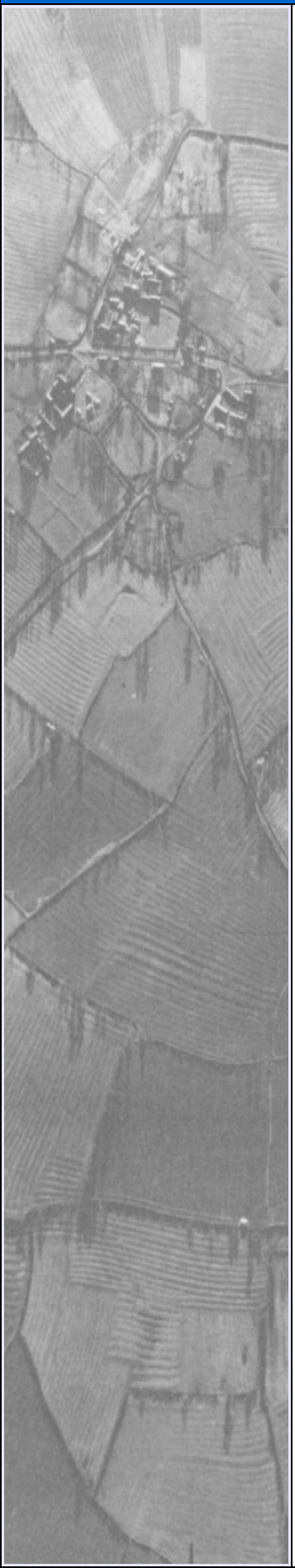

WWI German Prisoner of War Camp
Yatesbury
Wiltshire

MAGNETOMETER SURVEY REPORT

for

“Finding the Forgotten”

David Sabin and Kerry Donaldson

December 2011

ARCHAEOLOGICAL SURVEYS LTD

WWI Prisoner of War Camp
Yatesbury
Wiltshire

Magnetometer Survey

for

“Finding the Forgotten”

Fieldwork by David Sabin
Report by David Sabin BSc (Hons) MIFA and Kerry Donaldson BSc (Hons)

Survey date - **7th and 8th October 2011**
Ordnance Survey Grid Reference - **SU 063 713**

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Archaeological Surveys Ltd
PO Box 2862, Castle Combe, Chippenham, Wiltshire, SN14 7WZ
Tel: 01249 782234 Fax: 0871 661 8804
Email: info@archaeological-surveys.co.uk
Web: www.archaeological-surveys.co.uk

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SUMMARY

Archaeological Surveys Ltd carried out a magnetometry survey on the site of a WWI German prisoner of war (POW) camp at Yatesbury in Wiltshire for “Finding the Forgotten”, led by Daniel Miles and Richard Broadhead. The work is in advance of a proposed large scale project in preparation for the centenary of WWI.

Several objectives were identified. The site was considered suitable for the assessment of a bespoke magnetometer cart-based system constructed by Archaeological Surveys ltd. The survey would collect sample data from a demolished WWI prisoner of war camp and provide supporting information for field walking and metal detecting surveys. In addition, the survey would provide geophysical data from an area of possible practice trenches identified from aerial photographs. The cart-based magnetometer system provided a useful dataset over part of the site but due to poor mobile communications, it was abandoned in order to focus on other objectives.

Two separate areas of 0.64ha were set out in order to sample the eastern side of the prisoner of war camp and the trench-like features identified from aerial photography. The results revealed the presence of magnetic debris, probably caused by fragments of magnetically thermoremnant material (slag, brick, etc.), within two broad zones that correlate with clusters of camp huts visible on an aerial photograph from 1916. The debris could relate to material used within the construction of the huts or to provide hard standing and ground consolidation in the immediate vicinity. There was no evidence for surviving structural remains. The results from the possible practice trenches revealed rectilinear positive anomalies probably associated with former field boundaries or other agricultural features. No clear evidence for former trenches was revealed by the survey. A series of regularly spaced substantial pit-like anomalies was located but there is no evidence that they are related to the camp itself.

1 INTRODUCTION

1.1 Survey background

1.1.1 Archaeological Surveys Ltd carried out a magnetometry survey on the site of a WWI German prisoner of war (POW) camp at Yatesbury in Wiltshire. The survey was carried out in support of a pilot project by “Finding the Forgotten”, led by Daniel Miles and Richard Broadhead. The work is in advance of a proposed large scale project in preparation for the centenary of WWI.

1.1.2 The POW camp was established as part of Yatesbury airfield and German POWs were engaged in various tasks building and maintaining the airfield, as well as carrying out other labouring jobs including quarrying and agricultural activities. This site has been identified by aerial photographs adjacent to Camp 1 East. Documentary evidence of the POW camp also comes from

contemporary newspaper articles, war art and archival material kept in the UK National Archives and the Swiss National Archives. Next to the POW camp a set of possible practice trenches have been identified from two aerial photographs of 1917/1918. The origin and use of these is not known.

1.2 Survey objectives and techniques

1.2.1 The objectives of the survey were:

(a) – to assess the operation of a bespoke magnetometry cart-based system using RTK GPS positioning;

(b) – to provide a magnetometry sample of an area of WWI prisoner of war huts (now demolished);

(c) – to target an area of possible practice trenches visible on early aerial photographs of the site;

(d) – to provide supporting interpretations for the geophysical survey results with reference to the results of field walking and metal detecting carried out across the same area.

1.2.2 The survey and report follow the recommendations set out by: English Heritage, 2008, *Geophysical survey in archaeological field evaluation;* Institute for Archaeologists, 2002, *The use of Geophysical Techniques in Archaeological Evaluations*.

1.3 Site location, description and survey conditions

1.3.1 The site is located at Yatesbury in Wiltshire. Ordnance Survey National Grid Reference (OS NGR) 406370 171330, see Figures 01 and 02.

1.3.2 The geophysical survey covers 1.28ha of agricultural land split into two equal areas within the same field and referred to as Areas 1 and 2. The land slopes very gently down towards the north and had been harrowed immediately prior to the survey.

1.3.3 The ground conditions across the site were generally considered to be favourable for the collection of magnetometry data. Weather conditions during the survey were mainly fine.

1.4 Site history and archaeological potential

1.4.1 Yatesbury Aerodrome was established by the Royal Flying Corps (RFC) in late1916 to train pilots in air reconnaissance before they were sent to the

front. Yatesbury was the base, initially for the No. 21 (Training) Wing and then the No. 28 (Training) Wing and was used by various other squadrons including Australian and American units.

1.4.2 RFC Yatesbury was in fact comprised of two aerodromes; known as Camp 1 and Camp 2, each with their own grass landing strip. Camp 1 was split into Camp 1 East and Camp 1 West which are situated along Jugglers Lane. The Camp included a technical area with hangars and various workshops and a domestic area with accommodation blocks, quarters and messes. Two General Service Shed hangars have survived from Camp 1, though one has unfortunately recently collapsed.

1.4.3 No. 2 Camp was located near to the A4 Calne to Marlborough Road and also included a number of hangars, workshops and domestic facilities. Nothing of the site remains today, and in the Second World War a large radio and wireless school was built on the site.

1.4.4 A German POW camp was established as part of the airfield and German POWs were engaged in various tasks building and maintaining the airfield, as well as carrying out other labouring jobs including quarrying and agricultural activities. This site has been identified by aerial photographs adjacent to Camp 1 East. Documentary evidence of the POW camp also comes from contemporary newspaper articles, war art and archival material kept in the UK National Archives and the Swiss National Archives.

1.4.5 Next to the POW camp a set of possible practice trenches have been identified from two aerial photographs of 1917/1918. The origin and use of these is not known.

1.5 Geology and soils

1.5.1 The underlying geology is West Melbury Chalk Formation and Zig Zag Chalk Formation (undifferentiated) (BGS, 2010).

1.5.2 The overlying soils across the site are from the Blewbury association and are typical brown calcareous earths. These consist of well-drained, calcareous, clayey and silty soils over chalk (Soil Survey of England and Wales, 1983).

1.5.3 Magnetometry carried out across similar geology and soil in the vicinity of the site has produce good results.

2 METHODOLOGY

2.1 Technical synopsis

2.1.1 Magnetometry survey records localised magnetic fields that can be associated with features formed by human activity. Magnetic susceptibility and magnetic thermoremnance are factors associated with the formation of localised fields. Additional details are set out below and within Appendix A.

2.1.2 Iron minerals within the soil may become altered by burning and the break down of biological material; effectively the magnetic susceptibility of the soil is increased, and the iron minerals become magnetic in the presence of the Earth's magnetic field. Accumulations of magnetically enhanced soils within features, such as pits and ditches, may produce magnetic anomalies that can be mapped by magnetic prospection.

2.1.3 Magnetic thermoremnance can occur when ferrous minerals have been heated to high temperatures such as in a kiln, hearth, oven etc. On cooling, a permanent magnetisation may be acquired due to the presence of the Earth's magnetic field. Certain natural processes associated with the formation of some igneous and metamorphic rock may also result in magnetic thermoremnance.

2.1.4 The localised variations in magnetism are measured as sub-units of the Tesla, which is a SI unit of magnetic flux density. These sub-units are nano Teslas (nT), which are equivalent to 10^{-9} Tesla (T).

2.2 Equipment configuration, data collection and survey detail

2.2.1 The detailed magnetic survey was carried out using a Bartington Grad 601-2 gradiometer. The instrument effectively measures a magnetic gradient between two fluxgate sensors mounted vertically 1m apart. Two sets of sensors are mounted on a single frame 1m apart horizontally. The gradiometer was initially mounted upon a cart and was configured to send data in a format compatible with NMEA data. Both gradiometer and RTK GPS data were recorded together using a PDA.

2.2.2 An initial trial survey identified problems with the reliability of GPS correction data across the site due to weak signals from the mobile telephone network. Consequently, the magnetometry was completed across two areas using a more standard methodology. Grids were set out using RTK GPS and the instrument was carried along each survey transect.

2.2.3 The instrument is extremely sensitive and is able to measure magnetic variation to 0.1nanoTesla (nT). The data are limited to ±100nT when surveying with the highest sensitivity.

2.2.4 The instrument is operated according to the manufacturer's instructions with consideration given to the local conditions. An adjustment procedure is required,

prior to collection of data, in order to balance the sensors and remove the effects of the Earth's magnetic field; further adjustment is required during the survey due to instrument drift often associated with temperature change.

2.2.5 It can be very difficult to obtain optimum balance for the sensors due to localised magnetic vectors that may be associated with large ferrous objects, geological/pedological features, 'magnetic debris' within the topsoil and natural temperature fluctuations. Imperfect balance results in a heading error often visible as striping within the data; this can be effectively removed by software processing and generally has little effect on the data unless extreme.

2.2.6 The Bartington gradiometer undergoes regular servicing and calibration by the manufacturer. A current assessment of the instrument is shown in Table 1 below.

Sensor type and serial numbers	Bartington Grad - 01 – 1000 Nos. 084, 085
Date of certified calibration/service	Sensors 084 and 085 - 6th August 2010 (due Aug 2012)
Bandwidth	12Hz (100nT range) both sensors
Noise	<100pT peak to peak
Adjustable errors	<2nT

Table 1: Bartington fluxgate gradiometer sensor calibration results

The instrument was considered to be in good working order prior to the survey, with no known faults or defects.

2.2.7 Data were initially collected using the cart based system at 0.125m centres along traverses 1m apart. Subsequently, two survey areas were separated into 40m by 40m grids and data were collected at 0.25m centres along traverses separated by 1m without the cart. This sampling interval is very effective at locating archaeological features and is the recommended methodology for archaeological prospection (English Heritage, 2008).

2.2.8 The survey transects were aligned north – south and to the Ordnance Survey OSGB36 datum using a Leica GS10. The GPS is used in conjunction with Leica's SmartNet service, where positional corrections are sent via a mobile telephone link. Positional accuracy of around 10 – 20mm is possible using the system. The instrument is regularly checked against the ETRS89 reference framework using Ordnance Survey ground marker C1ST7784 (Horton).

2.3 Data processing and presentation

2.3.1 Magnetometry data downloaded from the Grad 601-2 data logger are analysed and processed in specialist software known as ArcheoSurveyor. The software allows greyscale and trace plots to be produced for presentation

and display. An overall composite of the data (composite file) is formed creating a dataset of the complete survey area. Appendix C contains specific information concerning the survey and data attributes and is derived directly from ArcheoSurveyor; this should be used in conjunction with information provided by Figure 02.

2.3.2 Only minimal processing is carried out in order to enhance the results of the survey for display. Raw data are always analysed, as processing can modify anomalies. The following schedule sets out the data and image processing used in this survey:

- clipping of the raw data at ±30nT to improve greyscale resolution,
- clipping of processed data at ±3nT to enhance low magnitude anomalies,
- zero median/mean traverse is applied in order to balance readings along each traverse.

Reference should be made to Appendix B for further information on the specific processes carried out on the data. Appendix C metadata includes details on the processing sequence used.

2.3.3 An abstraction and interpretation is offered for all geophysical anomalies located by the survey. A brief summary of each anomaly, with an appropriate reference number, is set out in list form within the results (Section 3) to allow a rapid and objective assessment of features within each survey area. Where further interpretation is possible, or where a number of possible origins should be considered, more subjective discussion is set out in Section 4.

2.3.4 The main form of data display prepared for this report is the greyscale plot. Anomalies are abstracted using colour coded points, lines and polygons. All plots are scaled to landscape A3 for paper printing.

2.3.5 The raster images are combined with base mapping using MapInfo Professional v11 creating TAB file formats. Survey results are effectively georeferenced allowing relocation of features using GPS, resection method etc.. A digital archive, including raster images, is produced with this report, see Appendix D below.

3 RESULTS

3.1 General overview

3.1.1 The detailed magnetic survey was carried out over a total of two survey areas covering approximately 1.28ha. Geophysical anomalies located can be generally classified as positive linear and discrete anomalies of an uncertain origin, areas of magnetic debris and disturbance, strong discrete dipolar anomalies relating to ferrous objects and a strong multiple dipolar linear anomaly relating to a buried service or pipe. Anomalies located within each survey area have been numbered and are described below with subsequent discussion in Section 4.

3.1.2 The initial trial survey using a cart-based system was abandoned due to poor mobile communications, see section 2.2. Data collected using a standard grid methodology appears good and representative of the magnetic anomalies present within the site. Magnetic disturbance associated with an underground service has the potential to obscure more minor anomalies of archaeological potential.

3.1.3 The list of sub-headings below attempts to define a number of separate categories that reflect the range and type of features located during the survey. A basic explanation of the characteristics of the magnetic anomalies is set out for each category in order to justify interpretation, a basic key is indicated to allow cross referencing to the abstraction and interpretation plot. MapInfo filenames (TAB) are included to aid reference to the associated digital archive. Sub-headings are then used to group anomalies with similar characteristics for each survey area.

Report sub-heading **CAD layer names and plot colour**	**Description and origin of anomalies**
Anomalies with an uncertain origin AS-ABST MAG POS LINEAR UNCERTAIN AS-ABST MAG POS DISCRETE UNCERTAIN 	The category applies to a range of anomalies where there is not enough evidence to confidently suggest an origin. Anomalies in this category may well be related to archaeologically significant features, but equally relatively modern features geological/pedological features and agricultural features should be considered. Positive anomalies are indicative of magnetically enhanced soils that may form the fill of 'cut' features or may be produced by accumulation within layers or 'earthwork' features; soils subject to burning may also produce positive anomalies. Negative anomalies are produced by material of comparatively low magnetic susceptibility such as stone and subsoil.
Anomalies associated with magnetic debris AS-ABST MAG DEBRIS AS-ABST MAG STRONG DIPOLAR 	Magnetic debris often appears as areas containing many small dipolar anomalies that may range from weak to very strong in magnitude. It often occurs where there has been dumping or ground make-up and is related to magnetically thermoremnant materials such as brick or tile or other small fragments of ferrous material. This type of response is occasionally associated with kilns, furnace structures, or hearths and may therefore be archaeologically significant. It is also possible that the response may be caused by natural material such as certain gravels and fragments of igneous or metamorphic rock. Strong discrete dipolar anomalies are responses to ferrous objects within the

	topsoil.
Anomalies associated with magnetic disturbance AS-ABST MAG DISTURBANCE AS-ABST MAG SERVICE	The magnetic response is often strong and dipolar indicative of ferrous material and may be associated with extant above surface features such as wire fencing, cables, pylons etc.. Often a significant area around such features has a strong magnetic flux which may create magnetic disturbance; such disturbance can effectively obscure low magnitude anomalies if they are present. Fluxgate sensors may respond erratically and with hysteresis adjacent to strong magnetic sources. Buried services may produce characteristic multiple dipolar anomalies dependant upon their construction.

Table 2: List and description of interpretation categories

3.2 List of anomalies - Area 1

Area centred on OS NGR 406315 171330, see Figures 04 & 05.

Anomalies with an uncertain origin

(1) – A weak positive anomaly (<1nT) that may represent a former ditch-like feature.

(2) – A discrete positive anomaly that may be associated with a pit-like feature. The response could also indicate an area of localised burning.

Anomalies associated with magnetic debris

(3) – Zones of magnetic debris that may have been caused by magnetically thermoremnant material used within former buildings or as ground make-up and consolidation. The zones have a strong correlation with clusters of prison huts visible on aerial photographs.

(4) – Strong dipolar anomalies indicate shallow ferrous objects across the survey area. The high density of objects within the vicinity of the magnetic debris (anomaly 3) probably implies a similar origin. Larger anomalies have been caused by ranging poles used for field walking and metal detecting during the geophysical survey.

Anomalies associated with magnetic disturbance

(5) – A zone of magnetic disturbance is associated with a steel pipeline or service crossing the survey area.

3.3 List of anomalies - Area 2

Area centred on OS NGR 406435 171330, see Figures 04 & 05.

Anomalies with an uncertain origin

(6) – Positive rectilinear anomalies (<3nT) that probably relate to ditch-like features. The anomalies appear to form part of a small enclosure although they may relate to agricultural activity.

(7) – Weak and fragmented positive linear anomalies that may be associated with cut features.

(8) – The survey area contains several discrete positive anomalies that may indicate pit-like features up to 5m in diameter. The anomalies appear regularly spaced probably indicating that they are anthropogenic in origin. There is no clear evidence from the data that they are related to the camp or other 20th century military features.

Anomalies associated with magnetic debris

(9) – Strong dipolar anomalies indicate shallow ferrous objects across the survey area.

4 DISCUSSION

4.1.1 The magnetometer data have revealed two zones of magnetic debris within Area 1 indicative of magnetically thermoremnant material, such as degraded steel and iron and fragments of slag, tile, brick etc. Georeferencing an aerial photograph taken in 1918 demonstrated a strong correlation between the zones and clusters of huts, with a 'magnetically quieter' zone correlating with space between two separate clusters of huts. The implication is, therefore, that the debris relates to the former prison huts and material used in the immediate vicinity of the huts. Agricultural cultivation may be responsible for spreading the material as there is no clear evidence for any in-situ structural remains.

4.1.2 The survey revealed no supporting evidence for the possible practice trenches within Area 2. Previous survey across practice trenches on Salisbury Plain have revealed clear magnetic anomalies, and it is likely that should trenches have been cut into the underlying geology, sufficient magnetic contrast would be created for them to be revealed by magnetometry. However, if trenches were cleanly backfilled with material of low magnetic susceptibility (e.g. chalk) and contamination with topsoil was very low, then it is possible that insufficient contrast exists for their location.

4.1.3 Rectilinear anomalies within Area 2 may be associated with former land enclosures or divisions and may relate to agricultural activity. It is not possible to infer any date for their construction or if there is any association with the former camp. The northern ditch orientated east west ends within the central part of the survey area. It is possible that this has been truncated by the trench-like features visible on the 1918 aerial photograph.

4.1.4 Discrete positive anomalies within Area 2 may indicate a series of pit-like features up to 5m in diameter. The anomalies are regularly spaced at approximately 30m apart. There is no clear evidence from the data that they are related to the former prison camp although an anthropogenic origin appears likely.

5 CONCLUSION

5.1.1 The magnetometer survey results demonstrate the presence of magnetic debris associated with hut clusters within the former prisoner of war camp. The debris is related to fragments of magnetically thermoremnant material used either within the structure of the prison huts themselves, within flooring, or associated with ground make-up and consolidation in the immediate vicinity of the huts. The data do not provide evidence for the survival of substantial structural remains below surface.

5.1.2 Although there is a strong correlation between the density of the magnetic debris and the location of hut clusters, without analysis of early aerial photography, it would not be possible to clearly define the extent or presence of the huts. Magnetic debris is frequently encountered during magnetometry and is often related to modern dumping and ground make-up.

5.1.3 The survey results have not provided evidence for former practice trenches to the east of the camp. A positive linear anomaly, possibly associated with a former ditch, ends abruptly and may indicate ground disturbance.

5.1.4 A series of large pit-like features was located to the east of the camp although there is no clear evidence that they are associated with it. Their regular spacing would tend to support an anthropogenic origin.

6 REFERENCES

British Geological Survey, 2010. *Geology of Britain viewer, 1:50 000 scale [online]* available from http://maps.bgs.ac.uk/geologyviewer/ [accessed 11/12/2011].

English Heritage, 2008. *Geophysical survey in archaeological field evaluation. Research and Professional Service Guideline No.1.* 2nd ed. Swindon: English Heritage.

Institute for Archaeologists, 2002. *The use of Geophysical Techniques in Archaeological Evaluations*. IFA Paper No. 6. IFA, University of Reading.

Soil Survey of England and Wales, 1983. *Soils of England and Wales, Sheet 5 South West England.*

Appendix A – basic principles of magnetic survey

Iron minerals are always present to some degree within the topsoil and enhancement associated with human activity is related to increases in the level of magnetic susceptibility and thermoremnant material.

Magnetic susceptibility is an induced magnetism within a material when it is in the presence of a magnetic field. This can be thought of as effectively permanent due to the presence of the Earth's magnetic field.

Thermoremnant magnetism occurs when ferrous material is heated beyond a specific temperature known as the Curie Point. Demagnetisation occurs at this temperature with re-magnetisation by the Earth's magnetic field upon cooling.

Enhancement of magnetic susceptibility can occur in areas subject to burning and complex fermentation processes on biological material; these are frequently associated with human settlement. Thermoremnant features include ovens, hearths, and kilns. In addition thermoremnant material such as tile and brick may also be associated with human activity and settlement.

Silting and deliberate infilling of ditches and pits with magnetically enhanced soil can create an area of enhancement compared with surrounding soils and subsoils into which the feature is cut. Mapping enhanced areas will produce linear and discrete anomalies allowing an assessment and characterisation of hidden subsurface features.

It should be noted that areas of negative enhancement can be produced from material having lower magnetic properties compared to the topsoil. This is common for many sedimentary bedrocks and subsoils which were often used in the construction of banks and walls etc. Mapping these 'negative' anomalies may also reveal archaeological features.

Magnetic survey or magnetometry can be carried out using a fluxgate gradiometer and may be referred to as gradiometry. The gradiometer is a passive instrument consisting of two fluxgate sensors mounted vertically 1m apart. The instrument is carried about 30cm above the ground surface and the upper sensor measures the Earth's magnetic field as does the lower sensor but this is influenced to a greater degree by any localised buried field. The difference between the two sensors will relate to the strength the magnetic field created by the buried feature. If no enhanced feature is present the field measured by both sensors will be similar and the difference close to zero.

There are a number of factors that may affect the magnetic survey and these include soil type, local geology and previous human activity. Situations arise where magnetic disturbance associated with modern services, metal fencing, dumped waste material etc., obscures low magnitude fields associated with archaeological features.

Appendix B – data processing notes

Clipping

Minimum and maximum values are set and replace data outside of the range with those values. Extreme values are removed improving colour or greyscale contrast associated with data values that may be archaeologically significant. It has been found that clipping data to ranges between ±5nT and ±1nT often improves the appearance of features associated with archaeology. Different ranges are applied to data in order to determine the most suitable for anomaly abstraction and display.

Zero Median/Mean Traverse

The median (or mean) of each traverse is calculated ignoring data outside a threshold value, the median (or mean) is then subtracted from the traverse. The process is used to equalise slight differences between the set-up and stability of gradiometer sensors and can remove striping. The process can remove archaeological features that run along a traverse so data analysis is also carried out prior its application.

De-stagger

Compensates for small positional errors within data collection by shifting the position of the readings along each traverse by a specified amount. Data lost at the end of each traverse are extrapolated from adjacent value in the same row.

Deslope

Corrects for striping and distortion caused by metal objects/services etc.. The process calculates a curve based on a polynomial best fit mathematical function for each traverse. This curve is then subtracted from the actual data.

Edge Match

Calculates the mean of the 2 lines (rows or columns) of data either side of the edge to match. It then subtracts the difference between the means from all datapoints in the selected area.

FFT (Fast Fourier Transform) spectral filtering

A mathematical process used to determine the frequency components of a traverse. Repetitive features, such as plough marks, produce characteristic spectral zones that can be suppressed allowing greyscale images to appear clearer.

Appendix C – survey and data information

Magnetometer data (combined Area 1 and Area 2)

Filename: yatesbury-mag.xcp
Instrument Type: Bartington (Gradiometer)
Units: nT
Surveyed by: on 08/10/2011
Assembled by: on 08/10/2011
Direction of 1st Traverse: 0 deg
Collection Method: ZigZag
Sensors: 2 @ 1.00 m spacing.
Dummy Value: 32702

Dimensions
Composite Size (readings): 320 x 200
Survey Size (meters): 80 m x 200 m
Grid Size: 40 m x 40 m
X Interval: 0.25 m
Y Interval: 1 m

Stats
Max: 100.00
Min: -100.00
Std Dev: 11.66
Mean: -0.90
Median: -0.49
Composite Area: 1.6 ha
Surveyed Area: 1.28 ha

Source Grids: 8
1 Col:0 Row:0 grids\07.xgd
2 Col:0 Row:1 grids\08.xgd
3 Col:0 Row:3 grids\03.xgd
4 Col:0 Row:4 grids\04.xgd
5 Col:1 Row:0 grids\05.xgd
6 Col:1 Row:1 grids\06.xgd
7 Col:1 Row:3 grids\01.xgd
8 Col:1 Row:4 grids\02.xgd

Magnetometer data processing

Processes: 6
1 Base Layer
2 DeStripe Median Traverse: Grids: 03.xgd 04.xgd 01.xgd 02.xgd
3 DeStripe Median Traverse: Grids: 07.xgd 05.xgd
4 DeStripe Mean Traverse: Grids: 08.xgd 06.xgd Threshold: 0.25 SDs
5 DeStripe Mean Traverse: Grids: 08.xgd Threshold: 0.5 SDs
6 Clip from -3.00 to 3.00 nT

Appendix D – digital archive

Archaeological Surveys Ltd hold the primary digital archive at Castle Combe, Wiltshire (see inside cover for address). Data are backed-up onto an on-site data storage drive and at the earliest opportunity data are copied to CD ROM for storage on-site and off-site.

Surveys are reported on in hardcopy (recycled paper) using A4 for text and A3 for plots (all plots are scaled for A3). The distribution of both hardcopy report and digital data is considered the responsibility of the Client unless explicitly stated in the survey Brief, Written Scheme of Investigation or other contractual agreement.

This report has been prepared using the following software on a Windows XP platform:

- ArcheoSurveyor version 2.5.8.46(geophysical data analysis),
- MapInfo Professional version 11 (report figures),
- OpenOffice.org 3.0.1 Writer (document text),
- PDF Creator version 0.9 (PDF archive).

Digital data include the following files:

- ArcheoSurveyor grid and composite files for all geophysical data,
- CSV files for raw and processed composites,
- geophysical composite file graphics as Bitmap images,
- AutoCAD DWG files in 2000 and 2007 versions,
- report text as OpenOffice.org ODT file,
- report text as Word 2000 doc file,
- report text as rich text format (RTF),
- report text as PDF,
- PDFs of all figures.