

From the *Transactions* of the
Bristol and Gloucestershire Archaeological Society

**R.A.F. Fairford: archaeological evaluation and excavations
conducted between 1999 and 2001**

by Stewart Road
2006, Vol. 124, 37-54

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By STEWART HOAD

Introduction

This report concerns the results of an evaluation by the Cotswold Archaeological Trust (now Cotswold Archaeology) and of excavations by the Museum of London Archaeology Service at R.A.F. Fairford. The evaluation was undertaken in October 1999. The subsequent archaeological investigations were conducted between June 2000 and August 2001.

Site Location

R.A.F. Fairford is located ten miles to the east of Cirencester and a mile to the south of the Cotswold town of Fairford. The airfield with its associated buildings lies in the parishes of Kempsford (Glos.) and Marston Meysey (Wilts.). The villages of Kempsford and Marston Meysey are located at the southern limit of the site, which is centred on O.S. Nat Grid SU 15009820 (Fig. 1).

Land Use, Topography and Geology

The airfield has a main runway, with taxiways, aircraft stands, hangars, a control tower and other associated buildings. It is located to the north of the river Thames, situated partially on the terrace overlooking the floodplain. Ground levels surrounding the runway vary from *c.*77 m to *c.*87 m above O.D. Modern landscaping has occurred across the site (Andrew Davis pers. comm.), with some areas having been lowered and other areas raised with fill material to form a levelled surface.

From west to east the ground profile describes a pronounced slope. The ground rises rapidly over a distance of 300 m from 82.51 m above O.D. at the western end of the site to 86.76 m, where the ground level has been built up significantly from the surrounding area by over three metres. The ground then levels off, before gently sloping away to the east. The eastern end of the site is fairly level lying at a height of 77 m above O.D. From south to north the height of the ground surface rises from the floodplain of the River Thames at 76.29 m above O.D. to 81.40 m. From there the ground surface levels off before gradually sloping down to the main runway at 77 m above O.D. From the runway the ground starts to rise to the north to a height of *c.*87 m.

The underlying solid geology of the site consists of oolitic limestone overlain by Kellaway and Oxford Clays of the Upper Jurassic period. These clays are in turn overlain by alluvial deposits of river terrace gravels (Second and Third Terrace), which were deposited along the floodplains of the rivers Thames and Coln in the post-glacial period (Geological Survey of Great Britain 1974). Overlying the drift geology is a thin layer of gravel and clay-rich soils. The water table varies between one and two metres below the present ground level (Foundation and Exploration Services 1998).

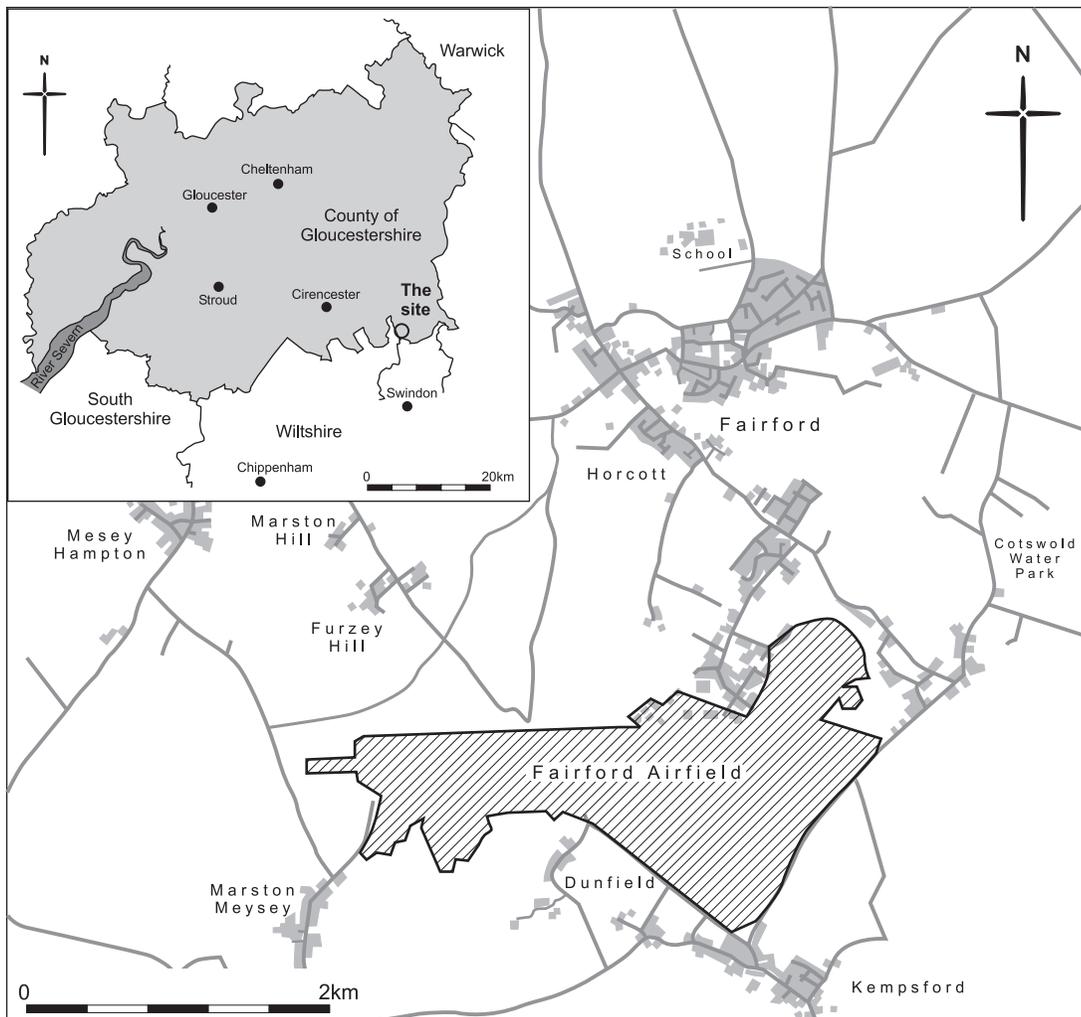


Fig. 1. Site location.

A History of the Airfield

Construction of the airfield at R.A.F. Fairford began in 1943. The airfield was officially opened on 18 January 1944 and was initially used as a base for wartime bombing operations (Bowyer 1983). During this period it covered approximately half the size of the present airfield, being concentrated at its eastern end. Initially the main runway was aligned NE–SW and two shorter runways were aligned E–W and SE–NW. A taxiway and numerous aircraft stands were located around the perimeter.

Between 1945 and 1950 R.A.F. Fairford was placed into a state of Care and Maintenance and was little used. It was re-opened in June 1950 for use by the United States Air Force (U.S.A.F.). It was at this stage that the airfield was expanded to its present size. The E–W runway was extended to become the main runway and is now the longest in England. Southern and northern taxiways

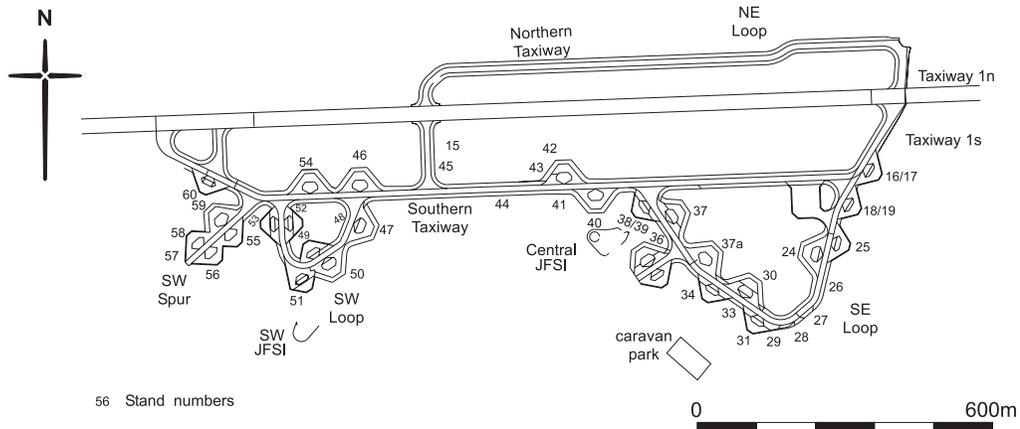


Fig. 2. Plan of the airfield.

were added either side of the main runway and the two shorter runways were incorporated into taxiways and aircraft stands, now referred to as the NE Loop and the SE Loop. A third loop, the SW Loop, was added later (Fig. 2). The Americans remained at R.A.F. Fairford until 1964 after which it reverted to the Royal Air Force and became the temporary home of the Red Arrows. Between 1969 to 1977 the airfield was used by the British Aircraft Corporation as a flight test centre for the Concorde aeroplane, and it also served as a reserve airfield for R.A.F. Brize Norton. The U.S.A.F. returned to R.A.F. Fairford in 1978 and has remained there ever since.

Background to the Evaluation and Excavations

The archaeological evaluation undertaken in 1999 and the subsequent excavations were prompted by further development at R.A.F. Fairford. The new works were to include the construction of additional jet fuel storage installations (JFSIs), the upgrading and restoration of the runway, taxiways and hardstanding areas, and the replacement of the electric distribution system and the drainage runs. They thus encompassed the entire airfield and also three areas beyond the perimeter fence.

Alfred McAlpine Construction Ltd as the main contractor was responsible for the development of the site and the management and operations of the numerous subcontractors. The Museum of London Archaeology Service (MoLAS) acted as the archaeological advisors to McAlpine. As a result of close work between the various parties a method statement was produced to meet the design brief prepared for the client by its project managers, Parkman Limited, and the approval of the County Archaeological Officer for Gloucestershire, Jan Wills.

The design brief for the development required that all archaeology less than 300 mm below the base of the proposed formation levels, the depth to which the ground was to be cleared prior to the new development, was to be excavated. In those areas with a protective covering in excess of 300 mm preservation *in situ* was the preferred requirement, as stipulated by Charles Parry, the archaeological advisor to the local planning authority.

The formation levels would therefore determine the impact on the archaeology across the site. By use of the information from the evaluation, from test pits, and from accurate three-dimensional surveying, MoLAS was able as the design information evolved to maintain a constant overview of those places where impacts would occur. This allowed a specific, impact-related methodology to be planned and applied in each area of work across the airfield.

The Evaluation

The initial archaeological investigations undertaken by the Cotswold Archaeological Trust (CAT) comprised an assessment (Barber 1999a), a geophysical survey, and an archaeological evaluation (Barber 1999b). The archaeological assessment considered all known archaeology on the airfield and within a radius of approximately 1.5 km of its perimeter. It concluded that, with the exception of an Anglo-Saxon burial reportedly found on the southern periphery of the airbase near Kempsford (Glos. Sites and Monuments Rec. no. 2421) and a nearby circular cropmark of uncertain character (Glos. SMR no. 2422), no archaeological information was available for the airfield itself. However, based on the intensity of past activity in the immediate surrounding area, it was thought that there was a likelihood that further archaeological remains could survive at the site.

The geophysical survey of the site used ground-probing radar and was conducted by Stratascan (1999). The radar scan focused on the main areas of redevelopment. The results of the survey identified a large number of anomalies thought to represent changes in ground conditions, the presence of services and remnant structures from previous airfield buildings, and other features having archaeological potential. Anomalies considered to have an archaeological potential were selected for further investigation.

The archaeological evaluation comprised of a total of 56 trial trenches within the areas of proposed redevelopment. It revealed the presence of archaeological features dating to the prehistoric, Roman and medieval periods.

The Excavations

Following the evaluation and immediately prior to the redevelopment MoLAS undertook a survey, comprising 181 test pits, across the site. The survey produced further information about the depth of the natural ground surface and the degree of preservation and/or truncation of surviving deposits of archaeological interest. The results from the survey and from the earlier archaeological investigations by CAT were used to highlight areas of archaeological potential. This information enabled the contractors to reassess their designs, and where possible alter them, to raise the formation levels to avoid disturbing the underlying archaeological deposits. This also enabled those areas under threat to be targeted by the archaeologists in the course of the redevelopment. Contexts from the excavations of 2000 and 2001 are referred to in the following text in square brackets. Contexts or trenches prefaced by the letters CAT refer to the results from the evaluation of 1999.

In all a total of 46 areas were investigated by MoLAS during the main phase of the excavation (Fig. 3). Of these, one known as the Caravan Park (Area 46) was treated as an evaluation. It lay outside the boundary of the airfield, in Kempsford, and was not part of the original planning application. The area was designated for use as temporary accommodation for the construction team, and groundwork here entailed the laying of services for drainage and electricity. Fourteen areas were investigated as excavations, with the remaining areas treated as watching/stopping briefs.

Throughout the airfield the ground had been truncated either by 19th–20th-century ploughing or by later landscaping during the construction and enlargement of the airfield. In most cases this meant that of the features recorded only the lowest parts survived, cutting into the underlying natural gravel. In the areas where natural hollows were infilled to level the ground surface the chances for the survival of archaeological features were greater. However, as preservation *in situ* was preferred, it is those areas that required the least excavation. The results from the excavations fall into four main periods, Bronze Age, Iron Age, Romano-British, and medieval to post-medieval.

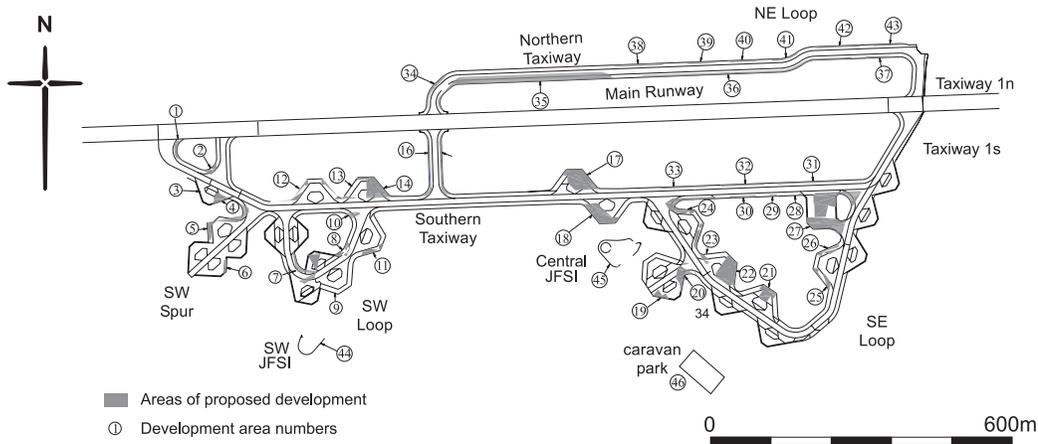


Fig. 3. Location of archaeological areas.

Bronze Age

Although no archaeological features have been dated to this period finds recovered from later features were identified as having Bronze-Age origins. One residual worked flint was recovered from the subsoil horizon, [CAT 202], in evaluation trench 2 (SE Loop). It has been interpreted as either a Neolithic or Early Bronze-Age artefact. A second flint was recovered from the backfill of a later plough furrow, [484], in Area 20b (Stand 34, SE Loop). This has been identified as a barbed-and-tanged arrowhead of an Early Bronze-Age date.

Iron Age

Evidence for Early Iron-Age activity was recorded across the entire site. In Area 2, located at the western end of the southern taxiway, a subcircular pit, [CAT 3404], containing two sherds of sandy ware, of an Early Iron-Age date, was recorded. A narrow curvilinear gully, [CAT 3406], was also noted in this area and, although undated, is thought to be a related feature.

Also at the western end of the southern taxiway, in Area 4 (SW Spur), a square pit, [CAT 3604], was identified. The feature contained four sherds of oolitic-tempered pottery of Iron-Age date, abundant scorched sandstone fragments and occasional fired clay flecks, perhaps representing daub fragments. Whilst sparse charcoal flecks were also present there was no thick *in-situ* charcoal spread. This feature may represent a truncated waste pit, perhaps containing sweepings from an oven or fire, rather than being an actual hearth setting.

A small posthole, [273], was recorded in Area 13, adjacent to Stand 54 (S Taxiway). It contained a single body sherd of Early Iron-Age date. This is in two pieces and has a leached, slightly vesicular, fabric.

Truncated features recorded in Area 20 (Stand 34, SE Loop) comprised five pits, three ditches (one curvilinear), and twelve postholes. It is probable that these features were Early Iron-Age in date, but it was not possible to clearly identify any structures from their layout, although a tentative fence line and perhaps part of a 'hut circle' could be postulated in Area 19. Later medieval/post-medieval furrows recorded in these areas had truncated these earlier remains, and residual Early Iron-Age pottery and a worked flint were recovered from three of these furrows, [128], [136], and [484].

Within the SE Loop, in Area 24, the archaeological investigation revealed a number of associated pits and ditches and one gully. Although these features contained no dating evidence a residual sherd of Early Iron-Age pottery was recovered from an adjacent tree bole, [19], and it is possible that these features may be of this date.

Towards the western end of the southern taxiway, in Area 31 a small pit, [CAT 5213], containing three sherds of Early Iron-Age pottery was recorded. To the west, in Area 32, a single sherd of unstratified Iron-Age pottery was recovered from evaluation trench 50. A N-S gully, [CAT 4914], also yielded one sherd of Iron-Age or Romano-British pottery.

On the northern taxiway, in Area 35, a number of features were recorded. One of these, posthole [152], contained 13 sherds of pottery of Iron-Age/Roman date. However, found amidst this assemblage was a sherd of post-medieval date. Animal bone recovered from this feature could not be identified.

In Area 45 (Central JFSI), two postholes were recorded, both of which have been dated to the Early Iron-Age period. No other features in this area are thought to be of a similar date.

In all a total of 111 pottery sherds of later prehistoric date were recovered and recorded in accordance with the guidelines outlined by the Prehistoric Ceramics Research Group (PCRG 1995). From the assemblage two basic wares, calcareous and sandy, were noted. Eighty per cent of the assemblage was made up of calcareous fabrics, (mainly of SHEL1 type), similar to the Peacock (1968) B1 limestone group. The remainder consisted of an oolitic limestone-tempered fabric (SHEL2), which can be paralleled at Gilder's Paddock, Bishop's Cleeve (Hancock 1999), and The Lodgers, Lechlade (Hingley 1986), although the proportion of sandy wares in the latter assemblage is much higher than in the material from this site. A much larger, as yet unpublished, assemblage of pottery found at nearby Totterdown Lane, Horcott (Timby and Harrison 2004, 11), is broadly comparable and contains material dating to the early and middle Iron Age.

Iron-Age burials

A large pit [60] excavated in Area 46 (Caravan Park) contained three separate deposits of human bone from fills [85], [86] and [87] (Fig. 4). The bones appeared to represent the reburied remains of disturbed inhumations. They were fragmentary in nature and had a varied preservation, with signs of some surface erosion. The bones were in the main mixed and disarticulated, although a few articulated bones were noted during excavation.

The remains were assessed using standard methods (Buikstra and Ubelaker 1994; Conheeny 1997). The age and sex of the human skeletal remains were also assessed by standard methods (Bass 1995, 13–15; Brothwell 1981, 59–67; Ferembach, Schwidetzky and Stloukal 1980). Conventional bone measurements were taken, where possible (Bass 1995, 68–81), and recording of non-metric variation in the skeleton was attempted, subject to the limitations caused by truncation (Brothwell 1981, 90–100). However, the poor state of preservation and integrity of the skeletons prevented a full demographic analysis.

The skull fragments included a left temporal bone, probably from a woman, and two right ilia from females. Another right ilium was that of a man and two left ilia were also from males. There were three examples of a left pubis: one was from a juvenile and the others were from young adult males. There were portions of mandible from two juveniles, one aged about four years and the other six years. Two femoral fragments were from juveniles, one being too long to have been from either of the aforementioned children. The adults thus included two young adults aged 17–25 years, but the other adults could not be aged with any degree of precision. There were no individuals who were demonstrably over 45 years of age.



Fig. 4. Iron-Age burials (scale 50 cm).

The adult bones in context [86] represent the (re)burial of the remains from a discrete single burial or are part of a general disturbance of graves that gave rise to the admixture of disarticulated bones from several individuals as seen in context [87]. These bones represented the remains of a minimum of nine individuals, which consisted of at least three adult males, two adult females and three juveniles. The age and sex of the last individual could not be determined.

The articulated skeletons were scanned for manifestations of metric and non-metric variation. Based on leg bone measurements, the male had stood 1.74 m tall. The stature of the other adult was 1.61 m if male or 1.56 m if female (Brothwell 1981, 101). Unfortunately the truncation of these remains meant that no consistent pattern of traits could be observed for non-metric variation and there remained no scope for the identification of the burials as a family group.

None of the remains showed definite signs of osteoarthritic changes. Similarly, none of the preserved joints revealed degenerative changes. Dental caries is another common feature of ancient skeletons. However, neither the fragmentary remains of the jaws nor the loose teeth present revealed instances of dental caries or any oral pathology (Ortner and Putschar 1981; Aufderheide and Rodriguez-Martin 1998).

Apart from the bone assemblage no other dating evidence was recovered from the pit. However, the close proximity of other features, which were dated to the Early Iron Age, could suggest a similar date.

Romano-British

The evidence for activity during the Romano-British period was limited in comparison with that for the Iron Age. All features dating to the Roman period were recorded at the western end of the site in the vicinity of the SW Loop. A total of 53 potsherds were recovered from the evaluation and a further 40 sherds from the later excavation and watching briefs. Sandy reduced and oxidised fabrics of probable North Wiltshire manufacture dominate the Roman pottery assemblage. Diagnostic forms are largely absent, and the material is datable, only broadly, to the 2nd to 4th centuries A.D. The presence of small quantities of Savernake grog-tempered ware and central Gaulish samian indicates an earlier Roman, probably 2nd-century, component and the general absence of late occurring ware types or vessel forms may be significant. Regional imports comprise sherds of south-west black-burnished ware, typical of the mid 2nd to early 3rd century, and a Poole Harbour black-burnished ware jar rim.

Romano-British features, in the form of ditches and gullies, were identified in Area 7, within CAT trench 42. They were aligned predominantly E–W and NW–SE. A large ditch terminal, [CAT 4207], produced a total of 37 sherds identified as a mixture of Dorset black-burnished ware, Wiltshire oxidised sandy wares, Wiltshire reduced sandy wares, and Savernake-type ware, of 2nd-century A.D. or later date. To the north-east two parallel ditches, [CAT 4209] and [CAT 4211], aligned NW–SE were also noted together with a central gully, [CAT 4219]. A total of 11 sherds comprising similar Dorset and Wiltshire wares and a sherd of black sandy ware were recovered from these. Animal bone recovered from [CAT 4209] and [CAT 4211] was ox and horse.

On the basis of feature type, fill characteristics, orientation and proximity to dated Romano-British features, adjacent undated ditches [CAT 4215] and [CAT 4217] are also thought to be of Romano-British date. Ditch [CAT 4215] ran NE–SW. It was subsequently cut across by ditch [CAT 4217], aligned NW–SE, possibly indicating more than one phase of Romano-British activity in this area. A N–S ditch, [CAT 4306] in CAT trench 43, had a fill similar to that of other Romano-British features and may also belong to this period.

The later archaeological investigations in Area 7 entailed the observation of the digging of several service trenches and the reducing of the surface level. Service trenches TR172, TR206 and TR207 revealed 8 ditches all on a NW–SE alignment. Three of these ditches, [529], [616] and [618], contained a total of 15 sherds of pottery of 2nd-century A.D. date. A small curved fragment of thick sheet/plate, made of iron, with a partial rivet hole at one end, was also recovered from ditch [616]. The exact function of these ditches remains uncertain, but they were probably related to the earlier features recorded during the evaluation and could represent a series of small enclosures or field boundaries, possibly the migrating line of a repeatedly maintained ditched boundary of a field or enclosure. This would indicate a managed agricultural landscape associated with a settlement in the vicinity.

In Areas 13 and 14, to the north of the SW Loop, four excavated features contained pottery of Romano-British date. Ditch [265], which was aligned NE–SW, contained 3 sherds dated to between the 2nd and 4th centuries. Gully [255], which was aligned E–W, contained a single sherd dated to the 2nd century. Two residual sherds were also recovered from the two later features, tyre/plough mark [247] and drain [257].

Other features and artefacts of note uncovered during the ground reduction comprised the remains of three stone-lined wells, [118] north of the main runway towards its western end, and [589] and [591] both within the SW Loop. These were possibly related to the other Romano-British features in the vicinity, despite their being undated.



Fig. 5. Roman burials.

Romano-British burials

The watching brief on service trench TR174 between the SW Loop and the SW Spur (see Fig. 2) observed evidence for Roman occupation in the form of two inter-cutting graves, [609] and [612]. Both graves had been truncated in modern times, but the remains of two individual skeletons with associated coffin nails and coffin stains were recorded (Fig. 5).

The earlier grave, [612], contained a severely truncated skeleton [611] consisting of only the lower limbs. Analysis of the human bone indicates that they belonged to an adult over 18 years of age. No trace of pathology was evident.

A total of eight pot sherds were retrieved from the backfill of the grave cut. They date to the 2nd to 4th centuries A.D. A total of 19 hobnails were recovered from around the feet of the burial and are thought to represent the remains of footwear, which may represent the belief that the boots were intended to help the deceased on its journey in the afterlife.

The later inhumation, [608], was truncated from the chest up, and lower limbs down, with approximately 55% of the entire skeleton surviving. Analysis of the bones, based upon observations on the ilium and pubis (Brothwell 1981, 62–9), enabled the remains to be identified as an adult male aged between 30 and 39 years. Evidence for disease seen in the skeleton comprised Schmorls nodes (disc prolapse), caused by herniation of the intervertebral discs, in all six thoracic vertebrae present (T7 to T12). Considerable osteoarthritic changes were observed in the thoracic and lumbar region of the man. These degenerative changes are also evident in the joints of the elbows, wrists and fingers, hips and knees. The right hip joint also revealed a superior lateral depression that was eroded and eburnated. The condition, known as *Os acetabuli*, is caused by the presence of a small supernumerary ossicle (small bone) loose in the hip joint and, though fairly common now, is very rare in archaeological material. The male also has multiple fractures, a healed fracture of a rib and a fracture of the coccyx that had healed with displacement to the right side. Posterior to the left proximal tibia is a small osteochondroma, a tumour benign in nature.

Pottery recovered from the backfill of the grave cut consists of seven sherds of Savernake grog-tempered ware and a single sherd of a la Graufesenque samian cup. The latter dated to A.D. 50–100.

Soil samples taken from both of the grave fills included charred plant assemblages, although in context [610] few remains were found. Seven grains of wheat were recovered from context [607]; two of them were probably spelt (Clapham, Tutin and Moore 1987). These were outnumbered by fragments of wheat chaff, the majority of which could not be identified to species (Anderberg 1994; Berggren 1981). A number of spelt glume bases were identified, as well as two which more closely resembled emmer. Occasional rachis nodes of barley were found in both samples and also single grains of both barley and oats. Charred seeds from arable weed species included stinking mayweed (*Anthemis cotula*) (Hanf 1983, 235), brome grass, vetch, and wild grasses (Poaceae).

Spelt wheat was the main cereal for human consumption in southern England during the Roman period, and it is also common for small amounts of emmer to be found. Cereal grains in these samples are outnumbered by chaff and weed seeds, suggesting that the assemblages represent discarded crop cleanings, possibly used as fuel, rather than prime grain. They are unlikely to have been deliberately included in the grave fills, but may represent waste from hearth debris accidentally included in the backfill. Several seeds of stinking mayweed were found in both of the Roman samples, while none was seen in those from the Early Iron Age. This plant is a characteristic arable weed of wet loam and clay soils (Hanf 1983, 235), and its presence in these samples may indicate a shift towards the cultivation of heavier soils in the Roman period, although no firm conclusions can be drawn from such small assemblages.

Anglo-Saxon

Despite the reported Anglo-Saxon burial in the south-eastern corner of the airfield (Glos. SMR no. 2421) only one feature of this date was identified during the excavation. That feature, located in Area 46 (Caravan Park), was interpreted as a ditch, [27]. Fragments of animal bone, burnt clay and pottery were recovered from the fill.

The pottery comprises a single small body sherd with coarse, dense organic tempering, and is very typical of the Saxon period. Evidence from elsewhere in the region has shown this tradition to be quite a long-lived one dating from the 6th to early 9th centuries.

The animal bone recovered from the ditch included ox, horse, pig, and sheep/goat. Of these the remains of the pig bone contained incisions, compatible with butchery marks.

Medieval to Post-Medieval

The majority of features revealed during the archaeological investigations on the site could be attributed to the medieval and post-medieval periods. As expected they were mainly associated with agricultural activity and comprised the remnants of ridge-and-furrow, land drains, and drainage ditches.

In Area 14 (S Taxiway) a substantial ditch [337] and its re-cut [336] were excavated. Both were aligned E–W and were recorded for a length of 38 m. Ditch [337] contained a single sherd of pot, occasional fragments of identifiable charred wood and a small number of beetle fragments and freshwater molluscs. It also contained a number of waterlogged seeds, including those of thistle (*Carduus* sp.), wild celery (*Apium graveolens* L) and buttercup (*Ranunculus* sp.).

Slots excavated through ditch [336] revealed that it had partially silted up prior to backfilling, suggesting that it had been left open for a long time. This was further substantiated by the large and diverse assemblages of waterlogged seeds recovered from two of the fills, [280] and [357]. The most abundant seeds were from horned pondweed (*Zannichellia palustris*), watercress (*Rorippa* cf. *nasturtium-aquaticum*), fool's watercress (*Apium nodiflorum*), crowfoot (*Ranunculus* subgen. *Batrachium*) and rushes (*Juncus* sp.), all of which are aquatic or wetland plants that live in or beside fresh water. These provide evidence that the ditch contained water for long enough periods to allow the growth and reproduction of a variety of plants. Fragmentary larval cases of caddis flies (Trichoptera), which are aquatic invertebrates, were also identified in context [280]. Remains of dry-land plants were less numerous in these samples. Seeds of disturbed-ground species such as dock (*Rumex* sp.), thistle (*Carduus/Cirsium* spp.), chickweed (*Stellaria media*) and stinging nettle (*Urtica dioica*) were recorded; they may have come from plants growing in nearby arable fields or waste ground. Occasional small fragments of charcoal and a single sloe (*Prunus spinosa*) stone may represent waste disposal, although the latter could equally well have dropped from a tree growing close to the ditch. Animal bone from the infill of the ditch included ox (*Bos Taurus*) and sheep/goat (*Ovis aries/Capra hircus*).

The bulk of the pottery recovered from the site was retrieved from ditch [336] and totalled 107 sherds. Eighty-seven of the sherds are from a single high-shouldered jar with a thinner lip and a distinct squared-off rim (see Fig. 6, no. 1). The remainder comprise body sherds from two other pots.

Occasional fragments of identifiable charred wood were also recovered from the ditch as well as occasional waterlogged goosefoot (*Chenopodium* sp.) seeds. A small number of freshwater molluscs were also noted. Animal bone from the ditch included horse (*Equus caballus*), ox and sheep/goat.

A series of inter-cutting ditches, [259], [297], [319] and [338], aligned N–S was also uncovered in Area 14 (Fig. 7). In addition similar features were recorded in service trench sections to the north and south. In section and plan these ditches varied from two to six metres in width, and were well defined at the base, but were less distinct towards the surface. On their western side there appears to have been a significant amount of disturbance from root activity, possibly from a hedgerow. Later landscaping and backfilling of the ditches may also have caused some blurring of the features.

The re-cutting of these ditches suggests continuity of use over a long period. When compared with the cartographic evidence the features were seen to be on the same alignment as the county boundary between Gloucestershire (to the east) and Wiltshire (to the west), at the point at which

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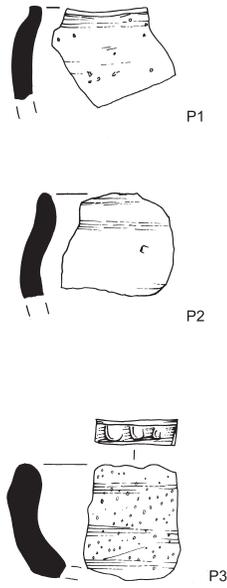


Fig. 6. Medieval pottery: P1 [276], P2 [61], P3 [127] (scale: 1:4).

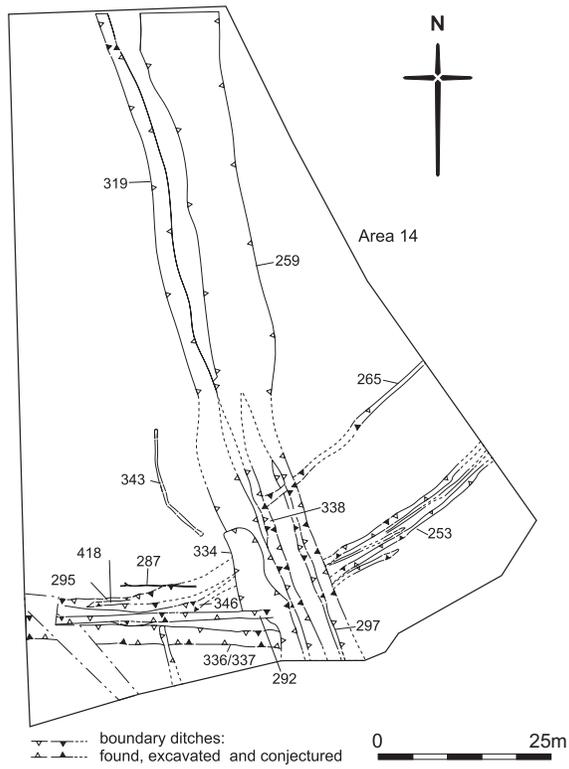


Fig. 7. County boundary ditches.



Fig. 8. Stone drain.

a small 'finger' of Wiltshire extends across the airfield (Ordnance Survey 1999). An extant part of this boundary can be seen immediately to the south of the airfield. The earliest of these ditches probably dates back to the medieval period, but only a fragment of clay tobacco pipe was retrieved from the upper fill to provide dating. Further disturbance of the upper levels of these ditches probably resulted from the extension of the airfield westwards in the 1950s.

A substantial stone-lined drain, recorded for a length of 92 m, extended E-W from Area 13 into Area 14 (Fig. 8). It was one metre wide and ≈ 0.40 m deep, and it had a stone slab base and capping. Artefacts recovered from the construction cut comprised two sherds of medieval pottery and a residual Roman sherd. The eastern end of the drain fed into the N-S ditches, which

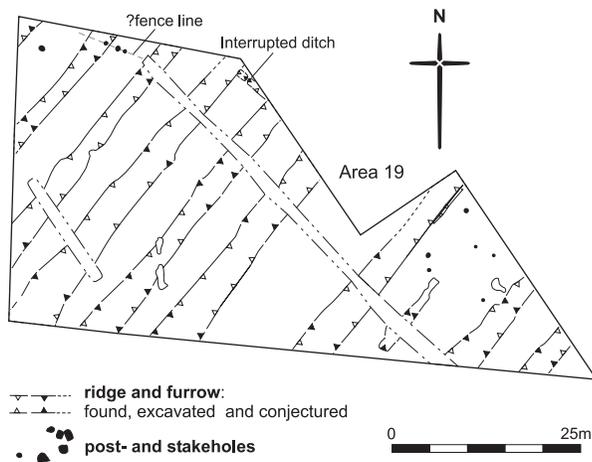


Fig. 9. Medieval and post-medieval ridge-and-furrow in Area 19.

presumably acted as drainage channels as well as boundary ditches. The construction of the drain suggests that it may have formed part of a larger drainage system, possibly for a substantial structure further up the slope to the west, in the vicinity of Stand 54.

In Area 46 (Caravan Park) two pits, [11] and [80], and a posthole, [62], were dated to the medieval period. The profile of a high-shouldered jar with a slight internal bevel (see Fig. 6, no. 2) can be discerned from sherds recovered from the posthole. Pit [11] contained one pot sherd, several fragments of burnt clay, and fragments of animal bone belonging to ox, pig (*Sus scrofa*) and possibly sheep. Environmental samples from the pit revealed the presence of abundant terrestrial molluscs (Cameron and Redfern 1976; Macan 1977). The ecological interpretation followed Kerney 1999. Pit [80] contained 20 sherds of pottery. One sherd from this assemblage has an orange, burnished surface imitating a haematite finish. Animal bone recovered comprised fragments belonging to ox, pig, sheep/goat, horse and cat. A small iron knife blade, broken into two fragments at one end, was also retrieved from the pit. The blade is approximately 90 mm long and has a maximum width of 32 mm. It appears to be similar to a Danebury type 2 style (Sellwood 1984), although the lack of a tang and a break in the middle made it difficult to assign the object to a more definite type. The dating of this knife blade is open to question, and it remains uncertain if it was of medieval date or was of an earlier Iron-Age date and had been disturbed and redeposited in a later feature.

Environmental evidence in the form of two charred wheat (*Triticum* sp.) grains and occasional legume and grass seeds was recovered from pit [80], along with small quantities of identifiable charred wood fragments and moderate quantities of terrestrial molluscs. Small assemblages of charred plant remains were also recovered from pit fills [10] and [79]. They included charcoal fragments, occasional cereal remains, and several weed seeds. The cereal grains were of wheat (*Triticum* sp.), barley (*Hordeum sativum*) and oat (*Avena* sp.). Two of the three wheat grains were apparently from a free-threshing wheat such as bread wheat (*Triticum aestivum*). The other wheat grain and a single wheat spikelet base demonstrated the presence of glume wheats, probably emmer (*Triticum dicoccum*) or spelt (*Triticum spelta*). All the weed seeds were from plants which are likely to have grown in fields alongside the cereal crops, and they include bedstraw (*Galium* sp.), vetch (*Vicia/Lathyrus* spp.), ivy speedwell (cf. *Veronica hederifolia*) and brome grass (*Bromus* sp.).

In Areas 19 and 20 feature [CAT 1004] was interpreted as subcircular pit. It contained fragments of sandy ware pottery of a medieval date. Six associated postholes, thought to be of similar date,

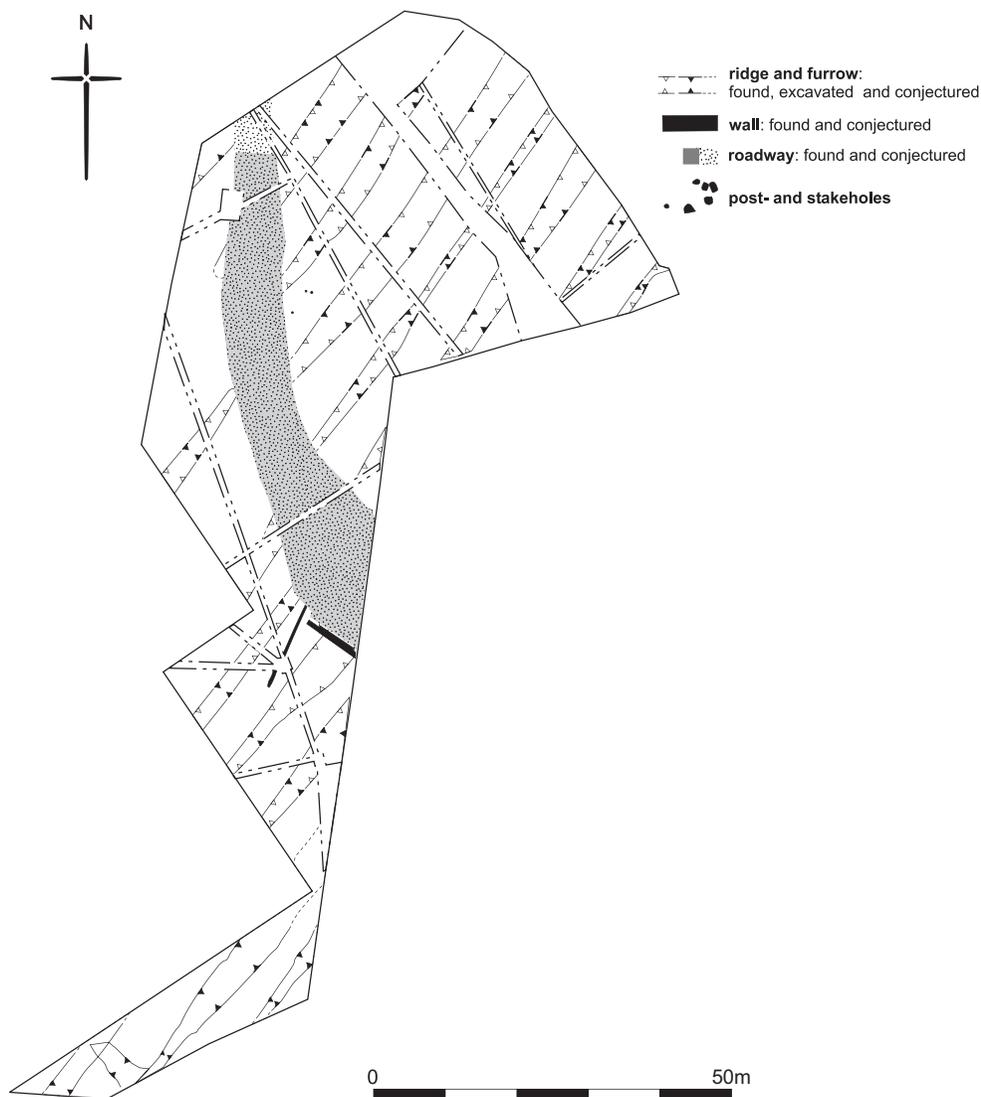


Fig. 10. Medieval/post-medieval ridge-and-furrow in Area 20.

were also recorded. Of these [203] contained animal bone belonging to a sheep/goat. The fragmentary remains of an interrupted ditch, [193], [204], and [206], were also noted in these areas. From them 10 pottery sherds made of a shell-tempered fabric were recovered. These were identified as body sherds from a jar.

The archaeological investigations uncovered evidence for plough furrows on both the SW Loop and SE Loop. Of particular note was the arrangement of two sets of furrows on the SE Loop in Areas 19, 20 and 45. In the first two areas a total of ten furrows were recorded on a NE-SW alignment (Figs. 9 and 10). Each measured up to 3.00 m in width and up to 0.40 m in depth, and could be traced for a distance of 75 m. They were on average 5 m apart. In Area 45, further to

the east, six furrows of similar dimensions were recorded on a NW–SE alignment and for a maximum length of 45 m.

The plough furrows bore the characteristics of ridge-and-furrow agriculture in open fields. The contrary alignment of the two sets of furrows is thought to represent neighbouring fields, worked by people from the villages of Kempsford and Marston Meysey. Aerial photographs taken by the R.A.F. in December 1943 (English Heritage) clearly show ridge-and-furrow in the area of the airfield and of the two villages to the south-east and south-west.

Among numerous artefacts retrieved from these furrows are pottery and animal bone, some of which were residual, having been churned up from underlying features during ploughing. Of the pottery 13 sherds are of medieval date and comprised Minety ware from north Wiltshire and a sandy ware containing flint and calcareous inclusions and probably from a source in the Kennet valley. Forms include unglazed jars and an unglazed pitcher. Both wares are current from the later 12th century with Minety ware continuing in production through to the 15th century. Of note are several sherds of pottery recovered from furrow [128], which include a large bowl with a curved profile and a fingertip-impressed rim (Fig. 6, no. 3).

A total of 50 sherds of post-medieval date was also recovered from the furrows. These are principally glazed red earthenwares, many of which are likely to come from Ashton Keynes (Hoad 2002, 69). Also present are a few fragments of transfer-decorated industrial white earthenwares ('china') and iron-glazed wares. Most of these sherds are quite abraded probably as a result of continual disturbance from ploughing. The animal bone recovered from the plough furrows derived from the main domesticated mammals, i.e. ox, horse, sheep/goat, and pig.

Accessioned finds include a very worn Charles I Rose farthing recovered from one of the furrows in Area 45. A small number of iron nails were also collected. All were of square section and most appeared to be post-medieval in date, probably related to fencing or construction activity.

Overlying the plough furrows, in Area 20 (SW Loop), were a layer of buried subsoil [443] and a layer of buried topsoil [442]. The latter was overlain by a layer of modern make-up, interpreted as part of the landscaping, presumably formed during the construction of the airfield. Associated with this and also overlying the buried topsoil was a layer of crushed stone rubble, [429], interpreted as a road. This was aligned NW–SE across Area 20 and measured eight metres wide; it was recorded for a length of 75 metres (Fig. 10). Spread across the surface of the road was a layer of silty clay, [428], from which the odour of horse manure was quite strong. The remains of a 20th-century chisel end or tooth from a mechanical excavator were recovered from this. Located on the south side of this road were the remains of a wall foundation, [490]. They appeared to be of a similar date to the road and were probably associated with it.

Similar remains were noted in several trench sections along the southern length of the airfield. These were all thought to be temporary roads used during the construction of the airfield.

Truncating the plough furrows in Area 45 (Central JFSI) were the remains of another post-medieval wall foundation, [408], aligned NE–SW. Modern glass, metal and wood were recorded in the backfill of the construction cut. The function of this wall is uncertain as only a short length (7.5 m) was exposed, but it may have formed part of a field boundary. No other walls were recorded in this area, and no associated features were uncovered.

Undated

Due to the nature of the investigations, many features recorded could not be dated directly. This was particularly true of the features observed in the numerous trench sections. A series of hollows, postholes, pits, field drains and ditches was found scattered across the airfield. Some could be attributed to agricultural activity, whilst others have been linked with associated features. However,

the isolated features remain enigmatic. Hopefully future analysis of the results in conjunction with those from other sites excavated in the vicinity more recently will increase our understanding, and may help to explain some of these anomalies.

Discussion

The nature of the project was such that the areas investigated were limited and widely spaced. This, coupled with the evidence of widespread landscaping and the truncation of the underlying natural deposits, reduced the archaeological potential of the site. Despite these drawbacks the archaeological investigation has produced evidence for human activity extending from the Bronze Age up to the present day.

The results indicate that for the most part this area appeared to be part of a managed agricultural landscape. No firm evidence for settlement from any period was discovered, but the results suggest that there was occupation, albeit small and rural, nearby. The presence of burials and the concentrations of artefacts indicate a settlement of Early Iron-Age date in the vicinity of the SE Loop. The occurrence of inter-cutting graves, indicative of a cemetery in use over a long period, and features such as the three stone-lined wells, the drainage and/or boundary ditches, and a concentration of artefacts all point towards a settlement of 2nd–4th-century date centred on the area of the SW Loop. Leaving aside the economic and political aspects of these periods, the locations of these two areas on terrace gravels providing good drainage, an easily accessible water supply, and a view overlooking the floodplain were favourable for settlement.

Acknowledgements

The evaluation and excavations were commissioned and funded by Alfred McAlpine Construction Ltd. Particular thanks are owed to the various managers of the development team, which included Dave Tullett, Mike O'Brien, Mel Grime, Julian Wilson, Huw Reece, Rob Moseley, and Chris Wrigley. Thanks are also owed to Nick Wollaston of Parkmans Limited and Andrew Davies, chief of engineering at R.A.F. Fairford, for their comments during the course of the fieldwork. Charles Parry and Jan Wills from Gloucester County Council's archaeology service monitored the project and advised on archaeological matters pertaining to the site. Mark Collard and Neil Holbrook from the Cotswold Archaeological Trust provided both help and background information on the site and staff for the excavation.

The pottery was assessed by Charlotte Thompson, Louise Raynor, and Jane Timby. The botanical samples were analysed by Anne Davis, the animal bone by Alan Pipe, the building materials by Terence Paul Smith, and the human bone by Bill White. Graphics for this report were produced by Sophie Lamb. Finally, thanks are owed to the numerous members of both the Museum of London Archaeology Service and the Cotswold Archaeological Trust, upwards of 47 people, who worked on this project, both on the site and in the post-excavation analysis.

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