

LIMES XX

ESTUDIOS SOBRE LA FRONTERA ROMANA
ROMAN FRONTIER STUDIES

Volumen II

A. Morillo, N. Hanel & E. Martín (eds.)



Anejos de
GLADIUS

CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS
EDICIONES POLIFEMO

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13

(Vol. 2)



INSTITUTO DE INVESTIGACIONES CIENTÍFICAS
DE LA UNIVERSIDAD DE VALLECAJAL



ANEJOS DE *GLADIUS*

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INSTITUTO DE ARQUEOLOGÍA DE MÉRIDA

ÁNGEL MORILLO, NORBERT HANEL & ESPERANZA MARTÍN
(eds.)

LIMES XX

XX CONGRESO INTERNACIONAL
DE ESTUDIOS SOBRE LA FRONTERA ROMANA

XXTH INTERNATIONAL CONGRESS OF ROMAN FRONTIER STUDIES

León (España), Septiembre, 2006

Congreso celebrado bajo la presidencia de honor de su Majestad el Rey de España
y con el apoyo de la Universidad de León

Anejos de Gladius

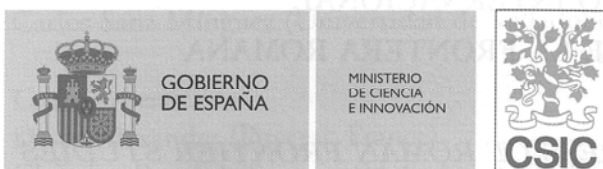
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CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS
INSTITUTO HISTÓRICO HOFFMEYER. INSTITUTO DE ARQUEOLOGÍA DE MÉRIDA
EDICIONES POLIFEMO
Madrid, 2009

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EDICIONES
POLIFEMO

© Consejo Superior de Investigaciones Científicas
c/ Vitruvio, 8
28006 Madrid
NIPO: 472-09-123-X
ISBN Volumen II: 978-84-00-08856-9
ISBN Obra completa: 978-84-00-08854-5
Catálogo General de Publicaciones Oficiales <http://www.060.es>

© Ediciones Polifemo
Avda. de Bruselas, 47 5º
28028 Madrid
www.polifemo.com
ISBN Volumen II: 978-84-96813-27-4
ISBN Obra completa: 978-84-96813-25-0

Depósito Legal: M-33.230-2009
Impreso en España

Imprime: eLeCe, Industria Gráfica
c/ Río Tiétar, 24
28110 Algete (Madrid)

THE ROMAN MILITARY PRESENCE IN THE RHINE DELTA IN THE PERIOD C. AD 40–140

MARINUS POLAK

INTRODUCTION

For over two centuries the Roman army occupied the delta of the Rhine. The wet conditions in this area, which the soldiers would have cursed, are a blessing to those who study the remains of the military infrastructure. Although the excellent preservation of the successive auxiliary forts at Valkenburg is probably exceptional, many timber structures and other well-preserved ecofacts have been unearthed at various neighbouring sites over a number of decades. Not only recent discoveries, but also a considerable accumulation of dateable finds and the extension of dendrochronology to ash and elm –species widely used here as construction timber in the Roman period– have all shed new light on the history of this section of the frontier zone of the empire (Fig. 1).

The earliest fortification in the Netherlands was the large legionary base at Nijmegen, now considered to have been built as early as 19/16 BC and evacuated by 12 BC (Kemmers, 2005: 44-57, esp. 48-49). Early in the first century AD smaller bases were established further westward, at Meinerswijk, Vechten and Velsen. Towards the middle of the first century a series of auxiliary forts appeared on the south bank of the Rhine, between Vechten and the North Sea. Traditionally, Valkenburg is assumed to have been built in AD 39/40, the others in, or soon after, AD 47¹.

A NEW SYNTHESIS

The last decade has seen several excavations in this part of the frontier area. At Alphen aan den Rijn most of the remains of the auxiliary fort of Albaniana were unearthed, and smaller excavations took place in the forts of Woerden and Roomburg, and in the military vici at Vechten, Woerden and Roomburg. Large-scale research to the west of the fort at De Meern has revealed important “extra-mural” structures, including long stretches of the limes road and several early watchtowers.

¹ E.g. Bogaers & Rüger, 1974: 44-58; Haalebos, 1977: 284-285; Schönberger, 1985: 345-346. According to Haalebos (1977: 285), Zwammerdam was not a regular auxiliary fort in the pre-Flavian period, but a smaller military post.

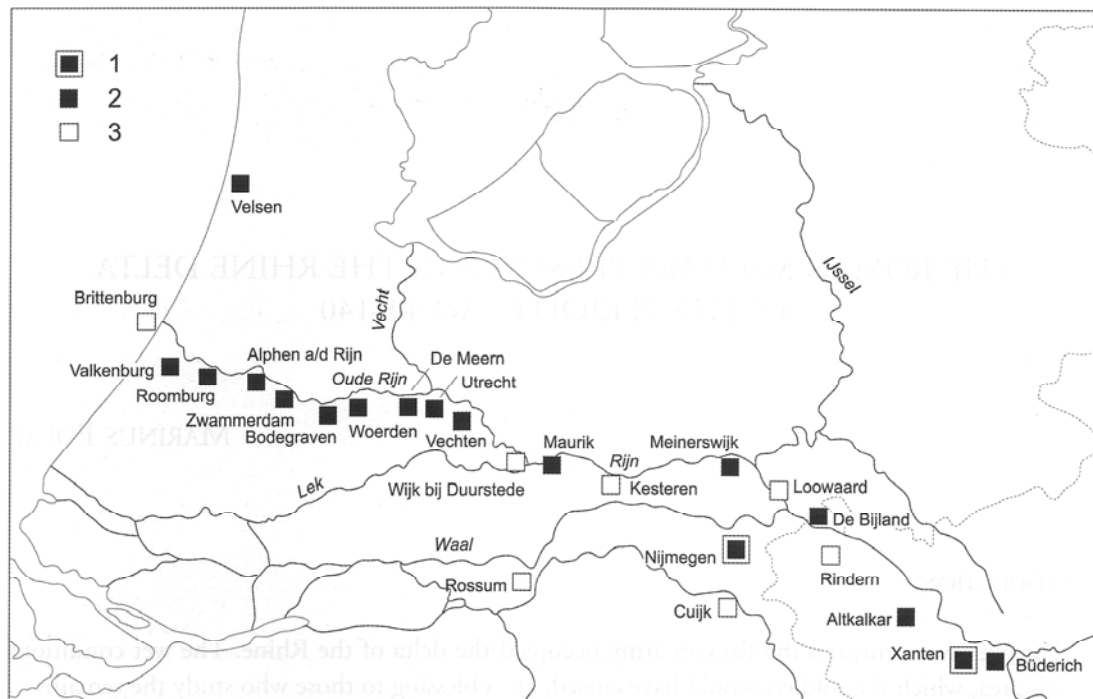


FIG. 1. Roman fortifications in the Lower Rhine Area in the Early and Middle Roman period:
 1) Legionary base; 2) Auxiliary fort; 3) Possible auxiliary fort

Unfortunately, for the most part the results of the recent excavations in the Western Netherlands are still waiting for analyses, and publications –if available at all– are often concise and/or difficult to obtain. To meet with this problem, a research project was started in 2004 which aimed to synthesize the history of the limes section from Vechten to the North Sea in the period of c. AD 40–140². The new evidence will be presented and compared with the results of earlier excavations. The project has a wide focus, and is not limited to the military structures alone³.

The central theme is to be the interaction between these structures and the dynamics of the landscape of the Rhine delta. The layout of the forts suggests that the army adapted its templates to the peculiar circumstances in this wet area⁴. On the other hand there is no doubt that the

² The research project is funded by the Netherlands Organization for Scientific Research, Biax Consult, Radboud University Nijmegen, the City of Utrecht and the Foundation for Provincial Roman Archaeology. The project team consists of J. P. Chorus, M. Erdrich and M. Polak (Radboud University Nijmegen), L. I. Kooistra and P. van Rijn (Biax Consult), C. Cavallo (University of Amsterdam), M. van Dinter (ADC Archeoprojecten), M. Dütting (Hazenberg Archeologie Leiden) and E. P. Graafstal (City of Utrecht).

³ Cf. the paper by L. I. Kooistra in this volume.

⁴ The forts of Meinerswijk, Utrecht, De Meern, Zwammerdam and Valkenburg have no *retentura*; judging by the available space, those of Woerden and Roomburg were probably of the same type, although there is no evidence from excavations. So far only the stone fort at Vechten and its immediate timber predecessor have produced a *retentura*, but just as the others they have a broad front (i.e. the length of the side which houses the *porta praetoria* is greater than that of the sides in which the *portae principales* are situated).



FIG. 2.

Part of one of the barracks from the earliest phase of the fort at Alphen aan den Rijn, seen from the *spatium conversantibus*. From right to left two *contubernia* consisting of *arma* and *papilio* are visible, separated by an empty (?) space from the centurion's quarters just outside the excavated area

arrival of a military force of several thousand put a heavy burden on the restricted natural resources. So while the military infrastructure was constrained by the influence of the landscape, the landscape itself was altered significantly by the infrastructure.

The project will eventually lead to a better understanding of why the Roman army settled itself in this area at all, given at first sight, the unsuitable natural surroundings, and why it stayed for over two centuries, given the ensuing logistic problems that its presence must have brought. Evidently, the Roman forts in the Rhine delta were important, but what then was the nature of their importance?

In this paper three topics will be addressed:

- the foundation of the auxiliary forts in the area of study;
- their function or functions;
- the history of the military occupation of this *limes* section, and some of its implications.

FOUNDATION

Excavations at Alphen aan den Rijn in 2001–2002 have produced many important results (Polak *et alii*, 2004). The timber remains of the first building phase were partly preserved (Fig. 2), as were the *porta principalis dextra* with the adjacent earth-and-timber wall and one of the corner towers, three barracks and probably the *fabrica*, and timber revetments in the Rhine bed immediately in front of the fort.

The wealth of evidence made it possible to study the mix of timber used for the buildings –mainly ash, alder, elm and oak– and various construction details. As dendrochronology can now be extended to ash and elm on a local scale, the basis for the dating of the structures was considerably broadened.

The coin series of the Alphen fort already indicated that it had been built before AD 47 (Kemmers, 2004: esp. 184) and this preliminary conclusion was later confirmed by a series of dendrochronology dates. The earliest timbers, which originate from the defensive works, were felled in autumn 40 or winter 40/41. The barracks and revetments of the Rhine yielded various felling dates in AD 42, suggesting that the building process extended over more than one year. This is not a major surprise in view of Elizabeth Shirley's analysis of the legionary fortress of Inchtuthil (Shirley, 2001), the time frame of which is based upon historical evidence. However, the Alphen building history, based on dendrochronology, is historically independent.

The results of the Alphen excavations have far reaching implications. Valkenburg is now no longer the only fort built in this area before AD 47. The dendrochronology dates at Alphen corroborate the conclusions drawn from the coin series, and the analogy of the latter with the pattern of the Valkenburg coins confirms the early building date of that fort⁵.

The overall finds assemblage at Alphen has little to offer to support a building date around 40. It appears that the soldiers arrived with only the bare necessities, and that further provisioning was a problem in the early years. Without the evidence of the coins and the tree-rings, Alphen would probably not have been equated with Valkenburg.

This observation prompts the question of whether there may be more forts between Vechten and Valkenburg with a pre-47 building date. At present there is ample reason to answer it affirmatively. A recent assessment of the coin finds in and around the fort at De Meern revealed a pattern very much in accordance with that of Alphen and Valkenburg (Kemmers, 2006). The first results of recent excavations at Woerden suggest a pre-47 foundation, too (Vos *et alii*, 2003).

FUNCTION(S)

At De Meern the limes road has been traced over a distance of c. 3 kms (Graafstal, 2002). It does not follow the contemporary bank of the main stream of the Rhine, but the strongly winding gully of a smaller southward branch joining the main course before the next auxiliary fort, at Woerden. The earliest archaeologically recognizable traces of the road seem to date to the Flavian period, with dendrochronology dates from 89 onwards. It is likely that there was an earlier road linking the forts in the Rhine delta, but if so, its route has not yet been detected.

Along this section of the road several watchtowers have been discovered – a rare phenomenon in this section of the *limes* until now. One tower was built in stone and may be dated after the beginning of the 2nd century, two others are timber structures and seem to have been erected around the middle of the 1st century. At present a dendro date of AD 62 is available for a rebuilding of one of the timber towers, and felling dates of 55–62 for another. Interestingly, the positions of the towers seem to be related to the course of the Rhine rather than to the *limes* road.

⁵ For some time it was thought that the earliest phase of the *limes* road immediately south of the Valkenburg fort could dendrochronologically be dated to AD 39/40 (Van Dierendonck *et alii*, 1993: 17-18). Recently, however, this view had to be corrected: the oak posts sampled were felled in AD 99/100 and do not belong to the earliest road but to a later refurbishing (Hessing, 1999: 151-152, with note 14).

This fits in with the siting of the auxiliary forts in the Western Netherlands. They were laid out immediately adjacent to the river, prone to flooding, even when less vulnerable locations were at hand at nearby. For this reason, it might be asked whether the military alignment in the Rhine delta was not primarily and/or initially related to the river, and much less to the territory across.

What then was the function of this Caligulan or early-Claudian system – if it was a system at all? Was it a *limes*, the *limes* or a structure that eventually became the *limes*? At present we are inclined to consider its appearance as a short-term investment related to securing of the Rhine delta, with an eye to the conquest of Britain or to control the German pirates, or perhaps both. Corbulo's operations across the Rhine demonstrate that the river was not a definite end to Rome's territorial ambition towards northward expansion at that time. When the idea of the incorporation of *Germania Transrhenana* in the Empire was given up –if it ever was– the southern bank of the Rhine with its military structures was the most obvious point to draw the official dividing line. Whereas elsewhere in the Northwest changing strategies produced new linear structures, the military infrastructure on the Lower Rhine seems to have absorbed these functional changes.

OCCUPATION HISTORY

The main sources for the history of the military occupation of the Rhine delta are tile stamps and military diplomas. Literary references are seldom precise and inscriptions on stone are rare. Bricks were stamped by the auxiliary units only in the Flavian-Trajanic period (Bogaers, 1969: 32, note 31) and mainly in the area downstream of the legionary fortress at Xanten⁶. Military diplomas cover the period from AD 78 to the early 160's⁷. Consequently, our best information concerns the late first and early second century, and the observations presented here will be confined to that period.

In 1968 Alföldy published his extensive study of the auxiliary troops in Lower Germany. Most of his conclusions are still valid, although the considerable increase in the number of military diplomas has added welcome details (Fig. 3). Alföldy pointed out that the occupation force on the Lower Rhine was considerably reduced in the period of AD 100–120 (Alföldy, 1968: 149-152). When the Batavian revolt was subdued in AD 70, the Lower German army comprised four legions, six *alae* and close to thirty *cohortes*, some 40.000 soldiers in all. Under Domitian only two *alae*⁸ and two *cohortes*⁹ left the province, but the *alae* were replaced¹⁰, and an additional *ala* seems to have arrived¹¹. Thus at the end of his reign the army had practically the same size as 25 years before.

⁶ Already observed by Schmitz (2002: 357).

⁷ CIL XVI, 23 and 158; RMD I 52, II 120 and IV 216 and 239 (Pferdehirt, 2004: n. 4, 9, 24 and 35; Eck *et alii*, 2002; Eck & Pangerl, 2003 and 2004).

⁸ *Ala Siliana* is attested in *Pannonia* in AD 84 and *ala I Flavia Singularium* in *Germania superior* in AD 90 (Alföldy, 1968: 32 and 34; Haalebos, 2000: 40).

⁹ *Cohors VI Thracum* is attested in *Pannonia* in AD 84 and *cohortes III Dalmatarum* in *Germania superior* in AD 90 (Alföldy, 1968: 72 and 57).

¹⁰ The new *alae* arriving were *ala Indiana Gallorum* and *ala Vocontiorum*.

¹¹ *Ala I Batavorum* is attested in the Lower German diplomas of AD 98 and 101. Since the *ala* received the honorary titles *pia fidelis* it must have been in this province in AD 89 (Haalebos, 2000: 42; Roxan & Holder, 2003: 437, note 3).

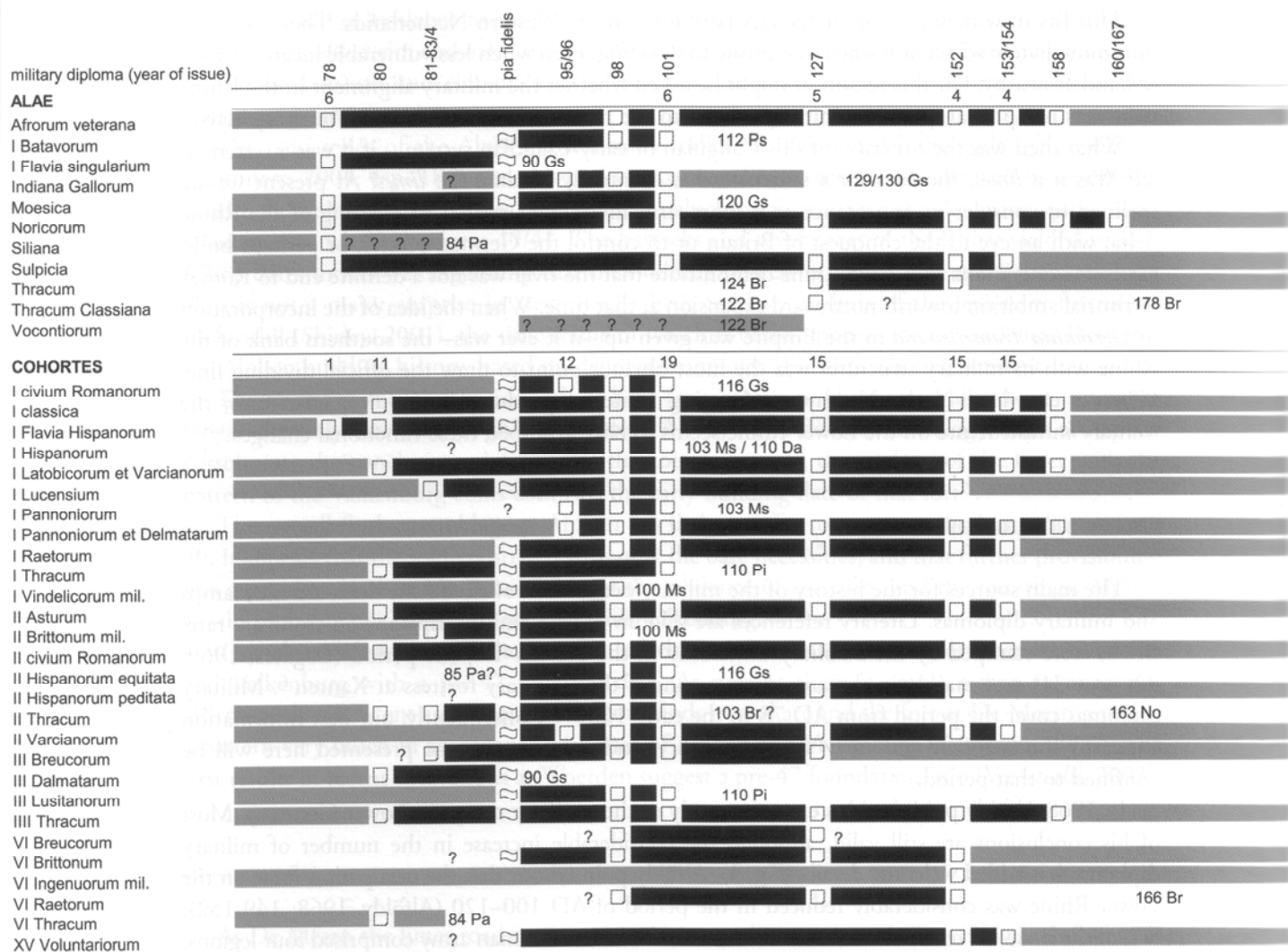


FIG. 3.

Overview of the auxiliary units represented in Lower Germany between c. 70 and 200, based on military diplomas and the occurrence of the honorary titles *pia fidelis*. Black bars indicate that presence is attested, grey bars that presence is likely. When a unit is known earlier or later from another province, year and province of the relevant constitution is recorded, e.g. 112 Ps is a military diploma for *Pannonia superior* dated to AD 112

With Trajan on the throne an important reduction took place, doubtless in pursuit of his Dacian wars. The number of legions was halved to two, the auxiliary units reduced by one third. When the dust raised by the troops marching off had settled, only 22,500 soldiers were left, less than 60% of the earlier occupation force.

This drain of manpower is clearly visible in the epigraphic evidence, but is it reflected in the structural remains? The disappearance of two legions is: at Neuss the legionary fortress was succeeded by an auxiliary fort on the same site; at Nijmegen tile stamps indicate that when the Tenth Legion left for *Aquincum* around 104, the legionary fortress was for at least two decades occupied only by detachments, although it is unclear what happened to the buildings.

As far as the auxiliary forts are concerned, there is little that indicates a severe reduction of the occupation force under Trajan. The number of c. 30 forts that are likely to have existed in Lower Germany seems on the low side for the 30–34 Flavian units, but too large for the slightly over 20 units of the second century army. But contrary to expectation, no forts seem to have been evacuated¹². If that means that the remaining units were divided over the available forts, we might perhaps expect either internal rebuilding or at least a decrease in the quantity of finds.

To start with the latter, it is well known that distribution curves plotting the quantity of pottery from forts in this region show low values for the early 2nd century. The curve of the potters' stamps on *terra sigillata* from Zwammerdam is a classic example (Haalebos, 1977: 93, Abb. 12). It is tempting to consider it as a reflection of reduced military activity, but the subsequent increase of the quantities of pottery is hard to reconcile with the stabilisation or slight reduction of the size of the army from Hadrian onwards.

A study of the structural remains of the forts indicates that rebuilding in the early 2nd century is rare. So far, we have two Trajanic building inscriptions from the Netherlands. The earliest, from Roomburg, was erected by *cohors I Lucensium* in AD 103–111 and might effectively be related to the troop movements during or following the Dacian wars (CIL XIII, 8823; Haalebos, 2000: 50, Abb. 11). The other, from Valkenburg, can be dated to 116 or 117 and seems too late to be relevant to this issue (AE 1989: 559 = 1995: 45; Haalebos, 2000: 58, Abb. 23).

On the whole, therefore, there are only few indications for changes in the size of forts or their garrisons in the first decades of the 2nd century. What does this imply? It might mean that the changes were so gradual or inconspicuous that they escape our attention. Or did we simply miss them because we did not look for them?¹³

ABBREVIATIONS

AE = *L'Année Épigraphique*

CIL = *Corpus Inscriptionum Latinarum*

RMD = *Roman Military Diplomas* (Roxan, 1978; 1985; 1994; Roxan & Holder, 2003)

BIBLIOGRAPHY

- ALFÖLDY, G. (1968): *Die Hilfstruppen der römischen Provinz Germania inferior*, Epigraphische Studien 6, Düsseldorf.
- BOGAERS, J. E. (1969): "Cohortes Breucorum", *BerOudhBod* 19, 27-50.
- BOGAERS, J. E. & RÜGER, C. B. (eds.) (1974): *Der Niedergermanische Limes: Materialien zu seiner Geschichte*, Kunst und Altertum am Rhein 50, Köln.
- DIERENDONCK, R. M. VAN *et alii* (eds.) (1993): *The Valkenburg excavations 1985–1988: Introduction and detail studies*, Nederlandse Oudheden 15/Valkenburg Project 1, Amersfoort.

¹² The auxiliary fort at *Asciburgium* was given up well before the Trajanic reduction of the army.

¹³ The English text was kindly corrected by G. B. Dannell.

- ECK, W. *et alii* (2002): "Neue Militärdiplome zur Geschichte der Provinz *Germania inferior*", *Kölner Jahrb.* 35, 227-236.
- ECK, W. & PANGERL, A. (2003): "Sex. Iulius Frontinus als Legat des niedergermanischen Heeres: Zu neuen Militärdiplomen in den germanischen Provinzen", *Zeitschr. Papyr. u. Epigr.* 143, 205-219.
- ECK, W. & PANGERL, A. (2004): "Neue Diplome für die Heere von *Germania superior* und *Germania inferior*", *Zeitschr. Papyr. u. Epigr.* 148, 259-268.
- GRAAFSTAL, E. P. (2002): "Logistiek, communicatie en watermanagement: over de uitrusting van de Romeinse rijksgrens in Nederland", *Westerheem* 51, 2-27.
- HAALEBOS, J. K. (1977): *Zwammerdam – Nigrum Pullum: Ein Auxiliarkastell am Niedergermanischen Limes*, Cingula 3, Amsterdam.
- HAALEBOS, J. K. (2000): "Traian und die Hilfstruppen am Niederrhein: Ein Militärdiplom des Jahres 98 n. Chr. aus Elst in der Over-Betuwe (Niederlande)", *Saalburg Jahrb.* 50, 31-72.
- HESSING, W. A. M. (1999): "Building programmes for the Lower Rhine limes: The impact of the visits of Trajan and Hadrian to the Lower Rhine", H. SARFATIJ *et alii* (eds.): *In discussion with the past: Archaeological studies presented to W.A. van Es*, Zwolle, 149-156.
- KEMMERS, F. (2004): "Munten", M. POLAK *et alii*: *Alphen aan den Rijn – Albaniana 2001–2002: Opgravingen tussen de Castellumstraat, het Omloopkanaal en de Oude Rijn*, Libelli Noviomagenses 7, Nijmegen, 165-188.
- KEMMERS, F. (2005): *Coins for a legion: An analysis of the coin finds of the Augustan legionary fortress and Flavian canabae legionis at Nijmegen*, s.l.
- KEMMERS, F. (2006): "Coins, countermarks and Caligula: The connection between the auxiliary forts in the Lower Rhine delta and the invasion of Britain", *Bulletin of the Hadrianic Society*, 5-11.
- PFERDEHIRT, B. (2004): *Römische Militärdiplome und Entlassungsurkunden in der Sammlung des Römisch-Germanischen Zentralmuseums*, Kataloge Vor- und Frühgeschichtlicher Altertümer 37, Mainz.
- POLAK, M. *et alii* (2004): *Alphen aan den Rijn – Albaniana 2001–2002: Opgravingen tussen de Castellumstraat, het Omloopkanaal en de Oude Rijn*, Libelli Noviomagenses 7, Nijmegen.
- ROXAN, M. M. (1978): *Roman military diplomas 1954–1977*, Institute of Archaeology Occasional Publication 2, London.
- ROXAN, M. M. (1985): *Roman military diplomas 1978–1984*, Institute of Archaeology Occasional Publication 9, London.
- ROXAN, M. M. (1994): *Roman military diplomas 1985–1993*, Institute of Archaeology Occasional Publication 14, London.
- ROXAN, M. & HOLDER, P. (2003): *Roman military diplomas, IV*, Bulletin of the Institute of Classical Studies Supplement 82, London.
- SCHMITZ, D. (2002): "Militärische Ziegelproduktion in Niedergermanien während der römischen Kaiserzeit", *Kölner Jahrb.* 35, 339-374.

- SCHÖNBERGER, H. (1985): "Die römischen Truppenlager der frühen und mittleren Kaiserzeit zwischen Nordsee und Inn", *BerRGK* 66, 321-497.
- SHIRLEY, E. (2001): *Building a Roman legionary fortress*, Stroud.
- VOS, W. *et alii* (2003): "De Romeinse limes tijdens Caligula: Gedachten over de aanvang van het castellum Laurium en onderzoeksresultaten van de opgravingen uit 2002 aan het Kerkplein in Woerden", *Westerheem* 52, 50-63.