galloping. Countercharges are next announced in the same manner. Movement of units so involved is then worked out before regular movement takes place. This is so even if the target is retreating away and will not be contacted or if the attacker decides to stop his charge after completing at least one half of his charge move. Units that have declared a charge (but not a countercharge) must move at least one half of their charge move before they can elect to stop the charge.

Movement section - All units not charging or countercharging now complete their normal moves. Units may elect to move all, some, or none of their allowed distance. They may react to enemy moves during their own movement within the restrictions of their formations and facings, bearing in mind that all movement is supposed to be as simultaneous as possible.

Units which have not declared their intention to charge may not make contact. Those in skirmish formation will withdraw to avoid contact with formed troops.

Firing phase - Units eligible to do so now fire in the order of artillery fire, volley fire, skirmish fire, and finally any conflagrations started by this fire, and any sapper charges taking place. This order of fire is for convenience only. All fire targets should be nominated before fire begins (i.e. a unit may not choose a target depending on the results of other units' fire) and all fire effect is simultaneous. Units screened from firing at this time may still be able and allowed to fire at enemy units that take a breakthrough during the **Victory bonus** portion of the **Combat phase**.

Units which are the target of a charge must take their precombat morale check **before** issuing fire. This includes units which execute a movement which takes them out of reach of the charge. The charging unit takes its precombat morale check at the usual time, even if its target has routed.

3. **Precombat morale checking phase** - At this point all morale checks caused by firing and any checks required to be made prior to entering into combat must take place. Results are acted upon at once. A unit that must check for more than one cause takes only one check but counts all the situations and behaves as the worst possible results indicate.
4. Once all units required to take morale checks by reason of fire or potential melee have made those checks, all neighboring units affected by routs will take their morale checks. These checks may in turn generate more checks if units rout. A unit which passes its initial pre-melee morale check may be required to take a second check if a neighboring unit routs, but no unit will take more than one check for neighboring units routing.
5. **Combat phase** - All units that moved into contact during the charge section of the movement phase will now fight those combats to a conclusion. Victors may be eligible for a **victory bonus** move and if so they will indicate their new targets, receive any firing from units eligible to fire, checking morale as required as they move into combat. If the target stands its morale check as well these second combats are fought to a conclusion. In either case there is no further movement or victory bonus after the second combat has been resolved.
6. **Post-combat morale checking phase** - All morale checks caused by retreats and routs from the combat phase are now acted upon and any neighboring units affected will also be forced to make morale checks as detailed in the **Morale** section.
7. **Non-combat movement phase** - Units still eligible for a non-combatant move and all units on or off table that will become visible in the next turn are now moved or placed onto the table in their new locations.
8. **Rally phase** - Units eligible to rally may attempt to do so.

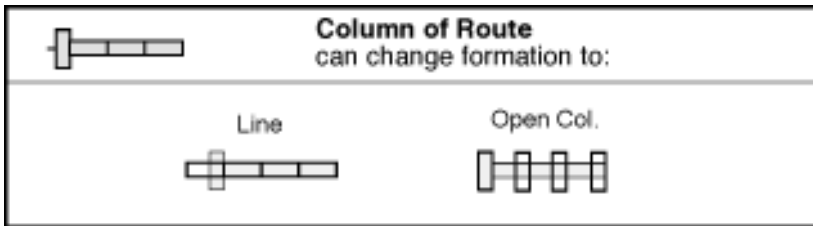
This sequence completes one game turn. Care should be taken to keep accurate track of the battlefield time and insure that the weather conditions do not change prior to commencing the next move. It is also recommended that players inform each other of any off table situations or sightings before the next move commences.

Chapter III — Deployments and Formations

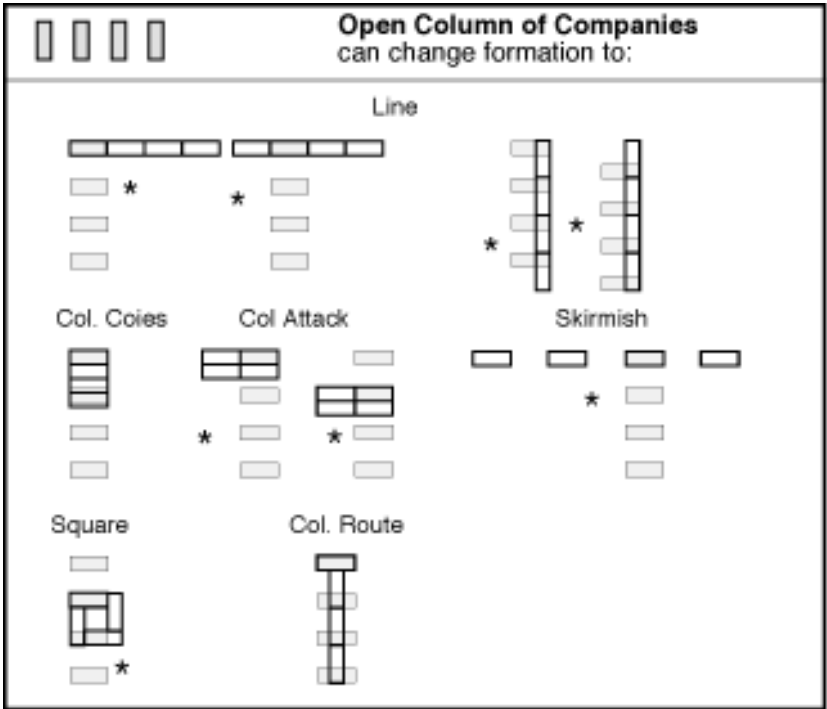
1. All basic units must be in one of the formation listed below at all times.

2. INFANTRY FORMATIONS:

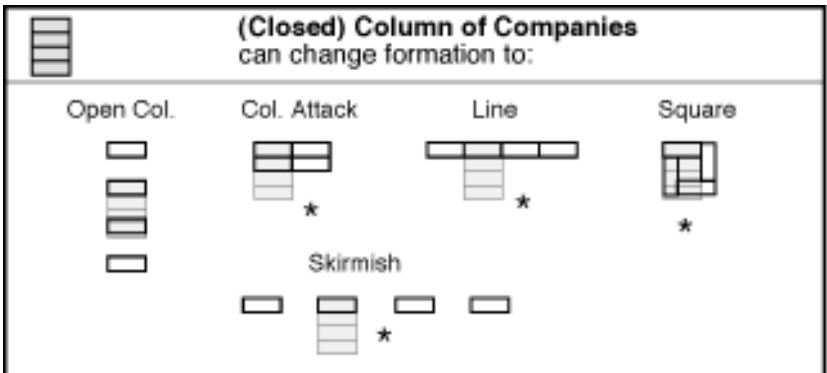
Column of route - One stand is faced in the direction of travel. The other three stands placed behind and at to 90° to the first stand, one behind the other along their long axis with every other company facing the opposite direction and with a slight gap between each stand. This is the standard marching formation and it can maneuver freely over most terrain, changing direction at will as long as the following stands comply with the movement of the leading stand. It is a long and narrow formation with extremely vulnerable flanks and little or no front or rear. In this formation infantry can cross defiles, bridges, and other restrictive terrain features without having to roll for terrain delay. It can deploy only into line to the flank or into open column of companies. It cannot fire or be used to initiate an attack. The *melée* multiplier for this formation is only one quarter.



Open column of companies - the four stands are placed one behind another facing the same direction and far enough apart that the distance from the front of one stand to the front of the next is equal to the width of a stand. This is the standard column of maneuver and waiting and is most flexible in the formations into which it can deploy. It is open enough to allow fairly easy maneuver, but is not a fighting formation, and is very vulnerable to its flanks. The leading company may fire forward (at 1/4 of the regular volley fire rate), although it can claim no firing bonuses. If brought to *melée*, the formation multiplier is 1.

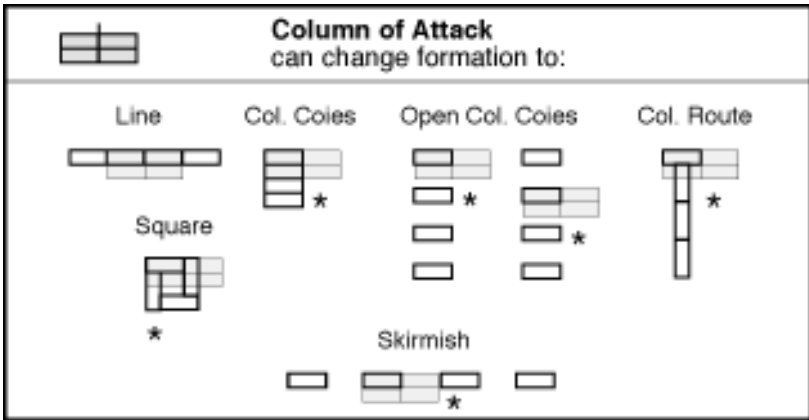


which are at least half as wide as its frontage. The leading company may fire forward (at 1/4 of the regular volley fire rate), although it can claim no firing bonuses. When attacking, the *melée* multiplier is three. If attacked when standing (as when an enemy takes a victory bonus move and attacks it) or whenever involved in a *melée* that has enemy cavalry against it the multiplier drops to one.

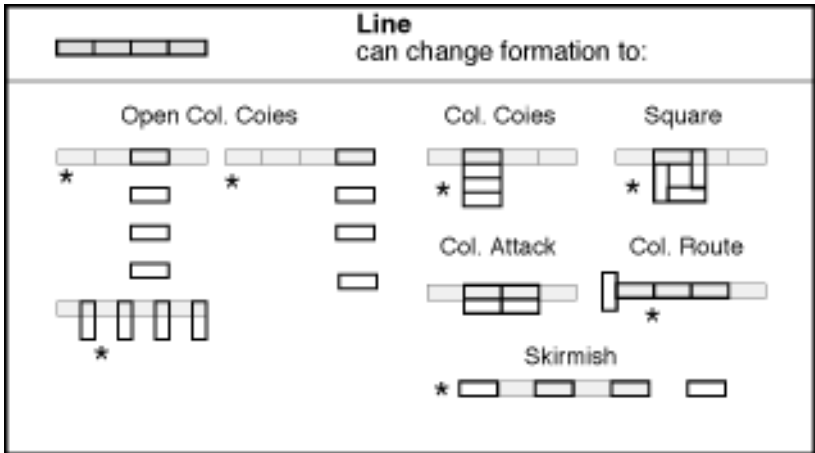


Column of attack - The four stands are placed with two stands across and two stands deep, all facing the same way, which represents the French attack column by divisions doubled on the center or the column of divisions used by other nations.

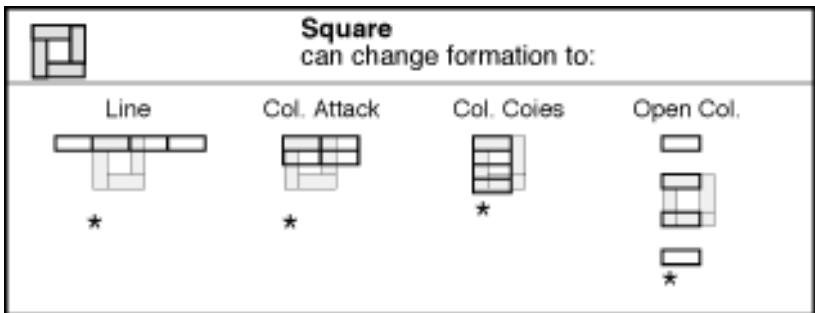
This formation moves with some difficulty across most terrain and is vulnerable on its flanks which are at least half as wide as its frontage. The leading companies may fire forward (at 1/2 of the regular volley fire rate), although it can claim no firing bonuses. When attacking, the *melée* multiplier is three. If attacked when standing (as when an enemy takes a victory bonus move and attacks it) or whenever involved in a *melée* that has enemy cavalry against it the multiplier drops to one.



Line - The four stands are placed side by side along their long axis, all facing in the same direction. This is the standard volley line formation of the period. It moves with considerable difficulty across all but flat gentle terrain. All four companies may fire forward and this formation receives several bonuses to its firing (see *Firing*) depending upon the nature and position of the targets. In towns, along the edges of woods, and along the slopes of hillsides the volley line is allowed to conform to the terrain by bending the stands around to fit the contours, but each stand must still be in contact with the next. The *melée* multiplier for line is always two.



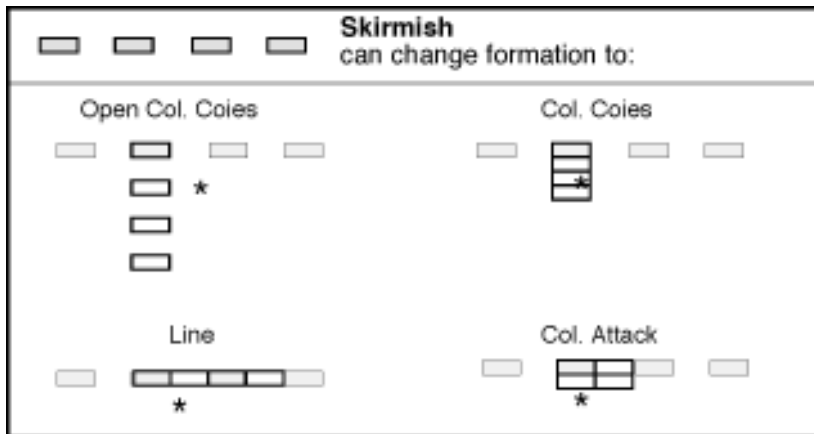
Square - The four stands are placed so as to form a box with all stands facing outwards. It moves only slowly and is awkward in all but flat terrain, although it can be formed in any terrain save towns. It may move in any of the four directions in which it has a stand facing. It may not be used to initiate an attack and it can claim no bonuses to its firing. Squares are also very vulnerable to fire losses (see Firing). When attacked by cavalry the square has a *melee* multiplier of four unless the cavalry is lance armed in which the multiplier is only three. When *melee*d by infantry and cavalry at the same time the multiplier is two. When *melee*d by infantry alone the multiplier is only one.



Skirmisher - The stands are placed in a dispersed line with at least 40mm between each pair of stands. It is assumed that there are members of the unit filling up these gaps. This formation is very flexible in movement and can maneuver freely over all types of terrain. All four stands may fire skirmisher fire once each turn (see Firing). The skirmishers may be no closer to a formed enemy than they are from their own formed supports, except that they may always be at least one skirmish move from formed supports.

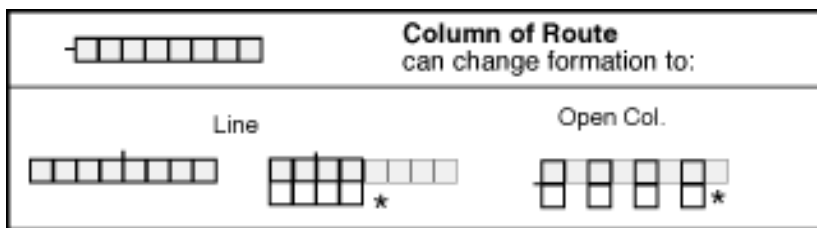
This formation can only initiate an attack upon other units that are in skirmisher formation. It cannot attack other formed units. The melée multiplier is one half.

A player may elect to leave one half the unit formed up in a normal formation and disperse only half the battalion in skirmisher order. In this case the skirmishers can move up to one full skirmisher move away from the formed portion of the unit which functions as a support.

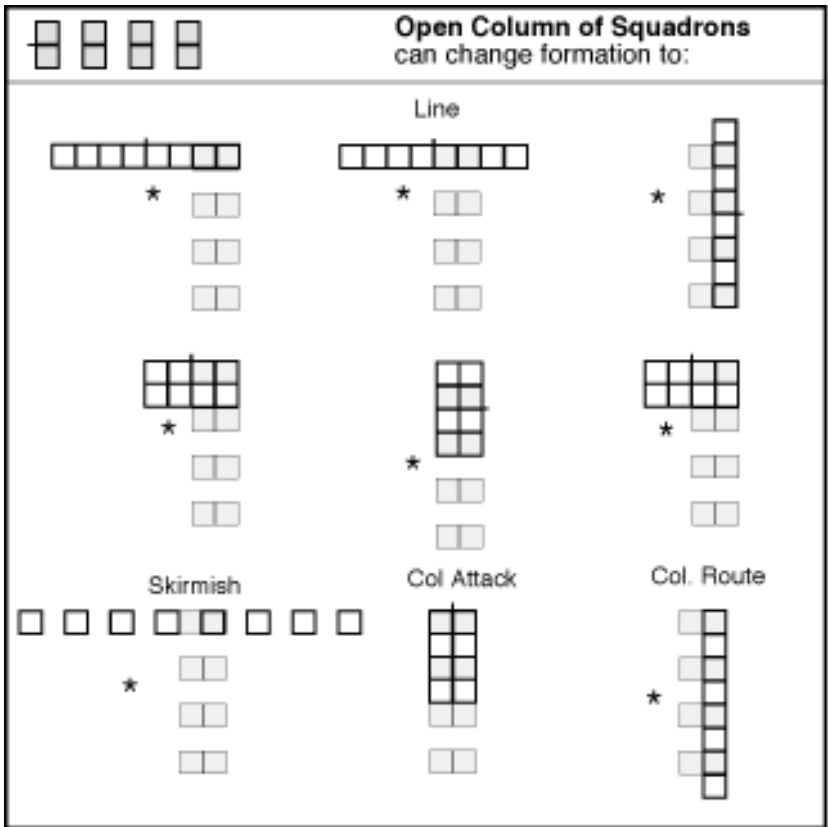


3. CAVALRY FORMATIONS

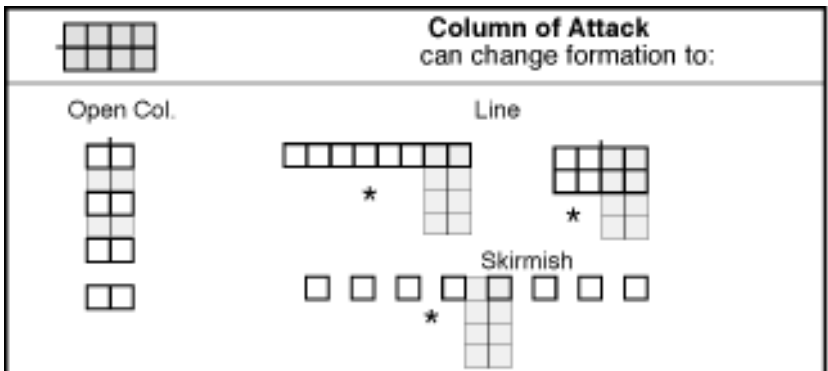
Column of Route - As for infantry described above, except that the half-squadron stands are all arranged one behind another, facing in the same direction. Melée multiplier is one quarter and it can not be used to initiate an attack.



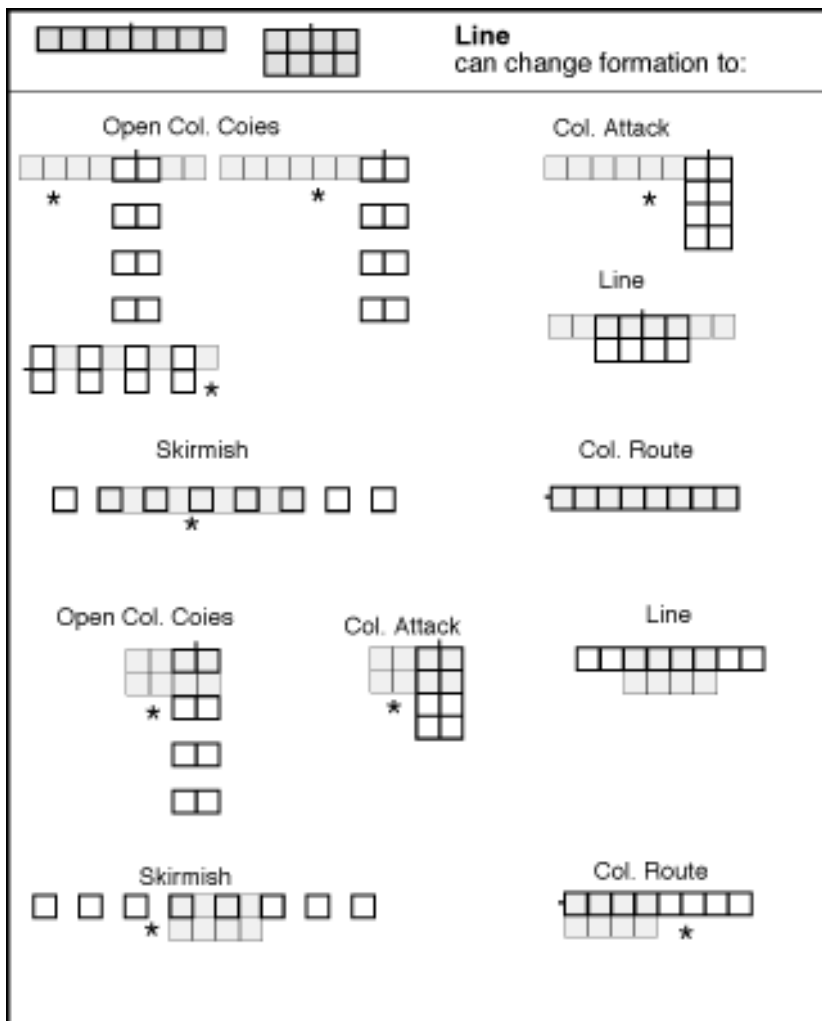
Open column of squadrons - As for infantry described above. The front of each squadron (of two stands abreast) is separated from that of the following squadron by the distance of the frontage of the squadron. The melée multiplier is one.



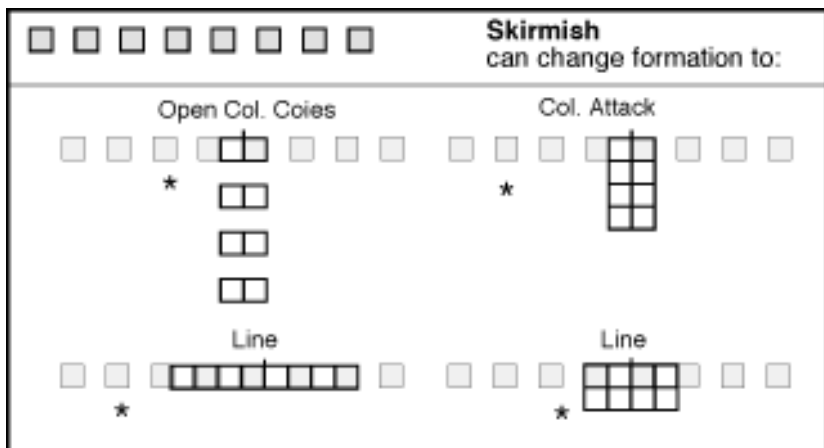
Column of Attack - This represents the regiment in squadron lines charging with intervals between the squadrons. Melée multipliers are one for light cavalry and two for heavy cavalry.



Line - The regiment is formed in one ranks of eight stands or two ranks of four stands. The melée multiplier is two for light cavalry and three for heavy cavalry.



Skirmish - As for infantry above: stands are separated by at least 25 mm. This formation can only initiate an attack upon other units that are in skir-misher formation. It cannot attack other formed units. The melée multiplier is one half.



4. ARTILLERY FORMATIONS

Column of Route - The battery is mounted on the special stands indicated in the Unit Organization section above. It cannot attack and has a melée multiplier of one quarter. It may deploy into firing order either to the front, sides, or rear of its direction of march without penalty.

Firing Line - The Battery is deployed for firing using the special stand indicated in the Unit Organization section above. It counts as being in a skirmisher formation and has a melée multiplier of one half. It can deploy back into column of route to either side, front, or rear of the stand as desired by the player.

5. SPECIAL UNIT FORMATIONS

All small detachments not at full 'basic' unit strength always count as being in skirmisher order and have a melée multiplier of one half.

6. CHANGING FORMATION

Changing from one formation to another is accomplished using the diagrams above. In almost every case there is at least one stand which does not move, fixing the position of the resulting formation. In the other cases each stand pivots on its corner, accomplishing the same result.

Each formation is restricted in the nature and orientation of the formations into which it may change. In addition, the final position must not penetrate another formation, a town block, or impassable terrain. Changes of formation must be completed one unit at a time. If there is not enough space for the change to be accomplished without moving the fixed stand(s) than the change is not permitted.

7. CHANGING FACE

A change of face is accomplished by turning each stand 180° in place. Changing the facing of a unit through any other angle requires movement (the next phase).

In order for skirmishers to move to the rear a distance greater than the 100 mm skirmisher fallback they must execute a change of face. They may, however, end their movement facing back to the original front.

8. This completes the deployment phase, the first phase of each game turn.

Chapter IV — Movement

- 1. OPTIONS:** Each turn a basic unit must be in one of the approved formations as described in the preceding chapter and must move as a basic unit at all times. Each basic unit is authorized two **options** from the listing below and it may perform these two options each turn with the following exceptions. No options may be performed twice in a single turn by any unit. Some actions themselves take so long to perform that they count as two options expended each turn; they cannot be carried over from turn to turn. Movement is the second phase of each game turn.

<u>Deployment Options</u>	<u>Movement Options</u>	<u>Firing Options</u>
Change facing	Charge	Fire
Change formation	Move	Fire/Fire *
Limber/Unlimber **	Wheel	
Load/Unload	Voluntary Fall Back	
Load/Unload	Recall and Rally *	
	Non-Combatant Move *	
	Victory Bonus Move	

* two options are expended to perform this action

** limbering and unlimbering times depend on the calibre of the batteries, see below

- 2.** During each turn a unit will elect its options in the normal order of operations of the turn. Facing and formation changes are fairly specific and are explained below in Chapter III. Movement is not as restrictive and will often include wheeling as a part of forward movement. In most cases the player will be able to determine whether to make a full move or only a part of it. Firing options are also explained below.
- 3. DEPLOYMENT PHASE OPTIONS:** Take place simultaneously during the deployment phase of each turn. In those cases where neither party will deploy until it sees what its opponent's intentions are, both sides should secretly write their decisions down and act on them simultaneously after all other deployment changes have been made.

Change of facing: units may reverse the direction in which they are facing, all the stands being simply faced about. All changes of facing count as one option expended.

Change of formation: units may change the formation that its stands are in. The change must conform to the Formations diagrams. If a unit is so blocked in by other units (friendly or enemy) or by restrictive terrain that it cannot place its stands in the desired formation then it is not allowed to execute that change of formation. This becomes especially critical when maneuvering with large numbers of units in a cramped area.

Limber / Unlimber: artillery units deploy from column of route to firing line and vice versa by this means. Artillery units may deploy to either the front, flank, or rear of its column of route formation. The number of options expended differs depending upon the size of the guns as follows:

Light and Horse Batteries - take one option to limber / unlimber

Medium and Heavy Batteries - take two options to limber / unlimber

Multi-battalion formations: Frequently several basic units will be found making up one large formation (especially in multi-battalion squares). In these instances care must be taken during the deployment phases to insure that illegal interpenetrations do not occur. Common sense will show that only a few battalions could deploy into or out of such large formations simply due to the lack of room to accommodate them.

- 4. MOVEMENT PHASE OPTIONS:** These take place simultaneously during the movement phase of the turn but occur in two separate subphases. As with deployments if two players cannot agree as to who must declare charges or move first, let all other actions be completed and then make each side write down its intentions for the turn, declaring them simultaneously.

Charges: A charge is a declared move which automatically commits the unit(s) to moving at least one half of their movement allowance towards the unit they declared the charge against. Once this requirement is met, however, the charger may elect to stop the charge, to continue on up to the maximum allowed distance, or to contact. There is no minimum distance that a unit has to move in order to be able to declare a charge and be eligible for a victory bonus move.

Movement: In normal movement units advance ahead the desired portion of their allowed movement rate, depending on the formation they are in. Wheels from a flank can be combined with forward movement so that a unit changes its overall facing as it moves, but this must be done with care to insure that the unit does not exceed its total movement allowance. Units may advance at the oblique, at a maximum angle of 10° (the artillery template may be used to judge the angle). Infantry units may flank march one stand width.

Light artillery making a handpush movement expends one option. Medium artillery making a handpush movement expends two options. Heavy artillery may not handpush.

Skirmishers may maneuver by wheeling companies, rather than on the entire battalion frontage. They must, however, remember that the frontage of the company includes the gaps between skirmish stands.

Voluntary Fall Back: The units retreat, still facing the enemy, by backing away to the maximum allowed distance. Here again slight wheels can be combined with the movement. No oblique movement is permitted, however.

Recall and Rally: This action counts as two options expended. Any unit in skirmish order (which by definition includes all units in **routed** morale status) who wish to draw themselves back together and rally in any formation or facing desired by their owner, do so using this action. Since it takes two options the process is not considered complete until the end of the Rally Phase of the turn, and any units contacted by the enemy while in a rally status from being routed will be destroyed (see **MORALE**). This is the only way that light infantry deployed out as skirmishers, or cavalry which has charged at the gallop can recover their order and form up into another formation.

Units which are in **shaken** status may attempt to rally without expending any options, as they need not be recalled.

Non-Combatant Move: This action counts as two options expended. Units that complete a normal move during the movement phase and who, in addition, are not fired upon during the firing phase, and who find themselves at least 500 mm from the nearest enemy unit may elect to take a non-combatant move. This allows the unit to take up to another full movement allowance during the non-combatant movement phase. Such units cannot use this second movement allowance to get any closer than 500 mm to any enemy unit.

Cavalry Gallop Movement: All cavalry units have two movement rates: the trot, which they can maintain indefinitely, and the gallop, which requires a full turn of Recall and Rally action to allow the unit to recover its order. The decision to gallop must be announced during the charge declaration phase and even if contact is not made or normal movement is not exceeded, the requirement to Recall and Rally still exists. The charge at a gallop may not wheel and may incline no more than 10° (the artillery template may be used to judge the angle). It may not cross linear obstacles to movement (hedges, creeks, walls, etc.)

The unit is in skirmish formation until rallied. It may rally in place or withdraw directly to a place of greater safety. Once the rally turn is completed the unit can gallop again immediately or make normal movements at the owner's choice.

Galloping cavalry which is permitted a victory bonus movement may continue to gallop only if its opponent broke from morale and was not contacted. Cavalry which did not gallop in its regular movement phase may not gallop in any victory bonus movement.

Victory Bonus Movement: Upon completion of a combat the winner may be eligible for further movement depending on whether he charged into the combat or not. This movement may be used to bring on a new round of combat (see **COMBAT**).

5. **FIRING PHASE OPTIONS:** These take place simultaneously during the firing phase of the turn.

Fire: The unit fires at any target directly ahead of it and within its own range (see **FIRING**).

Fire / Fire: this action counts as two options expended. Units that have sat and done nothing else so far in the turn are allowed to fire twice. Neither skirmishers, artillery, nor cavalry may claim this option. Units normally fire both rounds of fire at the range to the target at the end of the turn; however, units that were charged during the turn and end the turn in contact with the enemy may fire one round at the medium range and one round at the close range if the charging units began the turn outside the close range.

6. MOVEMENT TABLE

<u>Unit Type & Formation</u>	<u>Class I</u>	<u>Class II</u>
Infantry:		
Column of route	250	200
Open column of coies	200	160
Col of attack, Close col.	150	125
Line	100	100
Square	50	50
Skirmish	250	200
Voluntary fall back	50	50
Skirmish fall back	100	75

Cavalry:

Column of route	400	300
Open column of sqdns	300	220
Line (gallop rates)	200 (500)	150 (450)
Column of attack	250 (550)	200 (500)
Skirmish	400	300
Skirmish fall back	200	150

Artillery:

Column of route - Light and Horse	400	300
Column of route - Medium and Heavy	250	200
Hand push (Light & Horse)	50	50
Hand push (Medium)	25	25

7. INTERPENETRATIONS: Units must not interpenetrate other units except as follows:

Skirmishers can pass through and be passed through by any formation except galloping cavalry.

Infantry can pass through and be passed through by artillery and any other infantry, except that columns of attack and squares can neither pass through nor be passed through by anyone except skirmishers.

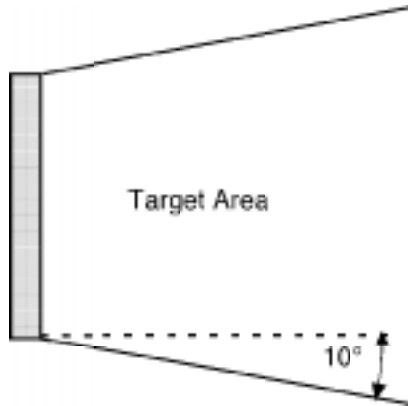
Cavalry can pass through and be passed through by other cavalry and artillery except that cavalry columns of attack can neither pass through nor be passed through by anyone except skirmishers. Galloping cavalry cannot interpenetrate nor be interpenetrated by anyone in any circumstances.

The unit being passed through may not move nor change facing or formation.

8. This completes the second phase of each turn.

Chapter V — Firing

1. Firing is the third phase in each game turn. It is divided into two major categories: Artillery Firing and Small Arms Firing. All firing is done within the zone located directly in front of the unit as depicted in the diagram below. Target ranges and vulnerablities are based on this.



2. To measure range to any target measure from the front center of the firing stand(s) to the nearest point on the target stands. If any part of the target unit lies within the firing zone it may be fired upon unless other units or terrain obstacles intervene.
3. Enfilade fire is defined as that firing which occurs whenever an imaginary line from the front center of the firing unit passes diagonally across opposite sides of the target stand. This assumes that the target stands are in the firing zone.
4. Firing takes place after all movement in the order of operations and all ranges, target vulnerablities and protection is calculated at that time with only two exceptions as noted below:

Fire / Fire - As specified earlier those units who are charged during the movement phase will fire once at medium range and once at close range if they have the fire / fire option and the charging unit started at medium range or farther. If they should only be able to fire once, then that fire will be taken at close range.

Victory bonus moves - As will be detailed under COMBAT, units that win their first round of combat and who elect to take a victory bonus move are then eligible to be fired on by units that have not yet fired in the turn and who have that unit in their firing zone. These units, however, can only claim one round of fire on the advancing enemy unit.

5. Firing takes place after all movement and if a unit finds itself in a combat with another unit as a result of movement then it cannot be fired upon by any other units except the unit(s) with which it is in combat. There is no 'pass through' fire allowed.
6. Units which are the target of a charge must take their precombat morale check **before** issuing fire. This includes units which execute a movement which takes them out of reach of the charge. (The charging unit takes its precombat morale check at the usual time, even if its target has routed.)
7. **ARTILLERY FIRING:** The basic unit for artillery is the battery which represents from four to twelve guns deployed for firing in a skirmish line depending on the frontage of the battery as specified in the unit organization section. All batteries are assumed to have a small complement of howitzers and a preponderant complement of guns. Each battery is also assigned a rate of fire (**Rate**), an impact factor (**Impact**), and a penetration factor (**Penetrations**) depending on the calibre of the guns normally found in that type of battery. The calibre of the guns will also determine the range at which it will be considered to be firing cannister (**Case**) and the range at which it will be considered to be firing ball or shell (**Ball/Shell**).

Rate - This is the number of times a battery will fire in each game turn. All batteries from Light through Heavy will fire only once per turn. Heavier guns such as siege guns and naval mountings involved in land fighting will fire only one every other turn. This fire counts as a single option.

Impact - This is the amount of force or damage that a battery's fire will cause on terrain objects. In the terrain section values are assigned as a guide which the artillery fire must exceed in order to destroy that terrain. After that value is reached artillery ball / shell is no longer stopped by that terrain but will continue on through it and cause damage to troops or other terrain behind it.

Penetrations - This is the number of stands that an artillery ball will penetrate (causing a combat strength point loss per stand) before the ball runs out of force and stops.

8. For purposes of comparison each impact factor equals two penetrations so that should a shot hit troops and then terrain or vice versa one can calculate the amount of force left against each type of target.
9. To fire ball the firer announces his target and then checks to insure that it is in range and within arc. There must be clear field of fire of at least 50 mm along each side of the line of sight from the center of the battery to the target in order to fire. The ball is assumed to travel in a straight line from the center of the battery to the target and will continue to travel along that line until it hits something it cannot penetrate, or it runs out of range, or it expends all its penetrations, at which point it is deemed to have stopped. The effects of terrain on ball firing are discussed fully in the TERRAIN chapter. Each unit that is subjected to ball fire must take a -10 morale check for each battery firing on them regardless of how many casualties are inflicted (see **Pre-combat Morale Checks**).

The target point must be designated on the front rank of the target. In particular, when firing through a skirmish screen, a target point must be chosen on the screen and the line of fire extended through that point, rather than targetting a column 1000 mm away and extending the intended line of fire back through the screen to the gun.

Artillery may fire ball over the heads of friendly troops only in prepared positions or in extraordinary situations specified for a particular scenario.

10. To fire case the firer announces his target, checks to insure that there is 50 mm clearance along each side of the line of sight from the center of the battery to the target, that the target is in case range, and within arc. Consult the Musketry and Case Fire Table and roll for casualties. Again, a target point must be chosen on the nearest target unit. There are several bonuses added when firing case at certain targets; consult section 16 below for details. Any target that receives case fire must take a -30 morale check for each battery firing at it (see **Pre-combat Morale Checks**), regardless if any casualties are caused.

Case fire is directed at a single target, and will cause casualties (and morale checks) to that unit only. If, however, a battery is charged by two units, or approached so closely by two units that firing on only one unit is impractical, the casualties will be divided between the two units and both will take a -30 morale check.

Case fire directed at skirmishers causes casualties at half effect. If there is a unit screened by the skirmishers and the line of fire extended through the target point hits that unit, it will receive half of the remaining casualties (*i.e.* one quarter of the original value) and take a -30 morale check. The

remaining quarter of the casualties is not inflicted.

Case may be fired over the heads of friendly troops only in casemated fortresses where the troops are provided with overhead cover.

11. To fire howitzer fire the firer announces his target, shows line of sight to the target and then checks to insure that the target is beyond case range for the calibre of guns, within maximum range, and within arc. (Batteries cannot fire howitzer at ranges less than the case range as the angle would be too steep.) Consult the artillery casualty chart and roll for casualties from the fire. Howitzer fire has the capability of setting fires that may destroy woods and villages (see **Terrain**). A unit subjected to shell fire must take a -10 morale check for each battery that fired shell on it.

Howitzers do not fire indirect fire except in prepared siege positions. The battery must be able to observe the fall of shot. They may, however, fire over intervening units if the target is at least 100 mm from any friendly troops and there are no friendly troops within 150 mm of the front of the firing battery.

12. To fire counter-battery fire, select the enemy battery and insure that it is in range and arc, and that clearance applies. Take the Impact factor for the calibre of gun firing and multiply it by ten (thus a 1 becomes 10, 1.5 becomes 15, etc.). That represents the number you must roll or less in order to get one dismount on the target. Each dismount destroys 33% of a 4 gun battery, 25% of a 6-8 gun battery, and 20% of a 10-12 gun battery. The unit loses that percentage of its start-of-game combat strength for each hit. Thereafter that battery so dismounted must roll a number above its dismounted percentage in order to fire that turn. For example a 6 gun battery that has received two dismounts would need to roll a 51 or above to be able to fire.

If a dismount shot fails to have an effect the ball is assumed to continue straight through the target and cause damage normally beyond it, having lost one penetration. No casualties are inflicted (the battery is a skirmish target), but a -10 morale check is required. Case and shell fire are ineffective for firing dismount shots; only ball fire is effective. Enfilade fire doubles the dismount chance for the firing battery.

13. All artillery and formed infantry fire receive certain bonuses and penalties when firing against certain targets or in certain situations. Consult the Artillery and Musketry Modifiers Table for a listing of these.

Artillery Summary Chart						
Gun	Case	Case Die	Ball / Shell	Howitzer		
Calibre	Range	Result	Range	Penetration	Impact	Die Result
Light / Horse (3 - 6 pdr)	0-250	-6	250-750	2	1	N/A
Medium (8 - 10 pdr)	0-300	-2	300-900	4	2	-6
Heavy (12 - 18 pdr)	0-400	+2	400-1200	8	4	-4
All Howitzers	0-400	+2	400-800	N/A	N/A	0

14. SMALL ARMS FIRING (FORMED UNITS): All formed units except those in column of route may fire. Such fire is broken down into three ranges: Close / Medium / Long. The firing zone is as described above. Casualties are determined by taking the result of one die roll per round of fire and deducting six for long range targets, two for medium range targets and full score for close range targets. These casualties are for a full basic unit of four stands firing. For formations with fewer stands firing take the appropriate fraction of firing stands times the die results (1/4, 1/2, or 3/4). Infantry units in line formation (only) receive several important bonuses when firing (see Artillery and Musketry Modifiers Table). Terrain has a very considerable effect on firing (see **Terrain**).

Small arms fire directed at skirmishers does not penetrate beyond the target. (It is so poorly directed as to be ineffective).

15. SMALL ARMS FIRING (SKIRMISHERS): Units operating in skirmisher order fire by individual stand once per turn (no Fire / Fire allowed) at any target in their firing zone at their choice. After insuring that the target is in range, roll two decimal dice. Each result of 90 - 00 inflicts a loss of two C.S. points and causes a -10 morale check, while each result of 75-89 causes a -10 morale check. Skirmisher fire is at the above effect out to maximum range and its effect is not diminished by terrain, status of firing unit, or weather.

16. ARTILLERY AND MUSKETRY MODIFIERS TABLE

The effect from firing is cumulatively modified by the following conditions for all musketry volleys, case firing and shell hits.

Add 2 to die roll if:	Target is in a column formation Target is cavalry First fire from unit in that battle
Deduct 2 from die roll if:	Firer has 1/2 C.S. or less remaining Firer has SHAKEN morale Firer is howitzer and target moved >50 mm Firer is howitzer and moved this turn
DOUBLE effect of die roll if:	Firing enfilade on target Firing on squares
HALVE effect of die roll if:	Firing on skirmisher targets

The effect of ball firing is doubled when firing enfilade or on squares just as it is for musketry and case above.

Ball fire is completely ineffective against skirmish targets, but still causes a -10 morale check per battery that fired through the skirmish order target. One rank of penetration is absorbed by the skirmish line.

The First Fire modifier applies only to the first shot if the unit is executing a fire/fire order. First fire is lost once a unit fires or is engaged in *melée*.

17. This completes the firing phase of the game turn. All firing is simultaneous and the morale checks caused by firing are handled in the next phase, the Pre-Combat Morale Check Phase.

Chapter VI — Pre-Combat Morale Checks

1. Pre-combat morale is the fourth phase of each game turn, except for firing units which are the target of a charge, who must take this check before issuing fire. At this time all units that received fire which force them to make a morale check, and all units that declared a charge or who were charged must take their pre-combat morale checks. These checks are all considered simultaneous and in situations where a unit has several causes requiring a check to be made these causes are all combined into one check with the cumulative penalties determining the roll each needs to make. A player may elect to combine several units into one roll as long as the worst modified situation is used to determine results.
2. Each basic unit is assigned a morale integer in relation to its morale grade. This integer represents the minimum score that that unit would have to roll in an unmodified situation to stand its morale check.

<u>Morale Grade</u>	<u>Morale Integer</u>
1	35
2	28
3	20
4	14
5	10

3. Roll two decimal dice, adding or subtracting any modifiers that apply, and see if the resultant total equals or exceeds the numbers above. If so, the unit has good morale for the moment and may continue on in its actions without penalty. If it is between one and ten below the morale integer the units become **shaken**. If it is eleven or more numbers below the integer the unit becomes **routed**.
4. **Shaken status** - Shaken units remain standing in place losing an additional 2 C.S. points at once. If about to enter a combat situation they can only count one half their current C.S. totals. Shaken units cannot take a victory bonus move even if they defeat their opponent in combat. Shaken units count at one half C.S. total until they rally successfully so that if contacted by a victory bonus move they would fight counting only one half C.S. as above. These units may attempt to recover in the Recall/Rally phase of the turn in which they become Shaken.

5. **Routed status** - Routed units automatically lose 4 C.S. and become totally disorganized. They must retreat immediately a minimum of one column of route move until they are in a protected position where they cannot be fired upon or threatened with a charge. If they have not reached a position of safety they will continue to retreat in each Non-Combatant Movement and regular Movement phase until they have done so, whether or not they are within 500 mm of the enemy. They must remain in that position and attempt a full turn of Recall / Rally options in order to regain their order and function once again as a unit. If fired upon they count as a skirmish target, but take no further morale check. If contacted and brought to *melée* they are destroyed at the time of the pre-*melée* morale check.
6. If a unit should become routed while making a pre-combat morale check the total losses inflicted may be increased by those factors discussed in the Combat sections (flank or rear attacks, infantry routed by cavalry, etc...).
7. **Proximity** - Whenever a units rout on a morale check every friendly unit within 100 mm is required to take a morale check to test their reaction to this rout. In addition whenever a routing unit passes within 100 mm of a friendly unit of a lower morale grade, then that unit as well must take a morale check. These checks occur simultaneously so that a unit is only required to make one morale check for routing neighbors each turn regardless of how many units around it rout away.
8. Once all pre-combat and subsequent proximity morale checks have been made and all units shaken or routed are marked and moved the combat phase can begin.

9. MORALE CHECK MODIFIERS TABLE

The following modifiers are applied to the die rolls to account for certain situations whenever a morale check is to be made:

- subtract 10 from roll:
- for each battery that fired ball / shell on a unit
 - for each skirmisher fire hit on a unit
 - whenever charged in the flank
 - when a unit has only 1/2 C.S. or less remaining
 - skirmisher order troops charged by formed infantry
 - if charged, for each higher grade morale of troops charging
 - if charged or charging and changed formation, and opponent did not change formation
 - received close range volley fire from a line

subtract 30 from roll: -for each battery that fired case on the unit
-whenever charged in the rear
-cavalry charging a square
-formed infantry not in a square charged by cavalry
-skirmishers or deployed artillery charged by cavalry
-when a unit has only 1/4 or less C.S. remaining
-when a unit is in shaken or routed morale status
-when a unit is beyond its commander's rating zone

add 30 to roll: -whenever a commander is directly attached to an infantry battalion or cavalry regiment taking a check

Chapter VII — Combat

1. Combat is the fifth phase of each game turn. At this time all units that declared a charge and moved into contact during the charge section of the movement phase, and who withstood the pre-combat morale check phase results will fight their combats. In cases where neither side declared a charge but would contact each other through normal movement both sides halt 50 mm away instead.
2. **INVOLVEMENT:** Only those units in actual base to base contact with enemy units count as being in contact although any amount of contact is sufficient to engage the whole basic unit in the *melée*. A few exceptions to this rule exist as follows: Multi-battalion squares always count all the component battalions as being involved in any *melée* against any part of the square. Garrison and shelter units in a town (see Terrain chapter) always count the entire garrison of the zone as involved in combat, while the shelter troops are never counted as involved but share the fate of the combat results to the garrison.

No more than two units may combine in an attack on a single enemy unit. These two units must both be of the same arm and subordinate to the same Division-level command figure. A higher level (usually Corps) command figure may, by attaching himself to a unit, allow it to combine in an attack with a unit of a different Division-level command.

3. **PROHIBITIONS:** Skirmisher troops can only charge and combat with other skirmisher troops or deployed artillery. They cannot initiate a combat against formed troops or cavalry. Troops in square or column of route formations can never initiate a combat, nor can artillery.
4. **PROCEDURE:** Take the current Combat Strength total of the unit(s) involved and adjust them to account for any terrain modifiers. Multiply the total by the appropriate multiplier for the formation the unit is in (see Formation Multiplier Table below). Multiply the resultant number by the roll of an AVERAGE die (2,3,3,4,4,5) die and divide by ten, dropping all fractions. This total is the combat results total which is then compared to the opponent's total to determine the winner.
5. **VICTORY DETERMINATION AND RESULTS:** The higher combat results total is the winner, the lower is the loser. Combat losers will lose the difference between the totals while the winner will lose 1/4 of the unmodified losses of the loser, rounded down, with a minimum loss of 1 CS.

Should both totals be equal, both sides lose two Combat Strength points and fall back one move, counting as shaken in morale.

If the defeated side lost from one to ten C.S. points they become **beaten** and must retreat all the units one full move for the formation they are in away from the enemy. Those units then count as shaken, although they take no additional CS loss.

If the defeated side lost 11 or more C.S. points they become **broken** and automatically **rout** away from the enemy. In this situation they do not lose an additional 4 C.S. points as they count their combat losses sufficient. They run away as per the morale rules and will need to execute a Recall/Rally move in a future turn in order to reform and once again enter play.

6. SPECIAL COMBAT RESULT MODIFIERS: Any time an infantry or artillery unit is beaten or broken by cavalry their losses are automatically doubled and the new total used to determine their fall back or rout status.

Any time a unit loses a combat when it was attacked from the flank its losses are doubled.

Any time a unit loses a combat when it was attacked from the rear its losses are tripled.

On some occasions losses are increased due to the nature of the terrain in which the combat was fought or due to weather conditions (see Terrain and Weather chapters).

These special modifiers are cumulative in effect and the total losses to the defeated will determine its beaten or broken status. In all cases the winner will only lose 1/4 of the unmodified losses of the defeated units.

7. RETREATS FROM COMBAT: Beaten units that must retreat one full move and who find themselves hemmed in by friendly units that they cannot interpenetrate, or by terrain that they cannot retreat over (either because it is impassible or because they did not roll a die roll sufficient to allow them to break contact) automatically become routed, losing 4 extra C.S. points and causing the appropriate morale checks to be made.

Beaten units that find themselves surrounded by enemy units such that they cannot retreat are automatically considered **broken** in place and overwhelmed by the enemy, losing all further C.S. points, their standard, and are removed from play at no further cost to the enemy.

Both winners and losers in combat are required to distribute their losses equally among their units involved. They cannot, however, assign losses to a unit that doesn't have them to lose. In such cases the remainder are redistributed among units that have points left.

The final total of such losses determine if the unit is beaten or broken.

Any unit driven to zero C.S is broken, even if its losses would only cause it to be beaten.

Any unit winning a combat that goes to zero C.S. is likewise routed at that point and is not eligible for a victory bonus move.

8. FORMATION MULTIPLIER TABLE

<u>Formation</u>	<u>Infantry</u>	<u>Cavalry</u>	<u>Artillery</u>
Column of Route	.25	.25	.25
Open Col	1	1	—
Close or Attack Col	3 (vs inf or arty)	1 (light)	—
	1 (vs cav or not charging)		2 (heavy)
Line	2	2 (light)	—
		3 (heavy)	
Square	4 (vs cav)	—	—
	3 (vs lancers)		
	1 (vs inf or inf & cav)		
Skirmish	.5	—	.5

Cavalry is awarded a special combat multiplier for their first round of combat. They double their start C.S. figure for that combat only, and does not apply to a victory bonus move if contact was made in the regular combat phase. This first combat multiplier is not lost, however, if the enemy breaks as a result of a precombat morale check.

9. VICTORY BONUS: Units that charged and won their combats and units whose target routed away on pre-combat checks are entitled to a victory bonus and can exercise one of the four choices listed below:

- They can elect to remain in place in their present formation and facing.
- They can elect to remain in place and change their formation or their formation (not both).
- They can elect to about face and move up to one full move back in the direction from which they came, to to seek shelter behind other friendly units or terrain.
- They can elect to continue on ahead up to one additional full move and fight a new combat if they are able to reach an enemy unit. They are not allowed to change their facing or formation. Cavalry which galloped into the initial combat may use the gallop rate in this second movement only if their target was broken by morale failure in the precombat melee phase.

In the first three cases, no further fire is allowed on the unit(s). In the last case any enemy unit which has a valid target and had not fired in the firing phase may fire once upon the unit as it makes its second movement.

If a second combat is formed the pre-combat morale checks and their effects are taken first, then the combat is fought as above and any retreats or routs are figured in the Post-Combat Morale Check Phase which follows next.

No victory bonus move is ever awarded for winning a second round combat.

Chapter VIII — Post-Combat Morale Checks

1. Post-combat morale checks are the sixth phase of each game turn. At this time all morale checks required to be done to complete the combat phase and any checks which result from units routing out of combat or being broken in combat are made.
2. As in the Pre-combat morale check phase these checks are combined whenever possible so that a unit need take only one check in this phase. These checks are assumed to be made simultaneously with the worst modified situation determining the results.
3. As above a player may elect to take one check for several units as long as he accepts the worst case results as applying to all.
4. The procedure is exactly as in pre-combat morale checks with each unit having to achieve or exceed its morale integer to stand the morale test.
5. All the modifiers discussed in pre-combat morale checks apply as for post-combat morale checks. This applies equally to proximity morale checks.
6. The results of routed units are the same as in pre-combat morale checks; however units merely shaken will find themselves able to attempt to rally in the upcoming Rally phase of the turn.
7. **This completes the Post-combat Morale Check Phase of the game turn.**

Chapter IX — Non-Combatant Movement

1. Non-Combatant movement is the seventh phase of each game turn. At this time units which elect the non-combatant two-option movement now check their eligibility.
2. **ELIGIBILITY:** Units that moved normally during the movement phase, and who were not fired upon, did not become shaken or broken from morale checks, and who are now still 500 mm away from the nearest enemy unit are eligible for a non-combatant move.
3. During this second full movement period, those units may not change facing or formation, but may continue up to a full movement distance provided that they move no closer than 500 mm to any enemy unit.
4. It is also during this phase that units moving onto or off the table in the upcoming turn should be announced.
5. Routing units which are not in a position of safety must continue to retreat during this phase, even if they are within 500 mm of the enemy.
6. **This completes the Non-Combatant Movement Phase of the game turn.**

Chapter X — Recall and Rally Phase

1. Recall/Rally is the eighth and final phase of each game turn. At this time units will recover their order from morale failures in the current or preceding turns.
2. Units which spent the entire turn up to this point forming up from skirmish order (including cavalry which has galloped) and who have not suffered shaken or routed morale states are now rallied in whatever formation and facing desired by their owner.
3. Units which have become **shaken** may attempt to rally. To do so they must successfully pass a regular morale check. Since they did not have their formation disrupted, they rally in the same facing and formation they had at the time they became shaken. Any unsuccessful result means the unit remains shaken, although it loses no additional CS.
4. Units which spent the entire turn up to this point in trying to rally from being routed on a preceding turn, have not been fired upon, and are in a position which in which they cannot be fired upon or charged, may now attempt to rally. To do so they must successfully pass a regular morale check. The rallied unit may be placed in whatever formation and facing desired by their owner. A result of Shaken or Routed means the unit remains in that condition, although it losses no additional CS.
5. Units that were driven off the table either by being beaten or broken, or from routing as a result of a bad morale check may begin the process of rallying off table. This process takes a minimum of three turns. Once these turns have passed the troops can elect to reenter the table where they exited or to take further turns of off table movement and reenter at other locations. (See Battles and Campaigns.)
6. **This completes the Recall/Rally phase and the entire game turn.** Mark off one turn as complete and start again at the Deployment Phase of the next turn.

Chapter XI — Terrain

1. Terrain exerts some fundamental adjustments to the effects of visibility, movement, firing combat, and morale.
2. Terrain is divided into four major categories - **intervals**, **watercourses**, **vegetation**, and **constructions**. Each of these categories is further divided by the density of the area into one of three categories: **regular**, **rough**, or **rugged**.
3. **INTERVAL:** Two interval types are recommended. A 1/2 inch contour represents normal gentle rolling changes, while a 1 inch interval represents steeper and more difficult interval. There two ways to approach the use of these contour pieces:

Let the contour piece itself represent the entire mass of the elevation. In this case draw the crest line across the contour piece to show the rise and fall of the area.

Let several pieces placed around on the table indicate the high points in the general lay of the land. Connect all these contours by drawing a continuous crest line between and through them. This method serves to show the connections between hill masses and is much better at representing the folds of ground and slight ridge lines that exist between the heights that will still screen troops from observation and firing.

Intervals may be designated as any of the three density categories with the following effects:

Regular interval:

Visibility: The crest lines mask troops and objects behind them from view until either side gets within 100 mm of the crest line at which time they can see over them.

Movement: No effect on any troops.

Firing: No effect except on artillery ball firing. Artillery ball fired up or down two or more contours will stop at the first stand contacted causing a casualty but burying in at that point so that no further casualties can be caused. Troops still have to be seen from the firer by line of sight in order to be fired upon.

Combat: No effects.

Morale: No effects.

Rough interval:

Visibility: Crest lines mask troops until they are within 50 mm.

Movement: All arms may traverse but must roll each turn for each basic unit against the Terrain Variable Delay (TVD) Table to determine the percentage of movement allowed. Troops in Column of Route formation are exempted from this requirement but see the TVD Table further on in this chapter.

Firing: As for regular interval.

Combat: Troops defending the crest line zone (50 mm) count full effect while troops charging in do not get to count 1/4 of their current C.S. total as a penalty.

Morale: No effects.

Rugged interval:

Visibility: Crest lines mask troops until they are on the crest line.

Movement: roll each turn per basic unit on the TVD Table. Cavalry cannot gallop move on rugged interval.

Firing: As for regular interval.

Combat: Troops defending on the crest line fight normally while chargers can not count 1/2 of their current C.S. as a penalty.

Morale: Morale penalties against defenders are cut in half (*i.e.* a -30 penalty becomes a -15 penalty). Morale bonuses are not changed.

4. **VEGETATION:** Vegetation is divided into four categories as shown below. Place an outline of the area on the table that cannot be moved to delineate the outline of the area and use actual models for color.

Scrub / Cultivation: Loose growth not over two meters high, such as fields, scrubland, meadows, etc. These may be rated **regular** or **rough**.

Regular scrub:

Visibility: Troops are visible out to full sighting range.

Movement, Firing, Combat, and Morale: No effects.

Rough scrub:

Visibility: Troops are visible out to 500 mm.

Movement: Units roll for movement against the TVD Table.

Firing: Troops fire out at full effect but receive casualties at 3/4 of the regular rate.

Combat and Morale: No effects.

Light woods: Infrequent trees with light undergrowth, borders to fields, etc. Can be **regular** but are usually **rough**.

Regular Light Woods: Treat as Regular Scrub/Cultivation.

Rough Light Woods:

Visibility: Troops are visible when within 100 mm. Visibility through such woods is 100 mm.

Movement: Cavalry cannot gallop within. Artillery cannot deploy for firing within these woods. All units roll on the TVD Table.

Firing: Troops along the edges fire out normally. Troops receiving fire from without and troops firing on each other from within receive casualties at one half normal rate. Neither artillery ball nor case is stopped by Rough Light Woods but continues to its full distance.

Combat: Troops defending within count full effect while attackers do not count 1/4 of their current C.S. as a penalty.

Morale: No effect.

Dense woods: Trees are close together with little undergrowth. European thickets and hedges are in this category as well. Always **rough**.

Rough Dense Woods:

Visibility: Troops are visible when within 100 mm and visibility through is 100 mm .

Movement: Cavalry and artillery must be in column of route formation and on a road or trail in order to pass through. All units must roll on the TVD Table.

Firing: Troops along the edges fire out normally. Troops receiving fire from without and troops exchanging fire within suffer only 1/2 casualties. Artillery ball and case penetrate only 100 mm. Shell fire effect is halved.

Combat: Troops defending within count full effect while attackers do not count 1/2 of their C.S. as a penalty. Losses to the loser in such combats are doubled to account for the disorder attendant on retreating in such difficult terrain.

Morale: Morale penalties against troops occupying such terrain are halved.

Forests: Areas where tree and scrub are very densely packed, always **ru**gged.

Rugged Forests:

Visibility: Troops are visible within 50 mm. Visibility through such terrain is limited to 50 mm.

Movement: Only skirmisher infantry can operate in forests. All other troops must be in column of route formation and on a trail or road. All units must roll on the TVD Table.

Firing: Troops receiving fire from without the forest count only 1/4 casualties. Since only skirmishers can operate within forests the only fire occurring out of or within should be skirmisher fire which is unaffected by the forest. Artillery ball and case penetrate only 50 mm into forests while howitzer fire is ineffective against troops.

Combat: Skirmishers defending in forests count normally while skirmishers attacking into or within count only 1/2 their C.S. as a penalty.

Morale: Morale penalties against troops occupying forests are cut in half.

5. WATERCOURSES: Divided into two subcategories as indicated below.

Running water: further divided into three types as follows.

Creeks/Dry streams/Sunken ways: Small easily fordable depressions which can be crossed at all points by all arms. Always **regular**.

Regular Creeks:

Visibility: Troops within are masked until enemy are within 100 mm. Troops can also be seen from any two contour or higher interval within standard visibility range (1000 mm).

Movement, Firing, Combat, and Morale: No effects.

Streams: Narrow watercourses (25-50 mm wide) fordable only at certain points by all arms. Always **rough** at these fords.

Rough Streams:

Visibility: No effects.

Movement: Troops can cross fords only in open or close columns of companies/squadrons, column of route, or skirmisher formations. Roll on the TVD Table. Cavalry gallop rate is prohibited.

Firing: Artillery ball loses all remaining penetration on contact with the water. Howitzer shell casualties are at 1/2 effect.

Combat: Units charged while in the ford do not count 1/2 their C.S. as a penalty. In addition losses to a defender in a ford are doubled.

Morale: No effects.

Rivers/Lakes: Wide bodies of water (50-100 mm wide) usually not fordable, being crossed at bridges or ferries only. Bridges always count **regular**.

Regular rivers/lakes:

Visibility: no effects.

Movement: Bridges must be crossed by infantry in column of attack with a single stand frontage or in skirmish order. Infantry, cavalry, and artillery can also cross bridges in column of route formation.

Firing: Artillery ball can fire across bridges normally or they can elect to try to destroy the bridge with their impact factor (see Bridges under Constructions later in this chapter). Artillery ball contacting the river will automatically stop its flight.

Combat, Morale: No effects.

Standing water: Further divided into two subcategories as follows:

Bogs: Broken ground with some standing water. Always **rough**.

Swamps: Standing water with little surface land showing. Always **rugged**.

Rough bogs:

Visibility: No effects.

Movement: Artillery is prohibited at all times. Cavalry cannot gallop in such terrain. Roll for all units on the VTD Table.

Firing: Artillery ball penetrates only 50 mm. Troops occupying bogs fire out at only 1/2 effect but accept full casualties.

Combat: Troops occupying bogs defend at full strength while troops charging in do not count 1/2 of the C.S. as a penalty. Losses to the loser of a *melée* in this terrain are doubled.

Morale: No effect.

Rugged Swamps:

Visibility: Troops within are not visible until within 50 mm and visibility through is 50 mm also.

Movement: Skirmish infantry only are allowed. Roll on the TVD Table.

Firing: Troops occupying swamps receive casualties at only 1/2 rate. Artillery ball and howitzer shell are completely ineffective.

Skirmishers occupying defend at full strength while skirmishers attack-

ing into swamps do not count 1/2 of their C.S. as a penalty. Losses to the loser of a combat in a swamp are doubled.

Morale: No effects.

6. **CONSTRUCTIONS:** Divided into four categories as described below.

Roadways: The sole effect of roadways is to increase the movement distance allowed both on and off the table. They also allow troops to pass through what would otherwise be impenetrable terrain.

Regular metalled roadways:

Visibility: No effects.

Movement: All units in all areas may double their normal column of route movement as long as the full movement is taken on the roadway. Two units may move abreast on these dual carriageways.

Firing, Combat, and Morale: No effects.

Regular unmetalled roads:

Visibility: No effects.

Movement: All units may double their column of route movement rate as long as perfect weather prevails. Single carriageway so that only one unit at a time can use the roadway.

Firing, Combat, and Morale: No effects.

Rough trails:

Visibility: No effects.

Movement: Troops may use these unimproved trails during all weather conditions but they always count **rough** and units must roll on the VTD Table.

Constructs: All man made obstacles and constructs except fortifications and bridges which are covered seperately.

Rough walls / hedges / fences:

Visibility: Troops behind and touching these obstacles are not visible until the enemy is within 100 mm.

Movement: Artillery may not cross at all and cavalry cannot gallop across. Infantry and cavalry must roll on the VTD Table.

Firing: Each 100 mm section is given an impact factor of from 4 to 8 which must be exceeded by cumulative artillery impacts before it is beaten down and no longer stops ball fire (see Firing). Troops behind and touching it cause full casualties but receive casualties at 3/4 rate.

Combat: Troops defending behind count full strength but attackers charging over do not count 1/4 of their C.S. as a penalty.

Morale: No effects.

Villages/Towns: All villages/towns are assumed to be a collection of several buildings with attendant gardens, low walls, outbuildings, etc. They are organized in “zones” roughly 100 mm on a side. Larger towns are simply collection of zones placed together. These always count as **rough** except for troops in column of route or skirmish order who claim to be moving through the zone on the roadnet, in which case it counts as **regular** terrain. Inside each zone there are two categories of troops found: **shelter** troops and **garrison** troops.

Garrison troops: These units are considered to line the edge of the zone and fire outward upon the enemy. Up to two units count as the garrison for each zone (half a battalion for each 100 mm). These troops can be fired upon and attacked from outside the village/town and always count as a multi-battalion formation for morale checks. Any adverse morale check, however, also affects the **sheltered** troops as well.

Sheltered troops: These are units considered to be standing in the town to support the garrison or to keep out of the action as a reserve. They cannot fire out and must react to morale situations with the same results as rolled by the garrison. Up to four battalions may count as sheltered for each zone. It takes one complete turn (two options) to exchange a garrison unit for a sheltered unit. Troops who are simply moving through a village/town but who end their turn within the village automatically count as sheltered troops until they can get out of the town.

Rough villages / towns:

Visibility: Troops within are not visible until within 100 mm. Visibility inside is limited to 50 mm.

Movement: All troops in column of route may pass through. Cavalry and artillery in other formations are prohibited. Infantry can operate in any formation except square but must roll on the TVD Table.

Firing: Artillery ball and case penetrate only 50 mm before they stop; troops electing to defend from deeper than 50 mm in the zone cannot be fired upon by ball or case. Troops within receiving fire from without, and troops within firing upon each other cause casualties at half rate. Howitzers have a 5% chance of starting a fire with each turn of firing. Roll immediately after firing. If started it counts as a 50 mm circle in the center of the zone fired upon, which grows by 50 mm each turn on good weather days and by only 25 mm on wet weather days.

All troops must evacuate the zone on the movement turn prior to its burning or they are lost. Troops unaccompanied by sappers have a 5% chance per basic unit to put out a fire or reduce it one 50 mm zone each turn. Sappers present double this chance. Troops so engaged can do nothing else for the turn and count as broken if contacted by the enemy.

Combat: Troops defending in place count full strength while troops charging in do not count 1/2 their C.S. as a penalty. Losses to the loser in any combat are doubled in this terrain.

Morale: Penalties to defenders are cut in half.

Fortifications: All works up to and including fortress walls and stone out-works; always classified as rugged.

Rugged fortifications:

Visibility: Troops are not visible until within 50 mm (although the work itself is visible out to full visibility range).

Movement: Troops defending must be in line or skirmish formation only. Artillery and cavalry cannot cross over such terrain except at gates or breaches when they must be in column of route. All troops in all the above circumstances must roll on the TVD Table. Attackers who are assaulting a gate or breach must be in single stand frontage column of attack.

Firing: Each 100 mm section has an impact factor of between 24 and 36. Troops defending from behind these works cause double firing casualties and receive casualties at 1/4 effect.

Combat: Defending troops count full strength while attackers do not count 3/4 of the C.S. as a penalty.

Morale: Defending troops have all morale penalties reduced to 1/4.

Bridges: Subdivided into two classifications as follows.

Regular temporary bridges/pontoons:

Visibility: No effects.

Movement: May pass all arms in column of route, single carriageway. Infantry can also cross in skirmish order but no interpenetrations are allowed on the bridge.

Firing: Impact factors of between 24 and 36.

Combat, Morale: No effects.

Regular permanent bridges:

Visibility: No effects.

Movement: As above. In addition infantry can attack across in single stand front column of attack. Dual carriageway.

Firing: Impact factors of between 36 and 48.

Combat, Morale: No effects.

7. TERRAIN VARIABLE DELAY (TVD) TABLE

Regular terrain: No delay for any troops or formations. Deduct 50 mm for minor obstacles as agreed upon. Remember effects of visibility at all times.

Rough terrain: All troops and formations allowed but all must roll against table for percentage of allowed movement each turn. Units cease to have to roll when the last part of the unit has exited from the terrain. Troops in column of route need not roll at all.

Rugged terrain: Column of route and skirmish troops only unless noted otherwise. Roll for percentage of allowed movement each turn.

<u>Die Roll</u>	<u>Effect</u>
1-2	No movement that turn
3-4	One quarter speed for the formation
5-6	One half speed for the formation
7-8	Three quarters speed for the formation
9-0	Full speed for the formation

Chapter XII — Command and Control

1. Each player will always be represented by a personal command figure. This figure represents himself and his staff. Commanders are rated as one of three levels of efficiency (Poor, Average, or Crack) and these categories determine the limit of his ability on the table top to influence units under his command.

Poor - Influence troops out to 200 mm

Average - Influence troops out to 300 mm

Crack - Influence troops out to 400 mm

Whenever troops under command are within that distance, or command radius, as it is called, they do not suffer the -30 morale penalty.

2. In games of three or four brigades on each side the commander should represent a brigade commander for each player. In games of up to Corps size actions each player should represent a divisional commander. At this level separate light cavalry brigades should be considered as assigned directly to one of the divisional commanders and all artillery should also be assigned out to specific division commanders. In games of multi-corps engagements the actual player becomes a corps commander but individual division commanders should still be represented on the table and command radius measured from them.
3. **Command presence:** In addition to their control function mentioned above commanders can attach themselves directly to units under their command to further elevate their morale status. Attachment is done during the Deployment Phase of the turn and a command figure may claim to be attached directly to up to an infantry regiment or a cavalry brigade. These units then add a plus thirty modifier to any morale checks they are required to make while the commander is attached. Other units within the chain of command of that commander still remain in the appropriate command radius distance to the command figure in order not to be penalized by the -30 morale penalty. Commanders can detach themselves only during an ensuing deployment phase. In those situations where the units to which he has attached himself are broken and routed then all units in his command must take a morale check with the -30 penalty for being out of command radius since the commander is required to rout along with those units.

4. Commanders suffer a possibility of being injured whenever they are attached to units. The losses suffered each turn by those units are totaled and the commander is injured on a die roll of 1/10 of the total losses to those units. (*i.e.* if a regiment lost 25 C.S. points a 1 or 2 would cause injury.) Once injured, the commander loses his command radius ability. A successor is immediately chosen from his entourage or the senior brigade commander assumes the role, but a die roll is made to determine the new commander's effectiveness rating. This new rating can never be greater than the injured commander's rating.
5. To determine the commander's effectiveness ratings at the start of a game simply roll the dice. A 01-33 gives a Poor commander, a 34-66 gives an Average, and a 67 or above gives a Crack. Players with a greater interest in historical research may assign ratings to specific commanders but these listings have to be agreed upon with your opponents in advance of any game.

