

ILKKA SYVÄNNE



MILITARY HISTORY  
OF  
LATE ROME  
284-361

**A Military  
History of Late  
Rome 284 to 361**

*“Money is the sinews of war”*  
*Cicero, Philippic 5.2*

*“Thus, recognizing dangers from afar, the Romans always found remedies for them; and they never allowed them to develop in order to avoid a war, because they knew that war cannot be avoided, but can only be put off to the advantage of others”*  
*Niccolò Machiavelli, The Prince (tr. by Peter Bondanella, Oxford 2005, p.12)*

*In loving memory of my mother Pirkko.*  
*Your kindness and devotion to the family will be remembered forever.*  
*You found encouraging words even at a time when you fought a losing battle against cancer.*  
*No words can adequately express the sorrow.*  
*You will be sorely missed by all of us.*  
*This book would not have been finished without your help and encouragement and is*  
*dedicated to your memory.*

# A Military History of Late Rome 284 to 361

Dr. Ilkka Syvanne



An officer of the Equites Domestici  
(author's drawing inspired by Mattesini)



Pen & Sword  
**MILITARY**

First published in Great Britain in 2015 by  
Pen & Sword Military  
an imprint of  
Pen & Sword Books Ltd  
47 Church Street  
Barnsley  
South Yorkshire  
S70 2AS

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ISBN 978 1 84884 855 9

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Typeset in Ehrhardt by  
Mac Style, Driffield, East Yorkshire  
Printed and bound in the UK by CPI Group (UK) Ltd, Croydon, CRO 4YY

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## Acknowledgements

First of all, I want to recognize my debt to Professor Geoffrey Greatrex in recommending me to the publisher and to the editor Philip Sidnell for accepting my book proposal.

Perry Gray read two chapters of the narrative and I owe him a great debt for pointing out some mistakes. Professor Armen Ayvazyan helped with the Armenian chapter. I also owe a big thanks to many other friends who know this without saying. My wife also helped me in the finding of some of the sources and also by graciously taking care of the daily chores at home so that I could concentrate on writing. The interest my children have shown towards the books and drawings of their father has also been an inspiration. In particular, the great interest of my firstborn three-year-old boy towards all things Roman is great to see.

In addition, the re-enactors of the Late Roman era have made a very significant contribution to this book in the form of photos of their equipment. I recommend that all readers pay particular attention to this section of the book for the photos give a much better understanding of the types of equipment that the Late-Roman soldiers used than I can possibly hope to do with words or illustrations. I owe particular thanks to the members of *Fectio* and its Chair Robert Vermaat, and to the members of *Comitatus* and its Chair John Conyard for their kind permission to use their photos in this book. In addition, the last but not least of the re-enactors is Jyrki Halme, a fellow Finn, whose contribution to this book is much appreciated. He not only contributed his photos, but also took additional photos with the equipment and poses I suggested. It would have been possible to fill up the photo section of this book with his photographs alone! My warmest thanks to all of the re-enactors! Without their efforts the book would be a lot less colourful.

I owe a particular thanks to Philip Sidnell for his patience when I missed my deadline for three whole months! Thanks!

## Introduction

The intention of this book, the first in a series of five, is to present an overview of all the principal facets of Roman military history during the years 284–361. I have included short discussions of all those aspects of the military, economy and culture that I have considered important for the understanding of the military successes and failures. The structure of the book follows the reigns of the emperors in chronological order, and the events and wars are also usually presented in chronological order. However, for the sake of ease of reading some events that took place in one particular sector of the empire are grouped together.

In the following text I will include direct references to the sources only in such cases that need to be argued further, for example because my conclusion can be considered controversial. I have not included footnotes or referrals to sources in such cases where the material is quite straightforward and there exist no significant controversies. I have also not included here a long discussion of the sources used and their problems, because there exists specialist literature devoted to this subject. The uneven survival of information, as well as the different lengths of the reigns, have also meant that some chapters are longer than others. However, there is a need to stress one aspect of the sources that in my opinion has received too little attention in the past, which is that the period authors were not only restricted by their literary models, by their religious beliefs, and by their personal aims (for example to please a patron), but even more so by the fact that they wrote under dictators who had the power over life and death. This is particularly important to keep in mind when reading Ammianus' history, which is by far the most important source for this period.

Ammianus' account has been coloured mainly by three things: 1) his pagan beliefs; 2) his need to please his patron Ursicinus, which has affected his account of the reign of Constantius II; and 3) his need to avoid disclosing such things that could have put him in mortal danger, learnt in the capacity of being a *protector*. In other words, one has to attempt to 'read between the lines' and not to take at face value his more direct statements. Ammianus sometimes includes contradictory information, and he is far too intelligent to have done that inadvertently. He was a career staff officer put in charge of special operations which included spying missions and assassinations. It is clear that he would not have been put in charge of such operations if he was not considered to be a clever fellow. In other words, when Ammianus presents a dark image of Constantius because he had treated Ursicinus unjustly (at least that seems to have been Ursicinus' own view), he still includes contradictory material elsewhere. The Arian Constantius II was also not well regarded in the Catholic courts of Theodosius I and Valentinian II because Constantius II had confiscated the property of Valentinian I's father Gratianus in 351. Valentinian II was the son of Valentinian I and Theodosius was married with the sister of Valentinian II. It is no wonder that Constantius gets bad press from Ammianus. When Ammianus appears

to give a positive image of Julian, he also presents evidence to the contrary so that Julian appears as a great failure towards the end of his Persian campaign. In order to please the current emperor Theodosius, Ammianus was also prepared to suppress the successes of Gratian even though he still acknowledges his merits in some places and so forth.

The quality of evidence for the different reigns is very uneven. The most detailed evidence comes from the pen of Ammianus, but unfortunately for the rest of the fourth century we are often forced to rely on very poor and biased sources which consist mostly of epitomes, panegyrics, letters, chronicles, orations etc. This uneven survival of evidence means that there are huge gaps in our knowledge and some of the conclusions are based only on educated guesses.

As regards secondary literature, I have included short referrals to the ones used in this book. When I have included a footnote that refers to the use of some particular secondary source in general terms (for example, 'this chapter is based on', 'the dates are taken from', etc.), it means that my text is in general agreement with the source(s) in question and it would be a nuisance to refer to the same source every time there is, for example, the dating of an event in the text. I have basically grouped these together as one footnote.

I know that I must have also been influenced by other sources for I have read hundreds if not thousands of articles and books dealing with Roman history over the years and did not have time to reread even all of those that I would have liked for this book. Therefore, it is certain that my thinking has been influenced by other historians (and also by university lecturers) and that this indebtedness is therefore not visible in the book, which is a great pity and I apologize for the oversight. I would have loved to include every possible secondary source that I have ever read on the subject. The principal reason for the fact that I was unable to do that is that this book was written during a very short period of time. The lack of time resulted from the many problems that I and my family faced at the time and also from the fact that I had to write the book while doing other work. I and my family have been suffering from 'flu for most of the period, thanks to the diseases brought back home by my firstborn, which has not made it easy to devote time to writing. In addition to this, the very serious health problems of my parents with the resulting angst and things that one has to do in such circumstances have limited my time even further. However, I still hope that the following account proves interesting to read. I also believe that I may in places have struck new ground and have brought to attention overlooked material to back up my argument.

The book includes lengthy analyses of the Roman administration and military matters including the policing of the interior. The reason for this is that it is impractical to point out in every chapter the things that were constantly taking place in the background, namely policing, anti-piracy operations, intelligence gathering, etc. It is easier to group all of these together into one chapter. The same is also true of the enemies and allies of Rome. We know from other sources how their military systems operated and what types of forces, tactics, equipment and ships they used, even if the period sources do not necessarily specify these in the context of their conflicts with Rome. The resulting analysis of the enemies will hopefully give the reader a better understanding of the circumstances in which the Romans had to operate. It would have been impractical to attach these details into each and every chapter, hence their treatment as a separate chapter. In order to shorten the text I have also purposefully left more detailed analyses of some topics to

later volumes. These include the analysis of the Roman square formation (2nd volume) as well as analysis of the defences of the Cyrenaican frontier (3rd volume).

As far as the language, transliteration, and titles are concerned I have usually adopted the easiest solutions. I have used the transliterations most commonly used except in the case of Greek military terms which I have generally transliterated, which means that I have maintained the original 'F' of the Greek instead of using the more common 'PH'. I have further adopted the practice of the Oxford University Press and used capital letters for all offices which could be held by only one person at a time. I have also used capital letters for all specific types of troops and military units. However, when I have referred to several office holders simultaneously (e.g. *comites*/counts, *duces*/dukes) I have used small letters.

I have also purposefully adopted the practice of using 'colourful' language of the persons and tribes and their traits, actions and habits. I do not believe that it would serve any good purpose to whitewash history with politically correct language. In other words, I have tried to describe the persons and events with warts and all, and I apologize if this approach causes offense among the more sensitive readers. All illustrations, drawings, maps and diagrams have been drawn and prepared by the author unless stated otherwise. I have used the Barrington Atlas as the principal source for the Maps.

## Abbreviations

Com. Dom.	Comes Domesticorum (Count of the Domestics)
CRP	Comes Rei Privatae (Count of the Privy Purse)
CSL	Comes Sacrarum Largitionum (Count of the Sacred Largess)
GC	Georgian Chronicles
Julian1	See Bibliography
Julian2	See Bibliography
LI	Light Infantry
Mag. Eq.	Magister Equitum (Master of Horse)
Mag. Ped.	Magister Peditum (Master of Foot)
Mag. Eq. et Ped.	Magister Equitum et Peditum (Master of Horse and Foot)
MVM	Magister Utriusque Militiae (Master of All Arms of Service)
Mag. Mil.	Magister Militum (Master of Soldiers)
Mag. Off.	Magister Officiorum (Master of Offices)
Or.	Orations
PIPLA	See Bibliography
PLRE1	See Bibliography
PLRE2	See Bibliography
PP	Praefectus Praetorio (Praetorian Prefect)
PSC	Praepositus Sacri Cubiculi (Provost of the Sacred Bedroom)
PVC	Praefectus Urbis Constantiopolitanae (Urban Prefect of Constantinople)
QSP	Quaestor Sacri Palatii (Quaestor of the Sacred Palace)
REF1	See Bibliography
REF2	See Bibliography
SHA	Scriptores Historiae Augustae







Battle of Vindonissa c. 303  
(Constantius vs. Alamanni)

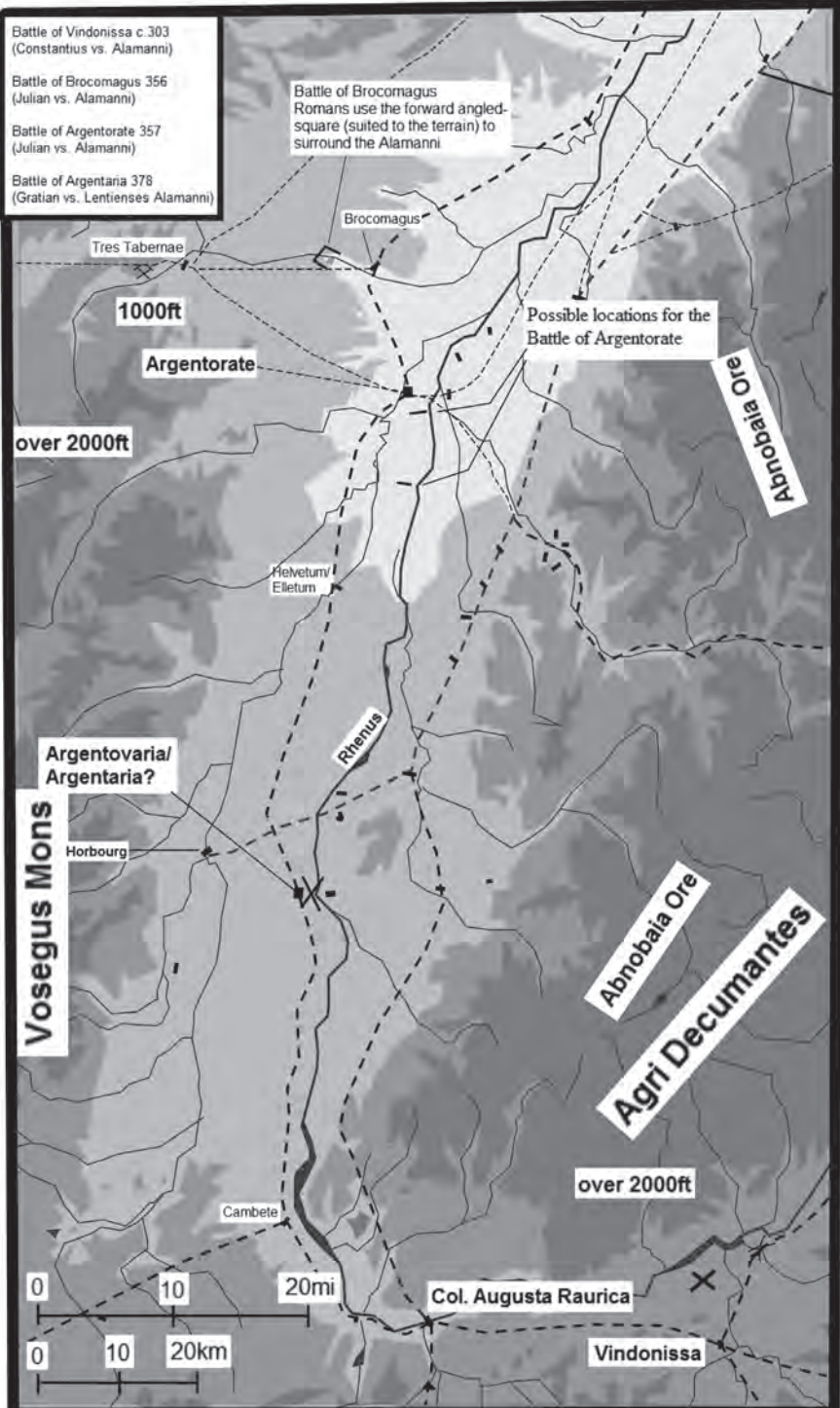
Battle of Brocomagus 356  
(Julian vs. Alamanni)

Battle of Argentorate 357  
(Julian vs. Alamanni)

Battle of Argentaria 378  
(Gratian vs. Lentienses Alamanni)

Battle of Brocomagus  
Romans use the forward angled-square (suited to the terrain) to surround the Alamanni

Possible locations for the Battle of Argentorate



**Vosegus Mons**

**Abnoba Ore**

**Abnoba Ore**

**Agri Decumantes**

1000ft

over 2000ft

over 2000ft

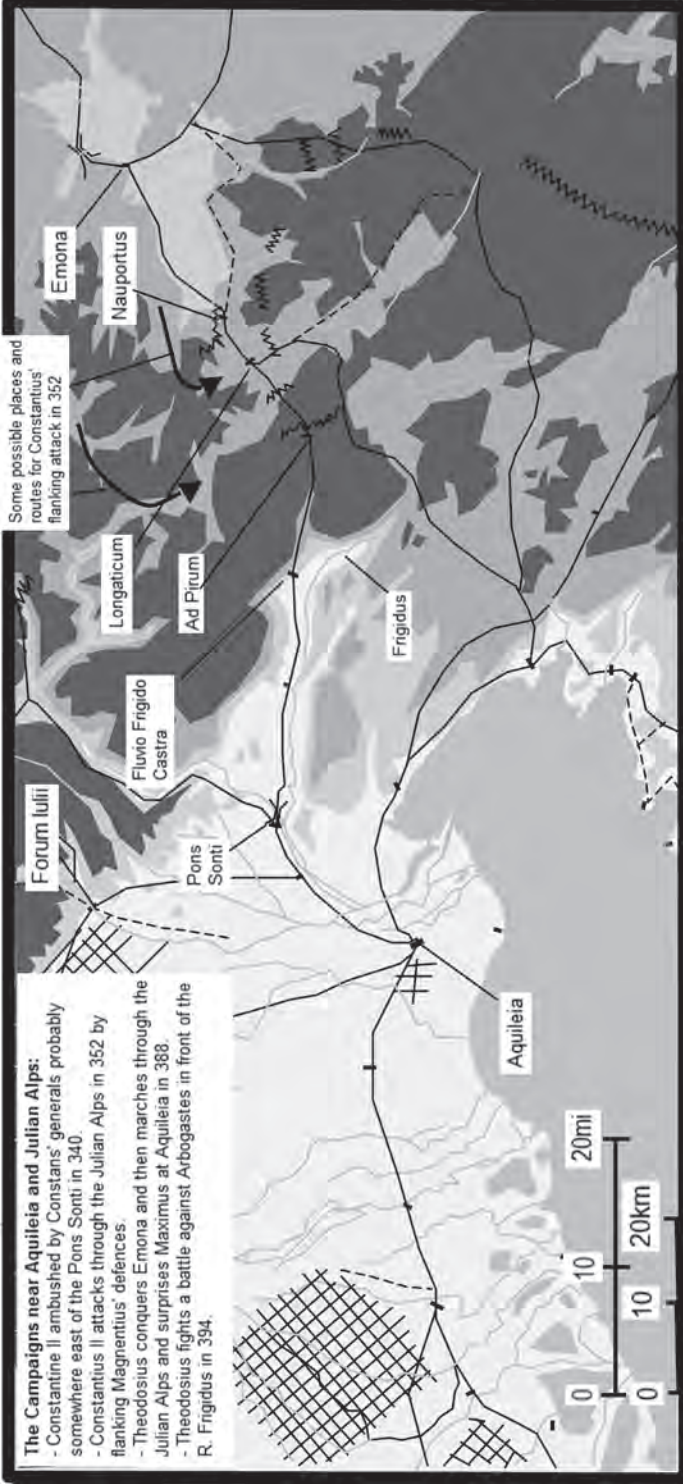
0 10 20mi

0 10 20km

### The Campaigns near Aquileia and Julian Alps:

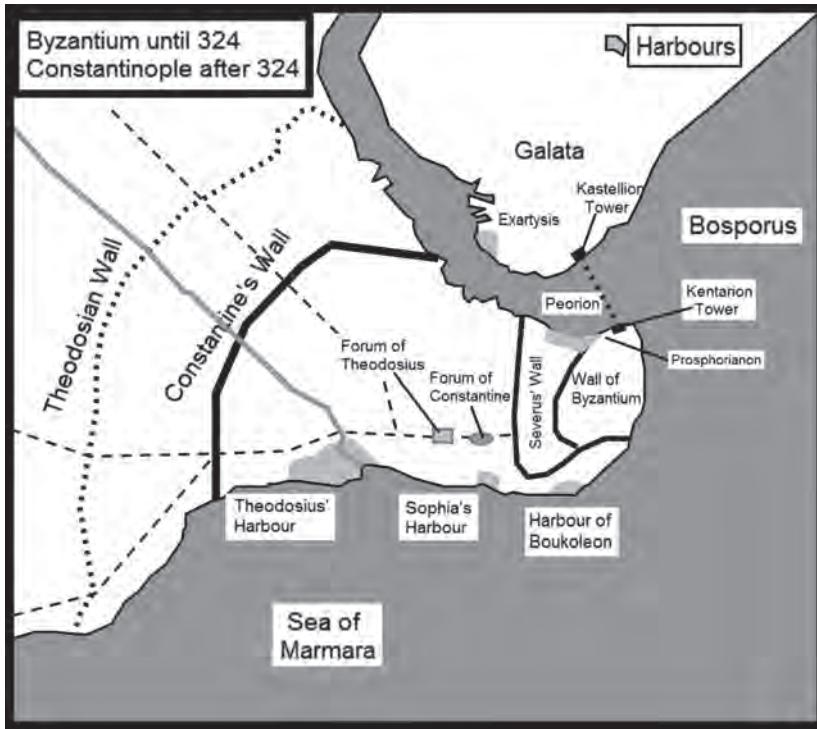
- Constantine II ambushed by Constans' generals probably somewhere east of the Pons Sonti in 340.
- Constantius II attacks through the Julian Alps in 352 by flanking Magnentius' defences.
- Theodosius conquers Emona and then marches through the Julian Alps and surprises Maximus at Aquileia in 388.
- Theodosius fights a battle against Arbogastes in front of the R. Frigidus in 394.

Some possible places and routes for Constantius' flanking attack in 352

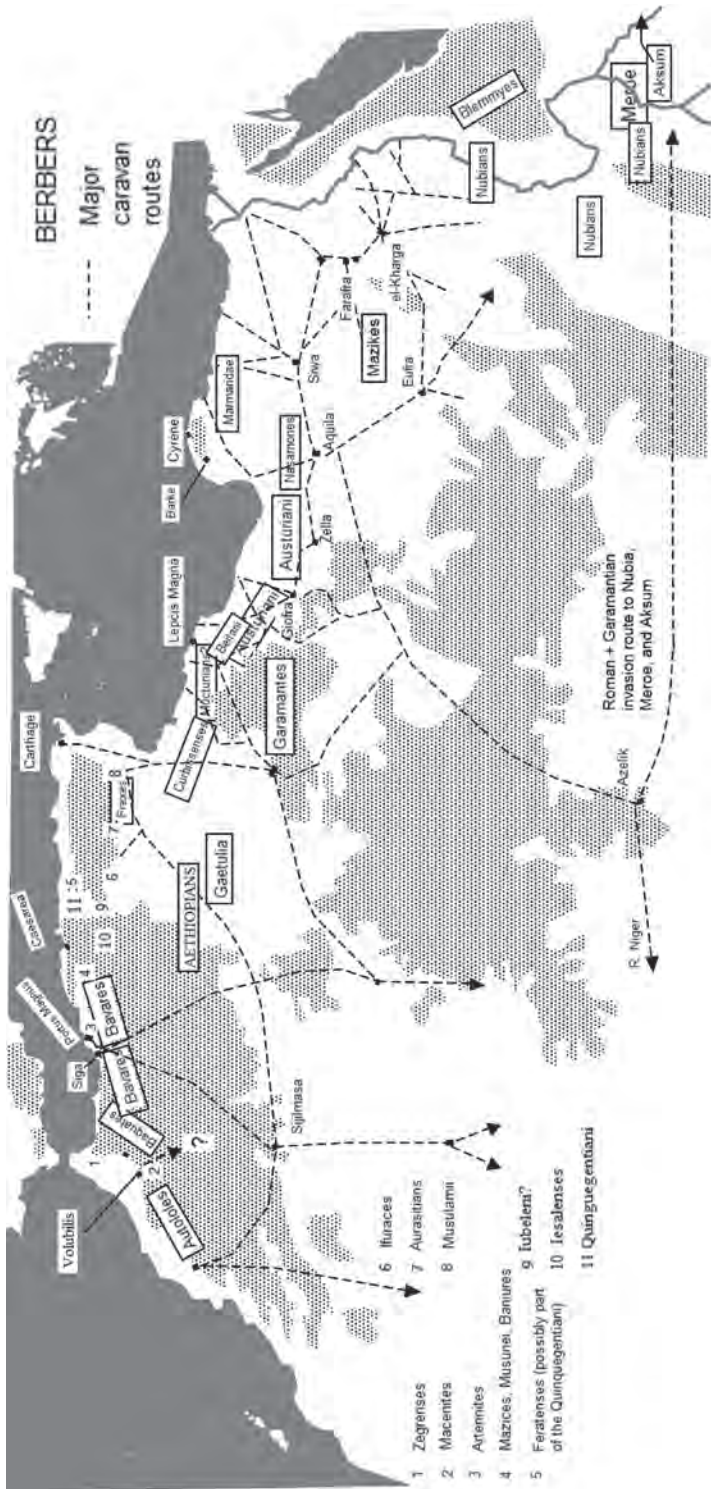














## Chapter One

# The Early Third Century Roman Empire

### Structures

#### *The Emperor*

**T**he Principate created by Augustus was essentially a monarchy that retained republican forms and offices and pretended to be a republic, but in practice the *Princeps*/emperor retained all the powers. The judicial basis of a *Princeps*' rule consisted of: 1) the *imperium* of proconsular powers or *imperium maius*; 2) the powers of people's tribune; and 3) the office of *Pontifex Maximus*. The proconsular powers (executive powers) gave the emperor the command of military forces and the administration of most of the provinces. The tribunician powers (legislative powers) gave the emperor immunity from prosecution, rights of veto over any public decision, the right to propose legislation, and the right to hear legal cases. The office of *Pontifex Maximus* made the emperors the official head of state religion and made them the guardians of the Roman calendar and timekeeping. In addition to the formal powers, the emperors possessed informal power over the senators and people, which was publicly recognized under the name *auctoritas* (influence). The *auctoritas* was symbolized with the official surname *Augustus*, which also entailed superhuman powers so that the emperor could in theory perform miracles and would on his death become a god.

When combined these gave the emperor all the executive, legislative and judiciary powers. He controlled Rome's foreign policy and military forces, appointed all civil and military functionaries, proposed and legislated imperial legislation, and acted as the Supreme Court. It did not take long for the republican façade to crumble. The reigns of Tiberius and Caligula had already demonstrated the fact that the *Augusti* were tyrants whose power rested solely on their monopoly of violence, and these emperors did not hesitate to use naked force against their enemies or imagined enemies.

There were several inherent weaknesses in this system. The most important of these was that the Principate did not establish an orderly system of succession. A *Princeps*' power rested on his control of the army which meant that the army could choose its own ruler, and the lack of orderly succession meant that there would always be civil wars fought by different Roman armies. It did not take long for the Praetorians to realize that they could make emperors and after that for the provincial armies to realize that they could also make their own emperors. Since the power of the emperor depended upon his control of armed forces, it became dangerous for any emperor to give control of a large field army or garrison to any capable military commander, which in turn meant that it was practically impossible to defeat two major threats simultaneously. If the emperor was a capable military commander he could deal with one threat at a time, but if he then assigned a sizable army to a capable leader he always took a huge gamble. The

emperors sought to minimize the threat of usurpation by limiting the number of legions commanded by each general and by creating the *Frumentarii* and *Peregrini* to keep an eye on the generals. However, the events of the third century prove that this system was neither efficient nor safe enough.

In addition, the effectiveness of the government and its economic, diplomatic and military policies all depended on the personal abilities of each emperor. A bad emperor like Decius or Valerian could overthrow the entire system while a good emperor like Aurelian or Probus could save the empire even from the brink of collapse.

### *Central Administration*

The central administration was effectively created by Augustus as an extension of his own private household. As a result, the imperial palace located on the Palatine Hill became the focal point of the Empire. Its members obviously consisted of the emperor, the imperial family, the *consilium* (private council), and the household staff.

The private council of the emperor was originally created by Augustus as an informal body of advisors which grew to an official body of advisors. The advisors consisted of persons whom the emperor considered competent and loyal and who would give valuable advice. The advisors were known with the official titles *amici* (friends) or *comites* (companions) and had also certain ceremonial and official duties. The *comites* were an inner circle of trusted friends who also accompanied the emperor on his travels and military campaigns. At some point in time during the second century AD (probably during Hadrian's reign) the friends became an official body of permanent advisors who henceforth were also known as the *consilarii* (counsellors/advisors). The emperor called his advisors together whenever he felt he needed advice on domestic or foreign policy, or in some problematic legal case. Unsurprisingly, the counsellors often included well-known jurists. In the latter part of the third century the newly created *Protectores* (bodyguards and staff-college) became to be considered as part of emperor's *comites*.

The emperor's household staff consisted originally solely of domestics, i.e. of imperial freedmen and slaves dressed in white clothes. It was an imperial chancellery consisting of bureaus/departments/ministries. From the reign of Hadrian onwards the head of each of the departments was an equestrian procurator. The staffs of freedmen and slaves were additionally grouped hierarchically into decuries. The heads of the bureaus of the central government were: 1. *a rationibus* (in charge of the imperial accounts, treasury and finances, which included the payments to the troops in money and in kind etc.), who was assisted by the *magister rei privatae* (in charge of the emperor's personal finances); 2. *a libellis* (in charge of the petitions to the emperor); 3. *ab epistulis* (imperial correspondence) divided into Greek and Latin sections; 4. *a cognitionibus* (hearing of judicial matters); 5. *a studiis* (preparation of files, reports and dossiers for the emperor); 6. *a censibus* (examination of the financial standing of persons seeking to become senators or equestrians); 7. *a commentariis* (archives); 8. *a memoria* (secretarial services).

This chancellery/household of the emperor was effectively in charge of directing all of the resources and forces of the Empire as the emperor saw fit. It should also be noted that the emperor's household included many other functionaries. The most important of these were the *cubicularii* of the imperial bedchamber. The physical closeness to

the emperor gave a *cubicularius* (usually a eunuch) the chance of gaining considerable influence and thereby the position of favourite with many official positions.

### *The Administration*

The administration of the Empire consisted of three layers: 1) Rome; 2) Italy; and 3) the Provinces. Rome was the capital of the Empire with about one million inhabitants fed by a huge logistical network controlled by the emperor and his central government. The city was divided into regions controlled by curators who in their turn were under the control of the urban prefect. The urban prefect was in control of the administration of the capital and had the duty of keeping public order. His duties were later enlarged to encompass central and south Italy, and then the whole of Italy. The city of Rome lost its privileged position in the course of the third century as a result of two things: 1) The granting of citizenship to all free persons by Caracalla in 212, together with his father's granting of equestrian status to soldiers which gave the soldiers unprecedented chance of social mobility; and 2) The constant wars waged by the emperors, who were not native Roman senators, meant that in practice the empire was ruled from the marching camp or from the base of operations.

Italy ranked second in the hierarchy. It was formally under the jurisdiction of the senate but in practice the emperor controlled everything through his own representatives, who included members of the emperor's Privy Purse. The principal advantage of Italy over the provinces was Roman citizenship and that Italians were not ruled by (often corrupt) governors. Nor did they have troops billeted, with the exception of the navy and *Legio II Parthica*, but this changed with the granting of citizenship to all free persons by Caracalla in 212.

The provinces were divided into imperial and senatorial provinces. The former were ruled by imperial legates (*legati Augusti pro praetore*), the length of whose term was dictated by the emperor, and the latter by proconsuls (*proconsulares*) who were chosen by lot from among the senators for a one year term. The imperial provinces were further divided into two categories: 1) senatorial legates; and 2) equestrian legates.

### *Municipal administration*

Roman control of people, taxation and movement of goods, valuables and money was based on control of urban settlements and their surroundings. In the east the societies had already organized themselves around cities before the Roman conquests, but in the west the Romans actively founded new cities and settlements in an effort to organize the societies on the Roman model. It was the local Romanized elites who performed the actual administration and taxation of the cities and subjects. Theoretically the municipal administration of all of the cities consisted of three levels: 1) Popular assembly of citizens (no longer functioning in the third century); 2) Municipal council or Order of Decurions (also called a Senate), consisting of the former magistrates and/or wealthy citizens with the unenviable duty of paying the taxes in cases when the taxes fell short of the requirement; and 3) The magistrates with executive powers.

### *Roman Society, Its Classes and Taxation*

Roman society was a class-based society that was divided into judicial and social hierarchies. The judicial hierarchy consisted of the division of the men into freemen and

slaves. The slaves were the property of their master and therefore their living conditions were very variable. The possibility of being freed made the slaves work harder and made them less likely to revolt. The freemen consisted of freeborn men and freedmen. The former consisted of the Roman citizens and of the tribesmen of varying rights, unless of course the individual (notable, auxiliary) had obtained Roman citizenship from the emperor. After the granting of citizenship to most of the freemen by Caracalla in 212 it was possible for foreigners to rise to very high positions and even become emperors (for example Maximinus Thrax) to the great ire of the old ruling classes. The freedmen consisted of those who had either managed to buy their freedom or had been granted freedom by their master. The freedmen had no political rights and were usually, but not always, tied to a patron-client relationship with their former master. The position of freedmen was not inherited. The children of the freedmen were freeborn men with full rights.

The three social categories were the senatorial order, the equestrian order, and the plebeians (plebs). The senatorial order was a hereditary order consisting of Roman citizens (senators, wives, and children) with a minimum property of 1,000,000 sesterces. As a sign of their social standing, the senators wore *toga laticlavus* (a broad-brimmed toga). The order was not a closed one, but acceptance into it depended on the goodwill of the emperor, which was one of the means the emperors used for canvassing support. By the third century the bulk of the senators were provincials. However, the senators had an obligation to reside at Rome and to invest one third of their property in Italy. The most important military and civilian offices of the empire were the privilege of the senatorial class until around the 260s.

The equestrian order was a non-hereditary order whose members consisted of Roman citizens who had at least 400,000 sesterces, and had successfully applied to be enrolled into its ranks in order to serve in the imperial administration in the posts reserved for equestrians. Its members consisted of those who had inherited money or who were self-made men. The most successful equestrians could hope to attain the senatorial rank. The equestrians wore the *toga angusticlavus* (a thin-brimmed toga) as a sign of their rank. The role of the equestrians in the imperial administration was constantly on the rise because the emperors recognized that the heterogeneous equestrians were generally more loyal and professional than the senators. In fact the position of Praetorian Prefect, which was the most important position right after the emperor, was the privilege of the equestrian class.

The rest of the free population consisted of the plebs, which included both rich and poor. The rich plebs consisted of the foreign notables and decurions who were allowed to wear the *toga praetexta* (a one-side brimmed toga), and of the rich businessmen and bankers and so on, who did not possess similar *dignitas* as the notables and decurions. The 'middle class' plebs consisted of the artisans, boutique keepers, merchants, bakers, artists, intellectuals/philosophers and so on. The poor plebs consisted of the peasants, carriers, labourers and so on and probably formed the majority of the Roman population.

From about the mid-second century onwards the old judicial and social standings and divisions started to disappear and a new form of class division emerged consisting of the *honestiores* and *humiliores*. The process was accelerated when Caracalla granted citizenship to all freeborn men, which meant that the rich wanted to find other forms of

privilege to separate them from the poor, and they were in the position to obtain these. The *honestiores* consisted of the senators, equestrians (including soldiers), veterans, and decuriones, and were separated from the *humiliores* by legal privileges and exemptions from the harsher punishments. In other words, the *honestiores* had acquired both social and judicial advantages. It is symptomatic of the greater trends occurring during this period that this new social order improved the standing of the soldiers vis-à-vis the rest of the society.

Alongside the creation of the *honestiores* came the creation of honorary ranks with judicial privileges. Marcus Aurelius was apparently the first emperor to do this. By about the mid-third century the praetorian prefects had the rank of *viri eminentissimi*, the senators *clarissimus* and the officials of the court the rank of *perfectissimi*.

In the course of the third century the advantages of belonging to the civilian *honestiores* of the decurion class came to be less attractive as a result of the military and economic crisis, which increased their tax burden. The constant wars and upheavals both in the Roman Empire and elsewhere led to the diminishment of trade and caused troubles both for the merchants and artisans. The economic downward spiral caused the decurions to attempt to avoid being put in charge of local administration, for example by placing all of their property in the name of their wife (who was not liable to serve as magistrate).

The position of the *humiliores* was not admirable either as they too had to shoulder an ever-increasing tax burden wherever the troops were billeted or marching or campaigning, and the poorly disciplined troops were not above pillaging their own countrymen. Unsurprisingly, more and more of the peasants chose to flee to the wilderness and become bandits, or to seek the protection of powerful landlords. This in turn caused the tax burden of the rest to rise, leading to a vicious cycle. This in turn caused the military to impose stricter control over the populace and also to increase the payments in kind (*annonae*) for the troops. The soldiers also no longer felt any loyalty towards the native Roman elite but increasingly saw their own commanders as protectors of their interests. The end result was that the Romans could no longer use the varying legal privileges to create loyalty and that the civilians increasingly saw their own army as the enemy. In this situation the Roman Empire urgently needed emperors who would put a stop to the foreign invasions and civil wars, and who would restore public order and thereby respect for the Roman institutions. However, as the events after 284 prove, the Roman Empire remained an economically viable and powerful empire despite all the problems of the third century. In fact, it was economically the most powerful empire on earth thanks to the collapse of the Later Han Empire.

The Roman Empire was an agricultural empire which had significant artisan and merchant classes. Most of the taxes were collected from the peasants through the city councils. It is therefore not surprising that the Romans were quite willing to settle foreign tribes within their borders to till the land and to provide soldiers. Since the income produced through this system was limited and often in arrears the emperors also used other forms of taxation. Since the members of the senatorial class (paid e.g. horses, conscripts, donatives) and the imperial machinery had certain tax privileges, and the richest members of the city councils could force the other members of the city councils to bear to the brunt of the taxes, the bulk of the taxes were paid by the middle class and the peasants. In order to make up the difference the emperors tapped the other resources

available to them, which consisted of the produce of the imperial estates, donatives, extraordinary taxes levied when needed, confiscation of the property of the rich, and tolls and customs. In fact, the only way for the emperors to increase their income by legal means other than through tighter taxation was to expand the opportunities for tolls and customs, and this they did. The rich Romans and the wealthy foreigners (in the 'barbarian' lands, and in Persia, India, China etc.) wanted to show off their wealth which created a demand for luxury goods – naturally, the emperors still always wanted to remain the wealthiest person around to separate them from the rest. This created internal trade as goods were transported to the rich, and this was taxed, and it also created demand for foreign goods, that was also taxed. Similarly, Roman exports to foreigners created taxing opportunities. As will be made clear in the following discussion, the emperors actively sought to expand and protect the Roman trade networks so that they could exact tolls and customs from the luxury goods and thereby tax the rich indirectly. This caused less dissatisfaction among the rich than the confiscation of property through fake trials. This also meant that the emperors sought to control the trade networks and movement of peoples so that these could be taxed.

### **The Armed Forces<sup>1</sup>**

The imperial Roman armies of the Principate consisted of the permanent legions, permanent auxiliary troops; veterans called for service when needed; true volunteers or 'volunteers' press-ganged into service; Praetorians and other units posted in the capital; allies/mercenaries; naval forces; and some kind of local militias consisting of tribesmen and urban dwellers. The provinces were divided into those under the emperor's rule and those still under the Senate's rule. The army consisted mostly of volunteers from the less developed provinces and to lesser extent of the conscripts until the third century crisis changed the situation. Thereafter the emperors and officers were forced to force the sons of the soldiers into service and to start using conscription.

The size of the armed forces was slightly more than 350,000 men so that about half of them were legionaries while the other half consisted of the auxiliaries. From the second century onwards the bulk of these forces were stationed along the Danube and eastern frontier. This reflected the Roman analysis of the potential threat posed by the enemies on those frontiers. This analysis must have been made at the highest level of government, because the transfer of troops could only have been done with the approval of the emperor. At the time, the Romans evidently did not face serious threats in Britain or along the Rhine frontier, but the third century wars showed that the coastal areas in the west as well as the defences along the Rhine frontier needed strengthening. This was caused by the emergence of new tribal confederacies, such as the Franks and Alamanni, and also because the Saxons started to raid the coastal areas of Britain and Gaul.

### *Strategy*

Edward N. Luttwak has quite aptly described the Early Roman Empire as a hegemonic empire, which controlled its core territories directly (occupied with garrisons or ruled directly by Roman administrators) and its outlying territories indirectly.<sup>2</sup> The indirect control of client states and tribes was based on the concentration of armed forces near

them in readiness to advance into their territory, if necessary. The legions were grouped together in two-to-four legion camps for this purpose. However, excluding extraordinary or temporary commands, from the reigns of Septimius Severus and Caracalla onwards the legionary commands were split into single or two legion commands for reasons of internal security.

From the reign of Tiberius onwards the strategy was modified.<sup>3</sup> He preferred to keep peace by using barbarians against barbarians, and not initiate new conquests. The goal was to keep the neighbours always weak and divided between those who supported the Romans and those who opposed them. The Roman army was only used to chastise the barbarians when other means of policy had been exhausted. This change of policy also meant the creation of permanent stone-built bases for the legions near the borders, where they acted as deterrents and rapid reaction forces over the border. However, this was not yet the end of the aggressive conquests. There were emperors like Domitian or Trajan or Septimius Severus or Caracalla or Constantine etc. who sought to enlarge the empire. They needed conquests to bolster their own standing. However, there were also those who preferred to stay within the established borders like Hadrian or Antoninus Pius (both of whom, however, did employ the military for operations of punishment), and those who employed both strategies like Claudius I or Aurelian. The choice of strategy depended upon the personality of the emperor and the situation.

The creation of permanent bases along the borders made the legions less mobile than they had been previously with the result that henceforth all expeditionary forces or large scale defensive forces had to be collected as detachments from the existing units, that were then grouped together, which in turn meant that any large scale operations in one sector of the frontier seriously weakened the defences somewhere else. In the absence of seasonal aggressive campaigning, as had been the practice before the reign of Tiberius, this often resulted in enemy invasions along the weakened frontiers. The Roman answer to this was to conduct a campaign of punishment at the earliest possible moment to instil healthy fear of Roman arms. In order for this strategy to work, it needed constant campaigning along the frontiers, which was not always possible with the small expensive professional army in situations in which there were several simultaneous threats. The emperors could not trust large armies to generals, and there were no longer the masses of trained conscripts of the Republican era available that could be employed for aggressive conquests with a small cost (i.e. with a minimal salary), the principal lure being the prospect of military booty. It would have been too risky for the emperor as a dictator to keep in being the Republican era system of universal conscription and training. Augustus recognized this and abolished it.<sup>4</sup>

The third century crisis brought a complete change to this strategy. The civil wars caused the withdrawal of troops from the frontiers to fight the civil wars with the result that significant sections of the frontiers were overrun and that each emerging enemy had to be defeated with the field army operating under the emperor or a general whose forces were therefore constantly moving from one place to another to face each new threat at a time. The goal of practically all emperors, however, was to re-establish the previous frontier system of fortifications and garrisons along the borders with client states/tribes outside.

### *The Legions*

The legions had a paper strength that seems to have consisted of 5,120 heavy infantrymen plus recruits, servants, horsemen and specialists. We do not know with any certainty the exact paper strength of each of the components of the Imperial legion. The legionaries were required to serve about 23–26 years before discharge. According to John Lydus (*De Magistr.* 1.16), when Marius formed his legions the legions consisted of 6,000 infantry and 600 cavalry, and this seems to have served as the model according to which Augustus formed his imperial legions. As regards to the number of 6,000 infantry, it is probable that the figure also includes the recruits and possibly even light infantry. In most cases, the figure of 600 horsemen probably included the servants attached to the cavalry. My educated guess is that the regular fighting (paper) strength of the cavalry detachment was an *ala* of 512 horsemen plus the *supernumerarii* and servants.<sup>5</sup> However, it is possible that there were actually three different types of cavalry units attached to the legions in the third century. Ps-Hyginus (5. 30) doesn't include any *equites legionis* for the three legions, but mentions 1,600 *vexillarii legionum*. This figure is consistent with the 500-man *turmae* of mounted archers, 500-man *vexillationes*, and 600-man *alae* mentioned by John Lydus (*De Magistr.* 1.46). Hence the possibility that the legions could have included three

#### Probable command structure of the legion c. AD 90–260

- 1 Legate (S) until the reign of Gallienus who abolished the office; or Prefect (E) for the Egyptian and Parthian legions.
- After Gallienus the commanders were prefects (E); commander of the legion.
- 1 Laticlavian tribune (S) changed by Gallienus into *tribunus maior* (E); in charge of one cohort and second-in-command of the legion.
- 1 *Praefectus Castrorum* (camp, medics, siege equipment etc.) (E).
- 1 *Praefectus Fabrorum* (workmen, construction etc.) (E).
- 5 tribunes (E) each in charge of one cohort of 480 men.
- 1 *tribunus sexmenstris* (in charge of cavalry?) (E).
- 5 centurions of the 1st Cohort (incl. the *primus pilus*, who could act as *praepositus* for the cohort).
- 54 centurions (called *centenarii* by the end of the 3rd century):
  - 5 unattached centurions that could be detailed for a variety of purposes; these could be used, for example, as acting *praepositi* (commanders for the cohorts of 480 men).
  - 9 single centurions, each in charge of two centuries (2 x 80).
  - 9 groups of 4 centurions, each in charge of one century (80 men).
  - 4 cavalry centurions, each commanding 128 horsemen.
- 64 infantry *decani*, one of whom was *optio*/second-in-command to centurion (each *decanus* part of and in charge of their 8-man file/*contubernium*), in addition to which was a *tiro*/recruit and one servant used for guarding the camp.
- 16 cavalry decurions (each in charge of a 32-man *turma*).
- 1st cohort of 800 men (5 centuries each of 160 men), plus 100 recruits and 100 servants.
- cohorts 2–10, each 9 x 420 footmen (including the *decani* 480), plus 60 recruits and 60 servants per cohort.

- 496 horsemen (including the decurions 512: Vegetius may have been wrong in adding the decurions to the strength of the *turma*, because the Roman cavalry organization was based on the Greek one; however, if Veg. is correct then these should be added to the total for a sum of 512 + 16 decurions) plus around 128 servants/squires.
- at least around 715 artillerymen in charge of the 55 *carroballistae* (cart-mounted bolt/arrow shooters) and 10 *onagri* (single-armed stone-throwers).
- 10 *speculatores* (formerly scouts, but now couriers, police officers, and executioners).
- *proculcatores* and *exploratores* scouted the roads. It is not known whether these counted as part of the cavalry or were separate from it. In practice the *mensores* could also act as scouts.
- unknown numbers of military police with the title of *stator*, and unknown numbers of guard dogs. Inside each camp there was also a police station called a *statio* under a tribune. Some of the soldiers were also used as sentinels (*excubitores*) and there were also other specific guards for various things.
- in addition, an unknown number of other specialists and bureaucrats consisting of surveyors, *campidoctor* (Chief Instructor), *haruspex* (read the entrails prepared by *victimarius*), *pullarius*, *actuarii*, *librarii* (*librarius a rationibus* worked also for the state post and could act as a spy), *notarii* (could act as a spy on the activities of the commander), *commentariensis* (archivist under head curator), heralds, standard-bearers, *draconarii*, cape-bearers, trumpeters, drummers, engineers, workmen, artisans, hunters, carters and cartwrights, doctors, medics etc.
- the legates/prefects were also guarded by a unit of *singulares* (both infantry and cavalry), which consisted of detached auxiliaries. (Confusingly the staff officers in training could also be called *singulares*). These bodyguards were replaced by *protectores* detached by the emperor from his staff at the latest during the reign of Gallienus as a safety measure against usurpations.
- the legion also included beasts of burden (depending on the situation, these could be horses, asses, mules, camels, oxen).

(S) = senatorial office; (E) = equestrian office

different types of cavalry detachments. The only real anomaly is Vegetius who claims that each legion was accompanied by an even greater number of horsemen. He claims that the legions had 726 horsemen plus the supernumeraries.<sup>6</sup> This may represent the strength of the cavalry component after the reforms of Gallienus or more likely by one of his successors.

The traditional infantry component of the legion consisted of ten cohorts. It is usually assumed that after the first century AD the first cohort had 800 legionaries (plus 100 recruits and 100 servants), while the rest of the cohorts from two to ten had 480 (plus recruits and servants). Each of these regular cohorts was divided into six centuries (eighty men plus recruits and servants). In other words, there were fifty-nine centuries per legion. The double-strength five centuries of the first cohort fought as centuries when employing the *pila*-javelins, while the regular centuries were grouped together as maniples (160 men). The smallest unit was the tent-group called a *contubernium*, which

fought as an eight-man-deep file in the rank-and-file battle formation. The head of the *contubernium* was a *decanus* (commander of ten) who commanded the seven fighters that formed the file. It included one green recruit (*tiro*) and one servant (with a mule or ass), both of whom were usually left in the marching camp for its protection when the legionaries advanced to fight. The legions also had an inbuilt artillery component that could be used as field artillery or for sieges. The legions further included medical, clerical and logistical services, and various kinds of engineers, architects and artisans to support the operations. See the diagram of the organization based on Bohec (2000).

Despite the fact that there was always upward mobility in the Roman society, it was still very hierarchical and the Roman army was a reflection of the society. The highest commanding positions in the different units were reserved for the men who belonged to the senatorial class (or who had been elevated to that class) and the positions below to the men belonging to the equestrian class. The commanders of the legions almost always belonged to the senatorial class, the sole exceptions being the Praetorian Guard, the 'Parthian legions', and the legions posted in Egypt, which were commanded by equestrians. The officers of the legion consisted, in descending order, of one imperial *propraetor* legate (senatorial rank, in command of the legion or legions, if governor), one *laticlavian* tribune (senatorial rank, second-in-command, a young nobleman learning soldiering), one camp prefect (third-in-command, an experienced veteran in charge of the camp), five *angusticlavian* prefects (equestrian rank, in charge of cohorts etc.), one (?) *sexmenstris* tribune (possibly in charge of the legionary cavalry). The non-commissioned officers of the first cohort consisted of the centurions, in order of seniority: *primus pilus*, *princeps prior*, *hastatus prior*, *princeps posterior*, and *hastatus posterior*. And the rest of the centurions in order of seniority consisted of: *pilus prior*, *princeps prior*, *hastatus prior*, *pilus posterior*, *princeps posterior*, and *hastatus posterior*. The soldiers were also ranked according to privileges and seniority.<sup>7</sup>

In practice, the actual fighting strength of the legions was usually well below the paper strength figures as a result of injuries, sickness, wounds, deaths and problems with recruiting. However, if there were enough time before campaign, then the units could actually be above their paper strength – but the legions rarely marched out in their entirety. Retired veterans, who had been recalled into service, were sometimes added to the legions as separate detachments or into the 1st cohort, but could also be grouped together separately in their own temporary units.

### *The Auxiliaries*

The regular auxiliaries consisted of various types of ca. 500–1,000 strong units that complemented the legions. The auxiliaries were required to serve for 28 years before discharge. Their principal reason for the joining of the army was that they received Roman citizenship after their service, or already during service if they distinguished themselves. Caracalla's grant of citizenship to all freeborn made service in the auxiliary units including the navy less desirable. The *Auxilia* included: various types of elite cavalry *alae* (wings); medium infantry armed with shields, spears and/or javelins, and a *spatha* (a long double-edged sword); mixed units of cavalry and infantry; foot archers; and slingers. The allies (client kingdoms and tribes) contributed such units that they possessed. The Romans added irregular auxiliary units, called by the generic name *Numeri*, into their

army when the regular auxiliaries had become less ‘nimble’ as a result of their regular attachment into the Roman army. The use of these various tribal *Numeri* gave the Roman armed forces additional flexibility, however, with the result that many of these initially mercenary units also became permanent units of the Roman army. The following list gives the approximate size and organization of the auxiliary units. In practice, the actual size and organization varied greatly. The use of extra-large milliary cohorts enabled the commanders to make their deployment pattern resemble that of the legions. The auxiliary units also included a variety of support personnel, consisting of clerical staff, logistical services, etc.

The smaller auxiliary *cohors quingenaria* units were commanded by prefects, while the larger *milliaria* units were commanded by tribunes. Both the prefects and tribunes belonged to the equestrian class. At least during the early imperial period, the tribune was assisted by a sub-prefect. The *turmae* of the cavalry were commanded by decurions, of whom the most senior was the *decurion princeps*, and groupings of three *turmae* by centurions. The infantry were commanded by centurions.

#### Approximate size and organization of auxiliary units:

<i>Unit</i>	<i>Foot</i>	<i>Horse</i>	<i>Centuries</i>	<i>Turmae</i>
Cohors Quingenaria Peditata	480		6	
Cohors Quingenaria Equitata	480	128	6	4
Cohors Milliaria Peditata	800		10	
Cohors Milliaria Equitata	800	256	10	8
Ala Quingenaria		512		16
Ala Milliaria		768 (campaign strength?)		24
		1024 (paper strength?)		32
Numeri	varied	varied	varied	varied

#### *The Garrison of Rome*<sup>8</sup>

Septimius Severus strengthened the Garrison of Rome considerably. The principal force guarding the capital and emperor were the Praetorian Cohorts (*Praetoriani*) housed in their own camp under the Praetorian Prefects (one to three, one of whom was always a legal expert). After the reign of Severus the Praetorians consisted of soldiers from all over the empire who had distinguished themselves in action. The Praetorians consisted of nine 1,000 men cohorts of infantry (9 tribunes, 54 centurions) for a total of 9,000 footmen, and probably nine *turmae* of cavalry (possibly 192 horsemen per ‘*turma*’?) for a total of 1728(?) men. The Praetorians were also used for special assignments and security operations, which meant that their members could serve anywhere in the empire as needed. The same barracks housed also 300 *speculatores* (cavalry), whose commander was the *Trecenarius* (centurion in charge of 300) and second-in-command the *Princeps Castrorum*, both of whom were under the Praetorian Prefect(s). These probably acted as the personal guard of the emperor (note the resemblance to the later 300 *Excubitores*) and performed special assignments at his orders. The *Numerus* of *Statores Augusti* was also housed in the same barracks and therefore

under the jurisdiction of the Praetorian Prefect. The *Statores* acted as a military police. Their command structure is unknown. The ca. 2,048 *Equites Singulares Augusti* (with a tribune, the *Decurion Princeps* and 32 decurions) were the barbarian bodyguard of the emperor and also served under the Praetorian Prefect, but they were housed in the so-called New Camp.

In addition to this, there were also units that can be considered to have been devoted to internal and external security missions, which consisted of the *Peregrini* and *Frumentarii*, both of which were housed at the barracks on the Caelian Hill. The *Peregrini* were basically the secret police of the emperor, commanded by a *Princeps*, a *Subprinceps*, and centurions. They operated all around the empire as commanded by the emperor. Unfortunately, their overall numbers and organization are not known, perhaps because of the secretive nature of their missions. The *Frumentarii* acted as imperial couriers, in the capacity of which they performed secret missions which included spying and assassinations. Their late Roman successors were the equally notorious *Agentes in Rebus*. Their commander was the *Princeps* of the *Peregrini*.

The Urban Cohorts (*Urbaniaci*) under the Urban Prefect consisted of three 500-man cohorts (three tribunes, 18 centurions) of infantry for a total of 1,500 men. They guarded the city and acted as its principal police force. However, they too could be detached for other duties. The seven 1,000 men Cohorts of Vigiles (sub-prefect, seven tribunes, forty-nine centurions) were under the Prefect of Vigiles, and served as the night patrol, firemen and policemen. They too could be detached elsewhere and at least under Claudius one cohort was stationed at Puteoli and another at Ostia. In addition to this, there were other forces present at Rome. The emperor recruited staff officers from among the *primipilares*; there were permanent detachments from the Ravenna and Misenum Fleets on duty at Rome; and lastly there were always soldiers on leave.

Septimius Severus had also posted the *Legio II Parthica* at Alba, which lay within striking distance of the city of Rome. This enabled the emperor to use this legion as a counterbalance against any units at Rome which showed signs of disloyalty. This also created the complication that when the emperors still resided at Rome, they needed to buy the support of the garrisons at Rome and at Alba.

### *Intelligence Gathering*<sup>9</sup>

The above-mentioned section has already touched upon the matter. The emperor's intelligence gathering network consisted of several overlapping organizations, the purpose of which was undoubtedly to prevent any one of those growing too influential. The principal security apparatus of the ruler consisted of his bodyguard units, most of which operated directly under the Praetorian Prefects. These conducted active intelligence gathering missions as undercover operatives, protected the emperor's person with their presence, and intimidated potential usurpers and assassins with their reputation. The emperor could also use the different units posted in or near the capital against the other units when their loyalty was shaky. The *Peregrini* and *Frumentarii* secured for the emperor an alternative avenue of information that was not under the control of the *PP*. The greatest threat to the emperors was a usurper and therefore the emperor paid particular attention to this aspect. The emperors used the various units involved in intelligence gathering in an effort to expose potential usurpers and they limited the

number of soldiers each commander could command at a time. However, as usual with such operations, sometimes these security measures worked while at other times, they did not.

As *Pontifex Maximus* the emperor was kept abreast of the questions presented by the nobility to the soothsayers and astrologers, which enabled him to persecute all who had asked the wrong kinds of question, like how long the emperor would live. The rewards of betraying a 'plot' could also be so great that many persons were ready to become informers even if this entailed interrogation under torture to secure the 'truth'.

The army also conducted active intelligence gathering missions (including spying in disguise) among the enemy under the supervision of the frontier commanders. These missions were performed by select scouting units or by officers with experience of such missions. The above-mentioned *Peregrini*, *Frumentarii*, staff officers, and members of the bodyguard units and even friends and members of the emperor's household could also be assigned to perform special missions home and abroad, sometimes in the company of some chosen official (e.g. as ambassador or messenger). Other sources of information were prisoners, deserters, and travellers. The Roman practice of using military detachments all over the empire as sentinels (towers, road blocks) and road patrols enabled them to capture suspect persons for interrogation. The control of the state post enabled the emperor's spies to read all the mail that passed through their hands, which meant that anyone who used careless words (and did not use a secure code) was bound to end up on death row. The frontier guard towers were also placed at such intervals that it was possible to transmit information regarding enemy movements by using fire and smoke signals, and by using mirrors.

### *Equipment*<sup>10</sup>

The offensive equipment of the line infantry, both legionaries and auxiliaries, consisted of the spear (*hasta*, called *kontarion* in the sixth-century Strategikon); heavy-javelin *spiculum* (formerly *pilum*), light/medium javelins *verutum* (formerly *vericulum*) and *lancea*; short javelin/dart called *plumbata*, *mattiobarbuli* or *martiobarbuli*; long-sword *spatha*; short-sword *semispatha* (formerly *gladius*); dagger; and single-edged knife. The offensive equipment of the late Roman soldiers varied according to the type of soldier and mission. The composite type (see later) was equipped simultaneously with melee weapons and bows. According to Bishop and Coulston, from the fourth century onwards the barbarians introduced to the Romans the Germanic weapons the *seax* and the throwing-axe *francisca*. The defensive equipment of the infantry consisted of the helmets, shields, greaves, armour, and padded 'under-armour'.

The c. 2.5–3.74 m spear was used by the front rankers (in eight rank formation the ranks 1 to 4) as a thrusting weapon mainly against cavalry, but could also be thrown if needed.<sup>11</sup> The *spiculum* was used mainly as a heavy javelin against enemy infantry, but could also be used for thrusting and against cavalry when necessary. The standard size for the *spiculum* was 1.628 m for the shaft and 20 to 22.9 cm for the head, but the length and type of iron head seem to have varied greatly. Maximum effective range for this weapon was about 20m. The *lancea* and *verutum* were medium/short javelins with short shafts (shaft c. 1.03 m and head 22.2 cm) used by the rear rankers (in eight-rank formations, the fifth–eighth ranks) as long-range light javelins. The maximum effective range for this weapon was about 30–40m. The *plumbata* were darts (length about 11.8–15.8 cm) used

by all those units that had them placed inside their shields (usually five). The maximum range for these was about 50–60m. There were several variants of this weapon available, some of which had caltrops attached so that even those that missed their targets would at least make movement difficult. The *spatha* was used mainly against the cavalry and the *semispatha* against infantry at close quarters, but both could also be used against either. The daggers and knives were only used as weapons in dire straits when no other weapon could be found.

The offensive equipment of the light infantry consisted of the bow (mainly composite bows, but some self bows may also have been used), *arcuballista* (composite crossbow), *manuballista* (torsion crossbow), light javelins (*lancea*, *verutum*), darts (*plumbatae*), slings, staff-slings, sword (*spatha/semispatha*), and dagger and knife. The bows, slings and staff-slings could be employed from behind the phalanx, inside it, or in front of it as required. The light infantry was very useful for the harassment of the enemy and for skirmishes and sieges. The lead slingshots and the crossbows were particularly effective against armoured opponents because the former caused concussion hits that disabled the armoured men, and the latter had the power to penetrate the armour. The defensive equipment of the light infantry varied greatly depending upon the type of unit, but in general it is fair to say that their equipment differed between those who had no defensive equipment at all to those who had some kind of protective equipment (mail, scale, leather, padded coat) for the torso and head (helmet or hat) and possibly also a small shield.

The standard helmet types of the late-third and fourth centuries were the so-called ridge/segmented-helmets that are variously named after the location in which archaeologists first found them. These include the so-called Intercisa, Berkasovo, Dar al-Madinah, Budapest, and Deurne types. **For examples, see the Photo/Plate Inset which includes photos of re-enactors. See also the accompanying line drawings.**

The standard shield types were round and oval shields of varying sizes and construction. The standard shield bosses were the domed or conical pointed bosses, both of which could be used for ‘punching’. The shields were usually constructed of vertical



Roman elite horseman equipped with a ridge helmet and scale armour (source: Arch of Galerius)



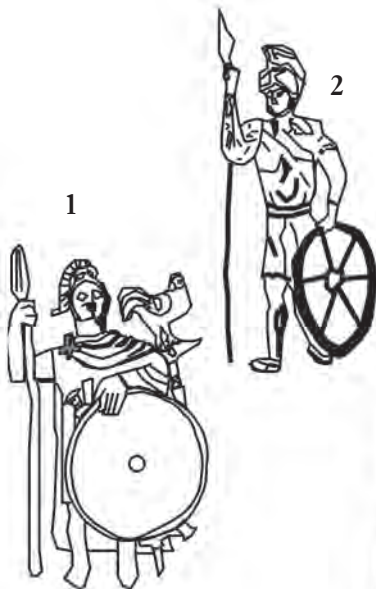
Soldiers wearing coifs in the Vatican Manuscript (drawn after Bishop & Coulston)



Adamklisi Trajan's Dacian War

planks of alder (or spruce, aspen, lime, or oak) and covered with painted rawhide. The shields were decorated with unit emblems. The shields had three basic types of grips: 1) the old legionary system of a single handle behind the boss that continued to be used by infantry and which was good for the punching technique; 2) the old hoplite and cavalry style grips in which the shield was held by both hand/wrist and arm along the shield's back (arm with a leather strap and wrist with another or alternatively so that the hand grasped the grip); and 3) shields that had both styles of grip. The single grip shield was particularly useful for use with the *pilum* and *spatha/semispatha*, while the second type of shield was particularly useful for use with the spear and for mass shoving in close infantry formation. The use of the hoplite type of shield grip was not new to this period, because we can detect that type of grip in, for example, Trajan's Column, but its implications have not been taken adequately into account when discussing the fighting techniques employed by the Roman army. There were units that could fight like hoplites in the Roman army!

The standard types of body armour were mail and scale armours of varying sizes. Metallic coifs were also used (see above), but apparently in most cases only when the men didn't wear helmets. Segmented limb defences were also produced at least to serve the needs of the cavalry, but it is also possible that these were also used by infantry when needed as had happened for example during Trajan's Dacian war (see above). The Romans also appear to have always worn a padded garment or coat under their armour for additional protection against enemy missiles. It also protected its wearer's skin from scratches caused by armour. Leather armour continued to be used as ersatz armour or as an under garment. In my opinion, it is also noteworthy that the art works continue to depict men equipped with muscle armour, which can mean either of two things: 1) those were indeed used at least by some units; or 2) the art works reflect artistic taste



Fourth Century Tombstones

1. Lepontius (Strasbourg)
2. unknown protector (Aquileia)
3. unknown (Gamzigrad)

Note the great variety of equipment.

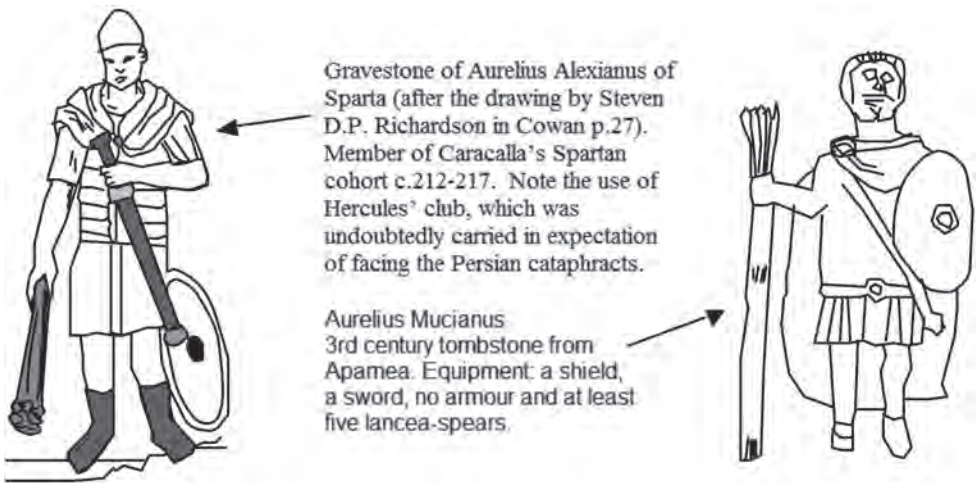
Drawn after Bishop & Coulston with some changes.



that has nothing to do with reality. However, since the emperors continue to be depicted with muscle armour and it is also depicted for example on Theodosius' column (see the second book in the series), it is possible that it was used at least for parade purposes or alternatively that the elite Imperial Bodyguards wore it. It is also possible that at least some of the officers wore the muscle armour to separate them from the rank-and-file.

The lightly-equipped legionaries (for deployment in forests and mountains) and auxiliaries can be considered to have formed medium infantry. They were equipped with helmets, spears, *spatha* and shields, but usually lacked armour even if they did sometimes use the ersatz armour consisting of padded coats or leather. The lack of armour undoubtedly made these men vulnerable to being hit by missiles or other weapons, but in combat situations the fighting spirit was more important than the amount of armour worn. It was quite possible for the medium infantry to defeat any type of unit in combat.

There were also units of special club-wielders or mace-wielders that were used against the cataphract cavalry.<sup>12</sup> These men were used either in front of the infantry phalanx to break up the enemy charge or behind the phalanx when it was opened up to admit the cataphracts through so that the clubmen could pummel them unconscious. This type of superbly brave warrior could be really lightly equipped as the Germanic clubmen in Trajan's Column prove. They needed the mobility to avoid being trampled by the horses. See the illustration of club-bearer and *lanciaris*, which could also be used in advance of the phalanx to harass the enemy and to break up enemy attack.



The offensive equipment of the cavalry consisted of the *contus*-spear, *xyston*-spear, javelins (*lancea*), *spatha*, *semispatha*, axe with a spike, crossbow, composite bow, quivers for missiles, sling, dagger, knife, and possibly also darts (*plumbatae*).

The *contus* had several variants, the heaviest of which, the Sarmatian *contus*, was usable only with two hands for thrusting, presumably because it was a thick spear meant to penetrate the enemy armour. The Sarmatian *contus* was used by specialist *contarii* units for frontal charges. In contrast, the lighter Celtic *contus* (length c. 3.74m) called *kontarion* in the Strategikon could be wielded with one hand and also used as a throwing weapon.

The ‘Celtic *contarii*’ were the standard type of Roman heavy cavalry. The Roman *xyston* was evidently a heavy thrown spear used to penetrate enemy shields and armour at close quarters. Thanks to its size the *xyston* was also adaptable for thrusting. The short *lancea* was primarily used as a light javelin, but could still be employed as a thrusting weapon. The swords and axes were naturally used only at close quarters fighting. The other standard Roman cavalry type were the *logchoforoi* (*lancearii*) cavalry who skirmished by throwing their javelins and then at the right moment charged and used *lancea* as a thrusting weapon (mainly Moors) or employed their swords and axes at close quarters fighting. All Roman cavalry were trained to use crossbows, spears, javelins, slings and apparently after Hadrian’s reign also to use the composite bow, but they were still typically employed only as specialist *contarii* or *lancearii*. Their defensive equipment consisted of the helmet, oval *thyreos/scutum*-shield, greaves, and mail corslet. The Roman cavalry horses wore chamfrons and *parapleuria*/sidecoverings (Arrian, Tact. 34.8) for combat. In addition, the Romans possessed auxiliary, *Foederati* (treaty-bound allies within and outside the borders) and *Laeti* (defeated tribes settled as farmer soldiers inside borders) units of cavalry that included all of the various types of specialist cavalry mentioned by Arrian (e.g. javelin throwers and mounted archers). The cataphracts and spear-bearers were obviously used as shock cavalry and the other types mainly as skirmishers.

The defensive equipment of cavalry consisted of various types of armour (mail or scale) for the men and horses depending upon the type of cavalry, and of the helmets (ridge and segmented types) and shields (oval or round). Regardless of the size and type, the cavalry shields always had a leather strap or straps attached to arm and wrist so that the rider’s left hand was free.

The standard military clothing included military style belts and buckles, fittings, long-sleeved tunics, tents, tight and looser trousers, military cloaks (*sagum*-cloak, hooded cloaks *caracallus* and *birrus*, and other types), and studded shoes (a variety of open and closed types). **See Photos Section.** The shoes were a particularly important piece of item for the soldiers. The shoes had to be suited for long marching and also for the needs of hand-to-hand combat in all kinds of terrains and weathers. The military equipment included also all kinds of standard day-to-day items like axes, saws, flasks, cups, spoons, knives, sickles, scythes, brooches, horse harnesses, saddles, etc, but some of the items were obviously specific only to the military. These included military standards, musical instruments, military decorations, caltrops, and various types of staffs used by the centurions and other NCOs. The standard colours for the tunics were yellowish-white and white with purple bands on the hem and cuffs. Red tunics were also quite common, but other colours were used in lesser quantities. The cloaks were usually chocolate or reddish-brown and the trousers dark grey or brown, but as always other colours were also used. The textiles were usually made out of wool.

### *Roman Tactics and Generalship in General*

The standard tactics called for the Romans to find out everything there was to know about the enemy and then plan their campaign accordingly. The availability of good and timely intelligence was of utmost importance and the good generals always also sought out knowledgeable guides and itineraries and maps of the locale in which they were to operate well in advance. The Roman generals expected their army to be better trained and

equipped than the forces their enemies could muster and their expectations were usually fulfilled. The Roman army was typically well-drilled and therefore able to perform very complex battlefield manoeuvres. The central position of the Roman Empire and their readiness to borrow what was useful from their enemies had given them readiness to face all kinds of threats and combat techniques. The Empire was also wealthier than any of its competitors which enabled it to maintain complex machinery to supply and equip their armies. In fact, one of the inherent strengths of the Roman Empire was its good logistical network which enabled its soldiers to starve out the enemies while they themselves lived in relative comfort. The Roman combat doctrine required them to attempt to engage their enemies only in favourable circumstances and in favourable terrain. They also chose their fighting methods to suit the fighting style of the enemy and the situation. Ambushes, stratagems, assassinations and all kinds of other underhand tactics were quite acceptable to the soldiers even if it was not for the civilians.

When conducted by the book, the Roman military operations were therefore usually meticulously planned and performed. The good Roman general always sought to obtain information from his spies, scouts and patrols before doing anything. He also took into account the logistical demands and the necessary safety measures during marching and fighting. If siege operations were foreseen, he also took into account its demands. In friendly areas, the army marched in a column formation, but in unfriendly hostile areas it marched either in a hollow square or in an open half-square or wedge formation which was protected by auxiliary units in front, behind and flanks. When threatened by the enemy, the Romans always used the hollow square/oblong formation or open half-square formations if the terrain allowed it. Contrary to common belief, this was also true when the Romans marched in hilly or wooded terrain. In those places, the units had to use the looser formation that allowed them to pass through difficult places in the terrain. In other words, the units (mainly the centuries) varied their formation (depth, length etc.) and intervals according to the situation, while the units posted as reserves covered up possible ruptures in the array. When threatened by the enemy, the individual units could conduct counterattacks by advancing forward from the square for a short distance. If they advanced too far, the enemy could cut off their route of retreat. In those places where it was possible to use only a column or columns, the Romans posted protective shielding forces in front, behind and on the flanks.

When following the regulations, the army always encamped for the night in a fortified marching camp. The illustration of the fortified camp opposite is based on Pseudo-Hyginus' treatise (drawn after Lenoir), which represents a theoretical field army consisting of three legions, auxiliaries, allies and naval detachments under the emperor.

The following list of qualities that the Romans required from their generals is based on Onasander, whose work was also later copied by later generations of military theorists – for example, his list can still be found in Leo's *Tactica* (tenth century). On the basis of this, the Romans required that their generals were to possess self-restraint so that they would not be led astray; to be vigilant; to be frugal in their tastes, and be hardened by labour; to be alert; not to suffer from avarice; not to be too young or old; preferably the generals were to be fathers, but good childless men were also acceptable; to be good public speakers so that they could encourage the troops; to have good reputation so that the men would follow them willingly; being poor or rich was not considered decisive,



*Cavalry Tactics*<sup>13</sup>

During the period under discussion the Romans usually used mixed armies consisting of both infantry and cavalry, but this doesn't mean that they would have neglected their cavalry arm. On the contrary, the cavalry usually decided the battles. Regardless, it is still clear that the importance of the cavalry had diminished after the reign of Gallienus (see Chapter 3), because during his reign the entire army could consist only of cavalry. This doesn't mean that cavalry would not have been deployed independently after that (for example Arbutio versus the Lentienses in 355), but it became rarer. If the cavalry fought separately, it was more usual that this happened because it had been posted in the vanguard of the army, or because it was chasing small detachments of raiders, or because it was used to ambush a careless foe. In the usual circumstances the cavalry was used solely to scout the roads, to protect the wings of the infantry phalanx, to outflank the enemy, and to pursue a defeated foe.

The cavalry consisted of five basic types. The first was the traditional Romano-Gallic-Spanish cavalry armed with a shield, helmet, sword, and javelin(s) or spear(s), but these too were trained to use crossbows and bows. The horses of this type of cavalry were usually unarmoured, but could also have chamfrons and side-coverings. The second consisted of the mounted archers that were mostly recruited from easterners. The third consisted of cataphracts (man and horse armoured, and rider armed with a spear, shield, sword and possibly with a bow), most of whom were also easterners. The fourth consisted of cavalry lancers equipped like the *Sarmatian contarii* or Arabic lancers. The fifth group were the extra-light Moorish cavalry that fought with javelins.

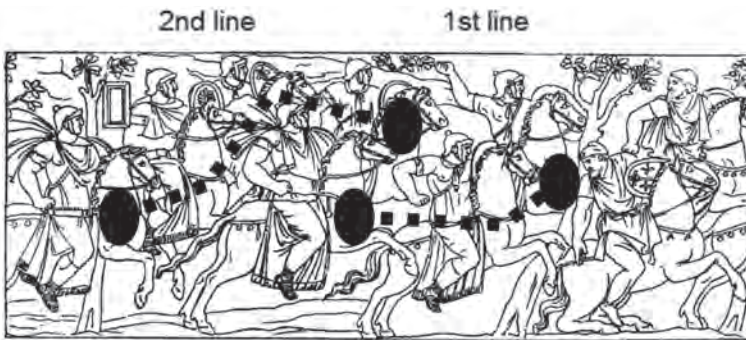
The different types of cavalry also employed different horse breeds supplied by the imperial stud-farms or by taxpayers. Depending upon the type of unit, the cavalry were deployed either as rank-and-file squares/oblongs (the standard formation with depths varying between five and ten ranks according to the quality of the unit), or as wedges, or as rhomboids (at least the Armenian, Parthian and Sasanian units), or as irregular throngs (*droungoi*). In addition, the Roman cataphracts also used a massive 'regimental' wedge for the breaking up of the enemy infantry formation. For additional details concerning the various types of cavalry see Chapter 2.

The standard Roman cavalry formation consisted of two lines, of which one served as a reserve. Before the battle the Romans also used a small separate vanguard to protect the array proper. The actual array could also include ambushers on the flanks if the terrain allowed this. There is evidence for the use of the so-called Italian Drill formation of the Strategikon from the first century AD onwards. The following illustration of the Roman cavalry in the Column of Trajan (drawn by Reinach, but additions by me) provides actually a relatively good picture of what type of formations were used.<sup>14</sup> If the Romans used cavalry forces with less than 5,000 men the second line was to consist of only one reserve division. If the cavalry force consisted of 5,000–15,000 men, it was acceptable to post only two reserve divisions, but during this time period the way in which the reserves were deployed varied greatly.

Each of the larger divisions was divided into units of *koursores* (runners/skirmishers) and *defensores* (defenders). The *koursores* were deployed on the flanks and used for skirmishing and pursuit in irregular order (*droungos*). The *defensores* in the centre maintained close order and protected the former if they needed to retreat and also attacked

the enemy with a well-ordered formation. The Romans could also forego the skirmishing phase and attack immediately with their entire line in close order. If they were successful, the *koursores* then pursued the enemy in irregular order. When the Romans outnumbered the enemy, they enveloped its flanks. When the Romans had slightly more men or had equal numbers of men, they usually attempted to outflank the enemy with their right wing. If the Romans were outnumbered, they refused their flanks and sent their centre to the attack first. If the front line or its divisions were forced to flee, the units of the second line were required to support it and attack the enemy.

The different parts of the Italian Array date from different periods. The reserve was already added before the birth of Christ, but we do not know when the other parts of the formation were added. The outflankers and flank guards would have been added when someone noted that the flanks of the first line needed extra protection for it to perform its mission unhindered. The fill-up *banda* ('flags' of men) were added between the divisions of the second line when someone noted that the intervals between them could become too small for the first line division to pass through in retreat. The rear guards were added when someone noted the need for extra rear guards. My working theory since 2008 (found in several research papers since), which I presented in *Slingshot* in 2011–2012, is that Gallienus put in place the final missing pieces of the array and that the formation received its name from the fact that Gallienus' cavalry *Tagmata* were at least initially

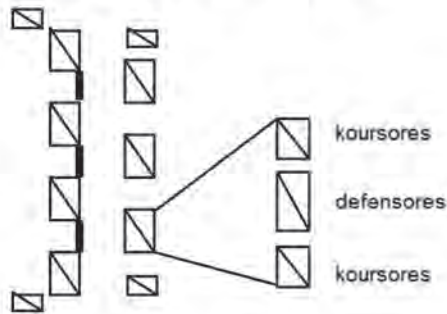


Drawing of Trajan's Column by Reinach

resulting array if the men are interpreted as units



Italian Drill Formation in the Strategikon: 1st Line 3 divisions with the outflankers (right) and flank guard (left); 2nd line 4 divisions with fill-up *banda* in between and rear guards behind the flanks



placed at Milan.<sup>15</sup> It should be noted, however, that the cavalry was rarely used in this manner during the period under discussion, except when it formed the vanguard of the army. The usual deployment pattern for the cavalry in combat was to be on the flanks of the infantry so that the cataphracts/*clibanarii* were placed next to the infantry and the lighter units further out, or alternatively so that the cavalry wings were also deployed as *koursores* and *defensores*.

***Infantry Tactics* (see the photo inset for examples of equipment)**

The infantry consisted of three basic types: the fully-equipped heavy infantry (legionaries/hoplites); the medium infantry (auxiliaries, *auxilia palatina*, ‘peltasts’, legionaries in light equipment); and the light infantry (*psiloi*). In addition to these there also appears to have existed a fourth composite type of heavy infantry armed with bows for which there is evidence in Vegetius and *Peri Strategikes* and in the accompanying illustration; and a fifth group of specialist clubmen/mace-wielders. It should be noted, though, that the Roman regulars were often trained to perform all of these various functions.

Roman tactics had been based on the use of the phalanx formation ever since the turn of the second century AD. The principal phalanx formation used by the Romans was the lateral phalanx with its variants. We can fill the blank spots in our knowledge from the late-sixth century *Strategikon*, which is likely to have reflected the standard phalanx tactics in use ever since the third century. When the army had less than 24,000 men, it was divided into three divisions (a maximum of 4,000 heavy-armed/2,000 light-armed per division, the rest probably designated as reserves), and if the army had more into four divisions.

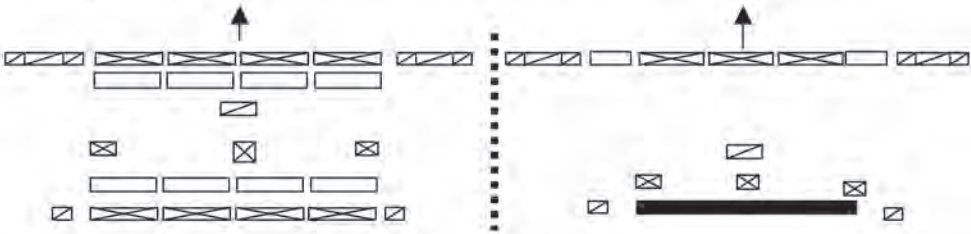
These figures also indicate the likely pattern of deployment between the first and fifth centuries, but it should be kept in mind that the figures (unit strengths) given by the *Strategikon* fit better the structures after Constantine’s reforms. However the difference between the 512 men unit of Constantine and the earlier 480 men unit is not that great. It was always a question of uniting the units of various sizes into larger entities that formed up the phalanx. The cavalry units were posted on the flanks of the infantry. The depth of the cavalry units varied from 5 to 10 ranks according to the availability of horsemen. The reserves usually consisted of both infantry and cavalry that were usually posted behind the wings and centre, or where specifically needed. When the baggage train accompanied the army, these were stationed a bowshot behind the infantry force to protect the rear of the formation. The drivers were armed with javelins, bows, slings, caltrops and metal darts to protect the wagons, and some soldiers were usually assigned to support them. They could also throw out a few caltrops to keep the enemy at bay. The wagons were covered by cloth to protect the drivers and the oxen against arrows. The batteries of field artillery on carts were distributed among the wagons to shoot over the head of the army and to protect the rear against possible outflanking attempts by the enemy.

The different sized units and detachments had to be adapted to the phalanx tactics. This means that when the cohorts of or detachments from the 5,120 men legion were deployed as phalanxes and fought with spears (with *pila* or *hastae* depending on the situation) as they did after the turn of the second century, they were probably deployed as double maniples (320 men) with depths of 4, 8 or 16 men behind which were posted the light-armed (160 men for a total of 480), because John Lydus’ referral (*De Magistr.* 1.46) to the cohorts of 300 men indicates this (see Chapter 3).

**Two variants of lateral phalanx with reserves not in scale (there were also other variants depending upon the size of the army, the placing of the reserves, and deployment of the light infantry):**

**left:** Over 24,000 footmen deployed as double phalanx when the baggage train did not accompany the army. Light infantry shown by the boxes without lines. Light infantry in irregular groups could also be posted on the flanks to make the formation a square.

**right:** Lateral phalanx with less than 24,000 footmen with the baggage line and artillery carts (the black line). The light infantry posted on the flanks between the heavy infantry and cavalry. This tactic enabled the Romans to use their light infantry against enemy cavalry and infantry simultaneously and also lengthened the line.



The rear ranks were armed either with *lanxæe* javelins or bows and slings. At least during the reign of Diocletian, the Romans appear to have deployed their legionary detachments in such a manner that one 'legion/division' consisted of about 6,000 (6,144?) men, divided into three c. 2,000 (2,048?) -men groups, each of which consisted of about 1,000 (1,024?) men. This bears resemblance to the sixth century practices and may prove that this system predates the reign of Constantine. The Strategikon stated that the *tagmata* were to consist of 200–400 men, the *moirai* at most of 2,000–3,000 men and the *mere mere* (pl. of *meros*, a division) of at most 6,000–7,000 men.

The phalangeal heavy infantry was arrayed in ranks and files with varying depths (4, 8, 16 and in exceptional cases 32). The light infantry was deployed either in front, behind, in the middle, or on the flanks as required by the tactical situation. In the ideal circumstance the light-armed could break up the enemy formation even before the lines would make contact. The four-deep array was the shallowest and essentially formed only a single line that could not be divided to form two lines. The other depths allowed the commanders to divide their units to face front and rear simultaneously (*amfistomos phalanx*, *orbis*) or separate the rear portion into a separate line and form a double phalanx (*difalangia*, *duplex acies*). The double phalanx could also be achieved by using two sets of separate units one after another, which was essentially the same array as the former double line of legionary cohorts. The double phalanx was used when the army was not accompanied by a wagon train. The Romans also used a phalangeal version of the triple line (*triplex acies*).

The principal battlefield tactics of the medium (no armour but melee weapons) and heavy infantry against enemy footmen consisted of different stages, which were the same when the Romans advanced or when they waited for the enemy to approach. The battle began at bowshot range. It was then that the soldiers placed their shields in the 'offensive' *testudo/foulkon* array (tortoise array with a shield roof). This 'offensive' *testudo* was an infantry array used against infantry, cavalry and fortifications in which the men tightened the formation so that their shields interlocked rim-to-boss in front (with file widths of 45–65cm) and the rear rankers placed their shields above their heads. If all men were fully

armoured, it was also acceptable to use the less-tight attack formation with shields placed rim-to-rim (c. 80–90cm per man in width) without a shield roof for attack and defence, but for obvious reasons the men preferred the safety of the shield roof even in the looser version. When the soldiers were at the range of the *plumbata/mattiobarbuli*, the *testudo* was opened up under the protective covering fire of the light-armed, and the soldiers threw their *plumbata/mattiobarbuli*. The next stage in combat happened when the lines came within javelin range. At this point, the Romans threw their *pila* or *hastae* with a jump, and then drew their *spathae* or *gladii* and ran forward to attack the enemy with swords by using thrusts and cuts at short range. The *gladius* was more suited to infantry combat while the *spatha* was better against cavalry. The second rank supported the first with spear thrusts and the rear rankers with missiles.

The Roman foot were also taught to employ wrestling, boxing and pancratium moves that could be used at close range combat. The aim of the volley(s) of missiles was to cause casualties among the enemy and to render enemy shields useless, all of which the Roman swordsmen could exploit when they charged forward. At close range, the soldier used his shield and shield boss for bashing and pushing and his sword for thrusts and cuts. The advantage of the attacking version of this system was that it facilitated the aggressiveness of the men and frightened the enemy. The alternative tactic was to stay in place and wait for the enemy to approach. This tactic had two advantages: the combat line would be perfectly aligned and the men were rested. If the battlelines were stationary, sometimes bold individuals also charged out of the formation to engage the enemy and thereby set an example for the rest. If needed the legionaries could also wield axes, mattocks, poles and pitchforks.

Against cavalry the Romans usually adopted the defensive version of the *testudo/foulkon*, which consisted of the front rankers kneeling and placing their shields rim-to-rim and by placing the butt of their *hasta*-spear (when equipped properly for the situation) or *pilum*-javelin at an angle into the ground so that the spears pointed at the enemy, while the second rank crouched a little and interlocked the bottoms of their shields above the top of the shields of the front rankers, and the third rankers did the same while standing up, as did the fourth rank. The 2nd–4th rankers pointed their *hastae* (or *pila*) towards the enemy while the men behind them threw javelins or darts or shot arrows when the enemy was within range. When the multi-purpose heavies faced cavalry the first three ranks rested their spears on the ground, and the first two ranks aimed their bowshots at the horses and the third shot (and others with bows behind them) at a higher angle so that the arrows dropped on the enemy from above. (See the illustration.) When the enemy approach had been slowed down by the barrage of arrows, the three front ranks picked up their spears and with the fourth rank they formed a wall of spears and engaged the enemy.

The use of the various phalanx arrays enabled the Romans to use various ‘grand tactical formations’ – even a version of the old triple line with three successive phalanxes. In order to achieve the ability to manoeuvre the units into different formations, the soldiers were taught to thin their lines (spread the formation as every other man stepped to form a new file), to thicken the lines (deepen and shorten the array as files were inserted into other files), to countermarch, to wheel, to turn in place and so forth. If the Romans outnumbered the enemy and/or had longer line, the lateral phalanx was used to outflank the enemy on both flanks. If the Romans outnumbered the enemy only slightly or had