ARMA



NEWSLETTER OF THE ROMAN MILITARY EQUIPMENT CONFERENCE

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EDITORIAL

VOL.1

NO.2

It is all a matter of scale, but the problem is - which one? Even when we have allowed for captions which do not match the illustrations, or no captions at all (and finally persuaded people to put a <u>drawn</u> scale onto each page of illustration), at which scale should military equipment be drawn? Various reports have used two-thirds, one-half, three-quarters, or full-size as a matter of course, but with little hint of consistency being sought by the archaeological community. There is obviously a need to compromise between practicality (it will not fit on the page if drawn at 1:1) and usefulness (1:3 - 'is that a rivet or a small ink blot?'), and it is worth noting that many reports are now drawing their copper alloy small finds at l:1, but there are still plenty which do not (my recent attempts to make sense of the illustrations in the Dangstetten finds report - once I had got over another of my bugbears, finds grouped by context - left me none the wiser and returning to the admirable interim report published in BRGK in the early 1970s).

Naturally, no one scale will do for all artefacts, but we could at least have a natural gradation that owed more to common sense and less to the demands of space or whim.

ROMEC 1

The proceedings of the first Roman Military Equipment Research Seminar have just gone out of print (see ARMA 1:1, p.3). Priced at only 90p, including post and packing, the publication was never going to make its editor and publisher rich! However, popular demand (in the form of Oxbow Books) has now suggested a reprint, so the opportunity was taken to improve upon the original. A new, more reader-friendly typeface has been introduced and a number of typographical errors corrected; more importantly, the long-lost figure 5 from Stephen Greep's article has now been restored. Copies of the revised edition of Roman Military Equipment, which has been published as a supplement to ARMA, are available from the editor (see editorial address) at $\pounds 2.70$, including postage and packing.

THE NEXT ROMEC

At the time of going to press, no further information about the next ROMEC has been received, but all subscribers to ARMA will be circulated with details when they become available.

THE ROMAN FINDS GROUP

A useful melding of like minds is achieved by this group, comprising finds various kinds from specialists of academic and unit backgrounds (more the latter than the former, it must be said). The group produces an attractive newsletter (well, it looks better than this one! Wait until I get my laser tries to hold two printer...) and meetings a year at various venues throughout Britain.

Their most recent meeting, held in the City Museum of Bristol, considered finds from the south-west and there were several papers of interest to students of military equipment. Ralph Jackson gave details of the hoard of material from Camerton, soon to be published by him; Ian Scott reviewed the evidence for military ironwork from South Wales; and David Zienkiewicz examined finds from several locations (and likely reasons for deposition) from recent work within the legionary fortress at Caerleon. In addition, Francis Grew gave a brief note on some military equipment from Lake Farm, Wimbourne.

The next meeting will be held at Liverpool on 12th February 1990 and takes as its theme 'Grave Finds from Roman Britain', whilst a meeting on the 'The Philospophy of Finds theme will be held in York Research' on March 1990. Further details 30-31st about the group and membership (£3.00 per annum, including subscription to the newsletter) can be obtained from: Mr P. Clay, Leicestershire Archaeological Unit, Museums Annexe, 116 Humberstone Drive, LEICESTER, LE5 ORD

A CIRCULAR SHIELD COVER

C. van Driel-Murray

The Ermine Street Guard recently equipped their imaginifer Clive with the paraphernalia of Constable office, based on the detailed scenes on Trajan's Column. What they did not know was that they could have based the dimensions of their small round shield cover surviving found at on a Castleford. England. The large find of scrap leather from this site is chiefly of interest because of what it tells us about the problems of provisioning the Roman army in the earlier phases of



conquest (c.AD 70-80). Most of the leather comes from cut-up and reused tentage, and there are few complete, or even identifiable, objects. One exception is a wedge shaped piece of leather, which, together with another, more fragmentary piece of the same shape, can be interpreted as an originally circular shield cover.

The complete covers were presumably made of four segments. The outer edge is folded and tacked, leaving room for the passage of a draw-string in the manner characteristic for the larger shield covers, such as from Caerleon and covers, such Valkenburg. The depth of the unstitched allowance at the sides allows the cover to be drawn around the circular shield board with an overfold of about 3cm. To judge from various slits and impressions metal sharp-edged objects, of attachments may originally have been mounted on the more fragmentary cover. Originally, appliqués had been sewn to the front of both covers, but now only the lines of stitch holes remain. What is apparently a symmetrical arrangement of petals overlies a semi-circular panel extra would have provided which protection for the shield edge. Though the stitching looks crude and irregular, a reconstruction made by P. de Haas of the Gemina Project, using dark brown contrasting leather on a honey-coloured base showed just how effective the pattern was. In addition the appliqués stiffened the cover and masked the coarsely stitched seams.

Working from the cover, it is possible to reconstruct the dimensions of the shield it was made to fit. The original diameter of the leather is c.60cm, reduced to c.56cm by the edge hem. Allowing for the overfold, the shield would have had a diameter of 48-50cm, which fits nicely between arm-pit and wrist, just as is shown on Trajan's Column. In short, the methods to achieve the reconstruction are different, but the effect is the same.

The Castleford fragments are the first actual evidence for these shields, and they provide an interesting example of the role of leather in preserving evidence of equipment which has not survived in its original form. What is curious is that only two other small pieces of shield covers were identified at Castleford, contrary to all expectations. Why, then, under these circumstances, this site should produce not one, but two examples of a previously unknown type of shield cover is odd, to say the least.

A more detailed account of the reconstruction of both the cover and its shield, as made and decorated by P. de Haas, appears in <u>Exercitus</u> 2:7, 132-4.

RECENT PUBLICATIONS

M.C. Bishop & J.C. Coulston, Roman Military Equipment, Shire, Princes Risborough: 1989. ISBN 0-7478-005-7 £3.50

M. Junkelmann, <u>Römische</u> <u>Kavallerie</u> <u>–</u> <u>Equites Alae</u>, Schriften des Limesmuseums Aalen, Aalen: 1989. No ISBN No price

W.	Selze	er, <u>Röm</u>	ische	Steinde	enkmäler.
Mainz	in	Römisc	he Zei	lt, von	Zabern,
Mainz:	1988	B. ISBN	3-8053	3-0993-7	£16.00

Not only does Selzer's catalogue contain some excellent photographs of most of the representations on stone from Mainz that should be familiar to students of military equipment, but it also includes a useful summary of the history of the garrisons of that site. It is obtainable in Britain through Oxbow Books.

NOTES ON THE CARRIAGE OF THE GLADIUS

Michael Simkins

It will probably have become apparent to a great many students of Roman military matters, that experiments by practical research exponents have concluded that the <u>gladius</u> and its scabbard can be more securely borne if the supporting baldric (when used) is passed beneath the soldier's military belt; an observation which is entirely factual.

However, prior to accepting such helpful advice on the use of military equipment, due attention ought to be paid to the available surviving evidence from the ancient world and the <u>tentative</u> nature of present-day suggestions of the kind noted.

There is, to my knowledge, no single sculptural representation which depicts the baldric being utilized in such a manner; all clearly show the baldric passing <u>over</u> the waist-belt. More important, perhaps, are the many representations of Roman infantrymen, both mailed and plated, with their swords suspended from baldrics and a complete absence of any waist-belts whatsoever.

Thus it would seem that the extra stability provided by trapping the baldric was regarded as needless, by the Romans at least.

THE COMPOSITION OF SOME COPPER ALLOY ARTEFACTS FROM LONGTHORPE

M.C. Bishop

Whilst preparing my doctoral thesis on 1st century A.D. military equipment, I was given the opportunity of using the analytical facilities of the Department Metallurgy at the University of of Sheffield. Peterborough City Museum very kindly loaned some of the equipment found during excavation on the site of the vexillation fortress at Longthorpe, near Peterborough (FRERE & ST.JOSEPH, 1974), with permission to carry out limited destructive analysis. The items examined were chosen during a visit to museum in April 1983 and were the considered to be reasonably representative of the military equipment from the site. Although a written report was submitted to the museum after the examination was completed and details were included in my thesis, these been properly have never results published, so this article aims to make the results more widely available, as well as, perhaps, to encourage others who have access to the appropriate facilities to attempt further such work.

The technique used for analysis was atomic absorption spectroscopy (HUGHES et al., 1976).

A range of artefacts were selected, but only those of direct relevance to this report are included; a list of these is given in Table 1, with a concordance for the original published information.

In most cases, sampling was carried out by drilling: an area of the artefact would be cleaned of corrosion and the actual sample would then be drilled from the uncorroded body metal. In one case, the sample was taken by clipping a corner and then cleaning it with abrasives.

Items with only one element in their construction were only sampled once, but in the case of 'lorica <u>segmentata</u>' fittings, separate samples were taken from the body of the fitting and from a rivet. Great care was naturally taken to ensure that corrosion products were not included with the sample.

Each sample was weighed accurately within one ten-thousandth of a (to gramme) and then dissolved using hydrochloric and nitric acids. At this stage, a further sample, consisting of a brass comparable weight of modern standard (of a known composition - High Tensile Brass No. 179/2), was included amongst the Roman samples. Once dissolved, the samples were diluted further. At the same time, a set of standard solutions were produced, containing all of the elements which it was decided should be sought in the dilutions the of these samples: standards enables an absorbance curve to be produced for each element.

Once the samples were in solution and diluted and the standards were prepared, their composition could be tested using the atomic absorption spectrophotometer. Absorbance readings are taken for a blank (de-ionised water) and the prepared standards, and the samples themselves can then be tested as a group for one element at a time. The readings produced are compared with the absorbance curve, enabling the original concentration of the element, in millilitre, to be microgrammes per determined. The resultant figure must _ then be used to calculate the percentage of the sample's composition which it formed (and this is calculated using the sample weight and the dilution).

The resulting percentage is only an approximation, given the small size of the original sample, and an error of +1% is to be expected in the main elements (hence the component elements of an object, as determined by AAS, will seldom add up to 100%). One of the reasons for including a modern brass standard was to allow comparison of its calculated contents with the known figures.

The results of the analysis with atomic absorption spectroscopy are given in Table 2.

Sample 1

A copper alloy fitting (published as a possible pendant), probably cast, with traces of white metal on its surface. This object was first tested with X-ray fluorescence, since it was in a good state of preservation and it was hoped that this technique of analysis, combined with AAS, would allow the nature of the white metal be to isolated. The results produced, although not quantifiable, showed in relative terms that larger amounts of tin were present, compared to zinc, suggesting that the white metal coating was tin (since XRF normally analyses the surface elements, as it is a non-destructive technique - CARTER et al., 1983, 202-3).

A sample was removed from the rear face of the artefact, the results obtained by AAS indicating almost equal amounts of tin and zinc, so the hypothesis that the coating metal was tin seems fairly likely (especially given the difficulties involved in working zinc in the Roman period and the fact that silver is only detected as a trace).

Of the main elements, lead comprises 8%, zinc and tin each 6%. Manganese, although not detected by AAS, was present in small amounts (less than chromium) in the XRF study.

Sample 2

A copper alloy mail fastener, probably cast, with an iron rivet at one end. This object was sampled on its rear, undecorated face, with a large drill bit (in order to avoid penetrating it too deeply).

Besides copper, the composition of this item was 13% zinc, 3% tin, and 1% lead. The iron rivet was sampled separately (Sample 14).

Sample 3

A copper alloy lobate hinge from '<u>lorica segmentata</u>', probably beaten from sheet. This sample included 16% zinc.

Sample 4

A rivet from the same copper alloy lobate hinge as Sample 3. It contained 9% zinc.

Sample 5

A copper alloy strip, in three joining pieces. This sample included 3%

tin and 1% lead, along with traces of cobalt.

Sample 6

A piece of copper alloy, possibly scrap, with evidence of having been cut and heated. It contained 8% tin, with traces of cobalt. Zinc was not detected.

Sample 7

A copper alloy lobate hinge from 'lorica segmentata'. This sample was found to contain 14% zinc, 1% tin, and 1% lead.

Sample 8

A rivet from the same copper alloy lobate hinge of '<u>lorica</u> segmentata' as Sample 7. The object was composed of 4% zinc, 2% tin, and 1% lead.

Sample 9

A copper alloy hinged strap-fitting from 'lorica segmentata', probably cut from beaten sheet. It contained 15% zinc.

Sample 10

A rivet from the same hinged strap-fitting as Sample 9. This object was found to contain 9% zinc. Tin was not detected.

Sample 11

A modern brass standard. The following elements were present in sizable amounts: 61% copper, 35% zinc, and 1% each of tin, iron, and manganese. This compares favourably with the known composition of the standard (Table 5).

Copper Alloy Samples: General

Manganese was not detected in any of the samples except Sample 11, the modern standard. Cobalt was only detected in the cases of Samples 5 and 6.

It should be stressed again that all readings have been rounded-up to the nearest per cent.

CONCLUSIONS

The analysis of the copper alloy objects produced some extremely interesting results. Samples 5 and 6 turned out to be bronzes, whereas the remainder were brasses. Within the category. of brass items, it is possible to distinguish several different types of composition.

The first two categories are formed from the 'lorica segmentata' fittings: the body metal and rivets differing markedly in composition. The body of these fittings normally consisted of copper alloyed with about 15% zinc, whereas the rivets contained something between 4% and 9% zinc. This means that the rivets would have been softer than the body of the fittings and may have facilitated their use. It is also possible that the difference was partly for decorative reasons, since the rivets would be noticeably more 'coppery' than the body metal of the fittings, thus creating a rather pleasing effect. In many ways, the composition of the body fittings of the resembles the composition of orichalcum coins (CARTER et al., 1983, Table 5).

Sample 7 showed slightly larger amounts of both lead and tin than was found in Samples 3 and 9, while the rivet of that same fitting, Sample 8, likewise has much higher proportions of lead and tin than was found in Samples 4 and 10. This might indicate that the lobate hinge from which samples 7 and 8 were taken was produced separately from the other lobate hinge (Samples 3 and 4) and the hinged strap fitting (Samples 9 and 10). There are also minor differences between these two objects, such as the fact that tin was not detected in Sample 10, whereas a trace was found in Sample 4. On the other hand, little difference can be discerned between Samples 3 and 9.

Sample 1, with its high amounts of lead and equal proportions of zinc and tin is a rather unusual piece. The presence of lead might be expected in a cast object, but the figure of 8% seems unusually high. The explanation may lie in the fact that the object was tinned. The results of the XRF test suggest that the item was tinned, rather than silvered, and also help confirm some of the AAS results (such as the low amounts of manganese).

Sample 2 is similar in some ways to the body metal of the 'lorica segmentata' fittings, although it has a slightly lower proportion of zinc, more tin, and lead is fairly well represented. Given that the item is cast, the presence of the lead is only to be expected. There is no trace of tinning on this item.

It should be remembered, when considering the analyses of cast items, that there is a tendency for some metals (notably lead and tin) in an alloy to 'sweat' towards the surface of an object (HUGHES et al., 1976, 22). Clearly, this could affect the analysis of such cast objects, although it is likely that the samples from the Longthorpe equipment were taken from a sufficient depth within the metal to prevent an 'sweated' over-emphasis on such elements, but it is possible that this leaves an artificial deficiency in some cases.

Samples 5 and 6 stand out from the others because of their unusual composition. Both are bronzes, with little zinc (not detected in the case of Sample 6), and tin (3% in Sample 5, 8% in Sample 6). Interestingly enough, both samples produced traces of cobalt, which was not detected in any of the other Although samples. similar in composition, these two samples are by no means identical. Sample 5 displays traces of zinc, about 1% lead (<1% in Sample 6), and only 3% tin (compared with 8% in Sample 6). These differences not surprising, are given the dissimilarities between the two objects from which they were taken.

It. seems clear from the above results that, even given the limited that analysis was possible, some interesting results have been produced. Two distinct types of brass seem to have been used for the body and rivets of the 'lorica segmentata' fittings, and the fact that they do not appear to come from the same production batch, suggests that this was deliberate on the part of $_$ the Romans. Comparison with the two cast objects (Samples 1 and 2), suggests that about 85% was a normal figure for copper in military brasses (with the exception of the rivets), although the composition of those cast items naturally differs in other particulars, because of the nature of their manufacture. This may suggest that Sample 5 and 6 were not from military brasses as such, but that these were scrap bronze being kept for some reason.

The British Museum Research Laboratory's analysis of the Fremington Hagg and Xanten horse trappings (CRADDOCK <u>et al.</u>, 1973, 15) typically produced results of around 80% copper,

TABLE 1: SAMPLES OF MILITARY EQUIPMENT FROM LONGTHORPE

Sample	Inv. No.	Description S	Sample weight	FRERE & ST.JOSEPH 1974
1	L70 II 1/8 X370	Pendant?	0.0064g	P.58, No.60; Fig.30,60
2	L67 II 4/28	Mail fastener (Ae base)	0.0621g	P.60, No.66b; Fig.30,66b
3	L69 VIII 1 X380	Lobate cuirass hinge (Ae base)	0.0242g	P.48, No.26
4	L69 VIII 1 X380	Lobate cuirass hinge (Ae rivet)	0.0250g	P.48, No.26
5	L73 X 3 X338	3 Ae fragments	0.0843g	P.64, No.94; Fig.33,94
6	L73 X 3 X338	Ae fragment	0.0151g	unpublished
7	L71 III 3 X310	Lobate cuirass hinge (Ae base)	0.0114g	P.46, No.17; Fig.26,17
8	L71 III 3 X310	Lobate cuirass hinge (Ae rivet)	0.0148g	P.46, No.17; Fig.26,17
9	L70 III 3 X332	Hinged strap fitting (Ae base	0.0325g	unpublished
10	L70 III 3 X332	Hinged strap fitting (Ae rive	0.0086g	unpublished
11	not applicable	modern brass standard	0.0237g	

TABLE 2: RESULTS OF ANALYSIS OF COPPER ALLOY ROMAN MILITARY EQUIPMENT (expressed as percentages)

Sample	Zn	Sn	Pb	SЪ	Fe	Mn	Ni	Со	Cr	Ag	TOTALS	Cu
1	6	6	8	<1	1	n.d.	<1	n.d.	<1	< 1	< 25	> 75
2	13	3	1	<1	<1	n.d.	<1	n.d.	<1	< 1	< 22	> 78
3	16	<1	<1	<1	<1	n.d.	<1	n.d.	<1	<1	< 23	> 77
<u> </u>	9	<1	<1	<1	1	n.d.	<1	n.d.	<1	<1	<16	> 84
5	<1	3	1	<1	<1	n.d.	<1	<1	<1	<1	<11	> 89
6	n.d.	8	<1	< <u>ī</u>	<1	n.d.	<1	<1	<1	<1	<15	>85
7	14	1	ī	<1	2	n.d.	<1	n.d.	<1	<1	< 22	> 78
8	4	2	1	<1	<1	n.d.	<1	n.d.	<1	<1	<12	>88
ğ	15	<1	<1	<1	<1	n.d.	<1	n.d.	<1	<1	< 22	>78
10	9	n.d.	<1	<1	<1	n.d.	<1	n.d.	< 1	<1	<15	>85
11	35	1	<1	<1	1	1	1	n.d.	<1	<1	< 43	> 57

TABLE 3: COMPOSITION OF THE HIGH TENSILE BRASS STANDARD NO. 179/2 (SAMPLE NO. 11)

C	58 5009	A1	2,220%
Sn	0.700%	Mn	0.860%
Ph	0.350%	Si	0.044%
NI	0.560%	Zn	35.800%
Fe	1.020%		

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15% zinc, 2% tin, and 2% lead, although the copper content is somewhat lower than that of the Longthorpe objects. The similarity between the fittings from Fremington Hagg and Xanten again suggests that particular recipes were used for particular purposes.

ACKNOWLEGEMENTS

The items of military equipment from Longthorpe were made available for analysis by Peterborough City Museum through the good offices of Mr. M.Howe.

I should also like to thank Mr. M.J. Dobby of the Dept. of Metallurgy, University of Sheffield, for his assistance with the analyses, advice over the results, and for reading a draft of the original report upon which t article is based.

DGRAPHY OF ROMAN MILITARY

I. you know of any references that might qualify for inclusion within this bibliography, please let me know. With the effects of rampant cuts in funding in most British academic libraries, it is becoming increasingly less likely that any one person can compile anything approaching a comprehensive list, especially where reports are concerned (many journal articles at least receive a mention in abstracting works such as ée Philologique or Archäologische ographie and - to a lesser extent tish Archaeological Abstracts. s are due to Dr C. van Driel-Murray a useful crop of references in this ection.

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ROMAN CAVALRY

Those of you who had begun to suspect that Roman cavalry had recently become a popular area of study might have your suspicions confirmed by Marcus Junkelmann's latest project. He and his team have been researching and reconstructing Roman cavalry equipment, carring out a trial ride along the Raetian and Upper German <u>limes</u> during 1988 (for a report on this, see RECENT PUBLICATIONS above), before attempting a more ambitious ride during 1990. For those who would like to see the reconstructions (many of which are, I believe, by Michael Simkins, although a Connolly saddle - mark 27B? - is in evidence in the book), the journey is planned to take place in June-August 1990 and the route is said to be Inchtuthil, Antonine Wall, Edinburgh, Newstead, Carlisle, Hadrian's Wall, Newcastle upon Tyne, York, Lincoln, Gloucester, Chester, Caerleon, Cirencester, Albans, St. London, Canterbury, Dover, Valkenburg Z.H., Leiden, Nijmegen, Xanten, Haltern, Oberaden, Neuß, Cologne, Bonn, Andernach, Koblenz, Mainz, Saalburg, the Upper German and Raetian limes (a different section), and Ratzenhofen. A Legionen des Augustus-type book on the forthcoming ride has already been advertised by von Zabern.

WORK IN PROGRESS

A CATALOGUE OF MILITARY EQUIPMENT FROM LONDON

Back in 1986, the Museum of London organised a gathering of specialists on military equipment and mounted a display of all the appropriate finds in their collection, as well as the more recently excavated material from the City and Southwark. One of the results of this day was the idea of a catalogue of this material, much of which is unpublished. This is now underway, with the cooperation of a number of specialists, and it is hoped this will be published in the near future, although the form in which it will appear has yet to be finalised.

MILITARY EQUIPMENT FROM LEJJUN

Sonja Jilek

I am preparing a catalogue of the small-finds from the legionary fortress of Lejjun, Jordan. This will include all objects found in the five seasons of excavation of Dr Thomas Parker from 1980-89. Part of this volume will be a section on military equipment.

The, place was colonized from the end of the third century AD. The presence of the army is best verified in the stratum V-VIb, the first half of the fourth century. The excavations have produced some weapons, like arrow-heads, small javelin heads and artillery some boltheads. There are also belt-fittings, buckles, fibulas and studs, which can be compared with the from material century third The objects have been Dura-Europos. found in good late Roman contexts and will be useful in throwing light on the situation of the Roman army on the Eastern frontier in late antiquity. The be article and the catalogue will published in the final report on the Limes Arabicus Project.

COPPER ALLOY BELT PLATES FROM BRITAIN

T.G. Padley & P.M. Cracknell

We are currently compiling a corpus of Roman belt plates from Britain of the three basic types shown in Fig.1. There are a sufficient number of this general type from Britain for them usually to be described as a 'common' The find. majority are enamelled with either a series of chequer-board pattern, a millefiori florets (see Fig.2,1), or have single colour fields. However, there are several plates which, although they are of the same general design, are not enamelled. From Cumbria there are at

least nine examples of all types, with a further eighteen from sites along Hadrian's Wall. Recent excavations in Carlisle have produced four examples, three from the excavations on the site of the fort at Annetwell Street and one from the 1988 Cathedral excavation. In addition, the almost complete example shown in Fig.2, I was found by a metal detector near to the Roman fort at Watercrook, near Kendal, Cumbria, in November 1988.

Many of the belt plates had central vertical bars which were easily detached and are therefore often found separately (see Fig.2,2, an example from Annetwell Street, Carlisle).

The variation in the details of the design are such that, for example, an exact parallel for the Watercrook plate is difficult to find. The closest example is a single plate from South Shields (ALLASON-JONES & MIKET, 1984, 96, 3.11 and Pl.6).

Besides the three main types, there are several oddities, such as an example from Lydney, Gloucestershire (WHEELER & WHEELER, 1932, Fig.20, no.97).

We would be grateful for information about any of the types. If possible a drawing or photograph would be appreciated, along with the following information:





TYPE 1 TYPE 2 **Fig.1:** The three main types (approx. 1:1)





2



1

Fig.2: Enamelled belt plates from (1) Watercrook, (2 & 3) Annetwell Street, Carlisle

- 1. Provenance
- 2. Context (and date if known)
- 3. Small find number or museum accession number
- 4. Length
- 5. Width
- 6. Thickness
- 7. description of any enamel decoration
- 8. Any published references

Please send the information to T.G. Padley or P.M. Cracknell, Carlisle Archaeological Unit, Level 5, Shaddon Mills, Shaddongate, Carlisle, CA2 5TY. Thank you.

A NOTE ON ROMAN INFANTRY ROLES

J. Davison

Modern authors frequently refer to Imperial auxiliary infantry as 'light infantry'.¹ This implies open order fighting, usually with missiles, and this view must be questioned.

These <u>auxilia</u> are usually reconstructed with cuirass, helmet and large shield.² Some are thought to have used the legionary <u>scutum</u> and <u>lorica</u> <u>segmentata</u>,³ hardly the equipment of light troops used for skirmishing. An 3

important point of interest is the apparent auxiliary use of the <u>hasta</u>. A thrusting weapon, it may have been used against cavalry, in a phalanx-type formation, rather like Caesar's legionaries used their ill-suited pila against Pompey's cavalry at Pharsalus,⁴ with dramatic results.

The typical modern depiction of an auxiliary infantryman of the first two centuries AD therefore can hardly be construed as a javelin-armed skirmisher, like an old velite. From some tombstones it would seem possible that the early Imperial auxilia may not have worn the cuirass,⁵ but with so many legionaries demobilised after Actium, and the creation of the Imperial auxilia soon after, surely much of the surplus legionary armour was passed on to the auxilia. In any case, the infantry of the fifth century AD are thought to have abandoned the use of the cuirass, but most must still have fought as line infantry.⁶ On tombstones of early auxiliaries, the usual soldier might carry the hasta and two javelins, not enough for skirmishing for any length of time.'

The <u>auxilia</u> may be viewed as a source of cheap legionary soldiers, as were the Italian allies, whose separate formations had only vanished 60 or 70 years previously, following the Social War. Auxiliaries fought at Mons Graupius as line infantry,⁸ armoured or not, and fought as an independent force under Antonius Primus in AD 69.⁹

Specialist troops, such as archers or the amphibious Batavians, were included among the <u>auxilia</u>, but the majority of the auxiliary infantry were low paid line infantry. The Roman army had always contained a fairly low proportion of light infantry, and this continued under the Empire.

Notes

- For example, see LUTTWAK, 1976, 16; ROSSI, 1971, 78-9.
- 2. Examples are SIMKINS, 1984, plates D1 and F2; WARRY, 1980, 193, figure 1.
- 3. WARRY, 1980, 193, figure 2; POULTER, 1988, 39.
- 4. Plutarch, Pompey 69.
- 5. Thanks to M.C. Bishop for pointing out that some tombstones show unarmoured soldiers.
- 6. FERRILL, 1986, 152-3, which notes Roman infantry behaviour at Chalons.
- 7. SIMKINS, 1984, 32.
- 8. Tacitus, Agricola 35-7.
- 9. WELLESLEY, 1976, 132.

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Amongst other things, the guide to military equipment on display in the site museum at Corbridge (postponed from this issue), plus whatever you send in.

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