Lynn F. Pitts und J. K. St Joseph, Inchtuthil. The Roman legionary fortress. Britannia Monograph Series 6. Society for the Promotion of Roman Studies, London 1985. 344 Seiten, 102 Abbildungen, 47 Tafeln, 24 Tabellen.

The late Sir Ian Richmond's excavations at Inchtuthil have for some time been established as a locus classicus for Roman military studies. The site is that of a single-period (indeed uncompleted) Flavian legionary fortress with associated camps and works. It lies where the river Tay debouches from the Highland massif onto the eastern coastal plain of Scotland. Though the site had been explored in a desultory fashion in the early part of this century, it was Richmond's campaign of excavations from 1952–1965 which really put it on the map. Sadly, Richmond himself died only two weeks after the conclusion of his last Inchtuthil season, so the task of preparing the report and seeing it through to publication was shouldered by his collaborator Professor St Joseph. In this he was greatly helped by Dr. Lynn Pitts, whose doctoral research was undertaken on Inchtuthil. Dr. Pitts was for a time Research assistant to Richmond's successor at Oxford, Professor S.S. Frere, who has also contributed substantially to the volume.

On the Inchtuthil plateau lie the legionary fortress, a two-period 'Labour Camp', an officers' temporary compound, two other military enclosures (the 'Redoubt' and Camp 1) and two linear earthworks (the 'Western Vallum' and the 'Outer Masking Earthwork'). Over most of the plateau post-Roman ploughing had removed any floor surfaces and the like, leaving only post-holes, foundation trenches and other features which penetrated the gravel subsoil. The defences of the fortress, the compound and the 'Redoubt' survived as truncated earthworks.

Richmond's excavations concentrated on the fortress and, to a lesser extent, the officers' compound, with the other sites only being selectively trenched. The method of excavation was very much a reflection of the man and the times. Increasingly aided by the results of aerial photography he was able to work out the general internal dispositions of the fortress and the locations of the major structures. Armed with this knowledge, and with only a small team of workmen, he undertook limited trenching. The purpose of this was threefold: to locate precisely the positions of the fortress buildings, to examine in more detail particular buildings or problems, and to recover sufficient dating evidence. This enabled him to build up the now famous overall plan of the fortress here reproduced as fig. 84. But quick and effective though this method is, it does depend on the assumption that Roman military planning was of a Prussian uniformity. Thus at Inchtuthil large areas of the fortress and large numbers of buildings were only very cursorily examined. The plan (fig. 79/80) of the latera praetorii and retentura makes this abundantly clear. The fabrica, the principia and the valetudinarium were quite intensively trenched, yet four cohorts-worth of barrack

blocks in the retentura seem to have been accorded only half-a-dozen or so narrow trenches, with others to check the exterior walls of the centurial blocks. Much the same applies to the crucial barracks of the first cohort and the associated supernumerary barrack by the principia. The tabernae flanking the principal streets of the fortress were likewise usually trenched and then reconstructed to a common formula. But when the barracks of one cohort within the porta principalis sinistra were examined in a little more detail it was clear that even within a cohort, let alone across the entire legion, variety, not uniformity, was the rule. The same applies to the tabernae excavated on the other side of the via principalis, they were very far from uniform. Thus the overall plan of the fortress here (and in many other publications) presented must be taken as an idealisation, rather than an accurate representation.

Because the fortress was only trenched one would have thought that a sine qua non of a modern publication of the excavations would have been a plan or plans showing the location and size of the trenches. This we do not get. In the overall plans (figs. 79/80 and 81/82) of the fortress the features and structures are drawn in outline, but parts are in solid black, showing where they were intersected by trenches. The individual plans of certain buildings such as the principia (fig. 11) are again in outline, with shading for the trenched areas but in neither case is there representation of the actual extent of the trenches. The importance of trench plans is of course that it would allow us to appreciate precisely what was and what was not excavated, and thus to assess how much reliance to place on the reconstructions and discussion. And the negative is as important as the positive. We are told that the large blank areas, for instance to the left of and behind the principia, were trenched, but we have no indication of the extent or location of this trenching. Fig. 75 shows that proper trench plans could have been drawn up.

Another lamentable feature of this modern excavation report is the bizarre scales at which the plans are published. The general plan is at 1:2307. The two big plans are at 1:1160. The individual building plans mainly range from 1:300 to 1:400 by way of 1:360. The last of these can be explained by reference to Imperial metrology, it is 1 inch to 30 feet. But the 1:28 of the section in fig. 23 is just perverse. So is the publication of the reconstruction plan of the valetudinarium at 1:442 (!) only two pages after the original plan which is at 1:400. Provision of metric scales is not consistent. In a work of this importance the user has a right to a set of plans to uniform and sensible scales. This is the more important as Inchtuthil will inevitably be much used in comparisons with fortresses elsewhere in the Empire, almost all planned and published in SI units, and to reductions such as 1:100, 1:500, 1:1000.

The content of the report is of the first importance for our understanding of the foundation, construction and lay-out of legionary fortresses. In many ways one of the most satisfying parts of the report is the description and discussion of the enclosures associated with the construction of the fortress. These are a so far unique collection, and have not previously been afforded detailed publication. There were two successive 'Labour camps' on the western part of the plateau; in lay-out and style of defences they are not unlike so-called 'marching camps'. In their interior were pits, many of them in double rows, some of the rows twice the length of others. Some can only have been associated with the earlier Camp 2 as they are cut through by the defences of the reduced Camp 3. A few (far too few) of the pits were sampled, and on the basis of this it is thought that they were the rubbish pits for contubernia of men living sub pellibus. In a somewhat indigestible discussion Frere suggests that they indicate accommodation for the order of three to four cohorts at any one time. There are also large blank areas within the camps. A rather strained attempt is made to populate these with non-pit-digging auxiliaries, and to assimilate the whole to Hyginus' proposed camp lay-out. More sensible, surely, is the observation that much of the material for the construction of the fortress must have been stored within the camp for safe-keeping. This would drastically reduce the area to be populated with troops. A construction force of a third of a legion or so would have been sufficient to construct the fortress. The rest of the legion and its accompanying auxiliaries could have been brigaded elsewhere, engaged in 'peace keeping' duties, and cohorts could have been rotated between the two duties. The presence of these camps warns against accepting all ditches at complexes such as Neuss as being those of permanent installations.

The fortified and garrisoned compound on the eastern edge of the plateau, with its superior accommodation and (unfinished) bath-house is plausibly explained as being for senior officers, perhaps the legate himself. Even with this there was still too little accommodation for all the senior officers of the legion at the abandonment of the fortress, and it is suggested that some may have remained in the base at Wroxeter.

Much of the discussion of the fortress itself is in many ways an anticlimax, for the plans and consideration of the major buildings have long been available. Nonetheless the unfinished state of the fortress does allow some observations to be made. Unlike fortresses such as Colchester where it has been shown that the buildings were made to conform to a standard module of lay-out, at Inchtuthil the lay-out depended on the buildings. At the time of abandonment there were four principal absences. There was no praetorium for the legate, there was no stabling, there was no bath-house, and there was no water-supply or sewerage system. Stabling (or the lack) of it is a persistent bugbear of the analysis of fortress and fort plans. The authors here estimate that a legion would have required of the order of one thousand horses and pack-animals. There is nothing in the fortress to accommodate them. Instead it is suggested that the animals were normally coralled outside the defences (thus allowing them to forage for themselves). Many forts and fortresses have large annexes, and it is possible that they were in part for animals. The lack of baths can be linked to the lack of provision for the supply of clean water and the removal of foul water. Some drains had been constructed; and presumably an aqueduct, the baths and sewers were high amongst the remaining priorities. The fact that the construction camps could be occupied though they lacked these facilities shows that a sophisticated water system was not indispensable. It would be useful to know more of the provisions made in the camps.

All the barrack accommodation for the troops had been constructed. Yet the fortress was incomplete, part at least of the legion must have been on detachment holding down the tribes around, and there must have been some troops still at Wroxeter, if only on a care-and-maintenance basis. Thus the fortress was designed for its theoretical complement rather than simply for the troops that actually needed to use it at that time. In this it differs somewhat from fortresses such as Caerleon. There is evidence that some of the barracks were not initially provided, suggesting that the occupying cohort(s) were stationed elsewhere at the time. Thus at Caerleon absence of accommodation must mean absence of some troops. But Inchtuthil shows that the converse, presence of accommodation means presence of troops, need not necessarily be true. At the tail of the rampart a number of stone oven-bases were excavated, some of them clearly used. It is suggested that there was one per century. This needs confirmation. If so, then the presence/absence or use/not-use of ovens could be a great help in determining which parts of the legion were in garrison. Interestingly there was no trace of rampart-back buildings, a commonplace of stone-built fortresses, and now known from timber-built sites such as Wroxeter. They have long been thought to be secondary and ad hoc.

The chief problem, and most extended discussion, concerns the barracks of Cohort I and the supernumerary barrack block(s) between them and the principia. In the right latus praetorii there are five centurions' houses along the via principalis. Associated with them are ten barracks of standard contubernia plan. There is also a short barrack block with centurial block by the via quintana, with another detached set of contubernia and a range of buildings which Richmond reconstructed as tabernae (but of which he excavated too little to be certain) across the street from the principia. This supernumerary barrack accommodation puts the Cohort I barracks out of kilter with their centurial houses. Our actual knowledge of the lay-out and accommodation of the Cohort I barracks is again less than is comfortable, but they seem to be comparable with those of the other Cohorts. Thus Cohort I would be double-strength. As Frere points out this is so far unique in legionary fortresses. Many others have extra buildings in the Cohort I block, but none can be shown just to be ten barrack blocks. Frere reiterates his thesis, first propounded in Britannia 11, 1980, 51 ff., that this is a peculiarly Flavian practice, allied to the introduction of double-strength (milliary) auxiliary units. He suggests that there are comparable arrangements yet to be found in the unexcavated first-century timber phases of second-century stone-built fortresses.

In discussing the supernumerary barrack(s) two groups are seriously considered as the occupants; the legionary cavalry and the specialists for the nearby fabrica. The cavalry are ruled out on the grounds that the literary evidence shows that they were on the books of centuries, and thus should be accommodated with their centuries. The facts that the officer's block of the barrack(s) lies next to the fabrica, and that there is no direct access to the via principalis focuses attention on the fabrica. It is suggested that the accommodation is for specialists connected with the fabrica. An analogy is drawn with accommodation for men associated with the valetudinarium. But there is evidence that specialists also were on the books of centuries. Either the rule of accommodation with parent centuries must hold for all specialists, or if not then the cavalry must come back into the discussion. In that case the 'tabernae' might be stabling. Also the cavalry

presumably had superior (pay-)status to the soldiers of Cohort I, so the priority in planning of their accommodation over that of the infantry might be explained.

Sufficient artefacts (especially coins) were found to help date the site. The latest certain coins are of AD 86, there is one possible of AD 87. Normally this could only give a general terminus post quem. But we now understand better the pattern of Flavian coin-supply to Britain and the pattern of loss at Scottish sites. It seems that there was a massive shipment of coins of AD 86 to the province, presumably in the year of their minting and perhaps to settle accounts at the end of a long campaign. At a number of forts north of the Firth of Forth these are the latest coins found, often in demolition deposits. Thus it seems that Inchtuthil, in common with other sites, was abandoned soon after the arrival of this issue of coins. All this is fitted into a consideration of Inchtuthil in the context of Agricola's conquest of Scotland. Such a discussion cannot be avoided in the report on this cardinal site, but the Roman conquest of Scotland has of late been much exposed in print and one begins to feel that a period of silence on this topic would be welcome.

What is lacking is a general discussion of the contribution of Inchtuthil to our knowledge of the design and development of legionary fortresses. Material from other fortresses is used in the discussion of individual buildings, but nowhere is this all brought together. Yet it is a commonplace that Inchtuthil as a single-period site is of unique value as a 'snapshot' of a stage in the development of castrametation. Such a synthesis would have been of the utmost value to Roman military studies: its absence is inexplicable.

Richmond's excavations brought to light a site of the first importance. This report lays before us the conclusions gained from his work, but also a range of problems which remain. It is rumoured that there may soon be further excavation at the site. Despite the destructive neglect of the plateau since 1965 by the powers that be, there is still great potential here. It is much to be hoped that work will resume, and it must be by modern area excavation. This reviewer would target as the two highest priorities the barrack blocks of the fortress, and the interiors of the construction camps. Let us hope Richmond's solid foundations will soon be built on.

Birmingham

A. Simon Esmonde Cleary