Using Aerial Photos for Desk Based Research  
A CIfA Accredited one-day training course

Aerial photographs provide brilliant opportunities for non-intrusive landscape and site survey.

At Air Photo Services, we routinely use historical aerial photos, digital photographic mosaics, satellite images and LiDAR data. We’d like to share our expertise and introduce you to the ways in which aerial imagery contributes to Desk Based heritage assessments and research projects.

Our practical one-day course will help you to confidently access and use aerial imagery as an initial assessment for desk based research. It is offered as a stand-alone module or in conjunction with Rebecca Bennett’s Making the Most of LiDAR and QGIS courses. Through practical guidance and hands-on sessions this course will cover the following topics:

- Selecting your aerial images, using the archives, including online resources
- Interpretation, perception and stereoscopic viewing
- Discussion and analysis of contrasting environments from the air, and the effect of erosion and differing soils and geologies on what we see and how we interpret the photos, using contrasting examples
- Dealing with a planning scenario - comparing different photographs and LiDAR data and their assistance in the interpretation

You’ll use your own laptop for the course, ensuring that you are fully ready to apply the skills you’ve learnt in the planning and scope your day-to-day work.
Who is the course aimed at?
The course is aimed primarily at heritage and landscape conservation professionals and consultants working in commercial, independent and research environments and to community groups who wish to work with aerial imagery and spatial data.

Course Aim
“To improve your knowledge and understanding of the use of aerial imagery
To undertake preliminary investigation of the historic environment for desk based research.”

Course Objectives
1. To provide theoretical background on the collection of air photo data and their use for historic landscape survey
2. To provide guidance on how to access air photos and the different types of photos available for use
3. To provide practical instruction and professional discussion on how to interpret and use air photos for historic landscape analysis
4. To provide guidance and discussion on the appropriate use of air photos and some of the pitfalls / problems that might be encountered
5. To introduce the comparison of air photos to LiDAR data and the concurrent use of both

This course provides skills and knowledge in support of the following National Occupational Standards AC8 - Undertake analysis and interpretation of archaeological material and data; AC1- Research and analyse information to achieve objectives and AC2 - Conduct non-intrusive archaeological investigations (see Additional Information below for more details).

Cost and Booking Information
The course is £150 per participant, including lunch and refreshments. Paypal payment via http://www.pushingthesensors.com/booking-form/ is preferred please, or we can invoice against a Purchase Order.

Numbers are limited to 8 places so pre-booking is essential and bookings close at noon two weeks before the course date (or earlier if all spaces are filled). If you find that you can’t attend, we will refund the cost of the course minus an administrative fee of £20 until noon 14 days prior to the course date. Refunds will not be made after this point, but transferring your place to another individual or credit for a future course will be considered where possible.
Requirements
You will need to bring your own laptop and mouse [Windows Vista or newer, Mac OS X or linux with at least 8GB RAM, 1GB memory] so that you can use online resources, view material and compare data on screen to printed resources.

The Venue
The course will be held at Air Photo Services Ltd, the Shaftesbury Centre, Swindon SN2 2AZ (within easy reach of Swindon train station). Bus routes 13 and 14 connect the station to Rodbourne Road and a taxi one-way should be around £5.

There is ample free parking off Morris Street, to the rear of the Shaftesbury Centre building.

The training room is on the second floor with lift access. Please let us know if you will need any specific modifications to make your training day more comfortable or, for blue-badge holders, if you need an accessible parking place to be reserved for you outside the front door.
Travel and Hotel Information

The venue is located 4 miles from junction 15 of the M4 (or 6 miles from Junction 16) and within walking distance (20mins) from Swindon town centre and the railway station. Swindon is on the Great Western Bristol-London route, serving London, the Midlands, South West England, the South Coast and South Wales.

If you need to stay overnight there is a range of hotels in Swindon, with the closest to the venue being:

- Holiday Inn Express Swindon City Centre, Bridge Street, SN1 1BT
- The Great Western Hotel, 73 Station Rd, SN1 1DH
- Jurys Inn, Fleming Way, SN1 2NG

Please check online for prices and reviews.

About the Trainers

Chris Cox MCiFA FSA will deliver the training, supported by Jack Powell. Chris established Air Photo Services in Cambridge in 1990 with Rog Palmer and has since worked as an aerial image interpreter on major infrastructure, consultancy, legal expert witness, training and commercial development projects throughout the UK and Europe. Chris is a CIFA NVQ Assessor.

Jack Powell BSc joined us in January as an aerial imagery analyst, working on photo and LiDAR interpretation, technical development and training support.
Additional Details - National Occupational Standards Outcomes

This course provides skills and knowledge in support of the following National Occupational Standards for Archaeology (ordered by most relevant first).

<table>
<thead>
<tr>
<th>AC8</th>
<th>Undertake analysis and interpretation of archaeological material and data</th>
<th>P1-5 K1-13</th>
<th>Performance Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Accurately identify requirements for analysis and interpretation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Identify and apply relevant technical and ethical standards</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Analyse and assess the accuracy, currency and completeness of data and identify any additional data and material requirements</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Obtain additional data and material from relevant sources as appropriate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Select, propose and agree appropriate methods for analysis and interpretation</td>
</tr>
</tbody>
</table>

Knowledge and Understanding

• How to carry out analysis and interpretation
• Data protocols
• Relevant technical and ethical standards
• Types of analysis and interpretation
• Types of method
• How to conduct analysis and interpretation
• Sources of specialist information and advice
• How to observe and measure accurately
• How to adapt analysis and interpretation procedures and practices to suit different conditions
• How and where to record and store analysis and interpretation data
• Types and modes of analysis and interpretation
• Circumstances and conditions which can affect analysis and interpretation activities
• Data protocols used in different analysis and interpretation methods

AC1 | Research and analyse information to achieve objectives | P13-14 | Performance Criteria

• Ensure the methods are appropriate to the type of data and the research aims
• Analyse information accurately according to the appropriate methodology

AC2 | Conduct non-intrusive archaeological investigations | P22-P24 | Performance Criteria

• Verify that data collected during investigation is sufficient for analytical purposes and is collated accurately
• Check and verify investigation data for accuracy and integrity
• Process investigation data accurately and present it in a format that will assist in making a balanced interpretation.