DE BELLIS ANTIQUITATIS

SIMPLE FAST PLAY ANCIENT WARGAME AND CAMPAIGN RULES
WITH ARMY LISTS

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INTRODUCTION

These rules derive from an experimental set for battles between Romans and Celts demonstrated by Phil Barker at the 1988 Society of Ancients conference. Its favourable reception led to a more general two page rule set called "De Bellis Societatis Antiquorum" produced for a very successful and popular competition at the 1989 conference. This commercial version extends the combat system, differentiates a few extra troop types, includes fuller explanation of procedures and philosophy than proved possible in two pages and incorporates set-up information, a campaign system by Richard Bodley Scott and suggested compositions for all important armies between 3000 BC and 1485 AD. We hope that it will prove acceptable both as an introduction for new players and as a tonic for the jaded.

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 are entirely new. They start from the assumptions that the results of command decisions can be shown rather than the minutia of how orders were comunicated and interpreted, that the proportions of different troops fielded were decided by availability within their culture and not cost-effectiveness against a current opponent, 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. The resulting system is more subtle than may be immediately apparent, and is the fruit of much detailed development work.

The average player has memorised the battle rules part way through his first game, but tactical skill, especially in the use of light troops, takes longer to develop. A game lasts less than an hour, so that a five round convention competition could be completed in one day and still leave plenty of time for visiting the trade stands. Since all battles end in outright victory, the organiser's work is minimised. Campaigns for up to six historically opposed armies can also be completed in a single day if desired.

Figure manufacturers may be comforted to learn that the small number of figures required for a DBA army is not as likely as it may at first seem to reduce their business. Many testers have not been content to merely provide a pair of historically opposed armies, or even the armies for a complete historical campaign, and have taken the opportunity to buy all those armies that have tempted them in the past but been ruled out by expense, painting time or storage considerations. 15mm scale figures have been most popular, followed by 6mm.

We see this style of game as an alternative to, rather than replacement for, conventional wargames rules. Each style has its own advantages and disadvantages. It may be that some future synthesis will emerge, and we welcome any suggestions.

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PLAYING EQUIPMENT AND REPRESENTATIONAL SCALES

CHOICE OF FIGURE AND MODEL SCALE

These rules can be used with any scale of figure or model. 25mm is good for public demonstration games at conventions, where its easier visibility for spectators is an advantage. 15mm combines cheapness and convenience, the number of figures based as an element serving as a useful reminder of combat factors. 5mm and 2mm increase visual realism at some cost in convenience.

ARMY SIZE AND TROOP REPRESENTATION

An army consists of 12 troop elements, one of which includes its only general. Unless sallying after standing siege in a campaign or including more than one war wagon, it must also have an on-table camp which is garrisoned either by one of the 12, or by an extra element of camp followers that cannot leave it.

An element consists of a rectangular base to which is fixed figures, or the equivalent 5mm or 2mm blocks, representing 6 to 8 ranks of close-formed foot, 4 or 5 ranks of mounted troops or skirmishers, or a single rank of elephants, scythed chariots, artillery or wagons. WRG 7th edition elements are ideal.

PLAYING AREA AND GROUND SCALE

The optimum playing area is 24 inches or 600mm square for 15mm or smaller figures or twice that for 25mm. We recommend the use of either single integral terrain blocks or grouped 12 inch or 300mm square blocks.

The ground scale varies with the size of army represented, but for convenience 1 inch or 25mm on the table can be taken as equivalent to 100 paces in real life if using 15mm or smaller figures, or 50 paces if using 25mm. Measure distances on the table with a 600p template marked at 100p intervals.

TIME SCALE

Play is in alternate bounds, which simulate approximately 15 minutes in real life.

DICE

All dicing uses a single ordinary 1 to 6 die.

DESIGN PHILOSOPHY

The function of the command and communications system in a wargame is exactly opposite from that in real life battle in that it is used, not to enable the general to manoeuvre his troops at all, but to prevent him doing so too freely. That of these rules is arbitrary, but its results are very similar to those from more elaborate systems incorporating written orders, transmission by a limited number of messengers or signals, and then testing interpretation on receipt. It also substitutes for elaborate testing of troops' reaction to events, and effectively simulates the reduction in armies' cohesion under stress of battle.

Wargamers usually pay much more attention to often theoretical differences between weapons than did ancient commanders and troops. Surviving Hellenistic and Roman manuals lump all foot skirmishers as psiloi regardless of whether armed with javelin, sling or bow, in effect defining them by their function rather than armament. We have done the same in these rules, and were surprised to find overall realism did not seem appreciably reduced. Morale and training distinctions have also been discarded as linked with function. Thus, all knights are rash, all warbands fierce but brittle, all skirmishers timid.

Similarly, a real general does not know that a unit has just lost a certain number of men. He will not know even its total losses until next day, if then. Some nations during this era even thought it unlucky to count the troops at all! Wargames rules that tell players losses suffered and inflicted during play are therefore inherently unrealistic. However, the general will usually be in a position to see if a body is moving forward cheering, standing its ground, edging back looking over its collective shoulders, or has disintegrated. These rules provide players with that information and that only.

TROOP DEFINITIONS

Troops are defined by battlefield behaviour instead of the usual formation, armour, weapons and morale classes. We distinguish only between troops whose fighting style differs sufficiently to need to be treated differently by either their general or their foe. Apparent anomalies from grouping together troops with greatly disparate armour can be rationalised as the disparity being compensated by other factors, such as ferocity or skill, and are unobtrusive if the army fights only opponents of its own era.

Mounted troops can be: Elephants, Knights, Cavalry, Light Horse, Scythed Chariots or Camelry.
Foot troops can be: Spears, Pikes, Blades, Auxilia, Bows, Psiloi, Warband, Artillery or War Wagons.
Camp followers are not considered to be troops, but fight as foot when defending a camp.

ELEPHANTS, of any breed or crew complement. These were used to charge solid foot, or to block mounted troops, whose frightened horses would not close with them. Pikes fought them on nearly level terms, and they could be killed by artillery or showers of lighter missiles, or be distracted by psiloi.

KNIGHTS, representing all those horsemen that charged at first instance without shooting, with the intention of breaking through and destroying enemy as much by weight and impetus as by their weapons; such as cataphracts, Macedonian companions, Sarmatians, Goths, Norman or medieval knights, (and also for convenience those unscythed heavy chariots with more than 2 horses or crew). Massed bows could shoot them down as at Crecy, or steady spears or pikes stop them with a dense array of shields or weapon points, forcing them to retire to charge again. Other foot were likely to be ridden down. Knights could be confident of defeating normal cavalry, but light skirmishing horse were a greater danger. These must sooner or later be charged rather than accept a constant drain of casualties. They were rarely caught, but the charge would give a temporary respite. However, an over-rash pursuit risked being surrounded and shot down in detail. Knights were not well suited to dodging elephants or scythed chariots.

CAVALRY, representing the majority of ancient horsemen, primarily armed with javelins, bows or other missile weapons but combining these with sword or lance, (and also for convenience light chariots with up to 2 horses and crew). They usually started combat with close range shooting, more intense than that of light horse, using rapid archery or circulating formations to concentrate a mass of missiles in space and time, but charged when that would serve better or to follow up an advantage. They could destroy or drive away psiloi or auxilia, ride down foot bows caught at a disadvantage, and force other foot to retire or even destroy them. Not as committed to the charge as knights, they could retire out of range of archery or to breathe their horses. They were outmatched hand-to-hand by knights, but, being more agile and missile-armed, were in less danger than these from light horse, elephants or scythed chariots.

LIGHT HORSE, including all light horsemen or camel riders who skirmished in dispersed swarms with javelin, bow or crossbow and would not charge unshaken enemy; such as Numidians, Huns, Parthian horse archers, Late Roman "Illyrians" or Equites Sagittarii, genitors or border staves. They typically fought by sending a stream of small parties to gallop past shooting once or twice at close range, then return to rest or change ponies while others took their turn. They did not charge until fatigue, casualties or disorder made the enemy incapable of resisting. If charged, they evaded shooting behind them, ready to turn on an over-confident pursuer. They detested foot bows, who outshot them badly. They were unlikely to destroy other infantry unless they could outflank them, but could greatly hamper their movements.

SCYTHED CHARIOTS, with 4 horses and a single crewman (and also for convenience stampeded cattle or Inca war dogs). These were intended to be charged into enemy formations early in a battle to break up or destroy them. Since they usually wrecked in the process, the drivers often jumped out at the last moment, offering some hope to the target that the horses might swerve away from contact. They were most dangerous to troops who offered a solid target and could not dodge easily, so were often countered by psiloi.

CAMELRY, including those camel-mounted warriors who charged to close quarters or used mass archery, but not those that only skirmished or infantry transported by camel. Their chief value was to disorder a superior enemy's horses. They were vulnerable to archery and to troops closing on foot.

SPEARS, representing all close formation infantry fighting with spears in a rigid shield wall; such as hoplites, Punic African foot, Byzantine skutatoi or Saxon fyrd. The mutual protection provided by their big shields, tight formation and row of spear points gave them great resisting power, so that two opposed bodies of spears might fence and shove for some time before one broke. Some advantage could be gained by increasing formation depth, provided this did not cause them to be outflanked. Steady spears could usually hold off horsemen, but psiloi or light skirmishing horse could force them to halt and present shields, and might surround and destroy an isolated body.

PIKES, including all close formation infantry fighting collectively with pikes or long spears wielded in both hands; such as Macedonians, Scots, Flemish or Swiss. Their longer weapons made them even better than spears at holding off mounted troops, while in deep formations they could roll over most foot, but the long shafts also made formation keeping more difficult, so that gaps resulting from movement or the stress of combat could be exploited by blades or warband.

BLADES, including all close fighting infantry primarily skilled in fencing individually with swords or heavier cutting or cut and thrust weapons; such as Roman legionaries of any period, huscarls, galloglaich, dismounted knights, halberdiers, billmen or samurai. They often had better armour or shields than other foot, weapons that could more readily defeat armour, supplementary missile weapons, or were taught to close quickly to avoid missiles. They were less safe than spears or pikes against mounted troops, but were superior in hand-to-hand combat to any foot except pikes in deep formations.

AUXILIA, representing foot able to fight hand-to-hand but emphasising agility and flexibility rather than cohesion; such as Hellenistic peltasts or thureophoroi, Thracians, Spanish scutarii, Early or Late Imperial Roman auxilia, Japanese ashigaru, Welsh spearmen or Irish bonnachts. These were used to chase off or support psiloi, to take or hold difficult terrain, as a link between heavier foot and mounted troops, occasionally as a mobile reserve, and often as the main troop type of mountain peoples. Outclassed in open country by other close fighting foot and vulnerable to cavalry, they made up for this by increased mobility, flexibility and insensitivity to difficult terrain.

BOWS, representing foot who fought in formed bodies with bow, longbow or crossbow and relied on dense shooting, light spears, stakes, pavises or shield bearers for survival at close quarters instead of skirmishing or evasion; such as Egyptian archers, Achaemenid immortals, Indian foot, English longbowmen, or Chinese or Italian crossbowmen. They shot at longer range than psiloi, often in volleys at command. They were especially effective against mounted troops, but if these got into contact without being checked by the shooting, would usually be swept away.

PSILOI, including all dispersed skirmishers on foot with javelin, sling, staff sling, bow, crossbow or hand gun. These fought in a loose swarm hanging around enemy foot, pestering it with a constant dribble of missiles and running away if charged. They rarely caused serious casualties, but were very useful to slow and hamper enemy movements, to protect the flanks of other troops, to hold or dispute difficult terrain, to co-operate with cavalry, to support heavier foot by shooting from behind them, and to counter elephants or scythed chariots. Unsupported psiloi in the open were in great danger from cavalry.

WARBAND, including all wild irregular foot that relied more on a ferocious impetuous charge than on mutual cohesion, individual skills or missiles; such as Galatians, Gauls, Germans, Dacians, Vikings or Galwegians. Enemy foot who failed to withstand the first impact of their charge were swept away, but they lacked staying power and were unusually vulnerable to harassment by psiloi and to mounted attack.

ARTILLERY, whether gunpowder, torsion or counterweight. This could annoy the enemy at long range, destroy war wagons or elephants and counter enemy artillery, but was immobile and vulnerable to close attack.

WAR WAGONS, including Hussite mantleted wagons for shooters, the standard-bearing carrioco with guards of the Khazars and Italian city states, gulai gorod and other wagons that fought on the move, but not transport wagons utilised to laager camps. They had great resisting power to blunt an enemy attack, but could not themselves charge and were vulnerable to artillery.

BASING

All figures must be combined into elements of several figures permanently mounted on a rectangular base of card or similar material. Base size is not critical provided that all bases have the same frontage and both armies use the same conventions. However, we recommend those of WRG 7th edition ancients, and to a large extent of its competitors, for the sake of commonality. This will enable those who normally play with more complex sets to use this one without duplicating troops, and beginners to upgrade should they later wish to do so. If you do wish to use WRG 7th edition bases, the size of each element base and the number of figures or figure blocks mounted on it should be:

If figure scale is:	25mm.	15mm.	6mm.	2mm.	No. of 25mm or 15mm figures.	No. of 6mm figures	No. of 6mm blocks	No. of 2mm blocks
Frontage.	60mm.	40mm.	40mm.	30mm.				
Depth if:								
Elephants.	80mm.	40mm.	30mm.	10mm.	1	2	2	2
Chariots.	80mm.	40mm.	30mm.	10mm.	1	2	2	4
Knights.	40mm.	30mm.	20mm.	10mm.	3 or 4	6 or 8	1.5 or 2	2
Cavalry.	40mm.	30mm.	20mm.	10mm.	3	6	1.5	2
Lt.Horse.	40mm.	30mm.	20mm.	10mm.	2	4	1	1.5
Camelry.	40mm.	30mm.	20mm.	10mm.	3	6	1.5	2
Spears.	20mm.	15mm.	5mm.	10mm.	4	8	2	2
Pikes.	20mm.	15mm.	5mm.	10mm.	4	8	2	2
Blades.	20mm.	15mm.	5mm.	10mm.	4	8	2	2
or	30mm.	20mm.	10mm.	10mm.	3 or 4	6 or 8	1.5 or 2	2
Auxilia.	30mm.	20mm.	10mm.	10mm.	3 or 4	6 or 8	1.5 or 2	2
Bows.	20mm.	15mm.	5mm.	10mm.	4	8	2	2
or	30mm.	20mm.	10mm.	10mm.	3 or 4	6 or 8	1.5 or 2	2
Warband.	30mm.	20mm.	10mm.	10mm.	3	6	1.5	3.5
or	20mm.	15mm.	5mm.	10mm.	4	8	2	3.5
Psiloi.	30mm.	20mm.	10mm.	10mm.	2	4	1	1.5
Artillery.	80mm.	40mm.	30mm.	10mm.	1	2	2	2
War Wagons.	80mm.	40mm.	30mm.	10mm.	1	2	2	2

Note that the chariot basing applies, not only to scythed chariots, but also to those chariots counting as knights or cavalry. If used, camp followers should be on psiloi-sized bases, but figure number can vary.

Where more than one basing option exists, this is because one of these troop types may combine several 7th edition types. Cataphracts differ from all other troops classed here as knights by having 4 figures to a base instead of 3. Blades, auxilia and bows have 4 if either regular troops or irregulars on shallow bases, 3 if irregulars on deep bases. However, do not worry. The army lists starting on page 14 specify the number of figures per 25mm or 15mm element base. If your army is of individual 6mm figures, use double the number specified there. Basing 6mm or 2mm blocks is at present complicated by these being cast with varying frontages depending on formation. Hopefully some manufacturer will make blocks with a varying number of figures on a standard 40mm or 30mm frontage. Until then, blocks must be cut and combined to give a realistic appearance, with irregulars and skirmishers often in small random groups. Use open formation blocks for light horse or psiloi, loose for most knights, cavalry, auxilia, bowmen or warband, and close for cataphracts, spears, pikes and most blades.

It is usual to enhance visual effect by disguising bases with scenic flock or similar, not merely painting them ground colour. Figures representing regular troops should be evenly distributed along the base in a single level row, and irregulars distinguished by using figures of differing type, pose and/or colour scheme placed more randomly. Depict camp followers as badly-armed unorganised civilians. The general's element must be recognisable by his figure, his standard, or at a pinch his conventional white charger, and should be of a type appropriate to that army.

TERRAIN

Few generals had complete freedom to choose where they would fight, so we assume that the terrain is fixed and that the players have only a limited freedom to control the direction from which they approach it. We accordingly favour a permanent terrain board with assymetric terrain features fixed permanently to it. One alternative is to build it up from 12 inch or 300mm square blocks or carpet tiles. To be eligible, a terrain must comply with both the following:

(a) At least three of the battlefield's quarters must contain at least one terrain feature.

(b) At least two of the battlefield's quarters must contain a river or bad going or impassable terrain.

The majority of the playing surface must be flat good going, which should be shown as a reasonably uniform approximation of pasture, large open fields or steppe. Bad going must be easily recognisable, and can be steep slopes, rough or boggy ground, sand dunes, a wood, a built-up area, or small enclosed fields. Gentle slopes confer combat advantages to troops higher up them, but are not bad going.

Rivers must flow between two different board edges. Movement along a river is not possible. Movement across it is not treated as in bad going, but is penalised in other ways. A river's nature is constant along its whole length and will not be known until the first player attempts to cross it off-road. It may then be found to be so shallow and easy banked as to cause minimal delay and provide no help to troops defending its bank, or to be a significant but not insuperable obstacle. Roads that intersect rivers cross them by ford or bridge.

Roads were among the most common terrain features of the era, most being simply convenient routes by which people were in the habit of moving. Few were paved, so they should be depicted as pale brown earth tracks. Elements necessarily move astride roads rather than on them (as did actually many troops of the era), so it is important that the terrain for half an element width on both sides should be identical to make it obvious if the element is in good or bad going or uphill should it be involved in fighting. (insert)

Sea, lakes and cliffs are impassable terrain, and it is advisable not to get your troops in the position of having to recoil over their edge! Beaches are good going.

As generalship is definable as the skill with which generals adapt their troops movements to those of the enemy and to the terrain, varied and realistic terrain is essential for interesting battles. Since with these rules so much less time is needed to paint armies, and the size of the playing area is so limited, we hope players will feel they can afford to spend time and ingenuity on making their terrain as visually attractive as their troops.

CAMPS

A camp can be a simple earthwork or pallisade, a wagon laager, a hill fort, a brush boma, a group of medieval tents with interlaced guy ropes, Mongol yurts with tethered ponies, a square of kneeling camels, or even the sand between a pair of partly beached ships, whichever is appropriate to your army.

A 25mm or 15mm camp is depicted as a half rectangle of such defences positioned on a board edge or beach edge anywhere in good going on dry land within the army's initial deployment area. A 6mm or 2mm camp can be the same, or can instead depict the entire defensive circuit and need not then be positioned on an edge. No camp should be larger inside than will easily accomodate any one appropriate element of the player's army, and its external dimensions should not be more than approximately double its internal. The 16 camps of all types mentioned above that were used for the DBSA 15mm competition were 80-90mm wide by 45-60mm deep.

DEPLOYMENT

Both sides dice. The low scorer chooses the terrain from that available and numbers its edges 1 to 4 clockwise unless this has already been done. The high scorer allocates the numbers 5 and 6 to two adjacent edges, so that these are represented twice, then dices for which edge will be his base edge. The low scorer's base edge is that opposite. The high scorer places his camp, then the low scorer places his. The high scorer now deploys all his troops within **600p** of his base edge or of its shore line if a sea edge. The low scorer does the same, then takes first bound.

SEQUENCE OF PLAY

The two sides take alternate bounds. During each player's bound:

1. He dices for tactical movement, then makes up to the number of moves his score permits.

2. Any artillery or bows elements of both sides that are in range and arc, but not yet in contact with enemy, shoot and make or inflict outcome moves, in an order decided by the player whose bound it is.

3. Any elements of both sides that are in contact with enemy fight and make or inflict outcome moves, in an order decided by the player whose bound it is.

TACTICAL MOVES

A tactical move can be by a single element or by a group of elements. Dice at the start of each bound, then make up to one tactical move for each point scored; except that an extra point is needed if all of the element or group to be moved is **1,200p** from the general's element, or is both **600p** from it and also beyond a hill, wood, built-up area or fortification, or if the general has been lost.

Elements moving as a group must each be touching another of its elements and not in contact with an enemy element. Each must 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 by road, or across bad going or a river, or away from enemy to its front, must be in a one element wide column. A group move can include reducing frontage where necessary to form such a column or to pass a gap, following a road or wheeling up to 90 degrees, but not other reductions or increases in frontage or turning in place.

A move by a single element can include any number of wheels or turns of any angle. It can be used to break-off from enemy in contact with its front, but only if these would have a lesser maximum move in the terrain it ends in. An element in contact with enemy to its flank or rear cannot break-off, but unless also in contact to its front turns to face without this counting as a move.

No element may move across the front of any enemy element which is within **200p** and not separated from it by an intervening element, except to contact or face that element's front.

Artillery or war wagons cannot be moved into contact with an enemy, or move off- road in bad going.

The maximum distance any single element or element of a group can move, unless added to by unused movement die points, is:

500p if light horse in good going off-road. Note that this is MORE than by road.

400p if cavalry or scythed chariots in good going, or if any troops except war wagons or artillery and moving by road.

300p if knights, elephants or camelry in good going, or if auxilia, bows or psiloi moving off-road, or if war wagons or artillery and moving by road.

200p if other foot moving off-road, or if mounted troops moving off-road in bad going.

100p if a single element or leading a column; and crossing a river unless at a road ford or bridge.

Any unused movement die points from the current bound can now each be used to add **100p** to a road move by the general's element or a group that includes it.

RIVER CROSSING

The first element to try to cross each river during the game except at a road ford or bridge must dice. A score of 1 or 2 indicates that it is too shallow and easy banked to aid defence, 5 or 6 that each element crossing except at a road ford or bridge must also dice separately and score more than 2 to cross.

INTERPENETRATING FRIENDLY TROOPS

Mounted can pass through psiloi, or psiloi through any friends, which are facing in the same or opposite direction. Mounted can also recoil through any friends except pikes or elephants, blades recoil through blades or spears, or pikes or bows recoil through blades, but only if facing in the same direction.

DISTANT SHOOTING

Artillery within **500p** or bows within **200p** can shoot at any one enemy element that is within an element base width of straight ahead, but only if neither is in close combat or overlapping and no other element is even partly between. A target that has not already shot and which can shoot back must do so. Artillery shoot only in an opponent's bound, and then only if they did not move or pivot in their own bound.

Except for the opponents not being in contact and some shooting being unreturned, the effects of shooting are resolved exactly as in close combat. A 2nd or 3rd element that shoots at the same target element aids the shooting of the 1st instead of being treated separately.

CLOSE COMBAT

Combat also occurs when an element has moved into, or remains in, both edge and corner to corner base contact with an enemy element or contact with a camp. An element not ~~already~~ in frontal contact which is contacted to flank or rear turns to face. If an element contacts the flanks of two such enemy elements, both these turn, the second moving to behind the first. Whether in contact, shooting or only shot at, each player dices for his element, and adds the appropriate combat factor to its score as follows:

Blades.	**+5** v foot, **+3** v mounted.
Elephants or war wagons.	**+4** v foot, **+5** v mounted.
Spears or scythed chariots.	**+4**.
Knights, pikes or camelry.	**+3** v foot, **+4** v mounted.
Cavalry or warband.	**+3**.
Auxilia or artillery.	**+3** v foot, **+2** v mounted.
Bows.	**+2** v foot, **+4** v mounted.
Light horse or psiloi.	**+2**.
Camp followers.	**+1**.

Pikes add **+3**, spears **+1**, if supported by another such element which is contiguous behind and facing in the same direction, and neither is in bad going or attacking a camp, nor is being shot at by or has just moved into contact with bows or artillery.

Spears or blades who are fighting mounted troops or attacking a camp add **+1** if supported by an element of psiloi which is contiguous behind and facing in the same direction.

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

+2 if camp followers or other foot; and occupying a camp.

+1 if the general's element; and either in close combat or shot at.

+1 if in close combat; and either uphill or defending a river bank except at a road ford or bridge.

−1 for each flank overlapped, and/or each enemy element in contact with flank or rear, or for each 2nd or 3rd element aiding a shooting enemy. A camp has no flanks and can be overlapped only by bows.

−2 if any but auxilia or psiloi; and in, or mounted in contact with enemy in, bad going on or off-road.

When an element is attacked in flank or rear while also fighting to its front, its opponents use only 1 die and the combat factor of the element to its front. If it wins, ~~the outcome affects only the element in front. Others stay in contact, and it turns to face one next bound.~~ An element cannot be overlapped and contacted on the same face, or be overlapped by an enemy unless both right or both left front corners touch.

flank

An element can count as an overlap against two enemy elements on opposite flanks, or against elements exposed by its frontal opponent having recoiled, fled or been destroyed that bound.

COMBAT OUTCOME

An element with less than or half the total of its opponent must make an immediate outcome move, which depends on its own type and that of the most dangerous opponent in contact with or shooting at it, but not of overlaps. Elements which shoot without being shot back at disregard an unfavourable outcome.

If its total is less than that of the enemy but more than half:

Elephants.	Destroyed by psiloi, artillery, or if in bad going. If not, recoil.
Scythed chariots.	Destroyed.
Knights.	Destroyed by elephants, scythed chariots or light horse, or by bows or artillery they have moved into contact with this bound, or if in bad going. If not, recoil.
Other mounted.	Destroyed if in bad going. If not, recoil.
Blades.	Destroyed by scythed chariots if in good going or by warband. If not, recoil.
Auxilia.	Destroyed by knights or scythed chariots if in good going. If not, recoil.
Bows.	Destroyed by any mounted in contact. If not, recoil.
Warband.	Destroyed by elephants, knights or scythed chariots if in good going. If not, recoil.
Psiloi.	Destroyed by knights if in good going. If not, recoil.
Artillery.	Destroyed by any in contact. If not, recoil.
War wagons.	Destroyed.
Camp followers.	Abandon camp defences and flee.
Other foot.	Destroyed by knights or scythed chariots if in good going or by warband. If not, recoil.

If its total is half or less than half that of the enemy:

Light horse.	Destroyed by any mounted or bows, or if in bad going. If not, flee **600p**.
Psiloi.	Destroyed by any mounted if in good going or by auxilia or psiloi. If not, flee **600p**.
Others.	Destroyed.

A recoiling element moves back its base depth to its rear without turning. If it meets friends who are facing in the same direction, it passes through to their rear if of a type allowed to do so, otherwise pushes back any but elephants or war wagons. Troops not facing in the same direction cannot be recoiled through or pushed back. A recoiling element in contact with enemy to both front and rear, or that meets enemy, or terrain it cannot cross, or friends that it cannot pass through or push back, is destroyed.

A fleeing element recoils until it has moved back one base depth, then 180 degrees. From then on, it changes direction only by the minimum necessary to avoid enemy, friends it cannot pass through, or bad or impassable going, but not to avoid crossing a river, a failure to succeed in which destroys it.

An element of pikes, spears or psiloi that has just added **+3** or **+1** in support of a friendly element to its front is destroyed if the element it supported is destroyed.

An element of knights, scythed chariots or warband whose enemy recoil, break-off, flee or are destroyed, and that is neither in contact nor overlapping, must immediately pursue for one base depth. An element in contact with a camp whose defenders are destroyed, recoil or flee, captures and immediately occupies it.

WINNING AND LOSING

The first side that at the end of any bound has lost either its general or 4 elements, and has also lost more elements than the enemy, loses the battle. A camp still occupied by enemy counts as 2 elements lost extra to the loss of its camp follower or other garrison. Elements that recoil or flee from a camp or across a board edge are counted as lost, although they may reappear in the next turn of a campaign.

Victory is most likely to be achieved by thinking of elements as bodies of troops rather than playing pieces, using them historically, and resisting the temptation to break formation for short term advantage.

COMBAT EXAMPLES (See Pages 8 and 9).

CLOSE COMBAT:

A line of four elements of Roman legionaries (classed as BLADES) are moved into contact with four elements two deep of Macedonian pikemen (classed as PIKES). Each element must be lined up exactly with its opponent with no part-element overlaps. BLADES (3) includes the Roman general.

	PIKES (3)	PIKES (4)	
	PIKES (1)	PIKES (2)	
BLADES (1)	BLADES (2)	BLADES (3)	BLADES (4)
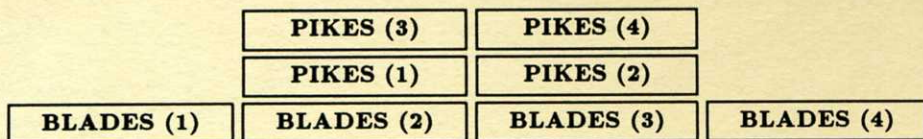
Since it is the Roman player's turn, he can choose which of his two elements in contact fight first. He decides on BLADES (3). BLADES (1) and (4) will not fight, but can count as overlaps. Both sides dice.
BLADES (3) scores 4, adds its combat factor against foot of +5 and a further +1 for the general.
PIKES (2) scores 4, adds its combat factor against foot of +3 and a further +3 because supported to its rear by pikes. However, it must deduct –1 for being overlapped by BLADES (4).
PIKES (2) has scored less than BLADES (3), but more than half as many, so immediately recoils its own base depth, pushing back PIKES (4).

		PIKES (4)	
	PIKES (3)	PIKES (2)	
	PIKES (1)		
BLADES (1)	BLADES (2)	BLADES (3)	BLADES (4)
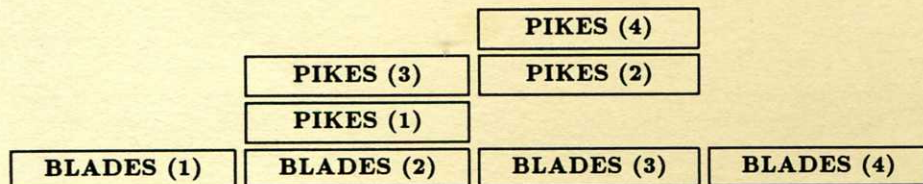
BLADES (2) and PIKES (1) now dice.
BLADES (2) scores 6 and adds its combat factor of +5.
PIKES (1) scores 1, adds its combat factor of +3 and a further +3 for support by pikes, but must deduct –2, since it is now overlapped by both BLADES (1) and BLADES (3).
PIKES (1)'s score is half or less that of its opponent, so it is destroyed. PIKES (3) is also destroyed.

It is now the Macedonian player's bound, and he can move PIKES (2) and (4) back into contact if he wishes to, and if he does not first use up his move die score with other moves.

DISTANT SHOOTING:

Two elements of English longbowmen (classed as BOWS) shoot at a Scots schiltron (classed as PIKES).

	PIKES (2)	
	PIKES (1)	

| BOWS (1)	BOWS (2)	BOWS (3)
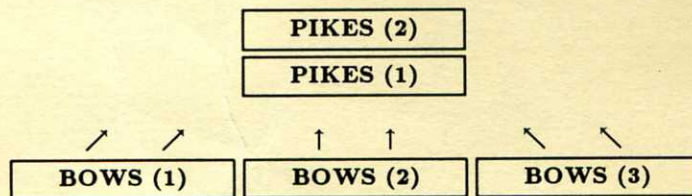
BOWS (2) shoots at PIKES (1), assisted by BOWS (1) and (3). Both dice.
BOWS (2) scores 2 and adds +2 for its combat factor against foot.
PIKES (1) scores 5 and adds +3 for its combat factor. It receives no support from PIKES (2), and must deduct –1 for each of the two elements supporting its opponent.
BOWS (2) has scored less than its opponent, so does not destroy it or force it to recoil, but escapes penalty itself because it is not shot back at. Had the dice scores been reversed, PIKES (1) would have been destroyed. PIKES (2) would not be destroyed with it, since it does not count as supporting against shooting.

STYLISED MAP FOR SIX NATION MINI-CAMPAIGN
(See Pages 10).
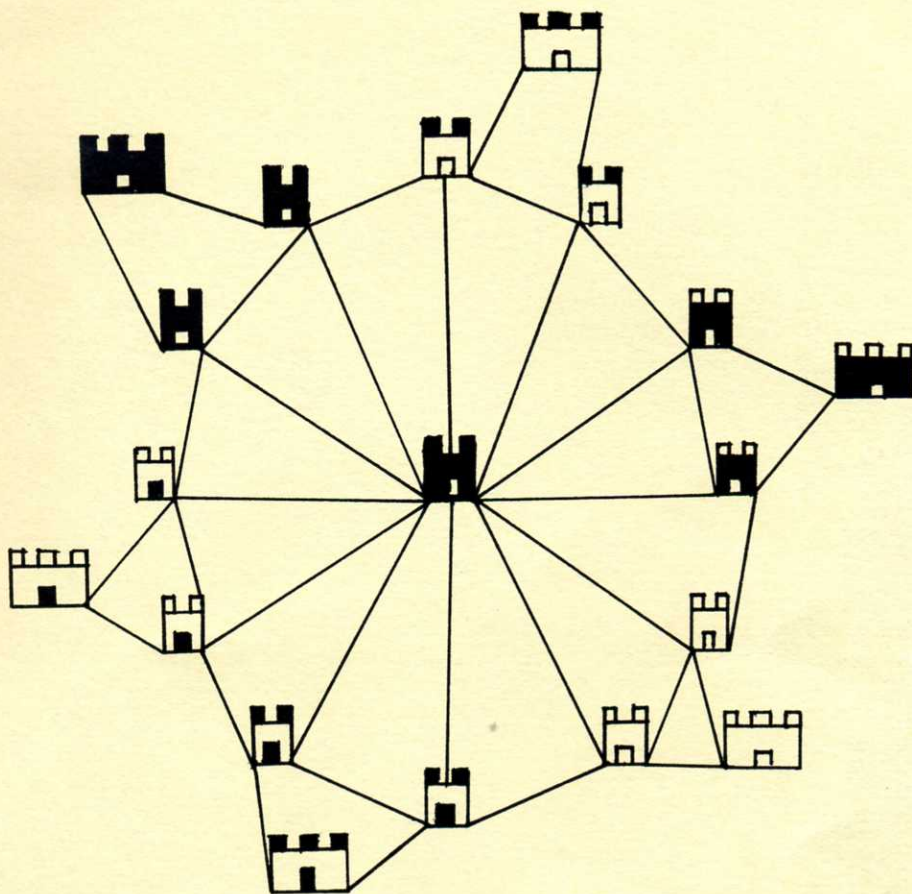
CAMPAIGN RULES

INTRODUCTION
This section contains procedures for a simple mini-campaign for 3 to 6 players, capable if desired of being played to a conclusion in one day, and using the battle rules of the previous section. The battle rules can equally be used to decide battles for larger military/political campaigns, or for Richard Bodley Scott's computer moderated campaign system.

MAPS
A stylised circular map for a six player campaign is shown inside the back cover. Movement is by marked routes between nodal points representing cities or provinces, ownership of which can conveniently be shown by coloured counters. The circular form can be substituted by others that correspond better to the historical geography and/or modified by eliminating some routes or specifying them as sea movement, but it must not be possible to attack a player's capital without first attacking another of his cities.

"The Penguin Atlas of Ancient History" and "The Penguin Atlas of Medieval History" are good sources for geographical relationships.

RESOURCES
Each player starts with three cities or provinces, one of which is his capital, and a field army of 12 troop elements corresponding to his nation's army list, plus a camp follower element if desired. One player also controls the centre city in addition to his normal three.

All elements that are lost through battle or siege are placed in a reserve, and all elements that are recruited are taken from that reserve, so the field army can never exceed 12 troop elements. Any element of the field army can be nominated at the start of a battle to include the general.

If a player does not take part in a battle or siege during a campaign year, the maximum size of his field army next year is reduced to 10 troop elements, it being assumed that the profound peace has led him to economise and unduly neglect his defences.

THE CAMPAIGN YEAR
There are three seasonal campaigning rounds per year - SPRING, SUMMER and AUTUMN. Each player dices at the beginning of each year. The highest scorer plays first. Play then proceeds clock-wise to the left. Each player has a turn in each round.

Before the spring round, all players simultaneously write down the location of their field army. Each must locate his entire field army in any one city currently under his control. Its location is revealed and marked at the start of his first turn of the year, or if his territory is invaded or he sends a contingent to assist another player.

At the end of the autumn round, the armies retire into winter quarters until the following spring, dicing for each sea movement stage necessary to reach their own or an ally's territory if no land route is available. Each player then transfers 1 troop element from his reserve to his field army for each city now under his control, this simulating new recruitment.

MOVEMENT
Each time troops move, they can travel a maximum of 2 movement stages along the designated routes. They cannot pass a city they do not control unless granted passage by the controlling player.

A field army which moves by a sea route other than in summer must dice for each sea movement stage. A score of 1 indicates that it has been caught in a storm and must dice again for the number of troop elements the player must transfer to his reserve as lost to shipwreck. The first element lost must be of mounted troops if any are present. An advancing player then decides whether to continue to his destination, to halt, or to return to his starting point without dicing again.

INVASION

On his turn, a player who has not yet sent a contingent that season to help an ally may attack another player's city. Before deciding to do so, he may solicit allies to assist him. If he then decides to proceed with his attack, the defender may also solicit allies.

The defender can then choose either: (a) to engage the attacker in battle, moving up his field army if it is not already present; or (b) to stand a siege, moving up his field army or retreating it away if he so wishes. He can do either of these even if he has earlier that season himself attacked or sent an allied contingent, surviving elements of such contingents having by then returned.

The field armies of players allied or tributary to the attacker or defender are not moved to their aid, but send allied contingents. The only circumstance in which two allied field armies can be at the same location is if one is standing siege and the other is attempting to relieve it, in which case the besieged army provides only a contingent for the battle.

Instead of moving to invade, a player may use his turn to move his field army to another of his or an ally's cities in readiness for further movement in future turns.

SUPPLY

A player's field army is in supply if it is either at, or next to, a city controlled either by himself or by another player who permits him to be supplied. A field army that ends its move or the autumn round out of supply dices for the number of troop elements lost to hunger, disease and desertion before entering battle or undertaking a siege, or during its return to winter quarters . A field army which starts its turn out of supply can retreat into supply even if it has previously provided an allied contingent.

GIVING BATTLE

If an invaded player decides to give battle, this is fought between the opposing players' field armies, using the battle rules. The player choosing the terrain should attempt to reflect the historical terrain in the vicinity of the battle site.

PARTICIPATION BY ALLIED CONTINGENTS

A player whose field army has not already made an attack that season can send an allied contingent to assist an invader or defender, provided it can move from his own field army's location to the foreign city under attack and is granted free passage through any intermediate city by the controlling player. If two contingents are sent in a single season, they must be of different elements.

An allied contingent consists of up to 3 elements from the player's own field army, one of which must be nominated to include a general.

Allied contingent(s) move in sequence after the second of the main protagonists. They use their own separate die to determine how many elements/groups they can move each turn. They do not arrive on table until they score 6, then arrive in a single one element frontage column at that table edge best representing their map route to the battlefield relative to the main protagonists, and measure their first move from that edge. They may sometimes have a choice of board edge. They do not have a camp on the battlefield. They cannot leave the table intentionally or change sides and attack their supposed ally, but the eagerness with which they assist him is a matter for their own conscience!

An element can affect combat in an allied player's bound only by providing tactical factors. Artillery shoot only in the main enemy protagonist's bound.

RESULTS OF A BATTLE

The battle is fought until ended as specified in the battle rules. The losses of allied players, including those of camp followers, are added together when determining whether their side is defeated. Loss of an allied contingent's general requires its remaining elements to attempt to march off and leave the table, starting with its next bound.

Elements destroyed by combat are transfered from the players' field armies to their reserves. Elements that leave the table return to their field army after the battle, as do camp followers.

Loss of a main protagonist's general and/or camp is penalised by the transfer of 2 extra troop elements from his field army to his reserve at the end of the battle in addition to those destroyed during the battle. This simulates desertion by demoralised troops.

If the player owning the city fought over is defeated, it is captured by the other main protagonist without any further siege. A defeated field army or contingent must retreat to another of its own cities. If it cannot, it is destroyed.

After a battle, each player gains 1 prestige point for each enemy troop element his troops have destroyed or forced to recoil or flee off table in excess of those of his own troop elements that have been destroyed or forced to recoil or flee off-table. A player who was the first to capture the enemy camp or whose troops destroyed the main enemy protagonist's general gains an additional 2 prestige points for each such instance.

STANDING A SIEGE

If the defender elects not to fight a battle, the city is besieged. If he has a field army at the city, this must either retreat to another of his cities or stand siege. The attacker now dices. He must score 6 to capture a city in which the enemy field army is standing siege, or 5 or 6 if the enemy field army is not present. If a captured city contains the defender's field army, the whole army is lost. If a besieger fails to capture the city, he loses 1 element of his choice, which he transfers from his field army to his reserve. His allies suffer no losses. The siege continues next season unless winter intervenes or the besieging army moves or is defeated in battle. The score needed for capture reduces by 1 each season the siege lasts.

A field army that is being besieged can sally out in its next turn to give battle, but not to retreat without battle.

An allied contingent assisting a besieger is automatically recalled if its own nation is invaded, or if it attacks with its field army during a later turn that year.

TRIBUTARY RULERS

A player can ask at any time to become a tributary of another, who, if he agrees, becomes his overlord. A tributary player must provide an allied contingent if ordered to do so by his overlord. Neither can attack the other while the relationship lasts. Either can renounce the relationship at the start of any year before dicing for order of play. A player who himself is or becomes tributary can retain or acquire tributaries of his own, and can order these to provide a contingent to support his own field army or provide a substitute contingent for his own overlord. A player cannot have 2 overlords. A player whose overlord is knocked-out of the game by losing his capital regains his independence.

CONQUEST

When the time limit has been reached, each player counts as his score the prestige points he has gained in battles, 3 points for each city now under his personal control, and 2 points for each of his direct tributaries' cities. A player who loses his capital before then is out of the game, gets no points for cities, but retains his prestige points. Any remaining cities under his control become independent. They can be besieged in the normal manner, but without risk of an open battle. Field armies or allied contingents cannot pass through the territory of such an independent city, except to besiege it.

SUGGESTED SIX NATION HISTORICAL CAMPAIGNS

Army numbers refer to the lists in the next section. They are listed here clockwise in geographical sequence, starting from that holding the central city.

Campaign:	Participating armies:
Hyksos 1720 BC.	2,3,4a,8a,4b,1.
Hittite Empire 1280 BC.	9,12,18b,5,11,10.
Sea Peoples 1231 BC.	11,14b,14a,10,9,12.
New Assyrian Conquest 745 BC.	20,19,15b,23,18a,22.
Rise of the Hellenes 670 AD.	24a,26,24c,27,25(Cimmerian),18d.
Babylonian Revolt 615 BC.	23,25,18c,18b,18a,5.
Persian Imperial 547 BC.	28a,18a,29,24a,18d,25.
Great Persian War 480 BC.	24a,24c,28a,24b,31a,34.
Rise of Rome 358 BC.	30a,30b,35,30d(Apulian),30d(Lucanian),30c.
Alexander the Great 334 BC.	33,32,36,27,25,21a.
Diadochi 321 BC.	38a,38b,41a,42a,40,39.
Chinese Warring States 318 BC.	16b(Wei),16c(Ch'in),25,7,16b(Chao),16b(Ch'u).
Pyrrhic 280 BC.	30d,43,34,31a,46,30c.
Galatian Invasion 279 BC.	41a,51,42a,47,40,45.
Bactrian Empire 250 BC.	50,25,54,21a,41b,51.
1st Punic War 264 BC.	31b,53,52,35,46,34.
2nd Punic War 218 BC.	52,52,35,46,31b,53.
Marian Roman 88 BC.	59(Optimates),52,35,59(Populares),58,44.
Caesarian Roman 58 BC.	59(Republican),52,35,59(Caesarian),44,51.
Year of the Four Emperors 69 AD.	64(Otho),67,64(Vitellius),57,64(Vespasian),66.
Trajanic Roman 101 AD.	64,67,57,68,55c,51.
Three Kingdoms Chinese 220 AD.	72(Wei),72(Wu),71,21b,72(Shu),62.
Rise of the Sassanians 227 AD.	69,57,70,55c,51,73a.
Aurelianic Roman 271 AD.	69(Aurelian),73a,76,69(Gallic Empire),74,70.
Carausian Britain 296 AD.	77a(British),61(Scot),67(Pict),75(Saxon),74(Frank),77a.
Divided Empire 394 AD.	77a,74,70,79,73a,77b.
Fall Of Rome 451 AD.	81,82,75,74,70,79.
Justinian Revival 533 AD.	86,84,88,74,90,73b.
Rise of Islam 633 AD.	91,89,90,93,73b,96.
Carolingian 770 AD.	102a,75,90,85(Lombard),103,104.
Imperial T'ang 800 AD.	95,110,83a,97,62,78.
Byzantine Imperial 1014 AD.	117,102a,87,109,93,118.
Rise of the Seljuks 1037 AD.	100,118,117,124,115,83a.
Norman Conquest 1066 AD.	113,92,112,111,106,102c.
First Crusade 1097 AD.	139,118,133,138,124,132.
Western Isles 1138 AD.	128,112,131a(Orkney),140,134,131a(Man).
Kingdom of Jerusalem 1174 AD.	139,143,141,133,124,121.
Mongol Invasion 1236 AD.	119,136,149,151,129,154.
Feudal Britain 1250 AD.	145,92,144,112,128,140.
Ilkhanid 1258 AD.	143,158,141,124,121,159a.
Northern Crusade 1260 AD.	148a,131b,148b,129,149,151.
Kublai Khan 1279 AD.	116,154,78,127,71,98.
Catalan Company 1316 AD.	153,165,152,142a,147,160a.
100 Years War 1369 AD.	170,155,171,168,163,173.
Tamerlane 1380 AD.	159b,160a,153(Trebizond),154(Golden Horde),83b,83a.
Christendom Endangered 1420 AD.	166,160b,142b,169(Venetian),167,176.
Late Medieval 1471 AD.	178,179(York),179(Lancaster),180,167,161b.
Ottoman Imperial 1478 AD.	160b,175,158,169(Venetian),167,166.

ARMY LISTS

The armies listed below are those from our three WRG army list books primarily intended for the more detailed rules. Sufficient flexibility is allowed for historic variation or differences of interpretation, but not to allow armies to be tailored for specific opponents. Such foreign mercenaries or subject races as were habitually used are included, but allied troops serving under their own generals are not, since they are provided for in the campaign rules. Since an army needs less than 50 figures, we hope that players will produce armies in opposing pairs or sets rather than fight unhistorical opponents. For more information on unfamiliar armies, consult the army list books and our series of "Armies and Enemies" books.

Each entry consists of the number identifying the army in our army list booklets, its name, the identifying numbers of plausible contemporary enemies, and its composition in number and type of elements. The code for each type of element consists of two or three letters prefixed by the number of 25mm or 15mm figures per element. These are:
El = Elephant, SCh = Scythed Chariot, HCh = Heavy Chariot (as knights), LCh = Light Chariot (as cavalry), Kn = Knights, Cv = Cavalry, LH = Light Horse, Cm = Camelry (as Light Horse if 2Cm), Sp = Spears, Pk = Pikes, Bd = Blades, Ax = Auxilia, Bw = Bows, Cb = Bows if with crossbow, Lb = Bows if with long bow, Ps = Psiloi, Wb = Warband, Art = Artillery, WWg = War Wagons, SC = Stampeded Cattle, WD = War Dogs.

Any element coded as 3Kn/4Bd, 3Cv/4Bd or LCh/4Bd, or that can be exchanged for Art or SC, can be deployed as either at the start of any battle and remains that type until its end. All other choices permitted are made once for the whole of a campaign or competition.

1.	Sumerian & Akkadian.	E=1,4b,8a. 3 HCh or 3Ax, 1 LCh or 2Ps, 6 4Sp, 2 2Ps.
2.	Old & Middle Kingdom Egyptian.	E=2,3,4a,4b,8a. 4 4Sp, 6 4Bw, 2 2Ps or 3Bw (Nubian).
3.	Nubian.	E=2,4a. 3 3Wb, 6 3Bw, 3 2Ps.
4a.	Early Libyan.	E=2,3,8a. 1 3Wb. 11 2Ps.
4b.	Early Syrian.	E=1,2,4b,8a,12. 1 3Wb. 11 2Ps.
5.	Midianite Arab.	E=11,13,18a,23. 1 2Cm, 5 3Cm, 6 2Ps.
6.	Early Shang China.	E=6,7. 1 LCh, 3 4Bd, 3 4Sp, 5 2Ps.
7.	Northern Barbarians.	E=6,16a,b,c. 1 LCh or 3Wb, 8 3Wb, 3 2Ps.
8a.	Hyksos.	E=1,2,4a,4b. 7 LCh, 2 4Sp, 3 2Ps.
8b.	Early Canaanite.	E=8b,9,11. 7 LCh, 2 3Ax or 2Ps, 3 2Ps.
9.	Hittite.	E=8b,10,11,12,14a,17. 2 HCh, 4 LCh, 1 4Sp (Ukus), 3 4Ax, 2 2Ps.
10.	Mycenean & Minoan.	E=9,10,11,14a. 5 LCh, 4 4Sp, 1 4Sp or 3Wb (Myrmidons), 2 2Ps.
11.	New Kingdom Egyptian.	E=3,4a,4b,5,8b,9,10,13,14a,b,15a. 4 LCh, 1 3/4Bd, 4 4Sp, 2 4Bw, 1 2Ps.
12.	Early Assyrian.	E=4b,9,18a. 4 HCh or LCh, 1 3Cv, 2 4Sp, 1 4Bw, 2 3Ax, 2 2Ps.
13.	Early Hebrew.	E=5,11,15a,b. 1 3Bd or 4Sp, 8 3Ax, 3 2Ps.
14a.	Sea People.	E=9,10,11,14b. 1 HCh or LCh, 7 3Wb, 2 WWg (warriors in ox-carts) or 3Wb, 2 2Ps.
14b.	Later Libyan.	E=11,14a. 1 LCh, 1 3Wb, 10 2Ps.
15a.	Philistine.	E=11,13,15a,b. 3 LCh, 6 4Sp, 1 3Ax, 2 2Ps.
15b.	Late Canaanite.	E=11,15a,b,19,20,23. 6 LCh or 2 HCh + 3Cv +2 4Sp, 1 4Bw or LCh, 2 4Sp or 3Ax, 3 2Ps.
16a.	Later Shang China.	E=7,16b. 1 HCh, 2 LCh, 3 4Bd, 6 2Ps.
16b.	Chou China.	E=7,16a,16b,16c,25. 1 HCh, 2 HCh or LCh, 4 4Sp or 4Bd, 3 4Cb, 2 2Ps.
16c.	Ch'in China.	E=7,16b,25,54. 3 HCh, 1 3Cv, 2 2LH, 2 4Bd, 2 4Cb, 2 2Ps.
17.	Dark Age & Geometric Greek.	E=9,17a,24a. 3 LCh/4Bd or 3Cv/4Bd, 1 2LH, 5 4Wb, 3 2Ps.
18a.	New Babylonian.	E=5,12,18b,c,19,22,23,28a,29. 3 HCh, 2 3Cv, 2 4Sp, 4 4Bw, 1 2Ps.
18b.	Elamite.	E=18a,18c,23. 3 HCh, 1 LCh, 1 2LH, 5 3Bw, 2 2Ps.
18c.	Mede.	E=18a,18b,18d,23,25,28a. 6 3Cv, 4 3Ax, 2 2Ps.
18d.	Lydian.	E=18c,24a,25,28a,b. 4 3Kn, 1 2LH, 3 4Sp, 2 2Ps, 2 3Ax.
19.	Later Hebrew.	E=15b,18a,20,22,23. 1 LCh + 2 3Ax or 3 HCh, 3 4Sp, 3 3Ax, 2 2Ps, 1 4Bd or 3Bw.
20.	Libyan Egyptian.	E=15b,19. 3 LCh, 2 2LH, 1 4Bd (Shardana.), 2 3Wb, 1 4Sp, 1 4Bw, 2 2Ps.
21a.	Early Indian.	E=21a,25,28a,37,41a,50. 2 HCh, 2 3Cv, 2 El, 2 El or 3Ax, 4 4Lb.
21b.	Kushan.	E=51,62,72,73a. 2 3Kn, 4 2LH, 2 El, 4 4Lb.

22.	Kushite Egyptian.	E=18a,19,23. 3 LCh, 3 3Cv, 1 4Sp, 1 4Bw, 2 3Wb, 2 2Ps.

22.   Kushite Egyptian. E=18a,19,23. 3 LCh, 3 3Cv, 1 4Sp, 1 4Bw, 2 3Wb, 2 2Ps.
23.   New Assyrian. E=5,15b,18a,b,c,19,22,25. 3 HCh, 2 3Cv, 2 4Sp, 1 4Bw or 2Ps, 2 4Ax, 2 2Ps.
24a.   Early Hoplite Greek. E=17,18d,24a,b,c,27,28a,29. 1 3Cv or 4Sp, 9 4Sp, 1 4Sp or 3Ax or 2Ps, 1 2Ps.
24b.   Early Spartan. E=24a,c,28a. 11 4Sp, 1 4Sp or 2Ps.
24c.   Early North Greek. E=24a,b,c,26,27,28a. 1 3Cv, 2 3Cv or 2LH, 1 2LH or 4Sp, 6 4Sp, 1 3Ax or 2Ps, 1 2Ps.
25.   Skythian & Hsiung Nu. E=16b,c,18c,d,21a,23,25,27,28a,33,37,50,51,54,55a. 1 3Cv, 6 2LH, 4 2LH or 2Ps, 1 2Ps.
26.   Illyrian. E=24c,26,27,32,35,36,39,40,43,46,49,59. 1 2LH, 5 3Wb, 2 2Ps, 4 3Wb or 2 3Ax (Spanish) + 2 4Sp (Hoplite).
27.   Thracian. E=24a,c,25,26,27,28a,32,36,39,40,45,49,55a,59. 1 3Cv, 2 2LH, 5 3Ax, 2 2Ps, 2 4Sp or 3Ax.
28a.   Early Achaemenid. E=18a,c,d,21a,24a,b,c,25,27,29. 3 3Cv, 2 2LH, 3 4Bw, 4 4Bw or 1 4Sp + 3 3Ax.
28b.   Cyropaedia Persian. E=18d. 3 3Cv, 2 3Ax, 3 SCh, 1 3Cm, 1 WWg (tower), 2 2Ps.
29.   Saitic Egyptian. E=18a,24a,28a,33. 1 HCh, 2 LCh, 1 3Cv, 2 2LH, 3 4Sp, 1 4Bw, 2 2Ps.
30a.   Tullian Roman. E=30b,c,d. 2 3Cv, 6 4Sp, 4 2Ps.
30b.   Etruscan. E=30a,c,d,35,46. 3 3Cv, 6 4Sp, 1 4Bd (axe or pilum) or 4Sp, 2 2Ps.
30c.   Samnite or Umbrian. E=30a,b,c,d,35,46. 2 3Cv, 8 4Ax, 2 2Ps.
30d.   Campanian or Apulian. E=30a,b,c,d,46. 4 3Cv, 4 4Sp, 3 4Ax, 1 2Ps.
31a.   Early Carthaginian. E=34,43. 2 HCh, 2 3Cv, 4 4Sp, 1 4Ax (Spanish), 1 3Wb (Gaul), 2 2Ps.
31b.   Later Carthaginian. E=34,35,46,52,53. 2 3Cv, 2 2LH (Numidian), 2 4Sp (African), 2 4Ax (Spanish), 2 3Wb (Gauls), 1 El, 1 2Ps (Balearic).
32.   Later Hoplite Greek. E=26,27,32,33,36,40. 1 3Cv or 2LH, 1 3Cv or Art or 2Ps, 4 4Sp, 1 4Sp or 3/4Ax or 2Ps, 4 4Sp or 2Ps, 1 2Ps.
33.   Later Achaemenid. E=25,29,32,33,36. 3 3Cv, 1 3Cv or 3Kn, 2 2LH, 1 4Bw (Sparabara), 1 4Bw or SCh, 2 3Ax (Takabara) or 4Sp (Hoplite), 2 4Ax (Kardaka) or 3Ax or 2Ps.
34.   Syracuse. E=31a,b,43,46. 2 3Cv, 1 2LH, 4 4Sp, 2 4Sp or 1 3Wb (Gaul) + 1 4Ax (Span), 1 Art, 2 2Ps.
35.   Gallic. E=26,30a,b,c,31b,35,46,52,57,59. 4 3Cv, 6 3Wb, 2 2Ps.
36.   Alexandrian Macedonian. E=26,27,32,33. 1 3Kn (Companions), 2 3Cv, 1 2LH, 4 4Pk, 1 4Ax (Hypaspists), 1 2Ps (archers), 1 2Ps (Agrianes), 1 4Sp (Hoplite) or 3/4Ax or Art.
37.   Alexandrian Emp. E=21a,25. 2 3Kn, 2 2LH, 1 4Ax, 2 4Pk, 2 4Pk or 1 3Cv + 1 Art, 1 3Ax, 2 2Ps.
38a.   Antigonid. E=38b,39,41a,42a,44. 1 3Kn, 1 3Cv, 1 2LH, 6 4Pk, 1 4Ax, 1 2Ps, 1 El.
38b.   Eumenid. E=38a,40. 2 3Kn, 1 3Cv, 4 4Pk, 3 2Ps, 2 El.
39.   Lysimachid. E=26,27,38a,40,41a,43. 1 3Kn, 1 3Cv, 1 2LH, 3 4Pk, 1 4Ax, 3 3Ax, 1 2Ps, 1 El or 4Sp.
40.   Macedonian Early Successor. E=26,27,32,38b,39,40,41a,42a,43,45,47. 1 3Kn, 1 3Cv, 4 4Pk, 2 4Pk or 4Ax, 2 4Ax, 1 El, 1 2Ps.
41a.   Early Seleucid. E=21a,38a,39,40,42a,45,50. 3 3Kn, 1 2LH, 4 4Pk, 3 El, 1 2Ps.
41b.   Late Seleucid. E=41b,42b,44,45,46,48,49,50,51,56. 2 4Kn, 1 2LH, 4 4Pk, 1 4Ax (Thureophoroi), 1 El, 1 2Ps, 1 SCh, 1 3Ax or 4Wb (Galatian) or El or Art or 4Bd (imitation legionaries).
42a.   Early Ptolemaic. E=38a,40,41a. 1 3Kn, 1 2LH, 6 4Pk, 1 4Ax, 1 4Wb, 2 2Ps.
42b.   Late Ptolemaic. E=41b,59. 1 3Kn, 1 2LH, 6 4Pk, 1 4Ax, 1 El, 1 3/4Ax or 4Wb, 1 2Ps.
43.   Pyrrhic. E=26,31a,34,39,40,46. 1 3Kn or 3Cv, 1 3Cv, 1 2LH, 1 El, 4 4Pk, 2 4Sp, 1 4Ax, 1 2Ps.
44.   Armenian. E=38a,41b,51,59,64,69,73a,77b. 4 3Kn or 4Kn, 2 2LH, 4 3Ax or 2Ps, 2 2Ps.
45.   Galatian. E=27,40,41a,41b,48,58. 2 LCh, 2 3Cv, 1 SCh or 2Ps, 7 4Wb.
46.   Camillan Roman. E=26,30b,c,d,31b,34,35,41b,43,49,52,53. 2 3Cv, 6 4Bd, 2 4Sp, 2 2Ps.
47.   Hellenistic Greek. E=40,47. 1 3Kn or 3Cv, 1 3Cv, 1 2LH, 6 4Ax, 2 2Ps, 1 3Wb or 2Ps.
48.   Pergamene. E=41b,45. 2 3Kn, 1 2LH, 6 4Ax, 2 2Ps, 1 4Wb or 2Ps.
49.   Later Macedonian. E=26,27,41b,46. 2 3Cv, 1 2LH, 4 4Pk, 2 4Ax, 1 4Ax or 4Wb or Art, 2 2Ps.
50.   Bactrian Greek. E=21a,25,41a,b,51. 2 3Kn, 1 2LH, 4 4Pk, 2 El, 2 4Lb (Indian), 1 2Ps.
51.   Parthian. E=21b,25,41b,44,50,51,54,55a,c,58,59,64,69,73a. 4 4Kn, 2 4Kn or 2LH or 2Ps, 6 2LH.
52.   Spanish. E=31b,35,46,52,59. 1 3Cv, 1 2LH, 6 3Ax or 2Ps, 1 3Wb (Celtiberians) or 2Ps, 3 2Ps.
53.   Numidian. E=31b,46,53,59,64. 4 2LH, 4 2Ps, 1 2LH or El, 1 2LH or 3Cv (Spanish/Gaul), 2 2LH or 4Ax or 4Bd (Imitation legionaries).
54.   Han China. E=16c,25,51,62,71. 1 HCh, 2 3Cv, 2 2LH, 4 4Cb, 2 4Bd, 1 2Ps.
55a.   Early Rhoxolani, Siracae or Alan. E=25,27,51,55a,b,c,58,64. 1 3Kn, 8 3Cv, 3 3Kn or 3Cv or 2Ps.
55b.   Bosporan. E=55a,b,c,d,58,64,70,79. 4 3Kn, 6 4Ax, 2 2Ps.
55c.   Later Sarmatian. E=51,55a,b,58,64,68,70,79. 10 3Kn, 1 2LH or 3Kn, 1 2Ps or 3Kn.

55d.	Later Alan. E=70,77a,79,165. 1 3Kn, 6 2LH, 3 4Bd (axemen), 2 2Ps.
56.	Maccabean Jewish. E=41b. 2 3Kn, 2 2LH, 4 4Ax, 4 2Ps.
57.	Early German. E=35,57,59,64. 1 3Cv/4Bd, 6 4Wb, 2 4Wb or 2Ps, 3 2Ps.
58.	Pontic. E=25,45,55a,b,c,59. 1 3Kn, 2 3Cv, 1 2LH, 1 SCh, 4 4Pk or 2 4Bd + 2 4Ax, 1 4Ax, 2 2Ps.
59.	Marian Rome. E=26,27,35,42b,44,51,52,53,57,58,59,60. 2 3Cv, 8 4Bd, 1 4Bd or 3Cv or 2Ps, 1 2Ps.
60.	Ancient British. E=59,60,64. 3 LCh/4Bd or 2Ps, 2 2LH, 5 3Wb, 1 3Wb or 2Ps, 1 2Ps.
61.	Scots-Irish. E=61,64,67,69,77a,82,92. 3 LCh, 1 LCh or 3Wb or 2Ps, 5 3Wb, 3 2Ps.
62.	Chinese Border Nomad. E=21b,54,62,72,95,97,114,116. 2 3Cv, 5 2LH, 1 3Ax, 1 3Ax or 2Ps, 3 2Ps.
63.	Blemye or Nobades. E=64,69,77b,86. 5 3Cv, 6 2Ps, 1 El.
64.	Early Imperial Rome. E=44,51,53,55a,b,c,57,60,61,63,64,65,66,67,68. 1 3Cv, 4 4Bd, 3 4Ax, 1 4Bd or 2LH, 1 4Ax or 3Wb, 1 3Cv or 2Ps, 1 2Ps or Art.
65.	Moorish. E=64,69,77a,84,86. 1 3Cv or 2LH, 5 2LH, 6 2Ps.
66.	Jewish Revolt. E=64. 6 3Wb, 3 2Ps, 3 3Wb or 1 3Cv + 2 4Ax.
67.	Caledonian or Pictish. E=61,64,69,75,77a,82. 2 LCh or 3Cv, 2 2LH, 6 3Wb, 2 2Ps.
68.	Dacian. E=55c,64. 1 2LH, 6 3Wb, 4 2Ps, 1 3Bd (Falx).
69.	Middle Imperial Rome. E=44,61,63,65,67,69,70,73a,74,75,76,77a. 2 3Cv, 1 3Cv or 2LH or 4Bd or 4Ax, 4 4Bd, 4 4Ax, 1 4Ax or 2Ps.
70.	Early Goth or Vandal. E=55b,c,d,69,70,74,75,77a,b,79,81,85. 2 3Kn, 1 3Kn or 2LH or 4Wb, 3 4Wb, 3 4Wb or 2Ps, 3 2Ps.
71.	Annamese or Champa. E=54,72,83a,95,98,110,154. 4 El, 1 3Cv, 4 3Wb, 3 2Ps.
72.	3 Kingdoms China. E=21b,62,71,72,78. 2 4Kn, 2 3Cv, 2 2LH, 2 2LH or 2 4Cb, 2 4Cb, 1 4Sp, 1 2Ps.
73a.	Early Sassanid. E=21b,44,51,69,76,77b,79. 2 3/4Kn, 4 3Cv, 2 2LH, 1 3Cv or El, 2 4Sp, 1 2Ps.
73b.	Later Sassanid. E=73b,83a,86,91,93,96. 3 3Cv, 1 3Cv or 3Kn, 2 2LH, 1 El or 3Cv, 4 4Sp, 1 2Ps.
74.	Early Frankish, Burgundian, Alamannic or Rugian. E=69,70,74,75,77a,79,80,81,85,86,88,89,90. 1 3Cv/4Bd, 10 4Wb, 1 2Ps.
75.	Early Saxon, Frisian, Suevi, Bavarian or Thuringian. E=67,69,70,74,75,77a,80,81,82,85,89,90,92. 1 4Bd (Comitatus), 10 4Wb, 1 2Ps.
76.	Palmyran. E=69,73a. 4 4Kn, 2 2LH, 4 4Bw, 1 4Bd or 3Cm or 2LH, 1 4Ax or 4Bw.
77a.	Late Roman (West). E=55d,61,65,67,69,70,74,75,77b,80. 1 4Kn or 3Cv, 2 3Cv, 1 2LH, 4 4Bd, 3 4Ax, 1 Art or 2Ps.
77b.	Late Roman (East). E=44,63,70,73a,77a,79. 2 4Kn, 2 3Cv, 2 2LH, 2 4Bd, 2 4Ax, 2 4Ax or 2Ps.
78.	Korean. E=72,95,114,116,127,154. 1 4Kn, 3 2LH, 4 4Sp, 4 2Ps.
79.	Hun. E=55b,c,d,70,73a,74,75,77b,81,85. 1 3Cv, 6 2LH, 5 2LH or 1 4Wb + 2 3Kn + 2 2Ps (German).
80.	Visigoth Spain. E=74,75,77a,80,81,86,88,96,103. 2 3Kn, 3 2LH, 2 2Ps, 5 4Sp or 5 4Wb or 3 4Wb + 2 4Ax.
81.	Patrician Roman. E=70,74,75,79,80,84,85. 1 3Cv, 1 2LH, 2 4Bd, 2 4Ax, 2 3Kn (German), 4 4Wb.
82.	Sub-Roman. E=61,67,75,82,92,106,111. 3 3Cv, 1 3Kn or 2LH, 4 3Ax, 2 3Ax or 2 3/4Wb, 2 2Ps.
83a.	Medieval Hindu. E=71,73b,83a,b,97,98,115,159b. 2 3Cv, 3 El, 1 3Bd, 4 3Lb, 2 2Ps.
83b.	Moslem Indian. E=83a,b,159b. 4 3Cv, 2 El, 3 3Ax, 3 2Ps.
84.	African Vandal. E=65,81,86. 8 3Kn, 4 3Kn or 1 2LH + 3 2Ps (Moors).
85.	Gepid or Lombard. E=70,74,75,79,81,85,86,88,89,90,91,99,102a,c,117. 6 3Kn/4Bd, 3 2Ps, 2 4Sp or 2Ps, 1 3Kn/4Bd or 2LH.
86.	Early Byzantine. E=63,65,73b,74,80,84,85,87,88,90. 4 3Cv, 1 2LH, 1 2LH or 3Kn/4Bd (Gepid), 2 4Sp, 4 2Ps.
87.	Early Bulgar. E=86,89,90,91,93,99,107,108,109,117. 2 3Cv, 4 2LH, 4 3Ax, 2 2Ps.
88.	Italian Ostrogothic. E=74,80,85,86. 6 3Kn, 6 2Ps.
89.	Slav. E=74,75,85,87,90,91,93,99,106,107,108,109. 1 3Cv or 3Ax, 9 3Ax, 3 2Ps.
90.	Avar. E=74,75,85,86,87,89,91,102a. 4 3Cv, 4 2LH, 4 3Cv or 3 3Ax + 1 2Ps.
91.	Maurikian Byzantine. E=73b,85,87,89,90,96. 5 3Cv, 2 2LH, 1 3Kn (Optimates), 2 4Sp, 2 2Ps.
92.	Welsh. E=61,75,82,92,102c,106,113,134,145. 1 3Cv, 5 3Ax or 3Lb, 3 3Ax, 2 2Ps, 1 3Bd or 3Lb.
93.	Khazar. E=73b,87,89,94,96,99,100,107,108,109,115,121. 1WWg, 2 3Cv, 5 2LH, 2 4Sp, 1 3Ax, 1 2Ps.
94.	Ghuzz. E=93,100,108,109,115. 2 3Cv, 8 2LH, 2 2LH or 3Bw.
95.	T'ang & Five Dynasties China. E=62,71,78,97,98,100,110,114. 4 3Cv, 2 2LH, 1 4Sp, 4 4Cb, 1 2Ps.
96.	Arab Conquest. E=73b,80,91,93. 3 3Cv, 2 2LH, 1 3Bd (mailed foot), 4 3Wb, 1 3Bw, 1 2Ps.
97.	Tibetan. E=62,83a,95,98,114. 3 3/4Kn/4Bd, 2 4Sp, 2 3Cv, 2 2LH, 2 3Ax, 1 2Ps.
98.	Burmese. E=71,83a,95,97,110,116,154. 3 3Cv, 3 El, 1 2LH, 2 3Bw, 2 3Ax, 1 2Ps.

99.	Thematic Byzantine. E=85,87,89,93,100,102a,108,109. 8 3Cv, 1 2LH, 1 4Sp, 2 2Ps.

99. Thematic Byzantine. E=85,87,89,93,100,102a,108,109. 8 3Cv, 1 2LH, 1 4Sp, 2 2Ps.

100. Arab Empire. E=93,94,95,99,100,101a,b,103,115,118. 3 3Cv, 1 3Cv or 2LH, 2 2LH, 2 4Sp, 1 4Sp or 3Bw, 1 3Ax or 3Bw, 2 2Ps.

101a. East Sudanese. E=100,101b,118,120. 3 3Cm, 6 3Wb, 3 2Ps.

101b. Abyssinian. E=100,101a,118. 1 3Cv, 2 2LH, 1 3Bd, 6 3Wb, 2 2Ps.

102a. Later Frankish. E=85,90,99,102a,b,c,103,104,106,107. 3 3Kn or 3Cv, 3 3Kn or 4Sp, 3 4Sp, 3 2Ps.

102b. Breton. E=102a,c,106. 6 3Cv, 3 2LH or 2Ps, 3 2Ps.

102c. Norman. E=85,92,102a,b,111,112,113,117,123,133. 3 3Kn, 1 3Kn or 2LH, 2 3Cv (Breton) or 2Ps, 3 3Kn or 4Sp, 3 3Cb or 2Ps.

103. Andalusian. E=80,100,102a,103,104,125. 3 3Cv, 2 2LH, 3 4Sp, 3 2Ps, 1 3Kn or 4Cb or 2LH.

104. Feudal Spanish. E=102a,103,125,137,155. 2 3Kn, 2 3Cv, 2 2LH, 3 4Sp, 1 4Cb, 2 2Ps.

105. Mexican. E=105,150,171. 3 4Bd or 3Ax, 3 3Ax, 3 3Ax or 2Ps, 3 2Ps.

106. Viking. E=82,89,92,102a,b,106,107,111,112,113. 1 3Bd, 2 3Bd or 3Wb, 8 3Wb, 1 2Ps or 3Bw.

107. Magyar. E=87,89,93,102a,106,108,109. 2 3Cv, 6 2LH, 1 3Bd, 2 3Ax, 1 2Ps.

108. Russ. E=87,89,93,94,99,107,108,109,117,119,122. 1 3Cv/4Bd, 2 3Cv or 4Sp, 6 4Sp, 3 2Ps.

109. Pecheneg. E=87,89,93,94,99,107,108,117,119,130,133. 1 3Cv, 8 2LH, 2 2LH or 2Ps, 1 2Ps.

110. Khmer. E=71,95,98,154. 3 3Cv, 3 El, 2 4Ax, 2 3Wb, 2 2Ps.

111. Pre-Feudal Scots. E=82,102c,106,111,112,113,128. 1 2LH, 1 2LH or 2Ps, 3 4Bd, 2 4Sp, 2 4Sp or 3Wb, 2 3Wb, 1 2Ps.

112. Norse Irish. E=102c,106,111,112,128,134,144. 6 3Ax, 2 2Ps or 4Bd (Galloglas) or 2 3Bd (Ostmen) + 1 3Wb (Gall Gael), 3 2Ps.

113. Anglo-Danish. E=92,102c,106,111,113,116. 2 4Bd, 1 4Bd or 3Cv, 8 4Sp, 1 2Ps.

114. Khitan Liao. E=62,78,95,116. 1 3Kn, 2 3Cv, 4 2LH, 4 4Sp, 1 2Ps.

115. Ghaznavid. E=83a,93,94,100,124. 4 3Cv, 2 2LH, 3 El, 1 4Bw, 1 4Sp or 3Wb or 3Ax, 1 2Ps.

116. Sung China. E=62,71,78,98,114,127,154. 1 3Cv, 2 2LH, 1 4Bd, 4 4Cb, 2 2Ps, 2 Art.

117. Nikephorian Byzantine. E=85,87,102c,108,109,117,118,119,121,124. 1 4Kn, 6 3Cv, 1 4Sp, 1 2Ps, 1 4Bd (Varangian), 1 2LH (Petcheneg) or 3Kn (Norman), 1 2LH.

118. Fatimid Egyptian. E=100,101a,b,117,124,125,138. 4 3Cv, 2 2LH, 4 3Bw, 1 4Sp, 1 2Ps.

119. E. Hungary. E=108,109,117,122,129,130,133,136,142a,147,154. 3 3Kn, 2 3Cv, 4 2LH, 2 3Ax, 1 2Ps.

120. West Sudanese. E=101a,120,125. 1 3Kn, 2 3Cv, 3 2LH, 1 4Sp, 4 3Bw, 1 3Cm or 3Bw or SC.

121. Georgian. E=93,117,124,143,146,154. 4 3Cv, 2 2LH, 6 2Ps.

122. Early Polish. E=108,119,129,136. 3 3Kn, 3 3Bd, 4 3Bw, 1 4Sp or 2LH, 1 4Sp or 2Ps.

123. Communal Italian. E=102c,123,126,135,136. 1 WWg or 2Ps, 3 3Kn, 4 4Sp, 2 4Cb, 2 3Ax or 2Ps.

124. Seljuq Turk. E=115,117,118,121,130,132,133,138,139,141,143,146,153,154,158,159a. 5 3Cv, 4 2LH, 2 3Ax or 2LH, 1 2Ps.

125. Berber. E=103,104,118,120,164,171. 4 2LH, 3 4Sp, 2 2Ps, 1 2Ps + 2 3Cm or 1 3Kn + 2 4Cb or 3 3Cv.

126. Papal Italian. E=123,135,136. 4 3Kn, 3 4Sp, 4 4Cb, 1 4Bd or 3Kn.

127. Japanese. E=78,116,127,154. 6 3Cv/4Bd or 3Bd, 6 3Ax.

128. Scots Isles & Highlands. E=111,112,131a,140. 3 3Bd, 3 3Bd or 3Wb, 5 3Ax or 2Ps, 1 2Ps.

129. Early Russian. E=119,122,129,130,149,154. 4 3Kn, 2 2LH, 2 4Bd, 3 4Sp, 1 2Ps.

130. Cuman. E=109,119,124,129,133,146,147,154. 1 3Cv, 8 2LH, 2 3Ax, 1 2Ps.

131a. Early Medieval Scandinavia. E=131a,128,136,140,167. 2 3Kn or 3Bd, 2 3Bd, 6 3Wb, 2 3Bw or 2Ps.

131b. Later Medieval Scandinavia. E=131b,136,167. 2 3Kn, 4 3Bd, 3 3Cb, 2 4Pk or 3Cb, 1 2Ps.

132. Cilician Armenian. E=124,133,138,139,141,143,158,159b. 3 3Cv, 6 3Ax, 3 2Ps.

133. Comnenan Byzantine. E=102c,109,119,124,130,132,138,139,141,142a,143. 3 3Cv, 2 2LH, 1 4Sp, 2 2Ps, 1 4Bd (Varangian), 1 4Bd or 2LH or 2Ps, 1 2LH or 3Kn (Norman), 1 3Ax.

134. Anglo-Norman. E=92,111,112,134,137,140. 5 3Kn/4Bd, 1 4Cb or 3Ax or 2Ps or 3Kn/4Bd, 3 4Sp, 3 2Ps.

135. Sicilian. E=123,125,126,136. 4 3Kn, 1 2LH or 2Ps, 1 4Sp, 1 4Cb, 2 3Ax, 3 2Ps.

136. Early Imperialist. E=119,122,123,126,131a,b,135,137,149,163. 4 3Kn, 2 3Cv, 1 4Bd (Swabian), 3 4Sp or 4Pk, 1 4Cb, 1 2Ps.

137. Feudal French. E=104,134,136,137,145,156,163. 6 3Kn, 1 3Cv, 2 3Cb, 2 4Sp, 1 3Ax.

138. Early Crusader. E=118,124,132,133,139. 6 3Kn/4Bd, 4 3Ax, 2 2Ps.

139. Syrian. E=124,132,133,138,141. 5 3Cv, 3 2LH, 1 4Sp, 1 3Ax, 2 2Ps.

140. Scots Common. E=128,131a,134,144,145,168,179. 1 3Kn, 8 4Pk, 2 3Wb or 2Ps, 1 2LH or 2Ps.

141.	Later Crusader.	E=124,132,133,139,143,158,159a. 4 3Kn, 1 2LH (Turkople), 3 4Cb, 2 4Sp, 2 2Ps.
142a.	Early Serbian.	E=119,133. 6 3Cv, 2 4Sp, 4 3Bw or 2Ps.
142b.	Later Serbian.	E=147,153,159b,160a,166. 3 3Kn, 3 2LH, 3 3Ax, 3 2Ps.
143.	Ayubid.	E=121,124,132,133,141,146. 4 3Cv, 4 2LH, 1 3Ax, 2 3Bw, 1 4Sp.
144.	Anglo-Irish.	E=112,140,164. 1 3Kn, 2 3Cv, 1 2LH, 2 4Lb, 2 4Bd, 2 3Ax, 2 2Ps.
145.	Feudal English.	E=92,137,140,145. 4 3Kn, 1 4Cb, 2 4Sp, 1 3Bw, 3 3Lb or 4Sp, 1 3Ax.
146.	Khwarizmian.	E=121,124,130,143,154,159a. 4 3Cv, 6 2LH, 1 3Bw, 1 4Sp.
147.	Later Bulgar.	E=119,130,142b,152,153,160a,166. 3 3Cv, 6 2LH, 2 3Ax, 1 2Ps.
148a.	Prussian or Estonian.	E=148a,b,149,151. 1 3Cv/4Bd, 8 3Wb, 3 2Ps.
148b.	Lithuanian or Wend.	E=148a,b,149,151,157. 1 3Cv or 2LH, 5 2LH, 3 3Wb, 3 2Ps.
149.	Later Polish.	E=129,136,148a,b,151,154,157,166,167. 3 3Kn, 3 3Cv, 1 2LH, 2 3Bw, 2 4Sp, 1 2Ps.
150.	Inca.	E=105,150,171. 3 4Bd, 6 3Bw (depicted as slingers), 2 2Ps, 1 WD or 2Ps.
151.	Teutonic Order.	E=148a,b,149,154,157. 3 3Kn, 2 3Kn or 3Cv, 2 3Cv, 1 4Cb, 1 4Sp, 2 3Ax, 1 2Ps.
152.	Romanian Frank.	E=147,152,153,165. 6 3Kn, 2 3Cv, 1 4Cb, 1 2Ps, 2 2LH (Alan or Turk) or 2Ps.
153.	Theodoran Byzantine.	E=124,142b,147,152,160a,b,165. 1 3Cv, 2 3Kn (Frank), 4 2LH, 2 4Bd (Varangian), 1 4Ax, 2 2Ps.
154.	Mongol.	E=71,78,98,110,116,119,121,124,127,129,130,146,149,151,157,159a,b,174. 4 2LH or 3Cv, 6 2LH, 2 2LH or 4Bw (dismounted LH) or 4Sp (Chinese) or 2Ps or Art.
155.	Granadine.	E=104,171. 2 3Kn or 3Cv, 4 2LH, 2 4Sp, 2 4Cb, 2 2Ps.
156.	Navarrese.	E=137,170,171. 6 3Kn, 1 4Cb, 3 3Ax, 2 2Ps.
157.	Post-Mongol Russia.	E=148b,149,151,154,157. 4 3Cv, 1 3Cv or 2LH, 2 2LH, 2 4Sp, 2 3Bw, 1 2Ps.
158.	Mamluk Egyptian.	E=124,132,141,159a,b,160a,b,162a. 6 3Cv, 2 2LH, 4 3Cv or 2 3Ax + 2 2Ps.
159a.	Ilkhanid.	E=124,141,146,154,158. 4 3Cv, 8 2LH.
159b.	Timurid.	E=83a,b,132,142b,154,158,160a,175. 1 3Kn or 3Cv, 6 3Cv, 2 2LH, 1 El or 2Ps, 1 3Bw, 1 Art or 2Ps.
160a.	Early Ottoman.	E=142b,147,153,158,159b,162a,b,165,166. 3 3Cv, 4 2LH, 1 3Ax or 2LH, 4 2Ps.
160b.	Later Ottoman.	E=153,158,162b,166,167,169,175,177. 4 3Cv, 2 2LH, 2 4Bw (Janissary), 1 3Kn (Serb) or 2LH, 2 Art, 1 2Ps.
161a.	Early Swiss.	E=161a,167. 1 2LH or 2Ps, 2 4Pk or 3/4Bd, 7 3/4Bd, 2 2Ps.
161b.	Later Swiss.	E=167,169,170,172,180. 1 3Kn or Art or 2LH, 4 4Pk, 2 4Pk or 4Bd, 3 4Bd, 2 2Ps.
162a.	Knights of Saint John on Cyprus.	E=158,160a. 2 3Kn, 2 3Cv, 2 2LH, 2 4Cb, 4 2Ps.
162b.	Knights of Saint John on Rhodes.	E=160a,b. 2 3Kn, 2 4Sp, 3 4Cb, 1 Arty, 4 3Cb.
163.	Low Countries.	E=136,137,167,170,173,180. 2 3Kn, 6 4Pk, 2 4Bd, 1 4Cb, 1 2Ps.
164.	Medieval Irish.	E=128,140,144,164. 1 3Cv or 4Sw, 2 2LH, 2 4Bd or 3Ax, 4 3Ax, 3 2Ps.
165.	Catalan Company.	E=55d,152,153,160a. 1 3Kn, 2 3Cv, 2 2LH, 5 3Ax, 2 2Ps.
166.	Later Hungarian.	E=142b,147,149,160a,b,167,176. 3 3Kn, 2 2LH, 1 4Bd, 2 4Sp, 3 2Ps, 1 Art.
167.	Later Imperialist.	E=131a,b,149,160b,161a,b,163,166,169,170,173,178,180. 5 3Kn, 2 2LH, 2 4Pk, 2 4Cb, 1 2Ps.
168.	100 Years War English.	E=140,170,171,173. 4 3Kn/4Bd, 6 4Lb, 1 3Ax, 1 Art or 4Lb.
169.	Italian Condotta.	E=160b,161a,b,166,167,169,172,178. 6 3Kn, 1 2LH or 4Lb or 3Ax, 2 4Cb, 2 4Sp or 4Pk or 1 4Cb + 1 2LH, 1 2Ps.
170.	Medieval French.	E=156,161b,163,167,168,170,173. 6 3Kn/4Bd, 2 4Cb, 3 3Ax. 1 3Ax or Art.
171.	Medieval Spanish.	E=105,125,150,155,156,168,172,178. 3 3Kn, 4 2LH, 1 4Cb, 1 3Ax, 1 2Ps, 2 4Sp or 3Kn/4Bd (French) or 1 4Bd + 1 4Lb (English).
172.	Free Company.	E=161b,169,170,171. 3 3Kn/4Bd (French, Gascon, Italian or German), 2 4Bd (English), 6 4Lb (English), 1 2Ps.
173.	Early Burgundian.	E=163,167,168,178. 6 3Kn/4Bd, 2 4Pk, 2 4Cb, 2 4Lb.
174.	Ming Chinese.	E=127,154. 3 3Cv, 2 2LH, 2 4Sp, 2 4Cb, 2 4Bw, 1 Art or SC or 2Ps.
175.	Islamic Persian.	E=159b,160b. 1 3Kn or 3Cv, 6 3Cv, 2 2LH or 3Cv, 2 3Bw or 3Cv, 1 2Ps or 3Cv.
176.	Hussite.	E=166,167,176. 1 3Kn + 2 3Cv or 1 2LH + 2 4Bd, 4 WWg, 3 4Bd, 2 Art.
177.	Scanderbeg Albanian.	E=160b. 1 3Cv, 5 2LH, 3 3Ax, 3 2Ps.
178.	French Ordonnance.	E=167,169,171,173,179,180. 4 3Kn, 2 4Pk, 2 4Cb, 1 3Lb, 1 3Ax, 1 Art, 1 2Ps.
179.	Wars of the Roses English.	E=140,178,179. 3 3Kn/4Bd (men-at-arms), 3 4Bd (billmen), 3 4Lb, 2 4Bd or 4Bw or 3Ax, 1 Art or 2Ps.
180.	Burgundian Ordonnance.	E=161b,163,167,178. 3 3Kn/4Bd, 1 3Kn, 1 2LH, 4 4Lb, 2 4Pk, 1 Art.

POSSIBLE GAME VARIATIONS

GAMES WITH UNEQUAL ARMIES

Most real life opposing armies were approximately equal in strength, since an army that was greatly inferior in its own estimation would try to avoid battle until the disparity was redressed. They did not always succeed, and this is most adequately simulated in campaign battles.

GAMES WITH LARGER ARMIES

The main virtue of DBA apart from simplicity is that it allows the simulation of much bigger battles than practical with conventional rule sets, but using only 12 elements. However, because of the group movement system, it is also possible to use DBA to simulate the same large battles but with 50 or more elements on a larger table, yet without proportionately slowing the game. This requires an adjustment to the conditions for losing, which become:

"The first side that at the end of a bound has lost either its general or 1/3 rounded down of its original elements, and has also lost more than the enemy, loses the battle. A camp still occupied by enemy counts as a loss of 1/6 rounded down of the original number of elements extra to the loss of its camp follower or other garrison. Elements that recoil or flee from a camp or across a board edge are counted as lost, although they may reappear in the next turn of a campaign."

As an extreme example, probably history's largest battle, and certainly the largest of which there is a detailed troop list, was that between Alexander and Darius at Gaugamela near Arbela in 331 BC. Armies for these with one element representing 500 open, 1000 loose or 1500 close formed troops, but neglecting the hordes of Persian levy infantry that took no part in the battle are:

Alexander: 2 3Kn (Companion), 2 3Cv (Thessalian), 2 3Cv (Greek/Mercenary), 1 2LH (Prodromoi), 1 2LH (Paeonian), 1 2LH (Odrysian), 3 4Ax (Hypaspists), 12 4Pk (Phalanx), 2 2Ps (Archers), 4 2Ps (Agrianians and Thracians), 6 4Sp (Greek), 2 4Ax (peltasts), 2 3Ax (Thracians).
Total = 40 elements.

Darius: 4 SCh, 26 3Cv, 12 2LH, 2 4Sp (Greek), 1 4Bw (Guard), 3 4Ax (Kardakes), 1 3Ax (Carian), 2 3Bw (Mardian), 1 El.
Total = 52 elements.

On a similar scale, the largest Byzantine army envisaged by Maurice in the "Strategicon" would be:

1st line:	1 2LH, (Ambushers), 1 2LH (Outflankers), 1 2LH (Flank guards), 5 3Cv (Meros of Vexilationes), 5 3Cv (Meros of Federati), 5 3Cv (Meros of Illyrikiani).
2nd line:	3 3Kn (Taxiarchy of Optimates), 3 Meros each of 3 3Cv.
Rear guard:	2 Moira each of 1 3Cv.
Infantry:	4 Meros each of 3 4Sp, 2 2Ps.
	Total = 52 elements.

VARIATION IN TROOP QUALITY

Organisers of full scale campaigns may wish to introduce some differences between troops of the same nominal type. If so, when two elements of the same nominal type fight each other, that judged to be worse counts a single extra -1 tactical factor. This will be that which has the largest total of the following disadvantage points:

1 dp if same troop type, but appreciably worse armour.

1 dp if same troop type, but worse, fewer or shorter ranged weapons.

1 dp if same troop type, but inferior morale class and/or less figures per base.

2 dp if any type and fatigued by forced marching, weather or shortage of food or water.

3 dp if any type and own army has acquired less than half as many prestige points as its opponents.

The varying ability of generals in campaign or solo games can be simulated by an addition of +1 to, or deduction of −1 from, movement die scores.

BATTLES WITH 7TH EDITION ARMIES

If you wish to use an existing 7th edition army and scales to simulate smaller battles in more detail, we suggest experimenting along the following lines. Use a 6 x 4 foot table and a ground scale of 1 inch = 25p for 25mm and 1 inch = 50p for 15mm. Still use one move die, but add +1 to its score for each subordinate general, and measure distances from each command's own general. Since elements are combined into units or bodies, the move die score gives the number of groups of units or single units or bodies that can be moved. Changing the relative position of units within a group requires single unit moves. Changing formation within a unit or body is a move.

Combat is completed one unit at a time, but by elements as usual in DBA. Use the troop quality variations from the previous section. Add a new tactical factor "+1 if a unit command element in frontal contact". The provision for rear support also changes to become:

Pikes +1 for each extra rank of pikes up to 3.
Spears +1 for a single extra rank of spears.
Blades, spears or auxilia +1 for a single extra rank of that type if contacted frontally by mounted.
Blades, spears, auxilia or bows +1 if a single 2nd to 5th rank is of bows or bow-armed psiloi.
Knights, cavalry or light horse +1 for a single extra rank of psiloi or of bow-armed cavalry or light horse.

When an element flees, all other elements of its body flee. If the cohesion of a body is broken by one or more elements recoiling or being destroyed, its elements move only as individuals until its formation is restored and can only move to form up with another of its elements. If a unit's or body's command element is destroyed, all its other elements are likewise destroyed.

MISCELLANEOUS INFORMATION

If you have any queries or suggestions, you are welcome to phone Phil Barker on 021-472-6207, preferably during normal office hours. For details of other WRG wargames rules, army lists and reference books, send a stamped and addressed envelope if in the U.K, or 2 international reply coupons if not, to:

W.R.G, The Keep, Le Marchant Barracks, London Rd, Devizes SN10 2ER, U.K. Tel: 0380-72-4558.

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 on 5.25inch disk for £3.00. On registration, which costs £20.00, the scenario editor will be supplied. This enables scenarios to be created or modified, and permits battles to be fought either automatically or using DBA or other table-top rules. Please add a further £2.00 for overseas postage. Orders or enquiries to:

Richard Bodley Scott, 28 Priory Gardens, Usk, Gwent, U.K. Tel: 029-13-2496.

THE SOCIETY OF ANCIENTS is a long established world-wide society for all interested in ancient and medieval warfare. Its bi-monthly journal SLINGSHOT balances research of a very high standard with more specifically wargaming content. Contact:

The Treasurer, 15 Longfleet Road, Poole, Dorset, BH15 2HN, U.K.

WARGAMES DEVELOPMENTS is an association of wargames innovators centering around an annual "try it on the dog" conference, not to be missed. Contact:

The Treasurer, 50 Booth Close, Thamesmead, London SE 28, UK.

Finally, we offer our thanks to our many testers in Britain, America, New Zealand and Italy, but especially to the "denizens of the S.W.A.M.P" (South Wales Ancient and Medieval Players), and to Thomas.