D.B.M. ARMY LISTS

For use with the De Bellis Multitudinis Wargames Rules BOOK 4: 1071 AD to 1500 AD



Compiled by Phil Barker and Richard Bodley Scott

WARGAMES RESEARCH GROUP 2nd EDITION, MARCH 1999

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D.B.M. ARMY LISTS

BOOK 4 - THE HIGH MEDIEVAL PERIOD, 1071 AD TO 1500 AD

These lists are intended for use with our "De Bellis Multitudinis" wargames rules, more familiarly known as "DBM". While mainly intended for competition games, they also provide a general guide to armies' troop classification and proportions for use in conjunction with more detailed sources such as the W.R.G. army handbooks.

Each list is designed to produce 300 AP to 500 AP armies which closely simulate their real life prototype, while still allowing sufficient flexibility to cover historical variations during the period and legitimate differences of opinion or personal preference. Most of them include about 200 AP of compulsory troops and allow greater freedom of choice for the remainder, this choice diminishing as the size of the army increases. You will often find that there is less freedom of choice than in previous W.R.G. army lists. In particular, we have taken pains to ensure that minority troop types are not over-represented. There is an unfortunate if natural tendency on the part of the illustrators of some series of army books to concentrate on the more glamorous components of an army at the expense of the more common. The permitted number of elephants is still on the generous side.

All lists have been updated in the light of the latest historical and archaeological research. We have had help from many people and an inordinate amount from a few who are recognised authorities in their field. However, we alone are responsible for the final decisions, so too much blame should not be laid at those worthies' doors. Where there is disagreement about the more obscure troop types or only minor doubt, we have often chosen to specify only the interpretation we think most likely. This has been done not through hubris, but for the sake of simplicity, and to reduce the scope for tailoring of armies by over-competitive players. Where a decision has been finely balanced, we have elected for the interpretation producing the most realistic effect against the army's historical opponents. Regretfully, some new research, necessitates changes in existing wargames armies. We can only plead that we are the slaves of history and not its masters.

The first part of each list comprises troops available throughout the historical time period covered. Some armies then have additional sub-lists of troops available to particular historical generals, or in different geographical regions, or during only part of the period. An army including troops only available to a particular general cannot include troops available only to a different geographical area. An army including troops available in a particular geographical area cannot include troops available only in a different geographical area. An army including troops available only in a particular historical period cannot include troops available only during an incompatible historical period.

An army must have a C-in-C and at least 1 other general. No army can have more than 4 generals. All armies must also have 2 baggage elements for each general whose command is not initially entirely waterborne.

ALLIES

In most cases foreign allied contingents are specified by reference to their own list. Each such allied contingent must include 1 general and 2 baggage elements. The general's type can be that of the allied contingent's list's C-in-C or subgeneral. Unless otherwise stated in a particular list, the allied contingent can include only compulsory troop types, and must have at least a quarter of the specified minimum number of elements of each such type. It cannot include more than a third of the specified maximum number of each such type, or 1 element, whichever is greater. Allied troops have only those options specified in their own list for that date, and any minima or maxima for such upgrades are modified as above. The full allowance of troops listed in the form "0-1 per X" can be included in an allied contingent if the "X" are. An allied contingent need not contain otherwise compulsory TF. An allied contingent cannot include allies of its own. Unless otherwise specified, only 1 foreign allied contingent of each nationality can be included. In some cases the maximum total number of elements that can be included in the allied contingent, including the general and 2 baggage elements, is specified. If so, this is because allies of that origin never exceeded a quarter of the total force fielded by the allies in any historical campaign.

Where foreign allies do not have an appropriate list of their own, their contingent is specified as an indented sub-list within a nation's main list. In this case the minimum and maximum number of elements of each troop type will be as specified in that sub-list. 2 baggage elements must also be included.

Where ally generals are specified unindented in a nation's main list, such generals are of the same or a closely related nationality. Unlike foreign irregular ally generals, they will never change sides except in a civil war, and may then do so whether regular or irregular. Each such general's command must, unless stated otherwise, include at least a quarter of the minimum number of each compulsory troop type. It can also include non-compulsory types. All elements count towards the total number of each type specified in the list.

NAVAL

Naval elements are included only if they played a significant part in a mainly land battle. Each replaces a land element of the list, of the type or types that follow it within brackets. For example, a Chinese junk element Irr Shp (O) @ 3AP [Bw], replaces one of the compulsory or optional Bowmen elements of the army list, and also disembarks as that element. The AP quoted is for the junk only. The bowmen must be paid for separately. Naval elements with no landing troops specified cannot provide landing parties. Points spent on naval elements are wasted if they have no access on to 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. Landing troops, whose number must be equal to the number of available vessels, such as marines, seaman, oarsmen or the equivalent, obviously cannot be used unless their vessels have been paid for.

CLIMATE, AGGRESSION AND TERRAIN

The second line of each list specifies the army's home climate, its aggression factor, and codes for the types of terrain that can be chosen if it is the defender. Types shown in bold letters are compulsory. Even if not listed, a single patch of coastal sand dunes or marsh can always be used if successfully positioned in contact with a waterway, or a single patch of marsh if successfully positioned in contact with a river, or up to 3 open fields if in contact with a BUA and enclosed fields are not specified. A hill cannot have any kind of surface not permitted on the flat.

Terrain types are:

• Waterway suitable for ships, such as the sea, lakes or great rivers.	WW
 Ordinary rivers. 	Rv
 Hill with some or all slopes steep, difficult or rough. 	H(S)
 Hill or lesser rise with only gentle smooth slopes. 	H(G)
♦ Woods.	Wd
 Orchards or olive or palm groves. 	О
♦ Vines.	V
 Small fields enclosed by hedges, walls or irrigation ditches. 	E
Rough going, such as moderately boggy or rocky ground or brush.	RGo
 Inland marsh other than on a river. 	М
 Non-coastal sand dunes. 	D
 Roads or frequently used tracks. 	Rd
♦ Built-up areas, such as villages.	BUA

The home terrain of an empire is assumed to be that of its heartland or capital, the centre of its power. The home terrain of a migration is that of the last region occupied before entering on the stage of world history. That of rebellious mercenaries is their previous area of operations.

FORTIFICATIONS

Any army with BUA listed among its permitted terrain types can have sufficient PF or TF to enclose the on-table part of a BUA when the defender. No other PF are permitted. TF can only otherwise be used if specified by the army's list. Those specified as defending camps or baggage must have both ends touching their side's base table edge and contain baggage. Points spent on fortifications other than those specified by the army's list are wasted if the terrain includes no BUA, or the army becomes the invader.

COMPETITION PERIODS

Where practicable, we favour the subdivision of competitions into historical time periods, to minimise the culture shock arising from the clash of wildly anachronistic armies. At first sight, the break-down of our army lists into the following four books might appear eminently suitable.

BOOK 1: THE CHARIOT PERIOD, 3000 BC - 500 BC.

BOOK 2: THE CLASSICAL PERIOD, 500 BC - 476 AD.

BOOK 3: THE EARLY MEDIEVAL PERIOD, 476 AD - 1071 AD.

BOOK 4: THE HIGH MEDIEVAL PERIOD, 1071 AD - 1500 AD.

Note, however, that some armies continue into later periods than that of the book in which they appear, so that division by books could unjustly prevent them from competing against actual historical opponents. Organisers should therefore subdivide competitions by the periods of the books, not by the books themselves. Obviously an army whose list crosses such a sub-period boundary can only use those troops permitted it during the sub-period in which it is competing. If such subdivision is not practicable, the initial pairings at least of a "Swiss Chess" competition should try to match armies of similar date and geographical region.

TROOP TYPE ABBREVIATIONS

The following abbreviations are used for troop types in these lists:

El = Elephants. Kn = Knights. Cv = Cavalry. LH = Light Horse. Cm = Camelry. Exp = Expendables. Sp = Spears. Pk = Pikes. Bd = Blades. Wb = Warband. Ax = Auxilia. Bw = Bowmen. Ps = Psiloi. Art = Artillery. WWg = War Wagons. Hd = Hordes. Gal = Galleys. Shp = Ships. Bts = Boats. Bg = Baggage. TF = Temporary Fortifications. mtd = Mounted Infantry.

ARMIES INCLUDED

- 1. Komnenan Byzantine. 1071 AD 1204 AD.
- 2. Cilician Armenian. 1071 AD 1375 AD.
- 3. Anglo-Norman. 1072 AD 1181 AD.
- 4. Feudal French. 1072 AD 1330 AD.
- 5. Sicilian. 1072 AD 1442 AD.
- 6. Syrian. 1092 AD 1286 AD.
- 7. Early Crusader. 1096 AD 1128 AD.
- 8. Ghurid. 1100 AD 1215 AD.
- 9. Eastern Forest American. 1100 AD 1620 AD.
- 10. Mound Builder American. 1100 AD 1701 AD.
- 11. North-Western American. 1100 AD 1770 AD.
- 12. Polynesian or Melanesian. 1100 AD 1785 AD.
- 13. Medieval German. 1106 AD 1519 AD.
- 14. Jurchen-Chin. 1114 AD 1234 AD.
- 15. Qara-Khitan. 1124 AD 1211 AD.
- 16. Scots Common Army. 1124 AD 1512 AD.
- 17. Later Crusader. 1128 AD 1303 AD.
- 18. Lithuanian or Samogitian. 1132 AD 1435 AD.
- 19. Tarascan or Toltec-Chichimec. 1168 AD- 1521 AD.
- 20. Ayyubid Egyptian. 1171 AD 1250 AD.
- 21. Anglo-Irish. 1172 AD 1489 AD.
- 22. Serbian Empire. 1180 AD 1459 AD.
- 23. Feudal English. 1181 AD 1322 AD.
- 24. Khwarizmian. 1186 AD 1246 AD.
- 25. Later Bulgan 1186 AD 1395 AD.
- 26. Lusignan Cypriot. 1192 AD 1489 AD.
- 27. Estonian. 1200 AD 1227 AD.
- 28. Prussian. 1200 AD 1283 AD.
- 29. Tupi. 1200 AD- 1601 AD.
- 30. Teutonic Orders. 1201 AD 1522 AD.
- 31. Nikaian Byzantine. 1204 AD 1261 AD.
- 32. Romanian Frank, 1204 AD 1311 AD.
- 33. Epirot Byzantine. 1204 AD 1340 AD.
- 34. Trapezuntine Byzantine. 1204 AD 1461 AD.
- 35. Mongol Conquest. 1206 AD 1266 AD.
- 36. Later Muslim Indian. 1206 AD 1526 AD.
- 37. Indonesian or Malay. 1222 AD 1511 AD.
- 38. Granadine. 1232 AD 1492 AD.
- 39. Navarrese. 1234 AD 1430 AD.
- 40. Siamese. 1238 AD 1518 AD.
- 41. Early Swiss. 1240 AD 1400 AD.
- 42. Islamic Persian.
 - 1245 AD 1393 AD and 1499 AD 1520 AD.
- 43. Later Hungarian. 1245 AD 1526 AD.

- 44. Post-Mongol Russian. 1246 AD 1533 AD.
- 45. Mamluk Egyptian. 1250 AD 1517 AD.
- 46. Ilkhanid. 1251 AD 1355 AD.
- 47. Golden Horde and Successors. 1251 AD- 1556 AD.
- 48. Yuan Chinese. 1260 AD 1368 AD.
- 49. Anatolian Turkoman. 1260 AD 1515 AD.
- 50. Palaiologan Byzantine. 1261 AD 1384 AD.
- 51. Morean Byzantine. 1262 AD 1460 AD.
- 52. Later Nomadic Mongol. 1266 AD 1508 AD.
- 53. Mixtec or Zapotec. 1280 AD 1521 AD.
- 54. Medieval Scandinavian. 1280 AD 1523 AD.
- 55. Ottoman. 1281 AD 1512 AD.
- 56. Order of St John. 1291 AD 1522 AD.
- 57. Low Countries. 1297 AD 1478 AD.
- 58. Medieval Irish. 1300 AD 1487 AD.
- 59. Post-Mongol Samurai. 1300 AD 1542 AD.
- 60. Catalan Company. 1302 AD 1388 AD.
- 61. Italian Condotta. 1320 AD 1495 AD.
- 62. 100 Years War English. 1322 AD 1455 AD.
- 63. Aztec. 1325 AD- 1521 AD.
- 64. Medieval French. 1330 AD 1445 AD.
- 65. Wallachian or Moldavian. 1330 AD 1504 AD.
- 66. Later Polish. 1335 AD 1510 AD.
- 67. Jalayirid. 1336 AD 1432 AD.
- 68. Medieval Spanish or Portuguese. 1340 1485 AD.
- 69. Albanian. 1345 1430 AD & 1443 1479 AD.
- 70. Chanca. 1350 AD 1440 AD.
- 71. Chimu. 1350 AD 1464 AD.
- 72. Amazonian. 1350 AD 1662 AD.
- 73. Ming Chinese. 1356 AD 1598 AD.
- 74. Free Company or Armagnac. 1357 AD - 1410 AD and 1444 AD.
- 75. Timurid. 1360 AD 1506 AD.
- 76. Early Burgundian. 1363 AD 1471 AD.
- 77. Black Sheep and White Sheep Turkoman. 1378 AD - 1469 AD and 1387 AD - 1504 AD.
- 78. Yi Dynasty Korean. 1392 AD 1598 AD.
- 79. Later Swiss. 1400 AD 1522 AD.
- 80. Hussite. 1419 1434 AD and 1464 1471 AD.
- 81. Inca. 1438 AD- 1534 AD.
- 82. French Ordonnance. 1445 AD 1503 AD.
- 83. Wars of the Roses English. 1455 AD 1487 AD.
- 84. Burgundian Ordonnance. 1471 AD 1477 AD.

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1. KOMNENAN BYZANTINE 1071 AD - 1204 AD

Warm. Ag 1. WW, Rv, H(S), H(G), Wd, O, V, E, RGo, Rd, BUA.	
C-in-C - Reg Cv (O) (a) 28AP or Reg Kn (F) (a) 31 AP	1
Sub-general - Reg Cv (O) @ $28AP$	1-2
Sub-general - Reg Cv (O) @ 28AP or as Varangians, Reg mtd Bd (O) @ 28	SAP 0-1 *1-7
Varangians - Reg mtd Bd (O) @ 8AP	0-6
Tourkopouloi - Reg LH (S) @ 7AP Skythikon - Irr LH (F) @ 4AP	0-0 8-16
Archers - Reg Ps (O) @ 2AP or Reg Bw (I) @ 4AP	8-24
Upgrade archers to Reg Bw (O) (a) 5AP	0-8
Kontaratoi - Reg Sp (I) @ 4AP	0-8
Alans - Irr LH (S) @ 7AP	0-8
Ditch and bank to protect baggage - TF @ 1AP	0-12
Pamphyla and Khelandia - Reg Gal (S) @ 4AP or Reg Gal (O) @ 3AP,	0 12
with marines Reg Sp (O) (a) 5AP	0-2
Turkish allies - List: Seljuq Turk (Bk 3)	° <u>-</u>
Only before 1150 AD:	
Kavallarioi - up to 1/2 Reg Cv (O) @ 8AP, remainder Reg Cv (I) @ 6AP	8-12
Latinikon - Reg Kn (F) @ 11AP	0-8
Frankish mercenary allies:	0.0
Frankish mercenary ally general - Irr Kn (F) @ HAP	**1
Downgrade Latinikon to Frankish mercenary allies, Irr Kn (F) @ 9AP	**A11
Manichaeans - Irr Ax (O) @ 3AP	0-4
Vlachs and Bulgars - up to half cavalry, Irr LH (S) @ 7AP, remainder arch	ers, Irr Ps (O) @ 2AP 0-4
Venetian allies:	
Venetian naval crossbowmen - Reg Bw (O) @ 5AP	Up to I per Venetian naval
	to 1 per 2 Venetian naval
Venetian usciere - Irr Shp (S) @ 4AP [Venetian Bw or Ax]	0-2
Venetian galleys - Reg Gal (F) @ 2AP [Venetian Bw or Ax]	0-3
Extra to upgrade Venetian Bw or Ax to ally-general $@+10$ AP	***1
Serbian allies - List: Early Serbian or Croatian (Bk 3)	0-16
Cuman allies - List: Cuman (Kipchak) (Bk 3)	
Only after 1150 AD:	
Upgrade Byzantine generals except Varangians to Reg Kn (F) @ 31 AP	All
Vardariotai - Reg LH (F) @ 4AP	* 1-8
Kavallarioi - Reg Kn (F) @ 11AP	4-6
Latinikon - Reg Kn (O) @ 12AP	4-12
Only in 1138 AD and 1159 AD:	
Crusader allies - List: Later Crusader (Bk 4)	
Only in 1152 AD and 1159 AD:	
Armenian allies - List: Cilician Armenian (Bk 4)	0-15
Only on the Italian expedition of 1155 AD to 1156 AD:	
Sicilian Norman rebel allies - List: Sicilian (Bk 4)	

This list covers Byzantine armies from the disaster of Manzikert until the capture of Constantinople by the Fourth Crusade. The loss of its Anatolian recruitment areas forced the army to depend heavily on foreign mercenaries. The Varangians were now a mixture of Anglo-Saxons and Rus, who rode to battle then fought on foot with axes. Kavallarioi were native armoured cavalry, now nearly all armed with lances which they often threw. They included some new elite units such as the Archontopouloi, but also many of low efficiency and sometimes lacking armour. Manouel I (1143 - 1180) increased the Latinikon and trained his native cavalry to charge in Frankish style. The option to class the C-in-C as Kn (F) prior to Manouel's reforms reflects Anna Komnene's descriptions of her father Alexios's prowess, and also the battle of Beliatoba in 1086 when another Byzantine C-in-C, Pakourianos, charged so vigorously that he crashed into a tree and killed himself. The Latinikon were Frankish mercenary knights. We class them as regular as they are described requesting permission to charge. There were also sometimes bodies of Franks under their own leader who were less reliable, once changing sides on the battlefield, so we provide an option to downgrade Latinikon to irregular allies. Tourkopouloi were Christianised Turks. The Vardariotai were a new guards unit first

attested in 1160 and originally recruited from Magyar settlers in the Vardar valley. The Skythikon were originally recruited from Pecheneg horse archers, but were increasingly supplemented by Cumans. Native infantry were mainly archers, supported by a few spearmen. The unarmoured spearmen previously equated with peltastai are now thought to represent the poorer Kontaratoi. The troops called peltastai by Anna Komnene are all archers who provide massed distant shooting, carry bucklers, sometimes use caltrops, support pursuing cavalry, on one occasion are placed alternately with infantry spearmen and on another dismount to attack fortifications. However, these last seem to have been dismounted Tourkopouloi. The term is not used by other Byzantine writers of this period, so she may be archaizing. Alternatively, some archers of superior quality and used for important tasks may have been so named from small shields like those shown in use by a minority of archers in later depictions. Manichaeans were Paulician heretic Slavs given to banditry, who are described by Anna Komnene as "excellent fighters, more than ready to draw the blood of their enemies", "headstrong and devoid of shame", "desperate warriors, full of loathing for their opponents" and as having an "incurable delight in battle". 2,800 were present in Alexios's army at Dyrrachium. Minima marked * apply only if the C-in-C is the Emperor, that marked ** only if the Latinikon is downgraded, that marked *** only if more than 2 Venetian naval elements are used. Byzantine ships cannot be used with Venetians. The battle off Rhodes in 1100 may have been the last Byzantine use of Greek Fire at sea. Sicilian Norman rebel allies cannot include any Saracens.

2. CILICIAN ARMENIAN 1071 AD - 1375 AD

Cold. Ag 1. Rv, H(S), H(G), Wd, O, RGo, Rd, BUA. C-in-C - Irr Kn (F) @ 19AP Sub-general - as above Armenian cavalry - Irr Kn (F) @ 9AP Armenian foot - Irr Ax (O) @ 3AP or Irr Sp (I) @ 3AP Armenian archers - Irr PS (O) @ 2AP or Irr Bw (O) @ 4AP Bedouin ally-general - Irr LH (O) @ 10AP Bedouin cavalry - Irr LH (O) @ 5AP Only from 1098 AD to 1263 AD: Frankish allies - List: Early Crusader (Bk 3) or Later Crusader (Bk 3) Only in 1128 AD and from 1220 AD to 1246 AD: Rum Seljuq allies - List: Seljuq Turk (Bk 3)	1 1-2 8-24 20-56 12-20 *1 0-6	1
Only after 1150 AD: Upgrade Armenian Kn to Irr Kn (O) @ 20AP if general, otherwise 10AP	0-5	
Frankish mercenary foot sergeants - Irr Sp (I) @ 3AP Frankish mercenary crossbowmen - Irr Bw (O) @ 4AP	0-2 0-4	
Upgrade Frankish sergeants to Reg Sp (O) @ 5AP and crossbowmen to Reg Bw (O	* .	
Templar, Hospitaller or Teutonic knights - Reg Kn (S) @ 15AP	0-1	
Templar, Hospitaller or Teutonic turcopoles - Reg Cv (O) @ 8AP	0-1	
Only from 1260 AD to 1355 AD:		
Armenians disguised as Mongols - Irr LH (F) @ 4AP	0-2	
Ilkhanid Mongol allies - List: Ilkhanid (Bk 4)		
Only after 1300 AD:		
Lusignan allies - List: Lusignan Cypriot (Bk 4)	0-14 plus 0-2 naval	

This list covers the Armenians of Cilicia from their gaining independence in the aftermath of Manzikert until the conquest of their kingdom by the Mamluks. King Hethum travelled to meet Mongke in 1255 and willingly submitted to the Mongols in the hope of help against the Rum Seljuqs, and then with his son-in-law Bohemond VI of Antioch and Tripoli helped the Mongols storm Aleppo in 1260. In 1263 his army included not only Bedouin and Mongol contingents but also 150 Armenians disguised as Mongols to further demoralise the enemy. The Armenians remained loyal to the Ilkhanids thereafter, thus incurring the wrath of the Mamluks. After the fall of the Crusader kingdom, Cilicia was heavily influenced by Lusignan-ruled Cyprus and recruited Frankish mercenary foot soldiers from there. Frankish, Seljuk, Mongol or Lusignan allies cannot be used together. The minimum marked * applies only if more than 3 elements of Bedouin are used, in which case all Bedouin must be under the command of the Bedouin ally-general. A Bedouin ally general can command only Bedouin. Whether armoured foot spearmen in art should be interpreted as native Armenians or Franks is a matter of opinion. The Crusading military orders held castles in Cilicia long after the fall of their fortesses in Palestine.

3. ANGLO-NORMAN 1072 AD - 1181 AD

Cold. Ag 2. WW, Rv, H(S), H(G), Wd, RGo, M, Rd, BUA.	
C-in-C - Irr Kn (F) @ 19AP	1
Sub-general - as above	1-2
Anglo-Norman and mercenary knights and mounted sergeants - Irr Kn (F) @ 9AP	12-24
Sergeants, fyrd, town militia and mercenaries - Irr Sp (I) @ 3AP	12-58
Archers - Irr Ps (O) @ 2AP [can support Sp or Bd] or Irr Bw (I) @ 3AP	8-20
Upgrade archers to Irr mtd Bw (I) @ 4AP	0-1
Flemings - Reg Pk (I) @ 3AP	0-4
North Welsh allies - List: Welsh (Bk 3)	
Only in Marcher army:	
Marcher muntatores - Irr Cv (O) @ 7AP	0-4
Marcher Welshry - Irr Ax (X) @ 3AP	*2-6
Only if not in Marcher army:	
Standard carried on ox-drawn wagon - Irr WWg (I) @ 2AP	0-1
French allies - List: Feudal French (Bk 4)	
Only after 1150 AD:	
Upgrade generals to Irr Kn (O) @ 20AP	All
Upgrade Kn to Irr Kn (O) @ 10AP	All
Brabancon or Flemish mercenary knights - Reg Kn (O) @ 12AP	0-3
Crossbowmen - Irr Bw (O) @ 4AP	0-4

This list covers English armies from the completion of the Norman conquest until Henry II's assize of arms in 1181. The wagon standard is the banner of St. Cuthbert of Durham or St. Peter of York. It cannot be used if the king is present or with Flemish infantry, muntatores, Welshry, Welsh or French. It will be especially appropriate when defending against the "breechless and barbarous Scots." A large proportion of the cavalry were often dismounted to stiffen the foot. Accordingly, Anglo-Norman Kn can always dismount to fight on foot as all Sp, or if they all leave their lances with their horses, as all Bd. Welshry were Welsh tenants owing Welsh-style military service to Norman marcher lords. Muntatores were specialist English feudal light cavalry of the Welsh marches in mail haubergeon and helmet, armed with lance and sword but no shield, and riding good fast horses. Their primary role was to pursue Welsh raiders, fight mounted, but to be prepared to dismount to spring any delaying ambushes in difficult terrain. In an expeditionary army they would serve as scouts. They can always dismount as Ax (X). The minimum marked * applies only if any muntatores are used. French allies cannot be used with Welsh or marcher troops. Crossbowmen were rare in England until after 1150, but 1 or 2 archer elements could include a crossbow figure for variety.

4. FEUDAL FRENCH 1072 AD - 1330 AD

Cold. Ag 1. WW, Rv, H(S), H(G), Wd, O, V, RGo, Rd, BUA.	
French C-in-C - Irr Kn (F) @ 19AP	1
French sub-general - as above	0-1
French ally-general - Irr Kn (F) @ MAP	1-2
French knights and sergeants - Irr Kn (F) @ 9AP	11-24
Foot crossbowmen - Irr Ps (O) @ 2AP	4-6
Archers - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP	0-16
Upgrade archers to Irr mtd Ps (O) @ 3AP or Irr mtd Bw (I) @ 4AP	0-6
Spearmen - Irr Sp (I) @ 3AP	10-16
Infantry with swords, axes, gisarmes, voulges, fauchards etc Irr Bd (I) @ 4AP	0-3
French communal militia - Reg Sp (I) @ 4AP	0-16
Brabancon mercenary cavalry - Reg Kn (F) @ 11AP	0-3
Bidets or Bretons - Irr Ps (S) @ 3AP	0-3
Ribauds - Irr Hd (O) @ 1AP	1-3
Peasant levies - Irr Hd (O) @ 1AP	0-10
Bolt-shooter - Reg Art (O) @ 8AP	0-1
Only after 1150AD:	
Upgrade generals to Irr Kn (S) @ 17AP if ally, otherwise 22AP	All
Upgrade Irr Kn to Irr Kn (S) @ 12AP	All
Upgrade Reg Kn to Reg Kn (O) @ 12AP	All
Royal guard crossbowmen - Reg mtd Bw (O) @ 6AP	0-2
Downgrade Irr Kn (S) to separated sergeants, Irr Cv (O) @ 7AP	0-4
Upgrade foot crossbowmen to armoured Irr Bw (O) @ 4AP	Any
Replace Irr Sp (I) with Brigans, Irr Ax (X) @ 3AP	1/2-A11
Genoese mercenary crossbowmen - Reg Bw (O) @ 5AP	0-6
Low Countries mercenary spearmen - Reg Pk (I) @ 3AP	0-6
Cogs - Irr Shp (S) @ 4AP [Reg Bw (O)]	0-3
Galleys - Reg Gal (O) @ 3AP [Irr Bd (I)]	0-3
Only in 1213 AD:	
Replace French C-in-C with Spanish C-in-C, Irr Kn (S) @ 22AP	0-1
Spanish allies (only under Spanish C-in-C) - List: Feudal Spanish (Bk 3)	
Only St Louis' Egyptian Crusade in 1250 AD:	
Crusader allies - List: Later Crusader (Bk 4)	
Ditched palisade to defend camp - TF @ 1AP	0-12
Only Charles of Anjou from 1266 AD to 1285 AD:	
Italian mercenary cavalry - Reg Kn (O) @ 12AP	0-2
Saracen mercenaries - Reg Ps (O) @ 2AP or Reg Bw (I) @ 4AP	0-2
Milanese allies - List: Communal Italian (Bk 3)	0-05
Minanese antes - Eist. Communar Italian (DK 5)	0-15

This covers French armies from the re-birth of a strong central monarchy until the change to plate armour. Royal control over the nobility outside the Ile de France remained doubtful. Royal Guard crossbowmen can only be used if the C-in-C is the King of France. The option for a Spanish C-in-C provides for the Albigensian and Spanish army of 1213, led by the King of Aragon, but mainly of south French. In this case, Spanish troops are chosen as if an allied contingent but instead form part of the C-in-C's command. No distinction is made between feudal troops and French mercenaries. French knights were considered superior to knights of other nations when mounted, and the army's chief reliance was on their charge. Conversely, they were considered of little use dismounted. Sergeants usually formed rear ranks and are then assumed to be included in each Kn element. However, bodies of them were occasionally used to provoke an enemy charge, as at Bouvines in 1214, or to clear away archers, as possibly at Benevento in 1266. Infantry could be drawn up behind as a rallying point, on the wings of each cavalry division, or sent in front to prepare the charge with missiles. By the 13th century spearmen with short spear and shield were being supplanted by men with a longer spear and no shield, resembling the later Brigans. Bidets or bidowers were respected skirmishing javelinmen. Ribauds were knife armed looters whose mobility was reduced by caution but who would enthusiastically attack unhorsed knights or defenceless baggage! Charles of Anjou with a French army invaded Italy and conquered the Kingdom of Sicily in 1266, losing the island of Sicily in the War of the Sicilian Vespers from 1282, but retaining the Kingdom of Naples for his heirs. He cannot use Saracens until after his defeat of the Sicilian army at Benevento.

5. SICILIAN 1072 AD - 1442 AD

Warm. Ag 3. WW, Rv, H(S), H(G), Wd, O, V, RGo, Rd, BUA.	
C-in-C - Irr Kn (F) $@$ 19AP	1
Sub-general - Irr Kn (F) @ 19AP	0-2
Ally-general - Irr Kn (F) $@$ 14AP	0-2
Feudal knights and sergeants - Irr Kn (F) @ 9AP	5-16 0-8
Italian communal or mercenary knights - Reg Kn (F) @ 11 AP	0-8
Italian communal spearmen - Reg Sp (I) @ 4AP Italian communal crossbowmen - Reg Bw (I) @ 4AP	0-10
Saracen or Berber nobles - Irr Cv (O) @ 7AP	0-0
Saracen archers - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP	*20-32
Saracen javelinmen or axemen - Irr Ax (O) @ 3AP or Reg Ax (S) @ 5AP	0-6
Mercenary crossbowmen - Reg Bw (O) @ 5AP	0-0
Griffons - Irr Ax (O) @ 3AP	0-16
Navi - Irr Shp (O) @ 3AP [Dismounted Kn, Bw (O)]	0-4
Horse transports - Irr Shp (I) @ 2AP [Kn, LH]	0-2
Only after 1150 AD:	
Upgrade C-in-C to Reg Kn (S) @ 35AP	All
Upgrade sub- or ally- generals to Irr Kn (O) @ 15AP if ally, otherwise 20AP	All
Upgrade other Kn to Kn (O) @ 12AP if regular, 10AP if irregular	All
Berbers - Irr LH (O) @ 5AP	0-6
Only after 1194 AD:	
Upgrade communal crossbowmen - up to half to Reg Bw (X) @ 7AP, remainder to	
Reg Bw (O) @ 3AP if rear element of double base behind Bw (X), otherwise 5AP	Any
Upgrade Saracen or Berber nobles to guard Reg Cv (O) @ 8AP	All
Saracen horse archers - Reg LH (F) @ 4AP	*3-8
Upgrade Saracen archers to Reg Ps (O) @ 2AP or Reg Bw (I) @ 4AP	Any
Downgrade Griffons to arriere-ban - Irr Hd (O) @ 1AP	All
Only Friedrich II's Crusade from 1228 AD to 1232 AD:	
Crusader allies - List: Later Crusader (Bk 4)	
Only after 1235 AD: V = 1235 AD:	A
Upgrade sub-general to Reg Kn (O) @ 32AP or double based Reg Kn (I) @ 30AP	Any *3-12
German mercenary cavalry - double based Reg Kn (I) @ 10AP if front rank, 8AP if rear rank	*3-12
Only after 1281 AD:	0-12
Aragonese crossbowmen - Irr Ps (O) @ 2AP	0-12
Only from 1282 AD to 1301 AD:	2.0
Aragonese light horse - Irr LH (O) @ 5AP	2-6
Catalan almughavars - Irr Ax (S) @ 4AP	12-36
Only from 1292 AD to 1301 AD:	4 11
Upgrade Aragonese and Catalan troops to regular @ 5 AP if LH, 5 AP if Ax (S), 2 AP if Ps	All
Only after 1302 AD:	
Aragonese allies - List: Medieval Spanish or Portuguese (Bk 4)	

This covers Sicily from Norman conquest until the reconquest of and union with Naples in 1442. It includes Robert Guiscard's army at Durazzo in 1081. Nobles were not always loyal. Communal troops were the militias of vassal Italian cities. "Griffons" were Sicilian Greeks. By the 13th century they were absorbed in the arriere-ban. The Saracens from whom the Normans conquered Sicily were conciliated and became loyal troops, some later wearing uniform. Saracens and Berbers cannot be used after 1300. German mercenaries of the 13th C wore heavy armour but fought in deep clumsy wedges. Other mercenary knights were north Italian and Burgundian with a few French. Minima marked * only apply before the conquest of the Kingdom by Charles of Anjou in 1266, after which no more than 4 elements of Kn (I) can be used. In 1282 the Sicilians revolted against Charles, massacred his French supporters and invited Pere III of Aragon to rule them. Bringing a force of Aragonese and Catalans, he fought the War of the Sicilian Vespers. Peace in 1301 left Sicily in Aragonese hands, Naples in Angevin hands and a dangerous surplus of Catalans, soon transferred to Byzantine service as the notorious Catalan Grand Company (List 60). Charles of Anjou's army is covered by the Feudal French list, Alfonso V's armies on the Italian mainland from 1421 by the Italian Condotta list [Neapolitan]. Ally generals can only command feudal Kn and arriere-ban.

6. SYRIAN 1092 AD - 1286 AD

Warm. Ag 1. WW, Rv, H(S), H(G), RGo, D, Rd, BUA.	
C-in-C - Reg Cv (O) @ 28AP or Irr Cv (O) @ 17AP	1
Ally-general - Irr Cv (O) @ 12AP or Reg Cv (O) @ 18AP	0-3
Ghulams - Reg Cv (O) @ 8AP	*3-6
Upgrade regular generals or ghulams equipped with lance and bow	
to Reg Cv (S) @ 30AP if C-in-C, 20AP if ally general, otherwise 10AP	Any
Other Syrian, Kurdish or Armenian cavalry - Irr Cv (O) @ 7AP	7-28
Turkomans - Irr LH (S) @ 7AP	* 12-20
Bedouin Arab cavalry - Irr LH (O) @ 5AP	0-12
Ahdath spearmen, glaivemen and archers - Irr Hd (O) @ 1AP	**6-20
Ghazis - Irr Wb (F) @ 3AP	0-4
Mutatawwi'a - Irr Hd (S) @ 2AP	0-2
Jabaliyya, Kurds, Armenians or other javelinmen - Irr Ax (O) @ 3AP	0-8
Al-Ashair - Irr Ps (O) @ 2AP	0-12
Trench to protect camp - TF @ 1AP	0-12
Only after 1100 AD:	
Crossbowmen - Irr Bw (O) @ 4AP	0-2
Armoured spearmen - Irr Sp (I) @ 3AP	0-4
Naffatun - Reg Ps (X) @ 6AP	0-1
Frankish allies - List: Early Crusader (Bk 4) or Later Crusader (Bk 4)	
Only Zankids from 1128 AD to 1174 AD:	
Sub-general - Reg Cv (O) @ 28AP or Reg Cv (S) @ 30AP	0-1
Only Damascus in 1246 AD:	
Khwarizmian allies - List: Khwarizmian (Bk 4)	
Only Abbasid Khalifate before 1259 AD:	
Replace Turkomans with extra ghazis - Irr Wb (F) @ 3AP	1/2-A11

This list covers the Muslim armies of Syria and the revived but shrunken Abbasid Khalifate of Baghdad after the relaxation of Seljug control following the death of the Sultan Malik Shah in 1092 AD. The rulers of the various Syrian cities achieved semi-independence, most powerful being the Turkish rulers of Damascus and Aleppo. Antioch and Jerusalem also had Turkish rulers, but succumbed to Crusader and Fatimid attack respectively during the First Crusade. The smaller cities of Hama, Homs, Tripoli and Shaizar were ruled by Arab dynasties, and cannot use any items marked *. The list also covers the Zankid armies of Mosul from Zanki's acquisition of Aleppo in 1128 until the death of his son Nur ed-Din in 1174. Earlier armies of the atabegs of Mosul are covered by the Sultanate of Hamadan section of the Seljuq Turk list (Bk 3). Zanki took Edessa in 1145, but was murdered while besieging Damascus in 1146. His son Nur ed-Din took Damascus in 1154. In 1169 Nur ed-Din's Kurdish general Shirkuh took Egypt. Shirkuh was succeeded by his nephew Saladin (Salah ed-Din Yusuf), who ruled Egypt theoretically on Nur ed-Din's behalf until the latter's death in 1174, then took over the whole Zankid territory to create the Ayyubid Sultanate. Saladin's armies, and those of his successors in Egypt, are covered by the Ayyubid Egyptian list. This Syrian list, however, covers the provincial Ayyubid dynasties in Syria from the death of Saladin in 1193 until the Mamluks absorbed Kerak in 1286. The Abbasid Khalifate had only religious influence outside its own territories in Iraq. It controlled few Turkomans, but could call for large numbers of volunteers. It was destroyed by the Mongols in 1258. Syrian armoured cavalry in Christian depictions are mainly armed with lance, sword and shield but not bow, as confirmed by literary sources. The ghulams of the Turkish atabegs, however, were presumably armed with bow, sword or mace and shield, with or without spear or lance. Addath were city militia. Ghazis were volunteers fighting for religion, Mutatawwi'a for loot. Al-Ashair were probably Druze tribesmen. The minimum marked ** applies if any infantry are used. Allied contingents drawn from this list can include Bedouin and need not include infantry. Muslim-Frankish alliances include: In 1108, Ridwan of Aleppo with Tancred of Antioch against Jawali Sagawa and Baldwin of Edessa; in 1115, Toghtekin of Damascus, with Roger of Antioch, Pons of Tripoli and Baldwin of Jerusalem against the Seljug Sultan Mohammed; in 1139, Unur of Damascus with Fulk of Jerusalem against Zanki; in 1244, the Ayyubids Ismail of Damascus, al-Mansur Ibrahim of Homs and an-Nasir of Kerak with the combined forces of Frankish Outremer, including both Military Orders, against the Ayyubid Sultan as-Salih Ayyub and his Khwarizmian allies. The unrewarded Khwarizmians changed sides in 1246, but were destroyed while fighting for Ismail against forces loyal to the Sultan. Zankids and the Abbasid Khalifate cannot have Frankish allies.

7. EARLY CRUSADER 1096 AD - 1128 AD

Warm. Ag 4 before 1100 AD, then 1. WW, Rv, H(S), H(G), RGo, D, Rd, BUA.	
C-in-C - Irr Kn (F) @ 19AP	1
Crusader ally general - Irr Kn (F) @ HAP	1-3
Knights - Irr Kn (F) @ 9AP	8-28
Spearmen - Irr Sp (I) @ 3AP	16-40
Crossbowmen - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP	6-24
Upgrade crossbowmen as armoured to Irr Bw (O) @ 4AP	Any
Archers - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP	4-12
Pilgrims - Irr Hd (S) @ 2AP	0-24
Ditch or set-up wagon laager to protect camp - TF @ 1AP	0-12
Navi or Nefs - Irr Shp (O) @ 3AP [English/Flemish Ax or Italian Bw]	0-6
Only before 1098 AD:	
Byzantine allies:	
Byzantine ally-general - Reg LH (S) @ 17AP	*1
Byzantine tourkopouloi - Reg LH (S) @ 7AP	0-5
Byzantine stone-thrower - Reg Art (S) @ 10AP	0-2
Byzantine siege boats - Reg Bts (X) @ 6AP [Art]	0-1
Byzantine boats - Irr Bts (O) @ 2AP [Reg Sp (I) @ 4AP]	0-4
Only from 1098 AD to 1099 AD:	
Upgrade C-in-C to Reg Kn (F) @ 31 AP	1
Upgrade ally-generals to sub-generals - Reg Kn (F) @ 31 AP	1-2
Regrade knights to 1/4-1/3 Reg Kn (F) @ 11AP, rest Reg Bd (O) @ 7AP	All
Flemish and English crusading seamen - Irr Ax (O) @ 3AP	1 per Shp
Only after 1100 AD:	
Byzantine or ex-Byzantine turcopoles - Reg LH (S) @ 7AP	0-2
Italian sailors - Irr Bw (O) @ 4AP or Irr Bw (I) @ 3AP	1 per Shp
Maronite or Syrian archers - Irr Bw (I) @ 3AP	0-8
Armenian allies - List: Cilician Armenian (Bk 3)	
Saracen allies - List: Syrian (Bk 4)	
Bedouin allies - List: Dynastic Bedouin (Bk 3)	

This list covers the armies of Outremer until the formation of the military orders. It includes the First Crusade, culminating with the establishment of the Kingdom of Jerusalem, the Principality of Antioch and the Counties of Edessa and Tripoli; then the initial defence of the Kingdom and failed attempts to capture Aleppo and Damascus. Although able to charge through most enemy cavalry, Crusader knights were vulnerable to being surrounded and picked off in detail by horse archers if they charged too rashly. This made the Seljuqs a more dangerous enemy for them than the unfortunate Fatimids, whose cavalry fought with the lance like the Crusaders but wore less armour and charged less fiercely. Severe losses in horses due to lack of forage forced many knights to fight on foot during the later part of the First Crusade. One general can always dismount as Bd (O) if commanding no Kn. From the start of 1098, grim experience forced a formal command structure under an acknowledged C-in-C, first Bohemond (Raymond of Toulouse, the only dissident, being ill at the time), then Godfrey, and the organisation of knights into disciplined units. Later armies reverted to a feudal structure. They usually won if they supported their knights properly by infantry and lost if they did not. Ps (O) can support Bd or Sp. The Byzantine contingent under Tatikios is described by Anna Komnene as including 2,000 "peltastai", by which she usually means foot archers. However, she here describes them as dismounting from their horses to shoot in support of an assault on the walls of Nikaia. Tatikios is usually found commanding tourkopouloi horse archers, and he is later ordered to "protect" the Crusaders' march. "Fully-armed soldiers" in boats attacked the lake side of Nikaia. A Byzantine general must command all Byzantines and no other troops. Minima marked * apply only if any Byzantines are used. There are only four recorded instances of turcopoles fighting as part of Crusader rather than Byzantine forces during this period, in 1101, 1109, 1115 and 1119 respectively. In the first, they were definitely Byzantine tourkopouloi sent to aid a Crusader lord and in the second probably so. In the other two instances, nothing is known of the origins of the turcopoles, who were positioned in each case in front of one flank and were driven back into it causing confusion. The next mention of them is in 1167. Saracen is used to include any independent Islamic states of Syria. Muslim allies were used in 1108, 1115 and 1124, on the first occasion against other Crusaders! Saracen and Bedouin allies cannot be used with pilgrims, Armenians or sailors.

8. GHURID 1100 AD - 1215 AD

Dry. Ag 3. H(S), H(G), RGo, Wd, BUA, E, O.	
C-in-C - Irr Cv (S)@ 19AP	1
Sub-general - as above	1-2
Ghurid spearmen - Irr Ax (X) @ 3AP	30-40
Provide spearmen with karwah, upgrading them to half Irr Pk (X) @ 4AP,	
half Irr Pk (I) @ 2AP, on double element bases with Pk (I) behind Pk (X)	0-36
Ghurid archers - Irr Bw (O) @ 4AP or Irr Ps (O) @ 2AP [Ps can support Ax or Pk]	12-20
Ghurid tribal or Khurasanian mercenary cavalry - up to 1/3 Irr LH (F) @ 4AP,	
remainder Irr Cv (O) @ 7AP	3-6
Khalaj or other Turkish mercenaries - Irr LH (S) @ 7AP	2-24
Turkish ghulams - Reg Cv (S) @ 10AP	*3-8
Upgrade generals with Turkish ghulam bodyguards to Reg Cv (S) @ 30AP	*All

Ghur, the mountainous region of Afghanistan west of Ghazni, had long been ruled by quarreling local chieftains as vassals of the Samanids and then the Ghaznavids (who converted the pagan inhabitants to Islam). In the early 12th century AD, the Shansabani Sultans united Ghur and captured and lost Ghazni several times, eventually taking it in 1174 from a force of "Oghuz" Turkomans who had held the town for some years. The Shansabani Sultans paid tribute to the Seljuks, and were defeated in 1152 trying to gain independence. Thwarted in this attempt to expand into Khurasan, they began to raid India from 1178. They were initially defeated by the Chalukyas of Gujerat, but in 1192 they defeated the Chauhanas, captured Delhi, and went on to conquer much of northern India. The Indian possessions broke away in 1206 to form the Delhi Sultanate, and the Ghurid kingdom was destroyed by the Khwarazmians in 1215. Ghurid armies were originally based on infantry from their mountain homeland. Ghur was noted for the export of mail, "jawshan" lamellar armour and weapons, so its troops may have been well armoured. As early as 1148 the Ghurid army contained cavalry, perhaps just a few tribal nobles, but perhaps already Turkish ghulams and mercenaries. In 1174 Khalaj Turks, who would certainly be cavalry, and Khurasanians who would probably be cavalry, are mentioned. Several battles in India were entirely won by cavalry, one by four divisions of 10,000 skirmishing horse archers and a fifth of 12,000 elite shock cavalry. Since that army allegedly totalled 120,000 men, there may still have been substantial tribal infantry forces in reserve. Minima marked * apply if any ghulams including generals' elements or more than six elements of Turkish LH are used. The karwah is described as a framework of hide stuffed with cotton or straw which was rolled in front of the troops to protect them from arrows or massed into a wall-like battle-line. Since it is mobile, it cannot be classed as TF, so we treat it as equivalent to a pavise, protecting the spearmen but hindering their movement. In this special case classification as Irr Pk (X) is permitted. At Tiginabad in 1150, not all of the spearmen used karwah. Two groups led by champions instead dashed forward to attack elephants.

9. EASTERN FOREST AMERICAN 1100 AD - 1620 AD

Cold. Ag 1. Rv, H(S), H(G), Wd, BUA. Only if coastal tribe: WW.	
C-in-C -Irr Wb (F) @ 13AP	1
Ally-general - Irr Wb (F) @ 8AP	1-2
Warband - Irr Wb (F) @ 3AP	48-150
Skirmishers, ambushers or scouts - Irr Ps (O) @ 2AP	12-60
Birch bark canoes - Irr Bts (I) @ 1AP [Wb or Ps]	0-6
Only if coastal tribe:	
Upgrade canoes to large dug-outs - Irr Bts (O) @ 2AP [Wb or Ps]	All

The forest peoples of the Atlantic coast of America, like the earlier woodland Hopewell culture destroyed by more barbarous tribes between 500 and 750 AD, were more culturally advanced than they are usually given credit for. The Iroquois, for example, lived in fortified agricultural villages with substantial buildings, formed large leagues and had **a** pictographic written language. Their legends recall emigrating from the south-west and having to learn woods fighting skills to expel previous occupants. Their main weapon was originally not their short-ranged bow, which was used only for ambushes, but the stone-headed tomahawk, used in conjunction with wooden armour. Europeans described their tactics as "Sneaking up like foxes, fighting like lions, then disappearing like birds", "fighting with leaping and dancing, that no arrow hits" and "venturing into the thickest with great valour and courage to bring away enemy heads". They are included here as enemies for the mound builders of the Mississippi basin, Vinland Vikings or the Welsh colonists of Prince Madouc in 1171 from whom the Mandan tribe is plausibly traced. The start date is arbitrary, the end date that of the introduction of firearms.

10. MOUND BUILDER AMERICAN 1100 AD - 1701 AD

Warm. Ag 1. WW, Rv, H(G), Wd, O, M, BUA.	
C-in-C in litter - Reg WWg (I) @ 23AP	1
Sub-General - Irr Bd (I) @ MAP	1-2
Guards - Reg Bw (I) @ 4AP	2-4
Nobles - Irr Bd (I) @ 4AP	8-16
Honoured Men - Irr Bw (I) @ 3AP or Irr Ps (O) @ 2AP	45-137
Stinkards - Irr Hd (S) @ 2AP	16-36
Canoes - Irr Bts (I) @ 1AP [Bd, Bw, Ps or Hd]	0-6

This list covers the last of the mound builder cultures of the Mississippi basin from the earliest possible contact with Mexico to the south-west or the Forest Leagues to the north-east until the destruction of the Natchez. It is derived from archeology and French accounts of the Natchez, whose predecessors' institutions we assume to have been similar. Each nation had a capital town containing massive mounds supporting temples and council houses, defended with palisades and/or moats. They were rigid theocracies ruled by "The Great Sun", who was not permitted to put foot to ground, so was borne in a litter. When he died he was buried with his retainers and household guard. Society was stratified into "Noble", "Honoured" and "Stinkard" classes. Military prowess was rewarded by promotion to the next class, though that to Noble was very difficult. Stinkards were replenished from conquered peoples. The Natchez were harder to fool than Motecuhzoma or Atahualpa, telling De Soto in 1542 that they would believe the Spaniards were gods if they dried up the river, then chasing them back down it in canoes. Representations of warriors show wooden armour and a sword-like weapon and too many bronze weapon heads have been found to be explained as modem intrusions.

11. NORTH-WESTERN AMERICAN 1100 AD - 1770 AD

Cold. Ag 2. WW, Rv, H(S), Wd, BUA.	
C-in-C - Irr Bw (O)@ MAP	1
Sub-general - Irr Bw (O) @ MAP	1-2
Warriors - Irr Bw (O) @ 4AP	42-137
Skirmishers - Irr Ps (O) @ 2AP	3-12
War canoes - Irr Bts (S) @ 3AP [Bw, Ps]	0-6

This covers the northern coast culture from the start of long distance voyaging until first contacts with Europeans. It was highly stratified. It is said that each man was of a different class and knew exactly how he ranked. Chiefs had absolute power over followers. The main weapon was the bow, but wooden rod armour and helmets were worn. Warfare differed from that elsewhere in America in the intention being to destroy or expel opponents and take their land. The huge red cedar war canoes, painted with yellow and black designs, are claimed to have reached Hawaii.

12. POLYNESIAN OR MELANESIAN 1100 AD - 1785 AD

Tropical. Ag 1. WW, Rv, H(S), H(G), Wd, O, E, V, RGo, M, BUA.	
C-in-C - Irr Bd (F) @ 15AP if Polynesian, Irr Ax (S) @ 14AP if Melanesian	1
Ally-general - Irr Bd (F) @ 10AP if Polynesian, Irr Ax (S) @ 9AP if Melanesian	1-2
Warriors - Irr Bd (F) @ 5AP if Polynesian, Irr Ax (X) @ 3AP if Melanesian	32-178
Skirmishers (slingers if Polynesian except Maori, archers if Melanesian) - Irr Ps (O) @ 2AP	*8-16
War canoes - Irr Bts (O) @ 2AP or, if Maori, Irr Bts (S) @ 3AP [Pk, Bd, Ax, Wb or Ps]	0-6
Palisade or stone barricade - TF @ 2AP	0-12
Hawaii only:	
Papa-kaua pikemen - Irr Pk (I) @ 3AP	4-12
Huna-lewa javelin skirmishers - Irr Ps (I) @ 1AP	6-12

This list covers those peoples of the Pacific that fielded substantial armies, from the settlement of the last islands until the introduction of firearms. Polynesians include the inhabitants of Samoa, Tonga, Tahiti, Easter Island and Hawaii and the Maori of New Zealand. Melanesians include those of Fiji, the Solomons and the New Hebrides. In Hawaii, chiefs wore crested helmets and patterned red and yellow feather cloaks. An elite guard had 18' pikes. Melanesian commoners had long spear and sometimes small shield, while Polynesians typically fought individual duels with clubs, as did Melanesian chiefs and their picked followers. Coconut fibre armour was used. A favourite Maori weapon was a long wooden sword, the taiaha, with a sophisticated fencing technique. They made huge single-hulled canoes called Waka Taua from the giant Kauri. The minimum marked * does not apply to Maori. Maori cannot have Ps.

13. MEDIEVAL GERMAN 1106 AD - 1519 AD

Cold. Ag 1. WW, Rv, H(S), H(G), Wd, V, RGo, Rd, BUA. If city/clerical C-in-C, BUA, if free C-in-C - Reg Kn (F) @ 31AP if Imperial, Irr Kn (F) @ 19AP if feudal,	canton,
Reg Kn (I) @ 30AP if clerical, city or mercenary, or Irr Ax (S) @ HAP if free canton	1
Clerical or city sub-general - Reg Kn (I) @ 30AP or clerical ally-general - Reg Kn (I) @ 20A	
Feudal ally-general - Irr Kn (F) @ MAP	0-2
City or mercenary ally-general - Reg Kn (I) @ 20AP	0-2
Feudal knights - Irr Kn (F) @ 9AP	*6-12
Clerical or mercenary knights, ministeriales or sariants - Reg Kn (I) @ 8AP if rear	*(12
element of double base, otherwise 10AP City mounted burghers - Reg Kn (I) @ 8AP if rear element of double base, otherwise 10AP	*6-12 0-3
City guard axemen or halberdiers - Reg Bd (O) @ 7AP	0-3
City militia crossbowmen - Reg Bw (I) @ 4AP	*4-8
City militia spearmen - Reg Sp (I) @ 4AP	*6-16
City militia archers - Reg Ps (O) @ 2AP	0-8
City, feudal or mercenary cogs - Irr Shp (S) @ 4AP [Bw]	0-3
Feudal retainers - up to 1/4 Irr Ps (O) @ 2AP, remainder Irr Hd (O) @ 1AP	0-8
Heerban - up to 1/3 Irr Ps (O) @ 2AP, remainder Irr Sp (I) @ 3AP or Irr Bd (X) @ 6AP	0-18
Free canton spearmen - Irr Ax (O) @ 3AP	*8-32
Free canton archers and crossbowmen - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP	0-8
Mercenary spearmen - Reg Sp (O) @ 5AP	0-16
Mercenary axemen, swordsmen or halberdiers - Reg Bd (O) (a) 7AP	0-8
Mercenary archers or crossbowmen - Reg Bw (O) @ 5AP or Reg Ps (O) @ 2AP	*4-12
Only if Imperial or clerical C-in-C:	0.12
Regrade city militia spearmen as Low Countries Reg Pk (I) @ 3AP	0-12
Only if Imperial C-in-C before 1320 AD:	
Italian allies - List: Communal Italian (Bk 3)	
Only if free canton C-in-C from 1144 to 1227 AD or feudal C-in-C in 1147 or 1160 AD:	
Danish Leidang allies - List: Norse Viking and Leidang (Bk 3)	
Only if feudal C-in-C in 1147 AD or 1227 AD:	
Polish allies - List: Early Polish (Bk 3)	
Only after 1150 AD: Ungende Immeriel C in C to Dec Kn (S) (25 AD	*1
Upgrade Imperial C-in-C to Reg Kn (S) @ 35AP Upgrade feudal Kn to Irr Kn (O) @ 20 AP if C-in-C, 15AP if ally general, otherwise 10AP	All
City or clerical standard wagon - Reg WWg (I) @ 3AP 0-1 per city or clerical c	
Only if feudal C-in-C from 1150 AD to 1332 AD:	/iiiiiaiia
Hungarians - Irr LH (F) @ 4AP	0-8
Only if Imperial C-in-C from 1226 AD to 1430 AD:	0-0
Teutonic Knights - Reg Kn (S) @ 15AP	0-2
Only Konradin's feudal army at Tagliacozzo in 1268 AD:	0-2
Italian knights - Irr Kn (O) @ 10AP	6-8
Spanish ally-general - Irr Kn (S) @ 17AP	1
Spanish knights - Irr Kn (O) @ 10AP	8-11
Spanish jinetes - Irr LH (O) @ 5AP	2-12
Only if Imperial C-in-C in 1278 AD:	
Hungarian allies - List: Later Hungarian (Bk 4)	
Only after 1320 AD:	
Feudal or mercenary mounted crossbowmen - Reg Cv (O) @ 8AP	*2-6
Feudal, city, free canton or mercenary light guns - Reg Art (I) @ 4AP	0-2
Upgrade city militia crossbowmen with pavises to Reg Bw (O) @ 5AP	Any
Downgrade heerban Sp to Hd (O) @ 1AP	All
City wagon laager - TF @ 2AP	0-12
Only if feudal C-in-C in 1322 AD or city C-in-C from 1385 AD to 1388 AD:	
Swiss allies - List: Early Swiss (Bk 4)	

Only after 1375 AD:	
Regrade city, free canton or mercenary Bw as handgunners - Reg Ps (S) @ 3AP	*2-8
Feudal or city bombards - Reg Art (S) @ 10AP	0-2
Only if Imperial C-in-C from 1420 AD to 1457 AD:	
Hungarians - Irr LH (F) @ 4AP	0-8
Only after 1426 AD:	
Feudal or clerical war wagons - Reg WWg (O) @ 10AP	0-6
Swiss allies - List: Later Swiss (Bk 4)	0-24
Only after 1450 AD:	
Regrade feudal knights as Reg Kn (I) @ 30AP if C-in-C, 20AP if ally-general,	
otherwise 8AP if rear element of double base, 10AP if front element.	All
Replace feudal or mercenary crossbow Cv with mounted handgunners - Reg Cv (S) @ 10AP	* 1-3
Downgrade any Reg Kn (I) as separately deployed light lancers - Reg Cv (O) @ 8AP	0-6
Regrade city militia spearmen as up to 1/4 Reg Bd (I) @ 5AP, remainder Reg Pk (I) @ 3AP	Any
Regrade mercenary Sp as Reg Pk (O) @ 4AP	All
Regrade free canton Ax as Irr Ax (X) @ 13AP if general, otherwise 3AP	All
Only after 1478 AD:	
Regrade C-in-C as Reg Pk (O) @ 24AP	0-1
Ex-Burgundian compagnies d'ordonnance - Reg Kn (O) @ 12AP	0-6
Regrade mercenary Bd as Reg Pk (O) @ 4AP	All
Regrade city militia Bd (I) and Pk (I) as Low Countries Reg Pk (O) @ 4AP	Any

This list covers the core of the Holy Roman Empire from the accession of Heinrich V until that of Karl V. This was less centralised than its name suggests, one comment being that it was neither holy, Roman nor an empire. In reality, it was a confederation of virtually independent and dubiously loyal princedoms and only slightly less powerful city states. Except during the king's obligatory expedition to Rome to be crowned emperor, only the princes of the church, all appointed by him, owed him military service. Any other contributions needed the approval of the Imperial Diet or parliament after arduous negotiation and delay, or else the expenditure of large sums of money, also painfully wrung from the Diet. The list covers both Imperial and factional armies. An Imperial C-in-C represents the emperor, or if not yet crowned in Rome, king. His command can include up to 4 feudal elements and any other elements. Only an Imperial C-in-C can have a sub-general. A clerical general's command can include only clerical, city, heerban, free canton and mercenary elements. A feudal general's command can include only feudal, heerban, mercenary, Hungarian or Pk elements, except that Konradin's feudal army at Tagliacozzo must include Italians and Spanish, but cannot include any infantry. A city general's command can include only city, heerban and mercenary elements. A mercenary general's command can include only mercenary elements. Free cantons comprise the marshy peasant republics of Stedinger, Friesland and Dithmarschen. The mainstay of their armies were tough agile farmers armed in the later 15th century with long spears or other pole arms which they used to pole vault over ditches. A free canton general's command can only include free canton and mercenary elements. Minima marked * apply only if any troops of that origin are used, except up to 4 elements of feudal troops in an Imperial C-in-C's command. Foreigners agreed that German knights were poor horsemen who could not charge well with the lance, but were superb swordsmen on foot. However, since most German Kn abroad were mercenary sergeants or clerical ministeriales in Imperial service, we give feudal Kn the benefit of the doubt. After 1235, all Kn (I) must be in wedge on double element bases. Prior to that date they must be on single element bases. Before 1150, any Kn can always dismount as Bd (O). After 1235 feudal Kn (O) can always dismount as Sp (S) or Bd (S). The heerban were the old levee en masse. Ps (O) can support Sp or Ax of the same origin. By 1450, German infantry were adopting pikes in imitation of the Swiss and Low Countries. The Ulm and Nuremburg militia were advised to replace "little evil spears" with pikes and halberds in 1450. At Guinegatte in 1479, Maximilian fought in the front rank of pikemen who were roughly half and half Low Countries and German. After 1478, some mercenary pike elements should include halberd- or two-handed-sword-armed figures as suggested in the Later Swiss list. The feudal cavalry adopted the standard clumsy wedge formation of their less noble compatriots circa 1450. This allowed the growing proportion who could not afford the full superb German plate armour to be hidden away in the rear ranks. Such lesser armoured lancers could also be deployed separately. According to the manual (circa 1480) of Phillip von Seldneck, mounted crossbows supported the right flank of the main cavalry wedge. Once it had broken through, they were to attack the enemy general without reloading. Mounted handgunners supported the left flank of the pikemen; light armoured lancers were placed behind the shooters to deter attack on them and also protected the flanks of the pikemen. According to the manual (circa 1507) of Duke Phillip von Cleve, pikemen were to form the centre with the cavalry on their right and shooters on their left. The flanks - it is not clear whether of the pikemen or of the whole army - were to be protected by war wagons with artillery in front.

14. JURCHEN-CHIN 1114 AD - 1234 AD

Cold. Ag 3. H(S), H(G), Rv, RGo, M Before 1126 AD: H(G) or Wd. From 1126 AD:	WW, Rd, BUA.
C-in-C - Reg Cv (S) @ 30AP	1
Sub-general - as above	1-2
Khitan sub-general - Reg Kn (F) @ 31AP	0-1
Jurchen cavalry - Reg Cv (S) @ 10AP	
-From 1114 AD to 1199AD:	10-30
- From 1200 AD to 1234 AD:	4-12
Scouts - Reg LH (S) @ 7AP	0-3
Khitan soldiers - Reg Kn (F) @ 11AP	*1-4
Khitan foragers - Reg Cv (O) @ 8AP	*2-5
Khitan orderlies - Reg LH (F) @ 4AP	**2-5
Only from 1126 AD:	
Convert Khitan sub-general to Reg Cv (S) @ 30AP and other Khitan troops,	
all to Reg Cv (S) @ 10AP or all to Reg Cv (I) @ 6AP	All/0
Chinese swordsmen - Reg Bd (I) @ 5AP	6-24
Chinese crossbowmen - Reg Bw (I) @ 4AP	6-24
Upgrade Chinese swordsmen to Reg Bd (F) @ 7AP and/or crossbowmen to Reg Bw (G	
Chinese cavalry - Reg Cv (I) (a) 6AP	2-3
Chinese levies - Irr Hd (O) (a) 1AP	0-20
War wagons - Reg WWg (O) @ 10AP	0-2 0-1
Chinese bolt-shooters - Reg Art (O) @ 8AP	0-1 0-2
Chinese stone-throwers - Reg Art (I) @ 4AP or Reg Art (S) @ 10AP Chinese infantry with fire lance - Reg Ps (X) @ 6AP	0-2
Upgrade Ps (X) to cavalry with fire lance - Reg Kn (F) @ 11AP	0-2
Only from 1150 AD to 1211 AD:	
Tatar, Kereyit, Ongut or similar allies - List: Tribal Mongolian (Bk 3)	
Only from 1158 AD to 1161 AD:	
River-boats - Irr Bts (O) @ 2AP [Bd, Bw]	0-4
War junks - Irr Shp (O) @ 3AP or Irr Shp (S) @ 4AP [Bd, Bw]	0-2
Horse transports - Irr Shp (I) @ 2AP [Cv]	0-4
Only from 1200 AD:	
Downgrade Jurchen cavalry to Reg Cv (I) @ 6AP	1/2-All
Uighur mercenary cavalry - Irr Cv (S) @ 9AP	0-1
Tangut mercenary cavalry - Irr Kn (F) @ 9AP	0-1
Other mercenary cavalry - Irr LH (S) @ 7AP	0-2
Chung-hsiao chün - Irr Bd (F) @ 5AP	4-12
Bomb-throwing junks - Irr Shp (S) @ 4AP [Bw]	0-1

The Jurchen were tribes of the Manchurian forest, not nomads but heavily influenced by nomadic military techniques. Wanyen Akuta founded the Chin "Golden" dynasty after rebelling against the Liao. The Chin conquered North China from the Liao and the Sung, but failed in several attempts to conquer the south. They were eventually overthrown by the Mongols after a hard fight. The first Chin armies were all cavalry, Jurchens with Khitan and Manchurian Po-hai auxiliaries, but they came to rely on Chinese infantry and artillery to an even greater extent than their Liao predecessors. Jurchen cavalry fought in a five-rank formation, the first two ranks heavily armoured lancers, the rear three lighter-armoured or unarmoured archers. They relied on weakening an enemy with successive volleys of arrows before charging. The battle formation was called kuai-tzu ma - "horse team". Some sources claim that horses were chained together, others that the "team" merely refers to close co-operation between the two cavalry wings of the army. Jurchen cavalry should be represented by a single rank of elements, each with one lancer figure and two archers. In the last decades of the dynasty the quality and morale of Jurchen cavalry declined, as a result of corruption among the officers and shortage of horses. The response was increasing use of Khitans and Chinese, and of brave but undisciplined irregulars called chung-hsiao chün - "loyal and filial troops". The decline in morale may not have been universal, since Jurchen armies still put up a stubborn resistance to the Mongols. The first Khitan cavalry were Liao defectors, so would have fought in Liao style. They may later have been re-organised in Jurchen-style units. Minima marked * apply if any Khitan are used, ** if Khitan orderlies are used. A Khitan general may not command Jurchen

troops. Unless all are converted to Cv, there must be equal numbers of Khitan Kn, Cv and (if used) LH elements. Nothing is known of Po-hai troops, who are assumed to be similar to Jurchen or to Khitan. Chinese infantry are assumed to be swordsmen and crossbowmen on the Liao parallel. The first infantry force used may have been the "Ever-Victorious Army", Liao troops who remained ever-victorious by deserting first from the defeated Liao to the Sung, and then once the Sung started losing, from them to the Chin. One infantry force engaged by the Mongols in 1215 was unarmoured and hence vulnerable to dismounted archery, but this may have been an atypical emergency levy. Warwagons, presumably copied from Sung Chinese types, were captured by the Koreans. The only serious attempt to build a fleet to counter the Sung river defences was defeated and burned by the Sung in 1161, but a few large ships with bomb-throwing engines were later used against the Mongols. The Chin tried to control the Mongolian steppes indirectly via allied nomads, switching support to a new tribe whenever the existing client became too powerful. Their last clients, the Ongut, defected to the Mongols in 1211. Mercenary cavalry represent a force of 400 Uighurs, Tanguts and others recorded fighting against the Mongols in 1228. Their recruitment may be another reaction to the declining quality of Jurchen cavalry.

15. QARA-KHITAN 1124 AD - 1211 AD

Dry, Ag 2. Rv, H(G), RGo, D, BUA.	
C-in-C - Reg Kn (F) @ 31 AP	1
Sub-general - Reg Kn (F) @ 31AP or Reg Cv (O) @ 28AP or Reg LH (F) @ 24AP	1-2
Khitan ordo soldiers - Reg Kn (F) @ 11AP	5-10
Khitan ordo foragers - Reg Cv (O) @ 8AP	5-10
Khitan ordo orderlies - Reg LH (F) @ 4AP	*5-10
Khitan tribal cavalry - Irr LH (F) @ 4AP	0-16
Khitan tribal nobles - Irr Cv (S) @ 9AP	0-4
Upgrade Khitan tribal Cv to Reg Cv (S) @ 10AP and Khitan tribal LH to Reg LH (F) @ 4AP	All/0
Qarluq or similar tribal cavalry - Irr LH (S) @ 7AP	7-20
Tribal foot archers - Irr Ps (O) @ 2AP	0-8
Muslim levy foot - Irr Hd (O) @ 1AP	0-10
Elephants - Irr El (O) @ 16AP	0-1
Only from 1128 AD - 1207 AD:	
Qarakhanid allies - List: Central Asian Turkish (Bk 3)	
Only from 1130 AD - 1208 AD:	
Uighur allies - List: Central Asian Turkish (Bk 3)	
Only from 1198 AD - 1207 AD:	
Khwarizmian allies - List: Khwarizmian (Bk 4)	
Only after 1208 AD:	
Naiman allies - List: Tribal Mongolian (Bk 3)	

The Oara-Khitan or Western Liao state was founded by Khitan refugees fleeing the Jurchen conquest. Yeh-lu Ta-shih, a member of the Liao imperial clan, collected troops in Mongolia and moved west. He defeated the eastern Seljuks and the Oarakhanids and set up an empire based south of Lake Balkash, with its capital at Balasaghun. He took the title of Gurkhan, "universal ruler". The Qarakhanids and Uighurs, and briefly the Khwarizmians, were vassals of Qara-Khitai. The Qara-Khitai retained a good deal of their ancestors' Chinese culture, including their Buddhist religion, which made them unpopular with their Muslim subjects. The army was apparently based on the Liao ordo system. The Qara-Khitai had far fewer men available, but since they do not appear to have developed an effective infantry arm from their subjects to replace the Chinese, the proportion of ethnic Khitan cavalry may have been higher. The ordo system is discussed in the Khitan-Liao list (Bk 3). The minimum marked * applies if any orderlies are used. Equal numbers of ordo Kn (F), ordo Cv (O) and (if used) ordo LH (F) must be used, including the C-in-C's and sub-generals' elements. There is no evidence that the Qara-Khitai had any effective infantry or artillery force, and the peoples under their direct rule had no great tradition of infantry warfare. Elephants were used against the rebellious people of Balasaghun in 1210. Their number is not recorded but was probably small. Qara-Khitai armies helped the Khwarizmshah against the Ghurids in 1198 and 1204, and a Khwarizmian army helped Qara-Khitai subdue a rebellion in Bukhara in 1207. Kuchluk, leading Naiman forces fleeing Ghengis Khan, allied with the Qara-Khitai in 1208. He seized the last Gur-khan in 1211 and tried, with little success, to take over the Oara-Khitai territories.

16. SCOTS COMMON ARMY 1124 AD - 1512 AD

Cold. Ag 3. WW, Rv, H(S), H(G), Wd, RGo, M, Rd, BUA. C-in-C - Irr Kn (F) @ 19AP	1
Norman-Scots sub-general - as above	0-1
Norman-Scots sub-general - Irr Pk (I) @ 13AP	0-2 1-5
Norman-Scots knights and sergeants - Irr Kn (F) @ 9AP Lowland Scots yeomen spearmen - Irr Pk (I) @ 3AP	48-106
Ponies to mount Pk (I) @ 1AP	48-100 All/0
Ettrick archers - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP	0-8
Ribaulds and camp followers - Irr Hd (S) @ 2AP	0-3
Pits or stake-and-rope barriers - TF @ 2AP	0-8
Only in Scotland or England:	0.0
Isles ally-general - Irr Bd (O) @ 10AP	*1
Islesmen - Irr Bd (O) @ 5AP	* 1-8
Highland ally-general - Irr Bd (O) @ 10AP or Irr Bd (F) @ 10AP	0-1
Highland warriors - Irr Bw (O) @ 4AP	*4-12
Highland scouts - Irr Ps (O) @ ZAP	0-4
Highland rabble - Irr Hd $(F) \stackrel{\frown}{@} 1AP$	0-12
Only in Scotland or England before 1162 AD:	
Feudal archers on ponies - Irr mtd Bw (O) @ 5AP	0-4
Galwegian ally-general - Irr Bd (F) @ 10AP	*1
Galwegian warriors - Irr Wb (F) @ 3AP	*6-16
Ponies to mount Galwegian general or warriors @ 1AP	0-7
Only after 1250 AD:	
Upgrade Kn (F) generals to Irr Kn (O) @ 20AP	All
Upgrade other Kn (F) to Irr Kn (O) @ 10AP	0-2
Downgrade remaining Kn (F) to Irr Kn (I) @ 8AP	All
Only in Scotland or England in 1385 AD:	
French ally-general - Irr Kn (S) @ 17AP	*1
French men-at-arms - Irr Kn (S) @ 12AP	*2-3
French crossbowmen - Irr Bw (O) @ 4AP	0-2
Only on the Continent from 1419 AD to 1429 AD:	
French allies - List: Medieval French (Bk 4)	
Only after 1456 AD:	
Bombards - Reg Art (S) @ 10AP	0-4
"Cartis of Weire" - Irr WWg (O) @ 8AP	0-2

This list covers Scots armies from the introduction of the feudal system by David I until the pre-Flodden importation of true pikes. Scots knights' armour lagged behind that of the richer English, and they were too few and too aware of their inferiority to resist the English knighthood. Some had fiefs on both sides of the border, leading to divided loyalties, others might be at feud with the King or his close supporters, providing tenuous excuses for fighting on the English side. Usually only the best fought mounted; after Bannockburn in 1314, rarely any. At Bannockburn the dismounted gentry were concentrated in the vanguard and dismounted gentry charged impetuously at Rouvray in 1429. They could alternatively stiffen the front ranks of all spear blocks, in which case they must be classed as Pk (I). James I (1424 - 1437) tried to introduce the longbow, but without much success. A Scots army's strength lies in its abundance of yeomen spearmen. When raiding into England these were often all mounted on ponies and could use their extra mobility to take up a defensive position where they could not successfully be attacked, then decamp overnight. Robert the Bruce's "Testament" advised that all battles should be fought on foot making use of hills, marsh and woods, and that attacks should be confined to surprises by night and ambushes by day. This became less practical when the English introduced mounted longbowmen, and Scots armies then turned to massed attacks with spearmen against dismounted English men-at-arms and longbows which were uniformly disastrous. Although Scots mythology focuses on the Wars of Independence against Edward I and II, the Scots in fact fought most of their battles on English soil and the atrocities perpetrated by their ribaulds on the civil population were notorious. The Isles and Highlands were independent until 1493, being covered by their own list, but provided contingents described on one occasion as

"3,000 of the most outrageous people in all the country". Minima marked * apply only if any element of that origin is used. French, Galwegians or Islesmen must be commanded by a general of their own origin. Highlanders can be commanded by a Highland or Islesman general or by the C-in-C. Kn (S) can always dismount as Bd (S). Kn (O) or Kn (I) can always dismount as Irr Sp (S) or Irr Pk (I). Edward Brace's attempt to gain the throne of Ireland is covered by the Medieval Irish list. French troops under Jean de Vienne were sent to Scotland for a joint campaign in 1385. A French general in 1385 must command all French, but can also command Norman-Scots Kn. A Scottish army of up to 10,000 men campaigned with the French in France and Burgundy in the third decade of the 15th century. At the battles of Baugé and Cravant they formed the majority of the Franco-Scottish army. Towards the end of the period, interest was being shown in the large scale use of artillery in the field, culminating in the massed battery at Flodden in 1513. King James II showed too close an interest in his artillery, being killed when a gun exploded at the siege of Roxburgh castle in 1460. "Cartis of Weire" mounting two small breech-loading cannon were called for in 1456 and 1471.

17. LATER CRUSADER 1128 AD - 1303 AD

Warm. Ag 1. WW, Rv, H(S), H(G), RGo, M, D, Rd, BUA.	
C-in-C - Irr Kn (F) @ 19AP	1 0-2
Templar or Hospitaller sub-general - Reg Kn (F) @ 31 AP Other sub-general - Irr Kn (F) @ 19AP	0-2 0-2
Knights and sergeants or turcopoles - Irr Kn (F) @ 9AP	6-18
Upgrade knights and sergeants or turcopoles as military order to Reg Kn (F) @ 11AP	0-1/2
Separately deployed turcopoles - Irr Cv (O) @ 7AP	0-4
Upgrade all separately deployed turcopoles of military orders to Reg Cv (O) @ 8AP	0-4
Foot sergeants - Irr Sp (I) @ 3AP	16-32
Upgrade foot sergeants of military orders to Reg Sp (O) @ 5AP	0-8
Crossbowmen - Irr Bw (O) @ 4AP	6-16
Upgrade crossbowmen of military orders to Reg Bw (O) @ 5AP	0-8
Horses to mount regular crossbowmen @ 1 AP	0-4
Maronite or Syrian archers - Irr Bw (I) (\hat{a}) 3AP	0-8
Italian navi or nefs - Irr Shp (O) @ 3AP [Bw], or galleys - Reg Gal (F) @ 2AP [Bw]	0-3 0-12
Ditch and bank to defend camp - TF @ 1AP Armenian allies - List: Cilician Armenian (Bk 4)	0-12
Saracen allies - List: Syrian (Bk 4)	
Only in 1169 AD:	
Byzantine allies - List: Komnenan Byzantine (Bk 4)	
Only before 1273 AD:	
Assassin Fida'i - Irr Wb (S) @ 5AP	0-1
Assassin Fidar - In Wo (3) (2) SAT Assassin volunteer civic militia cavalry - Reg Cv (O) (2) 8AP	0-2
Assassin volunteer civic militia foot - Reg Bw (O) @ 5AP	0-4
Only Second Crusade in 1148 AD:	÷ .
German allies - List: Medieval German (Bk 4)	
French allies - List: Feudal French (Bk 4)	
Only after 1150:	
Upgrade military order Kn to Reg Kn (S) @ 35AP if general, otherwise 15AP	All
Upgrade other Kn to Irr Kn (O) @ 20AP if general, otherwise 10AP	All
Cogs or Usciere - Irr Shp (S) @ 4AP [Bw, Kn dismounted as Bd (S)]	0-2
Only in 1167 AD:	
Fatimid allies - List: Fatimid Egyptian (Bk 3)	
Only Richard Coeur de Lion from 1191 AD to 1192 AD:	
Upgrade C-in-C to Reg Kn (S) @ 35AP	1
Upgrade unmounted crossbowmen to Bw (X) @ 5AP if Irr, 7AP if Reg,	
with two crossbowmen figures and one or two spearmen figures on each base.	All/0
Standard wagon - Irr WWg (I) @ 2AP	0-1
Only after 1299 AD:	
Mongol allies - List: Ilkhanid (Bk 4)	

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This list covers the defensive phase of the Crusader states, from the granting of Papal protection to the Templars in 1128 until the fall of the off-shore Templar fortress of Tortosa in 1303. The period includes the Second Crusade ruined by disputes with the French and German contingents, the disaster of Hattin and the Third Crusade featuring Richard Coeur de Lion, but not the Fourth Crusade diverted against Constantinople by Venetian perfidy, nor St Louis' Egyptian Crusade, his army being mainly French. Turcopoles were used for scouting and sometimes skirmishing but mainly as rear support for the knights. In the first two functions they are now classed as Cv, since they were both included by Richard in troops sent out to shoot and, at least in Cyprus, were required to have mail. In the last function they are assumed to be included in the Kn elements. Whether they were used other than by the Military Orders is uncertain. The Bw (X) option is based on Richard's tactic at Jaffa in 1192. As only a fifth of his foot were crossbowmen, there were at least as many Sp elements. At Arsuf, Richard also had a wagon with a tower "as high as a minaret" carrying his standard. Richard cannot have any ally contingents. One military order sub-general must be used if more than 3 elements of military order Kn are used, both if more than 6. Military order sub-generals can, in addition to the brothers, also command secular knights, turcopoles, foot sergeants, crossbowmen and, if a Hospitaller, Assassins. Fatimids or Saracens cannot be used with any other allies. A small Assassin contingent aided Raymond of Antioch in 1149. However, the Old Man of the Mountain's pragmatic approach to politics and religion could have provided such helpers at any time prior to their extirpation by Baybars and throughout the 13th century he was intermittently a vassal of the Hospitallers, murdering the Patriarch of Jerusalem for them in 1214!

18. LITHUANIAN or SAMOGITIAN 1132 AD - 1435 AD

Cold. Ag 2. WW, Rv, H(G), Wd, RGo, M, Rd, BUA. C-in-C - Irr LH (O) @ 15AP or Irr Cv (O) @ 17AP Sub-general - as above Lithuanian or Samogitian cavalry - Irr LH (O) @ 5AP Lithuanian or Samogitian spearmen - Irr Ax (O) @ 3AP Lithuanian or Samogitian archers - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP Wagon laager, abatis or plashed wood edge - TF @ 2AP Only Lithuanian from 1250 AD to 1253 AD and in 1435 AD: Teutonic Order allies - List: Teutonic Orders (Bk 4)	1 1-2 20-60 *4-16 *4-10 0-8
Only Lithuanian after 1299 AD:	
Tartar exile settlers - Reg LH (S) @ 7AP	0-6
Only Lithuanian after 1360 AD:	
Russian ally general - Irr Cv (S) @ HAP	0-1
Russian cavalry - up to 1/4 Irr Cv (S) @ 9AP, remainder Irr Cv (O) @ 7AP	**6-12 0-4
Russian archers - Irr Bw (I) @ 3AP Russian spearmen - Irr Sp (I) @ 3AP	0-2
Only Lithuanian after 1382 AD:	0-2
Bombards - Reg Art (S) @ 10AP	0-2
Only Samogitian or after 1386 AD:	
Upgrade Lithuanian or Samogitian cavalry to Irr Cv (O) @ 7AP	0-1/3
Only Lithuanian after 1386 AD:	
Polish allies - List: Later Polish (Bk 4) [Treat general as sub-general]	
Only Lithuanian from 1397 AD to 1399 AD:	
Poles - up to 1/2 Irr Cv (O) @ 7AP, remainder Irr Kn (O) @ 10AP	1-2
Golden Horde Tartar allies - List: Golden Horde and Successors (Bk 4)	
Only Lithuanian from 1397 AD to 1399 AD and in 1499 AD:	
Teutonics - Reg Kn (S) @ 15AP	1-2
Only Lithuanian after 1419 AD:	
Crim Tartar vassal allies - List: Golden Horde and Successors (Bk 4)	
Only Lithuanian in 1435 AD:	0.6
Hussite war-wagons - Reg WWg (O) @ 10AP Hussite flailmen and halberdiers - Reg Bd (O) @ 7AP	0-6 1 per WWg
Chains to cover gaps between wagons - TF (treat as gateways) @ 4AP	0-5
channe to control Burbo between muBons II (neur us Bure muBo) (g) mil	05

This list covers Lithuanian and Samogitian armies from the invasion of Lithuania by Mstislav of Kiev in 1132 until Lithuania's integration with Poland, the crown having already been united since the marriage of the Grand Duke to the Polish heiress in 1386. As Polish allied contingents after 1386 served the same crown and were usually commanded by close relatives, their commanders are classed as sub-generals rather than ally-generals. They can still only command Poles. Most Lithuanians remained pagan, providing a pretext for aggression by the Teutonic Order. The even more obstinately pagan Samogitians were conquered by the Teutonics in 1406, but revolted in 1409 and joined Lithuania in 1411. Lithuanian expansion from 1240 onwards after the destruction of the Kievan Russian state by the Mongols took in much of Ruthenia and western Russia, quadrupling their territories and dwarfing those of the Teutonic Order, which was straining its resources to defeat them. Though the population density of the new territories was low, they could supply enough Russian troops to be described as "an innumerable multitude of schismatics" at Swienta in 1435, where they were joined by Hussite mercenaries with their war-wagons, Livonian Teutonic Knights and Tartars, many dissidents from the Golden Horde having settled in Lithuania from 1299. Ordinary wagons had been used at Worskla in 1399 to protect artillery. Most Lithuanian cavalry were unarmoured skirmishers, who, although most carried bows, used these only on foot, fighting mounted with a light 8-9' lance, the "spisa", which could be used for thrusting or throwing. They are described as "flying around the enemy on speedy horses, sometimes fleeing, sometimes pursuing, throwing their lances and spears and wounding many". Armoured nobles at first fought mixed with their lighter followers, but their number increased with time and the Samogitians may have always had a larger proportion, being described in the 13th century as "a noble army, with silver-coloured shirts of mail." Lithuanian and Samogitian Cv and LH can always dismount as Bw (O). The minima marked * apply if any infantry are used. Allied contingents drawn from this list can include Tartars and need not include infantry. The minimum marked ** applies if any Russian cavalry are used.

19. TARASCAN OR TOLTEC-CHICHIMEC 1168 AD - 1521 AD

Dry. Ag 1. Rv, H(S), Wd, E, RGo, Rd, BUA.	
C-in-C - Reg Bd (I) @ 25AP	1
Sub-General - Reg Bd (I) @ 25AP or Reg Bw (O) @ 25AP	1-3
Ally-General - Reg Bd (I) @ 15AP	0-2
Suit wearers - Reg Bd (I) @ 5AP	6-16
Archers and shield bearers - Reg Bw (O) @ 5AP	0-30
Archers - Irr Bw (I) @ 3AP	40-72
Scouts or skirmishers - Reg Ps (O) @ 2AP	0-10
Otomi mercenaries - Irr Wb (F) @ 3AP	0-8
Only Colhuacan from 1300 AD to 1323 AD:	
Proto-Aztec allies - List: Dog Peoples (Bk 3)	
Only TIaxcalan after 1518 AD:	
Upgrade C-in-C to Spanish Reg Kn (S) @ 35AP	1
Spanish war dogs - Irr Wb (F) @ 3AP	1
Spanish sword and buckler men - Reg Bd (O) @ 7AP	4-6
Spanish arquebusiers - Reg Art (X) @ 5AP	1
Spanish crossbowmen - Reg Bw (S) @ 7AP	1-2
Spanish artillery - Reg Art (S) @ 10AP	0-1
Spanish Totonac levies - Irr Bd (I) @ 4AP	4-12
Spanish brigantines - Reg Gal (F) @ 2AP [Bw]	0-3
Spanish mobile towers - Reg WWg (S) @ HAP	0-1
Upgrade Reg Art (X) to Reg Bw (S) @ 7AP to man brigantine	*1

Both these peoples fought in a similar manner emphasising the bow, although separated geographically by the Aztec Triple Alliance. The Tarascans actually called themselves Purempecha, but a Spanish mistake inflicted them forever with a name derived from the Aztec words for "distant relations". They lived to the west of the Aztecs and fought them to an expensive stand-off. They differed from other peoples of the area in often edging their wooden weapons with copper instead of obsidian. To the east of the Aztecs were a number of Toltec-Chichimec city states, derived like them from the fusion of the civilised Toltecs and a barbarous immigration of wild Chichimec "dog people" tribesmen. The formerly Toltec Colhuacan was the earliest, but the most important of later times were Huexotzingo, Cholula and Tlaxcala. These were usually allied against the Aztecs, but Cholula occasionally took the other side. Tlaxcala, which means "tortilla" and was a Spanish mistake for Texcala "the crags", survived the others long enough to join with

Cortez' Spaniards in destroying the Aztecs. A contemporary Spanish account reports that the Tlaxcalans "manoeuvred marvellously well". Their army was grouped into 4 commands and liked to counter or envelop the enemy flanks with massed archers before assaulting their centre. Suit wearers are the military orders such as the Eagle and Jaguar knights. Although some militia archers had cotton armour, this was not proof against the bow. However, other archers had side arms and were mixed with warriors armed with maguahuitl and shield who protected them while they shot. We suggest representing them with mixed elements alternating bow and shield figures. Cortez' force was untypical of homeland armies of that date, was exceptionally high in confidence and falls outside the strict period of the DBM rules. Halfpikes were used, but immediately abandoned in favour of sword and buckler. Although in a Spanish army of this date, sword and buckler men would be classed as Bd (F), this does not fit their tactical role under Cortez. His crossbowmen are also upgraded since they both had unusually powerful bows by local standards and had to fight it out hand-to-hand. His few lancers were both exceptionally high in self confidence and dreaded by opponents. Some Totonacs are described as armed with swords made from swordfish snouts and shields made from turtle shells. The brigantines were Cortez' most important asset in the fighting around Tenochtitlan. They were only 40 feet long, but carried a light cannon in the bow and a crew of 25, half of paddlers and half of crossbowmen with a sprinkling of arguebusiers. The minimum marked * applies only if any brigantines are used. Towers manned by arquebusiers and crossbowmen were used in the break-out from Tenochtitlan. All and only "Spanish" elements must be in a Spanish C-in-C's command. Since ancient competitions should be restricted to armies of before 1500, the provision for a Spanish contingent is mainly for friendly games between historical opponents.

20. AYYUBID EGYPTIAN 1171 AD - 1250 AD

Dry. Ag 2. WW, Rv, E, RGo, M, D, Rd, BUA.	
C-in-C - Reg Cv (S) @ 30AP	1
Sub-general - as above	1-2
Toassin, halqa or Kipchaq mamluks	
- up to half with bow but not lance or horse armour, Reg Cv (O) @ 8AP,	
remainder with bow and lance and/or horse armour, Reg Cv (S) @ 10AP	6-12
Qaraghulams, Kurds or Syrian askaris - Reg Cv (O) @ 8AP	6-12
Bedouin Arabs - Irr LH (O) @ 5AP	2-6
Arabs from Medina and the Hejaz - Irr Cv (O) @ 7AP	0-2
Franks - Irr Kn (O) @ 10AP	0-1
Jabaliyya or Kurdish javelinmen - Irr Ax (O) @ 3AP	0-8
Ghazis - Irr Wb (F) @ 3AP	0-4
Mutatawwi'a - Irr Hd (S) @ 2AP	0-2
Syrian ahdath - Irr Hd (O) @ 1AP, or Egyptian city mob - Irr Hd (F) @ 1AP	0-6
Al-ashair - Irr Ps (O) @ 2AP	0-10
Naffatun - Reg Ps (X) @ 6AP	0-1
Shayani - Reg Gal (O) @ 3AP [Crossbowmen - Reg Bw (O) @ 5AP]	0-2
Only before 1244 AD:	
Sudanese archers - Reg Bw (O) @ 5AP	0-12
Turkomans - Irr LH (S) @ 7AP	6-16
Only after 1193 AD:	
Syrian Ayyubid allies - List: Syrian (Bk 4)	
Only from 1244 AD to 1245 AD:	
Khwarizmian allies - List: Khwarizmian (Bk 4)	

This list covers the armies of the Ayyubid Sultanate established by Saladin from the end of the Fatimids until the Ayyubid dynasty was over-thrown by its mamluks. It does not cover the armies of the provincial Ayyubids in Syria after the death of Saladin in 1193, which are covered by the Syrian list. Toassin were elite white mamluks, including Turks, later supplanted by Kipchak mamluks, halqa were non-mamluk elite cavalry and qaraghulams were probably Berbers and negroes armed with lance but not bow, progressively replaced by Kurds. Infantry were now used only in a supporting role. The Sudanese archers were new regiments raised by Saladin to replace those he had massacred in 1169 and do not seem to have included spearmen. A Crusader source describes agile black archers with shields. Ghazis were seekers for paradise and mutatawwi'a for loot. Ahdath were Syrian city defence guilds. An Egyptian mob happily threw stones from roof-tops at Mansurah in 1250. Al-ashair were probably Syrian Druze. 10,000 Khwarizmian troops, the remnants of the army of Jalal ad-Din, fought for the Sultan as-Salih Ayyub at La Forbie in 1244. They subsequently changed sides to his rival Ismail of Damascus but were destroyed in the latter's defeat in 1246.

21. ANGLO-IRISH 1172 AD - 1489 AD

Co	ld. Ag 1. WW, Rv, H(S), H(G), Wd, RGo, Rd, BUA.	
	sh ally general - Irr Ax (O) @ 8AP	0-1
Iri	sh bonnachts - Irr Ax (O) @ 3AP	8-36
	sh kerns - Up to half Irr Ps (S) @ 3AP, remainder Irr Ps (I) @ 1AP	4-24
Iri	sh archers - Irr Ps (O) @ 2AP	0-4
Co	ogs - Irr Shp (S) @ 4AP [Bw (O) or (S)]	0-2
Oı	ıly before 1300 AD:	
No	orman C-in-C - Irr Kn (O) @ 20AP	1
Nc	orman sub-general - Irr Kn (O) @ 20AP	1-2
No	orman knights - Irr Kn (O) @ 10AP	6-9
	elsh longbowmen - Irr Bw (O) @ 4AP	16-32
-	ograde Welsh longbowmen to Irr mtd Bw (O) @ 5AP	1/4-All
W	elsh spearmen - Irr Ax (X) @ 3AP	0-4
Os	tmen - Irr Bd (O) @ 5AP	0-8
Oı	ıly after 1300 AD:	
Up	pgrade Irish ally general to Irr LH (O) @ 10AP	All
Iri	sh horse - Irr LH (O) @ 5AP	0-8
Ga	lloglaich - Irr Bd (O) @ 5AP	0-18
Oı	ly from 1300 AD to 1394 AD:	
	in-C - Justiciar, Reg Kn (O) @ 32AP or Anglo-Irish, Irr Kn (F) @ 19AP or Irr Cv (O)	(a) 17AP 1
	nglo-Irish ally-general - Irr Kn (F) @ MAP or Irr Cv (O) @ 12AP	1-2
Ju	sticiar's men-at-arms - Reg Kn (O) @ 12AP	*0-2
Ar	nglo-Irish spears or lances - up to half Irr Kn (F) @ 9AP, remainder Irr Cv (O) @ 7AP	8-12
	sticiar's hobilars - Reg Cv (I) @ 6AP	*2-4
Co	lonist longbowmen - Reg Bw (I) @ 4AP	12-18
Up	ograde longbowmen to Justiciar's Reg mtd Bw (S) @ 8AP	*2-6
Oı	ıly after 1394 AD:	
C-	in-C - Justiciar, Reg Kn (O) @ 32AP or Anglo-Irish, Irr Cv (O) @ 17AP	1
Ar	nglo-Irish ally-general - Irr Cv (O) @ 12AP	1-2
Jus	sticiar's men-at-arms - Reg Kn (O) @ 12AP	*0-2
	nglo-Irish spears - Irr Cv (O) @ 7AP	5-7
	lonist longbowmen - Reg Bw (O) @ 5AP	6-8
	ograde longbowmen to Justiciar's Reg mtd Bw (S) @ 8AP	*2-6
	lonist billmen - Reg Bd (I) @ 5AP	6-20
Bc	ombards - Reg Art (S) @ 10AP	*0-1

This list covers the English in Ireland from the landing of Henry II until the first use of hand guns. Minima marked * apply only if any troops so marked are used, in which case the C-in-C must be regular, representing the royal official known successively as the Justiciar, Lieutenant, or Lord Deputy and all troops so marked must be in his own command. He was sometimes an imported Englishman who was completely out of his depth and baffled by the locals, but more often a member of a prominent Anglo-Irish family who understood the locals all too well but was at blood-feud with many of them. He had a small force of men-at-arms, mounted archers and hobilars, but mainly depended on Anglo-Irish lords "more Irish than the Irish", colonist bows and bills, and Irish. The men-at-arms usually fought mounted, and displayed greater skill doing so than most English of their era. After 1322 any Kn (O) can always dismount to fight on foot as Bd (S). Hobilars can always dismount to fight on foot as Ax (X). As time progressed, less and less of the Anglo-Irish cavalry fought with lances and more in Irish style with javelins, though they remained more heavily armoured and willing to charge home. The boys that accompanied galloglaich are assumed to be included in the galloglaich element. Dismounted men-at-arms and billmen cannot give rear support to galloglaich nor vice versa. An Irish ally-general can command only Irish troops and galloglaich. An Anglo-Irish C-in-C can command only Anglo-Irish, Colonist, Galloglaich and Irish troops, but need not have any Colonist troops. A Norman general or a Justiciar C-in-C can command any troops.

22. SERBIAN EMPIRE 1180 AD - 1459 AD

Cold. Ag 1. Rv, H(S), H(G), Wd, RGo, Rd, BUA.	
C-in-C - Irr Kn (F) @ 19AP	1
Sub-general - as above	1-2
Bosnian ally general - Irr Ax (O) @ 8AP	*1
Serbian vlastela - Irr Kn (F) @ 9AP	12-24
Serbian voynuk spearmen - Irr Sp (O) @ 4AP	0-8
Serbian, Moravian, Bosnian or Greek archers - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP	12-36
Hungarian or Cuman mercenaries - Irr LH (F) @ 4AP	0-5
Turkoman or Wallachian mercenaries - Irr LH (S) @ 7AP	0-5
Tartar mercenaries - Reg LH (S) @ 7AP	0-2
Vlach baggage guards - Irr Hd (O) @ 1AP	0-4
Zamanitchka Voyska levies - Irr Hd (F) @ 1AP	0-10
Only before 1355 AD:	
Byzantine deserters - Reg Cv (I) @ 6AP	0-2
Only after 1300 AD:	
Upgrade shielded Serbian or Bosnian archers to Irr Bw (O) @ 4AP	Any
Serbian, Bosnian, Moravian or Croat krayishnici - Irr Ax (O) @ 3AP	0-12
German or Bohemian mercenary cavalry - double based Reg Kn (I) @ 10AP	
if front element, 8AP if rear element	0, 2 or 4
Other Western European mercenary cavalry - Reg Kn (O) @ 12AP	0-2
Only after 1340 AD:	
Upgrade Serbian Kn to Irr Kn (S) @ 22AP if general, otherwise 12AP	All
Serbian gusars - Irr LH (O) @ 5AP	6-12
Upgrade Bosnian ally-general to Irr Kn (O) @ 15AP	All
Bosnian nobles and mounted retainers - Irr Kn (O) @ 10AP	0-2
Upgrade voynuks equipped with bills, rawcons or long-handled axes to Irr Bd (O) @ 5AP	Any
Only after 1380 AD:	0.4
Crossbowmen - Reg Bw (O) @ 5AP	0-4
Handgunners - Reg Ps (S) (a) 3AP	0-2
Organ guns - Reg Art (I) @ 4AP	0-2
Bombards - Reg Art (S) @ 10AP	0-1
Albanian allies - List: Albanian (Bk 4)	
Ottoman allies - List: Ottoman (Bk 4)	

This list covers the Greater Serbian empire from its founding until final absorption by the Ottomans. Vlastela were the nobility, serving as armoured cavalry. In the earlier part of the period, Byzantine-style equipment predominated, at least in the south. Though the cavalry were equipped with bow as well as lance, the lance was regarded as the primary weapon. Later on, full western knightly panoply became increasingly widespread. The bow seems to have been largely abandoned as a cavalry weapon by the middle of the 14th century. The Serbian charge was greatly feared. At Kossovo Pole in 1389, it broke the Ottoman left flank, at Nicopolis in 1396 it won the battle for the Ottomans and at Ankara in 1402, it three times broke through Timur's best cavalry "with martial fury, tilting their lances in the faces of the Tartars", "dispersing them with great force and unhorsing many". Voynuks were upper-class peasants serving as armoured infantry. The majority of the infantry, however, were unarmoured archers provided by the vlastela's servants. Gusars or usars were the lance armed light cavalry from which later hussars developed. Krayishnici were men of border lords, who were held financially responsible for raiders' depredations. The Zamanitchka Voyska ("All Together") was the arriere-ban, called up only in times of emergency, and included all able-bodied freemen. The minimum marked * applies if more than 3 elements of Bosnians are used. A Bosnian ally general can only command Bosnian troops. Kn (I) must be on double element bases in wedge. Unfortunately for ambitious wargamers, the few Swiss mercenaries attested as in this army were all cavalry. Allied contingents from this list need not include otherwise compulsory foot.

23. FEUDAL ENGLISH 1181 AD - 1322 AD

Cold. Ag 3. WW, Rv, H(S), H(G), Wd, RGo, M, Rd, BUA.	
Cold. Ag 5. w w, RV , $H(5)$, $H(0)$, wu, ROO , W , ROA . C-in-C - Reg Kn (S) @ 35AP if the king, otherwise Irr Kn (O) @ 20AP	1
Sub-general - Irr Kn (O) @ 20AP	1-2
Standard wagon - Irr WWg (I) @ 2AP	0-1
Feudal and mercenary knights and sergeants - Irr Kn (O) @ 10AP	9-20
Marcher muntatores - Irr $Cv(O)$ @ 7AP	9-20 0-3
	0-3
Brabancon mercenaries - Reg Kn (O) @ 12AP	0-5
Mercenary crossbowmen - Reg Bw (O) @ 5AP	0-8
Horses to mount crossbowmen @ 1AP	
Sherwood slingers - Irr Ps (O) @ 2AP Sherwood Challier Lengel in the Walth enders L_{0} D $(O) \odot 4AP$	0-3
Sherwood, Cheshire, Lancashire or South Welsh archers - Irr Bw (O) @ 4AP	*8-56
Spearmen - Irr Hd (O) @ 1AP	8-20
Upgrade Hd spearmen to Shropshire or Herefordshire Marcher	0.6
- Irr Sp (I) @ 3AP or Irr Ax (X) @ 3AP Herry L Hild A_{1} (X) \bigcirc 2AP	0-6
Upgrade Hd spearmen to North Welsh - Irr Ax (X) @ $3AP$	0-8
City militia - Reg Sp (I) @ $4AP$	0-8
Flemish mercenary spearmen - Reg Pk (I) @ 3AP	0-6
Welsh mercenary cavalry - Irr $Cv(O)$ @ 7AP	0-2
Irish kerns or Welsh mercenary javelinmen - Irr Ps (S) @ 3AP	0-3
Cogs - Irr Shp (S) @ 4AP [Kn dismounted as Bd, Bw]	0-3
Ballingers or galeae - Irr Bts (S) @ 3AP [Bw]	0-2
North Welsh allies - List: Welsh (Bk 3)	
French allies - List: Feudal French (Bk 4)	0-13
Only Richard I from 1194 AD to 1196 AD:	
Navarrese allies - List: Feudal Spanish (Bk 3)	
Only Richard I from 1194 AD to 1199 AD:	
Saracens - Reg Cv (O) @ 8AP or Irr LH (S) @ 7AP or Reg Bw (O) @ 5AP	0-1
Only in 1245 AD or in 1296 AD:	
Irish allies - List: Norse Irish (Bk 3)	0-20
Only after 1300 AD:	
Downgrade muntatores to hobilars - Reg Cv (I) @ 6AP	All/0

This list covers the period from Henry II's assize of arms until the introduction of dismounted tactics, recruitment by indenture, and the perfection of the English longbowman. The royal familia, including crossbowmen, is included in the C-in-C's element. A standard wagon was used by Simon de Montfort's rebel army at Lewes in 1264. The minimum marked * applies only if any archers are used. English Kn had not yet taken to dismounting, and charged vigorously even into Scots schiltrons. Hobilars were Anglo-Irish scouting cavalry imported from Ireland for the Scots wars, and became the inspiration for the later border horse. Although they did on occasion fight dismounted, this seems to have been a secondary role. Oman's description of them as mounted infantry seems to have been primarily based on an inaccurate contemporary use of the term to describe Scots mtd Pk (I). However, they can always dismount to fight on foot as Ax (X), as can the similar muntatores of the Welsh Marches. Whether the Saracens brought back by Richard I and used in France were armoured horse archers, Turkomans or Sicilian Arab foot archers is unknown. English infantry were at this time generally unwilling and prone to desert, the chief exceptions being levies from counties accustomed to service against the Welsh. The earlier Welshry troops of the Marcher counties had by now been absorbed into those counties' normal levies, but the feudal muntatores scouting cavalry of those counties continued a separate existence. Welsh mercenary cavalry were used by Richard I and cavalry and longbowmen by Edward I. Independent Welsh rulers were often prepared to assist English rebels by providing troops, as at Evesham in 1265, or promising allied contingents. Welsh allies or standard wagon cannot be used if the King is present in the army. French allies represent contingents helping the English Crown on the continent or rebel armies in England. Irish, French or Navarrese allies cannot be used together, nor with muntatores, marcher upgrades, city militia or Welsh. English armies of this period usually won if they softened up the enemy with missiles before charging and lost when the knights charged prematurely or were pinned against an obstacle. By the end of the period South Welsh archers often constituted the majority of the infantry. A Marcher allied contingent aiding a Welsh army can include only compulsory or Marcher troop types and crossbowmen.

24. KHWARIZMIAN 1186 AD - 1246 AD

Dry. Ag 1. Rv, H(S), O, RGo, M, D, Rd, BUA.	
C-in-C - Reg Cv (S) $@$ 30AP	1
Sub-General - as above	1-2
Khwarizmian lancers - Reg Cv (S) @ 10AP	7-20.
Qangli and similar horse archers - Irr LH (F) @ 4AP	9-30
Iranian atabegs' askaris - Reg Cv (O) @ 8AP	0-10
Persian subject cavalry - Irr Cv (O) @ 7AP	0-4
Militia archers, mounted on camels - Irr mtd Bw (I) @ 4AP or Irr mtd Ps (O) @ 3AP	***4-10
Persian or Tajik levy foot or armed slaves - Irr Hd (O) @ 1AP	0-10
Turkoman tribesmen:	
Turkoman ally-general - Irr LH (S) @ 12AP	*1-2
Turkomans - Irr LH (S) @ 7AP	*6-24
Only before 1207 AD:	
Qara-Khitan allies - List: Qara-Khitan (Bk 4)	
Only before 1223 AD:	
Qangli allies:	
Qangli ally-general - Irr Cv (O) @ 12AP or Irr Cv (S) @ MAP	**1
Upgrade Qangli LH to Irr Cv (O) @ 7AP	0-1/3
Qangli foot - Irr Hd (F) @ 1AP	**6-10
Only from 1204 AD to 1212 AD:	
Qarakhanid allies - List: Central Asian Turkish (Bk 3)	
Only from 1215 AD to 1222 AD:	
Elephant - Irr El (O) @ 16AP	0-1
Ghurid allies - List: Ghurid (Bk 4)	0-19
Only after 1225 AD:	
Kurds - Irr Cv (O) @ 7AP	3-8

This list covers the Khwarizmian state from its founding by dissident vassals of the Seljugs until the final defeat of Jelal ad-Din by the Mongols in 1231, and thereafter the continuation of the Khwarizmian army as a "Free Company" in Syria. Despite a defeat by the local Ayyubids in 1241, they were still able to supply 10,000 horsemen to the Ayyubid Sultan as-Salih Ayyub in 1244. At his instigation they captured Jerusalem from the Franks; it was never recovered. Later the same year, together with 5,000 of the Sultan's own troops under the amir Baibars, they defeated at La Forbie the armies of the Ayyubids of Homs, Damascus and Kerak, together with the combined forces of Frankish Outremer. Unrewarded, they changed sides in 1246 to join Ismail of Damascus, but were almost annihilated when he was defeated by forces loyal to the Sultan the same year. The few survivors fled east to join the Mongols. The native Khwarizmian cavalry rode down Mongols and are mentioned as having metal shields and bows. Horse armour was used by the Seljuqs and Persians, so is probable for at least some elite troops. Qanglis were a Cuman tribe from which the mother of Sultan Muhammad II derived. They provided him with a mercenary force whose commander he distrusted as more loyal to his mother, whom he suspected of having ideas of her own, than to himself. Their infantry rashly advanced unsupported in a single mass against the Mongols on one occasion, but fell to flank charges. The tribe finally changed sides, only to be massacred as unreliable. Minima marked * apply only if more than 8 elements of Turkomans are used, marked ** if any Qangli Cv or foot or more than 12 elements of LH (F) are used, marked *** if any troops so marked or elephants are used. In 1221, Khwarizmian and allied cavalry can always dismount to fight on foot as Bw.

25. LATER BULGAR 1186 AD - 1395 AD

Cold. Ag 2. WW, Rv, H(S), H(G), V, E, RGo, Rd, BUA.	
C-in-C - Irr Kn (F) @ 19AP	1
Sub-general - as above	1-2
Boyars and retinues - Irr Kn (F) @ 9AP	8-15
Bulgar horse archers - Irr LH (S) @ 7AP	8-20
Cuman horse archers - Irr LH (F) @ 4AP	5-14
Vlach cavalry - Irr LH (S) @ 7AP	0-8
Russian mercenaries - Irr Cv (O) @ 7AP	0-3
Hungarian mercenaries - Irr LH (F) @ 4AP	0-2
Bulgar spearmen - Irr Sp (I) @ 3AP	*4-10
Bulgar or Vlach archers - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP	*6-18
Greek cavalry - Reg Cv (I) @ 6AP	0-2
Greek town militia spearmen - Reg Sp (I) @ 4AP	0-4
Greek archers - Reg Bw (I) @ 4AP	0-2
Only before 1196 AD:	
Serbian allies - List: Serbian Empire (Bk 4)	
Only from 1230 AD to 1256 AD:	
Frankish mercenaries - Irr Kn (O) @ 10AP	0-1
Only from 1257 AD to 1277 AD:	
Golden Horde Mongol allies - List: Golden Horde and Successors (Bk 4)	

The "Second Bulgarian Empire" was the result of an uprising in 1186 by two local Vlach (Wallachian) chieftain brothers, Kalopeter and Asen, who refused to pay a tax levied to celebrate the marriage of the Byzantine Emperor. The Vlachs were initially checked in a battle near the Danube, but were later joined by the Cumans, and on recrossing the Danube were enthusiastically joined by the Bulgar population. They later formed an alliance against Byzantium with two Serb zhupans. Kalopeter was assassinated by the Byzantines and Asen was killed by a fellow-Vlach over a woman. Their third brother, Ioannitsa or Kalojan was eventually recognised by the Pope as "Calaiohannes Imperator Bulgarorum et Vlachorum". The rejuvenated "Bulgarian" empire was to remain a constant thorn in the side of Byzantium. It prospered in the aftermath of the Latin conquest of Constantinople, until its annexation by the Ottomans. It was basically feudal with land-holding boyars leading their personal followers and levies from their estates, but with many remnants of Byzantine organisation and a strong Greek element provided by the cities of Thrace and Macedonia after their conquest from the Romanian Franks. Minima marked * apply only if any infantry are used.

26. LUSIGNAN CYPRIOT 1192 AD - 1489 AD

Warm. Ag 2. WW, Rv, H(S), H(G), O, V, E, BUA, Rd, RGo.	
C-in-C - Irr Kn (O) @ 20AP, or on foot with guard of pavisiers - Irr Sp (O) @ 14AP	1
Sub-generals - Irr Kn (O) @ 20AP	1-2
Feudal or mercenary knights and turcopoles - Irr Kn (O) @ 10AP	6-10
Separately deployed turcopoles - Irr Cv (O) @ 7AP	0-4
Crossbowmen - Irr Bw (O) $@$ 4AP	12-36 8-24
Spearmen - Irr Sp (I) @ 3AP Archers - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP	8-24 8-24
Upgrade archers to Irr Bw (O) (a) 2AP of In Bw (I) (a) 3AP	0-24 0-6
Arriere-ban - Irr Hd (O) @ 1AP	0-6
Only before 1373 AD:	0.0
Galleys - Reg Gal (O) @ 3AP [Bw (O)]	0-4
Horse-transports - Irr Shp (I) @ 2AP [Kn, Cv]	0-4
Only Imperialist faction from 1231 AD to 1232 AD:	
Upgrade C-in-C to Reg Kn (O) @ 32AP as Imperial legate	1
Lombard and other mercenary cavalry - Reg Kn (O) @ 12AP	4-7
Only from 1291 AD to 1459 AD:	
Hospitaller knights, sergeants and turcopoles - Reg Kn (S) @ 15AP	*1-2
Separately deployed Hospitaller turcopoles - Reg Cv (O) @ 8AP	0-1
Upgrade spearmen to Reg Sp (O) @ 5AP, crossbowmen to Reg Bw (O) @ 5AP	
as Hospitaller troops	0-4
Only after 1320 AD:	
Catalan mercenaries - Irr Ax (S) @ 4AP	0-6
Only in 1365 AD:	
Mixed mercenary forces - List: Free Companies (Bk 4)	
Only from 1373 AD to 1374 AD:	
Bulgarians, Greeks and Tartars - Irr LH (F) @ 4AP	0-15
Only after 1415 AD:	
Karamanli Turkoman mercenaries - Irr LH (S) @ 7AP	0-10
Only from 1460 AD to 1464 AD:	
Mamluk allies- List: Mamluk Egyptian (Bk 4)	
Only from 1474 AD:	
Replace C-in-C and/or sub-generals by Venetian general and casa - Reg Kn (S) @ 35AP	1-2
Stradiots - Irr LH (O) @ 5AP	2-5 2-6
Italian mercenary crossbowmen - Reg Bw (O) @ 5AP Other Italian mercenary infantry	∠-0
- handgunners, Reg Ps (S) @ 3AP or billmen, Reg Bd (O) @ 7AP	1-4
Venetian galley crew - Reg Ax (S) @ 5AP	1 per Gal
Venetian galleys - Reg Gal (F) @ 2AP [Venetian Ax]	0-2

This list covers Frankish Cyprus from Guy de Lusignan's purchase of the island from Richard Coeur de Lion until the last Lusignan queen sold it to Venice. A classic feudal system was set up on the island, with fiefs originally for 300 knights and 200 mailed turcopoles, though Cyprus later fielded at least 1,000 knights. Infantry were a mixture of Frankish settlers, local Greeks, Lebanese Maronites and Frankish and Armenian mercenaries. We do not distinguish between troops of different national origins, though the Maronites present in very considerable numbers and the Armenians would be mostly archers. The Emperor Friedrich II tried to impose his authority on Cyprus after 1228. His legate Ricardo Filangieri had a force of Lombard mercenary cavalry and gained some local support, but was defeated by the rival Ibelin faction. The Knights Hospitaller of St John moved their headquarters to Cyprus after the fall of Acre in 1291; even after moving again to Rhodes in 1310 they retained a presence in Cypriot armies at least as late as 1426. The minimum marked * applies if any Hospitallers are used. In 1373 a Genoese invasion in support of the widow of Peter I ended in a partial occupation that was only evicted in 1464, the riches of Cyprus enabling the Genoese to maintain a far larger army than they could at home. Genoese armies in Cyprus are covered by the Italian Condotta list. 14th-century Cyprus became a substantial naval power. Raids on Muslim coasts climaxed with the sack of Alexandria

in 1365, when Cypriot forces were supplemented by numerous English and other soldiers of fortune - including Chaucer's Knight - who proved unreliable allies. 2,000 Bulgarian and other ex-slaves were used as light cavalry for the war against the Genoese in 1373-74 (having originally been recruited by the Genoese). Catalan mercenaries are mentioned in 1426 and in the 1460s, and might have been used at any time after the Catalans' establishment in Athens. A Mamluk invasion in 1426 made Cyprus tributary to Egypt, and a Mamluk force assisted the King against rebels from 1440-1446. A Mamluk ally-contingent can include one element of artillery. Cypriot armies had gunpowder artillery of their own from about 1404, but do not seem to have used it in the field. Venice was proclaimed the protector of Cyprus in 1473 and occupied it the next year, annexing the island in 1489. The garrison included stradiots and Italian mercenary infantry, but not condottieri men-at-arms.

27. ESTONIAN 1200 AD - 1227 AD

Cold. Ag 3. WW, Rv, Wd, RGo, M, Rd, BUA.	
C-in-C - Irr mtd Wb (S) @ 16AP	1
Sub-generals - Irr mtd Wb (S) @ 16AP or Irr Wb (F) @ 13AP	1-2
Nobles - Irr mtd Wb (S) @ 6AP	0-12
Warriors - Irr Wb (F) @ 3AP	50-136
Archers and crossbowmen - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP	10-16
Log barricades or abatis to block enemy line of march - TF @ 2AP	0-6
Boats - Irr Bts (O) @ 2AP [Wb]	0-4
Novgorod or Pskov allies - List: Early Russian (Bk 3)	
Only after 1222:	
Mercenary Russian crossbowmen - Irr Bw (O) @ 4AP	0-6
Stone-throwers - Reg Art (S) @ 10AP	0-1

This list covers Estonian armies from the start of the Northern Crusades until the completion of their subjection by the Germans and Danes in 1227. The Estonians, with the Lithuanians, were the fiercest fighters among the heathens of the southern Baltic coast and raided extensively by sea, burning the Swedish capital on one occasion. Stealing or murdering by stealth were crimes, but face to face killing and robbery were not, it being considered that a weak man had no right to his life or property. They were more willing than others to fight pitched battles, but saw no disgrace in retiring if the shock of their initial impact proved insufficient. They were expert ambushers. Much use was made of felled trees to block tracks or similar narrow avenues of approach. Horsemen were numerous but invariably dismounted to fight. The Estonians already used a weak crossbow before the Germans came, and learned to make stone-throwers from a Danish example in the fort of Warbole. Russian mercenaries in the Estonian forts of Dorpat and Fellin also took to the crossbow after capturing many from the Germans and learning from these how to construct their own.

28. PRUSSIAN 1200 AD - 1283 AD

Cold. Ag 1. WW, Rv, Wd, RGo, M, BUA.	
C-in-C - Irr Cv (O) @ 17AP	1
Prussian ally-general - Irr Cv (O) @ 12AP or Irr Wb (F) @ 8AP	1-2
Cavalry - Irr Cv (O) @ 7AP	0-12
Warriors - Irr Wb (F) @ 3AP	50-75
Militia - Irr Ax (I) @ 2AP	0-85
Archers - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP	10-24
Boats - Irr Bts (O) @ 2AP [Wb]	0-4
Only after 1242 AD:	
Pomeranian allies - List: Early Polish (Bk 3)	

This list covers Prussian armies from the start of the Northern Crusades until final subjection by the Teutonic Order. The Prussian tribes never achieved unity, hence the provision only of ally-generals. The only enthusiastic part of the army consisted of noble horsemen and their immediate followers, whom they sometimes dismounted to join. Accordingly, cavalry can always dismount to fight on foot. The militia of farmers that made up the rest of the infantry were distinctly timid and tended to disappear in the face of superior numbers. The army's favourite tactics were skirmishing from cover and sudden charges from woods. Failing that, they would form up with their backs to woods into which they could fall back. The Polish Duke Swatopelk of Pomerania was originally allied to the Teutonics against the Prussians, but changed sides when he found out that he was to be the Teutonics' next victim.

29. TUPI 1200 AD - 1601 AD

Tropical. Ag 2. WW, Rv, Wd, RGo.	
C-in-C - Irr Wb (F) @ 13AP	1
Sub-general - as above	0-1
Tupi ally-general - Irr Wb (F) @ 8AP	1-3
Warriors - 1/3 to 2/3 in each command Irr Bw (S) @ 5AP, rest Irr Wb (F) @ 3AP	48-144
Scouts - Irr Ps (O) @ 2AP	0-3
Canoes - Irr Bts (O) @ 2AP [Bw, Wb]	0-4
Only after 1580 AD:	
Skirmishers with javelins - Irr Ps (S) @ 3AP	0-10
Skirmishers with bow - Irr Ps (O) @ 2AP	0-10

The Tupi of coastal Brazil had migrated from inland. Europeans described them in armies of several thousand, and as ferocious cannibals. They fought with long powerful bows and hardwood clubs, with which, after an initial barrage of arrows, they charged "like bulls". It was said that they knew no other tactics until a late 16th century Englishman taught them to lay ambushes. Their canoes carried up to 50 men. They resisted the Portuguese for a century until the final defeat of their largest tribe, the Potiguar, in 1601. A colourful army with bright feathers and face paint.

30. TEUTONIC ORDERS 1201 AD - 1522 AD

Cold. Ag 4. WW, Rv, Wd, RGo, M, BUA. C-in-C - Reg Kn (S) @ 35AP Sub-General - as above Ritterbrüder, Dienende Brüder and Mitbrüder - Reg Kn (S) @ 15AP German Crusader or vassal knights - Irr Kn (O) @ 10AP Knechte - Reg Cv (I) @ 6AP Turkopolen - Reg LH (O) @ 5AP Prussian or Livonian cavalry - Irr Cv (O) @ 7AP Livonian horse archers - Irr LH (F) @ 4AP Dienende Brüder spearmen - Reg Sp (O) @ 5AP Dienende Brüder crossbowmen - Reg Bw (O) @ 5AP Feudal or Crusader crossbowmen - Irr Bw (O) @ 4AP Colonists and burghers - Irr Sp (I) @ 3AP Livonian foot - 1/2 Irr Ax (O) @ 3AP, 1/2 Irr Ps (O) @ 2AP	$ \begin{array}{c} 1 \\ 1-2 \\ 5-9 \\ 2-6 \\ 2-4 \\ 3-8 \\ 0-4 \\ 4-12 \\ *2-4 \\ *4-8 \\ 0-4 \\ 0-6 \\ 0-8 \\ \end{array} $
Prussian or Lithuanian subject foot - Irr Hd (O) @ 1AP	0-10 0-2
Cogs - Irr Shp (S) @ 4AP [Bw (O)] Launches - Irr Bts (O) @ 2AP [Kn (S) dismounted as Bd (S)]	0-2 0-3
German city allies - List: Medieval German (Bk 4)	0-14
Only before 1242 AD:	
Polish allies - List: Early Polish (Bk 3)	
Only before 1414 AD:	0.6
Non-German Crusader knights and sergeants - Irr Kn (O) @ 10AP	0-6
Only from 1352 AD to 1392 AD: English longbowmen - Reg Bw (S) @ 7AP	0-1
Only after 1380 AD: Handgunners - Reg Ps (S) @ 3AP Bombard - Reg Art (S) @ 10AP Only after 1450 AD:	0-4 0-2
Regrade German Crusader or vassal knights as double based Reg Kn (I) @ 10AP if front element, 8AP if rear element	All

This list covers the Teutonic Orders in the Baltic from the foundation of the Order of the Knights of Christ of Livonia (the "Knights of the Sword" or "Sword Brethren") by the bishop of Riga in 1200, and the arrival of the Teutonic Knights of the Hospital of St Mary of Jerusalem in Poland in 1226, through the affiliation of the Livonian Knights to the Teutonic Order following defeat by the Samogitians and Semgallians in 1236, until the conversion of the last Hochmeister of the Teutonic Order in Prussia to Lutheranism in 1522. The last territories of the Livonian Teutonic Knights were ceded to Poland in 1562. Ritterbrüder were knights of the Order, Dienende Brüder were serving brothers

of the Order forming rear ranks or serving as infantry, and Mitbrüder or Confratres were lay knights of the Order. Knechte were crossbow-armed cavalry recruited from lower class German Crusaders on a 1 year contract; they acted as advance and flank guards, but their official battle role was to form up adjacent to the baggage and pray for success. Turkopolen were natives who scouted and formed a second line in battle. "Crusader" covers a multitude of Gastritter (guest knight) knightly adventurers of many nationalities, including English, French, Italians, Lowlanders, Scots, Scandinavians, Swiss and Hungarians. These were not in sufficient numbers to justify the separate inclusion of such types as Swiss pikemen or Hungarian horse archers! One exception, however, is permitted to cover the visits of Henry of Lancaster in 1352 and Henry Bolingbroke in 1390 and 1392, who brought both horse and foot who must have been longbowmen. W. European Crusaders became rare after 1400 and disappeared completely after 1413. Livonians were eager to serve against the Estonians whom they hated. Minima marked * apply only if any foot sergeants are used.

31. NIKAIAN BYZANTINE 1204 AD - 1261 AD

Warm. Ag 1. WW, Rv, H(S), H(G), Wd, O, V, E, RGo, Rd, BUA.	
C-in-C - Reg Cv (O) (a) 28AP	1
Sub-general - as above	1-2
Vardariotai - Reg LH (F) @ 4AP	•1-6
Latinikon - Reg Kn (O) @ 12AP	6-12
Tourkopouloi - Reg LH (S) @ 7AP	0-6
Skythikon - Irr LH (F) @ 4AP	6-12
Stratiotai - Up to half Reg Cv (O) @ 8AP, remainder Reg Cv (I) @ 6AP	**6-12
Archers - Reg Ps (O) (a) 2AP or Reg Bw (I) (a) 4AP	6-20
Upgrade archers with spear and shield to Reg Bw (O) @ 5AP	0-1/4
Kontaratoi - Reg Sp (I) (a) 4AP	0-4
Camp servants - Irr Hd (O) @ 1AP	0-3
Byzantine ghaleia - Reg Gal (F) @ 2AP [Bw]	0-2
Only from 1234 AD to 1236 AD:	
Bulgarian allies - List: Later Bulgar (Bk 4)	
Only after 1242 AD:	
Cuman allies - List: Cuman (Kipchak) (Bk 3)	13-36
Only after 1258 AD:	
German mercenaries - double based Reg Kn (I) @ 10AP if front element, 8AP if rear	0 or 2
Serbs - Irr Kn (F) @ 9AP	0-1
Turkish allies - List: Seljuq Turk (Bk 3)	
Only in 1260 AD:	

Thessalian allies - List: Epirot Byzantine (Bk 4)

The conquest of Constantinople by the Fourth Crusade and the founding of the Latin Empire split the remaining possessions of the Byzantines into two large states. Nikaia and Epiros, and some smaller states. This list covers the Nikaian army from then until its recapture of Constantinople. Despite reduced resources, it was an effective army which rarely lost a battle, beating the Seljugs at Antioch in 1211, the Latin Empire at Poimanenon in 1224 and the Achaian Franks at Pelagonia in 1259. Originally based only on the Anatolian provinces, it regained Thrace in 1235, Macedonia and Thessaloniki in 1246. The Varangians were now purely palace guards and no longer went to war, but the Vardariotai guards originally recruited from Magyar settlers in the Vardar valley did still take the field. The Latinikon were Frankish knights, now mainly recruited from Constantinople, the Latin Emperor being poor and Byzantine pay generous. We class them as regular since they requested permission to charge. Tourkopouloi were Christianised Turks. The Skythikon had originally been recruited from Pechenegs, but were now usually Cumans. They were not used in a single body, but as detachments scattered through the army. They were supplemented from 1242 by a mass settlement of Cuman refugees fleeing from the Mongols. These were given lands in exchange for military service, but on one occasion deserted to the enemy on the field of battle, so are classed as allies. Cuman allies are compulsory after 1242 AD. Native cavalry were now mostly reservists called stratiotai holding individual pronoiai, grants not of land but of its rents. They were thus neither localised soldier-farmers as in the old Thematic forces, nor feudal lords, but soldiers who collected their own pay and were called up by the central authorities for service anywhere in the empire. They were still armoured lancers, but had reverted to the skirmishing tactics of earlier days. Until the accession of Theodoros II Laskaris they served only in Anatolia. Their quality was variable, those of the Paphlagonian theme for example being considered good and those of Macedonia bad. The illustrations in the Skylitzes manuscript of around the start of this period shows several bodies of lancers who lack armour. Infantry were now predominantly archers from the Anatolian themes. Peltastai are no longer mentioned, but some archers are depicted

with spears and small shields. Camp servants were used to attack the unwalled town of Serres in 1246, and so are shown separately rather than included in the baggage. Byzantine warships were now lighter and no longer mentioned using Greek Fire. The minimum marked * applies only if the C-in-C is the Emperor, that marked * only if after 1254.

32. ROMANIAN FRANK 1204 AD-1311 AD

Warm. Ag 1. WW, Rv, H(S), H(G), O, V, RGo, Rd, BUA.	
C-in-C - Irr Kn (S) @ 22AP	1
Sub-general - as above	1-2
Feudal knights and esquires - Irr Kn (S) @ 12AP	9-18
Military order brother knights and sergeants - Reg Kn (S) @ 15AP	0-2
Greek archontes - Irr Cv (O) @ 7AP	0-6
Frankish spearmen - Irr Sp (I) @ 3AP	0-6
Frankish crossbowmen - Irr Bw (O) @ 4AP	0-8
Frankish or Melingoi archers - Irr Ps (O) @ 2AP	0-8
Melingoi javelinmen - Irr Ax (O) @ 3AP or Irr Ps (S) @ 3AP	*8-10
Greek archers - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP	* 12-32
Venetian allies:	
Venetian ally general - Reg Kn (O) @ 22AP	*1
Venetian knights - Reg Kn (O) @ 12AP	0-1
Venetian crossbowmen - Reg Bw (O) @ 5AP	*1-4
Venetian bellatores - Reg Ax (S) @ 5AP	0-2
Venetian galleys - Reg Gal (F) @ 2AP [Bw, Ax]	0-3
Only Latin Empire from 1211 AD to 1214 AD:	
Byzantine prisoners - Reg Cv (I) @ 6AP	0-6
Seljuq allies - List: Seljuq Turk (Bk 3)	
Trapezuntine allies - List: Trapezuntine Byzantine (Bk 4)	0-13
Only Achaia from 1212 AD to 1213 AD and in 1259 AD:	
Epirot allies - List: Epirot Byzantine (Bk 4)	
Only Latin Empire from 1239 AD to 1261 AD:	
Cuman allies - List: Cuman (Kipchak) (Bk 3)	0-14
Only Achaia in 1259 AD and in 1304 AD:	
Thessalian allies - List: Epirot Byzantine (Bk 4)	
Only Achaia in 1264 AD:	
Turkish allies - List: Seljuk Turk (Bk 3)	
Only Achaia after 1264AD:	
Turkish or Bulgar horse archers - Irr LH (S) @ 7AP	0-3
Only Achaia from 1272 AD to 1282 AD:	
Sicilian German mercenaries - double based Reg Kn (I) @ 10AP if front element, 8AP if rear	• 0 or 2
Sicilian Saracen archers - Reg Bw (I) @ 4AP or Reg Ps (O) @ 2AP	0-6
Only Achaia in 1310 AD:	0.0
Catalan Company allies List: Catalan Company (Bk 4)	

Catalan Company allies - List: Catalan Company (Bk 4)

This list covers the armies of the Latin Empire and Frankish Greece from the capture of Constantinople until the fatal battle of Kephissos. Thessalonika and Anatolia were lost in 1224, leaving only Constantinople and its surroundings as a rump of the Latin Empire until it fell in 1261. Southern Greece alone then remained under Frankish control, fighting off Byzantine attacks but finally succumbing to its own unpaid Catalan mercenaries. Those wishing a painless introduction to these unlikely and romantic crusader states should read Alfred Duggan's historical novel "Lord Geoffrey's Fancy". The feudal knighthood of Achaia was considered by early 14th century contemporaries to be the best anywhere. Archontes were former Byzantine pronoia holders, regarded by the Franks as feudal gentry. Greeks willingly served their Frankish overlords whose exactions may have been milder than those of Byzantine tax gatherers; religious ties with the Byzantines failed to withstand the Byzantine use of rapacious infidel Turks. Melingoi were Slav hillmen. Minima marked • apply only if more than 4 elements of that nationality are used. Thessalian allies in 1259 must be commanded by an irregular general. Those of 1304 must include Bulgar LH (S). The Catalan Grand Company had a collective leadership when employed by the Romanian Franks, so a Catalan general element should depict a furiously debating committee, rather than the great man, bodyguards and aides!

33. EPIROT BYZANTINE 1204 AD - 1340 AD

Warm. Ag 1. WW, Rv, H(S), H(G), Wd, O, V, E, RGo, Rd, BUA.	
C-in-C - Reg Cv (O) (a) 28AP	1
Sub-general - Reg Cv (O) @ $28AP$	1-2
Frankish mercenaries - Irr Kn (O) (a) 10AP	0-10 8-12
Byzantine cavalry - up to half Reg Cv (O) @ 8AP, remainder Reg Cv (I) @ 6AP Byzantine archers - Reg Ps (O) @ 2AP or Reg Bw (I) @ 4AP	8-12 8-24
Byzantine archers - Keg Fs (O) (2) ZAF of Keg Bw (I) (2) 4AF Byzantine or mercenary spearmen - Reg Sp (I) (2) 4AP	0-8
Vlach cavalry - Irr LH (S) @ 7AP	4-12
Albanian or Vlach foot - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP	16-32
Only before 1230 AD or Despotate of Epiros:	
Albanian cavalry - Irr LH (O) @ 5AP	0-8
Only from 1207 AD to 1215 AD:	
Bulgarian allies - List: Later Bulgar (Bk 4)	0-12
Only if Thessalian from 1230 AD to 1318 AD:	
Downgrade C-in-C or sub-general to Vlach Irr LH (S) @ 17AP	Any
Bulgar horse archers - Irr LH (S) @ 7AP	0-6
Only Despotate of Epiros in 1259 AD:	
German mercenaries - double based Reg Kn (I) @ 10AP if front element, 8AP if rear Thessalian allies - List: Epirot Byzantine (Bk 4)	2
Only Despotate of Epiros in 1259 AD and in 1292 AD:	
Achaian Frank allies - List: Romanian Frank (Bk 4)	
Only Despotate of Epiros from 1276 AD to 1291 AD:	
Angevin allies - List: Sicilian (Bk 4)	
Only Despotate of Epiros from 1309 AD to 1310 AD:	
Byzantine allies - List: Palaiologan Byzantine (Bk 4)	
Only Despotate of Epiros after 1318 AD:	
Upgrade C-in-C to Reg Kn (O) @ 32AP	1
Upgrade Frankish mercenaries to Reg Kn (O) @ 12AP .	Any

The conquest of Constantinople by the Fourth Crusade and the founding of the Latin Empire split the remaining possessions of the Byzantines into two large states, Nikaia and Epiros, and some smaller states. This list covers the Despotates of Epiros, Thessaloniki and Thessaly. The Despotate of Epiros was organised from Byzantine remnants in Albania and western Greece by Mikhail I Doukas. In 1207 he took advantage of a period of disorder in Bulgaria to start a series of ultimately unsuccessful attacks on the new Latin kingdom of Thessaloniki with the aid of independent Bulgarian princes. His brother and successor Theodoros Doukas destroyed the Latin kingdom in 1224, acquiring Thessaloniki, Thessaly, Thrace and most of Macedonia, and proclaimed the Empire of Thessaloniki. He was preparing to recover Constantinople when he was defeated and captured by the Bulgarians at Klokotnitza in 1230. Thrace and Macedonia were seized by Bulgaria and the empire was split into three parts: Epiros, Thessaly and Thessaloniki. Thessaloniki fell to the Nikaians in 1246. Thessaly remained nominally subordinate to Epiros, but in practice independent. When Ioannis II Doukas of Thessaly died childless in 1318, his possessions were divided between the revived Byzantine Empire at Constantinople and the Catalan Duchy of Athens. The assassination of Thomas Doukas of Epiros later the same year led to rule by the Italin Orsini family which lasted until conquest by Constantinople in 1340. A total lack of Epirot historians limits our information on the army to that provided by its foes. In its early days at least it is said to have depended heavily on Frankish mercenaries. As these were probably recruited directly from the West, we assume that they would not have the discipline of the old Byzantine Latinikon. Vlachs and Albanians were also important elements. Nikaia had inherited the old guard and tagmatic troops, but Epiros must have inherited some of the regional troops and may have supported them by pronoiai. There was no fleet and no access to nomad horsemen. The Angevins were mainly a source of potential rather than real help. An Epirot ally-contingent in a Romanian Frank army of 1259 must have 2 elements of Germans on a double base. A Thessalian ally-contingent in an Epirot or Romanian Frank army of that year must have an irregular LH general.

34. TRAPEZUNTINE BYZANTINE 1204 AD - 1461 AD

Warm. Ag 1. WW, Rv, H(S), H(G), Wd, O, V, E, RGo, Rd, BUA.	
C-in-C - Reg Cv (O) @ 28AP	1
Sub-general - Reg Cv (O) @ 28AP or Irr LH (S) @ 17AP	1-2
Trapezuntine stratiotai lancers - Reg Cv (O) @ 8AP	3-6
Trapezuntine or mercenary spearmen - Reg Sp (I) @ 4AP	0-4
Trapezuntine archers - Reg Ps (O) @ 2AP or Reg Bw (O) @ 5AP	8-16
Trapezuntine Laz or Tzan horse archers - Irr LH (S) @ 7AP	8-12
Trapezuntine Laz or Tzan tribal infantry - up to half archers, Irr Bw (I) @ 3AP	
or Irr Ps (O) @ 2AP, remainder spearmen, Irr Ax (O) @ 3AP	*6-I2
Turks - Irr LH (S) @ 7AP	2-6
Alans - Irr LH (S) @ 7AP	0-4
Ghaleia - Reg Gal (F) @ 2AP [Bw]	0-2
Georgian allies - List: Georgian (Bk 3)	
Only after 1360 AD:	
Re-equip generals as horse archers - Reg Cv (O) @ 28AP or Reg LH (S) @ 27AP	Any
Re-equip lancers as horse archers - Reg Cv (O) @ 8AP or Reg LH (S) @ 7AP	Any
Upgrade Laz horse archers to Reg LH (S) @ 27AP if general, otherwise @ 7AP	Ail
Karaman or Kastamonu Turkish allies - List: Anatolian Turkoman (Bk 4)	
Only after 1400 AD:	
Re-equip generals as horse archers - Reg Cv (O) @ 28AP or Reg LH (S) @ 27AP	All
Re-equip lancers as horse archers - Reg Cv (O) @ 8AP or Reg LH (S) @ 7AP	All

This list covers the "Empire" of Trebizond on the south coast of the Black Sea, from its establishment by Alexios Komnenos with the aid of Georgian troops after the fall of Constantinople to the Franks until the fall of Trebizond to the Ottoman Turks. During this time the Empire of Trebizond kept a low profile, relying on a network of alliances (often marriage alliances) with neighbouring Georgian and Turkish potentates. Its army was small, but effective against the various Turkish emirs whose armies occasionally threatened Trebizond; it could not stand against the Ottomans when they decided to invade. Much of the army consisted of ethnically Georgian native Lazoi and Tzanoi. Graeco-Laz frontier lords initially served voluntarily, but their lands were later recognised as pronoiai, the Tzanoi having by then been absorbed by the Lazoi. Although most were unarmoured and equipped only with bow, sabre and sometimes mace, Trapezuntine troops had a fearsome reputation. A Muslim writer of the mid 14th century describes them as "warlike men and fearless" and adds that "although few in number and ill-equipped, they are however heroes, like terrible lions who never let their prey escape". The minimum marked * applies only before 1360. Lancers were probably entirely replaced by horse archers by the beginning of the 15th century. The total maximum points value of troops allowed is less than usual because substantial armies could not be fielded without allies.

35. MONGOL CONQUEST 1206 AD - 1266 AD

Cold. Ag 4. Rv , $\operatorname{H}(S)$, $\operatorname{H}(G)$, RGo .	1
C-in-C - Reg Cv (S) @ 30 AP	1
Mongol sub-general - as above or Reg LH (S) @ 27AP	1-3
Guard cavalry - Reg Cv (S) @ 10AP	0-8
Mongol cavalry - up to half Reg Cv (O) @ 8AP, remainder Reg LH (S) @ 7AP	12-40
Eastern steppe, Cuman or similar auxiliaries - Irr LH (F) @ 4AP	*6-10
Uighur allies - List: Central Asian Turkish (Bk 3)	0-20
Only after 1211 AD:	
Khitan sub-general - Reg Kn (F) @ 31 AP	**1
Khitan soldiers - Reg Kn (F) @ 11AP	**1-4
Khitan foragers - Reg Cv (O) @ 8AP	**2-5
Khitan orderlies - Reg LH (F) @ 4AP	***2-5
Convert all Khitans to Reg Cv (S) @ 30AP if general, 10AP if not	All/0
Only after 1213 AD:	
Upgrade eastern steppe, Cuman or similar auxiliaries to Reg LH (S) @ 7AP	All
Alan, Turkish or similar auxiliaries - Irr LH (S) @ 7AP	*4-10
Jurchen, Georgian or similar auxiliaries - Irr Cv (S) @ 9AP	0-4
Armenian auxiliary cavalry - Irr Kn (F) @ 9AP	0-3
Civilians driven ahead of the army - Irr Hd (I) @ 0.5AP	0-8
Counter-weight stone-throwers - Reg Art (S) @ 10AP	0-2
Bolt-shooters - Reg Art (O) @ 8AP	0-2
Chinese warlord allies - List: Jurchen-Chin (Bk 4)	0-14
Only in 1234 AD:	
Chinese allies - List: Sung Chinese (Bk 3)	
Only after 1241 AD:	
Korean allies - List: Koryo Dynasty Korean (Bk 3)	

This list covers all Mongol armies from Temuchin's assumption of the title of Oaghan under the name of Chinggis, until the foundation of the Yuan and Ilkhanid dynasties and the breakaway of the Golden Horde. The Mongols differed from previous steppe empires in having an ideology and discipline. They believed that there was only one God in heaven and that there should likewise be only one ruler on earth. They were utterly confident in their ability to arrange this. "You know not the valour of our Mongol people; the more (of the enemy) there are, the more glory we win and the more plunder we secure." Their opponents often agreed. A Chinese wrote "Since the beginnings of time no barbarians have been so powerful as the Mongols are today. They destroy kingdoms as one tears up grass. Why does heaven permit it?" Chinggis replaced tribal organisation with a hierarchy of decimal-based units with his own trusted companions as its higher commanders. It has been suggested that most tactics were based on herding and hunting practice, but there is also evidence of more formal drill. The "Secret History" says of two units "Each time they turn, their ranks are proper, each time they turn, their order is proper" and Chinggis is reported as ordering an approach march in "thorn-bush" formation, deployment in "lake" formation and attack in "chisel" formation. Contemporary western sources agree that most Mongols were unarmoured horse archers, that the wealthiest tenth had leather or iron armour for themselves and their horses and carried sabres, and that lances were carried by some only. The five rank formation, two armoured and three not, usually ascribed to the Mongols, is actually based on a Jurchen army of 1120. This list allows both that and alternative interpretations. We assume that auxiliary light horse from the steppes were quickly brought under Mongol discipline and ended by assimilating with the Mongols' poorer class. Mongol cavalry, including generals and guards, and auxiliary light horse can always dismount to fight on foot. The minima marked * apply only if any auxiliaries are used. Georgians and Armenians cannot be used with Uighurs, nor any of these with any Chinese or Koreans except artillerymen. The Khitan rebel Yehlu Ahai joined Chinggis in 1211 and he and his successors became loyal vassals. It is uncertain whether the Khitans had adopted Jurchen methods under their rule. Minima marked ** apply if any Khitan troops are used, those marked *** if Khitan orderlies are used. Chinese warlord allies represent the ex-Chin generals and officials who came over to the Mongols but retained considerable independence until brought under control by the new Mongol Yuan dynasty. Such contingents need not include the normally compulsory Jurchen cavalry and must grade all Jurchen they do use as Cv (I). They cannot include any of the normally compulsory Chung-hsiao chün.
36. LATER MUSLIM INDIAN 1206 AD - 1526 AD

Tropical. Ag 2. WW, Rv, H(G), Wd, E, RGo, M, Rd, BUA.	
C-in-C - Reg Cv (S) @ 30AP	1
Sub-general - Irr Cv (S) @ 19AP	1-2
Guard and/or royal mamluks - Reg Cv (S) @ 10AP	0-4
Moslem jagir cavalry - Irr Cv (S) @ 9AP	7-16
Elephants and escorts - Irr El (S) @ 20AP	*3-6
Horse archers - Irr LH (F) @ 4AP	0-3
Afghan horse - Irr LH (O) @ 5AP	0-2
Afghan spearmen - Irr Ax (X) @ 3AP	0-4
Afghan archers - Irr Ps (O) @ 2AP or Irr Bw (O) @ 4AP	0-4
Hindu archers - Irr Bw (I) @ 3AP	8-30
Hindu swordsmen - Irr Bd (F) @ 5AP	1-8
Hindu javelinmen - Irr Ps (S) @ 3AP	0-4
Nags to mount any Hindu infantry @ 1AP	0-6
Camp followers - Irr Hd (O) @ 1AP	1-10
Bolt-shooters - Reg Art (O) @ 8AP	0-1
Stone-throwing trebuchet - Reg Art (S) @ 10AP	0-1
Only from 1316 AD to 1388 AD:	
Rathor ally general - Irr Kn (F) @ MAP	**1
Rathor cavalry - Irr Kn (F) @ 9AP	**2-6
Only after 1340 AD:	
Abyssinian bodyguards - Reg Bd (F) @ 7AP	0-2
Grenadiers and firework throwers - Reg Ps (X) @ 6AP	0-5
Rocketeers - Reg Art (I) @ 4AP	0-6
Only after 1365 AD:	
Bombards - Reg Art (S) @ 10AP	0-1
Only after 1470 AD:	
Handgunners - Irr Ps (S) @ 3AP	0-4
5	

This list covers Muslim Indian states from the establishment of the Delhi Sultanate until that of the Moghul empire. Unlike Hindu armies, cavalry was regarded as the main arm. Elephants with their fighting crew in howdahs advanced in the centre in front of the Sultan to disrupt enemy cavalry and were accompanied by escort infantry to prevent enemy foot interfering. The minimum marked * applies except from 1387 to 1392, when the unfortunate Sultan Muhammad lost a civil war due to his opponents having a monopoly of elephants. Rathors were a Rajput Hindu clan organised into a number of petty states, some of which remained semi-independent after the Muslim conquest, though having to provide contingents of their fearsome cavalry. Most regained de facto independence after the death of Firuz Shah in 1388. Minima marked ** apply only if more than one Rathor element is used, in which case all and only Rathors must be commanded by a Rathor ally general. Rocketeers had their rockets carried by pack animals and launched them by hand as if thrown spears. Unlike the small Chinese man-launched rockets fired in showers, they had explosive heads. They were accompanied at the battle of Delhi in 1398 by grenadiers and firework throwers, the whole being assigned to the somewhat unlikely task of supporting the elephants.

37. INDONESIAN OR MALAY 1222 AD - 1511 AD

Tropical. Ag 1. WW, Rv, H(S), H(G), Wd, RGo, M, BUA. Malacca only: WW. Moluccas of	
C-in-C - Irr Wb (F) @ 13AP	1
Sub-general - as above	1-2 20-100
Warriors - Irr Wb (F) @ 3AP Archers - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP	20-100 8-30
Skirmishers - Irr Ps (I) @ 1AP	0-16
Upgrade skirmishers to blowpipe men - Irr Ps (X) @ 6AP	0-10
Any except Moluccans:	
Noble cavalry - Irr LH (O) @ 5AP	2-4
Any except Malays or Sumatrans:	
Prahu - Irr Bts (S) @ 3AP [Wb, Bw, Ps]	0-6
Only Malays, Sumatrans or Javanese:	
Replace Wb (F) by Irr Wb (S) @ 5AP	All
Jong or prau mayang - Irr Shp (O) @ 3AP [Wb, Bw, Ps]	0-4
Only Malays or Sumatrans:	
Mount generals on elephants - Irr El (O) @ 26AP	All
Elephants - Irr El (O) @ 16AP	2-6
Only Javanese:	
Mount C-in-C in chariot, Irr Cv (O) (a) 16AP, or on elephant, Irr El (O) (a) 26AP	1
Mount sub-generals on elephants, Irr El (O) $@$ 26AP, or on horses, Irr Cv (O) $@$ 17AP	All
Upgrade uniformed cavalry to Reg LH (O) @ 5AP	0-2
Only Tambralinga Malays from 1241 AD to 1270 AD:	
Sinhalese allies - List: Tamil Indian and Sinhalese (Bk 2)	
Only Singhasari or Majapahit Javanese from 1270 AD to 1390 AD:	
Cham allies - List: Khmer and Cham (Bk 3) Malay allies - List: Indonesian or Malay (Bk 4)	
Any after 1400 AD:	
Light guns - Reg Art (I) @ 4AP	0-2
Only Malacca Malays from 1409 AD to 1435 AD:	0-2
Ming allies - List: Ming Chinese (Bk 4)	
Only Malays, Sumatrans and Javanese after 1429 AD:	
Replace archers with skirmishing handgunners - Irr Ps (S) @ 3AP	0-6
Only Malacca Malays after 1435 AD:	0-0
Replace Art (I) by heavy guns commanded by Turkish mercenaries - Reg Art (S) @ 10AP	Any
Javanese allies - List: Indonesian or Malay (Bk 4)	<i>1</i> 11 y

This list covers the Javanese empires of Singhasari and Majapahit, the Malay sultanate of Malacca, the Moluccas (the "Spice Islands"), and other states of Indonesia, Malaysia and the Philippines, from the founding of Singhasari until the fall of Malacca to the Portuguese. There had been powerful Indianized states since Srivijaya in east Sumatra was founded before 700 AD, but their military organization is obscure (though 9th-century reliefs from Borobudur in Java show guardsmen with Indian-style short swords and long bows or small oval shields), and even this list has to rely partly on later evidence. Many states were still Hindu or Buddhist, but conversion to Islam was increasing from the 14th century on, especially in the trading ports. The Yuan Mongol attack on Java in 1293 was directed against Singhasari, which had meanwhile fallen to the ruler of Kediri in eastern Java. A Singhasari prince submitted to the Yuan and accompanied them against Kediri; he then treacherously ambushed the Yuan forces, and founded the new Majapahit empire. Hoping to intercept the Yuan invasion, Singhasari had sent troops to Champa (with which there was a marriage-alliance) and Malaya, indicating Java's sphere of influence on the mainland. Majapahit declined after 1389, because Malacca's rise diverted trade and the spread of Islam undermined the Hindu dynasty, and disappeared soon after 1513. A 16th or 17th century account of a battle in 1357 between Majapahit and the west Javanese state of Sunda describes a king armed with a spear riding in a chariot (perhaps an anachronistic memory of earlier heroic eras), with a streamer-decorated standard, a black parasol, and small flags on the front of the vehicle; other princes in howdahs on elephants, each with a standard of a distinctive colour and matching parasol, and armed with bows, spears and oblong

shields; noble cavalry, including "the highest dignitary of Sunda", with spears, swords and shields; and infantry with shields, swords, throwing-spears and blowpipes (plus cannon and arquebuses, anachronistic for 1357). One contingent's noble cavalry are uniformed, in yellow jackets and loincloths. Dangerous cavalry mock-combats with the throwing of blunt javelins are practised even today in Java and a high level of skill is displayed. The infantry attacked very fiercely, "as though they were conscious of no peril", "like men who did not expect to escape with their lives"; combined with the Malay and Javanese reputation for running amok, this justifies classification as Wb (S). Foot archers are not mentioned, perhaps because they had been replaced by arquebusiers by the time the source was written. A 16th century Portuguese account describes the Javanese using "huge" bows as well as spears, krisses, scimitars, blowpipes and wooden shields large enough to protect the whole body; by then they were skilled gunners. The blowpipe and its poisoned darts was in limited use by nearly all the nations of the area, often in the hands of woods dwelling aborigines. It was greatly feared and especially dangerous to animals. Tambralinga was a powerful Malay state in the 13th century, with trading links with Sri Lanka. In 1270 a Tambralingan force with local Sinhalese allies fought unsuccessfully against an invasion by the Pandya Tamils from South India. Malay forces in Sri Lanka are described as using poisoned arrows. Malacca, founded about 1400 and soon converted to Islam, grew to power under Chinese protection at the time of Cheng Ho's great ocean voyages, and then fought against Siamese expansion. Ming allies cannot include more than the minimum number of cavalry and may not upgrade them to guards, but can include Chinese infantry, archers, crossbowmen, handgunners, "dare-to-die" troops, up to two elements of light guns or hand-launch rocketeers, and the Ming list's full complement of ships. The Moluccas were so mountainous and heavily wooded as to make horses useless, so there were none on the islands.

38. GRANADINE 1232 AD - 1492 AD

Warm. Ag 0. WW, Rv, H(S) [H(S) unless WW used], H(G), O, V,	RGo, Rd, BUA.
C-in-C - Reg Kn (O) @ 32AP	1
Sub-general - Reg Kn (O) @ 32AP or Reg LH (O) @ 25AP	1-2
Granadine lancers - Reg Kn (O) @ 12AP	2-3
Granadine jinetes - Reg LH (O) @ 5AP	10-20
Granadine mounted crossbowmen - Reg LH (I) @ 3AP	3-6
Christian mercenary cavalry - Irr Kn (O) (a) $10 \overline{AP}$	0-1
Mercenary foot - Up to half crossbowmen, Reg Bw (O) @ 5AP,	
rest spearmen, Reg Sp (O) @ 5AP	0-8
Mercenary archers - Reg Bw (O) @ 5AP	0-6
Town militia - Reg Sp (I) @ 4AP	0-12
Peasant crossbowmen - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP	16-70
Staff-slingers - Irr Ps (O) @ 2AP	0-6
Only before 1340 AD:	
Granadine horse archers - Reg LH (F) @ 4AP	0-2
Marinid allies - List: Fanatic Berber (Bk 3)	
Only after 1340 AD:	
Downgrade Granadine lancers to Reg Cv (O) @ 28AP if general, 8AP if not	All
Handgunners - Reg Ps (S) @ 3AP	0-6

This list covers the armies of the Islamic Spanish state of Granada from its foundation until its fall. Granada lasted as long as it did because, although small, the land was rich, densely populated and with mountainous borders, and the inhabitants cunning, resourceful and brave as well as much better organised than the Christian Spanish of the time. During the early period, the army depended heavily on local equivalents of contemporary knights, and was supplemented by a contract force commanded by Marinid Berber princes with the title of Shaykh al-Guzat. This office was abolished when the holders started interfering excessively in Granadine politics. Other mercenaries were also mainly North African, some negro. Although Granadine heavy cavalry were initially armoured as heavily as Christian knights and charged with a heavy lance, this is described in 1340 as their "former" equipment before changing to lighter armour and skirmishing tactics. Later period armies relied instead chiefly on skirmishing light cavalry and native crossbowmen. Nearly every peasant is said to have owned a crossbow. Although the Granadines were probably the first to introduce gunpowder weapons into the Iberian peninsula, they appear to have used artillery only in sieges. A Marinid allied contingent can include "Ghuzz" mercenaries.

39. NAVARRESE 1234 AD - 1430 AD

Warm. Ag 1. WW, Rv, H(S), H(G), O, V, RGo, Rd, BUA.	
C-in-C - Irr Kn (O) @ 20AP	1
Sub-general - as above	0-2
Navarrese mesnaderos - Irr Kn (O) @ 10AP	2-4
Navarrese javelinmen - Irr Ax (S) @ 4AP	5-28
Navarrese slingers - Irr Ps (O) @ 2AP	0-10
Gascon crossbowmen - Irr Bw (O) @ 4AP	*2-10
Gascon bidets - Irr Ps (S) @ 3AP	*2-10
Gascon brigans - Irr Ax (X) @ 3AP	*2-10
Only from 1328 AD to 1379 AD:	
Norman men-at-arms - Irr Kn (S) @ 12AP	0-6
Only after 1350 AD:	
Bombard - Reg Art (S) @ 10AP	0-1
Free company ally-general - Irr Kn (O) @ 15AP or (only before 1379) Reg Kn (I) @ 20AP	* 1-2
Free company Gascon men-at-arms - Irr Kn (O) @ 10AP	*2-9
Only from 1350 AD to 1379 AD:	
Free company English men-at-arms - Reg Kn (I) @ 10AP	*1-5
Free company English longbowmen - Reg Bw (S) @ 7AP or Reg mtd Bw (S) @ 8AP	*6-10
Only Navarrese Company from 1379 AD:	
Italian condottieri ally-general - Reg Kn (S) @ 25AP	*1
Italian elmetti - Reg Kn (O) @ 12AP	**2-8
Italian crossbowmen - Reg Bw (O) @ 5AP	**2-8
Greek archers - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP	0-4
Hospitallers - Reg Kn (S) @ 15AP	0-1
Catalans - Irr Ax (S) @ 4AP	0-2
Turks - Irr LH (S) @ 7AP or Irr LH (F) @ 4AP	0-4

This list covers the armies of the Kingdom of Navarre from its transfer from the Spanish to the French sphere of influence until the loss of his Norman possessions in 1378 and lack of money to pay mercenaries forced Charles the Bad to submit to the French Crown, after which its military system assimilated to the French. It also covers the Navarrese Company, originally formed for a failed conquest of Albania in 1376, but which then seized the Principality of Achaia and held it until it fell to the Despotate of the Morea in 1430. For much of the period Navarre was either allied to the English against the French or at least intriguing against its nominal French suzerain. The native population was small, but was supplemented by the King of Navarre's Norman vassals after the Count of Evreux became ruler in 1328, and later by free company mercenaries. Mesnaderos were cavalry similar to Spanish knights, who were expected to serve 40 days per year at their own expense accompanied by an infantryman and a page. They differed from other nations' feudal cavalry in that they received an annual grant of money instead of holding land from the King, and did not differentiate themselves socially from the infantry. Free company men-at-arms almost invariably fought dismounted, so can always do so. Minima marked * apply only if any free company elements or more than 4 Gascon elements are used, those marked *** only if any Italians are used. A free company ally general can only command English and/or Gascons.

40. SIAMESE 1238 AD - 1518 AD

Tropical. Ag 3. WW, Rv, H(S), H(G), Wd, RGo, M, BUA.	
C-in-C - Irr El (O) @ 26AP	1
Sub-general - as above	0-1
Ally-general - Irr El (O) @ 21AP	0-2
Elephants - Irr El (O) @ 16AP	2-6
Cavalry - Irr Cv (I) (a) 5AP	4-8
Royal guards - all Reg Ax (O) @ 4AP or all Reg Ax (S) @ 5AP	0-8
Infantry - all Irr Wb (F) @ 3AP or all Irr Ax (O) @ 3AP	24-84
Archers and crossbowmen - Irr Ps (O) @ 2AP [can support Ax] or Irr Bw (I) @ 3AP	8-24
Porters - Irr Hd (I) @ 0.5AP	0-6
Stockade for camp - TF @ 1AP	0-12
River boats - Irr Bts (O) @ 2AP [Wb or Ax]	0-6
Only after 1287 AD:	
Burmese vassal-allies - List: Burmese (Bk 3)	
Malay vassal-allies - List: Indonesia or Malay (Bk 4)	
Junks - Irr Shp (O) @ 3AP [Wb or Ax]	0-4
Only after 1400 AD:	
Artillery - Reg Art (I) @ 4AP	0-2
Handgunners - Irr Ps (S) @ 3AP	0-6

This list covers Siamese, or Thai, armies from the founding of their first kingdom at Sukhothai until the first employment of Portuguese military advisers by the kings of Ayudhya. They were heavily influenced by Khmer culture; the option to make the infantry Ax assumes they may have adopted Khmer military styles and lost their original ferocity as they became more cultured. A 13th century Siamese general's elephant on a Khmer relief has the great man standing on a platform and the driver on the elephant's neck, in Khmer style, but 16th century elephant warriors sat on the neck, the driver steering with a long goad from the rump. A 17th century source describes three armed warriors on each elephant. After the Yuan Mongol campaigns in Burma, some of the fragmented Burmese principalities came under Thai suzerainty; in the 14th century, so did some of the northern Malay states. A Siamese manual of 1518 mentions cannon and infantry firearms, presumably introduced in the 15th century, probably from Ming China. It includes a variety of elaborate deployments; cavalry and elephants are usually deployed on the flanks, while archers can be on the wings with handgunners, or sheltering behind the guards or other spear-armed infantry. Feints, feigned flights and ambushes from woods are also mentioned; in one case the baggage-porters are used to give the impression of more men. A 17th century formation had three lines, each comprising three bodies, each of the nine bodies including 16 elephants. Reliance sometimes had to be placed on prickly sub-kings for troop reinforcements. Changmai was particularly rebellious and prone to side with Burmese enemy.

41. EARLY SWISS 1240 AD - 1400 AD

Cold. Ag 1. Rv, H(S), Wd, RGo, Rd, BUA.	
C-in-C - Reg Bd (X) @ 28AP mounted on double element base with halberdiers	1
Sub-general - as above	1-2
Mounted crossbows - Reg LH (I) @ 3AP	0-2
Halberdiers - double based Reg Bd (X) @ 8AP if front element, 6AP if rear element	24-70
Crossbowmen - Reg Ps (O) @ 2AP	4-12
Stone throwing enfants perdus - Reg Ps (I) @ 1AP	0-8
Stone barricade - TF @ 2AP	0-6

This list covers Swiss armies from the revolt of Schwyz, Unterwalden, Uri and Lutzen against Count Rudolf of Hapsburg in 1240 until the introduction of large number of pikes in response to reverses inflicted by men-at-arms dismounting to use their lances on foot as Sp (S). The initial revolt was defeated in 1244, as was another from 1245 -1251. 1291 saw the establishment of the "Eternal Alliance" of the forest cantons. Albert of Hapsburg regained control in 1298, but his death in 1308 provoked a long conflict during which the forest cantons won their independence by a succession of victories. Other cantons then joined the Confederacy to make a total of 8 by 1353. It can thus be seen that the Austrians were far from a pushover. Most Swiss successes against them were in difficult terrain and involved the skilful use of field defences and surprise flank attacks. The halberd was the most common weapon of the troops we call halberdiers, but axes and to a lesser extent two-handed swords and spears were also used. The requirement to be double based reflects their deep "Keil" formations. An overall commander was sometimes elected by the Confederate Council, but more often command was vested in a council of war in which no one was supreme, though they sometimes appointed an outsider as a figurehead. This is therefore an army that has generals' elements but no general figures, in effect being run by its shop stewards! The usual formation was a single deep block except for minor detachments, the threefold division into Vorhut, Gewalthut and Nachhut not vet having been introduced. Crossbowmen were used for skirmishing ahead, not for support from behind. Mounted crossbows can always dismount as Ps (O). At Laupen in 1338, the Bernese used men throwing stones to prepare their attack, but their retirement caused confusion.

42. ISLAMIC PERSIAN 1245 AD - 1393 AD and 1499 AD - 1520 AD

Dry. Ag 0. Rv, H(S), H(G), D, O, E, RGo, Rd, BUA.	
C-in-C - Irr Cv (S) @ 19AP	1
Sub-general - as above	1-2
Persian cavalry with bow - Irr Cv (O) @ 7AP	20-60
Turkomans - Irr LH (S) @ 7AP	0-8
Persian archers - Irr Bw (I) @ 3AP or Irr Ps (O) @ 2AP	8-16
Camp followers or levy foot - Irr Hd (O) @ 1AP	2-4
Only until 1393 AD:	
Upgrade generals with ghulam bodyguard to Reg Cv (S) @ 30AP	Any
Upgrade Persian cavalry as ghulams to Reg Cv (O) @ 8AP	0-20
Upgrade Persian cavalry to Cv (S) with lance and bow,	
and/or with horse armour @ 9AP if irregular, 10AP if regular	0-10
Only Karts (1245 AD to 1389 AD):	
Afghan archers - Irr Bw (O) @ 4AP or Irr Ps (O) @ 2AP	6-12
Afghan spearmen - Irr Ax (X) @ 3AP	6-12
Only Injuids (1303 AD to 1353 AD) or Muzaffarids (1314 AD to 1393 AD):	
Kurdish cavalry - Irr Cv (O) @ 7AP	0-6
Only Safavids (from 1499 AD):	
Upgrade Persian cavalry with lance and bow and horse armour to Irr Cv (S) @ 9AP	1/4-1/3
Upgrade Persian archers with emplaced spears to Irr Bw (O) (a) 4AP	0-1/2
opprade rensian archers with emplaced spears to in Bw (O) @ 4Ai	0-1/2

This list covers the ethnically Iranian dynasties that ruled as Ilkhanid vassals or emerged in the turmoil after the fall of the Ilkhanate and also the new Safavid dynasty that rose to supplant the White Sheep Turks in 1499. As well as the Safavids, it includes the Injuids of Fars, the Muzaffarids of Fars and Isfahan, the Sarbadarids of Sabzawar (1337 - 1381), and the Karts of Herat. The Injuids were conquered by the Muzaffarids, and the other dynasties were destroyed by Timur. Some may have used regular ghulam armies. The Karts were Afghans, descended from Ghurid officials, and used Afghan mercenary infantry for garrisons. Allied contingents drawn from this list need not contain otherwise compulsory foot.

43. LATER HUNGARIAN 1245 AD - 1526 AD

Cold. Ag 2. WW, Rv, H(G), RGo, Rd, BUA.	
C-in-C - Irr Kn (O) @ 20AP	1
Hungarian sub-general - as above	0-2
Szekeler sub-general - as above or Irr LH (S) @ 17AP	0-1
Hungarian nobles - Irr Kn (O) @ 10AP	2-10
Hungarians, Cumans, Jazyges or Ruthenians - Irr LH (F) @ 4AP	8-24
Szekelers - Irr LH (S) @ 7AP or Tartars - Reg LH (S) @ 7AP Hungarian spearmen - Irr Sp (I) @ 3AP	5-20 0-8
Hungarian, Croatian or Transylvanian archers - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP	0-8
Wagon laager for camp - TF (a) 1AP	0-10
Wallachian allies - List: Wallachian or Moldavian (Bk 4)	0-12
Moldavian allies - List: Wallachian or Moldavian (Bk 4)	
Only before 1308 AD:	
Downgrade Hungarian sub-generals to ally-generals, Irr Kn (O) @ 15AP	All
Cuman ally-general - Irr Cv (O) $@$ 12AP or Irr LH (F) $@$ 9AP	0-1
German city allies - List: Medieval German (Bk 4)	0-12
Only in 1285 AD:	0 12
Mongol allies - List: Golden Horde and Successors (Bk 4)	
Only from 1322 AD to 1435 AD:	
Bosnian ally-general - Irr Ax (O) @ 8AP	*1
Bosnian archers - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP or with shields, Irr Bw (O) @ 4AF	-
Only after 1340 AD:	0.12
Upgrade Bosnian ally-general to Irr Kn (O) @ 15AP	All
Bosnian nobles and mounted retainers - Irr Kn (O) @ 10AP	0-2
Only from 1370 AD to 1382 AD and from 1440 AD to 1444 AD:	• -
Polish allies - List: Later Polish (Bk 4)	
Only after 1395 AD:	
German or Bohemian armigeri - double based Reg Kn (I) @ 10AP if front element, 8A	P if rear
- From 1442 AD to 1490 AD:	4-12
- Other dates	0-6
Only the Crusade of Nicopolis 1396 AD:	
Crusader ally general - Irr Kn (S) @ 17AP	1
Crusader knights - up to 2/3 French Irr Kn (S) @ 12AP, remainder Irr Kn (O) @ 10AP	3-6
Crossbowmen - Irr mtd Bw (O) @ 5AP	0-2
Hospitaller knights and sergeants - Reg Kn (S) @ 15AP	1-2
Crusader ribauds - Irr Hd (S) @ 2AP	0-1
Only after 1441 AD:	
Upgrade C-in-C and nobles to Reg Kn (S) as royal banderium, @ 35AP if C-in-C,	. .
otherwise 15AP	0-3
Serbian hussars - Irr LH (O) @ 5AP	3-6
Armati - Reg Bd (O) @ 7AP	0-8
Upgrade Hungarian spearmen to clipeati - Reg Sp (O) @ 5AP	1/2-A11 0-6
Crossbowmen - Reg Ps (O) @ 2AP German or Bohemian Handgunners - Reg Ps (S) @ 3AP	5-10
War wagons - Reg WWg (O) @ 10AP	0-6
Light guns - Reg Art (I) @ 4AP	0-2
Only from 1442 AD to 1446 AD:	• -
Transylvanian or Crusading peasants - Irr Hd (S) @ 2AP	0-15
Serbian allies - List: Serbian Empire (Bk 4)	0 10
Only from 1442 AD to 1490 AD:	
Mercenary sub-general - Reg Kn (I) @ 30AP	0-2
Only after 1490 AD:	-
Upgrade generals and/or nobles to Reg Kn (O) @ 32AP if general, otherwise 12AP	Any
German or Italian pikemen - Reg Pk (O) @ 4AP	0-4

This covers Hungarian armies from the aftermath of the disaster of Mohi until the disaster of Mohacs. They became the main shield of Christian Europe against the Turks, a task for which their combination of plate-armoured nobles with light horse archers made them eminently suitable. The period before the refounding of the kingdom under the house of Anjou in 1308 was one of anarchy, hence the compulsory ally-generals. The period from 1441 AD is that of the great Janos Hunyadi, his son Matthias Corvinus and the famous "Black Army" of mercenaries. Matthias's successor Laszlo VI (Vladislav II of Bohemia) was unable to finance this, and it was largely replaced by paid feudal troops who may or may not deserve regular status. Ps archers, crossbowmen and Handgunners can give rear support to armati or clipeati. Szekelers must outnumber Tartars by at least 2:1. The royal banderium can only be used if the C-in-C is the king. Mercenary sub-general, if present, must command all Szekelers, but can also command other troops. A Cuman ally-general can only command Cumans. A Crusader ally-general can command only Crusaders, Hospitallers and crossbowmen, and must command all French Crusader Kn. A late 15th century writer describes the Hungarian "scorpion" formation in which war wagons supported by cavalry moved against the enemy wings while the infantry in square formation held the centre in front of the camp, which was fortified with ordinary wagons. Minima marked * apply only if any Bosnians are used. Bosnians cannot be used with other allies.

44. POST-MONGOL RUSSIAN 1246 AD - 1533 AD

Cold. Ag 1. Rv, Wd, M, BUA.	
C-in-C - Irr Cv (S) @ 19AP	1
Sub-general - as above	0-2
Dvor - Irr Cv (S) @ 9AP	4-8
Lesser boyars and their retainers - Irr Cv (O) @ 7AP	18-40
Militia spearmen - Irr Sp (I) @ 3AP	*4-8
Militia bowmen - Irr Bw (I) @ 3AP	*4-8
Peasants - Irr Hd (F) @ 1AP	0-2
Gulay gorod - TF @ 2AP	0-12
Upgrade all gulay gorod to Irr WWg (O) @ 8AP	0-6
Only before 1380 AD:	
Lithuanian allies - List: Lithuanian or Samogitian (Bk 4)	
Golden Horde Mongol allies - List: Golden Horde and Successors (Bk 4)	
Only after 1380 AD:	
Tartars - Reg LH (S) @ 7AP or Cossacks - Irr LH (S) @ 7AP	0-12
Cossack foot - Irr Ps (O) @ 2AP	0-8
Light guns - Reg Art (I) @ 4AP	0-1
Boats - Irr Bts (O) @ 2AP [Ps]	0-4
Only after 1480 AD:	
Upgrade militia Bw or Cossack Ps to handgunners - Irr Ps (S) @ 3AP	0-12

This list covers the armies of north-eastern Russia from the Mongol conquest until the accession of Ivan the Terrible. Dvor were the paid troops of the prince and the more important boyars. This period saw the rise of Moscow to preeminence under the protection of Mongol overlordship. Muscovite rulers were said to be skilled in both ingratiating themselves with the Mongols and in discreetly leaving Mongol armies on the eve of battle. Open war in 1380 saw the defeat of the Mongols at the epic battle of Kulikovo. Russian armies of this period were predominantly of cavalry, and their tactics were similar to those of the Mongols. The usual formation consisted of an advance guard, a strong centre, the "bolshoi polk", left arm, right arm and rearguard, the right arm having seniority over the other divisions. Infantry were first used for offensive campaigning by Ivan III in 1469 and provided almost exclusively by town militia in separate bodies of spearmen and bowmen and by Cossacks. Cossacks ("adventurers") were originally renegade Tartars and Russian peasants not on the tax rolls or who refused to work another's land and were free associations who settled along distant borders in areas of uncertain control. Although we think of them today as light horse, they at this time provided many infantry and specialised in boat work, taking quickly to handguns when these became available. Minima marked * apply only if any infantry are used or after 1468. It is doubtful if the gulay gorod "walking fort" should be classed as WWg as it had to be set up, with loopholed wall sections having to be removed from the wagons and fastened between them. If it is, 1 element of WWg replaces 2 sections of TF to give the same frontage. Contrary to received opinion, it seems to have played no significant part in any major battle of the period.

45. MAMLUK EGYPTIAN 1250 AD - 1517 AD

Dry. Ag 2. WW, E, RGo, M, D, Rd, BUA.	
C-in-C - Reg Cv (S) (a) 30AP	1
Sub-general - as above	1-2
Royal Mamluks - Reg Cv (S) @ 10AP	5-8
Amirs' mamluks - Irr Cv (S) @ 9AP	7-16
Halqa - Reg Cv (O) \hat{a} 8AP	0-10
Turkomans - Irr LH (S) @ 7AP	3-10
Kurdish, Syrian or Ashir cavalry - Irr Cv (O) @ 7AP	0-3
Bedouin Arabs - Irr LH (O) @ 5AP	0-8
Ashir or other archers - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP	0-6
Jabaliyya or other javelinmen - Irr Ax (O) @ 3AP	0-6
Crossbowmen - Reg Bw (O) @ 5AP	0-2
Naffatun - Reg Ps (X) @ 6AP	0-4
Upgrade Royal Mamluks or naffatun to mounted incendiaries - Reg Kn (F) @ 11AP	0-1
Ghazis - Irr Wb (F) @ 3AP	0-3
Mutatawwi'a - Irr Hd (S) @ 2AP	0-1
City rabble and 'abid - Irr Hd (O) @ 1AP	0-4
Stone-throwers - Reg Art (S) @ 10AP	0-2
Only before 1286 AD:	
Syrian Ayyubid allies - List: Syrian (Bk 4)	
Only before 1302 AD:	
Frankish knights - Irr Kn (O) @ 10AP	0-1
Only after 1262 AD:	
Shayani - Reg Gal (O) @ 3AP [Bw]	0-2
Only after 1315 AD:	
Downgrade halqa to Irr Bw (O) @ 4AP	Any
Only after 1340 AD:	
Replace stone-throwers with light guns - Reg Art (I) @ 4AP	All
Upgrade Gal (O) to gun-armed Reg Gal (S) @ 4AP [Bw]	0-1
Only after 1490 AD:	
Replace naffatun with handgunners - Reg Ps (S) @ 3AP	All

This list covers Egyptian armies from the overthrow of the Ayyubids until the disaster of Raydaniyah in 1517. The Mamluks were a self-perpetuating corporation of slave soldiers, originally Kipchaks but latterly mainly Circassians, bought in youth and converted to Islam. Having made themselves indispensable, they seized political power and appointed their own sultans. They were divided into Royal Mamluks, comprising the current sultan's guards regiment and those of previous sultans, and the mamluks of the amirs. Only the Royal Mamluks trained thoroughly and drilled. The halqa were elite non-mamluk cavalry recruited from Arabs, native Egyptians and the sons of mamluks, who, not being steppe-bom, were thought inferior to their fathers. They may all have been lightly armoured horse archers or some may have been traditional lancers. Only those halga in Syria outlasted the 13th century as a competent fighting force, those in Egypt having deteriorated into undisciplined home defence infantry archers. Mongol refugees after 1261 called Wafidya "immigrants" did qualify as steppe-born. They were not formed into separate units, their loyalty en masse being slightly suspect, but were instead drafted into the Royal Mamluks and halqa. Other auxiliary cavalry were deployed on the wings of the army, usually with Turkomans on one wing and Bedouin on the other. Although mamluk period manuals prescribe the occasional dismounting of cavalry, in practice mamluks utterly refused to do so. They also disdained infantry, using it only for sieges, garrisons, the fleet, hunting hill robbers or if there was a desperate shortage of men. If it was employed, it would be on the army's defensive wing, guarding the baggage or occupying BUA. The Tabardariyya axe-bearing guard fought in open battle with bows as ordinary Royal Mamluks, 500 mounted naffatun were used unsuccessfully at the battle of Salamiyet in 1299 and could have been Royal Mamluks, since these trained in the use of incendiaries from horseback. Ashir were probably Druse from the Lebanon whose normal occupation was banditry, but who were also willing to serve for pay. Ghazis were seekers for paradise and mutatawwi'a for loot. Jabaliyya were fierce javelinmen from Aleppo. Handgunners were usually black slave troops, but a unit recruited to fight the Portuguese in 1510 also included Turkomans, Persians and Egyptians and was unofficially referred to as the al-Askar al-Mulaffaq "the army of patches". Baybars I's attempt to recreate an Egyptian fleet had only limited success.

46. ILKHANID 1251 AD - 1355 AD

Warm. Ag 3. Rv, H(S), H(G), Wd, O, RGo, BUA.	
C-in-C - Reg Cv (S) (a) 30AP	1
Sub-general - as above or Reg LH (S) @ 27AP	1-3
Guard cavalry - Reg Cv (S) (a) 10AP	1-8
Mongol cavalry - Reg LH (S) @ 7AP	19-38
Turkomans - Irr LH (S) @ 7AP	0-12
Stone-throwers - Reg Art (S) @ 10AP	0-2
Bolt-shooters - Reg Art (O) @ 8AP	0-1
Ditch to protect camp - TF @ 1AP	0-12
Kart, Injuid or Muzaffarid allies - List: Islamic Persian (Bk 4)	0-16
Armenian allies - List: Cilician Armenian (Bk 3)	
Only after 1254 AD:	
Kurdish cavalry - Irr Cv (O) @ 7AP	0-2
Kurdish javelinmen - Irr Ax (O) @ 3AP	0-4
Only from 1256 AD to 1261 AD:	
Golden Horde allies - List: Golden Horde and Successors (Bk 4)	
Only from 1256 AD to 1276 AD:	
Rum Seljuq allies - List: Seljuk Turk (Bk 3)	0-12
Only from 1257 AD to 1327 AD:	
Georgian allies - List: Georgian (Bk 3)	0-16
Only in 1260 AD:	
Syrian allies - List: Syrian (Bk 4)	
Only from 1260 AD to 1308 AD :	
Frankish knights - Irr Kn (O) @ 10AP	0-2
Upgrade Frankish knights to Hospitallers - Reg Kn (S) @ 15AP	0-2
Frankish Turcopoles - Reg Cv (O) @ 8AP if Hospitaller, Irr Cv (O) @ 7AP if not	0-1
Frankish crossbowmen - $\operatorname{Reg Bw}(O)$ @ 5AP if Hospitaller, Irr $\operatorname{Bw}(O)$ @ 4AP if not	0-4
Only after 1335 AD:	
Downgrade sub-generals to ally-generals, Reg Cv (S) @ 20AP	All

This list covers the army of the Mongol Il-Khans from the appointment of Hülegü as viceroy of Iran with orders to destroy the Assassing of Alamut and bring the Khalif of Baghdad to heel, until the demise of the khanate. During this time it destroyed the Abbasid Khalifate, crushed the Turks and was held back from Egypt only by an epic battle with the Mamluks. A renewal of the failed western expansion was then deterred by the alliance of the Mamluks with the Golden Horde, Byzantines and Genoese. After the death of Abu Sa'id in 1335 Iraq split off under the Jalavirids, while the rump fell into chaos under squabbling Chopanid nominees with civil war endemic. Throughout its existence, the centre of its power remained the grasslands of Azerbaijan, with administrative capitals at Maragha and Tabriz. Despite the elaborate armour often shown in contemporary art, most Ilkhanid Mongols continued to be unarmoured horse archers, the majority being Mongolized Kipchaks, and the epic lost battle with the Mamluks at Ayn Jalut in 1260 was mainly one of unarmoured light horse against armoured cavalry. Mongol cavalry, including generals and guard, can always dismount to fight on foot Some Crusaders were nominally allied to the Mongols from 1244. Bohemond VI of Antioch and Tripoli helped storm Aleppo in 1260 together with his father-in-law King Hethum of Armenia, but the other Crusader states vainly opposed Mongol raids later that year in a number of disastrous minor encounters and remained neutral in the Ayn Jalut campaign. Hospitallers fought as Mongol allies at Horns in 1281. Small numbers of other western knights may have been employed at other times as mercenaries, but the western mercenaries the Ilkhanids really prized were the crossbowmen. After the battle of Wadi-al Khazindar in 1299, an alliance was mooted that might have regained Syria for the Crusaders, and when the Ilkhanids captured Jerusalem in 1308, there were again rumours that it would be handed over in exchange for a Christian alliance. The Rum Seljuk Sultanate was a vassal state of the Ilkhanids from 1256 and finally collapsed in 1276. Rum allies were at best resigned. Armenians could be quite enthusiastic due to their dislike for the Muslim Mamluks. Georgians were always enthusiastic, even when nominally subject to the Ilkhanids' enemies, but possibly touchy enough to change sides if slighted.

47. GOLDEN HORDE AND SUCCESSORS 1251 AD - 1556 AD

Cold. Ag 2. Rv, H(G), RGo. Golden Horde only: Wd, BUA. Crimean Khanate only: WW, H(S), BUA.	
C-in-C - Reg Cv (S) @ 30AP	1
Sub-general - as above or Reg LH (S) @ 27AP	0-2
Tartar heavy cavalry - up to half Reg Cv (S) @ 10AP, remainder Reg Cv (O) @ 8AI	
Tartar light cavalry - Reg LH (S) @ 7AP	13-40
Bessermeni - Irr Bw (I) @ 3AP	0-8
Only Golden Horde:	
Cuman cavalry - Irr LH (F) @ 4AP	8-12
Alan, Circassian, Burta, Mordvin or Karburdian cavalry - Irr LH (S) @ 7AP	2-8
Italian "Fryazei" crossbowmen - Reg Bw (O) @ 5AP	0-2
Russian subject allies - List: Post-Mongol Russian (Bk 4) Up to 2 cont	tingents, each 0-13
Only Golden Horde or Crimean Khanate:	
Armen - Irr Bw (O) @ 4AP	0-4
Only Golden Horde or Khanate of Kazan:	
Siberian tribesmen - Irr Wb (F) @ 3AP	0-4
Only Golden Horde before 1259 AD:	
Georgian allies - List: Georgian (Bk 3)	0-16
Only Golden Horde after 1340 AD:	
Upgrade Cuman Irr LH (F) to Reg LH (S) @ 7AP	Any
Naffatun - Irr Ps (X) @ 6AP	0-2
Boats - Irr Bts (O) @ 2AP [Bw]	0-4
Only Crimean Khanate after 1475 AD:	
Ottoman allies - List: Ottoman (Bk 4)	

The Golden Horde was named from the gilded tent of its first ruler, Chinggis's grandson Batu. As a result of the original Mongol conquest of the Volga Bulgars in 1237, the great principality of Vladimir in 1238, the Cumans and Alans in 1239, and the south-Russian principalities in 1240, with the subsequent reduction of the north-Russian principalities to vassal status, the Horde ruled an enormous territory. Although nominally part of the Mongol Empire until 1266, it was for practical purposes independent from the establishment of Batu's rule at Sarai in 1251, though at first sending contingents to help the Ilkhanids. From 1262 it was usually at war with or at least hostile to the Ilkhanids and in alliance with the Mamluks, Byzantines and Genoese. It was more conservative than the other Mongol successor states and its peoples remained mostly nomadic. Most of its original "Mongols" had in fact been conscripted from other Asian tribes. This list covers the "Tartar" armies of the Golden Horde until its final overthrow by the Crimean Khanate in 1502. It also covers the Golden Horde's successor states, including the Khanates of the Crimea (from 1430), Kazan (from 1445) and Astrakhan (from 1466) until the latter two fell to the Russians under Ivan the Terrible in 1552 and 1556 respectively. The Crimean Khanate continued for another two centuries. The Crimean Tartars became vassals of the Turks in 1475, having previously been vassals of Lithuania. Sigmund Horberstein, an Imperial ambassador of the early 16th century, notes that the Russians called the Tartar battle tactic "khorovod" (dance). It consisted of two "arrow strikes" by light cavalry followed by a charge by armoured cavalry, the best of which rode barded horses, and many of whom carried a lance. Cuman LH (F) cannot be used after 1400, the Mongols and Cumans having by then largely merged, and speaking Cuman-Turkish. Russian historians think this process had been completed before the battle of Kulikovo in 1380. Golden Horde armies could include quite large numbers of infantry, mostly the inhabitants of Muslim towns of the Horde, called "Bessermeni", who were rated brave if unenthusiastic, and a lesser number of "Armen" or Crimean Armenians considered skillful and firm. Circassian mountaineers served only as cavalry. Other foot were provided by the Italian colonies of the Crimea, notably the Genoese of Kaffa, though at Kulikovo these were absent in a huff, leaving only mercenaries paid for by the Venetians of Azov. Although well supplied with artillery and handguns for their own defence, the Italians did not provide these to the Tartars, keeping them as an "ace in the hole". There is no account of Tartar cavalry dismounting to fight on foot in open battle during this period.

48. YUAN CHINESE 1260 AD - 1368 AD

Cold. Ag 2. WW, Rv, H(S), H(G), RGo, Rd, BUA. C-in-C - Reg Cv (S) @ 30AP Sub-general - as above Guard cavalry - Reg Cv (S) @ 10AP Chinese guards - Reg Bd (O) @ 7AP Meng-ku chun Mongol cavalry - up to half Reg Cv (O) @ 8AP, remainder Reg LF Han-chun swordsmen - Reg Bd (F) @ 7AP Han-chun archers or crossbowmen - Reg Bw (O) @ 5AP Skirmishing spearmen or javelinmen - Reg Ps (S) @ 3AP, or archers - Reg Ps (O) @ Counter-weight stone-throwers - Reg Art (S) @ 10AP Korean allies - List: Koryo Dynasty Korean (Bk 3) Only before 1262 AD:	6-16 6-16
Li T'an Chinese allies - List: Jurchen-Chin (Bk 4)	
Only before 1266 AD: Mongol allies - List: Mongol Conquest (Bk 4)	
Only before 1275 AD: Han-chun cavalry - Reg Cv (I) @ 6AP	0-5
Kan-t'ao-lu infantry - Irr Ax (O) @ 3AP or Irr Hd (F) @ 1AP	0-16
Only before 1330 AD:	0.10
Uighur allies - List: Central Asian Turkish (Bk 3)	
Only after 1265 AD:	
Tower ships - Irr Shp (S) @ 4AP [Bd, Bw or Ax]	0-6
T'an-ma-ch'ih chun Mongol allies - List: Later Nomadic Mongol (Bk 4)	
Only after 1275 AD:	
Hsin-fu-chun infantry - Irr Bd (I) @ 4AP	0-16
Upgrade Hsin-fu-chun Bd (I) to Irr Bw (X) @ 5AP	All/0
Hsin-fu-chun crossbowmen - Irr Bw (I) @ 3AP or Irr Ps (O) @ 2AP	0-16
Hsin-fu-chun firelance detachments - Irr Ps (X) (a) 6AP	0-2
Southern tribal cavalry - Irr Cv (O) @ 7AP Southern tribal infantry - Irr Ax (O) @ 3AP or Irr Ps (O) @ 2AP	0-8 0-8
Handgunners - Reg Ps (S) @ 3AP	0-8
Only from 1279 AD to 1294 AD:	0-4
Replace C-in-C on horse with C-in-C on elephant, Irr El (O) @ 26AP	0-1
Only in 1293 AD:	01
Javanese allies - List: Indonesian or Malay (Bk 4)	
Only after 1300 AD:	
Downgrade Meng-ku chun Mongol Cv and LH to Reg Cv (I) @ 6AP	1/2-All
Light guns - Reg Art (I) @ 4AP	0-2
Only from 1340 AD:	
Rocket troops - Reg Art (I) @ 4AP	0-4

This list covers Mongol armies in China from the accession of Kubilai to the overthrow of the Yuan dynasty by the Ming. Kubilai's dubious election was disputed until 1266, with various Mongol leaders supporting him or his steppe rival Arik Boke and sometimes changing allegiance. Guard cavalry may be Mongol, Manchurian, Turkish, Alan or even Russian, all being assumed to fight with lance and bow. The 5 rank formation, 2 armoured and 3 not, usually ascribed to the Mongols is in fact based on a Jurchen army of 1120. This list allows both that and alternative interpretations. Meng-ku chun were Mongols directly subordinate to the Emperor. T'an ma-ch'ih chun were steppe Mongols under semi-independent nobles. Downgrading Meng-ku chun after 1300 reflects their settlement in areas unsuitable for horse breeding, the unfortunate results of which are attested by contemporaries. Mongol cavalry can always dismount to fight on foot. Between 1260 and 1294 only, Guard and Meng-ku chun Cv can be supported by Ps (S), representing picked Chinese spear or javelin-armed troops carried on the cruppers of the Mongol horses, a tactic attested once in Kubilai's reign. Li T'an was the son of a Sung commander who had deserted to the Mongols in 1227. He inherited his father's position and commanded ex-Chin troops on the Mongols' behalf before getting ideas of his

own in 1262. His contingent has the same special characteristics as the Chinese warlord allies in the Mongol Conquest list. Han-chun were North Chinese, taken over after the fall of the Chin in 1235, and Hsin-fu-chun ex-Sung troops, incorporated after the conquest of the south. Han-chun were considered better. Upgrading Hsin-fu-chun to Bw (X) represents the archers and spear-armed pavisiers of the Japanese "Invasion Scroll", variously identified as South Chinese or Koreans. These need not reflect former Chinese or Korean practice as Meng Hung mentions similar shields used by Mongols for siege work. Kan-t'ao-lu or "looters" were irregular Chinese auxiliaries. Javanese cannot be used with any other allies or with Southern tribes. Uighur cannot be used with Koreans or Southern tribes. Handgunners are first recorded in 1288 but were possibly used earlier. Although hand-held rockets may have been used by the later Sung, rockets are not attested in battle under the Yuan until 1340. The first direct evidence of Chinese cannon is from 1322, but early types are identical to early 14th century European types probably transmitted from China. Different grades of Bd cannot give rear support to each other.

49. ANATOLIAN TURKOMAN 1260 AD - 1515 AD

Coastal emirates: Warm. Ag 2. WW, Rv, H(G), O, E, BUA, Rd, RGo.	
Inland emirates: Cold. Ag 2. Rv, H(S), H(G), E, BUA, Rd, RGo.	
C-in-C - Irr Cv (O)@ 17AP	1
Turkoman ally-general - Irr Cv (O) @ 12AP or Irr LH (S) @ 12AP	1-2
Nobles - Irr Cv (O) @ 7AP	6-15
Upgrade generals or nobles to Irr Cv (S) with horse armour, @ 19 AP if C-inC,	
MAP if ally-general, otherwise 9AP	0-8
Tribesmen - Irr LH (S) @ 7AP	18-45
Infantry - up to half spearmen, Irr Ax (O) @ 3AP,	
remainder archers - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP or Irr Bw (O) @ 4AP	0-30
Akhiya town militias - Irr Hd (O) @ 1AP	0-8
Only after 1380 AD:	
Guns - up to half heavy, Reg Art (S) @ 10AP, remainder light, Reg Art (I) @ 4AP	0-6
Only Coastal emirates:	
Barges and other small craft - Irr Bts (O) @ 2AP [Ax, Bw, Ps]	0-4
Only Menteshe after 1300 AD:	
Azab marines - Reg Bw (O) @ 5AP	1 per Gal
Upgrade Bts to galleys, Reg Gal (O) @ 3AP [Bw]	0-2
Only Karaman or Kastamonu after 1360 AD:	
Trapezuntine allies - List: Trapezuntine Byzantine (Bk 4)	
Only Dulgadir from 1300 AD to 1484 AD and from 1492 AD to 1515 AD:	
Mamluk allies - List: Mamluk Egyptian (Bk 4)	
Only Dulgadir from 1485 AD to 1491 AD	

Only Dulgadir from 1485 AD to 1491 AD:

Ottoman allies - List: Ottoman (Bk 4)

This list covers the Turkoman emirates of Asia Minor from the emergence of the first of them when the Mongols weakened the Seljuq Sultanate of Rum, until the last was conquered by the Ottomans. It includes coastal emirates such as Aydin, Menteshe and Saruhan and inland emirates such as Karaman, Kastamonu and Dulgadir. Most of these were subdued by the Ottomans in the 14th century, reconstituted by Timur, and reconquered by the Ottomans in the 15th century. Many Turkoman cavalry wore leather lamellar armour, richer men wearing iron mail or lamellar armour with arm and leg defences. Coastal emirates raided westward by sea during the 14th century with large numbers of men carried in barges and other presumably small craft. The original Azabs were salaried marines. Kastamonu had 400 "large and small" guns in 1461. Dulgadir was allied with the Mamluks from the early 14th century until its fall, except for the war of 1485-1491 when the Mamluks tried to replace the Dulgadir emir, who called in the neighbouring Ottoman provincial governor.

50. PALAIOLOGAN BYZANTINE 1261 AD - 1384 AD

Warm. Ag 1. WW, Rv, H(S), H(G), Wd, O, V, E, M, RGo, Rd, B	BUA.
C-in-C - Reg Cv (O) @ 28AP	1
Sub-general - as above	1-2
Vardariotai guards - Reg LH (F) @ 4AP	*1-6
Tzakones, Catalans or similar guards - Reg Ax (S) @ 5AP	* 1-6
Kavallarioi - Reg Kn (O) @ 12AP	2-3
Stratiotai - Reg Cv (O) @ 8AP	8-12
Kontaratoi - Reg Sp (I) @ 4AP	0-8
Archers - Reg Ps (O) @ 2AP or Reg Bw (I) @ 4AP	8-24
Upgrade archers to Mourtatoi or Gianitzaroi guards - Reg Bw (O) (
Peasants or town militia - 1/2 Irr Ps (O) @ 2AP, 1/2 Irr Ax (I) @ 2	
Tzakones, Gazmouloi or similar Byzantine marines - Reg Ax (S) @	5AP 1 per Byzantine Gal
Byzantine ghaleia - Reg Gal (F) @ 2AP [Ax (S)]	0-2
Genoese - up to 1/4 Reg Bd (S) @ 9AP, rest Reg Bw (O) @ 5AP	1 per Genoese Gal
Genoese galleys - Reg Gal (F) @ 2AP [Bd or Bw]	0-4
Turkish allies - List: Anatolian Turkoman (Bk 4) if before 1348, o	therwise Ottoman (Bk 4)
Only before 1292 AD:	
Cumans - Irr LH (F) @ 4AP	8-18
Only before 1306 AD:	
Tourkopouloi - Reg LH (S) @ 7AP	1-6
Only from 1282 AD to 1283 AD:	
Golden Horde Mongol allies - List: Golden Horde and Successors	(Bk 4)
Only from 1301 AD to 1305 AD:	
Alan allies - List: Alan (Bk 2)	
Only from 1327 AD to 1352 AD:	
Serbian allies - List: Serbian Empire (Bk 4)	
Bulgar allies - List: Later Bulgar (Bk 4)	0-12
list starts with Mikhail VIII Palaiologos's reorganisation of the	Byzantine army and ends with the

This list starts with Mikhail VIII Palaiologos's reorganisation of the Byzantine army and ends with the defeat at Chortiates in 1384 of the last field army outside the Morea. It does not cover the sieges ending with the fall of Constantinople in 1453. Varangians no longer took the field, but the Vardariotai still did at least as late as 1272. They were supplemented by light armed infantry, firstly Tzakones from the Morea, then a succession of similar troops. The supply of Franks had dried up with the fall of the Latin Empire, leaving only the Tourkopouloi as permanent mercenary troops. Armoured cavalry were now mostly reservists holding individual pronoiai, grants not of land but of its rents. Most were called stratiotai, rode small horses, wore moderate armour and fought with lance, sword or mace and a long triangular shield if from western provinces, more often a round shield if from Asia, Thessaloniki or Constantinople. About a fifth were instead called kavallarioi, added the prefix "Syr" to their name and are assumed to be the descendents of Frankish knights. We also assume them to be the minority attested by Conrad of Montferrat with large destriers and heavier armour and to be the men Kantakouzenos calls "kataphraktoi". Other troops served unpaid in return for land grants, usually settled in groups by the government. These included soldier-farmers working their own plots, such as the Tzakones that provided most of the marines and the native Thelematarioi, and nomad horsemen allocated tribal tracts in return for military service, such as Cumans or Alans. Remaining sources of men included supplementary infantry such as peasants or shepherds conscripted to chase raiders like those under Ioannis Choiroboskos "John the swineherd" in 1304 and town dwellers holding walls, temporary mercenaries, and allied contingents such as the Turks that were increasingly relied on and who served only under their own leaders. Fortress garrisons were permanent paid troops responsible to the governors of their themes and did not serve in field armies. Most infantry were now lightly equipped archers, but some archers are depicted wearing armour and shooting from inside a shield in Turkish fashion. These may have been based on the Mourtatoi Turkish foot guards. "Gianitzaroi" is so similar to "Janissary" ("Yeni-ceri") as to also imply an archer guard. Minima marked * apply only if the C-in-C is the Emperor. Since the Catalan Company (1302 - 1305) and Amadeus of Savoy (1366 - 1367) fought independently, they are not included here as allies.

51. MOREAN BYZANTINE 1262 AD - 1460 AD

Warm. Ag 1. WW, Rv, H(S), H(G), O, V, RGo, Rd, BUA. C-in-C - Reg Cv (O) @ 28AP Sub-general - as above Stratiotai - Reg Cv (I) @ 6AP Garrison spearmen - Reg Sp (I) @ 4AP Garrison archers - Reg Bw (I) @ 4AP Peasant archers - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP	1 1-2 8-12 0-8 8-12 20-40
Maniates, Tzakones or Melingoi hillmen - Irr Ax (O) @ 3AP or Irr Ps (S) @ 3AP Only before 1347 AD:	0-16
Byzantine allies - List: Palaiologan Byzantine (Bk 4)	
Only from 1262 AD to 1263 AD: Genoese galleys - Reg Gal (F) @ 2AP [Sp, Bw, Ps] Genoese horse transports - Irr Shp (I) @ 2AP [Cv] Turkish allies - List: Anatolian Turkoman (Bk 4)	0-3 0-4
Only after 1315 AD: Frankish feudal vassals - Irr Kn (O) @ 10AP	0-4
Only from 1347 AD to 1458 AD:	01
Albanian ally general - Irr LH (O) @ 10AP or Irr Cv (O) @ 12AP	*1
Albanians - up to 1/4 archers, Irr Ps (O) @ 2AP, up to 1/4 javelinmen, Irr Ax (O) @ 3A remainder Irr LH (O) @ 5AP	P, 12-30
Only from 1382 AD to 1394 AD and from 1453 AD to 1454 AD: Turkick allian Lint: Ottoman (Dlr 4)	
Turkish allies - List: Ottoman (Bk 4) Only from 1445 AD to 1450 AD: Burgundians - Irr Kn (O) @ 10AP Only from 1459 AD to 1460 AD:	0-2
Papal-supplied Italian mercenaries	
- men-at-arms, Reg Kn (O) @ 12AP or crossbowmen, Reg Bw (O) @ 5AP	0-2

This list covers Byzantine armies in southern Greece from their first regaining a foothold from the Romanian Franks until the Ottoman conquest. After 1349 it represents the semi-independent Despotate of the Morea. This retained an economic base long after the rest of the Empire had shrunk to a 20 mile radius around Constantinople, continued to field substantial armies and in fact only reached its greatest extent as late as 1432. Although frequently aided by the central government while this still could, the Despotate did not return the favour when it was the stronger. This may have been because it had only a few full time troops, mostly garrisoning fortresses; the bulk of the army being provided by relatively inept or unenthusiastic pronoia cavalry and peasant infantry. The Despot and his bodyguard are reported trying to acquire Turkish horse archery skills on a visit to Constantinople in 1433, so some cavalry at the end of the period may have been bow-armed. A few minor Frankish nobles came to terms with the Byzantines and served in the army. Melingoi and Tzakones were hill dwellers given to banditry, and Maniates to piracy. Most of the Albanian immigrants of 1347 and after fought as cavalry. The minimum marked * applies if more than 12 Albanian elements are used. Although few, the 300 Burgundians that arrived in 1445 were considered an important reinforcement. They can always dismount as Bd (S). Genoese ships and galleys can only transport Byzantines and/or Turkish allies.

52. LATER NOMADIC MONGOL 1266 AD - 1508 AD

Eastern Mongols, Cold. Others, Dry. Ag 3.	
Rv, H(G), D, RGo. Eastern Mongols add H(S), H(G). Jagatai before 1363 add O, E, BUA, Rd.	
C-in-C - Reg Cv (S) @ 30AP	1
Sub-general - as above or Reg LH (S) @ 27AP	0-2
Mongol cavalry - up to half Reg Cv (O) @ 8AP, remainder Reg LH (S) @ 7AP	24-60
Upgrade Cv (O) to Reg Cv (S) @ 10AP with lance as well as bow, and/or with horse armour	0-1/2
Serfs and camp-followers - Irr Hd (O) @ 1AP	0-4
Downgrade generals and Mongol cavalry to Irregular, @ 19AP if Cv (S) general,	
17AP if LH (S) general, otherwise @ 9AP if Cv (S), @ 7AP if Cv (O), @ 7AP if LH (S)	All/0
Only Jagatais before 1363 AD:	
Downgrade sub-generals to Mongol ally-generals - Reg Cv (S) @ 20AP	All
Transoxanian Tajik levies - up to 2/3 Irr Bw (I) @ 3AP, remainder Irr Hd (O) @ 1AP	0-15
Transoxanian Turkomans - Irr LH (S) @ 7AP	0-6
Only Jagatais in 1320 AD:	
Ilkhanid allies - List: Ilkhanid (Bk 4)	
Only Jagatais from 1351 AD to 1360 AD:	
Kart allies - List: Islamic Persian (Bk 4)	
Only Jagatais in 1365 AD:	
Downgrade Cv or LH who have lost their horses to demoralised infantry, Irr Bw (I) @ 3AP	0-1/2

This list covers all steppe-based Mongol armies after the period of the great Mongol conquests, with the exception of the Golden Horde and its successors in Russia. It provides enemies for the Yuan, Ming and Timurids. It includes Kubilai's steppe-based rivals such as Kaidu; the "Eastern Mongols" or "Northern Yuan" in Mongolia itself after the Yuan were driven from China; the Oirats who fought against the Ming in the 15th century; the Jagatais of Central Asia who split into Transoxania and Moghulistan about 1343, lost Transoxania to Timur and Mir Husain in 1363, but survived in Moghulistan until they were chased further east by the Uzbeks in 1508; the Uzbek offshoot of the Golden Horde who took Transoxania (now Uzbekistan and Tajikistan) from the Timurids; and the Turco-Mongol Kazakhs, "adventurers" who separated from the Uzbeks in the 1460s. Probably some armies retained or revived training and discipline to regular standards, while others declined. Timur's creation of a highly disciplined army from Transoxanian Jagatai tribesmen suggests that they had retained the old discipline right through the 14th century, while by contrast the Kazakhs were barbarous and unruly tribesmen. Eastern Mongol discipline probably declined with the breakdown of authority after the murder of Toghan Temur Khan in 1388. Jagatais and Ilkhanids co-operated in 1320 against a Jagatai rebel who had briefly gone over to the Ilkhanate only to rebel again. The Transoxanian wing of the Jagatais subdued the Karts of Herat in 1351, but control was probably lost by the time the Moghulistani wing briefly recovered Transoxania in 1360. Internal alliances among the Jagatais shifted with bewildering speed without creating permanent grudges. In the unsuccessful siege of Samarkand in 1365 many of the Jagatai troops lost their horses to disease and had to march home on foot; we assume that this involuntary foot-service affected discipline and morale.

53. MIXTEC OR ZAPOTEC 1280 AD - 1521 AD

Dry. Ag 1. Ry, H(S), RGo, Rd, BUA.	
C-in-C -Irr Ax (O) @ 13AP	1
Sub-General - Irr Ax (O) @ 13AP	0-1
Ally-General - Irr Ax (O) @ 8AP	0-1
Upgrade Zapotec C-in-C or Zapotec ally-general to Irr Ax (S) @ 9AP if ally, otherwise HAP	0-1
Warriors - Irr Ax (O) @ 3AP	45-150
Peasant slingers - Irr Ps (O) @ 2AP	20-40
Only if Mixtec C-in-C:	
Upgrade Mixtec C-in-C to Priest - Reg Ax (O) @ 24AP	0-1
Temple soldiers - Reg Ax (O) @ 4AP	0-20
Only 1486 AD to 1495 AD:	
Toltec-Chichimec allies - List Tarascan and Toltec-Chichimec (Bk 4)	

Toltec-Chichimec allies - List Tarascan and Toltec-Chichimec (Bk 4)

The fall around 900 AD to internal subversion of the Zapotec empire centred on Monte Alban left a political vacuum that was filled from 1280 AD by two new alliances between groupings of Mixtec and Zapotec cities. The first was

centred on Zapotec Zaachila and the second on Mixtec Cuilapan. These were enemies of the Aztecs during the latters' aggressive campaigns between 1486 and 1495. They occasionally allied at this time with Toltec-Chichimec city states, which were mostly enemies of the Aztecs. The primary weapon of the warrior classes was the atlatl dart-thrower, which they used to maintain a distant combat, rather than to precede a charge like the Aztecs. Their usual side arm was a short copper axe or a stone-headed or obsidian-studded mace, but there is one reference to a Zapotec general fighting duels with a spear. Accordingly, a Zapotec general can be upgraded to Ax (S). Peasants with slings provided a dense skirmishing barrage. Zapotecs in a Mixtec army or Mixtecs in a Zapotec army must be commanded by an ally-general of their own nation. Mixtec armies were sometimes commanded by the priest of a major oracle dressed as his god, and often backed by a rigidly disciplined temple army. Temple soldiers can only be used in such a C-in-C's own command.

54. MEDIEVAL SCANDINAVIAN 1280 AD - 1523 AD

Cold. Ag 3 if Danish or Union. Ag 1 if Swedish or Norwegian. WW, Rv, H(S), Wd, RGo, M	· · · ·
C-in-C - Irr Kn (O) @ 20AP	1
Sub-general - as above	1-2
Feudal knights - Irr Kn (O) @ 10AP	2-14
Smaasvende - Irr Cv (I) @ 5AP	1-3
Skytter - Irr Cv (O) @ 7AP	2-6
Leidang - Up to 1/3 Irr Bw (O) @ 4AP or Irr Ps (O) @ 2AP, remainder Irr Bd (I) @ 4AP	*36-62
Longships - Irr Bts (S) @ 3AP [Bd or Bw]	0-4
Only Danish armies before 1350 AD:	
Panzenar billmen or German halberdiers - Reg Bd (O) @ 7AP	1-4
German clerical or free canton allies - List: Medieval German (Bk 4)	
Only after 1304 AD:	
Exchange longships for cogs - Irr Shp (S) @ 4AP [Bw (O)]	1/2-A11
Only after 1390 AD:	
Upgrade Skytter to mounted handgunners - Irr Cv (S) @ 9AP	0-2
Handgunners - Reg Ps (S) @ 3AP	2-5
Bombard - Reg Art (S) @ 10AP	0-1
Light guns - Reg Art (I) @ 4AP	0-3
Upgrade remaining longships to Skyttebaade - Reg Gal (F) @ 2AP [Bw (O)]	All
Only Swedish armies after 1390 AD:	
Upgrade leidang to half Irr Bd (O) @ 5AP, half Irr Bw (O) @ 4AP	All
Lapp or other scouts - Irr Ps (O) @ 2AP, or on elk or reindeer, Irr LH (I) @ 3AP	0-2
Timber abatis or barricades - TF @ 2AP	0-16
German Vitalienbrüder mercenary cogs - Irr Shp (S) @ 4AP with Reg Bw (O) @ 5AP	0-3
Only Danish armies from 1350 AD to 1390 AD and Union armies after 1390 AD:	
German mercenary cavalry - double based Reg Kn (I) @ 10AP if front element, 8AP if rear	0-6
Obudshaer - up to 1/3 crossbowmen, Reg Bw (O) (a) 5AP, remainder Reg Bd (F) (a) 7AP	16-24
Downgrade leidang to landevaernet - up to 1/3 Irr Ps (O) @ 2AP, rest Irr Sp (I) @ 3AP	All
Only Union armies after 1390 AD:	
German city, feudal or mercenary allies - List: Medieval German (Bk 4)	
Swedish allies - List: Medieval Scandinavian (Bk 4)	0-17
Only Union armies after 1487 AD:	
German landsknecht pikemen - Reg Pk (O) @ 4AP	8-16
	0.10

This list covers the armies of Norway, Denmark and Sweden from the institution of a feudal knighthood until the end of the union and the accession of Gustavus Vasa to the Swedish throne. Smaasvende were unarmoured mounted attendants drawn up separately behind the knights as a reserve. Skytter were armoured cavalry initially armed with crossbows, some later with handguns. Leidang were home defence militia. Although the three kingdoms were unified in 1390 AD, dissident Swedish rulers with predominantly leidang armies fought against the union's armies which in turn could include a Swedish contingent. The equipment demanded from leidang at the start of the period included a helmet, quilted or leather jacket, spear, sword and shield, with a proportion also to have bow or crossbow. Contemporary depictions of later Swedish foot in battle show them in kettle hat or sallet, crossbowmen in front with a second rank loading for them, and men with mixed pole arms behind, about half like Swiss halberds, the rest a sword blade with cross guard on a 5 foot pole called a "svaerdstav". Some, including crossbowmen, wear plate corslets. Such

Swedish peasant infantry had a fearsome reputation. Dalarna had many iron and copper mines worked part-time by yeomen, making its levy the best equipped and most warlike. Obudshaer were a select levy of single men for foreign service, mostly armed with a halberd supplemented by a short flail pushed through the belt, and charging rapidly. Landevaernet were a levy of all men capable of bearing arms. They were not allowed to keep traditional weapons at home and were mostly armed with a short spear, the "spiud". Ps (O) with bow or crossbow can support Leidang or Landevaernet. It is uncertain whether Swedish rule yet extended to Lappland. Lapps were not warlike, but are included for scouting and local colour. Their present elaborate folk dress was probably a later development. Whether they rode elk (European moose) or reindeer is equally doubtful. Swedish leidang made great use of felled trees as barricades and abatis, especially to block roads through woods or gaps between woods. Much Swedish campaigning was in winter, when frozen rivers provided rough roads. Landsknecht pike elements should have a mixture of pike and halberd figures as described in the Later Swiss list and be accompanied by handgunners. The Danish naval levy first called for cogs instead of longships in 1304. They were manned by armoured crossbowmen. Skyttebaade were oared vessels with light guns specialising in the support of troops ashore. The minimum marked * applies only before 1350 or if Swedish.

55. OTTOMAN 1281 AD - 1512 AD

Warm. Ag 4. WW, Rv, H(G), O, RGo, M, Rd, BUA.	
C-in-C - Irr Cv (S)@ 19AP	1
Sub-general - Irr Cv (S) @ 19AP	1-2
Feudal sipahis - Irr Cv (O) @ 7AP	
- Before 1362 AD:	0-10
- After 1362 AD:	9-18
Upgrade feudal sipahis with a high proportion equipped with lance to Irr Cv (S) @ 9AP	0-1/2
Spearmen - Irr Ax (O) @ 3AP or Irr Sp (I) @ 3AP	0-4
Azabs - up to 1/4 javelinmen, Irr Ps (S) @ 3AP, up to 1/4 slingers,	
Irr Ps (O) @ 2AP, remainder archers, Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP	6-12
Levendat, poorly equipped Azabs or European levy infantry - Irr Hd (O) @ 1AP	0-6
Only before 1362 AD:	
Ghazis - Irr LH (S) @ 7AP	20-58
Only after 1362 AD:	
Upgrade generals to Reg Cv (S) @ 30AP	All
Qapukulu cavalry - Reg Cv (S) @ 10AP	1-3
Janissary archers - Reg Bw (S) (a) 7AP	2-8
Janissary crossbowmen or slingers - Reg Ps (O) @ 2AP	0-2
Akinjis - Irr LH (F) @ 4AP	10-24
Djanbazan or Turkomans - Irr LH (S) @ 7AP or Crimean Tartars - Reg LH (S) @ 7AP	0-6
Delis, Kurds or Bedouin Arabs - Irr LH (O) @ 5AP	0-4
Iaylars - Irr Wb (F) @ 3AP	0-4
Voynuks - Irr Bd (O) @ 5AP	0-4
Foot with fire lance or other incendiaries - Irr Ps (X) @ 6AP	0-1
Bombards - Reg Art (S) @ 10AP	0-3
Stakes, ditches and/or tethered camels, or wagon laager to defend camp - TF @ 1AP	0-24
Galleys - Reg Gal (O) @ 3AP [Azabs]	0-2
Wallachian vassal allies - List: Wallachian or Moldavian (Bk 4)	
Turkoman allies - List: Anatolian Turkoman (Bk 4)	0-12
Only after 1380 AD:	
Albanian vassal allies - List: Albanian (Bk 4)	
Only from 1386 AD to 1458 AD:	
Serbian vassal allies - List: Serbian Empire (Bk 4)	
Only after 1429 AD:	
Upgrade Janissary crossbowmen and slingers to Janissary handgunners - Reg Ps (S) @ 3AP	All
Replace Azab javelinmen with handgunners, Irr Ps (S) @ 3AP	Any
Galleys with guns - Reg Gal (S) @ 4AP [Up to 1/2 Janissary Bw, remainder Azabs]	0-4
Kokas - Irr Shp (S) @ 4AP [Janissary Bw]	0-1
Downgrade Gal (O) to Fustae, Reg Gal (F) @ 2AP [Azabs]	All

Only after 1470 AD: War wagons carrying light guns - Irr WWg (O) @ 8AP Only after 1475 AD: Crimean Tartar vassal allies - List: Golden Horde and Successors (Bk 4)

This list covers Ottoman Turkish armies from the accession of Othman I until the accession of Selim I. Early Ottoman armies depended mainly on ghazis, fanatics serving for religion and loot, and levendat, whose main function was to police conquered territory. These were replaced by timariots providing mounted warriors (sipahis) in return for a land grant (timar), and by akinji ("raiders"), settled in border regions and serving in return for tax-exemption and loot. According to Christian writers only a small proportion of the feudal sipahis were equipped with lance as well as bow, although most wore at least helmet and mail corselet by the end of the 15th century. Azabs ("bachelors") were foot troops recruited for a campaign, supported by money and provisions from their home villages. Musellems and Yava were early semi-regulars who initially did not have land grants but were paid on campaign. Musellems probably did not differ substantially from feudal signalis and are here included among them. Yaya were probably very similar to Azabs, but it has also been suggested that they are the spearmen occasionally depicted in art, especially since one role was guarding strategic bridges. In about 1362, the regular foot corps of the Janissaries (Yeni-ceri - "new troops") was founded. It was first recruited from prisoners, then levied from Christian children forcibly converted to Islam. The timing of the changeover is obscure and it seems to have made no discernable difference to fighting quality. Soon after, the regular household cavalry regiments of the Qapu Kullari ("court slaves") were founded. Djanbazan ("daredevils") were light cavalry picked from among the akinji; they served in the vanguard of the army. Delis ("madmen") were a similar body of light cavalry raised from among converted Serbs, Bosnians and Croats. Iaylars were religious fanatics on foot. Voynuks were armoured Balkan infantry armed with a mixture of spears, long axes and other pole-arms. Armies not commanded by the Sultan or Grand Vizier and allied contingents from this list need not contain Qapukulu or Janissaries and cannot have Serbian allies. A typical later deployment put a screen of Akinjis in front, with Azabs behind them. Further to the rear were the Janissaries and artillery, protected by field defences of stakes, ditch and iron chains, and later, under Hungarian influence, wagons. This defensive position was flanked on one side by the feudal sipahis of Rumelia (Europe) and on the other by those of Anatolia, while behind it the Qapukulu were in reserve. Detached flank units, usually Tartars or Serbs, were sometimes concealed to the left and/or right of the main formation. Albanians cannot be used with other allies.

56. ORDER OF ST JOHN 1291 AD - 1522 AD

Warm. Ag 1. WW, H(S), H(G), Wd, O, RGo, Rd, BUA.	
C-in-C - Reg Kn (S) @ 35AP	1
Sub-general - as above	0-2
Brother knights, sergeants and turcopoles - Reg Kn (S) @ 15AP	2-8
Separately deployed turcopoles - Reg Cv (O) @ 8AP	0-2
Colonist men-at-arms - Irr Kn (O) @ 10AP	0-2
Greek or, after 1310, colonist spearmen - Irr Sp (I) @ 3AP	0-10
Greek archers and crossbowmen - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP	12-20
Colonist crossbowmen - Irr Bw (O) @ 4AP	0-8
Mercenary crossbowmen - Reg Bw (O) @ 5AP	0-8
Ships - Irr Shp (S) @ 4AP [Bw or Ps]	0-2
Galleys - Reg Gal (S) @ 4AP [Up to 1/2 Bw or Ps, remainder Reg Bd (S)]	0-4
Genoese allies:	
Genoese ally-general - Reg Bd (S) @ 19AP	*1
Genoese marines - Reg Ax (S) @ 5AP	0-3
Genoese galleys - Reg Gal (F) @ 2AP [Bd, Bw (O), Ps (S) or Ax (S)]	*2-6
Only from 1300 AD to 1350 AD:	
Cilician Armenian allies - List: Cilician Armenian (Bk 4)	
Only from 1400 AD to 1450 AD:	
Handgunners - Reg Ps (S) @ 3AP	0-4
Only after 1450 AD:	
Mercenary halberdiers - Reg Bd (O) @ 7AP	0-4
Handgunners - Reg Ps (S) @ 3AP	0-8
Bombards - Reg Art (S) @ 10AP	0-2
Organ guns - Reg Art (I) @ 4AP	0-2

This list covers the land forces of the Knights Hospitaller, now usually known as the Knights of St John or the Knights of Rhodes (or later Malta) from the fall to the Mamluks of Acre, their last possession in Palestine, through their tenure of Cyprus until 1310 and Rhodes thereafter, until the fall of Rhodes to the Ottomans, after which they moved to Malta where they were to withstand an even more famous siege. While in Cyprus and Rhodes, they kept up a constant campaign of maritime and coastal piracy against the Muslim states. Their low aggression factor reflects only their inability to bring large forces to bear on the mainland and their dependence on the Greek populations of Cyprus and Rhodes at home. Kn can always be deployed dismounted as Bd (S). Even in their Maltese period, the Knights were noted for wearing much heavier armour on ship board than other nations, and their galleys are recorded in 1455 as having superior artillery to their Turkish opponents and double that of Genoese galleys. A Genoese ally-general must command all Genoese. He can also command, and his galleys carry, mercenary troops or handgunners from elsewhere in the list. Minima marked * apply only if any Genoese are used. The total maxima possible from this list are less than usual to reflect the small size of Hospitaller forces - even so an unusual degree of scale distortion has been required.

57. LOW COUNTRIES 1297 AD - 1478 AD

Cold. Ag 0. WW, Rv, H(G), Wd, RGo, M, Rd, BUA.	
C-in-C - Irr Kn (O) @ 20AP or Reg Kn (I) @ 30AP	1
Burgher sub-general - Reg Kn (I) @ 30AP	1-2
Feudal ally-general - Irr Kn (O) @ 15AP	*1
Feudal or mercenary knights and sergeants - Irr Kn (O) @ 10AP	*1-9
Burghers - Reg Kn (I) @ 10AP	2-6
Crossbowmen - Reg Bw (O) @ 5AP	2-8
Horses to mount crossbowmen @ 1AP	0-2
Ditch or set-up wagon laager - TF @ 2AP	0-16
Only before 1330 AD:	
Guildsmen - Reg Pk (I) @ 3AP	32-84
Guildsmen with plancon - Reg Bd (X) @ 8AP	3-8
Archers - Reg Ps (O) @ 2AP	0-6
Only from 1330 AD - 1410 AD:	
Guildsmen - Reg Pk (O) @ 4AP	20-52
Guildsmen with plançon - Reg Bd (X) @ 8AP	3-8
English longbowmen - Reg Bw (S) @ 7AP	0-1
Whitehoods - Irr Hd (F) @ 1AP	0-4
Archers - Reg Ps (O) @ 2AP or Reg Bw (O) @ 5AP	0-4
Organ guns - Reg Art (I) @ 4AP	4-6
Only after 1410 AD:	
Guildsmen - Reg Pk (O) @ 4AP	32-64
Guildsmen with halberds - Reg Bd (O) @ 7AP	0-4
English longbowmen - Reg Bw (S) @ 7AP	0-1
Handgunners - Reg Ps (S) @ 3AP	0-6
Organ guns - Reg Art (I) @ 4AP	0-4

This list covers the communal armies of the Low Countries cities from their first resistance to Philip IV of France until they chose to support Maximilian I of Austria in his struggle against France for his Burgundian inheritance. Although the richer burghers had to serve as men-at-arms, some even on barded horses, we have the authority of their erstwhile ally King Edward III of England for denigrating their efficiency. Better cavalry were provided on occasion by feudal lords and mercenaries. A feudal ally-general can only control feudal troops, which do not seem to have included foot. Minima marked * apply only if more than 3 Kn (O) elements are used. Reg Kn (I) generals and burghers can always dismount before battle as Reg Pk (I) before 1330 or Reg Pk (O) from 1330, but must be paid for as Kn. Any or all Kn can always dismount during the battle, as Bd (S). The main strength of the army was provided by the disciplined pikemen of the Guilds, supplemented by others with the fearsome plancon. This was a heavy club with spiked point often wrongly referred to as a "goedendag". Although the pike was in use from the beginning of the period, it had not in the early 14th century attained its later length, nor were its wielders as well drilled and well armoured as later. The White Hoods of Ghent are described as "loving war better than peace, for they had nothing to lose" and as ribauds. The preferred tactic was to allow the enemy to attack across boggy ground or ditches, then charge him as he emerged. Vulnerability to enemy missiles while waiting attack was sometimes partly compensated for by massed light artillery.

58. MEDIEVAL IRISH 1300 AD - 1487 AD

Cold. Ag 1. WW, Rv, H(S), H(G), Wd, RGo, M, BUA.	
C-in-C - Irr LH (O) @ 15AP	1
Irish ally-general - Irr LH (O) @ 10AP	1-3
Irish sub-general - Irr LH (O) @ 15AP or Irr Ax (O) @ 13AP	0-1
Anglo-Irish ally-general - Irr Cv (O) @ 12AP or Irr Kn (F) @ 14AP	*1
Irish horse - Irr LH (O) @ 5AP	2-9
Anglo-Irish spears or lances - up to half Irr Kn (F) @ 9AP, remainder Irr Cv (O) @ 7AP	*3-4
Galloglaich - Irr Bd (O) @ 5AP	12-26
Bonnachts - Irr Ax (O) @ 3AP	16-52
Kerns - Up to 1/2 Irr Ps (S) @ 3AP, remainder Irr Ps (I) @ 1AP	24-40
Archers - Irr Ps (O) @ 2AP	0-10
Rising out - Irr Hd (F) @ 1AP	0-12
Plashed wood edges - TF @ 2AP	0-12
Before 1330 AD:	
Upgrade C-in-C to Scots Irr Kn (O) @ 20AP	**1
Scots knights - Irr Kn (O) @ 10AP	**1-3
Scots spearmen - Irr Pk (I) @ 3AP	**8-12

This list covers Irish armies from the adoption of cavalry until the first recorded use of fire arms. Each Irish cavalryman in a mail shirt was accompanied by unarmoured horseboys who fought with him rather than separately. Classification as LH (O) reflects this, their skirmishing mode of combat, and their reluctance to stand up to Anglo-Irish cavalry. Galloglaich were professional soldiers of Scots descent, bonnachts Irish professionals. Boys accompanying galloglaich are assumed to be included in the galloglaich element. Except for those carried by most galloglaich, axes are no longer attested, though they reappear carried by unarmoured men in the 16th century. The "rising-out" was the full levy of the country side, rarely called at this period and lacking both aptitude and weapons. Minima marked * apply only if any Anglo-Irish are used, those marked ** if any Scots are used. The Scots reflect Edward Bruce's attempt to become King of Ireland. All Anglo-Irish must be commanded by an Anglo-Irish general and all Scots by a Scots general. They cannot both be used. An Anglo-Irish or Scots general can also command Irish infantry. Anglo-Irish Kn cannot be used after 1394. An army at its best in difficult terrain, especially bogs and woods and in ambush.

59. POST-MONGOL SAMURAI 1300 AD - 1542 AD

Cold. Ag 0. WW, Rv, H(S), H(G), Wd, O, E, RGo, M, Rd, BUA.	
C-in-C seated with bodyguard - Reg Bd (O) @ 27AP, or mounted - Reg Cv (O) @ 28AP	1
Sub-general - Reg Bd (O) @ 27AP or Reg Cv (O) @ 28AP	1-2
Mounted samurai mostly with bow and katana - Reg Cv (O) @ 8AP	0-12
Foot samurai with naginata or yari and/or katana - Reg Bd (O) @ 7AP	12-36
Followers with bow - Irr Bw (I) @ 3AP or Irr Ps (O) @ 2AP	0-8
Pavises to upgrade Bw (I) to Irr Bw (O) @ 4AP	0-4
Ronin and mercenary swordsmen - Irr Bd (F) @ 5AP	0-6
Sohei warrior monk ally-general - Reg Bd (O) @ 17AP	*1
Sohei warrior monks mostly with naginata - Reg Bd (I) @ 5AP	*8-16
Sohei mounted warrior monks - Irr Cv (O) @ 7AP	0-2
Palisade - TF @ 2AP	0-8
Armed boys or ladies with light naginata guarding baggage - Irr Bd (I) @ 4AP	0-1
Ships - Irr Shp (O) @ 3AP [Bd, Bw, Ax, Art(X)]	0-3
Only before 1465 AD:	
Followers with naginata - Irr Ax (I) @ 2AP	12-24
Only from 1465 AD:	
Ashigaru with yari - Irr Ax (X) @ 3AP	12-48
Ikko Ikki fanatics - Irr Hd (S) @ 2AP	*30-60
Town militia - Irr Hd (O) @ 1AP	*12-24

This list covers Japanese armies from the aftermath of the Mongol invasions until the introduction of firearms and drilled foot. Foot samurai were now wearing more armour, had largely abandoned the bow for naginata and later the

yari, and were under much closer control. Although many now carried the spear-like yari as well as their two swords, they continued to fight as individuals rather than in formation, so are classed as Bd. While their armour was lighter than the cumbersome ovoroi of previous times, the addition of arm and thigh armour made it heavier than the do-maru of followers and monks. During this period the Japanese mainly fought each other. Japanese bowmen were later outshot by Koreans. The Onin War of 1467-1477 brought the introduction of large numbers of fierce but lightly equipped ashigaru "light feet", which during the 16th century were to evolve into drilled infantry. Ikko Ikki were a mass militant religious movement based on the peasantry, but with a hard core of conventional warriors and Sohei. They were sometimes fought off by improvised town militia reinforced by local samurai, but such self-defence organisations were considered by the authorities to be almost equally subversive! Ronin were impoverished masterless samurai. We assume that they would have little armour or weapons apart from the cherished swords that were their only remaining sign of samurai status, so would be faster moving and less cohesive. The Sohei monks were as turbulent as before, but less impetuous. Samurai cavalry are described as fighting in wedge or "with bridles aligned". They had not yet abandoned their bows for yari. Generals and mounted samurai can only dismount to defend fortifications or within 300p of enemy fortifications or enemy war wagons, as Bd (O). Minima marked * apply only if any troops of that origin are used. Sohei monks or Ikko Ikki cannot be used with town militia. A Sohei general can command only Sohei and ashigaru and must command all Sohei.

60. CATALAN COMPANY 1302 AD - 1388 AD

Warm. Ag 4. WW, Rv, H(S), H(G), O, V, RGo, Rd, BUA.	
C-in-C - Reg Kn (O) @ 32AP	1
Sub-general - Reg LH (O) @ 25AP or Reg Ax (S) @ 25AP	1-2
Aragonese men-at-arms - Reg Kn (O) @ 12AP	0-2
Aragonese light horse - Reg LH (O) @ 5AP	2-10
Catalan almughavars - Reg Ax (S) @ 5AP	24-70
Catalan scouts - Reg Ps, all (I) @ 1AP or all (S) @ 3AP	0-3
Catalan crossbowmen - Reg Ps (O) @ 2AP or Reg Bw (I) @ 4AP	3-10
Piratical armed sailors - Irr Bw (O) @ 4AP	1 per Gal
Galleys - Reg Gal (O) @ 3AP [Bw]	0-4
Only before 1305 AD:	
Byzantine allies - List: Palaiologan Byzantine (Bk 4)	0-11
Alan allies - List: Alan (Bk 2)	
Only after 1305 AD:	
Downgrade C-in-C to Reg Ax (S) @ 25AP	0-1
Horses to mount almughavars or foot generals @ 1AP	0-24
Turks or Turcopoles - Irr LH (S) @ 7AP	8-18
Greek prisoner-of-war archers - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP	0-10
Only after 1380 AD:	
Replace Turks with Albanians - Irr LH (O) @ 5AP	8-12

This list covers the Catalan Grand Company from its departure from Sicily until the fall of the state it founded in Greece to the Florentines. During this time it fought for both Byzantines and Romanian Franks, was short-changed by both, took a horrid revenge on both, and beat every Turkish, Byzantine and Frankish army that got in its way. Its Alan allies were allied only because hired by the Byzantines to assist the Grand Company. The relations between the two ranged from veiled hostility to naked hostility. After the Byzantine assassination of its great leader Roger de Flor, the company was largely commanded by committee, often through a figurehead. Its C-in-C element represents the committee and its figurehead. It is said to have been highly disciplined, although displaying extremely rapacious behaviour towards even friendly civilians. Despite having left Aragonese service under a cloud after backing the wrong heir, the Company continued to fight under the banner of Aragon [yellow with horizontal red stripes].

61. ITALIAN CONDOTTA 1320 AD - 1495 AD

Warm. Ag 1. WW, Rv, H(S), H(G), O, V, E, RGo, M, Rd, BUA.		
C-in-C - Reg Kn (S) @ 35AP	1	
Condottieri sub-general - as above	0-2	
Condottieri or lanze spezzate elmetti - Reg Kn (O) @ 12AP	10-22	
Feudal elmetti - Irr Kn (O) @ 10AP [N]	0-8	
Mounted crossbowmen - Reg LH (I) @ 3AP	*6-8	
Militia crossbowmen - Reg Ps (O) @ 2AP	0-8	
Mercenary crossbowmen - Reg Bw (O) @ 5AP	0-6	
Javelinmen - Reg Ax (O) @ 4AP, or swordsmen - Reg Bd (I) @ 5AP	0-4	
Papal or Neapolitan guardsmen - Reg Sp (S) @ 7AP [Pa, N]	0-2	
Pioneers - Irr Hd (O) @ 1AP	0-4	
Organ gun - Reg Art (I) @ 4AP	0-1	
Bombard - Reg Art (S) @ 10AP	0-3	
Ditch and bank - TF @ 2AP	0-12	
	p (S) or Gal	
Great galleys, usciere or carracks - Irr Shp (S) @ 4AP [Bw (O), Ax (S)] [VI, VG]	0-1	
Galleys - Reg Gal (F) @ 2AP [Bd (O), Bw (O), Ps (S), Ax (S)] [VI, VG, GC]	0-4	
Transports - Irr Shp (I) @ 2AP [LH or Bg] [VI, VG, GC]	0-4	
Galleons and Barche - Irr Bts (S) @ 3AP [Bw] [VI, Mi, Pi]	0-4	
Italian allies - List: Italian Condotta (Bk 4) [Mi, F, Pi, Pa, N, VI].	Up to 2 contingents	·
Only before 1363 AD: Deplete Dep K_{π} (D) with Common memory double based Dep K_{π} (D) \oplus 10 AD		
Replace Reg Kn (O) with German mercenary double based Reg Kn (I) @ 10AP if front element, 8AP if rear element	$I_{\rm in}$ to $2/2$	
	Up to $2/3$	
Only in 1373 AD:	0-15	
Bulgar or other slaves - Irr LH (F) @ 4AP [GC]	0-15	
Only before 1400 AD:	**1	
Carroccio standard on ox-wagon - Reg WWg (I) @ 3AP	0-5	
Hungarians - Irr LH (F) @ 4AP [F, N, Pa] Militia spears - Reg Sp (I) @ 4AP	0-3 **2-6	
Militia pavisiers and crossbowmen - Half Reg Bw (X) @ 7AP,	2-0	
half Reg Bw (O) @ 3AP, on double depth bases	**4-8	
	4-0	
Free Company allies - List: Free Company or Armagnac (Bk 4) [Pi, Pa, F]		
Only from 1400 to 1440 AD:	0.5	
Hungarians - Irr LH (F) @ 4AP [F, N, Pa]	0-5	
Militia spears or pikes - Reg Sp (I) @ 4AP or Reg Pk (I) @ 3AP	0.4	
-[F]	0-4	
- Others Militia registrations and areas housen - Ualf Dec Dec (V) @ 74 D	0-2	
Militia pavisiers and crossbowmen - Half Reg Bw (X) @ 7AP, half Reg Bw (O) @ 3AP, on double depth bases		
-[F]	**4-8	
- Others	0-4	
Mercenary pikes - Reg Pk (O) @ 4AP	0-4	
Mercenary billmen - Reg Bd (O) @ 7AP	0-4	
Handgunners - Reg Ps (S) @ 3AP	0-2	
English archers - Reg mtd Bw (S) @ 8AP [F, VI]	0-2	
Swiss mercenary allies - List: Later Swiss (Bk 4) [F]	02	
Only after 1411 AD:		
Famiglia ducale elmetti - Reg Kn (S) @ 15AP [Mi]	0-2	
Only after 1416 AD:	° -	
Replace swordsmen or javelinmen with sword-and-buckler men - Reg Bd (F) @ 7AP	0-4	
Only after 1420 AD:	U - T	
Aragonese targeteers - Irr Ax (S) @ 4AP [N]	0-8	
Aragonese targeteers - III Ax (S) (a) 4AF [N] Aragonese crossbowmen - Irr Ps (O) (a) 2AP [N]	0-12	
1 magonese erossoowinen - in 1.5 (0) (a 271 [14]	0-12	

Only after 1440 AD:	
Dalmatian feudal knights - Irr Kn (O) @ 10AP [VG]	0-3
Dalmatian city militia crossbowmen - Reg Bw (O) @ 5AP [VG]	0-4
Turks - Irr LH (F) @ 4AP [N, VI, VG]	0-5
Stradiot sub-general - Irr LH (O) @ 15AP [VI, VG]	0-1
Stradiots - Irr LH (O) @ 5AP	
- [VI]	0-9
- [VG]	5-15
Militia spears or pikes - Reg Sp (I) @ 4AP or Reg Pk (I) @ 3AP [F]	0-4
Militia pavisiers and crossbowmen - Half Reg Bw (X) @ 7AP,	
half Reg Bw (O) @ 3AP, on double depth bases [F]	**4-8
Mercenary pikes - Reg Pk (O) @ 4AP	0-8
Mercenary billmen - Reg Bd (O) @ 7AP	0-2
Handgunners - Reg Ps (S) @ 3AP	
- [Mi, VI]	0-12
- Others	0-6
Archers - Reg Ps (O) @ 2AP [VI, VG, N]	0-6
Swiss mercenary allies - List: Later Swiss (Bk 4) [VI]	0-14
Albanian allies - List: Albanian (Bk 4) [N]	

This list covers Italian states from the rise of mercenary companies until Fornovo in 1495, when a less sophisticated but more determined French army swept aside a scientific Italian army deployed in accordance with the best tactical principles and destroyed Italian confidence. Armies can be Milanese [Mi], Florentine [F], Pisan or Paduan [Pi], Papal [Pa], Neapolitan [N], Venetian in Italy [VI], Venetian in Greece [VG], Genoese in Cyprus from 1373 to 1464 [GC] or none of these. Items so marked apply only to those armies. Italian ally contingents must each be from a different city. Only cities that can have Italian allies can provide them. Condottieri were military sub-contractors who undertook to provide mercenary armies contracted to a state for a fixed period. As their troops were their commercial assets, this fostered a relatively bloodless style of warfare in which victory was sought by manoeuvre. Famiglia were bodyguards and lanze spezzate mercenaries hired directly by the state. Elmetti "helmets" or armigeri vera were each supported by 1 or 2 men equivalent to coustilliers, which are included in the elmetti elements. Civic militia were a source of competent infantry. The minimum marked * applies only if Venetian in Italy. Minima marked ** apply only if militia are used. Venetians in Greece and Genoese in Cyprus cannot use militia spears nor any pikes nor be allies. If galley crews are used, their galleys must be paid for. While Genoa had a fleet, which appears in other lists in a mercenary role, it had insufficient land forces in Italy to count as an army, so these are not covered here. However, the riches of Cyprus enabled Genoa to maintain an army there sufficient to hold off the infuriated Cypriots and their Venetian allies. All other cities except Venice had too few sea-going vessels to count as a fleet. Venetian galleys did not have effective heavy bow guns until after this period, were faster than those of the Ottomans, Spanish and Knights of St. John, had relatively light boarding crews, relying instead mainly on armed rowers, and preferred short sudden attacks. Genoese galleys were smaller than Venetian and described as having half the guns of those of St. John. Galleons (not to be confused with the large ships of the next century) and Barche were river war craft that could carry light guns. River fighting was common, especially on the Po and Adige. Free company mercenary allies include such bands as Hawkwood's famous White Company. Although condottieri were not fond of dismounting, both sides dismounted at Castagnaro in 1387 because of close terrain, and at the battle of Arbedo in 1422 the Milanese dismounted their men-at-arms to oppose Swiss halberdiers and pikemen with lances wielded on foot as spears, as had the Austrians at Sempach in 1386. Accordingly, after 1386 Reg Kn can always dismount as Sp (S). The sword-and-buckler men later famous in 16th century Spanish armies in Italy were first experimented with by Braccio da Montone in his attack on Perugia in 1416 and seem to have been a feature of Spain's Neapolitan possessions rather than of the homeland. Free Company allies must either include only a single nationality or be a mixture of English and Germans or of Gascons and Bretons. A German Free Company ally-general can also control Hungarians from this list. A Free Company leader was sometimes appointed C-in-C by an Italian city. In such a case, his own command is chosen as if it were an allied contingent from the Free Company list, but does not count as allies and can also include other troops from this list. A stradiot sub-general can only command stradiots.

62. 100 YEARS WAR ENGLISH 1322 AD - 1455 AD

Cold. Ag 3. WW, Rv, H(S), H(G), Wd, RGo, M, Rd, BUA.	
C-in-C - Reg Kn (S) @ 35AP if the king, otherwise Reg Kn (O) @ 32AP	1
Sub-general - Reg Kn (O) (a) 32AP or Irr Kn (O) (a) 20AP	1-2
Gascon or Brabanter men-at-arms - Irr Kn (O) (a) 10AP	0-5
Irish foot - up to half archers, Irr Ps (O) @ 2AP, remainder kerns, Irr Ps (S) @ 3AP	0-3 0-3
Gascon crossbowmen - Irr Bw (O) @ 4AP Gascon bidowers or Bretons - Irr Ps (S) @ 3AP	0-3
Guns - Reg Art (I) @ 4AP	0-3
Concealed pits, set-up wagon laager, or ditch - TF @ 2AP	0-10
Cogs - Irr Shp (S) @ 4AP [Bw or Bd]	0-4
Balingers - Irr Bts (S) @ 3AP [Bw]	0-2
Nefs - Irr Shp (I) @ 2AP [Kn, Cv, mtd foot, LH or Bg]	0-4
Only before 1350 AD:	• •
Hobilars - Reg Cv (I) @ 6AP	0-6
English men-at-arms - Reg Kn (I) @ 10AP	8-16
English mounted longbowmen - Reg mtd Bw (S) @ 8AP	8-16
English foot longbowmen - Reg Bw (S) @ 7AP	0-20
Welsh archers - Irr Bw (O) @ 4AP or Reg Bw (O) @ 5AP	0-12
Welsh "knifemen" - Irr Ax (X) @ 3AP	2-6
German pauncenars - Reg Sp (O) @ 5AP	0-4
Only from 1350 AD to 1415 AD:	
English men-at-arms - Reg Kn (I) @ 10AP	5-12
English mounted longbowmen - Reg mtd Bw (S) @ 8AP	12-30
Welsh archers - Reg Bw (O) @ 5AP or Reg Bw (S) @ 7AP	0-3
Gascon brigans - Irr Ax (X) @ 3AP	0-6
False-French men-at-arms - Irr Kn (S) @ 12AP	0-3
Gascon or False-French town militia - Reg Bw (I) @ 4AP	0-2
Only after 1415 AD:	
Irish horse - Irr LH (O) @ 5AP	0-2
English men-at-arms - Reg Kn (I) @ 10AP	3-6
English mounted longbowmen - Reg mtd Bw (S) @ 8AP	15-30
English billmen - Reg Bd (O) @ 7AP	0-8
Welsh archers - Reg Bw (O) @ 5AP or Reg Bw (S) @ 7AP	0-3
Gascon brigans - Irr Ax (X) (a) 3AP	0-6
False-French men-at-arms - Irr Kn (S) @ 12AP	0-2
Gascon or False-French town militia - Reg Bd (I) @ 5AP	0-4
Horses to mount False-French militia @ 1AP	Any 0-1
Upgrade guns to bombards - Reg Art (S) @ 10AP	0-1

This list covers English armies from the first use of dismounted men-at-arms and recruiting by indenture until the start of the Wars of the Roses. The men-at-arms were made up of bannerets, knights, esquires and gentlemen, the proportion of knights steadily dropping with time. Royal household men-at-arms are included in the king's element. The richer of the former sergeants had been absorbed by the men-at-arms and the poorer in the hobilars, who in their turn were assimilated by 1350 to the men-at-arms, possibly with the upgraded protection of looted armour. Such lesser men-at-arms were prominent in the free companies. All men-at-arms and hobilars can always dismount to fight on foot, the former as Bd (S), the latter as Ax (X). Although this was the standard tactic, a mounted reserve was often kept, mounted pursuits were conducted and occasional general mounted charges made, though the mounted fighting skills of all but elite English men-at-arms deteriorated sadly. The proportion of longbowmen to men-at-arms steadily increased during the period, although this was later somewhat offset by supplementing the men-at-arms with billmen. Late 15th century records of the English in France show that the longbowman was supposed to have bow, sword, dagger, sallet and jack. Few were fined for lacking jack, many for lacking helmet. A few men-at-arms were fined for lacking armour. Classification as regular simulates the actual behaviour of the indentured English troops of this era better than irregular. False-French was the French epithet for troops from the ceded territories.

63. AZTEC 1325 AD - 1521 AD

Dry. Ag 3. WW, Rv, H(S), Wd, M, Rd, BUA.	
C-in-C - Reg Bd (I) @ 25AP	1
Sub-General - Reg Bd (I) @ 25AP	1-3
Warrior priests - Irr Bd (I) @ 4AP	1-3
Cuachic shock troops - Irr Wb (S) @ 5AP	2-10
Suit wearers - Reg Bd (I) @ 5AP	12-40
Clan warriors - Irr Hd (S) @ 2AP	30-90
Skirmishers with slings or bows - Irr Ps (O) @ 2AP	8-24
Mercenary archers - Reg Bw (I) @ 4AP	0-6
Otomi - Irr Wb (F) @ 3AP	0-10
Large war canoes - Irr Bts (O) @ 2AP [Wb or Bd]	0-1
Other canoes - Irr Bts (I) @ 1AP [Hd]	0-5
Only 1428 AD to 1518 AD:	

Toltec-Chichimec allies - List: Tarascan or Toltec-Chichimec (Bk 4)

Aztec is the most usual name for a people also called Tenocha and Colhua Mexica. They originated as a Chichimec tribe that emigrated into Mexico from the north, absorbed culture from the Toltecs, Mixtees and Zapotees, and founded the lake island city of Tenochtitlan in 1325. In 1428, Tenochtitlan joined the two nearby lake side cities of Texcoco and Tlacopan to form a federation called the "Triple Alliance", which was for all practical purposes a unitary Aztec state. This expanded aggressively under the rule of Motecuhzoma I, but was conquered under Motecuhzoma II by Cortez' Spaniards and his Tlaxcalan allies 1519-1521. "Suit wearers" includes military orders such as the Eagle, Jaguar and Arrow knights (if indeed the latter existed, which is doubtful), and those noble youths supporting them as rear rank apprentices. They fought separately from the ordinary clan warrior macehualtin, most of whom had not yet captured a prisoner and whose inexperience and rashness provided most of the prisoners taken for sacrifice by the enemy. These were stiffened by a sprinkling of officers, but were both less skilled than the suit wearers and less easily controlled by the drum and conch signals of the four generals. They often formed the flanks of the army where their numbers could envelop the enemy wings. Cuachic were a high ranking grade of individualist suit wearers who had refused promotion to officer to serve instead as shock troops, finding a wild charge more congenial than rational thought. They acted as vanguard and rearguard and as weapons instructors and are also described as lying concealed in ambush. The Aztec charge was described by the Spaniards as "harder to face than French artillery and fiercer than the Moors". The favourite primary weapon of these three warrior groups was the one-handed maquahuitl wooden sword edged with razor sharp black obsidian glass, effective against flesh, but not against metal armour. The larger two-handed cuahololli was uncommon among the Aztecs. Atlatl dartthrowers and other missile weapons were often used in conjunction with the shorter. The spear-like cut and thrust tepoztopilli is particularly associated in art with generals and sometimes with apprentices. A dense swarm of skirmishers with slings and less probably bows, used to prepare attacks and then cover flanks, were probably provided by the nonwarrior lower classes. Better skilled archers capable of mass shooting are likely to have been Chichimec mercenaries. The Otomi were an ethnic group living north of the Aztecs, who did not fight on their own account, but only as well-regarded mercenary shock troops in Aztec, Tarascan and Chichimec armies. A few war canoes may have held as many as 20 men, but most were very much smaller, a Spanish account mentioning 2,000 canoes carrying 20,000 men. Contemporary depictions usually show one warrior using an atlatl and one paddler, but also show Spanish brigantines known to have a crew of 25 with only 3 men. There are two accounts of the larger canoes being concentrated in a single squadron to ambush brigantines. Note that what may appear at first sight to be ungenerous troop type classifications for this army do not diminish its chances of victory: they do ensure that the army is realistically larger than those of historical opponents.

64. MEDIEVAL FRENCH 1330 AD - 1445 AD

Cold. Ag 1. WW, Rv, H(S), H(G), Wd, O, V, RGo, Rd, BUA.	
C-in-C - Irr Kn (S) @ 22AP	1
Sub-general - as above	1-2
Nobles, knights, other men-at-arms, squires and sergeants - Irr Kn (S) @ 12AP	10-22
Archers - Irr Bw (I) @ 3AP	0-10
French crossbowmen - Irr Ps (O) @ 2AP or Irr Bw (O) @ 4AP or Reg Bw (I) @ 4AP	6-14
Horses to mount French crossbowmen @ 1AP	0-8
Genoese crossbowmen - Reg Bw (O) @ 5AP	0-6
Spanish crossbowmen - Irr Ps (O) @ 2AP	0-4
Brigans - Irr Ax (X) @ 3AP	4-12
Ribauds - Irr Hd (O) @ 1AP	1-3
Peasant levy -Irr Hd (O)@ 1AP	0-18
Cogs - Irr Shp (S) @ 4AP [Bw]	0-3
Galleys - Reg Gal (O) @ 3AP [Bw]	0-3
Only from 1350 AD to 1400 AD:	
Pavisiers - Reg Sp (O) @ 5AP	0-8
Horses to mount pavisiers @ 1AP	0-8
Bidets or Bretons - Irr Ps (S) @ 3AP	0-6
Only from 1356 AD to 1360 AD:	
Jacquerie allies:	
Ally-general - Irr Hd (S) @ 7AP	*1
Desperate peasants - Irr Hd (S) @ 2AP	*5-8
Wagon laager - TF @ 2AP	0-12
Only after 1385 AD:	
Handgunners - Reg Ps (S) @ 3AP	0-1
Guns - Reg Art (I) @ 4AP	0-1
Only after 1400 AD:	
Downgrade Kn (S) to separately deployed "Gros Varlets" - Irr Cv (O) @ 7AP	0-6
Voulgiers - Reg Bd (O) @ 7AP	0-8
Horses to mount voulgiers @ 1AP	0-8
Only after 1418 AD:	0-0
	0-1
Upgrade C-in-C if King with Scots guard to Reg Kn (S) @ 35AP Scots guard and other mounted archers - Reg mtd Bw (S) @ 8AP	0-1 0-1
Bombard - Reg Art (S) @ 10AP	0-1
Scots allies - List: Scots Common Army (Bk 4)	0-28
Stors and - List. Stors Common Army (DK 4)	0-20

This list covers French armies from the transition to plate armour until the institution of a standing army. This is the period of the 100 Years War against the English. Those familiar with the battles of Crecy and Poitiers may be interested to learn of an early DBM game during which an advanced command of crossbows recoiling from longbow shooting was passed through by a second command of knights, who then, their formation disrupted, charged impetuously to detail defeat, leaving the third command under the C-in-C demoralised before it had struck a blow! However, such results are not inevitable. In 1346 at St Pol, French knights realised that attacking on foot offered a better chance and this became their standard practice. Accordingly, Kn can always dismount as Bd (S) from 1346 on. The French plan for Agincourt, which was not put into effect, envisaged leaving some of the lesser men-at-arms mounted while their betters fought on foot. Although crossbowmen frequently carried their own pavises, the troops listed here as pavisiers were not associated with missile troops but armoured spearmen given an unusually large shield to protect them from archery; as at Nogent-sur-Seine in 1359 where such troops broke through and drove off English longbowmen. The voulgiers that replaced them discarded the pavise, but wore armour little lighter than that of a dismounted man-at-arms and fought with short staff weapons such as the voulge, lance à pousser or langue de boeuf. Brigans were lighter armoured foot usually armed with spears but rarely pictured with shields. Bidets were javelinmen. Ribauds were looting knifemen who although lightly equipped were too reluctant to move into danger to be tactically mobile. Another answer to the longbow was long range artillery, but this was not available until well into the 15th century. Reg (I) infantry are city militia, Reg (O) are mercenaries or heavily armoured militia, Irr are feudal. The

"Jacquerie" peasant revolt that followed Poitiers proved to be incapable in practice of co-operating with other forces due to its propensity for killing all nobles it caught and burning their castles. However, overtures of alliance were made, notably by the Commune of Paris. Minima marked * apply only if any troops of that origin are used.

65. WALLACHIAN OR MOLDAVIAN 1330 AD - 1504 AD

Cold. Ag 1. Rv, H(S), H(G), Wd, RGo, M, Rd, BUA. C-in-C - Irr Cv (O) @ 17AP Sub-general - as above Rich boyars - Irr Cv (O) @ 7AP Lesser boyars or viteji - Irr LH (S) @ 7AP Armoured voynuks with pole arms - Irr Bd (O) @ 5AP Archers - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP Upgrade curteni archers to Irr Bw (O) @ 4AP Other rustici with spears, javelins, axes, halberds, flails, maces and scythes - Ir Upgrade rustici Hd to Irr Ax (O) @ 3AP Crossbowmen - Irr Ps (O) @ 2AP Handgunners - Irr Ps (S) @ 3AP Only Wallachians: Moldavian allies - List: Wallachian or Moldavian (Bk 4) Hungarian allies - List: Later Hungarian (Bk 4)	1 1-2 2-5 12-24 0-4 28-72 0-16 rr Hd (F) @ 1AP Any 0-3 0-3	0-15
Ottoman allies - List: Ottoman (Bk 4) Only Wallachians after 1455 AD:		
"Crusaders" - Reg Kn (O) @ 12AP	0-4	
Bombards - Reg Art (S) @ 10AP	0-2	
Ditch and earth bank to protect artillery - TF @ 2AP	0-8	
Only Moldavians:		
Horses to mount foot @ 1AP	Any	
Ditch and earth bank to protect front of army - TF @ 2AP	0-40	
Felled trees to block forest track or gap between woods - TF @ 2AP Hungarian allies - List: Later Hungarian (Bk 4) Polish allies - List: Later Polish (Bk 4) Ottoman allies - List: Ottoman (Bk 4)	0-2	
Crim Tartar allies - List: Golden Horde and Successors (Bk 4)		
Only Moldavians after 1400 AD: Upgrade Cv (O) to Irr Kn (F) @ 19AP if general, otherwise 9AP Bombards - Reg Art (S) @ 10AP	1/2-All 0-2	

This list covers the Wallachians from their independence from Hungary in 1330 until they became vassals of the Ottomans in 1476 after the death of Dracula (Vlad Tepes, "Vlad the Impaler", 1456 - 1462 and 1476), and the Moldavians from their independence from Hungary in 1359 until the death of Stephen the Great in 1504. The boyars were the nobility. Viteji were landowning peasants; many were promoted to the gentry by Dracula for bravery on the battlefield - and given the wealth of boyars he had impaled or otherwise inventively eliminated. Viteji were also important in the army of Moldavia. The curteni were the standing army of cavalry and infantry. An Italian traveller of the mid 15th century described the Wallachian army as "ranking among the most valiant in the world". The Moldavians considered themselves braver still. Both nations sought to fight in mountain defiles, woods or marshy ground to restrict enemy cavalry. Under Stephen the Great (1457 - 1504), the Moldavians tended to prepare defensive positions and slug it out behind ditches and ramparts garnished with artillery, keeping their cavalry in reserve for a decisive final charge. Some boyars wore partial plate armour and fought with lances, but others were of Lithuanian origin and may have fought in Lithuanian style. The Wallachians preferred a more mobile battle, launching sudden attacks from ambush and under Dracula indulging in night surprises and atrocities that established a complete morale ascendency over the Turks, who at night huddled terrified behind their camp defences. Wallachians cannot use Ottoman allies with Hungarians or Moldavians. Moldavians cannot use Ottoman or Crim Tartar allies with Poles. Other combinations of allies are permitted. The so-called "Crusaders" were Italians and Bosnians and Croats in Italian armour and were actually paid mercenaries.

66. LATER POLISH 1335 AD - 1510 AD

Cold. Ag 1. Rv, H(S), H(G), Wd, RGo, M, Rd, BUA.	
C-in-C - Irr Kn (S) @ 22AP	1
Sub-general - as above	1-2
Rycerz - Irr Kn (O) @ 10AP	7-16
Czeladz - Irr Cv (O) @ 7AP	9-18
Axemen - Irr Bd $(F) \stackrel{\frown}{\otimes} 5AP$	0-4
Town militia crossbowmen - Reg Bw, up to half (X) @ 7AP, re	mainder (O) @ 3AP
if rear element of double base behind Bw (X), otherwise @ 5AP	0-12
Lithuanian cavalry - Irr LH (O) @ 5AP	0-6
Wallachian or Moldavian cavalry - Irr LH (S) @ 7AP	0-2
Hungarian or Cuman cavalry - Irr LH (F) @ 4AP	0-6
Wagon fortress - TF @ 2AP	0-24
Only from 1342 AD to 1382 AD and from 1440 AD to 1444 A	AD:
Hungarian allies - List: Later Hungarian (Bk 4)	
Only after 1386 AD:	
Lithuanian allies - List: Lithuanian or Samogitian (Bk 4)	[Treat general as sub-general]
Tartar cavalry - Reg LH (S) @ 7AP	0-3
Only after 1400 AD:	
Serbian cavalry - Irr LH (O) @ 5AP	0-4
Guns - Reg Art (I) @ 4AP	0-1
Handgunners - Irr Ps (S) @ 3AP	0-2
War wagons - Irr WWg (O) @ 8AP	0-4
5 5 6 7 6 7	

This list covers Polish armies from the reforms of Kazimierz III (Casimir the Great) until widespread use of hand fire arms. The rycerz or knights were supported by czeladz or followers, initially armed with crossbow and called strzelcy (shooters), but by 1400 with lance instead. These at first drew up in a separate second line behind the rycerz, but after 1400 bodies of rycerz and czeladz often alternated in a single line with light cavalry, usually Lithuanians, on its flanks. Infantry were seldom fielded, the best being town militia who formed 10 deep, the first rank with pavise and spear, the others with crossbow. A few axemen fought effectively in woods. The "tabor" wagon fortress probably inspired Jan Zizka who had served as a mercenary in Poland. However, unlike those of the Hussites, most wagons of the tabor were unmodified baggage vehicles. After 1386 Poland and Lithuania were under the same crown and allied detachments were usually commanded by members of the royal family. Commanders of Lithuanian contingents are therefore classed as sub-generals rather than ally-generals. All Lithuanians must be in such a contingent if more than 6 elements are fielded. Although the Lithuanian list ends in 1435, it is still used to determine the composition of Lithuanian contingents after that date. Czeladz before 1400 and Lithuanian LH can always dismount as Bw (O).

67. JALAYIRID 1336 AD - 1432 AD

Dry. Ag 1. Rv, H(G), M, D, O, RGo, E, Rd, BUA.	
C-in-C - Reg Cv (S) @ 30AP	1
Mongol ally-general - Reg Cv (S) @ 20AP	0-3
Ghulams - Reg Cv (S) @ 10AP	5-12
Mongol armoured cavalry - Reg Cv (S) @ 10AP or Reg Cv (O) @ 8AP	0-8
Mongol horse archers - Reg LH (S) @ 7AP	10-32
Turkomans - Irr LH (S) @ 7AP	0-6
Bedouin - Irr LH (O) @ 5AP	5-12
Foot - Irr Hd (O) @ 1AP	0-6
Only from 1378 AD to 1389 AD:	
Black Sheep allies - List: Black Sheep and White Sheep Turkoman (Bk 4)	
Only from 1394 AD to 1399 AD:	
Georgian allies - List: Georgian (Bk 3)	

The Iraq-based Jalayirids split off from the Ilkhanids after the deaths of Abu Sa'id (the last fully legitimate Ilkhan) and Arpa Ke'ün (the last generally accepted Ilkhan). Their armies depended heavily on ghulams, who were considered more reliable than the regime's Mongol tribes. Iraqi bedouin were also important. Mongol ally generals cannot command ghulams or bedouin, but the C-in-C can command Mongols.

68. MEDIEVAL SPANISH OR PORTUGUESE 1340 AD - 1485 AD

Warm. Ag 3. WW, Rv, H(S), H(G), O, V, RGo, Rd, BUA.	
C-in-C - Irr Kn (O) @ 20AP	1
Sub-general - as above, or, if of military order, Reg Kn (S) @ 35AP	1-2
Spanish or Portuguese men-at-arms - Irr Kn (O) @ 10AP	8-12
Upgrade men-at-arms as belonging to military orders - Reg Kn (S) @ 15AP	0-3
Jinetes or Adalides - Irr LH (O) @ 5AP [C,A]	5-12 0-6
Jinetes or Adalides - Irr LH (O) @ 5AP [P] Granadine cavalry - Reg LH (O) @ 5AP [C, P]	0-6 0-4
Spearmen - Irr Sp (I) (a) SAP	0-4
Almughavars - Irr Ax (S) @ 4AP [A]	0-10
Javelinmen - Irr Ax (O) @ 3AP or Irr Ps (S) @ 3AP [C]	0-24
Javelinmen - Irr Ax (O) @ 3AP or Irr Ps (S) @ 3AP [P]	0-24
Crossbowmen and archers - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP or Irr Bw (O) @ 4AP	6-24
Upgrade crossbowmen as military orders foot to Reg Bw (O) @ 5AP	0-4
Hermandad militia spearmen - Reg Sp (I) @ 4AP [C]	3-6
Hermandad militia crossbowmen - Reg Bw (I) @ 4AP or Reg Ps (O) @ 2AP [C]	3-6
Slingers - Irr Ps (O) @ 2AP	6-12
Peasants [P] - Irr Hd (F) @ 1AP	0-6
	0-12
Granadine archers - Reg Bw (O) @ 5AP	0-2
Abatis - TF @ 2AP [P]	0-16
Nao or carracks - Irr Shp (S) @ 4AP [Bw (I)] [C, P]	0-4
Galleys - Reg Gal (O) @ 3AP [Up to 1/4 Kn dismounted as Bd (S), remainder Bw (O)] [C, A]	0-4
Only before 1390 AD:	
French ally-general - Irr Kn (S) @ 17AP [C]	*1
English ally-general - Reg Kn (I) @ 20AP [P]	*1
French or Gascon men-at-arms - Irr Kn (O) @ 10AP	0-4
Upgrade French men-at-arms to Irr Kn (S) @ 12AP	0-4
French crossbowmen - Irr Bw (O) @ 4AP	0-4
English men-at-arms - Reg Kn (I) @ 10AP [P]	0-6 *4-10
Horses or mules to mount longbowmen @ 1AP	0-4
Only Portuguese in 1385 AD:	
Upgrade C-in-C to Reg Kn (S) @ 35AP	1
Only from 1390 AD:	
Handgunners - Irr Ps (S) @ 3AP [P]	0-12
Hermandad militia Handgunners - Reg Ps (S) @ 3AP [C]	0-6
Bombard - Reg Art (S) @ 10AP	0-2
Upgrade galleys to Reg Gal (S) @ 4AP [Up to 1/2 Bw (O), remainder Kn dismounted as Bd (S)]	All

This list covers the three main Christian states of the peninsula, Castile, Aragon and Portugal, from the introduction of plate until that of the pike. Items marked [C] apply to Castilian, those marked [A] to Aragonese, and those marked [P] to Portuguese armies. Items marked with none of these apply to all. Minima marked * apply only if more than 4 elements of that nation are used. Portuguese, French and English men-at-arms usually fought on foot, Spaniards (Castilians or Aragonese) rarely. The usual Spanish tactic was a cavalry charge, sometimes delayed for softening up by crossbows and slings, or outflanking by jinetes, and sometimes preceded by dismounted men-at-arms. Adalides were border scouts and mudejars levies of conquered Muslims. Ally generals can only command troops of their own nation and, if English, Gascons and must command all of these if present. Hermandad crossbowmen classed as Ps (O) can give rear support to Hermandad spearmen. English, Gascon, Portuguese and French Kn can always dismount as Bd (S), Spanish Kn only to attack or defend fortifications, attack war wagons or if arriving by galley. Castilian naval squadrons frequently raided the English coast, often in conjunction with French squadrons. Spanish galleys specialised in boarding fights and came to carry a large proportion of men-at-arms. The Portuguese relied on sailing vessels and were early exponents of broadside gun batteries. The largest English allied force was the Duke of Lancaster's 2,000 men-at-arms and 3,000 longbowmen in 1386-7 and the largest French was 2,000 men-at-arms to 4,000 Spanish in a Castilian army of reputedly 60,000 in 1367.

69. ALBANIAN 1345 AD - 1430 AD and 1443 AD - 1479 AD

Cold. Ag 1. Rv, H(S), Wd, O, V, RGo, Rd, BUA. C-in-C - Irr LH (O) @ 15AP or Irr Cv (O) @ 17AP Sub-General - as above or Irr Ax (O) @ 13AP Cavalry - up to 1/4 with crossbow, Irr LH (I) @ 3AP, remainder with javelins or lance, Irr LH (O) @ 5AP Archers - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP Crossbowmen - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP Upgrade crossbowmen to Irr Bw (O) @ 4AP Javelinmen - Irr Ax (O) @ 3AP Halberdiers - Irr Bd (O) @ 5AP Peasants - Irr Hd (F) @ 1AP Handgunners - Irr Ps (S) @ 3AP Light guns - Reg Art (I) @ 4AP Bombards - Reg Art (S) @ 10AP Only before 1385 AD: Downgrade sub-general to ally-general - Irr LH (O) @ 10AP or Irr Cv (O) @ 12AP Only from 1392 AD to 1395 AD: Venetian allies [VG] - List: Italian Condotta (Bk 4)	1 1-2 30-56 18-48 0-16 0-6 0-12 0-4 0-8 0-2 0-1 0-1 1
Only from 1450 AD: Italian, German, Hungarian and other mercenary men-at-arms - Reg Kn (O) @ 12AP, double based Reg Kn (I) @ 10AP if front element, 8AP if rear, or Irr Kn (O) @ 10AP Only in 1451 AD and in 1455 AD:	0-4
Neapolitan allies - Neapolitan ally general - Reg Kn (O) @ 22AP Neapolitan supplied elmetti - Reg Kn (O) @ 12AP Neapolitan supplied handgunners - Reg Ps (S) @ 3AP Neapolitan supplied Catalans - Irr Ax (S) @ 4AP Neapolitan supplied archers - Reg Ps (O) @ 2AP	*1 *0-2 *0-3 *0-3

Prior to this period, Albania was variously controlled by Epiros, Morea, Naples and Serbia. After rebelling from Serbia under George Balshan and his rival Charles Thopia, it fought successfully against the Angevins of Naples and the Venetians before falling to the Ottomans in 1430. In 1443 John Castriot "Scanderbeg" rebelled and led resistance against the Turks until his death in 1468. His son took refugee cavalry into Venetian service as the famous stradiots. At this time stradiots were mostly unarmoured and fought with a double-ended lance and light shield. Later, in Venetian service, they discarded lance for mace and shield for heavier armour, but remained the pre-eminent of Europe, displacing the Spanish Genitors, and were formidable opponents even for plate-armoured knights. Alfonso V, the Aragonese king of Naples, supplied allied forces on two occasions. Minima marked * apply only if any troops so marked are used. Despite its high proportion of light horse, this was an army thoroughly at mountainous and partly wooded terrain. Feint attacks were used to lure rash enemy into flank ambushes.

70. CHANCA 1350 AD - 1440 AD

Cold. Ag 3. Rv, H(S), Wd, RGo, Rd, BUA.	
Chanca C-in-C - Irr Ax (X) @ 13AP	1
Chanca sub-general - Irr Ax (X) @ 13AP	0-1
Chanca priests with portable shrine - Irr WWg (I) @ 2AP	0-1
Chanca spearmen - Irr Ax (X) @ 3AP	50-106
Confederate sub-general - Irr Wb (F) @ 13AP	0-2
Confederate warriors - Irr Wb (F) @ 3AP	0-60
Chanca and/or confederate slingers - Irr Ps (O) @ 2AP	12-30
Quechua allies:	
Quechua ally general - Irr Ax (O) @ 8AP	*1
Quechua warriors - Irr Ax (O) @ 3AP	* 12-18
Quechua slingers - Irr Ps (O) @ 2AP	* 12-18

The Chanca or Chinchaysuyu confederation blocked Inca expansion until subjugated and are mainly included as contemporary enemies for the Incas. Some ceremonials involved men wearing puma suits and it is possible that these could appear in warfare. The Incas attacked a portable shrine being carried into battle by Chanca. The standard Chanca weapon was a long thrusting spear, which is repeatedly contrasted with shorter Inca weapons. Shields were not used. The Quechua were reluctant allies and liable to change sides. They were all slingers, but some also had short spears. Other more reliable confederates were the Uramarca, Villca, Utunsulla and Hancohualla. These seem to have been charging troops primarily armed with one and two handed clubs, axes and black hard wood swords, often supplemented by javelins. They must be commanded by generals of their own nation. The slingers ubiquitous to the area are assumed to have been available to all contingents for skirmishing. The minimum marked * applies only if any Quechua are used.

71. CHIMU 1350 AD - 1464 AD

Dry. Ag 1. WW, Rv, H(G), Wd, O, RGo, D, Rd, BUA	
C-in-C - Irr Wb (F) @ 13AP	1
Sub-general - Irr Wb (F) @ 13AP	1-2
Warriors - Irr Wb (F) @ 3AP	58-170
Slingers - Irr Ps (O) @ 2AP	0-30
Sailing rafts - Irr Shp (I) @ 2AP [Wb]	0-3

The Chimu or Chimor empire occupied a dry desert plain cut through by rivers, between the sea and the wooded foot hills of the Andes. They had replaced and absorbed the previous Mochica culture by the end of the 11th century and were conquered by a series of Inca campaigns between 1461 and 1464. This list starts with their first possible contact with the Chanca. The only depiction of a warrior we have found actually belongs to the earlier culture. Textile armour and helmets were worn by at least some and the main close guarter weapon appears to have been a hardwood club used with a small round shield. The atlatl dart-thrower also seems to have been in use.

72. AMAZONIAN 1350 AD - 1662 AD

Tropical. Ag 0. WW, Rv, Wd, M, Rd, BUA.	
C-in-C - Irr Bw (I) @ 13AP	1
Sub-general - as above	0-1
Ally-general - Irr Bw (I) @ 8AP	1-3
Archers - Irr Bw (I) @ 3AP	58-168
Spearmen - Irr Ps (I) @ 1AP	0-12
Blowpipe men - Irr Ps (X) @ 6AP	0-6
Canoes - Irr Bts (I) @ 1AP [Bw]	0-6

This list covers the well-organised riverine tribes of the Upper Amazon from the appearance of the first known external rivals whom they could have fought - the Chanca of the Andes - until the expulsion of their Jesuit protectors led to the depopulation of most of their settlements by disease, migration and Portuguese slave-raiding. Similar peoples had probably inhabited the Amazon Basin for millennia, but evidence for them comes almost exclusively from the reports of 16th century Conquistadores, who describe large fleets of canoes manned by archers. One account claims that an army of the Tapajos tribe comprised 60,000 bows. Other weapons included hardwood clubs, spears and blowpipes, but archery was overwhelmingly the most important tactic.

73. MING CHINESE 1356 AD - 1598 AD

Tropical until 1402, Cold thereafter. Ag 2. WW, Rv, H(S), H(G), O, RGo, M, Rd, BUA. Until	1 1402: WW, E.
C-in-C - Reg Cv (S) @ 30AP	1
Sub-general - as above	1-2
Chinese cavalry - Reg Cv (O) @ 8AP	
- before 1420 AD	12-16
- after 1420 AD	0-10
Mongol or Jurchen guards - Reg Cv (S) @ 10AP	0-3
Mongol or Jurchen cavalry - Reg LH (S) @ 7AP	4-12
Chinese infantry - Irr Bd (I) @ 4AP	0-16
Chinese archers or crossbowmen - all Irr Bw (O) @ 4AP or all Irr Bw (X) @ 5AP	0-16
Chinese handgunners - Reg Art (X) @ 5AP	0-6
"Dare-to-die" troops - Irr Bd (F) @ 5AP or Irr Ps (S) @ 3AP or Irr Ps (X) @ 6AP	0-4
Counter-weight stone-throwers - Reg Art (S) @ 10AP	0-1
Light guns - Reg Art (I) @ 4AP	0-2
Hand-launch rocketeers, Reg Art (I) @ 4AP	0-8
Thunder-bomb oxen or stampeding cattle - Irr Exp (O) @ 7AP	0-3
Palisades - TF @ 2AP	0-24
Junks - Irr Shp (O) @ 3AP [Bd, Bw or Ps]	0-6
Mongol allies - List: Later Nomadic Mongol [Bk 4]	
Only before 1420 AD:	
Upgrade Chinese cavalry to Ching-wei guards - Reg Cv (S) @ 10AP	0-6
Upgrade Chinese Bd (I) and Bw (O) or (X) to Hung Wu's veterans or San-ta-ying troops	
- Bd to Reg Bd (O) (a) 7AP, Bw (O) to Reg Bw (O) (a) 5AP, Bw (X) to Reg Bw (X) (a) 7AP	1/2-All
Only after 1398 AD:	
Upgrade rocketeers to multiple-rocket launchers on carts or wheel-barrows, Reg Art (O) @ 8.	AP 1/2
Only after 1420 AD:	
Chinese mercenary cavalry - Irr Cv (I) @ 5AP	6-9
Chuang or similar southern tribesmen - Irr Ax (O) @ 3AP or Irr Ps (O) @ 2AP	0-12
Upgrade light guns to bombards - Reg Art (S) @ 10AP	Any
Only from 1440 AD - 1454 AD:	5
Burmese or Shan allies - List: Burmese (Bk 3)	
Only after 1449 AD:	
Chinese militia - Irr Hd (O) @ 1AP	0-20
War Wagons - Reg WWg (O) @ 10AP	0-6
Only after 1540 AD:	0.0
Replace Art (O) rocket launchers with bombards, Reg Art (S) @ 10AP	0-2
Replace Art (I) rocketeers with handgunners, Reg Art (X) @ 5AP	0-2
	0-4
Korean allies - List: Yi Dynasty Korean (Bk 4)	

This list covers the Ming from the rise to power of Chu Yuan-chang, who became the first Ming emperor in 1368, until the Korean war. In 1402 the capital was moved from the southern city of Nanking to Peking in the north. We have assumed that the Miao and similar Yuan auxiliary troops incorporated into the early Ming army fought in the same style as the Chinese, although probably distinctively dressed. Mongol allies may not be used with southern tribesmen or with Burmese or Shan allies; this does not apply to the Mongol cavalry in the main list. The regular Chinese troops deteriorated after the 1420s, and we have not attempted to distinguish between the later badly-trained regulars and the ill-disciplined mercenaries who gradually replaced them - both are classed as irregulars. "Dare-to-die" troops were picked detachments used for special missions; they may be armed with halberds or swords (Bd), handguns (Ps (S)) or fire-lances (Ps (X)). Other handgunners now fired in ranks by relief and are classed as Art (X). Chinese close-fighting infantry have been classed as Bd rather than Sp to represent the preponderance of mixed halberd-type weapons and an emphasis on individual combat and the taking of heads rather than cohesion. Bw (X) represent troops depicted with a single rank of men with shields and banners attached to spears, with several ranks of missile troops behind. These must be represented by a single row of Bw (X) elements, each with alternate figures armed with bow or with shield and banner. The majority of Chinese cavalry, as well as all Mongols or Jurchen, would carry bows. Mongol

settlers had been expelled from the agricultural areas of China, which paradoxically increased their efficiency, since such lands had lacked good grazing. The Ming were especially strong at sea and between 1405 and 1433 intervened militarily in Java, Sumatra and Ceylon and sent an expedition to Arabia and Africa. Unsuitable for open ocean work, paddle-wheelers were now used only for light river transport, in which role they continued into the 19th century. WW include not only the Yangtse river, but also the Grand Canal extending it, the scene of many internal battles.

74. FREE COMPANY OR ARMAGNAC 1357 AD - 1410 AD and 1444 AD

Cold. Ag 4. WW, Rv, H(S), H(G), Wd, O, V, RGo, Rd, BUA. C-in-C - English or	
German, Reg Kn (I) @ 30AP, or French, Irr Kn (S) @ 22AP,	
or Gascon, Spanish or Navarrese, Irr Kn (O) @ 20AP	1
Sub-general - as above	1-3
Gascon, French, Spanish or Navarrese men-at-arms and sergeants - Irr Kn (O) @ 10AP	9-16
Upgrade French men-at-arms to Irr Kn (S) @ 12AP	0-4
English gentlemen and lesser men-at-arms - Reg Kn (I) @ 10AP	4-12
German mercenary M-at-A - double based Reg Kn (I) @ 10AP if front element, 8AP if rear	*1-4
Crossbowmen - Reg Bw (O) @ 5AP	0-6
English longbowmen - Reg Bw (S) @ 7AP	4-16
Horses to mount English longbowman @ 1AP	Any
Breton javelinmen - Irr Ps (S) @ 3AP	0-6
Only in 1444 AD:	
French brigans - Irr Ax (X) @ 3AP	4-12
French ribauds - Irr Hd (O) (a) 1AP	1-4
Bombards - Reg Art (S) @ 10AP	1-2

This list covers the free companies of 100 Years War soldiers made redundant by the truce of Bordeaux and the Treaty of Bretigny and later by the truce of Tours. It represents one of the army-sized accumulations that sometimes came together for major looting expeditions. Although many of the companies of the first phase went back into their own nation's service when the war broke out again, some that had moved to Italy stayed there and drifted into formal contractual relationships with Italian city states. Prominent among these were the English "White Company" under John Hawkwood, the German "Company of the Star" under Albrecht Sterz and Hannekin Bongarten, and the Breton and Gascon company of Bertrand de la Salle. They were gradually replaced by native Italian condottieri, the last to disappear being the Company of the Rose in 1410. On the final ending of the 100 Years War, the French King Charles VII hit on the idea of disposing of the surplus soldiery from both sides before they took up the habits of their predecessors. He accordingly collected 40,000 of them, and hired them, the so-called "Armagnacs", to the Habsburg Emperor Frederick III for an invasion of Switzerland. Their final exploit was to totally destroy a heavily outnumbered Swiss force which rashly attacked them at St Jacob-en-Birs in 1444. There is no restriction on mixing nationalities except for allied contingents supplied to armies in Italy, where the only combinations of nationalities allowed are German with English or Gascon with Breton. German Kn (I) must be on double element bases; English Kn (I) must not. All Kn can always dismount as Bd (S). Until 1394, English Kn can alternatively dismount as Sp (S), simulating Hawkwood's practice with the White Company. Hubert Cole's novel to the contrary. Hawkwood's longbowmen deployed separately from his men-at-arms. The minimum marked * applies only if a German general is used.

75. TIMURID 1360 AD - 1506 AD

Dry. Ag 4. Rv, H(S), H(G), O, RGo, M, D, Rd, BUA.	
C-in-C - Reg Cv (S) @ 30AP	1
Sub-general - as above	1-2
Persian or Georgian ally-general - Irr Cv (S) @ HAP	0-1
Timurid cavalry - up to half Reg Cv (S) @ 10AP, remainder Reg Cv (O) @ 8AP	16-26
Persian, Georgian or Turkoman nobles - up to half Irr Cv (S) @ 9AP,	
remainder Irr Cv (O) @ 7AP	0-10
Turkoman nomad cavalry - Irr LH (S) @ 7AP	0-8
Timurid archers - Reg Bw (O) @ 5AP	0-8
Persian and/or Tajik militia - Irr Bw (I) @ 3AP	0-8
Afghan archers - Irr Ps (O) @ 2AP or Irr Bw (O) @ 4AP	0-6
Afghan spearmen - Irr Ax (X) @ 3AP or other hillmen - Irr Ax (O) @ 3AP	0-6
Stone-throwers or bombards - Reg Art (S) @ 10AP	0-2
Ditch and tethered buffaloes or wagon laager to protect camp - TF @ 1AP	0-12
Only before 1370 AD:	
Downgrade sub-general to ally-general, Reg Cv (S) @ 20AP	0-1
Only Timur from 1360 AD to 1405 AD:	
Hostage screen - Irr Hd (I) @ 0.5AP	0-10
Only Timur from 1399 AD to 1405 AD:	
Elephants - Irr El (O) @ 16AP	0-2
Only Shah Rukh from 1405 AD to 1447 AD:	
Elephants - Irr El (O) @ 16AP	0-4
Black Sheep allies - List: Black Sheep and White Sheep Turkoman (Bk 4)	
Only Timur or Shah Rukh:	
Stampeding cattle, buffaloes or camels - Irr Exp (O) @ 7AP	0-4
White Sheep allies - List: Black Sheep and White Sheep Turkoman (Bk 4)	•••
Only after 1450 AD:	
Uzbek allies - List: Later Nomadic Mongol (Bk 4)	
Only after 1480 AD:	
Handgunners - Irr Ps (S) @ 3AP	0-3
Tranugumers - III I S (S) (W SAF	0-3

This list covers Transoxanian armies from the revolt of Timur and Mir Hussain until the death of Husayn Bayqara. Having revolted together against the Jagatai, Timur and Mir Hussain quarrelled, leading to the latter's defeat and murder. During his career Timur-i Lenk (Timur the Lame or Tamburlaine) defeated the Jagatai, Karts, Jalayarids, Georgians, Black Sheep Turkomans, Golden Horde, Mazandarians, Muzaffarids, Ottomans, Mamluks and the Delhi Sultanate, though he was less good at holding territory and had often to make return visits. After his death in 1405 on his way to attack Ming China, his empire split into several hostile principalites, of which the largest was Herat, initially ruled by his youngest son Shah Rukh. Although Timurid armies retained Mongol organisation, both battle accounts and evidence of the increasing use of armour suggest that they emphasised close quarters fighting rather than traditional nomad tactics. This is borne out by the controversial "Political and Military Institutes" of Timur, which prescribes a series of controlled charges. Lances and horse armour, however, were not universal. Non-Timurid troops may be commanded either by a Timurid sub-general or by an ally-general of their own nationality. Illustrations show infantry with bow, axe, sabre and shield; their exact origin is unknown, so they have been described here as "Timurid". One possibility is that these were Sabadars, Shi-ite urban militia from Transoxiana and Khurasan whose unusual competence was balanced by their turbulence. Timurid cavalry can always dismount to fight on foot as Bw. Persian or Georgian ally-generals can command only troops of their own nationality.

76. EARLY BURGUNDIAN 1363 AD - 1471 AD

Cold. Ag 2. WW, Rv, H(S), H(G), Wd, O, V, RGo, M, Rd, BUA.	
C-in-C - Irr Kn (O) @ 20AP	1
Sub-general - as above	1-2
French ally-general - Irr Kn (S) @ 17AP	*1
English ally-general - Reg Kn (I) @ 20AP	*1
Burgundian men-at-arms, demi-lances and coustilliers or valets - Irr Kn (O) @ 10AP	8-12
Downgrade Burgundian Kn to Irr Cv (O) @ 7AP as separately deployed valets d'armes	0-2/3
Burgundian or mercenary mounted crossbowmen - Irr mtd Bw (O) @ 5AP	4-6
French men-at-arms etc Irr Kn (S) @ 12AP	0-5
Italian men-at-arms etc Reg Kn (O) @ 12AP	0-4
English men-at-arms - Reg Kn (I) @ 10AP	*1-3
Low countries pikemen - Reg Pk (I) @ 3AP	0-12
Low countries crossbowmen - Reg Bw (I) @ 4AP	6-12
Picard archers - Reg Bw (O) @ 5AP	6-24
English archers - Reg Bw (S) @ 7AP	*4-8
Village levy - Irr Hd (O) @ 1AP	0-6
Bombard - Reg Art (S) @ 10AP	0-1
Wagon laager for camp - TF @ 1AP	0-12
Only after 1419 AD:	
Downgrade Burgundian Kn (O) to Irr Kn (I) @ 8AP	1/2-All
Only after 1430 AD:	
Organ guns - Reg Art (I) @ 4AP	1-4
Handgunners - Reg Ps (S) @ 3AP	0-4
Only after 1464 AD:	
Swiss - Reg Pk (S) @ 5AP	0 or 4

This list covers Burgundian armies until the reforms of Charles the Bold had taken effect. The Low Countries were disaffected, and the preparedness of the country gentry slumped under Philip the Good. According to a contemporary writer, only 50 out of 1,200 men-at-arms present at the battle of Montl'hery in 1465 knew how to couch a lance. Minima marked * apply only if more than 4 elements of that nation are used. An ally-general must command all and only troops of his nationality. Kn can always dismount as Bd (S). At Othee in 1408 and St. Remy-sur-Plain in 1422, Burgundian men-at-arms dismounted, leaving their valets mounted in reserve. Accordingly, at least 1 element of Burgundian Kn must be deployed dismounted at the start of the game for every 2 elements downgraded to Cv (O).

77. BLACK SHEEP AND WHITE SHEEP TURKOMAN 1378 AD - 1469 AD and 1387 AD - 1504 AD

Dry. Ag 2. Rv, H(S), H(G), O, E, BUA, Rd, RGo.	
C-in-C - Reg Cv (S) @ 30AP	1
Sub-general - as above	1-3
Pushan-push - Reg Cv (S) @ 10AP	3-7
Tirkash-band - Reg Cv (O) @ 8AP or Reg LH (F) @ 4AP	6-16
Qullughchi - Irr Cv (O) @ 7AP	3-10
Turkoman tribal horse - Irr LH (S) @ 7AP	5-16
Archers - Irr Bw (O) @ 4AP or Irr Ps (O) @ 2AP	6-16
Camp followers and levy foot - Irr Hd (O) @ 1AP	2-8
Kurdish cavalry - Irr Cv (O) @ 7AP	0-8
Only White Sheep:	
Downgrade archers to Irr Bw (I) @ 3AP as Persian militia	Any
Trapezuntine allies - List: Trapezuntine Byzantine (Bk 4)	
Georgian allies - List: Georgian (Bk 3)	
Karaman or Kastamonu Turkoman allies - List: Anatolian Turkoman (Bk 4)	
Only White Sheep rebels in 1457 AD:	
Black Sheep allies - List: Black Sheep and White Sheep Turkoman (Bk 4)	

Only White Sheep from 1472 AD:	
Bombards - Reg Art (S) @ 10AP	0-2
Wagon-laager to protect artillery - TF @ 2AP	0-6
Handgunners - Irr Ps (S) @ 3AP	0-6

These two Turkoman confederations (the White Sheep including Kurdish clans) were successor states to the Jalavirids in eastern Anatolia, and were influenced by late Mongol practice. Both survived Timur's invasions; the Black Sheep (Qara-Ooyunlu) took over Azerbaijan and Iraq from the Jalayirids, but were overthrown by the White Sheep (Aq-Qoyunlu), who then fought against the Ottomans but fell to the Safavids in 1499 - 1504. Both the White Sheep Sultan and his local leaders kept forces of paid and trained cavalry. Pushan-push or Pushan-dar "armoured men" were the best equipped, probably the minority with barded horse, bow, and sometimes lance seen in Persian art of the period. Tirkash-band "quiver-bearers" were the mounted archers who provided the main strength of the army, while qullughchi "servants" were mounted retainers. Since they were included in the troop muster lists, we assume that they were the mounted servants described as wearing armour and carrying shields; the Sultan's included functionaries of his household including cooks, lion keepers, falconers and messengers. Both tirkash-band and gullughchi may have been the armoured archers on unarmoured horses who are the commonest type in art, though we allow for the possibility that some or all of the tirkash-band may instead have been Mongol-style light horse archers. At a review in 1476, an elite unit with a white banner and mounted on armoured horses led the right wing. The left wing also had an elite unit of armoured cavalry, though this time horse armour is not mentioned. A Venetian traveller states that 2,000 of 20,000 cavalry horses at a review in 1474 had metal armour and others leather or quilted. A 15th-century drawing of a Turkoman infantryman with bow, sabre, dagger, short axe and round shield suggests that some infantry were well enough equipped to rate as Bw (O). The White Sheep captured some Ottoman guns in 1472, and guns and Handgunners stationed in the centre of a White Sheep army are said to have chased off opposing skirmishers in 1478. Normally infantry formed the centre, with cavalry wings and advance guard "fore-head"; some armies had only a few infantry, others one-third or more. Allied contingents drawn from this list need not include otherwise compulsory infantry. A grand defensive league proposed against the Ottomans included the White Sheep, the Trapezuntine Byzantines, several Georgian princes and the Turkoman emirs of Karaman and Kastamonu.

78. YI DYNASTY KOREAN 1392 AD - 1598 AD

Cold. Ag 0. WW, Rv, H(S), H(G), Wd, O, E, RGo, M, Rd, BUA.	
C-in-C - Reg Cv (S) @ 30AP or Reg Cv (O) @ 28AP	1
Sub-general - as above	1-2
Cavalry - up to 1/3 lancers, Reg Cv (S) @ 10AP, rest with flail or halberd, Reg Cv (O) @ 8AP	6-24
Light cavalry - Irr LH (F) @ 4AP	0-12
Archers - Reg Bw (O) @ 5AP	8-24
Halberdiers - Reg Bd (I) @ 5AP	0-4
Spearmen - Reg Pk (I) @ 3AP	8-20
Peasant spearmen - Irr Hd (O) @ 1AP	0-12
Mixed skirmishers - Reg Ps (S) @ 3AP	0-6
Hand-launched rockets - Reg Art (I) @ 4AP	0-4
Light guns - Reg Art (I) @ 4AP	2-4
Ditch and bank, palisades - TF @ 2AP	0-24
Galleys - Reg Gal (O) @ 3AP [Sp, Bw]	0-4
Transport junks - Irr Shp (I) @ 2AP [Cv, LH, Sp, Bw, Bg]	0-4
Jurchen allies:	
Jurchen ally-general - Irr Cv (S) @ HAP	*1
Jurchen cavalry - Irr Cv (O) @ 7AP or Irr Cv (S) @ 9AP	*3-7
Jurchen scouts - Irr LH (F) @ 4AP	0-2
Only after 1450 AD:	
Upgrade hand-launched rockets to wheeled rocket-launchers - Reg Art (O) @ 8AP	Any
Only after 1592 AD:	
Upgrade galleys to turtle ships - Reg Gal (S) @ 4AP [Bw, Sp, Art (I)]	All
Chinese allies - List: Ming Chinese (Bk 4)	

This list covers Korean armies from the beginning of the Yi dynasty until the end of the Japanese invasion under Hideyoshi, which prompted military reforms and an increased use of handguns. Until the Japanese invasion the only enemies were pirates and Manchurian tribes. The core of the armed forces were professional soldiers, the cavalry and navy being best. 16th century cavalry are depicted with bow plus a weapon wielded in both hands, either a halberd, a lance or a flail, but no horse barding. Koreans were renowned for their skill with the bow and the Japanese found that Korean archers outshot their own. They were also impressed by the Korean use of long spears, which increased the popularity of the yari among Japanese. Nevertheless, the infantry were less impressive than the cavalry, and the militia, although armed with the same spears, performed poorly. The skirmishers were a mixture of men with long sword and shield, others with repeating crossbow or grenades, and latterly a few handguns. Korean armies of the period were well equipped with cannons and rockets, though the former were very small, the Japanese boasting that they could be fired from Japanese guns! Traditionally, Korean armies relied on the heavy use of temporary and permanent fortifications. The extension of the list until 1596 is to allow friendly games against Japanese armies employing firearms. The principal Korean innovation of those wars was the turtle ship, a covered rowing vessel armed with cannon and possibly a bow flame-thrower, which wrecked the Japanese fleet. Jurchen allies were remnants unlikely to have preserved any of the organisation of the Jurchen-Chin state. Minima marked * apply if any Jurchen are used.

79. LATER SWISS 1400 AD - 1522 AD

Cold. Ag 3. Rv, H(S), Wd, RGo, Rd, BUA.	
C-in-C - Reg Pk (S) @ 25AP	1
Sub-general - Reg Pk (S) @ 25AP or Reg Bd (X) @ 28AP or Reg Ps (S) @ 23AP	1-2
Mounted crossbows - Reg LH (I) @ 3AP	0-2
Pikemen - Reg Pk (S) @ 5AP	26-78
Guns - Reg Art (I) @ 4AP	0-1
Only before 1476:	
Skirmishers - up to 1/4 handguns, Reg Ps (S) @ 3AP, rest crossbows, Reg Ps (O) @ 2AP	6-16
Only before 1490 AD:	
Halberdiers - Reg Bd (X) @ 8AP	0-25
Only from 1476 AD to 1477 AD:	
Lorrainer sub-general - double-based Reg Kn (I) @ 30AP	0-1
Lorrainer cavalry - double-based Reg Kn (I) @ 10AP if front element, 8AP if rear	4-7
Captured Burgundian artillery - Reg Art (I) @ 4AP	0-6
Only from 1476 AD to 1489 AD:	
Skirmishers - 1/4 to 1/2 handguns, Reg Ps (S) @ 3AP, rest crossbows, Reg Ps (O) @ 2AP	6-16
Only from 1490 AD:	
Skirmishers - up to 1/4 crossbows, Reg Ps (O) @ 2AP, rest handguns - Reg Ps (S) @ 3AP	6-12

This list covers Swiss armies from the first large scale use of pikes until the disastrous battle of Bicocca in 1522 finally ended Swiss battlefield supremacy. The usual formation was into three commands called the Vorhut (vanguard). Gewalthut (centre) formed around the cantonal standards and Nachhut (rearguard). Either of the first two could be the largest, but the Nachhut was always the smallest. The three commands sometimes attacked in echelon, each in a solid block, but this was not invariable. At Nancy in 1477 the Nachhut comprised only a large body of skirmishing handgunners used to connect the other two commands. Committee control continued and the C-in-C's function is assumed to reside in a front rank element of the Gewalthut. This applied even at Nancy where the nominal commander of the army was its hirer, Duke René of Lorraine, the former leader of the cavalry at Morat in 1476. Although most elements are classed as pikemen, pike units still contained a large proportion of halberdiers. This should be represented by using halberdiers as the centre figures of the rear three elements of each four deep pike block. However, until about 1490 there can also be separate halberdier elements classed as Bd (X); at Morat the Nachhut consisted entirely of these. At Arbedo in 1422 at least two thirds of the army were still halberdiers. Most halberdiers were unarmoured. In this period they do not have to be double based. Skirmishers were usually mostly attached to the Vorhut, handguns progressively replacing crossbows. Mounted crossbows can always dismount as Ps (O). Allied contingents drawn from this list prior to 1490 can include Bd (X) halberdiers. Swiss artillery consisted of light pieces dragged along with the infantry. A large number of extra guns were captured at Grandson in 1476 and used on the walls of Morat later that year to beat off initial Burgundian assaults before succumbing to counter-battery fire from heavy bombards. Accordingly, captured Burgundian artillery can only be used in PF.

80. HUSSITE 1419 AD - 1434 AD and 1464 AD - 1471 AD

Cold. Ag 1. H(S), H(G), Wd, RGo, Rd, BUA.	
C-in-C - Reg Bd (O) @ 27AP or Reg Kn (O) @ 32AP	1
Sub-general - Reg Kn (F) @ 31 AP or Reg Kn (O) @ 32AP or Reg WWg (O) @ 30AP	1-2
Mounted scouts with crossbows - Irr LH (I) @ 3AP	0-4
War-wagons manned by crossbowmen and Handgunners or with light guns	
- Reg WWg (O) @ 10AP	11-22
Mixed flailmen and halberdiers - Reg Bd (I) @ 5AP	1 per WWg
Bombards - Reg Art (S) @ 10AP	0-4
Ditch to cover front of war wagons and troops between them - TF @ 2AP	0-60
Chains to cover gaps between wagons - TF (treat as gateways) @ 4AP	0-23
Only after 1420 AD:	
Hussite cavalry - Reg Kn (F) @ 11AP	0-8
Only after 1422 AD:	
Upgrade Hussite cavalry including nobles to Reg Kn (O) @ 12AP	0-2
Upgrade Bd (I) to Reg Bd (O) @ 7AP	Any
Only from 1421 AD to 1431 AD:	
Polish allies - List: Later Polish (Bk 4) [Can include Lithuanians]	0-12

The Hussites were named after Jan Hus, a Bohemian Protestant reformer judicially murdered while under safe conduct in 1415. This having failed to suppress local religious aspirations, a revolt broke out in 1419 under Jan Zizka. After winning a couple of lucky small battles with the aid of wagons mounting artillery, Zizka had created by 1420 an entirely new kind of army based on specially constructed armed wagons manned by disciplined troops, which won many victories against the Catholic League's Royalist and Hungarian armies. When he died in 1424, he is said to have ordered his skin to be made into a drum so that he could go on frightening his enemies! The organisation of the army was based on the war wagon as a unit, each having, according to the Hodetin Ordinance, 2 drivers, 2 handgunners, 6 crossbowmen, 4 flailmen, 4 halberdiers and 2 pavisiers. Other sources list different numbers, but similar proportions. The wagons usually formed up defensively with the shooters inside the wagon and the flailmen and halberdiers occupying the gap between their wagon and the next in the line. They could also manoeuvre offensively, however, as at Kutna Hora in 1421, when the infantry advanced flanked by two columns of war wagons, flanked again by cavalry. Each WWg element is taken by this list to represent 25 wagons and their shooters. When lined up defensively flank-on with a flail/halberd element separating each pair of wagon elements, the chains in front of the flail/halberds are eligible to represent gates. Note that although a WWg does not benefit from defending a ditch, the ditch must still extend in front of it. Cavalry were initially provided by young townsmen with crossbows mounted on wagon horses and used for scouting, supplemented at first by ill-armed former members of Bohemian, German and Silesian lances, and later by Bohemian nobles who came over to the Hussite cause after it had demonstrated its military superiority. Trumpets and drums were used to control the cavalry, trumpets to sound the attack and drums to recall them from pursuit. The Hussites came to be divided into a number of factions, principally the radical Taborites, the "Orphans" (Zizka's former army) and the moderate Utraquists. The militant Hussite cause was finally lost at Lipany in 1434, in which the Taborites and Orphans under Prokop the Bald were decisively defeated by the Bohemian League of Utraquist noblemen and the Old Town of Prague. A further series of anti-Hussite crusades occurred from 1464 to 1471 against the "Hussite King", King Georg Podiebrad of Bohemia. The enemy this time consisted largely of Hungarian and Silesian troops under King Matthias Corvinus, Georg's son-in-law, together with Catholic Bohemian nobles. Georg's army included a strong core of Bohemian mercenaries, such companies having commonly been employed in other countries, including Hungary, since the demise of the original Hussite revolt. Upgrading the flailmen and halberdiers to Bd (O) represents the increasing confidence of the original Hussites after their initial successes, as well as the acquisition of captured armour. Georg Podiebrad's forces consisted of a mixture of experienced mercenaries and less experienced, and presumably less well equipped, militia.

81. INCA 1438 AD - 1534 AD

Cold. Ag 2. WW, Rv, H(S), Wd, RGo, Rd, BUA.	
C-in-C in command litter - Reg WWg (I) (a) 23AP	1
Sub-general - Reg Ax (S) (a) 25AP	1-3
Inca regulars - Reg Ax (O) @ 4AP	30-96
Militia - Irr Hd (F) @ 1AP	8-24
Skirmishing slingers - Irr Ps (O) @ 2AP	12-25
Stone breastworks or areas of pits - TF @ 2AP	0-4
Only before 1439 AD:	
Quechua ally general - Irr Ax (O) @ 8AP	*1-2
Quechua allied warriors - Irr Ax (O) @ 3AP	* 12-21
Quechua slingers - Irr Ps (O) @ 2AP	* 12-22
Only if after 1440 AD and no Spanish used:	
Chimu - Irr Wb (F) @ 3AP	0-6
Sailing rafts - Irr Shp (I) @ 2AP [Ax or Ps]	0-4
Forest Indian archers - Irr Ps (O) @ 2AP or Irr Bw (I) @ 3AP	0-3
Colla armed with bolas - Irr Ps (X) @ 6AP	0-4
Other subjects - Irr Ax (I) @ 2AP	0-12
Chanca allies - List: Chanca (Bk 4)	0-21
Only if 1533 AD to 1534 AD and no other allies used:	
Spanish ally general - Reg Kn (S) @ 25AP	**1
Spanish cavalry - Reg Kn (S) @ 15AP	0-2
Spanish sword and buckler men - Reg Bd (O) @ 7AP	**2-4
Spanish crossbowmen - Reg Bw (S) @ 7AP	** 1-3
Spanish arquebusiers - Reg Art (X) @ 5AP	** 1-2
Spanish wardogs - Irr Wb (F) @ 3AP	0-1
Spanish artillery - Reg Art (S) @ 10AP	0-1
Spanish Canari auxiliaries - Irr Ax (O) @ 3AP	0-6

The Inca state in Peru was founded in the 13th century AD, but until the Chanca invasion of 1438 AD had been only one of several Quechua tribes. Others now deserted the Chanca to join them. Pachacutic, the 9th Inca, now incorporated all Quechua into a reorganised state with his original tribesmen as its aristocracy, subjugated the Chanca, then launched an aggressive expansion culminating with the conquest of the coastal Chimu empire in 1464. Civil war from 1527 to 1532 between Huascar and Atahualpa ended with the defeat of Huascar and his execution on the orders of Atahualpa, after the latter's kidnap by the Spaniards but before his murder by them! This gave the Spaniards the opportunity to ally with Huascar's successors against those of Atahualpa. The list ends before the introduction of horses, pikes and firearms during Manco's rebellion. The Inca state was highly regimented, the whole populace being issued with standard clothing from storehouses and forbidden to embellish it. The army consisted of 4 large regular regiments, supported by local militia and unassimilated subject contingents. Inca regulars are mostly depicted with a short spear decorated with feathers along its shaft's whole length, club, sling, small shield and cotton armour. Earlier unassimilated Quechua were probably armed in much the same way. The classification as Auxilia is because even today they are described always moving at a "light footed shuffling trot", walking only when drunk! The normal tactic against the Spaniards was a downhill charge slinging a hail storm of stones in advance. The militia are described as "hordes adding little to the strength of the army". Mountain subject tribes were issued with bronze-edged chonta wooden swords as a side arm and Equadorians like the Canari added atlatl dart-throwers. Colla used the bolas and are classed as Psiloi (X) due to its effect on horses. The only bowmen were Amazon forest tribesmen, who as an escort for one later C-in-C came close to defeating a cavalry charge. The litter was a prized status symbol and seems to have been used by all C-in-C's, not just reigning Incas, since we read of a non-royal commander being killed in one. Other generals and guards fought on foot, but substituting a bronze halberd for the usual spear. Minima marked * apply if any Quechua are used. Minima marked •* apply only if any Spanish are used. All and only Spanish troops must be commanded by a Spanish general who, unlike his counterpart in a Tlaxcalan army does not usurp the position of Cin-C, since the Inca continued to command the army as a whole. Note that classification of Spanish troops here is dictated by their effect in American warfare. For instance, sword and bucklermen are not Bd (F) and arguebusiers not Ps (S), since they sensibly decided not to try to outrun lightly equipped Amerindians.

82. FRENCH ORDONNANCE 1445 AD - 1503 AD

Cold. Ag 2. WW, Rv, H(S), H(G), Wd, O, V, RGo, Rd, BUA. C-in-C - Reg Kn (S) @ 35AP or Reg mtd Bw (S) @ 28AP Sub-general - Reg Kn (S) @ 35AP Ordonnance gendarmes and coustilliers - Reg Kn (S) @ 15AP Ordonnance archers - Reg mtd Bw (S) @ 8AP Mounted hand-gunners - Reg Cv (S) @ 10AP French partisanmen - Irr Bd (O) @ 5AP or Reg Bd (I) @ 5AP Foot crossbowmen - Irr Bw (O) @ 4AP or Reg Bw (I) @ 4AP Upgrade crossbowmen to Reg Bw (O) @ 5AP or Reg mtd Bw (O) @ 6AP Francs archers - Irr Bw (I) @ 3AP Gascon crossbowmen or slingers - Irr Ps (O) @ 2AP Gascon bidets or Bretons - Irr Ps (S) @ 3AP Handgunners - Reg Ps (S) @ 3AP Organ gun - Reg Art (I) @ 4AP Bombard - Reg Art (S) @ 10AP Genoese carracks - Irr Shp (S) @ 4AP [Reg Bw (O)] Genoese galleys - Reg Gal (F) @ 2AP [Reg Bw (O)] Only in 1453 AD: Ditch, bank and stakes - TF @ 2AP	$ \begin{array}{c} 1 \\ 1-2 \\ 4-9 \\ 5-8 \\ 0-1 \\ 0-8 \\ 0-12 \\ 0-6 \\ 8-20 \\ 0-4 \\ 0-6 \\ 0-3 \\ 0-2 \\ 0-5 \\ 0-2 \\ 0-2 \\ 0-2 \\ 0-18 \\ \end{array} $
Only before 1465 AD:	
Feudal men-at-arms - Irr Kn (S) @ 12AP	0-4
Savoyard men-at-arms - Reg Kn (O) @ 12AP French spearmen - Irr Sp (I) @ 3AP or Reg Sp (I) @ 4AP	0-2 0-6
Milanese allies - List: Italian Condotta (Bk 4)	0-0
Only from 1465 AD:	
Upgrade Ordonnance archers to Reg Cv (O) @ 8AP	Any
Feudal men-at-arms - Irr Kn (I) @ 8AP	0-2
Only rebels in 1469 AD:	
Swiss mercenary allies - List: Later Swiss (Bk 4)	0-14
Only after 1479 AD:	
Upgrade Ordonnance archers to Reg Cv (O) @ 8AP	All
Replace partisanmen with pikemen and halberdiers - Reg Pk (I) @ 3AP	Any
Swiss mercenary sub-general - Reg Pk (S) @ 25AP Swiss pikemen - Reg Pk (S) @ 5AP	*1 *3-15
Swiss skirmishers - up to 1/2 handgunners, Reg Ps (S) @ 3AP,	5-15
remainder crossbowmen, Reg Ps (O) @ 2AP	0-6
Only from 1480 AD to 1490 AD:	
Swiss halberdiers - Reg Bd (X) @ 8AP	0-2
Only from 1480 AD to 1482 AD:	
War wagons - Irr WWg (O) @ 8AP	0-4
Only after 1493 AD:	
Italian allies - List: Italian Condotta (Bk 4)	
Only in 1494 AD:	0-1
Genetaires - Irr LH (O) @ 5AP	0-1

This list covers French armies from the ordonnance reforms until Cerignola. Gendarmes had now largely returned to fighting mounted. However, Kn can still always dismount to fight on foot as Bd (S) before 1465. Coustilliers are assumed to make up the rear ranks of knight elements rather than being represented separately. Ordonnance archers evolved into cavalry. They can then still always dismount, but as Bw (O), archery skills having been neglected in the course of social climbing. Classing the C-in-C as Bw (S) represents the King's Scots archer guard, in which case the King's figure is mounted and on a Kn depth base but accompanied on it by archers either mounted or afoot. Reg (O) infantry are disciplined mercenaries, Reg (I) are town militia, and Irr are either feudal or undisciplined mercenaries. Francs archers practised shooting, but did not train collectively, were held in low regard, and frequently ran away. Contemporaries accused them of being able to kill only chickens. Milan helped the king in a civil war in 1461 AD.

Swiss were used by rebels in 1469 AD, and by the king from 1480 AD. They must always be commanded by a Swiss sub-general commanding no other troops. The minima marked * apply if any Swiss are used.

83. WARS OF THE ROSES ENGLISH 1455 AD - 1487 AD

Cold. Ag 1. WW, Rv, H(S), H(G), Wd, RGo, M, Rd, BUA. C-in-C - Reg Kn (S) @ 35AP if a crowned king, otherwise Reg Kn (O) @ 32AP Sub-General - Reg Kn (O) @ 22AP Royal bodyguard men-at-arms - Reg Kn (S) @ 15AP Men-at-arms - Reg Kn (I) @ 10AP Currours - Reg Cv (O) @ 8AP Retinue archers - Reg Bd (O) @ 7AP Retinue archers - Reg Bw (S) @ 7AP Horses to mount retinue billmen and archers @ 1AP Shire levy staves or hobilars - Irr Cv (I) @ 5AP [L] Shire levy staves or hobilars - Irr Cv (I) @ 5AP [L] Shire levy staves or hobilars - Irr Cv (I) @ 5AP [L] Shire levy archers - Irr Bw (O) @ 4AP [L, Y, R3, T] Northern border staves - Irr LH (O) @ 5AP [L, R3] Northern border foot - up to 1/4 Irr Bw (O) @ 4AP, up to 1/4 Irr Bd (I) @ 4AP, remainder Irr Sp (I) @ 3AP [L, R3] Welsh spearmen - Irr Ax (X) @ 3AP [L, Y, T] Welsh archers - Irr Bw (O) @ 4AP [L, Y] Irish bonnachts - Irr Ax (O) @ 3AP [L, YP] Irish kerns - Irr Ps, up to 1/2 (S) @ 3AP, remainder (I) @ 1AP [L, YP] Burgundian, Flemish, French or German Handgunners - Reg Ps (S) @ 3AP [Y, T, YP] Burgundian, Flemish, French or German Handgunners - Reg Ps (S) @ 3AP [Y, T, YP] Burgundian petardiers - Reg Bw (O) @ 5AP [L, T] Breton javelinmen - Irr Ps (S) @ 3AP [T] Burgundian-supplied German pikemen - Reg Pk (O) @ 4AP - [Y] - [YP] Bombards - Reg Art (S) @ 10AP Orean guns - Reg Art (I) @ 4AP	1 0-1 0-2 2-6 0-3 5-10 10-20 0-12 0-1 *2-6 *8-36 0-3 *6-12 0-8 *6-12 0-8 *6-12 0-8 *6-12 0-8 *6-12 0-8 *6-12 0-8 *6-12 0-8 *6-12 0-8
	• •
Bombards - Reg Art (S) @ 10AP	
Organ guns - Reg Art (I) @ 4AP	0-1
Earthworks and palisades - TF @ 2AP [Y,L] Scots allies - List: Scots Common Army (Bk 4) [L]	0-12

This list covers Yorkist, Lancastrian, Richard III, Tudor and post-1485 Yorkist Pretender armies of the English civil wars popularly known as the "Wars of the Roses" from the first battle of St. Albans until the battle of Stoke. Items marked [Y], [L], [R3], [T], or [YP] apply only to those armies. The armies mobilised by Edward IV for external wars are counted as Yorkist. Rebel armies raised by the Earl of Warwick or others against Edward IV in the interest of Clarence, Lancaster or Warwick's own ego are all counted as Lancastrian. Minima marked * apply only if any figures of that origin i.e border, shire levy etc. are used. Royal bodyguard Kn (S) can only be used if the C-in-C's element is Kn (S). Shire levy cannot be used with Welsh or Bretons. An ally-general cannot command any but English troops. The single reliable subordinate simulates the possibilities for treachery and suspicion. Bosworth in 1485 offers the ultimate example. None of the Stanley family should be classed as sub-generals! Men-at-arms now sometimes fought mounted again, often mixed with currours, somewhat lighter cavalry used mainly as scouts, but most still dismounted to stiffen the billmen who were now the most important infantry type. As one participant put it; "As for spearmen [mounted menat-arms and currours] they be good to ride before the footmen and eat and drink up their victual, and many more such pretty things they do, hold me excused though I say the best, for in the footmen is all the trust." The effectiveness of Northern border light horse, descended from the old hobilars, led to similar troops being demanded as levies in the south for coast watching and sometimes called by the old name. These do not seem to have been as useful, no doubt due to lacking their raiding experience, and they were not generally thought worth bringing to a battle. Sword and buckler had replaced the archer's maul. At the start of the wars, armies formed with the conventional centre and two wings. Towards the end they were more likely to be divided into a vaward concentrating most of the best troops and archers, a main body or battle with all others of barely acceptable quality, a rearward of troops best kept out of temptation to flee, and sometimes a picked mounted reserve under the C-in-C. Kn can always dismount as Bd (S). Scots allies can include bombards. Scots cannot be used with any Welsh or Irish.

84. BURGUNDIAN ORDONNANCE 1471 AD - 1477 AD

Cold Ac 4 WW By H(C) H(C) Wd O V DCo M Dd DHA	
Cold. Ag 4. WW, Rv, H(S), H(G), Wd, O, V, RGo, M, Rd, BUA.	1
C-in-C - Reg Kn (S) @ 35AP Sub-general - Reg Kn (O) @ 32AP	1-2
	0-1
	1-2
	0-2
	-15
	-10
	1-2
	1-3
	2-6
	2-4
Alternative mixed Ordonnance formation of archers screened by pikemen - equal numbers of	
Reg Bw (X) (a) 7AP and Reg Bw (S) (a) 5AP, on double-depth bases with front element (X),	
rear element (S). Depict front rank as pikemen, rear rank as archers. 2 such double element	
bases replace 1 element of Ordonnance pikemen and 3 of Ordonnance archers.	ny
Other Italian men-at-arms - Reg Kn (O) @ 12AP *	1-3
Italian mounted crossbowmen - Reg LH (I) @ 3AP	0-3
Italian foot crossbowmen - Reg Bw (O) @ 5AP	0-6
Feudal men-at-arms, demi-lances and coustilliers - Irr Kn (I) @ 8AP	2-4
Feudal mounted crossbowmen - Irr mtd Bw (O) @ 5AP *	2-4
Low Country pikemen - Reg Pk (I) @ 3AP 0	-12
Petardiers - Reg Ps (X) @ 6AP	0-1
	2-6
Bombards - Reg Art (S) @ 10AP	0-3
2 () 0	-10
English Yorkist allies - List: Wars of the Roses English (Bk 4)	

This list covers Burgundian armies after the reforms of Charles the Bold (or Rash). Though various measures were mooted earlier, nothing seems to have actually been done before 1471 AD. Feudal troops had declined badly in both equipment and training during the peaceful proceeding reign of Philip the Good, whose benevolence and economy did not save him from the French. Low Country contingents were now more efficient, but also extremely unwilling. This led Charles to institute a new regular army using the best troops and ideas from all over Europe. It failed to cope with the Swiss, but so did everybody else. The Ordonnance companies comprised men of many nationalities, including Frenchmen, Germans, English and Italians. Each of their gendarmes was supposed to be supported by a coustillier, a valet and 3 mounted longbowmen, also armed with a two-handed sword. The mounted archers usually deployed separately, and the valets sometimes held the horses, but the coustilliers were deployed with the gendarmes, so are assumed to provide the rear ranks of each Kn element. The mounted archers were ordered on occasion to combine with pikes in a mixed formation, and it is possible that others also did so. According to the Ordonnance of 1473, "The pikemen must be made to advance in close formation in front of the archers, kneel at a sign from them, holding their pikes lowered to the level of a horse's back so that the archers can fire over the pikemen as if over a wall. Thus, if the pikemen see that the enemy are breaking rank, they will be near enough to charge them in good order as instructed." The proportions of Ordonnance troops in this list are based closely on the Ordonnance of 1472, listing the actual strength of the Ordonnance companies at the end of the year's campaigning. This suggests that there was some difficulty in obtaining the required number of missile-men, the difference being made up by extra pikemen. Charles's "pick and mix" approach is typical of many wargamers, so this army's popularity despite its real life 100% record of defeat is perhaps not so surprising. At Grandson, charging gendarmes failed to break into the Swiss and the army broke when fresh enemy arrived while it was changing its dispositions. At Morat, an inadequately manned trench line was stormed by the Swiss and the rest of the army beaten in detail as it came up. At Nancy, the Swiss avoided an artillery ambush by a flank march and rolled over dismounted gendarmes as they changed front. The Burgundians had earlier acquired the practice of dismounting their men-at-arms from the English. Although they still did so on occasion, they now retained a mounted reserve and wings. Charles was apparently fighting mounted in such a reserve when killed at Nancy and those Italian gendarmes not included in the Ordonnance companies were part of a mounted wing. Accordingly, Ordonnance and feudal Kn can always dismount as Bd (S). Minima marked * apply only if any troops of that origin are used. Yorkist allies arrived to help against the French in 1475, though there was no fighting.

MISCELLANEOUS

FURTHER INFORMATION

Further information on the organisation, equipment, tactics and appearance of the majority of the armies in these army list books can be found in the WRG series of army books. Particularly relevant to Book 4 are:

Armies of Feudal Europe 1066 - 1300, by Ian Heath. Armies of the Crusades 1096 - 1291, by Ian Heath. Armies of the Middle Ages, Volume 1, 1300 - 1487, by Ian Heath. (Western Europe). Armies of the Middle Ages, Volume 2, 1300 - 1500, by Ian Heath. (Eastern Europe and the Near East).

Other especially useful publications include:

Those Osprey books by David Nicolle on Islamic subjects. The Penguin Atlas of Medieval History, by Colin McEvedy, for geographical relationships and a brief history of the rise and fall of nations and dynasties.

CONTACT ADDRESSES

For details of other WRG wargames rules, army lists and reference books, send a stamped addressed envelope or International Reply Coupons to:

WARGAMES RESEARCH GROUP, The Keep, Le Marchant Barracks, London Rd, Devizes, Wilts SN10 2ER. Tel: 01380 724558.

ACKNOWLEDGEMENTS

We would like to thank all those who have contributed information and suggested lists for this book. It particular, we must acknowledge the major contributions made by (in alphabetical order) Michael Anastasiadis, Marios Bletas, Dmitris Christodoulou, Kevin Donovan, Duncan Head, Bodo Kohl, Tim Moyse, Chris Peers, George Pistof and Karl Heinz Ranitzsch.

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