DE BELLIS MULTITUDINIS

Wargames Rules for Ancient and Medieval Battle

3000 BC to 1500 AD



by Phil Barker and Richard Bodley Scott

Version 3.2 April 2011

Explanatory note for Version 3.2

Phil Barker and Richard Bodley Scott jointly developed all versions of DBM up to 3.0, published in July 2000. After that they went their separate ways.

Phil started to develop DBMM which he intended to be the successor to DBM. Richard at that time did not consider that changes to DBM were needed. The prototype of DBMM was put on the web for open discussion and after over two years testing, DBMM 1.0 was published in 2007. Meanwhile Richard had decided to accept suggestions and update DBM and in 2005 he issued amendment sheets to update DBM to version 3.1; Phil had no direct input to this version, but many of the changes resemble sections of the DBMM rules. The changes between 3.0 and 3.1 are indicated in blue.

In 2009 John Graham-Leigh (not a member of Wargames Research Group but an organiser of many DBM competitions) developed some amendments as house rules for use in his competitions. In 2011 Richard approved these amendments as DBM Version 3.2. (Phil, being fully occupied with version 2.00 of DBMM which was published in 2010, took no part in these discussions.) The 3.2 amendments are shown in red in this document.

Phil and Richard have been prevailed upon by John to permit the electronic publication of DBM version 3.2, partly as an historical document and partly for the convenience of those who wish to continue using these rules. Until this was done, neither version 3.1 nor 3.2 had been published as a stand alone set of rules.

The original four books of army lists for DBM are now out-of-print, but the new and extensively-revised books of DBMM army lists each include a section explaining how to use them with DBM.

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DE BELLIS MULTITUDINIS

INTRODUCTION

This rule set is an extension of our very successful "De Bellis Antiquitatis", more familiarly known as DBA. It chiefly differs in being intended as a direct competitor for current mainstream wargames rules for the ancient and medieval period, such as our own WRG 7th edition, and to satisfy those players who like uncomplicated rules, but enjoy a table covered with figures. It is accordingly designed to be suitable for battles with armies of several hundred figures, played on full size tables and lasting two or three hours, and to provide more detailed period flavour than DBA. Special effort has been made to ensure suitability for 25mm figures to tempt some of the older hands' favourite armies out of retirement. This Version 3.0 contains further revisions resulting from massive electronic and other feedback from players across the world, to improve play balance, prevent misunderstandings and penalise gamesmanship. It has a radically new terrain system requiring a real general's skill in exploiting the features provided by nature rather than ingenuity in tailoring battlefields.

DBM retains the basic troop types, mechanisms and simplicity of DBA, and DBA players will find they adapt readily. As with DBA, our intent is to provide the simplest possible set of wargames rules that retain the feel and generalship requirements of ancient or medieval battle. The rule mechanisms used start from the premise that the results of command decisions can be shown rather than the minutiae of how orders were communicated and interpreted, that differences between troops of the same class and era were relatively unimportant, and that most shooting regardless of theoretical weapon range was at very short distances. No order writing or record keeping is necessary and time consuming reaction tests are dispensed with. The resulting system is much faster moving than before and more interesting to spectators. It emphasises the talents of the general rather than those of the accountant, requires much less effort, and, despite the increased use of simple dicing procedures, keener tactical awareness. The simple rule mechanisms produce effects which are more subtle than may be immediately apparent on first reading, and are the fruit of much detailed development work. They should not be tampered with.

A points value system has been introduced, to facilitate the battles against unhistorical opponents which now tend to be deplored, but which are almost inevitable with large army games against strangers, and to enable players to adapt their existing armies. Unlike in previous large scale rule sets, no special rules are needed to simulate scouting, forced marches, accidental encounters or attacks on a marching force, since they will occur naturally as a consequence of players pressing ahead with march moves during the early part of the game, sending detachments in front or laying ambushes.

We see DBM as complementary to and emphatically not a replacement for DBA. Each has its own advantages. Some players will inevitably be tempted to introduce some of the features of DBM into their DBA games, especially the points value system. We strongly advise against this. All those we consider appropriate have been included in the current version of DBA, and others would reduce the value of DBA as an introductory, fast play and campaign battle set.

Conversely, DBA is an excellent introduction to DBM. Those players not already familiar with the system should consider playing a few DBA games first as a training exercise. DBA is now so widespread that willing opponents with a set of rules and a pair of armies should not be hard to find.

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Includes v3.1 Amendments dated 27 February 2005 and 3.2 dated 18 April 2011

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DESIGN PHILOSOPHY

DBM and DBA differ from previous rule sets in two major respects, the command and movement system and the combat system.

The command system is simple and arbitrary, but produces results very similar to those from more detailed systems incorporating written orders, transmission by messenger and interpretation by recipients. In one respect it is markedly more realistic, since it produces visible battle lines rather than the "firework display" of independent units found with other rule sets. We have concluded that we must be doing something right, even if we are not entirely sure what it is! The passage of time, terrain and battle bring a progressive visible deterioration in organisation which players must devote attention to repairing. Keeping a barbarian or feudal army under control calls for real skill.

The traditional functional division into units is dispensed with. Movement and combat is by elements, each consisting of a fixed number of figures. Elements can be moved individually, or be combined into and move as temporary groups which can be part units, a full unit, or more than a unit. An element does not represent a unit, but the smallest sub-unit or body capable of operating independently. Units may still exist in that several regular elements may have the same dress or shield emblem and one of them include a standard and officers, but they have no function other than as a possibly convenient group. Elements always fight individually but are supported by neighbours.

Troops are primarily classified by their method of fighting instead of by weapons and armour. Finer grading within each type reflects perceived efficiency rather than unit prestige or title. Our principal concern has been to reflect relationships between historically opposed types, and not to speculate unduly on the relative effectiveness of anachronistic opponents.

Combat differs from previous rule sets in almost abolishing the artificial distinction between the traditional combat phases of **shooting** and **melee**. That the bases of opposed elements are in contact does not necessarily imply that they are exchanging handstrokes, although this may be so, but that they are closely engaged at the distance preferred by the tactically dominant troop type. If it still worries you, remember that base depths are over-scale. For example, the four ranks of close order infantry represented by an element of spearmen may occupy only 4 paces depth in real life, but the element base depth represents 30 paces in 15mm scale. There is room for a little space between enemies. Similarly, multi-element depth formations include space behind the supporting ranks once they have closed up for combat. Moving troops often only occupy the first few mm of their base, so may not have as far to move when turning as it may seem, and can wheel out of line with adjacent troops without having to clear the front of their neighbours' base first.

When spearmen are in contact with spearmen, they are indeed fighting hand-to-hand. However, when horse archers or foot skirmishers with javelins are in contact with an element of spearmen, this represents them being a few paces apart. If the spearmen give ground, this is because of the effect of their opponents' shooting. If the horsemen or skirmishers flee, this is because the spearmen have charged to relieve the pressure and temporarily chased them out of reach. Even in hand-to-hand combat, missile weapons played a part. A shower of hand-hurled javelins often immediately preceded hand strokes or was kept up during it by rear ranks shooting overhead. Often, some individuals in the front rank would hurl their spears, while others kept them in their hand to thrust.

Too much attention is often paid to maximum rather than normal ranges. Horse archers attacking infantry spearmen could sit still on their horses 200 paces away and shoot, but did not. Why should they? They could and did instead in turn gallop by the infantry 10 paces away and be equally safe from being caught. The closer the range shot from, the easier it is to hit the target, the more likely that hits will penetrate armour and the more injury inflicted after penetration. What of horse archers attacking horse javelinmen? Surely they would gain by their longer maximum range? So they might, had the desperate javelinmen not immediately galloped to close the range. After two or three hurried shots, the bowman either continued the combat on inferior terms since he could not use shield and bow together, or galloped away to open the range and was often pursued straight off the battlefield or shot in the back. Shooting at longer ranges was not decisive, serving only to fix attention or impose caution, so is invisibly subsumed in various enemy proximity rules. Even with those troops who did shoot in large bodies at long range in artillery fashion, theoretical maximum ranges may be deceptive. A crossbow cocked up at 45° reaches further than a longbow. However, when the front end is raised, the target disappears behind it. We assume that the effect of early gunpowder weapons derived at least as much from their propensity to frighten men and animals by noise, flash and smoke as from the casualties caused.

We do not evaluate the results of combat in terms of casualties received and inflicted, but in terms of the element's immediate reaction. A real ancient general would not know that a body of men had just received a certain number of casualties. He would be able to see that it was forcing the enemy back, or losing ground, or scattering to the rear hysterical with fear. We accordingly give you this information and this only. The local effects of fatigue and morale are taken into account in combat results and their effect on troops to the side and rear. Their wider effects are simulated by the demoralisation rules. For instance, destruction of an element in combat simulates the flight of survivors, while the consequent destruction of elements close behind simulates the fate of troops carried away by their flight. With the passage of time the collective morale of a command may reach breaking point and the whole command start to crumble. Finally the whole army may seek safety in flight.

REPRESENTATIONAL SCALES

FIGURE AND MODEL SCALE

This is expressed as the height in millimetres of a figure representing a man 1.83 metres or 6 feet tall. Naval elements use models of reduced scale. This can be rationalised as them being seen at a distance by men on shore.

25mm, 15mm, 6mm and 2mm scales are all in use and all are fully compatible with these rules:

- 25mm is the traditional scale, is best for detailed painting, but has somewhat fallen out of favour lately. We hope that these rules will inspire players to dig out their old armies and give them some exercise. This scale is especially suitable for public demonstration games, where visibility can be a problem for spectators.
- 15mm is currently the most popular scale and is still large enough for detailed painting and for players to easily recognise the types comprising their opponent's army.
- 6mm and 2mm provide the ultimate in visual realism, but at the cost of increasing difficulty in painting and recognising troop types.

GROUND SCALE

This is the relationship between the distances measured on the table and those they represent on a real battlefield. It varies according to the figure and model scale used.

All distances in the text are quoted in multiples of paces (p) each of 0.75 metres or 2.5 feet. This is because the length of a man's stride has remained fairly constant throughout history, while such units as cubits, yards and metres come and go. Measure distances on the table with a **300p** card strip marked at **50p** intervals.

- 25mm figures: 50 paces in battle = 40mm measured on the table.
- 15mm or 6mm: 50 paces in battle = 25mm (or 1 inch) measured on the table.
- 2mm: 50 paces in battle = 20mm measured on the table.

TROOP REPRESENTATION AND DEPICTION

Each element represents, not a unit, but the smallest sub-unit or body capable of independent action. It consists of a rectangular base, to which are fixed several figures according to its troop type and the model scale. Elements vary in cost, and represent the number of men who would occupy that frontage, typically a nominal full strength of 122 to 256 riders or foot formed in a 4 man deep block, or sometimes in wedges or rhomboids, or a lesser number of more specialised troops usually formed in a single rank, such as up to 16 elephants 25 chariots with or without runners, 6 heavy artillery pieces, 30 light bolt-shooters, 25 war wagons, 2 to 5 galleys or ships or 5 to 20 boats, depending on individual size. An element of Hordes represents up to 1,000 men in a deep mass. Note that the first elephant element of an army can represent as few as 4 elephants, this reflecting the disproportionate effect of even a few elephants on enemy horses or on the morale of men unused to them.

Figures must accurately depict the troops they represent. The only exception to this is that generals, officers, standard bearers and musicians represent the majority type comprising their element.

TIME SCALE

Play is in alternate bounds. These do not represent fixed arbitrary divisions of time, but instead reflect initiatives and responses by the two sides. However, dividing known battle durations by the number of discrete phases that can be identified produces consistent enough results for us to define a pair of bounds as equivalent to 15 minutes in real life.

Except in the case of march movement out of contact, which is assumed to be continuous and to have been during the preceding enemy bound as well as your own current bound, move distances are not a function of time available and theoretical speeds. Instead they are based on typical tactical initiatives and counter-initiatives in real battles.

Troops contacted by enemy are assumed often to have countercharged even though not moved. Whether they did so in good time must be judged by the result of the ensuing combat.

PLAYING AREA

An ideal playing area is $2.7m (108") \ge 1.5m (60")$ [a standard table tennis table] if using 25mm figures, or $1.8m (72") \ge 1.2m (48")$ if using smaller figures. If competition organisers use $1.8m \ge 1.2m$ tables for 25mm games, armies should not exceed 350AP, and all dimensions specified in paces (**p**) in Terrain Choosing [P12-13] should be reduced to 5/8 normal.

DICE

All dice used are the normal 1 to 6 type. One dice is used for each general for all purposes. Those for irregular or ally generals must each be a different colour. Those for other regular generals of the same army must all be the same colour.

TROOP DEFINITIONS

Troops are defined by battlefield behaviour instead of by the formation, armour, weapon and morale classes usual in earlier rule sets. We distinguish only between troops whose fighting style differed sufficiently to need to be treated differently by either their general or their foe. Each troop type therefore includes all troops that fought in the same way, had a generally similar ethos and morale and had an equivalent effect on the other classes. Each type is identified by a name descriptive of its function,

Mounted troops can be Elephants, Knights Cavalry, Light Horse, Camelry or Expendables. Foot can be Spears, Pikes, Blades, Warband, Auxilia, Bowmen, Psiloi, Artillery, War Wagons, Hordes or Baggage. Naval can be Galleys, Ships or Boats.

Light Horse and Psiloi are referred to collectively as **Skirmishers**, and also together with Auxilia as **Light Troops**. Artillery except (X), war wagons and baggage are referred to collectively as **Train**. Foot other than train are referred to collectively as **Infantry**.

Troops within each type are additionally graded for efficiency relative to the average for that type, taking into account lesser differences in morale, degree of training, equipment or mobility, but not in prestige alone. This is necessarily subjective, but follows thorough discussion, often with recognised authorities on individual armies.

- Superior (S): Troops recognized by their contemporaries as of significantly superior morale and/or efficiency.
- Ordinary (O): Representing the great bulk of troops of that type.
- Inferior (I): Brittle troops historically identifiable as of significantly inferior morale or efficiency.
- Fast (F): Troops who move faster and further than average but are worse protected.
- Exception (X): Troops treated as special Cases.

All are also either **Regular** or **Irregular**. This somewhat arbitrary distinction chiefly reflects the ease with which they can be controlled by their general. Regulars are typically enlisted into units under officers appointed by the government and practised in manoeuvre and combat techniques. Irregulars typically join with acquaintances under local or tribal leader, and are less accustomed to waiting for, listening to, or precisely and instantly obeying formal orders.

ELEPHANTS, of either species and various crew complement. They are used to charge solid foot, to break through gateways, and to block mounted troops, whose frightened horses are reluctant to close with them. They can most easily be killed by artillery or by the continued showers of missiles of light troops. They are all irregular.

- Superior (S): Elephants of the Indian species with at least 6 crew and/or foot escort figures per model, such as escorted Seleucid elephants or heavily archer-crewed Burmese.
- **Ordinary (O):** Elephants of the Indian species with up to 4 fighting crew, such as those of Indian armies and Sassanid Persia. **Inferior (I):** Smaller elephants of the African forest sub-species with maximum fighting crew of 2, such as those used by

Ptolemaic Egypt, Carthage, Numidia and Rome.

Exception (X): Bolt-shooting engines mounted on elephants, such as those of the Khmer and Cham. They shoot and inflict shooting outcomes as if (F) artillery, but suffer shooting outcomes as if (I) elephants. They are treated as (I) elephants in all other circumstances. Opponents use their CF against elephants if in close combat, or if war wagons or bowmen shooting or shot at, that against artillery if not,

KNIGHTS, representing all those noble or heavy horsemen of high morale that charge at first instance without shooting, with the intention of breaking through and destroying enemy by sheer weight and impetus. The impetuous charge that enables them to sweep away lesser cavalry and all but the stoutest foot is also their Achilles' heel, leading to them being destroyed by massed longbowmen or by light horse too rashly pursued, where lighter cavalry would have pulled off earlier. They can be regular or irregular.

- **Superior (S):** French knights or gentry, and permanently embodied elite units of other European nations such as Royal or Ducal household gendarmes or the Military Orders, completely armoured in plate and/or mail, primarily armed with heavy lances, riding with stirrups on heavy horses themselves often partly protected by armour or textile caparisons, accompanied by lesser armoured and armed retainers such as coustilliers, squires, archers or pages, and charging fiercely at the gallop without too much regard to exact formation keeping. Unscythed charging chariots with 4 horses and 4 or more crew including spearmen such as later Assyrian or Indian chariots.
- **Ordinary (O):** Other knights, gentry or men-at-arms, with similar followers and similarly equipped, mounted and trained, charging at the gallop, but less impetuous and less skilled in individual jousting, unscythed charging chariots with 2 horses and 3 or 4 crew, at least one with long weapon, such as Hittite or Shang chariots and some Minoan or early Mycenaean generals' chariots, or 3 or 4 horses and 3 crew, at least one with long weapon, such as early Assyrian or later Chinese chariots.

Inferior (I):	Knights or men-at-arms unskilled with lance and relying mainly on sword or mace, often fighting either in
	deep clumsy wedge formations or dismounted, such as Byzantine kataphraktoi, medieval Germans or 100
	Years War English. Sumerian four-wheeled battle-cars with 4 asses, driver and fighting man with javelins.
Fast (F):	Less heavily armoured riders on lighter horses charging fiercely at the gallop, and armed either with lance but
	no shield such as Macedonian or Seleucid companions or Sarmatians, or with javelins or light spears capable
	of being thrown and shields, such as Goths, Vandals or pre-conquest Normans, or with lance and shield such as
	later Normans with armour limited to helmet and mail hauberk, or with fire lance such as some Chinese
	cavalry. Unscythed charging chariots with 2 horses, driver and 1 fighting man with spear, such as Minoan or
	early Mycenean chariots.
Exception (X):	Completely armoured shieldless cataphracts wielding long kontos two-handed on fully armoured horses and
	charging in close formation, such as Parthian or Sassanid cataphracts. They are treated as (S) knights when
	shot at by bowmen or naval, or in close combat to their front against light horse, spears, pikes, or bowmen, as
	(I) knights in close combat to their front against knights except (X), expendables or warband, otherwise as (O)

CAVALRY, representing the majority of ancient horsemen, usually partially armoured, combining or following close range javelin or bow shooting with controlled charges. Their shooting is more intense than that of light horse, often using circulating formations or halted rapid archery techniques to concentrate missiles in place and time, and may force enemy foot to halt or recoil. Being less impetuous, they can retire out of danger or to breathe their horses when knights would charge on to disaster. They can be regular or irregular.

knights. They cannot claim rear support.

- **Superior (S):** Either all combining bow with lance, such as Avars or Belisarius's boukellarioi, or lacking lances but on partially protected horses, such as Saka nobles or many Sassanids, or with handgun. Skirmishing chariots with well-armoured driver and archer, and 2 horses, also often armoured, such as Hurri-Mitannian, Egyptian or Canaanite chariots.
- **Ordinary (O):** Depicted with lance and trained to fight in a formation mixing ranks armed with lance and shield or with bow, such as later Byzantine cavalry, or riding unprotected horses and armed with javelins and usually shield, such as the majority of ancient cavalry, or with bow and spear, such as early Achaemenid cavalry, or with bow and sword, such as most Belisarian Byzantine cavalry and medieval Persian cavalry, or armed with lance but relying on fencing skills rather than the impetus of their charge, such as Arab cavalry, or with halberd or crossbow. Skirmishing chariots with 2 to 4 unarmoured horses or other equids, and crew comprising driver and one or more unarmoured archers, such as Elamite chariots, or armoured or unarmoured javelinmen, such as later Mycenean, Libyan, Kyrenean or British chariots.
- **Inferior (I):** Poorly trained or inexperienced cavalry, such as early classical Greek cavalry, early Indian cavalry, some Byzantine thematic troops during periods of neglect, and mounted Vikings or Saxons. Sumerian platform or straddle cars with a single javelin-armed crewman.
- LIGHT HORSE, including all riders who skirmish in dispersed swarms evading enemy charges. They can be regular or irregular. Superior (S): Armed primarily with bows, but eager to take advantage of disordered enemy by charging home, such as Huns or Turkomans.
 - **Ordinary (O):** Relying on javelin, such as Early Thessalians, Numidians, Late Roman Equites Illyricani or medieval Spanish Genitors, or with lance, such as Macedonian Prodromoi. Such troops were forced to try and close with bow-armed equivalents to avoid the arrows, their opponents' sensible desire to open the range tuning almost inevitably to flight
 - **Fast (F):** Placing almost sole reliance on bow shooting from close range at the gallop, and on speed to avoid contact, often gaining extra mobility from remounts, such as Parthian horse archers.
- Inferior (I): Scouts or raiders riding camels, asses or deer. Horsemen skirmishing with crossbow.

CAMELRY, including all other warriors who either fight from camels, or dismount from them to fight on foot, but keep them close at hand to act as an obstacle or to disorder cavalry, whose horses dislike them. They are all irregular.

- **Superior (S):** Exceptionally heavily armoured or exceptionally feared and fanatical camel riders fighting exclusively hand-to-hand, such as Parthian 2nd century A.D. cataphract camelry or Tuaregs.
- **Ordinary (O):** Camel riders of nations that used them in mass, the riders fighting mounted or dismounting to fight with bows, javelins or swords, such as Midianite Arabs.
- **Inferior (I):** Cameleers improvised by mounting troops on pack camels, such as those used by Cyrus against the Lydians, or fighting on foot behind a barrier of tethered pack camels, such as 6th century Moors.

Exception (X): Camels disguised as elephants to frighten real elephants, and also Chinese paper lions. They move as if baggage, except that they can contact elephants, and fight as **(I)** camelry, except that they can panic elephants.

EXPENDABLES, including scythed chariots fitted with scythe blades and spear points, usually with 4 horses and a single crewman, intended to be driven into enemy formations in a single suicidal charge early in the battle to break up or destroy them, and also all animals to be stampeded into enemy, such as cattle herds, wild elephants or Chinese thunder-bomb oxen. They are most dangerous to troops who offer a solid target and cannot dodge easily, so are often countered by psiloi. They are always irregular and **Ordinary (O)**.

SPEARS, representing all close formation infantry fighting with spears in a rigid shield wall. (S) are always regular, unless dismounted knights. Others can be regular or irregular.

- Superior (S): Unusually well trained and confident elite regular spearmen, such as Spartan hoplites or the Varangian guard if equipped as spearmen.
- **Ordinary (O):** Regular spearmen, drilled to fight and perform simple manoeuvres in close formation, such as mercenary hoplites or Punic African foot, and also irregulars, such as good citizen hoplites, whose aggression and democratic leanings tend to submerge their training.
- **Inferior (I):** Reluctant or sketchily drilled spearmen, including regulars such as citizen hoplites dragooned into reluctant obedience by a domestic or foreign tyrant, or of effete cities, or medieval town militia, and also determined irregular peasants practised only in keeping line, such as Saxon fyrd.

PIKES, including all close formation infantry fighting collectively with pikes or long spears wielded in both hands. They are always regular, except for **(I)**, who can also be irregular.

- Superior (S): Exceptionally effective elite pikemen, such as argyraspids or Swiss.
- **Ordinary (O):** Other pikemen drilled to fight effectively in close formation with true pikes, such as other Hellenistic phalangites and languesknechts.
- **Inferior (I):** Less formally trained peasant or militia troops with long spears or pikes grasped in both hands, such as Flemings or lowland Scots, or drilled pikemen of low morale or expertise, such as those of client states or hurriedly raised.
- Exception (X): As (I), but with at least the front rank carrying large pavises, such as Sumerian, Minoan or early Mycenaean spearmen. Except for a reduced number of ranks allowed to fight, they are treated as (S) pikes when shot at by bowmen or in close combat to their front with cavalry, light horse, auxilia, bowmen or psiloi, otherwise as (I) pikes.

BLADES, including all close fighting infantry primarily skilled in fencing individually with swords or heavier cutting or cut and thrust weapons, sometimes supplemented by hand-hurled weapons. They can be regular or irregular.

Superior (S): European knights or men-at-arms completely armoured in plate and/or mail, if fighting on foot, such as English men-at-arms of the 100 Years War or Wars of the Roses.

- **Ordinary (O):** Partially armoured well trained close formation troops with missiles as well as sword and shield, such as legionaries, or with two-handed cutting or cut-and-thrust weapons, such as Saxon huscarles, later samurai, halberdiers or English retinue billmen. Also all gladiators.
- **Inferior (I):** Foot generally equipped as immediately above, but less confident or inadequately trained, such us newly recruited or imitation legionaries or English commission of array billmen.
- **Fast (F):** Loose formation troops such as Dacian falxmen, early Viking raiders, some early samurai, Japanese warrior monks or late medieval Spanish sword-and-buckler men.
- Exception (X): Men armed with weapons specialised against heavily armoured mounted troops, such as the exceptionally heavy clubs wielded with both hands said to have been used by Aurelian's "Palestinians" and very doubtfully by Constantine I's legionaries against cataphracts, the Low Countries plançon, the Byzantine menaulion and Swiss halberds. They are treated as (S) blades when in close combat with knights or (S) camelry to their front, and can be supported against these by a second rank element of (X) blades, also counting as (S). They can only support or be supported by (X) blades. If expressly required by their army list to be mounted on a double element base, they are treated as (O) blades when in close combat to their front with troops other than knights or (S) camelry. In all other circumstances, except for impetuosity [See P.19], they are treated as (F) blades.

WARBAND, including all irregular foot that rely on an impetuous and ferocious collective charge to sweep away enemy foot, rather than on individual skill. They are all irregular.

- **Superior (S):** Fighting densely packed by forward pressure, and either having a strong belief, often shared by their contemporaries, in their own invincibility, such as early Galatians, or armed with heavy throwing weapons, such as Franks, Alemanni or Rugians. Chieftain's bodyguards and dismounted irregular cavalry.
- **Ordinary (O):** Others fighting in dense formation but emphasizing mutual cohesion, such as Germans.
- Fast (F):Fighting in loose formation and emphasizing speed in the charge, such as Gauls, Celtiberians, Ancient Britons,
Dacians or Galwegians. Also war dogs.

AUXILIA, representing foot able to fight individually hand-to-hand and to skirmish but emphasizing mobility in difficult terrain rather than cohesion or aggression. They can be regular or irregular.

Superior (S): Regular foot drilled to fight in close formation when necessary, and with mail, darts or spear besides javelins and sword, such as Hellenistic thureophoroi or Roman auxilia. Irregular foot with heavy throwing weapons, such as Spanish scutarii, or with combinations of javelins with long spear or two-handed cutting weapon, such as Illyrians or Thracians.

Ordinary (O): Foot relying only on javelins or short spear and light shield, such as Greek peltasts or mountain tribesmen. Inferior (I): Poorly motivated and trained regular troops, such as late Roman border auxiliarii. Other troops with javelins, but who are shieldless or lack confidence, or who would be psiloi were they not too numerous to skirmish.

Exception (X): Foot partly or entirely lacking effective shields and relying on long spear or cut-and-thrust pole weapon instead of javelins, such as Akkadian spearmen who have discarded their shields, North Welsh spearmen or later Japanese ashigaru. Disadvantaged against missile users, but capable of resisting mounted charges if clumped, they are treated as (S) auxilia if in close combat to their front against knights, cavalry, Wb or expendables, otherwise as (I) auxilia. However, they benefit from deep formations.

BOWMEN, representing foot who fight in formed bodies by shooting collectively with missiles shot at longer range than psiloi, often in volleys at command, and who rely on dense shooting, hand-to-hand weapons, personally prepared obstacles or accompanying pavise bearers for survival at close quarters instead of skirmishing or evasion, or who are packed too tightly to skirmish effectively. They can be regular or irregular.

- **Superior (S):** Exceptionally effective shooters with unusually powerful bows and high skill and morale, able to outshoot opponents and equally prepared to fight indefinitely hand-to-hand with sword and buckler, spear or two-handed cutting or concussive weapon, often protecting themselves from knights by stakes or potholes, such as English or Indian longbowmen, dismounted early samurai or Ottoman janissaries.
- **Ordinary (O):** Shooters with lesser bows or skill or with crossbows, able to maintain a prolonged shooting exchange and fight for a limited period hand-to-band, by virtue of armour, pavises, spears, shields and side arms or high discipline or morale, such as Dynastic Egyptian, Palmyrene, Roman or Viking archers and mercenary or civic crossbow companies.
- **Inferior (I):** Shooters lacking the protection or discipline to be able to prolong a losing exchange and unwilling to fight hand-to-hand, such as Elamites, Seleucid levy archers, Goths, Francs archers, and all bowmen who would be **(O)** psiloi were they not too numerous to skirmish.
- Exception (X): Foot trained to fight in a formation having a front rank or ranks with pike or with spear and a large shield or pavise, but with the majority of ranks armed with bow or crossbow, and tactically emphasizing shooting rather than close combat, such as Achaemenid Persian sparabara infantry, Alexander's experimental phalanx, Italian civic infantry or Burgundian pike and longbow infantry. They must either be mounted on a double depth base together with an element of (O) or (S) bowmen behind them, or on a normal base as a single element alternating pike or spear armed figures with shooting figures. They are treated as spears when a front rank element in close combat against foot to their front, counting as (O) if they have a rear rank of (S) bowmen on the same base, otherwise as (I). In all other circumstances, they are treated as bowmen, counting as (S) when in close combat against mounted to their front, or when enemy bowmen shoot or shoot back at them, or if they have a rear rank of (S) bowmen on the same base, otherwise as (O). Bowmen (X) cannot shoot from a rear rank, nor provide or receive rear support in close combat.

PSILOI, including all dispersed skirmishers on foot shooting individually with javelin, sling, staff sling, bow, crossbow or hand gun, who fight in a loose swarm hanging around enemy foot, running away when charged. Also all shooters supporting primarily close combat infantry formations from rear ranks. They are useful to delay enemy, occupy difficult terrain or support friends, but not where quick results are needed or unsupported in the open against cavalry. They are able to defeat elephants and scythed chariots by harassing them with missiles, using their agility to dodge them and avoid contact. They can be regular or irregular.

Superior (S): Armed with javelins and small shield or with hand gun, able to drive off rival psiloi.

Ordinary (O): Armed with bow, sling, crossbow or staff sling, useful to support foot, sometimes from behind.

Inferior (I): Armed only with hand-hurled missiles and no shield, useful mainly to pester and delay enemy foot.

Exception (X): Armed with incendiaries, corrosives or biologicals such as Greek Fire siphons, hand-hurled naphtha bombs, Chinese fire lances, quicklime or hornets' nests, They are treated in all circumstances as **(I)** psiloi, but substitute artillery combat factors when in close combat to their front against any but auxilia or psiloi.

ARTILLERY, whether gunpowder, torsion, counterweight or powered by men pulling ropes. It is always regular.

- Superior (S): Torsion counterweight or large rope pull stone-throwers. Bombards or heavy cannon.
- **Ordinary (O):** Bolt-shooting tension or torsion engines. Crew-served rocket launchers.

Inferior (I): Small rope pull or gunpowder artillery including organ guns/ribaudequins. Man-held rockets. Also flaming pigs, which are treated as if rockets except that they cannot be used across water or fortifications, or overhead.Fast (F): Bolt-shooting engines mounted on light carts but not those on wagons.

Exception (X): Hand gunners formed in ranks, such as Ming Chinese. They are treated as (I) auxilia when in close combat, otherwise as (F) artillery except that they move as (O) bowmen, that their shooting range is only 100p, that only the normal front edge counts as such, so that they turn to face when contacted in flank or rear, and that if 2 elements deep they can shoot in both their own and the enemy bound.

WAR WAGONS, including all slow wheeled vehicles intended to be fought from and to move on the battlefield, but not ordinary transport wagons or carts utilised to laager camps. They can be regular or irregular.

- **Superior (S):** Large wheeled towers manned by bowmen and either pulled by oxen or manhandled, such as those attributed to the Achaemenid Persians by Xenophon in the Cyropaedia or those used in sieges.
- **Ordinary (O):** Mantleted wagons filled with men shooting from behind cover with bow, crossbow, handgun or light artillery, such as those of the Hussites, Poles, Hungarians or Gulai Gorod.
- **Inferior (I):** Wagons carrying a large standard guarded by picked troops on foot, such as the royal wagon of the Khazars, that containing the holy banners of St. Peter and St. Cuthbert used by the Anglo-Normans at the Battle of the Standard, or the carroccio of an Italian state. Command litters.

Exception (X): Republican Roman anti-elephant carts and similar blade-studded man-pushed wagons. They are treated as **(O)** war wagons, except that they cannot shoot, can contact enemy, and are less easily destroyed by elephants.

HORDES, including all unwilling or incompetent foot brought to swell numbers and/or perform menial services, or attracted by desperation, religious or political fanaticism or greed. They are always irregular.

- Superior (S): Fanatic armed mobs, such as Crusader pilgrims, French peasant jacquerie or Scottish ribaulds.
- **Ordinary (O):** Peasants or camp servants issued with cheap weapons, but with little confidence in their ability to use them and no stake in the battle except personal survival, such as Achaemenid or Sassanid levy infantry or Byzantine soldiers' servants.
- **Inferior (I):** Unarmed civilians driven ahead with whips by invaders such as Mongols.
- **Fast (F):** Unorganised enthusiastic rabble with improvised weapons and relying on ambush from difficult terrain and/or street fighting skills, such as light-footed mountain peasant freedom-fighters, Byzantine racing factions or Alexandrian rioters.

GALLEYS, including all swift rowing vessels intended to ram or use fire projectors. They are always regular.

- **Superior (S):** Large galleys with exceptionally powerful marine contingents and gunpowder or torsion artillery or fire siphons, such as quinquiremes/penteres, hepteres, dekares, later Byzantine dromons or the heaviest armed late medieval galleys.
- **Ordinary (O):** Smaller galleys still large enough for the line of battle, such as tetrares, triremes/trieres, Byzantine pamphylia or large medieval galleys lacking powerful bow cannon.
- **Fast (F):** Fast lightly built galleys with smaller specialised marine contingents, such as penteconters, triemioli, Roman liburnians, medieval Venetian or Genoese galleys and North African galliots.

SHIPS, including all slow, unhandy or primarily sailing vessels intended to carry cargo, and also galleys converted to carry horses or as unmanoeuvrable siege towers for sieges. They are always irregular.

- Superior(S): With stem and bow castles and large numbers of troops embarked, such as cogs or uscieri.
- Ordinary (O): With large numbers of troops embarked, such as those of the Veneti and medieval navi or nefs.

Inferior (I): Either acting as horse transports, or carrying supplies and substituting for land baggage elements. Horse transports are the only naval that can embark mounted troops.

Exception (X): Fastened together in pairs to carry siege towers. They are treated as **(S)** ships if shooting or shot at or if in close combat against fortifications, otherwise as **(I)** ships.

BOATS, including all primarily rowing vessels not intended to ram. (F) and (X) are always regular, others always irregular.

- Superior (S): Large wooden boats with several men per oar and filled with warriors, such as Viking longships.
- Ordinary (O): Smaller undecked wooden boats filled with warriors, such as triaconters or lembi.
- **Inferior (I):** Hide and/or wicker boats filled with warriors, such as Pictish or Irish curraghs.
- **Fast (F):** Despatch boats attached to galley fleets.
- Exception (X): Converted rowing vessels with penthouse for torsion artillery. Treated as (S) artillery if shooting or shot at, otherwise as (I) boats.

BAGGAGE, including all logistic support. Its main game function is to require protection. If permitted by an army list, (I) ships can be substituted for land baggage elements. Land baggage is (O) if protected by fortifications, (I) if not. All baggage is irregular. Baggage elements must be either mobile such as wagons in draft, pack animals, flocks, herds or (I) ships, or immobile, such as tented camps or draft animals tethered in the centre of a wagon laager. Only mobile baggage can move. Only immobile baggage can be protected by field fortifications.

FORTIFICATIONS

These can be temporary [TF], such as a palisade and/or ditch and bank, a wagon laager or a thorn boma, or permanent [PF] around a built-up area [BUA] such as a turf or stone wall with walkway and parapet and often raised towers. A BUA more than **750p** across must have PF, and others may have TF or PF. These must completely fortify its perimeter, except optionally where it abuts the table edge or a waterway, and must include 1-3 on-table fortified gateways to which any internal roads must connect. A fortification intersecting a table edge is assumed to be part of a closed circuit, the off-table part of which is not paid for. Towers must be at least 1 element width apart. Corner pieces of no internal frontage are not paid for and cannot be attacked, overlapped or crossed. The smallest gap permitted between non-continuous fortifications is 1 element width. The angle inside corners of continuous fortifications cannot be less than 90 degrees nor more than 270 degrees. TF, other than around BUA or the plashed wood edges of an ambush, must be in the army's own deployment area. TF paid for at reduced cost for BUA cannot be used for camps and vice versa. TF paid for at full cost can be used for BUA, camps or elsewhere. Fortifications are not troop elements.

EXCHANGING MOUNTED AND FOOT ELEMENTS

Those knights, cavalry or light horse specified in our army lists as able to do so can dismount to fight on foot, replaced by duplicate foot figures. Others can do so only to defend fortifications (in which case they must remount to leave these), or within **300p** of enemy war wagons on a hill or enemy fortifications, or if a general (plus any troops double-based with him) whose command is now otherwise entirely on foot. All must dismount to defend fortifications. Non-(**X**) camelry are already assumed to fight dismounted where appropriate, using camelry factors and outcomes, so can only be replaced by foot figures to defend fortifications or within **300p** of enemy war wagons on a hill or enemy fortifications, and must be to defend fortifications. Elephants, expendables and camelry (**X**) cannot dismount or defend fortifications. Troops need not dismount to capture ships or loot baggage since we assume that individuals get off to loot or make a passage while others still fight mounted. Unless specified otherwise by our army lists, mounted troops dismount as follows:

If armed with bow, crossbow or handgun:

- Knights with bow if (X) as Bowmen (S), otherwise as Bowmen (O).
- Cavalry if (I) as Bowmen (I), if with handgun as Artillery (X), otherwise as Bowmen (O).
- Light Horse with bow or crossbow or Camelry with bow as Bowmen (I).

Otherwise:

- Knights (S), (O) or (I) as Blades (S), Knights (F) as Spears (O) or Blades (O), Knights (X) as Spears (S).
- Regular Cavalry if (S) or (O) as Auxilia (S), if (I) as Auxilia (I).
- Light Horse as Auxilia (I).

Dismounters exchange 3 chariot elements, 1 of other knights, cavalry or camelry or 2 of light horse for 1 foot element. Except at deployment time, or to mount to spontaneously advance against demoralised enemy or flee, mounting or dismounting requires a full single element tactical or march move for each dismounted element. If it is to remount, an appropriate chariot or cavalry size base with riderless mounts and holders must be provided for and accompany each dismounted element adjacent to its rear, or that of any element providing rear support or overhead shooting or its mounts.

If so specified in their army list, infantry can be given additional bases with riderless mounts and holders as above and classed as **Mounted Infantry**. Unless they have lost or left their mounts, they march and flee as camelry if on camels, cavalry if not, but otherwise move as foot. They always count as foot when shooting, shot at or in close combat, so do not use a tactical move to dismount/remount. Duplicate mounted figures can optionally be used when they are mounted.

The riderless mounts of any troops do not count for any element count. They are immediately removed from the table if in even corner contact with enemy, or if shot at, or if their owners are destroyed, make a tactical move except to remount, a march move except by mounted infantry, or any spontaneous or outcome move on foot, or pass through or are passed through by any but psiloi; if so, they cannot be remounted. Enemy contacting riderless mounts do not have to make one of the permitted contacts listed on P.18, and can continue their move after the mounts are removed. All infantry shown in Army Lists as compulsorily mounted are instead treated as optionally mounted.

NAVAL LANDING FORCES

Except for boats (F), which have insufficient capacity, and ships (I) if substituting for land baggage, each naval element can and must carry one land element of a type specified in our army lists. Its cost is additional to that of the naval element. A naval element in contact with a beach, quay or river bank can disembark its landing troops. Until landing troops are re-embarked, it cannot be moved, and is assumed to have few fighting men, so has minimal ability to defend itself. If the terrain lacks any route of access for naval elements, their landing troops and baggage instead deploy on land.

ORGANIZING AN ARMY

ELEMENT BASING

All figures must be combined into elements of several figures fixed to a thin rectangular base. Base size is not critical provided that all bases have the same frontage and both armies use the same conventions. The basing specified below is a simplified version of that used for WRG 7th and is also suitable for DBA. Naval elements use models of reduced scale.

If figure scale is: The largest recommended naval scale is Element frontage (width) is Depth if:	25mm 15mm 60mm	15mm 6mm 40mm	* 6mm 1/600 40mm	2mm 1/1200 30mm
Elephants, Chariots, Expendables, Artillery unless (X) or on wagon, Baggage	80mm	40mm	40mm	10mm
Knights, Cavalry, Light Horse, Camelry, Hordes	40mm	30mm	20mm	10mm
Blades (F) or (X), Warband (F), Auxilia, Bowmen, Psiloi, Artillery (X)	30mm	20mm	10mm	10mm
Spears, Pikes, other Blades, other Warband	20mm	15mm	5mm	10mm
War Wagons, Artillery on wagons or naval (minimum for naval scale above)	120mm	80mm	80mm	60mm
 Models per element if: Elephants, Chariots, Camelry (X), Artillery (S) or (F), thunder-bomb oxen Artillery (O) or (I) War wagons (S) or (I), Galleys, Ships Boats (S) or (F) (for naval scale above) Other war wagons Other Boats (for naval scale above) 	1	1	2	3
	1-2	1-2	2-4	4
	1	1	1	1
	1	1	2	3
	1-4	3-4	3-4	3-4

Elephants (S) add extra crew or 2 or more escort figures and Artillery 2 or more crew figures per model. A Baggage element typically has one or more tents or yurts if immobile, a wagon or several pack animals with drivers if mobile.

Figures per element (unless chariots, for which see above) if:			
Light Horse (including (I) mounted on camels). Psiloi	2	2	4
Knights (S), (O), (I) or (F), Cavalry, other Camelry, Blades (F) or (X),			
Warband (F), Auxilia if irregular, Bowmen if irregular	3	3	6
Knights (X), Spears, Pikes, other Blades, Auxilia if regular,			
other Warband, Bowmen if regular, Artillery (X), cattle herds	4	4	8
Hordes	5-8	5-8	10-16

* A better alternative for 6mm is to use 15mm base depths and double the number of 6mm figures specified above, based in two rows. Except for **(O)** war wagons, the number of models remains that specified, based in a single row. Though it requires more figures, this system gives a better impression of large bodies of men. It also allows the representation on each element of formations such as wedge or cantabrian circle, or horse archer parties galloping and in reserve.

Regular figures should be evenly distributed along the base in a single level row. Irregulars are distinguished by using figures of differing type, pose and/or colour scheme placed more randomly. 6mm blocks need to be cut and combined, with irregular or skirmishing troops often in small random clumps. 2mm figures come in blocks of varied size, 4 of which make a warband or horde or 2 any other element. Mount war wagons in single file. The general's element must be recognisable by his figure or standard. Such elements and any depicting unit commanders fight as the rank and file type.

It is sometimes convenient to base 2 elements that historically habitually fought together on 1 double depth base. This is permitted only if the rear element could provide rear close combat support to that in front, or could shoot over it at a target on the same level, or if baggage. Double-based knights (I), instead of 2 rows of 3 25mm or 15mm figures, have 1 each of 2 and 4, or interleaved rows of 1, 2 and 3. A double element counts as 2 elements in all circumstances, except:

- A double element moves as if a single element having the maximum permitted move of its slower type.
- A double element normally expends PIPs as if a single element of whichever type would require the most if alone. If, however, it moves backwards (i.e. any part of it crosses the original line of its rear edge), it expends PIPs as if 2 single elements, unless both its elements are cavalry or both are skirmishers.
- A double element which is not part of a group contacts enemy or responds to contact as if a single element.
- A double element makes outcome moves as if a single element of the front type.
- If only one element of a double element is destroyed, the double element is replaced by a single element of the other element's type. The surviving single element remains in its original position.

When a double element recoils or pursues, it moves back or forward the depth of the front rank element, usually half the depth of the double element. When a double element is destroyed, the distance behind it within which friendly elements are destroyed is measured from the rear of the front rank element, usually half the depth of the double element. All cavalry elements required by Army Lists to be double-based with other cavalry are treated as optionally double-based, except that if they are double-based, both front and rear rank elements are treated and paid for as Cv(O), regardless of the grading specified by the list, and the Army Point reduction for double-based rear rank elements applies. Page 10

ARMY SIZE

Unless the battle is a campaign or scenario game, each side consists of troop elements up to an agreed total of army points (AP), normally between 300 and 500 AP. In all games each army is controlled by 2 to 4 generals, each with his own command. Each element must be part of one of these commands, and cannot be transferred to a different command. One general must be designated as commander-in-chief. Up to 3 generals can be subordinate generals of his own army. Any others must be allied generals either controlling foreign troops, or of his own nationality but of doubtful reliability and so treated as allied rather than subordinate. Subordinate or allied generals can either represent extra players or not. Each army must include 6 baggage elements if 400AP or less, otherwise 8. Baggage elements must all be assigned to a single on-table C-in-C's or sub-general's command after deployment. All other elements and generals must be assigned to commands before the set-up procedure on P. 12 is started.

Our accompanying army list books specify element types and numbers for the great majority of historical armies within the period of the rules. All references to lists in these rules refer to these books and not to players' competition lists. An army can have only sufficient PF to enclose the on-table part of a BUA, or TF to do the same and/or as specified in its army list. Points spent on fortifications restricted to BUA are wasted if the terrain includes no BUA or the army turns out to be the invader. Points spent on naval elements are wasted if they have no access onto the table. Their landing troops and baggage can still be deployed, however, being assumed to have disembarked and joined the army prior to the battle. An elephant-mounted general is Regular where specified by the army list. Such a general counts as Irregular in all respects except for PIP allocation, but is paid for as Regular

ELEMENT COST

			R	egul	ar			Ir	regul	lar	
Basic cost of element of:		(S)	(0)	(I)	(F)	(X)	(S)	(0)	(Ĭ)	(F)	(X)
	Elephants	-	-	-	-	-	20	16	14	-	22
	Knights	15	12	10	11	13	12	10	8	9	11
	Cavalry	10	8	6	-	-	9	7	5	-	-
	Light Horse	7	5	3	4	-	7	5	3	4	-
	Camelry	-	-	-	-	-	11	6	5	-	9
	Expendables	-	-	-	-	-	-	7	-	-	-
	Spears	7	5	4	-	-	-	4	3	-	-
	Pikes	5	4	3	-	4	-	-	3	-	4
	Blades	8	6	4	6	7	7	5	3	5	6
	Warband	-	-	-	-	-	5	3	-	3	-
	Auxilia	4.5	3.5	2.5	-	3.5	4	3	2	-	3
	Bowmen	7	5	4	-	7	5	4	3	-	5
	Psiloi	3	2	1	-	6	3	2	1	-	6
	Artillery	10	8	4	10	5	-	-	-	-	-
	War Wagons	14	10	3	-	7	10	8	2	-	6
	Hordes	-	-	-	-	-	2	1	0.5	1	-
	Galleys	4	3	-	2	-	-	-	-	-	-
	Ships	-	-	-	-	-	4	3	2	-	6
	Boats	-	-	-	2	6	3	2	1	-	-
	Land Baggage	-	-	-	-	-	-	0	0	-	-
Adjust for all grades if:											
Knights or Cavalry if chariots				- 1					-1		
Mounted infantry				+1					+1		
Rear element of double base if specified by army list				-2					-1		
C-in-C's or sub-general's element				+20)				+10		
Ally-general's element				+10)				+5		
Fortifications:							2				

Temporary fortifications to cover the front of 1 element	2
Adjustment if TF part of a BUA or specified in army list as defending camps or baggage	-1
Permanent fortifications to cover the front of 1 element	2
Adjustment if a raised tower:	+1
Adjustment if a gateway	+2

Non-outward-facing parapets of a tower are free, so for example: A square PF of four corner towers (4 x 6AP), 1 gate tower (1 x 5AP), 3 interval towers (3 x 3AP) and 8 wall sections (8 x 2AP) costs 54 AP.

PREPARING FOR BATTLE

SET-UP DICING

Except in a scenario or campaign battle, each side's C-in-C sits at a different long table side. They first each nominate a season of the year. Both then dice, each adding his army's aggression factor (a number from 0 to 4 specified in its army list) to his raw score. If adjusted scores are equal, dice again until a round of dicing produces unequal adjusted scores. The side with the higher adjusted score is the invader, the other is the defender. The battle takes place in the invader's nominated season. Now add together the raw scores of all dice thrown. The total is used to determine the time that the battle can start. [See P. 13]. Now deduct the lower of the last pair of raw scores from the higher. The difference is the weather score. If the score of the invader's last die was odd, the direction he faces is due west, if even, due east.

TERRAIN CHOOSING

An historical invader chose the season and route of invasion, often beside a waterway [WW], along a river [Rv], or, if nervous of mounted enemy, through hilly country. The defender chose where on that route to oppose him, such as on a transverse river or line of hills, in ambush country or near a city or fortress. We simulate this with terrain features placed on top of a flat playing area notionally first bisected then trisected into 4 flank and 2 central sectors, which are then numbered 1-6. Terrain features can be linear, such as WW, Rv or external roads, or realistically shaped area features such as a built-up area [BUA], hills or woods. Only features specified by our DBM army list books for the defender's army can be used. A BUA can always include 0-2 connecting internal roads and, if on a hill, a link road to the bottom of the hill. Any fields must be contiguous with a BUA, and enclosed if the list book allows, open if not. Features cannot be superimposed, except roads, a hill on a waterway (as an island or promontory), a BUA incorporating a hill or island or placed as a promontory, or marsh, rocks, sand dunes or a BUA partly replacing beach. Terrain is laid in 3 phases.

1. The invader can choose whether or not to provide and position only one of the following:

- If he has at least 2 naval elements, a WW along one short table edge. Unless a WW is listed as compulsory for the defender's army, he can only do so if he dices and scores 4, 5 or 6. If a WW is listed as compulsory, he can place one without dicing, but is not obliged to do so. A different non-water-feature option can be chosen if dicing is unsuccessful.
- A river flowing from one long table edge to the other. Unless a Rv is listed as compulsory for the defender's army, he can only do so if he dices and scores 4, 5 or 6. If a Rv is listed as compulsory, he can place one without dicing, but is not obliged to do so. A different non-water-feature option can be chosen if dicing is unsuccessful. If a river is placed, a second dice is thrown. The river must be entirely between **250p** plus **50p** times the score on this dice and **600p** plus **100p** times its score from the short table edge.
- A road from one central sector table edge to the other, plus 0 or 2-3 feature equivalents of entirely steep hills. Such hills can include a full or partial covering of Wd, V, O, rocky ground or brush if permitted to the defender, but the whole hill counts as DGo, and as a H(S), so does not satisfy a requirement for other types of compulsory terrain. The first compulsory road placed counts as 0 feature equivalents.

2. The defender now provides and positions 2-3 feature equivalents of his choice. His choice must include 1 feature (of $1-1\frac{1}{2}$ feature equivalents if an area feature) of each compulsory terrain type not yet present. For the purpose of this total only, these count as half their actual feature equivalents. His terrain is positioned in two phases (i) compulsory features (ii) optional features. In each phase, WW, river and BUA/fields must be placed first. He is restricted to:

- One WW, and only if none is already present and (if the army list book allows a BUA to his army) he positions a BUA in contact with it. Unless it is compulsory, he can only include a WW in his terrain selection if he dices and scores 5 or 6. A different option can be chosen if dicing is unsuccessful.
- One river flowing from one short table edge to that opposite, or to a WW, or to an attacker-positioned river. Unless it is compulsory, he can only include a river in his terrain selection if he dices and scores 6. A different option can be chosen if dicing is unsuccessful. If dicing is successful, divide the table depth equally into four and dice again. The river cannot go outside the indicated zone: 1 zone nearest defender, 2,3 central zone nearer defender, 4,5 central zone nearer invader, 6 nearest zone to invader.
- One BUA, and only if in contact with a WW, or, if there is none, in a flank sector or placed so that a gateway or included road links with an invader-placed road. The BUA (or any incorporated hill) must be positioned in contact with the defender's rear table edge unless he dices and scores 5 or 6. If dicing is unsuccessful he must place it in contact with his rear table edge. The BUA and any fields must all be entirely within 1 sector.
- Up to 2 external roads, and only if they link with a BUA or join/cross a previous road, or roads are compulsory.

3. An invader who has not yet placed any terrain can now choose and position 0-1.5 feature equivalents of area features permitted by the defender's list (not BUAs).

{TERRAIN CHOOSING continued on next sheet}

An area feature cannot be more than 1,000p across in any direction, nor less than 100p. If it nowhere exceeds 500p across it counts as $\frac{1}{2}$ a feature equivalent, if it anywhere exceeds 750p as $\frac{1}{2}$. A BUA on a hill or island counts as the sum of both. No player can use more than 3 features of the same feature equivalence **and** going. An area feature can be:

- Good going [GGo], of bare gentle slopes, open fields, or of water features, bog or marsh frozen by cold weather.
- Rough going [RGo], of moderately boggy, rocky or brushy gentle slopes or lower ground or a sunken gully.
- **Difficult going** [DGo], of steep or wooded, vine-planted or terraced slopes, woods [Wd], orchards or olive or oasis palm groves [O], small fields enclosed by walls, hedges, irrigation channels or paddy bunds [E], vineyards [V], marsh [M], sand dunes [D], and built-up areas [BUA] unless manning perimeter fortifications.

Each compulsory and chosen area feature except BUA or contiguous fields is diced for in turn and must be placed entirely in the indicated sector. A 2nd dice throw decides the position of the feature within the sector: 1,2 it must touch a table edge or waterway, 3,4 its nearest part must be between **100p** and **300p** from the nearest table edge or waterway edge, 5,6 no part can be within **300p** of any table edge or waterway edge. If it will not fit in without moving earlier features, it is discarded even if compulsory. Each player must choose all his features before positioning any.

Space between features is good going and may represent unimproved pasture, steppe or hard desert. For movement and combat, an element that is in more than one type of going is treated as in whichever would slow mounted troops more. For visibility, an element that is in more than one type of terrain is treated as in whichever would reduce visibility less. Camels of any troop type except baggage count sand dunes and brush as good going and other rough going as difficult.

A hill is a single feature whether some or all of its slopes are steep, rough or covered with woods, vineyards, orchards or olive groves, or all are gentle and bare. Unless modelled with crests, hills are assumed to slope from a central ridge or point down to their edge. Hill or gully slopes give an advantage in close combat to an element with at least part of its front edge upslope of all the opposing element.

External roads [Rd] may be unpaved tracks. Each counts as ½ a feature equivalent. It must be approx. element width or less, with troops moving astride. It goes through or over features placed before or after, and can cross each river once by bridge or ford. Combat along a road counts as in the off-road going on its edges, which must be identical on both sides.

Waterways [WW] represent the sea, large lakes or giant rivers such as the Rhine, Danube, Euphrates, Tigris, lower Nile or Yangtse. Only one can be used, occupying the full length of a short table edge, and extending anywhere between a minimum of **300p** and a maximum of **300p** plus **100p** times the score of one dice inward from that table edge. No more than half can extend more than **600p** inward. It counts as 1 feature equivalent. It is edged by a further **50p** to **100p** of beach (**50p** if not depicted), except where a promontory, marsh, rocky or dune area feature, or the quay, defences or foreshore of a BUA are placed. Beaches are good going to land troops. Unless frozen, waterways are impassable to land elements but passable to all naval elements. A BUA or hill touching a waterway can project into it as a promontory if no closer than **300p** to the table edge. An island (a hill completely surrounded by the waterway it touches) cannot be closer than **300p** to the table edge nor closer than 1 element width to the shore. A gap no more than **200p** wide between island and shore is treated as a river for movement and combat by naval and land troops. If waterway placement is obstructed by hills on both flanks, those on the flank with less hills are moved directly inland the minimum necessary to become islands or promontories.

The first river [Rv] placed must flow from a specified table edge to the opposite edge, or to a waterway along that edge. If both players place a river, the defender's must flow from a short table edge to the first. Each counts as 1 feature equivalent. A river can only curve to the extent that no two points on its mid-stream line are separated by a straight line distance of less than ³/₄ of the distance between them measured along the mid-stream line. Its width must not exceed **200p**. Troops wading a river do not count as in rough or difficult going, but are penalised in other ways. [See P. 20 & Figure 15]. A land element is wading a river if any part of it is in the river. A river can be crossed safely without delay by bridge or road ford. Its nature elsewhere is unknown until the first player attempts to wade it off-road or place boats on it. It will then be found to be **Paltry, Easy, Tricky** or **Dangerous**. All rivers aid troops defending their banks. Only boats can move along an unfrozen river and then only if it is at least 1 element width wide and not paltry. Fords or undefended bridges do not block boats.

Naval elements in contact with a beach, quay, river bank, bridge or fortification can be in close combat with land elements using their normal combat factors. They can also land troops and cannot then move until troops re-embark. Naval movement is in difficult going if galleys in strong winds, boats moving up-river, or ships if there is no wind or headed within 45° of directly upwind. Naval elements cannot be deployed on frozen water features.

TIME OF DAY OR NIGHT

The raw set-up dicing total gives the number of hours after midnight that deployment ends. One hour passes each tine the defender completes 4 bounds. Sunrise to Sunset is:

- 0400 to 2200 in Cold if summer.
- 0500 to 1900 in Cold if spring or autumn, or in Warm or Dry if summer.
- 0800 to 1600 in Cold, Warm or Dry if winter.
- 0600 to 1800 in other climates or seasons.

Dawn is the hour before sunrise. Dusk is the hour after sunset. Night is between dusk and dawn. It will be moonlit if the defender's last set-up raw die score was odd and there is no overcast, nor current mist, rain nor dust storm.

If deployment ends between midnight and dawn either side can choose to start the battle immediately in summer, or half a hour before dawn in spring or autumn. Otherwise it starts at dawn. If it starts before dawn, any command that is unreliable, or twice has a PIP score of 2 or less, does not move or dice again until dawn breaks or any of its elements has seen enemy.

If night falls during a battle, this continues if in moonlight and either side chooses. If not, both sides are assumed to break off and return to camp. Both then choose simultaneously whether to retreat under cover of darkness. If either does, the battle ends and 1 VP is transferred from a retreating side to a side that remains. If neither retreats, any demoralised troops not in fortified BUA are removed and the remaining troops less losses but plus any flank marches that have not arrived redeploy on table at dawn as if the start of a new battle. No flank marches or ambushes are permitted. All losses are carried forward and demoralisation points are based on the original strengths of the armies.

CLIMATIC REGIONS

We recognise four climatic regions, which we call Cold, Warm, Dry and Tropical. The home climate of each army is specified by its army list. If opposing armies originate in different climatic regions, they meet in that of the defender.

- **Cold** applies north of the Pyrenees, Alps, Caucasus and the Central Asian Desert, to the Danube basin, Galatia, Mongolia, Tibet, Korea, China north of the Fei river, Japan and highland Peru, and to all large mountain regions.
- Warm applies to southern Europe, Africa north of the Atlas, Asia Minor except Galatia, and Syria/Palestine.
- Dry applies to the Sahara, Libya, Egypt, West and East Sudans, Arabia, Persia, Mesopotamia, the Indo-Persian border, and the Central Asian Desert.
- **Tropical** applies to Africa south of the Sudans, India, South East Asia, China south of the Fei river, and Central and South America.

WEATHER

If the weather score is:

- 0-1 Perfect clear and dry weather with minimal cloud cover. Light wind as for score of 5, except in bounds in which the average PIP score is 2 or less, during which there is no wind.
- 2 Fog in Cold if winter, mist in other climates except Dry or other seasons, from 1 hour before dawn until any bound's PIP dice average less than 3. If the battle starts at least 2 hours after dawn, or continues past that time, fog or mist is automatically assumed to have cleared. No wind.
- 3 Strong wind blowing from South West in Cold or Tropical, from South in Warm or Dry. Overcast and risk of rain in Tropical if spring or summer, or in Cold. Risk of dust storms in Dry if spring or summer. Risk of shipwreck.
- 4 Light wind blowing from North West in Cold or Warm, from South West in Dry or Tropical. Overcast and risk of rain in Tropical if spring or summer. Rivers flooded in Warm if spring. Rivers and marshes frozen in Cold if winter.
- 5 Overcast if spring, autumn or winter. Light wind blowing from North East in Cold if winter, South West in Cold if spring, summer or autumn, North West in Warm, South West in Dry or Tropical. Waterways, rivers and marshes frozen and risk of snow in Cold if winter. Risk of rain in Cold if spring or autumn, in Warm if spring, autumn or winter, in Dry if winter, in Tropical if spring. Rivers flooded and mud in Cold if spring or autumn, in Warm or Dry if winter, in Tropical if spring. Risk of dazzle if summer. Thirst in Warrn if summer, in Dry if summer or autumn.

Change in wind	direction:	The wind backs 45° anticlockwise when any bound's PIP dice average 5 or more, veers 45° clockwise if they average 2 or less.
Snow, rain or du	st storm risk:	Such weather starts when any bound's PIP dice average 5 or more, then ceases if in a later bound they average less than 3. Once ceased, snow & dust storm do not occur again.
Snow, fog, mist:		ibility. Restricts movement. [See Pages 19 & 20]. Combat disadvantage if shooting, except in snow if f directly downwind.
Rain:		dvantage if bowmen or artillery and shooting or in close combat.
Dust storm:		ibility. Combat disadvantage unless facing within 45° of directly down wind. Restricts movement.
Flooded rivers:		fficulty of river crossings.
Dazzle:	within 1 hou	idvantage if facing within 45° of due East within 1 hour after sunrise or within 45° of due West ir before sunset, unless the element's front edge is entirely within a wood, orchard, olive or palm ly or on the slope of a hill's shaded side.
Strong winds:	Combat disa elements. Na destroyed by	dvantage if shooting except within 45° of directly down wind. Naval move only as individual aval with the land edge of a waterway directly down wind within an element base width are y shipwreck unless moved or halted, or already in contact with a quay, or galleys or boats already in a beach. Difficult going and combat disadvantage for galleys.
No wind:	Difficult goi	ing for ships.
Mud:		ads into rough going, both for movement along or across them, and for combat if through good going. Idvantage if moved upslope into contact this bound.
Thirst:		dvantage after the side's 6th bound unless it has a river, lake or other feature depicting fresh water or A closer to its base table edge than is the rear of its most forward element.
Overcast:	Reduces vis	ibility at night.

VISIBILITY

Troops or terrain features are visible in daylight and clear weather to all viewers whose direct line of sight is not blocked by intervening hills, sand dunes, woods, orchards, olive or palm groves or BUA. Dusk and dawn reduce the maximum distance at which they can be seen to 600p, moonlight, day-time mist or snow to 300p, and a moonless, overcast or misty night, fog or dust-storm to 100p. Troop elements do not block line of sight.

Troops or plashing within a wood or troops in the interior of a built-up area cannot be seen from beyond **50p**, nor those within orchards, olive or palm groves or sand dunes from beyond **150p**, unless they disclose their presence by shooting out. Troops less than those distances inside the edge see out as if outside. Psiloi in vineyards, marsh, rocky areas or brush cannot be seen beyond **150p** unless moving or in close combat. Troops at least half way up hills cannot see or be seen from less than **600p** beyond a lower hill, wood, orchard or olive or palm grove or sand dunes. Those on the flat or lower on hills cannot be seen over these at all. Troops on steep slopes or beyond a crest cannot be seen from the same hill at beyond **100p**. A gully can be seen into only from its edge. Troops in a gully can see out, but cannot shoot out. Knowledge of enemy presence or adverse events is assumed to spread through a command by informal means, whether the general wishes it or not. Troops are considered to be aware of any enemy:

- Who are visible to or have shot at any element of their command.
- Who have been observed within or moving into concealing terrain by an element of the command and not been seen to move out again.
- Who are within fortifications.

DEPLOYMENT

The defender is assumed to have the greater local knowledge and scope for choosing the battlefield or preparing defensive positions or ambushes. The invader is assumed to have the initiative. None of this affects tactical posture, which is entirely the choice of the players. For example, an invader can seek to adopt the tactical defensive, as did English armies in the 100 Years War, a defender can attack, and so on.

Unless inside or part of a fortified BUA or in ambush, troops, baggage and TF cannot be deployed:

- Further forward than **300p** short of the table centre line.
- Unless naval, within **300p** of a short table edge.
- Within **200p** of an enemy garrisoned fortified BUA.

Baggage must be placed in a BUA, or in a group or groups in GGo, (a) with each group's rear edge in full contact with the base table edge, or (b) in contact with a waterway, beach or river. TF specified by army lists as defending camps or baggage must have each end touching their side's base table edge, a waterway or a river, and contain baggage.

The defender first places his baggage, any fortifications not part of a BUA, and any of his elements garrisoning a fortified BUA. The latter can include some or all of the elements of one command only, which cannot be the largest command in the army. The invader then places his baggage and any temporary fortifications.

Both sides then record: (i) the relative position of their commands from right to left and front to rear, (ii) the flank of arrival of any commands making off-table flank marches, (iii) the position and direction faced of each element of troops deployed in ambush, and whether ambushers are dismounted.

They then deploy their remaining troops, except any making off-table flank marches or in ambush. They alternately deploy one on-table command each, starting with the defender. Each side's first command must be the one with the largest total number of elements,

excluding baggage and ambushers. Its remaining commands can be deployed in any order. All non-baggage elements of a command must deploy within a notional rectangle, which:

- Must be parallel with the battlefield edges.
- Cannot intersect or be inside another friendly command's rectangle.
- Can be in contact with another friendly command's rectangle. Elements of one command can be deployed in contact with elements of another friendly command.

Off-table flank marchers are not placed on table until they arrive. Ambushers are not placed in position until they first move, are seen by enemy, or shoot.

After both sides have deployed all on-table troops except ambushers, each side assigns all their baggage to one on-table C-in-C's or subgeneral's command.

OFF-TABLE FLANK MARCHES

Up to half an army's complete commands can be sent on off-table flank marches. Only 1 can be on each flank. The flank of arrival must he recorded for each such command at deployment time. A C-in-C cannot flank march, nor can baggage. Only naval flank marchers can arrive on a waterway. Mounted troops must arrive mounted. A PIP score of 6 by a flank marching command indicates the arrival of that command in its next bound. The flank of arrival is immediately declared and the opponent asked if he also has an off-table flank march on that flank.

If both sides have a flank march on that flank, the two commands' total numbers of elements are compared. A smaller flank march is driven back, as are both if equal sized. A driven back flank march arrives by march moves in its next bound anywhere in its side's own half of the specified flank edge. Any elements failing to do so instead flee on. Elements still unable to move on to the table are lost. A larger flank march arrives in its next subsequent bound.

Unopposed or larger flank marches arrive anywhere in the opposing side's half of the specified flank edge. Arrival is by tactical or march moves. Any elements failing to move on to the table in the bound of arrival are assumed to be straggling. Unless demoralised, in which case they are lost, stragglers arrive in the next bound in which their command's PIP score is 6. Those failing to arrive by tactical or march move that bound instead all arrive by spontaneous advance. Any that have no room to do so are lost. Any enemy element within **300p** of and in sight of the place of arrival on the flank table edge of any element of an unopposed or larger flank march must **immediately** flee directly away from that table edge, unless inside a fortified BUA or in close combat other than as an overlap.

Front rank elements arriving by tactical or march move measure their move from the table edge, as does each element fleeing or spontaneously advancing on. No element can arrive inside a fortified BUA nor with part of its base off table.

AMBUSHES

An ambush is an element or elements initially deployed in any of the following situations in flank sectors only:

- Concealed within a wood, orchard, olive or palm grove, sand dunes or a gully.
- Hidden from the enemy deployment area by intervening hills, sand dunes, woods, orchards or olive/palm groves.
- If psiloi, hidden in these ways or in a vineyard, rocky area or marsh, or in brush.

Its location is written down at deployment time, but it is not placed in position until it first moves, shoots or is seen by enemy. A defender cannot place ambushers further forward than the table centre line. An invader cannot place ambushers further forward than **300p** short of the table centre line. An ambush cannot be placed within **200p** of an enemy garrisoned fortified BUA. An ambush cannot include baggage or fortifications other than plashed wood edges. If impetuous troops in ambush need to be restrained without betraying their presence, the player can leave the required PIPs apparently unused, rather than declaring them as used for a halt.

FIGHTING THE BATTLE

SEQUENCE OF PLAY

The two sides take alternate bounds. The invaders take first bound. During each side's bound:

- (1) Its commander-in-chief dices on behalf of each of its commands whether on or off table for that command's player initiative points (PIP), to be used to make tactical or march moves or to temporarily halt spontaneous advance or retreat moves or drifting, or to test for arrival. Note is taken of any change in the weather.
- (2) It first makes tactical or march moves, then any spontaneous moves or drifting that have not been prevented. A legal move cannot be taken back once made. Opponents' troops immediately pursue break-offs if required to do so.
- (3) All elements of both sides that are eligible to shoot, shoot and make or inflict outcome moves, in an order decided by the side whose bound it is.
- (4) Any elements of both sides that are in contact with enemy fight and make or inflict outcome moves, in an order decided by the side whose bound it is.

PLAYER INITIATIVE POINT DICING

The C-in-C simultaneously throws one PIP die for each and every command at the start of each of his side's bounds. The colour of these dice depends on the status of each command's general. A general is irregular if his element is irregular. A command's die continues to be thrown each bound until all the command's non-baggage elements have been lost.

Irregular and allied general commands are each allocated a different colour die at the start of the game, which die and its PIP scores they use throughout the game. The dice for other regular generals' commands are all the same colour. The C-in-C specifies after throwing each bound, and before any moves are made, which of these commands uses which die and its PIP score that bound. However, a command instead dices independently if at night, or in mist, fog, snow or a dust-storm, or the C-in-C has been lost, or the command's general is flank marching off-table or is in ambush.

PIPs cannot be used by other commands or saved for future bounds. 1 PIP is used for each tactical or march move, and each halt to prevent spontaneous advance or retreat or drifting. This is modified for each of the following that apply:

- -1 If the element or group includes the C-in-C if to be moved or halted, or a sub-general who has not moved during the game if to be halted. Each general can only apply this modifier to his own command, and only once per bound.
- +1 If the element or group to be moved or halted is more than **1,200p** from the general's element, or more than **600p** and neither is in sight of the other; or if the general's element is in front edge contact with enemy, or is straggling off-table or has been lost. The distance is taken as being the shortest distance between the nearest point of the general's element and the nearest point of the element or group to be moved or halted without passing either through terrain impassable to both light horse and boats or through any enemy element.
- +1 If a single element or group move on land, but not a halt, includes any irregulars except light troops or cavalry, and either of the following also apply:
 - Any element deviates from straight ahead, unless following another element in (but not into) a 1 element wide column, or moving (1 element wide) along a road or river bank, or any element contacts enemy.
 - Any irregular element, other than of light troops or a general and any troops double based with him, moves less than its full move, **unless** the move ends when at least one element contacts enemy, a river or impassable terrain, or a march discovers enemy within **200p**.
- +1 If a group move, but not a halt, includes any mounted infantry, knights, cavalry or light horse, other than a general and any troops double based with him, **and also** any un-mounted foot except psiloi behind cavalry they can support.
- +1 If a single element or group move, but not a halt, includes any artillery except (F) or (X).
- +1 For each single element move used to mount or dismount.
- +1 If a single irregular element or a group including any irregulars is halted to prevent spontaneous advance or retreat, unless entirely of foot occupying rough or difficult going, or entirely of foot defending fortifications or a river edge, or entirely of foot uphill of the nearest enemy of whom they are aware.
- +1 If a marching group is marching for a fourth or subsequent time that bound, or for a third time if it includes any of the following:
 - Any knights, war wagons or elephants (other than a general and any troops double based with him), hordes or expendables in any formation.
 - Any irregulars (other than skirmishers) not in a single element wide column.

UNRELIABLE ALLIES

An ally general whose first PIP die score is 1 is unreliable. He will not commit himself until any of:

- He scores a 6 on his PIP die. (If flank marching, subsequent to the 6 required for arrival).
- Enemy shoot at or move into contact with any of his troops.
- An enemy command becomes demoralised.

Before that: (a) His troops cannot shoot, spontaneously advance, or make tactical or march moves closer to any known enemy within **600p** except to arrive on table without contacting enemy; (b) If he is irregular and of a different nation to the main army, or if regular or irregular and of the same nation in a civil war, his command will change sides and become a committed enemy command if any of its own side's commands become demoralised.

TACTICAL MOVES

A tactical move by land or water can be by a single element or by a temporary group of elements all of the same command. No element can take part in more than one tactical move per bound.

Single element moves:

A move by a single element other than of expendables:

- Can be in any direction provided that neither front corner of its base (nor rear corner if train) ends more than the trooptype's maximum permitted move distance from where that corner started. [See figure 1].
- Can be used to break off from enemy in contact with its front, but only if it is either at night, by naval, or the element breaking off has a greater maximum move in the terrain it ends in than the element broken off from. An element breaking off must move at least **100p** directly to its own rear and end facing the clement broken off from. A break-off must not deviate from straight back, nor end in contact with new enemy. An element in contact with an enemy front edge to its flank or rear cannot break off.
- Can be used to dismount or remount troops, except mounted infantry who do so automatically. A full single element move is required for each dismounted element. If this replaces or is replaced by 2 or 3 elements, each of these must start or end in edge contact with at least one of the other. Elements using a tactical move to mount or dismount cannot start or end in edge contact with enemy.
- Can be used to embark on or disembark from naval in edge contact with a beach, quay or river bank, starting or ending respectively in edge contact with the naval element An element cannot disembark if enemy land troops are in contact with the water's edge, in which case combat must be fought by the naval element until the enemy recoil, break-off, flee or are destroyed. It can disembark to contact enemy who are positioned away from the edge, these being moved back if necessary to make room.

Group moves:

A group is defined as a number of elements which, except as made necessary by wheeling a column or passing through a gateway, are facing the same direction, and each in both edge and corner to corner contact with another of the group's elements. A group including expendables cannot include elements of other types unless in a 1 element wide column.

A group move cannot start with any element in contact with an enemy element's front edge. Unless moving laterally to form or expand from a single element wide column, or prevented by friends or terrain, elements moving as a group must each move parallel to, or follow, the first of them that moves and must move the same distance or wheel through the same angles. A group move cannot include changes in frontage, turns or movement to the group's rear except as below, nor any sideways or oblique inclining movement other than as specified in Fig. 15 or by up to half an element width to line up with enemy who are within 1 base width [See P. 18], nor mounting, disembarking or embarking.

An entire group move can be used to:

- Expand from a single element wide column. The front element remains stationary. Other elements move as if by single element moves. All must end facing the same direction and in both edge and corner to corner contact with another element of the original group. None can end in contact with enemy. All front rank elements must be lined up level with the original front rank element. The maximum distance that any front corner of any element can move is **50p** more than its permitted tactical move distance in that terrain. [See figure 3].
- Contract into a single element wide column from a wider group. The front element of the column moves forward by up to its full tactical move distance, including any bonus for moving along a road. It can wheel. Other elements move as if by single element moves, the nearest elements falling in behind the column, the rest moving to close up any resulting gaps. No element can end further to its rear than its position prior to the formation change (but after any initial 180° turn). Until the group is entirely in column, all must end facing the same direction and in both edge and corner to corner contact with another element of the original group. None can end in contact with enemy. The maximum distance that any front corner of any element can move is its normal tactical move, including any bonus for moving along a road if the front of the column is doing so. It may take more than one move for the whole group to join in the column. [See fig. 4a 4c].

Unless expanding from a column, a group move can include:

- One or more wheels, measuring the move distance of the outer front corner of each wheel in a straight line.
- An initial and/or a final 180° turn if the group is entirely of light horse, or entirely of psiloi, or entirely of regular naval, in each case measuring the move of each element from its initial front edge to its final rear edge.

Each element of a 1 element wide column wheels in succession on arrival at the place where the first wheeled. Until all have done so, the column will have a bend at that point. Only the front element's move is measured, the other elements being treated as if moving the same distance. A group move **must** be in or into a 1 element wide column if:

- Through a gateway or leaving a temporary fortification, or entirely along a road, or across a road ford or bridge.
- Ending the move in difficult going, unless all elements are psiloi or move into edge to edge or corner to corner contact with enemy visible at the start of the move.
- Across a tricky or dangerous river, this simulating discovery and use of an unmarked ford.

Movement restrictions:

No element can cross the front of or retire from in front of any enemy element at or closer than 1 element base width distance with no element, fortification or, unless the enemy is naval, water even partly intervening, nor thereafter continue moving, except:

- To advance directly forward towards such an element at least part of which is directly in front.
- To advance and line up directly opposite such an element's front.
- To advance so that its front edge contacts the front edge or front corner only of whichever enemy element can be so contacted by the shortest move. [Fig 2]. An element attempting contact having started opposite a joint between two enemy elements must therefore contact the enemy element it initially overlaps most.
- To follow behind an element or elements contiguous with its front in any of the above.
- To retire directly to its own initial rear without ending in edge contact with enemy.
- As a spontaneous or outcome move.
- If the enemy are skirmishers and the movers are impetuous troops and their entire move is directly forward.

In the following circumstances moves which would not normally be permitted, are permitted to allow troops to line up with or contact enemy:

- When a single element or group moves within 1 base width of enemy, one sideways shift of up to half an element width is permitted **if it is necessary** to line up the troops so that a move straight ahead (this bound or in a subsequent bound), without any further sideways shift, would allow at least one element to make contact with the enemy as specified in paragraph 4 below. Such a shift does not itself prevent a move from counting as entirely straight ahead. If, however, a wheel is also required to line up with the enemy, the shift can be performed before, during or after the wheel. The normal rules for crossing the enemy front are suspended during the shift unless the move ends with any element in front edge contact with an enemy flank or rear. If the move is otherwise entirely straight ahead or by a group, the shift is disregarded for measuring move distance.
- Several single element or group moves can be made simultaneously to allow contact with an enemy element or group, but only if none of the moving elements or groups could contact enemy without the others moving first, and all moves can be carried out without any element or group interpenetrating another.

When an element which is not part of a group or which is part of a group entirely of skirmishers is contacted by the front edge or by the front corner only of an enemy element which is part of a larger group whose whole move was entirely straight ahead (without any sideways shift), it must immediately pivot and/or shift sideways as needed to exactly face the element contacting it the most, unless any of the following apply:

- It is already in contact with enemy.
- It is defending fortifications or the edge of a terrain feature.
- It is of a type that does not turn to face flank contact.
- This will position it so that a recoil would meet a friendly element it could not pass through or push back enough to fully recoil, or a flee move from combat would take it off table. This exception applies even if recoil or flee is not a possible outcome.
- There is insufficient space for it to pivot or shift. In this case, an element of skirmishers contacted by foot must still pivot or shift if sufficient space can be made for it to do so by the moving group being moved straight back to make room.

If such an element is in even partial edge to edge contact with another friendly element other than of skirmishers, it need not pivot, but must shift sideways to line up. The player whose bound it is chooses the order of multiple pivots/shifts.

{Movement Restrictions continued on next sheet}

If the enemy is not required to pivot or shift sideways as above, the following restrictions apply to all tactical, spontaneous advance or pressing forward moves:

- Troops can only move into contact with enemy if a single element or at least one element of a group ends in one of the following positions.
 - Front edge in full contact with an enemy element's front edge and front corner in contact with that enemy element's front corner.
 - Front edge in at least partial contact with an enemy element's flank edge and front corner in contact with that enemy element's front corner. [Fig. 6.]
 - Front edge in full contact with an enemy element's rear edge and front corner in contact with that enemy element's rear corner.
 - In right-to-right or left-to-left front corner to front corner contact with an enemy element, and facing the exact opposite direction.
 - In partial or complete side edge to side edge contact with an enemy element.
 - In front corner to front corner and side edge to side edge contact with a friendly element whose front edge is in contact with an enemy element's flank or rear edge as specified in the 2^{nd} or 3^{rd} bullet above.
- No element can move into contact with an enemy element's rear unless it starts entirely on that side of an imaginary line prolonging the rear base edge of the enemy element. [Fig. 5].
- No element can move into contact with an enemy element's flank unless it starts partly or entirely on that side of an imaginary line prolonging the side base edge of the enemy element, any part not on that side of the line being behind the enemy rear. [Fig. 5].

Bowmen (even bow (X)) cannot move to contact the front of mounted enemy they can shoot at. Train cannot move to contact enemy troop elements or fortifications, except that WWg (S) can contact fortifications and WWg (X) can contact troops. Chariots, expendables, artillery except (X) or man-held rockets, war wagons and wheeled baggage ending their move off-road in rough or difficult going can only do so as single elements. Expendables can only change direction by wheels except when turning to face enemy in front edge contact with their flank or rear.

Troops can enter fortifications only unopposed at a gateway, or by assault. [See P. 21]. Infantry can only leave a permanent fortification, and mounted or train any fortification, by a gateway. When entering or leaving a fortification, whether by a gateway or otherwise, the distance between its near and far edges is disregarded.

MARCH MOVES

March movement by land or water differs from tactical movement in that, there being no enemy in the immediate vicinity, it is assumed to be continuous and to include movement during the preceding enemy bound. Except as specified on P.16 a march move expends the same PIPs as a tactical move. It is identical to a tactical move except that:

- Normally, it cannot start or go closer to known enemy than **200p**, and ends immediately on discovering previously unknown enemy within **200p**. However, this distance is reduced to **50p** if all of the following apply:
 - The movers are entirely unmounted foot or unmounted foot plus a mounted general and any troops double based with him.
 - The enemy are entirely skirmishers, or any type if not part of a group.
 - The enemy total less elements than the number of elements in the moving group's front rank (even if this is not level).

Any march move that goes closer to known enemy than **200p**, as permitted by the above exception, must be entirely straight ahead. It must stop as soon as it has the required number of known enemy elements within **200p**. [Fig. 16.]

• An element can make or join in as many march moves during each bound as there are sufficient PIPs for, but cannot also make a tactical move that bound.

HALTS

A halt can be used to prevent any of the following for the current bound:

- An element or group from making a spontaneous advance.
- A naval element from drifting on to a lee shore in strong winds and being shipwrecked.
- An element or group belonging to a demoralised command from fleeing in spontaneous retreat, In the case of single elements only, such a halt can include a 180° turn towards enemy.

It is not a move, even if it includes a 180° turn, so is unaffected by difficult going. A group halt can be used to halt any or all of the defenders of a fortified enclosure (continuous except where intersected by a feature, table edge, or gateway).

Halts and moves are mutually exclusive. No element can take part in a halt and also any tactical or march move in the same bound.

SPONTANEOUS ADVANCE

Some troops are impetuous on land and are liable to advance without waiting for orders. These are:

- Irregular elements of knights if (S), (O) or (F) (but not (X)), camelry if (S), expendables, warband, blades if (F) (but not (X)) and hordes if (S).
- Any regulars or irregulars, other than train, who are aware of demoralised enemy closer than the nearest undemoralised enemy and within **600p** or who would contact enemy baggage.

Impetuous elements must make a spontaneous advance as individual elements unless any of the following apply:

- They have made a tactical or march move this bound.
- They are prevented from moving this bound by a single element or group halt.
- Their front edge is already in contact with enemy, or the front edge of an enemy element is in contact with them.
- They are in a position to give rear or overlap support to friends whose front edge is already in contact with enemy.
- They belong to the command of an uncommitted unreliable ally general.
- They belong to a demoralised command.
- They would contact enemy elephants.

A spontaneous advance must be towards the nearest enemy baggage element if this is visible and there are no known enemy elements within **200p** either side of the impetuous element's direct route to it, otherwise towards the centre of the closest enemy element of which it is aware, measuring between furthest apart front corners, ignoring the following:

- Any enemy in or beyond terrain the impetuous element cannot enter and cannot by-pass by a diversion of **300p**.
- If the impetuous element is mounted, any enemy in difficult going or beyond enemy fortifications.
- Enemy skirmishers unless any part of their element base is directly to the impetuous element's front.

Spontaneous advancers unaware of any enemy they do not ignore move towards the centre of the enemy base table edge. If still unaware of such enemy on reaching that edge, they halt.

A spontaneously advancing element must move its full tactical distance and directly towards its target, making any necessary changes of direction by wheels and/or 180° turns, except that:

- It can make any shifts, inclines or pivots necessary to contact its target this bound if it cannot do so by wheeling.
- It must reduce its move by **10p** if needed to avoid ending in front corner to front corner contact with friends unless its front edge contacts enemy, or it can give rear or overlap support to friends in contact with enemy.
- It can shift and/or pivot by the minimum necessary to avoid any of the following that it has contacted: difficult going, impassable terrain, fortifications it cannot cross or friends it cannot pass through. [See P. 20 and fig. 9c to 9e]. It cannot do so to avoid going it counts as rough or rivers, but can pivot to cross a river.
- It can pivot backwards by the minimum necessary to align the direction it ends facing with that of a friendly element within an element base width which is already in edge or corner contact with enemy or which has already made a spontaneous advance this bound. [Fig. 9a and 9b].
- Its move ends when it reaches front edge and corner contact with an enemy element, or it becomes eligible to give rear or overlap support to friends in contact with enemy, or it is within **50p** of mounted enemy it can shoot at.
- It moves double distance unless already within, or the move would bring it within, **200p** of known enemy.

TACTICAL AND MARCH MOVE DISTANCES

The maximum distance (p) that any Single element or element of a group can move, if permitted in that terrain, is:

	Entirely Along Road		•	ff-Road in
		Good	Rough	Difficult
Light Horse	250	250	200	100
Cavalry, Camelry or Expendables	200	200	150	100
Elephants or Knights	200	150	150	100
Auxilia or Psiloi	200	150	150	150
Spears, Pikes, Blades, Warband, Bowmen or Hordes	200	100	100	100
War Wagons. Artillery except (S), mobile land Bagga	ige 150	100	50	50
Artillery (S)	100	50	50	-
Naval except (X)	-	200	-	100
Naval(X)	-	100	-	50

However:

- Troops classed as Fast (F), add an extra **50p** to their maximum tactical, march or fleeing move distance off-road, if either mounted, artillery or naval in good going or if other foot.
- An element in front corner to front corner or side edge to side edge contact with an enemy element at the start of its move can add **50p** to its maximum distance to move into frontal contact with that enemy element's flank edge.
- Off-road moves are restricted to **100p** if any element is crossing any but a paltry river, or when visibility is reduced to **100p** by night and/or, unless Bedouin or Tuaregs in a day-time dust-storm, by weather.

MOVING THROUGH FRIENDLY TROOPS OR GAPS

Except when contracting a group into a column, no element can enter a gap less than 1 element wide between elements it could not interpenetrate in the direction moved and/or fortifications or impassable terrain, unless while it is in the gap it moves straight ahead or straight back and stops when it meets any obstruction that it cannot pass through; if moving straight ahead, it must end its move in close combat; if moving straight back, it must end its move out of the gap and cannot end its move in contact with enemy. (Note that an element moving sideways out of the middle of a single element wide column can do so because it is leaving the gap not entering it.) Elements within or entering a 1 element wide gap between 2 enemy elements can change direction 90° to move into frontal contact with the flank of an enemy element. Otherwise, such elements can only move directly to their own front or rear and any remaining move must be in the same direction.

No element can interpenetrate friends who are in contact with an enemy element's front edge, nor land troops friends in a river. Friends not in spontaneous advance are permitted the following interpenetrations directly to their front or rear:

- Mounted can pass through psiloi who are facing in the same or opposite direction.
- Psiloi can pass through any land troops who are facing in the same or opposite direction.
- Bowmen except (X) can pass through or be passed through by blades facing in the same or opposite direction.
- Infantry can pass through train in any direction.
- Boats can pass through or be passed through by galleys or ships facing the same or opposite direction.
- Any land troops can pass through (I) hordes in any direction, the hordes being destroyed as the interpenetration starts.

Elements making a spontaneous advance can and must pass through any friends in their path except elephants, unless the friends are already in edge contact with or eligible to give rear or overlap support against enemy, are in a river, or have themselves already made a spontaneous advance in the current bound. When any except train are passed through by a spontaneous advance, the following actions are taken as the interpenetration starts:

- Foot elements passed through by knights, (S) camelry or expendables flee.
- Other impetuous troops that have not yet moved this bound recoil if they can complete this. They then make a full spontaneous advance, even if halted this bound, as soon as the element passing through has completed its move.
- Other impetuous troops that have already made a tactical or march move this bound, or other non-impetuous troops, recoil if they can complete this.

When the move of a single non-spontaneously-advancing element or an element of a group is insufficient to clear the base of an element it is passing through it cannot pass through if such a move would end in contact with enemy, otherwise it is placed immediately beyond the friendly element's far edge. Any following elements stop at the friendly element's near edge. Such split-off elements are no longer part of the original group.

CROSSING WATER OBSTACLES

Waterways are unfordable except where an island is within **200p** of the shore. A river can always be crossed by road ford or bridge. The first element to enter each unfrozen river during the game, or the same river in a different table sector, except by a road ford must dice for its difficulty, adding 2 if in flood and deducting 1 if running to another water feature or a short table edge, 2 if in summer or autumn in Dry or in summer in Warm or Cold. If the total is:

- < 3 it is **Paltry**. It can be waded anywhere in any formation without delay.
- 3-4 it is Easy. It can be waded anywhere in any formation, but at reduced speed,
- 5-6 it is **Tricky**. It can be waded anywhere by a single element or single element-wide column at reduced speed. Blades (S) or Spears (S) dismounted knights treat the river as dangerous see below.
- 7-8 it is **Dangerous**. It can only be waded by a single element or 1 element wide column at reduced speed. Each element making a tactical, march or spontaneous advance move dices again separately as it enters the water, adding 1 if a general's element or if an element immediately in front has just crossed successfully. A score of 1 means it is destroyed by drowning, 2, 3 or 4 that so entering the river is now impossible anywhere within **300p** that bound, 5 or more that it can cross safely. Unless destroyed anyway by another cause, an element recoiling, fleeing, or pushed back by friendly recoilers in or into such a river is destroyed by drowning unless it dices and scores 5 or more.

Troops wading a river must do so as in Figure 15, p. 39. A frozen river or waterway is impassable to naval elements and good going to land elements. Land elements fleeing across a bridge or a frozen river, frozen waterway or frozen marsh must each dice each bound and are destroyed by drowning unless they score 2 or more.

MOVEMENT AT NIGHT OR IN MIST, FOG, SNOW OR A DUST-STORM

The following rules changes apply at night (after dusk and before dawn) or in mist, fog, snow or a dust-storm:

- Instead of regular commands being allocated dice by the C-in-C after throwing, each throws its own PIP die.
- Any command that is currently unreliable or has twice had a PIP score of 2 or less since the visibility restricting conditions started does not move or dice again until dawn breaks and any visibility restricting weather has ceased, or any of its elements has seen enemy since the conditions started.
- Move distances are restricted as specified on P. 19.

TYPES OF COMBAT

Combat is either distant shooting or close combat (shooting at close range and hand-to-hand fighting). [See P. 2.]

DISTANT SHOOTING

Artillery, bowmen, war wagons (S) or (O), elephants (X), ships (S), (O) or (X), galleys, and boats (S) or (X) within range and which did not march or flee this bound can shoot at any 1 enemy element any part of which is visible inside an imaginary rectangle extending 1 element base width either side of the shooting element's front. [See Fig. 10b.]. War wagons, artillery (O) on wagons and boats (S) count any base edge as their front edge for shooting. Shooting is not permitted if shooter or target is:

- in close combat.
- providing rear support to an element in close combat.
- in full front edge to rear edge contact with an element in close combat.
- overlapping an enemy element which is in close combat to its front.

Maximum range is **100p** for (X) artillery, **200p** for (I) artillery, bowmen, war wagons, galleys, ships and (S) boats, **500p** for other artillery. Range is measured from the nearest point of the front edge of each front rank shooting element to the nearest point of the target. Range for shooting at or by troops defending a fortification is measured to and from its front edge.

An element can shoot once per bound. It must do so unless a target's recoil would destroy friends. Shooting by a 2nd or 3rd element at 1 target is not resolved separately, but aids that of the first. More elements have no extra effect. Artillery except 2 deep (X) shoot only in their own bound. 2 deep (X) shoot as 1 element in both own and enemy bounds, but not together in the same bound, simulating fire by rotation. Artillery except (X) cannot shoot if it moved this bound.

A second rank element of bowmen can aid the shooting of the front rank element or that of the element it is aiding, but only if all of the following apply:

- Both ranks are bowmen, armed with same type of bow.
- Both ranks belong to the same command.
- The second rank element is in full front edge to rear edge contact with the front rank element.
- Both ranks are of the same grade, or the front rank is (X) and the rear rank is (S) or (O) mounted on the same base.
- Neither rank is in difficult going.

Artillery (F), elephants (X), artillery on a hill, war wagons (S) or ships (X) can shoot over friendly infantry unless these are pikes or bowmen or within 150p of the target. Troops on PF can shoot over any friends. Artillery can shoot over/through enemy psiloi. Shooting is otherwise only permitted if no part of another friendly or visible enemy element is between a line from one front corner of the shooting element to any corner of the target element, and another from the other front corner to a different corner of the target without crossing the first line, and there is at least an element wide gap to shoot through.

Front rank elements can only shoot at the eligible target most directly to their front, except that artillery can choose to ignore psiloi. If two targets have exactly equal priority, the player owning the shooting element chooses which one his element shoots at. Rear rank bowmen shoot at the same target and range as the front rank element directly to their front.

The player whose bound it is chooses the order of adjudicating shooting combats. If two opposing elements mutually target each other they must be treated as the main shooting element on each side, otherwise the owning player chooses which of his elements counts as the main shooting element.

{CLOSE COMBAT on next sheet}

CLOSE COMBAT

Close combat occurs when an element has moved into, or remains in, both front edge and corner to corner base contact lined up with an enemy element or a fortification it is defending behind. [See Figures 5-7].

At the end of the movement phase, any element, other than of train or boats, which has been so contacted to flank and/or rear by enemy elements' front edge(s), and which is not in frontal combat with an enemy front edge or providing rear support to such a combat, turns to face the rear attacker if any, otherwise whichever flank attacker contacted it first. If an element contacts the flanks of two or more such elements all these turn to face, the second and subsequent elements moving to behind the first, If an element or elements contacted in flank have insufficient room to turn to face, the enemy element must make room by moving back. If this is impossible, both moves are cancelled. If turning to face one flank or rear attacker breaks contact with another, this moves to renew contact if there is room. If an element which is double based with or providing rear support to friends in frontal combat with an enemy front edge is contacted to flank or rear by an enemy front edge, this is treated as a contact with the flank or rear of the front element. Train and boats do not turn to face enemy, but count the edge first contacted by an enemy front edge as their front edge, and, unless boats, any edge in contact with an enemy side edge as a side edge.

An element can count as an overlap against an enemy element if either of the following apply [See Figure 7]:

- It is in both side edge and front corner to front corner contact with the friendly element in frontal combat with the enemy element and at least the nearest part of its own front edge is free of contact with any enemy element.
- It is in side edge contact with the enemy element's side edge, even if it is itself in contact with a friendly or enemy element to its front. Two opposing elements in contact on their side edges overlap each other. An element in side edge to side edge contact with the rear element only of a double based element does not count as an overlap on the front rank element. An element in side edge to side edge contact with a supporting element only does not count as an overlap on the front rank element.

An element overlapping or in frontal contact with the flank or rear of an enemy element which is fighting to its front fights only as a tactical factor for its friends. It can overlap two enemy elements on opposite flanks, or elements exposed by its own frontal opponents having recoiled, fled or been destroyed that bound. An element can only count one -1 tactical factor on each flank for the flank being overlapped or frontally contacted. Elephants cannot count as overlaps for friendly mounted troops except elephants. No troops can count as overlaps for friendly expendables. If a war wagon, artillery or boats element with a longer base edge currently acting as its front edge is contacted on that edge by 2 enemy elements, it fights each in turn that bound. If only half the edge is currently in contact, the attacker is overlapped.

Troops attacking fortifications always count as fighting foot. Infantry assaulting PF or gateways are assumed to use improvised ladders or rams. Mounted troops can only assault TF, except that elephants can assault any gateways. Troops assaulting an undefended fortification section do so as if attacking defenders whose CF is 0. Except at a fortification corner, attackers and defenders can overlap each other as if the fortification did not separate them. A defending element that does not occupy a single fortification section must shift to conform to an attacker if there is room. If it is unable to conform, the attacker fights the undefended fortification section. If an assaulting element moves into full front edge contact with an undefended fortification section on the other side of a corner, and an unengaged defending element is in contact with any part of the fortification section on the other side of the corner, the defending element moves to defend the assaulted fortification section at the end of the movement phase. If two assaulting elements are in full front edge contact with the two fortification sections either side of a corner:

- If one of the sections is defended, the element not faced by the defending element fights as if a flank contact, except that the defending element is not destroyed if it recoils.
- If neither section is defended, the assaulting player chooses which of his elements counts as the main attacker and which the flanker.
- The flanking element does not pursue over the fortifications if the combat is won by its side, but does recoil if the combat is lost by its side.

RESOLVING DISTANT SHOOTING OR CLOSE COMBAT

Whether in contact, shooting or only shot at, each player dices for his element, and adds its combat factor (CF) to its score as follows, together with any rear support or tactical factors that apply. [See figures 10, 11a and 11b].

Elephants.	+5 v mounted, $+3$ v naval, $+4$ v foot.
Spears. expendables or artillery.	+4.
Knights or war wagons.	+4 v mounted, +4 v naval, +4 v bowmen shooting, +3 v other foot.
Pikes.	+4 v mounted, $+4$ v naval. $+3$ v foot.
Bowmen.	+4 v mounted. +3 v naval, +3 when shooting at or shot at by bowmen, +2 v foot.
Camelry.	+4 v mounted. $+3$ v naval, $+2$ v foot.
Blades.	+3 v mounted, +4 v naval. +4 v shooting, +5 v other foot.
Cavalry, galleys or ships.	+3.
Warband or auxilia,	+2 v mounted, $+3$ v naval, $+3$ v foot.
Light horse, psiloi, hordes or boats.	+2.
Baggage, or any naval if troops disembarked.	+1.

Rear Support

Some troop types add to their normal combat factor, modify an opposing element's final combat score, or benefit from modified combat outcomes if supported to their rear by friendly elements of appropriate type. These must be of the same command, lined up with them, facing in the same direction and contiguous with them or an intervening rank of the same type (but not always grade) as the front rank. Rear support is not permitted if any rank is of chariots, or in difficult going, or defending fortifications, or being shot at unless cavalry or knights (I), or has any edge in contact with the front edge of enemy expendables, or has just moved into close combat against artillery (S). Where the new (DBMM) army lists specifically allow rear support by a different grade of the same type, such as Pk(I) supporting Pk(O), this is allowed in DBM. Exception: Sp(O) cannot support Sp(S) even if this is specified by the army list.

The following Rear Support Factors are applied immediately:

- If expressly required by their army list to be mounted on a double element base, knights (I) fighting foot, knights, cavalry or light horse to their front or shot at except by artillery add +1 for a supporting 2nd rank of knights (I).
- Spears add +1 for a supporting 2nd rank of spears, if both are the same grade and in good going, and their frontal opponents are not elephants. If fighting elephants to their front, their combat outcome is modified as specified on P.23.
- Pikes except (X) add +1 for each supporting 2nd or 3rd rank of pikes, if all are the same grade and in good going, and their frontal opponents are not elephants. If fighting elephants to their front, their combat outcome is modified as specified on P.23.
- Foot fighting to their front against pikes except (X) deduct 1 if the pikes are supported by a 4th rank of pikes, if all ranks are pikes of the same grade and in good going.
- Pikes (X) add +1 for each supporting 2nd or 3rd rank of pikes (X) or (I), if all are in good going, and their frontal opponents are not elephants. If fighting elephants to their front, their combat outcome is modified as specified on P.23.
- Warband add +1 for a supporting 2nd rank of warband.
- Auxilia (X) add +1 for each supporting 2nd or 3rd rank of auxilia (X), if the 2nd rank is of auxilia (X).
- Other auxilia in close combat against spears, pikes, blades, auxilia or bowmen to their front add +1 for a supporting 2nd rank of auxilia of the same grade.
- Bowmen in close combat against spears, pikes, blades, auxilia or bowmen to their front add +1 for a supporting 2nd rank of bowmen of the same grade, armed with the same type of bow.
- Psiloi (S) or (O) who are fighting skirmishers to their front add +1 for a supporting rank of psiloi of the same or (O) grade.

Tactical Factors

Add to or subtract from scores for each of the following tactical factors that applies:

- +2 If foot defending behind fortifications when shot at or in close combat, unless any of the following apply:
 - They are war wagons.
 - They are behind permanent fortifications and being shot at by artillery (S).
 - They are behind temporary fortifications and being shot at by any artillery or in close combat with psiloi (X).
 - They are behind any fortifications and in close combat with or shot at by a war wagon (S) or ship (X) tower.
- +1 If the general's element of an undemoralised command and either in close combat or shot at.
- +1 If in close combat and either upslope, on a raised PF tower, or defending a river bank except at a road ford/bridge.
- -1 For each flank overlapped, and/or each enemy element in frontal contact with flank or rear, or for each 2nd or 3rd element aiding a shooting enemy.
- -1 If disadvantaged by weather or shooting to or from a wood, orchard or olive or palm grove.
- -2 If an element of a demoralised command other than its general.
- -2 If mounted troops who are attacking across fortifications; or in close combat while in, or in contact with the front edge of enemy foot who are in, going rough or difficult to the mounted troops.
- -1 If (S) or (O) warband in close combat against foot to their front while in rough or difficult going.
- -2 If blades in close combat against foot to their front while in rough or difficult going.
- -2 If spears, pikes, (O) or (I) hordes or train in close combat while in rough or difficult going or while crossing any but a paltry river except by a road ford or bridge.

Grading Factors

Compare your element's total score **before** grading factors to that of its shooting or frontal close combat opponent **before** grading factors then adjust it by each of the following that apply:

- -1 if your element is neither artillery shooting nor elephants in close combat, and scored more than (S) opponents.
- +1 if your element is (S) shooting, and scored exactly 1 more than (S) opponents, or equal to (O) or (F) opponents.
- +1 if your element is shooting or in close combat, and scored equal to or more than (I) opponents.
- +1 if your element is not artillery, and scored at least 2 more than (F) opponents.

Mitigating rear support factors

Compare your element's total score **after** grading factors to that of its shooting or frontal close combat opponent **after** grading factors, then adjust the winning element's score by each of the following that apply:

- -1 if any troop-type except elephants or artillery scored more than enemy cavalry if these are supported by a 2nd rank of cavalry (O) if (O), (I) if (I).
- -1 if cavalry or knights (X) scored more than cavalry (O) or (I) if these if these are supported by a 2nd rank of psiloi (S) or (I), provided that such support is expressly permitted by their army list.
- -1 if warband, mounted troops except knights (X), war wagons or troops defending fortifications scored more than enemy spears, pikes, blades or auxilia if these are supported by a single 2nd or 3rd rank of psiloi armed with bows, or a single 2nd rank of psiloi armed with crossbows or handguns, provided that such support is expressly permitted by their army list.

{COMBAT OUTCOME on next sheet}

COMBAT OUTCOME

Now compare the final totals of your element and its opponent, then immediately make the outcome move specified below. This depends on your element's own type and that of the main enemy element shooting at it or in frontal close combat with it, but not that of elements aiding shooting at it, overlapping it or in frontal contact with its flank or rear. Outcomes applying only in difficult going do not apply unless the troops affected by the outcome count the terrain as difficult going. Outcomes applying only in good going do not apply when attacking or defending across fortifications.

Elements disregard an unfavourable outcome when shooting without being shot back at, when fighting only as an overlap and when attempting to cross undefended fortifications.

An element in frontal contact with an enemy element's flank or rear edge disregards the outcomes listed below. If, however, the element fighting the enemy frontally recoils, flees or is destroyed, the element to flank or rear recoils.

If an element's total is equal to that of its opponent:

Destroyed.
Continue fighting next bound if in close combat and neither breaks-off.
ss than that of its opponent, but more than half:
Destroyed by artillery shooting, by light troops or by (X) camelry. If not, recoil.
Destroyed by elephants, expendables or light horse, by (S) bowmen whose front they moved into contact with this bound, or by any enemy if in close combat in difficult going. If not, recoil.
Flee from artillery shooting, from expendables, or if in difficult going. If not, recoil.
Destroyed.
Flee from expendables, or if in difficult going. If not, recoil.
Destroyed by elephants, knights, (S) camelry or expendables if in going these count as good, or by warband. Spears fighting elephants to their front instead recoil if supported by a 2 nd rank of spears of the same grade. In other circumstances, recoil.
Destroyed by elephants, knights, (S) camelry or expendables if in going these count as good, or by warband. Pikes fighting elephants to their front instead recoil if supported by a 2^{nd} rank of the same grade, or of (X) or (I) if the front rank is (X). In other circumstances, recoil.
Destroyed by knights, (S) camelry or expendables if in going these count as good, or by warband. Blades (S) or (O) fighting knights or (S) camelry to their front instead recoil if supported by a 2 nd rank of (S) or (O) blades. In other circumstances, recoil.
Destroyed by knights, (S) camelry or expendables if in going these count as good, or by elephants. Warband (S) or (O) fighting knights, (S) camelry or elephants to their front instead recoil if supported by 2^{nd} , 3^{rd} and 4^{th} ranks of (S) or (O) warband. If not, recoil.
Destroyed by knights or (S) camelry if in going these count as good, and also, if auxilia (X), by elephants, expendables or warband. If not, recoil.
Destroyed by any mounted troops in contact. If not, recoil.
Destroyed by knights, cavalry, light horse or (S) camelry if in going these count as good, Recoil from elephants or expendables, or if shot at except by artillery, or if in going neither counts as good. If not, flee.
Destroyed by any in contact. If not, recoil unless in a fortification,
Destroyed by artillery except (X) or, unless (X), by elephants. If not, recoil if (S) assaulting fortifications.
Destroyed by knights, (S) camelry or expendables if in going these count as good, or by elephants or warband, or if (I) in close combat. If not, recoil unless (I).
Recoil.
Destroyed by any in contact except expendables.
Destroyed by any in contact. If not, flee if mobile.
alf or less than half that of the enemy:
Flee from spears, pikes or auxilia (X) if in good going, from close combat with artillery except (I) or (X), or from naval. Otherwise destroyed.
Destroyed if in close combat by any mounted troops, bowmen, psiloi (O) or war wagons (O), or if in close combat in difficult going. If not, flee.
Destroyed by any mounted troops if in going these count as good, by bowmen, auxilia except (X), or psiloi, or if (X). If not, flee.
Flee from close combat with artillery except (I) or (X), or from naval. Otherwise destroyed.
Destroyed by artillery (S), or by any in contact except expendables. Flee from other shooting.
Destroyed by any except expendables.

DESTROYED ELEMENTS

A destroyed element is removed. This represents its survivors breaking, dispersing and fleeing the field individually, or if naval its vessels having been sunk, burned, captured, shipwrecked or having limped off crippled. Destroyed baggage is assumed to have been pillaged and burned and any survivors scattered. When a naval element is destroyed in combat, all troops embarked are also destroyed. If shipwrecked on a lee shore by strong winds, they survive, but as hordes (I).

When an element is destroyed as its close combat outcome or by being unable to complete a recoil from close combat, all friendly elements with any part directly behind and less than the destroyed element's base **depth** from the initial position of its rear edge, or less than one base **width** if this is less, and any psiloi which gave rear support, are also destroyed unless any of the following apply:

- The front element is of psiloi and the nearest element behind is not.
- The front element or that behind is of war wagons, baggage or naval, or the front element is of artillery or (I) hordes.
- The elements behind are separated from that in front by a fortification, or the front element drowned.

If an element that fought as a flank contact is still in front edge to side edge contact with enemy after destroyed enemy elements have been removed, it is immediately shifted sideways, if necessary and there is room, to conform to front corner to front corner and front edge to side edge contact with the front-most such element.

RECOILING ELEMENTS

A recoiling element moves back its base depth to its rear without turning, or a base width if this is less. If it meets friends facing the same direction, it may pass through to their rear if of a type allowed to do so (and must do so if it is psiloi), otherwise if naval it pushes back naval, if land troops any but elephants, war wagons, baggage or naval. If it meets skirmishers facing any other way, it pushes them back directly to its own rear **unless** their front edge is in contact with enemy. Other troops not facing the same direction cannot be recoiled through or pushed back. Elements that would be passed through or pushed back by recoiling elephants instead flee. An element recoiling from distant shooting only by enemy entirely behind an imaginary line extending its rear base edge, first turns 180°. Land troops on a bridge recoiling from naval turn and flee back to land.

A recoiling element is destroyed if it starts or ends its recoil with an enemy element's front edge in contact with its flank or rear; or if, before it has completed its recoil move, its rear corner only or rear edge either:

- Meets enemy (other than psiloi contacted on a side or rear edge or rear corner, who immediately flee). Unless the recoilers are psiloi, this enemy is also destroyed if contacted on a rear corner **only** or a rear edge by the recoiling element's rear edge, or on a rear or side edge by its rear corner **only**. It does not then count as having been destroyed in close combat.
- Meets friends it cannot pass through and cannot push back sufficiently to complete its recoil move.
- Meets terrain it cannot cross. (Landing troops can re-embark. A boat recoiling on a river follows its curves.).
- Meets a PF parapet or TF, except from inside an enemy TF or unopposed at a gateway.

An element pushed back behind a recoiling element does not itself count as recoiling. If it meets friends it passes through them or pushes them back in the same circumstances as if it was recoiling.

The recoiling element, not the pushed back element, is destroyed if, before the recoiling element has completed its recoil move, the pushed back element's path is blocked by any of the following:

- Enemy (other than psiloi contacted on a side or rear edge or rear corner, who immediately flee). Unless the pushed back element is psiloi, this enemy is also destroyed if contacted on a rear corner only or a rear edge by the pushed back element's edge, or on a rear or side edge by its corner only. It does not then count as having been destroyed in close combat.
- Friends it cannot pass through and cannot push back sufficiently for the recoiling element to complete its recoil move.
- Terrain it cannot cross. (Landing troops can re-embark. A boat pushed back on a river follows its curves.).
- A PF parapet or TF, except from inside an enemy TF or unopposed at a gateway.

In each such case the pushed back element (unless itself destroyed – see DESTROYED ELEMENTS above) is moved back as far as the obstruction.

The pushed back element is lost if it is pushed even partly off the table edge. The recoiling element is only lost if it also crosses the table edge.

{Fleeing Elements on next sheet}

FLEEING ELEMENTS

Depending on the circumstances, a fleeing element moves as follows:

- An element fleeing as a result of shooting or close combat [See p. 23] first recoils one base depth. It then moves directly to its own rear, making a 180° turn to do so.
- An element fleeing from an enemy flank march [See p. 15] moves directly away from the flank table edge if a land element, towards its side's base edge if a naval element, making an initial turn if necessary.
- An element fleeing after being passed through by spontaneously advancing friends [See P. 20] makes an initial 180° turn unless the impetuous friends passed through within 90° of from front to rear.
- An element fleeing from a recoiling enemy or elephant element [See above] moves in the same direction as the recoiling element, making an initial turn if necessary.
- An element fleeing in spontaneous retreat as a result of demoralisation [See P. 25] moves towards the nearest point on its army's base table edge, or its edge of arrival if it successfully flank marched, except that an element of naval landing troops moves towards the nearest unladen friendly naval element capable of embarking it if any exist. In each case it makes an initial turn if necessary.
- An element of skirmishers fleeing as a result of an enemy press forward move flees directly away from (perpendicularly to) the enemy front, making an initial turn if necessary.

After any initial recoil, a fleeing element can and must change direction by the minimum necessary up to 90° to avoid enemy, friends it cannot pass through or by, difficult going it cannot enter this bound, impassable terrain, or a table edge other than its side's base table edge or, if it successfully flank marched, its edge of arrival, provided that no such obstruction is visible in the new direction within **200p**; or to pass through friends it contacts. It is destroyed by enemy or impassable terrain it cannot so avoid. Friends it cannot pass through or avoid are burst through, then flee behind it until it stops or their own flee move is exceeded. It cannot deviate to avoid crossing an unfrozen river, or a frozen river, frozen waterway or frozen marsh, a failure to succeed in any of which destroys it, including during an initial recoil.

A flee move, excluding any initial recoil, is **50p** more than full tactical move distance in that terrain. If it involves a turn, move distance is measured from the original position of the element's rear edge after any recoil to the final position of its front edge. It ends without turning again. An undemoralised element flees for 1 bound only unless it suffers a new cause of flight. Mounted infantry flee as camelry if on camels, as cavalry if not. Dismounted that can remount do so. A friendly element of skirmishers, any part of which is directly behind and less than 1 element base width from the initial position of the rear edge of any front rank element starting to flee from close combat, also flees.

PURSUING ELEMENTS

If its close combat opponents recoil, break off, flee or are destroyed, an element of knights except (X), pikes, irregular blades, irregular spears (but not bow (X)), waders or naval, or of any impetuous troops, immediately pursues straight ahead its full move if this contacts enemy baggage, otherwise the lesser of its own base depth or width, unless any of:

- It is in contact with an enemy front edge to its flank or rear after a frontal opponent breaks off.
- It fought only as an overlap or flank contact.
- It was foot fighting skirmishers, pikes or blades vs mounted, or knights vs psiloi, and chooses not to pursue.
- It was defending a fortification or river bank, took a tower, or would enter a river or reach a waterway.
- Its pursuit would take any part of its base off table.

Contiguous 2nd, 3rd or 4th rank elements lined up behind pursuers also pursue if they are of the same troop-type as the pursuers or if they would be capable of giving the pursuers rear support against any troop-type, even if not the type being pursued. A naval element does not pursue land opponents, but its landing troops can choose to do so. If a pursuing element other than one pursuing a break-off contacts a new enemy element which is not already in close combat, the ensuing combat does not occur until next bound. If there is room, pursuers conform to enemy baggage their front edge contacts. Expendables are destroyed if their pursuit reaches DGo.

PRESSING FORWARD

If an undemoralised group (entirely of foot, or of foot plus a mounted general and any troops double based with him) causes all of its frontal close combat opponents to flee in its own bound, without pursuing any of them, it can press forward after all combats have been resolved for the bound. This is only permitted if any tactical move the elements comprising the group made earlier in the bound was entirely straight ahead. Skirmishers can only press forward if in a rear rank behind other troops. All ranks must press forward if any do. No troops can press forward across fortifications.

A press forward move is straight ahead, up to the full tactical move of the slowest element in the group. Any enemy skirmishers that would obstruct the push forward move flee (once only) without being contacted. The move ends if fresh enemy non-skirmishers are contacted. Combat is not resolved till next bound. If skirmishers are contacted (because their flee move was forced to deviate to avoid some obstruction), they are immediately destroyed; the press forward move can continue.

A press forward move does not count as an outcome move, so must obey normal movement restrictions.

Note that as groups are not fixed in DBM, if only part of a group causes all of its close combat opponents to flee, that sub-group can choose to make a press forward move, but this must include all contiguous lined-up ranks, as stated above. As a press forward move does not require PIPs, it can include troops of different commands if these constitute a group.

STORMING FORTIFICATIONS

An element assaulting fortifications which destroys a defending element or forces it to flee or recoil, or which achieves a higher score than an undefended fortification, (unless fighting only as a flanker on a corner or friends are in the way) immediately pursues 1 base depth measured from the inner edge of the fortification, any enemy elements in the way being moved back sufficiently to make room. Friends following, unless through a gate, count as assaulting an undefended fortification next bound. If an element subsequently recoils or flees back across a gateway or TF, this is measured from the outer edge of the fortification, and infantry opponents pursue back into contact with the fortification. An element of war wagons (S) or naval does not pursue across fortifications, but, if war wagons (S), an element of infantry in contact behind, or if naval, its landing troops or those of a naval element in contact behind, can.

LOSSES

Destroyed elements are lost. An element is also lost and removed from the table if any of its base crosses the table edge voluntarily or when recoiling or fleeing. For the purpose of calculating demoralisation, defeat and tie break situations, each troop element counts as 1 element equivalent, except as follows:

- Each element of war wagons (I) counts as 3 element equivalents.
- Each element of psiloi, hordes except (I), boats (F) or irregular auxilia (I) counts as half an element equivalent.
- Expendables or hordes (I) count as 0 element equivalents.
- A dismounted element counts as the mounted element equivalents it was exchanged for. Its mounts do not count.
- An element of naval landing troops counts as its original element equivalents whether embarked, disembarked or shipwrecked. Its vessels do not count. An element of ships (I) baggage counts as 1 baggage element.
- Baggage does not count towards the original element equivalents of a command or army, but baggage losses are added to total army losses when calculating final defeat and tie breaks only. Each element counts as 2 elements if destroyed in close combat, 1 if lost any other way, 0 if demoralised but not yet lost.
- If any invaders have passed through the centre point of a BUA, add 4 elements to the defender's total army losses.

{DEMORALIZED COMMANDS on next sheet}

DEMORALISED COMMANDS

An entire command becomes demoralised for the remainder of the game when either of the following applies:

- At the end of any bound by either side at least one third of its original element equivalents have been lost.
- Its general is lost and its next PIP die score is not greater than the cumulative total of element equivalents lost by the command. This represents immediate panic after loss of a general, so only applies once per command.

A demoralised command can use its PIP die each bound to make 1 single element tactical move and any remainder to halt groups or single elements for the current bound. All other mobile elements must flee in spontaneous retreat [See P. 24] unless within the circuit of a fortification not entered by enemy, or in a tower, or their front edge is in contact with enemy.

VICTORY & DEFEAT

When at the end of any bound by either side an army's cumulative losses, including all troops of commands that are demoralised or changed sides and any fled or destroyed baggage, at least equal half its original element equivalents, its remaining commands also become demoralised. The game is over.

In a competition game each army is worth 5 victory points (VP). 1 VP is assigned to each sub- or ally-general's command. The remainder is assigned to the C-in-C's command. For example, if an army has a C-in-C, a sub-general and an ally general, the C-in-C's command is worth 3 VP, the other commands 1 VP each. At the end of the battle, each side's score is the sum of the VP of any demoralised enemy commands, plus the VP of its own undemoralised commands. This gives a possible range of 0 to 10. If neither side has any demoralised commands at the end of the game, and either side has any commands which have lost at least one quarter of their original element equivalents, transfer 1 VP from a side with more such commands to the side with less such commands. In a large "Swiss Chess" tournament a tie may occur. If so, we recommend that victory be awarded to the player who, in the final round, had the lowest percentage of his original element equivalents lost, demoralised or having changed sides. Lost army points (AP) must never be used as a criterion.

TACTICAL ADVICE

It is the stated aim of most wargames rules writers that historical tactics should give the best chance of victory on the table, and that wargames generals should be bound by the same constraints as their historical counterparts. We feel that these rules go further than any other table-top miniatures rules towards realizing these objectives with particular importance being attached to the problems of controlling troops in battle.

Under DBM command control is absolutely central to successful generalship. Owing to the PIP system, badly thought out or overcomplicated plans will usually come to grief as will ill-considered attempts to redeploy in response to unexpected enemy dispositions.

It is important, therefore, to have a satisfactory plan in mind and keep to it. The plan should ideally take into account:

- The strengths and weaknesses of your own forces.
- The strengths and weaknesses of the enemy.
- The terrain.
- The enemy's possible deployments and plans.

It should be designed to require the minimum possible number of PIPs to execute, and should allow for the occasional PIP score of 1.

It should also allow some flexibility to deal with the unforeseen. This is usually best achieved by retaining a suitable reserve under the control of the C-in-C. Such a reserve should, if possible, consist of high quality fast moving troops.

Most of each command should initially be deployed as a single group. Where appropriate, they can separate out into multiple lines when they are closer to the enemy. Troops close to the enemy should not remain in deeper formations than required for rear support. Additional rear rank elements will not add to the strength of the formation and will be swept away if the front rank clement is destroyed. Roman legionaries, for example, should fight enemy foot in multiple lines, with preferably two base depths between. Rear line elements, instead of being swept away, can then move forward to fill any gaps that appear in the front line. For the same reason, reserves moving across the rear should not get too close to the front line.

Impetuous troops need to be deployed in large groups, preferably only one per command, otherwise they will soon go out of control. If possible they should be placed so that they can move straight forward against the enemy without wheeling or halting. They should not be intermixed with faster or slower types. They should not be deployed facing disadvantageous terrain. If other troops are placed in front of them, there is a danger that they will eventually burst through them with disastrous results if your advance is checked.

If a regular army faces a largely irregular force, it will probably be outnumbered. The regular general should use his superior control to wrong-foot the enemy. If the enemy are impetuous, then attempts should be made to draw them out of formation before the decisive clash.

Large ambushes, comprising a whole command hidden behind a hill, can surprise the enemy to devastating effect if he assumes the troops to be off-table on a flank march. Smaller ambushes, or small advanced forces of light horse, can be effective in holding off the enemy on one wing, while victory is achieved on the other.

Allies may turn out to be unreliable. The effect of this can be minimised if they are deployed in a position where the enemy will be forced to attack them, thus committing them to your cause.

Flank attacks can be deadly, as they may result in several elements being swept away, so you should try to ensure that you do not leave your lines exposed to this danger. Conversely, you should attempt to outflank the enemy where possible. On the other hand, you should not necessarily seize a transient positional advantage if there is a risk that it may lead to disaster for your own troops in a subsequent bound.

If the advance of your centre is held up by small groups of enemy psiloi or light horse, the answer is in your own hands. Do what real generals did and keep them at a distance with an advance guard of cavalry. This can be withdrawn when the main armies draw near each other. However, remember that many a real battle took place at the wrong place or wrong time because both sides kept on reinforcing clashing light troops.

If your light troops are out-fought by their enemy equivalents, they should be withdrawn quickly before their losses demoralise the remainder of the army. If the psiloi are failing, it is time for the phalanx.

You should not be excessively concerned to keep generals out of close combat. Their elements are hard to kill and hard to withstand, so leading from the front can be valuable.

Finally, you should reflect on the thought that historical armies mostly deployed as they did for go reasons. A historical deployment is therefore likely to suit your army best, at least when fighting the historical opponents against which it was successful!

MISCELLANEOUS

COMPETITION UMPIRING AND RULE INTERPRETATIONS

The use of alternate movement should greatly reduce the need for umpires. When one is used, his function is to decide if a player's actions or expectations, in a specific instance referred to him, accord to the letter and spirit of the rules as the umpire understands them, and to alter an illegal action by the minimum necessary to make it legal. Each decision should be made on the individual circumstances, and not taken to constitute a precedent. Players are entitled to an honest umpire, but not one who is infallible or tolerant of gamesmanship.

Sets of "interpretations" by competition organisers can cause more problems than they solve, due to poor understanding, careless paraphrasing, or being made a vehicle for ill-judged amendments. Careful rereading of the rules should solve most queries, but you are welcome to phone Phil Barker on 0121 472 6207 for explanations, preferably in business hours.

CAMPAIGN AND SCENARIO GAMES

As well as equal points casual or competition games, these rules are equally suitable both for scenario games featuring unequal forces, special victory conditions, or incomplete or misleading information, and for battles in which circumstances and forces are defined by the events of a campaign including logistical, economic and political factors.

A simple system for determining final losses in a campaign battle is as follows: Unlike in a competition game, any troops voluntarily moved off his own table edge by the invader, or off any of the other three table edges by the defender, do not count as lost for demoralisation purposes, so that it may be possible for a player to extricate his army more or less intact from an unfavourable situation. Play ends when one army is completely demoralised or its last non-baggage element leaves the table, whichever comes sooner. All destroyed elements on both sides are lost. The victor (or player holding the field) regains all his other elements that have been demoralised or lost off table. The defeated (or retreating) player must dice for each of his elements that has involuntarily left the table or which remains on the table when the army becomes demoralised, Both sides count up the number of elements of mounted troops remaining on the table, including those currently dismounted but retaining their mounts. Deduct 1 from the score of any element in contact with enemy.

Ratio of victor's mounted to loser's:	Element lost on scores of:		
	If Hordes, Artillery or Baggage	If Elephants or other foot	If other mounted
Half or less	1,2,3,4	1,2	0
More than half but less than double	1,2,3,4,5	1,2,3	1
Double or more	1,2,3,4,5,6	1,2,3,4	1,2

Elephants and artillery lost in this way are assumed to be captured by the victor. A similar method can be used to determine the capture of naval elements, using the ratio of naval elements of both sides and the elephant column above.

CONTACT ADDRESSES

For details of other WRG wargames rules, army lists and reference books, see the website <u>www.wrg.me.uk</u>

PBM UMPIRE is a computerised system (IBM PC compatibles) for moderating and automatically generating player reports for campaigns with up to 30 players, A trial version, including a fully functional 20 player Medieval scenario, is available free by e-mail. On registration, which costs £25.00, the scenario editor will be supplied. This enables scenarios to be created or modified, and permits battles to be fought either automatically or using DBM, DBA or other table-top rules. Orders/enquiries to Richard@byzant.demon.co.uk.

THE SOCIETY OF ANCIENTS is a long established world-wide society for all interested in ancient and medieval warfare, and publishes a bi-monthly journal, SLINGSHOT. Contact: <u>www.soa.org.uk/</u>

WARGAMES DEVELOPMENTS is an association of wargames innovators centering around an annual conference. Contact: The Treasurer, 84 Eglinton Hill, Shooters Hill, London SE18 3DY. Or /<u>www.wargamedevelopments.org/</u>

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In each of the above examples the double-headed arrow shows the distance to be measured - i.e. the furthest distance that any of the element's front corners ends from its original position. [See P. 17]. This method of measuring single element moves is a simplification to remove the necessity of taking into account intermediate turns or wheels, and may result in some parts of an element moving through a little more than the element's maximum move distance. It is based on the assumption that the men forming an element do not necessarily maintain a constant relationship to each other during the move and that some may move faster to complete the manoeuvre. If, however, more than one of the element's corners deviates from a straight path to avoid other troops, to avoid crossing their front, or to avoid a terrain feature, the extra distance must be taken into account in measuring the element's move distance.



Figure 2: Crossing an enemy element's front.

Element A can cross the front of C to contact B but not vice versa, as the move to contact B is shorter.


Figure 3: Expanding a single element wide column.

A single element wide column can expand as a group move. In these examples the elements are Spears. In both cases element A must remain stationary.



Figure 4a: Forming a single element wide column from a wider group.

A group move can be used to start to contract a group into a single element wide column. In this example the elements are Spears. Element A moves forward as the head of the column. B, C and D follow. The other elements are unable to get into the column this move, so merely close up the resulting gap.



Figure 4b: Forming a single element wide column from a wider group.

All elements are cavalry. Element A wheels forward to its left, the rest fall in towards the forming column by single element moves. None can exceed their maximum move (unless A is moving along a road).



Figure 4c: Forming a single element wide column from a wider group.

All elements are cavalry. Element A wheels forward to its left, the rest fall in towards the forming column by single element moves. None can exceed their normal maximum move (unless A is moving along a road).



Figure 7: Overlaps and Partial Contacts.

Element A overlaps B. B and C overlap each other. D overlaps E, and has contacted F in flank. K does not overlap L, and must have moved into that position before L contacted J. A-G moved as a group, G initiating close combat by lining up in edge to edge and corner to corner contact with B. Although A has also contacted the front edge of M (part of a group not of psiloi), they are not in corner to corner contact, so there is no combat between them until one of them conforms in a succeeding bound.



Figure 8a: Conforming to the front of enemy elements.

None of the above elements is of skirmishers.

If the group of elements A-F moves straight forward into contact with elements G, H & I, G must pivot to face and line up exactly with A, H must shuffle sideways to line up exactly with D, I must pivot to face and line up exactly with E. This is because G, H & I are neither in a group nor in even partial edge to edge contact with another friendly element, so must conform to the front of enemy elements moving into contact with them as a group.

If G, H & I move into contact with group A-F, this must be by single element moves since they are not in a group. G must once again conform to the front of A, H must conform to the front of D, and I must conform to the front of E.



Figure 8b: Conforming to the front of enemy elements.

Elements A, B, C & D are psiloi. Elements E, F, G & H are not.

If the group of elements A-B moves to contact the enemy group E-G, it must wheel and shift to conform to the front of elements E & F, because these are part of a group. A lines up exactly with E, B with F. If group C-D moves to contact element H, H need not pivot as it is in partial edge to edge contact with G. Group C-D must therefore wheel to contact H with C's front parallel to that of H. H must then shift sideways if necessary to conform to C.

If group E-G moves straight forward to contact group A-B, it need not conform to the front of A-B as this group is a smaller group entirely of skirmishers. Instead A, which will be contacted first, must pivot to face E. Elements F & G must move the same distance as E, so will not contact any enemy. F will count as an overlap against A. If H moves to contact C, H must pivot to face C, even though C & D are both psiloi, because H is not itself part of a group.

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Figure 9a: Spontaneous Advances.

Elements A, B, C & D are Polish knights, classified as Irregular Knights (**O**), and hence impetuous. E and F are Russian cavalry, classed as Irregular Cavalry (**O**). Unfortunately, the Polish commander, when moving his troops this bound, forgot to keep back any PIPs to control group A-D. He should have retained 2 PIPs if he wanted to halt or manoeuvre the group, 1 PIP if he wanted to move it straight forward **150p**. Elements A, B, C & D have neither made a tactical or march move this turn, nor been halted by a group halt. They must therefore each make a spontaneous advance towards the closest enemy element. This is E in the case of A & B, F in the case of C & D.



Figure 9b: Spontaneous Advances.

This shows the position after elements A, B, C & D have made their spontaneous advances. B & C moved first. A and D were allowed to pivot backwards by the minimum necessary to align their direction of facing with B & C respectively, but not allowed to end in front corner to front corner contact with them. The result is that they are now in echelon, and no longer qualify as one or even two groups, as they are not in corner to corner contact. In the Polish player's next bound, each element will have to be moved or halted separately, making it likely that the momentary loss of control this bound will be permanent, particularly if the Russian player pulled back E & F during his bound.





Figure 9d: Spontaneous Advances

The Polish player decides to move his elements in the following order: B, E, A, D, C then F. B and E move straight forward. This diagram shows the position partway through A's move. A has contacted E, which is blocking its direct centre to centre path towards G and which it cannot pass through [see P. 20].

Figure 9e: Spontaneous Advances

A can now shift and/or pivot by the minimum necessary to avoid E, ending up in the position shown opposite. The 3 arrowed measurements must be added together to determine A's overall move. D, C and F also move in turn and end up in approximately the positions shown. (Try it and see!).

A further note about Spontaneous Advances.

If another friendly element is already in contact with the front edge of the nearest enemy element, a spontaneously advancing element will attempt to move into whichever is nearest of a rear support, overlap or flank contact position if any of these is possible.



Figure 9c: Spontaneous Advances

Elements A, B, C, D, E and F are Polish knights [see 9a], G is Russian cavalry. Once again the Polish commander has no PIPs left to control group A-F. Elements A, B, C, D, E and F must therefore each make a spontaneous advance towards the closest enemy element, which is G.





Figure 10: Distant Shooting

English longbowmen (classed as (S) bowmen) shoot at a Scots schiltron (classed as (I) pikes) and some Ettrick archers (classed as (O) psiloi). Element A can shoot at G. E can shoot at K. C can shoot at G, but cannot shoot at K because G is closer to directly to its front. C, therefore, shoots at G, aided by A and D. Only 2 elements can assist C. Both sides dice. C scores 5 and adds +2 for its combat factor against foot. G scores 3 and adds +3 for its combat factor against foot. It receives no support from H, I or J, and must deduct 1 for each of the elements aiding its opponent. The scores are now 7 to C and 4 to G. G is (I), so C adds +1 to a winning score when shooting at it, making its final score 8. G's final score is half C's final score, so G is destroyed. As G has been destroyed by distant shooting, rather than by close combat, H, I and J are not destroyed. E shoots at K, assisted by F. Both sides dice. E scores 2 and adds +2 for its combat factor. K scores 5 and adds +2 for its combat factor, then deducts 1 for the element aiding its opponent. The scores are now 4 to E, 6 to K. E's score is less than K's, but E suffers no penalty because it has not been shot back at – psiloi having no distant shooting capability. If the dice scores had been reversed K would have been destroyed.



Figure 10b: Distant Shooting

A is an element of bowmen. The dotted line shows the area 1 element base width either side of straight ahead of A inside which A can target enemy (A's "arc of fire"). The solid line shows A's shooting range (**200p**).

If all the shaded elements are separate elements, A must shoot at B because it is the target most directly to A's front.

If each shaded element was the only enemy element present, A could shoot at B, C, D or E, because they are within range and at least partly inside A's arc of fire. A cannot shoot at F or G because, although within range, they are not even partly inside A's arc of fire.

	Pikes H	i Pikes L	
	Pikes G	Pikes K.	
	Pikes F	Pikes J	
	Pikes E	Pikes 1	
Blades A	Blades B	Blades C	Blades D

Figure 11a: Close Combat.

A line of four elements of Roman legionaries (classed as **(O)** Blades) are moved into combat with eight elements four deep of Macedonian pikemen (classed as **(O)** Pikes). Each element must be lined up exactly with its opponent with no part-element overlaps. Element C includes the Roman general.

Since it is the Roman player's turn, he can choose which of his two elements in edge contact fight first. He decides on C. A and D will not fight, but can count as overlaps.

Both sides dice. C scores 4, adds its combat factor against foot of +5, a further +1 for the general and -1 for the 4^{th} rank of the enemy pikes. I scores 4, adds its combat factor against foot of +3, and a further +1 for rear support from each of the 2^{nd} and 3^{rd} elements of pikes behind it. However, it must deduct 1 for being overlapped by D.

There are no modifications for grading, as both elements are **(O)**, so the final scores are 10 to C, 9 to I. I has scored less than C, but more than half as many, so immediately recoils its own base depth, pushing back J, K and L.



Figure 11b: Close Combat.

The players now dice for B and E. B scores 6, adds its combat factor of +5, and -1 for the 4th rank of the enemy pikes. E scores 1, adds its combat factor of +3 and a further +2 for rear support by pikes F & G, but must deduct 2, since it is now overlapped by both A and C. E's score is half or less that of its opponent, so it is destroyed.

F is less than E's base depth behind E, so is also destroyed

It is now the Macedonian player's bound, and he can move G (with H in support) & I (with J, K & L in support) back into contact if he wishes to as two (because their front is not level) group moves expending 1 PIP each.



Figure 12: Flank Contacts and Rear Support.

A, B, C & D are Macedonian pikemen (Pikes). X & Y are Roman legionaries (Blades). X has contacted the front of A. Y has made a legal flank contact on B. As B can provide rear support to A against X, it does not turn to face Y at the end of the movement phase. Nor do C or D.

Instead B, C & D provide rear support to A in the close combat against X, and Y is treated as if in frontal contact with A's flank. Thus A suffers a minus 1 tactical factor, and is destroyed if it suffers a recoil combat outcome (in which case B is also destroyed because it is less than A's base depth behind A, and Y is shifted sideways so that its left front corner is in contact with the left front corner of C).

If there was no enemy in front edge contact with the front of A at the end of the movement phase, B would instead turn to face Y and C & D would move to behind B. Close combat would then ensue between Y and B. C & D would provide rear support to B.





In order to partly intervene between a moving element and an enemy element whose front it is attempting to cross within 1 element base width [See P. 18. Movement Restrictions. Para 1], the intervening element must, at every point in the moving element's traversal of the enemy element's front, intersect either of the imaginary lines traced from the front corners of the enemy element, to the front corners of the nearest edge of the moving element. (It is not adequate to just touch the line, it must be intersected. The imaginary lines cannot cross.).

In example 13a above, element C prevents element X from contacting the flank of element A, because no element even partly intervenes.

In example 13b, element D does not prevent element X from contacting the flank of element A, because C partly intervenes at every point in X's traversal of D's front.



Figure 14a: Defending a River Bank.

Elements A, B & C count as defending the river bank and would get a +1 tactical factor in close combat.

In order to do so, an element must be entirely on dry land, facing the river, with the water's edge closer than its own base depth directly in front of the nearest part of its front edge, and part of the opponent's base still in the water.



Figure 14b: Defending the Edge of an Unfortified Area Terrain Feature.

Element A is defending the edge of the feature. It does not have to conform to an attacking group.

Such an element must be entirely inside the feature, facing outwards, and close enough to the edge that the enemy element contacting it is at least partly outside the edge.

Figure 15: Wading Rivers

Land elements recoiling, pushed back, fleeing or pursuing in or into a river ignore the direction of flow. Otherwise, a single element or group wading a river must cross it at between 45° and 135° to the direction of flow, except that it can pivot/shift the minimum necessary to line up the front rank in contact with enemy obstructing emergence. A single element or group already in a river can continue directly forward on its present facing even if this is outside the 45° and 135° arc, provided that its front rank's front edge ends the move clear of the river. Alternatively, it can pivot/shift by the minimum necessary to conform to the above arc.

All elements wading a river must face either the direction they are moving or the opposite direction, even if moving by single element moves. They cannot change direction while in the river, except to pivot/shift as above and/or to move directly to their previous rear. Troops wading except across a paltry river or road ford cannot shoot. Wading troops receive rear support and suffer combat outcomes as if in good going. Naval can pass through friendly or enemy waders, in which case the waders are immediately destroyed, this not counting as in close combat.



Example

Elements A-D are pikes. The group started to cross the river in its side's last bound. In its next bound, if enemy element X was not present, its movement options would be (a) to continue moving in exactly the same direction until each element was across the river (As A-D is a single element wide column, any elements completely clear of the river could start to wheel), or (b) to fall back in exactly the opposite direction – using single element moves. (Skirmishers could move back as a group).

However, during his bound, the enemy moved up element X, obstructing A-D's emergence from the river. This creates the additional option of pivoting/shifting the group to contact X. The whole group pivots/shifts so that A conforms to the front of X and B-D line up behind A. This would be so even if A-D ended up facing outside the permitted 45° and 135° arc. None of them can exceed their maximum move – measured as if single elements.

If, in the ensuing close combat, A recoils or flees from X, it will not be destroyed unless the river is **Dangerous** and it dices and scores less than 5. B, C and D are not automatically destroyed if A is, but, whether A is destroyed or not, dice separately for being pushed back by recoilers while in a **Dangerous** river.

Following a recoil, neither side's movement would be restricted by the proximity of the enemy because of the intervening water [See P. 18 Para 1]. In its next bound, A-D's movement options would be (a) to move back into combat with X, or (b) to fall back to its rear, once again using single element moves. If A-D were facing a direction outside the 45° and 135° arc, they would have to pivot/shift sufficiently to conform to this at the start of the move, before falling back.

If the enemy, during his bound, had moved X away, and A-D were facing a direction outside the 45° and 135° arc, the group could move forward either straight ahead (provided that A's front edge cleared the river) or after pivoting/shifting sufficiently to conform to the 45° and 135° arc.



Figure 16a: Foot Marching Near Skirmishers

The unshaded elements represent a marching group of blades. The shaded elements are enemy light horse. The blades' group has four elements in its front rank. The march move must stop at the position shown by the diagram because the group now has four elements of skirmishers at or closer than 200p. This march move has gone closer than 200p to enemy, so must be entirely straight ahead – it cannot include any wheel, even while outside 200p of enemy. Any previous march moves earlier in the bound that were entirely outside 200p of enemy could have included wheels or changes of formation.



Figure 16b: Foot Marching Near Skirmishers

The unshaded elements represent a marching group of blades. The shaded elements are enemy light horse. The blades' group has four elements in its front rank. It can march move to **50p** from the light horse because there are less than four enemy skirmisher elements at or closer than **200p**, and no non-skirmisher elements.

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	GLOSSARY
Edge contact	Each element has at least part of an edge in contact with at least a part of an edge of the other. Elements in contact only corner-to-corner are not in edge contact.
Rear Support	An element counts as giving rear support if it fulfils the criteria for rear support given on P.22, and the front rank element's frontal opponents are of a type against which a relevant rear support factor, modified combat outcome or mitigating rear support factor is listed. It does not count as giving rear support against other types.
Straight ahead	Perpendicularly forwards from the element's front edge.
Straight back	Perpendicularly backwards from the element's rear edge.
Table	The rectangular area representing the battlefield.
Within 1 base width	At or closer than 1 element base width distance.
Within x paces	At or closer than x paces distance.

ALL ARMY LIST BOOKS. First page of text. Delete "All armies must also have 2 baggage elements for each general whose command is not initially entirely waterborne". Replace with: "All armies must also have 6 baggage elements if 400AP or less, otherwise 8."

ALLIES. Para 1 (Bk 1, 3, 4) or Para 1 and Para 2 (Bk 2). Delete "and 2 baggage elements" twice.

Para 2 (Bk 1, 3, 4) or Para 2 (Bk 2). Delete "2 baggage elements must also be included."

All Cv(S) required to be double-based with Cv(O) as the front rank of a double based element are downgraded to (and paid for as) Cv(O).