Session title: ARCHIVES TO APPLICATIONS: HISTORIC AERIAL IMAGERY AS A RESOURCE FOR EUROPE’S CULTURAL HERITAGE

Organizers: Robin Standring, AARG and Cambridge Archaeological Unit, University of Cambridge, UK
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Discussant: Lesley Ferguson, Royal Commission on the Ancient and Historical Monuments of Scotland, UK

Time: Friday afternoon

Room:

Session abstract:

This session presents the huge potential locked up in archives of historic aerial imagery for the exploration and management of European cultural heritage. Rural and urban cultural landscapes have undergone massive changes during the second half of the 20th century. Thus imagery dating from World War I to the present, but with huge collections from the 1940s, provides an unrivalled means of documenting and understanding change. The imagery informs effective management of the cultural heritage and also records historic landscapes that have disappeared.

The session has two components. Firstly, there are reviews of the major archives with an emphasis on accessibility and finding aids. For illustrative purposes there will be an emphasis on the material available for Southern Europe to reflect the location of the EAA conference (including a case-study for Malta). Secondly, a series of case studies will illustrate the applications of this imagery from across a wide range of heritage issues, from prehistoric cultivation and settlement patterns, to the impact of recent vegetation change on the management of cultural heritage. Studies will also explore military archaeology, approaches to the Holocaust and World War II, as well as highlighting the value of this imagery in urban contexts.

Organised by the Archives Working Group of the Aerial Archaeology Research Group (AARG - www.univie.ac.at/aarg/php/cms/) and sponsored by the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS - www.rcahms.gov.uk).

Paper abstracts:

THE ARCHAEOLOGICAL POTENTIAL OF THE AERIAL RECONNAISSANCE ARCHIVES

Lesley Ferguson, Royal Commission on the Ancient and Historical Monuments of Scotland, UK
The Aerial Reconnaissance Archives (TARA) based at the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) is an international air photo archive that contains over 10 million Allied and German air photos taken before, during and following the Second World War. The collection covers much of Europe including many countries bordering the Mediterranean including the Near and Middle East. The global and temporal reach of the archive is continually expanding as the UK Ministry of Defence declassifies new post-war material.

Much of the users of the archive in recent years have been ‘20th Century Archaeologists’ – those wishing to plot the location of bomb damage and military installations for the purposes of identifying land contamination and unexploded ordnance. In addition to charting such conflict events, the large and varied coverage is a significant record of huge areas of the globe before the intensive developments of the late twentieth century. As other papers in this session will illustrate, the potential of the collection for archaeological research of all periods is huge and is being increasingly discovered by researchers working on projects across Europe.

It is likely that many of the archaeological sites and landscapes that are being presented during EAA 2008 will be represented in TARA and it is hoped that researchers will take the opportunity of this meeting to register their interest in future collaboration.

MALTA IN CAMERA: EARLY AIR SURVEY IN THE MEDITERRANEAN

Matthew Abicht and Robin Standring, Aerial Archaeology Research Group

The United States National Archives (NARA) at College Park, Maryland contains a large collection of wartime and post-war aerial photography of the Mediterranean basin.

This paper will demonstrate the potential of this imagery for projects which are mapping and interpreting archaeological sites or landscapes. By way of illustration, the extensive German air photo coverage of Malta from 1941-43 is considered. While these images were taken purely for the military purpose of subjugating the island, they record much which is now of primary importance for studying cultural heritage.

Individual case studies will illustrate the potential of the imagery for identifying archaeological remains and wartime damage to cultural heritage, and to assess the effects of post-war development on cultural landscapes. Attendees will be given imagery samples and information on how to research their areas of interest in Malta and beyond.

BEFORE ABANDONMENT: TARA’S PERSPECTIVE ON THE FRAGILE COMMUNITIES OF ANTIKYTHERA

Andrew Bevan, University College London, UK

Antikythera is one of the smallest (ca. 20 sq.km) and most remote inhabited places in the insular Mediterranean, but also one located at a strategic intersection of several important routes of interaction. Its history of perhaps 7 thousand years of human exploitation is punctuated by abrupt highs and lows of abandonment and
recolonisation, as well as temporary visits by hunters and pirates amongst others. The island has been subject to a phased, interdisciplinary program of investigation by The Antikythera Survey Project (ASP) since 2005. One key way in which ASP has sought to try to understand these longer-term patterns is by comparing them to the most recent, historically-documented period of Antikytheran settlement which began with an explicit recolonisation episode in the late 18th century, saw the population rise to nearly a thousand people in the early part of the 19th century and then, in recent years, has seen a decline to no more than 35 year-round inhabitants today.

RAF photos stored in The Aerial Reconnaissance Archive (TARA) at RCAHMS in Edinburgh provide a critical dataset for obtaining a high-resolution picture of this most recent phase of settlement and land use because of at least two sorties made in early 1944, only 2-3 months before the entire island’s population was forcibly removed to Crete by retreating German forces. Island life was never quite the same when some of the inhabitants returned after the war and these photographs represent a crucial snapshot of the last time Antikythera was under full agricultural cultivation. This paper considers a range of ways, both methodological and interpretative, in which ASP has sought to exploit the detail present in these photos.

**WWII MILITARY AERIAL PHOTOGRAPHS AND THE RECONSTRUCTION OF THE ROMAN LIMES INSTALLATIONS AT GALAŢI (ROMANIA)**

Ioana A. Oltean, University of Exeter, UK

The Roman limes installations in the area of Galaţi (Romania) at the confluence of River Siret with the Danube were known to include an earthwork between the modern villages of Traian and Tuluceşti, behind which a number of military and non-military sites were located, among them the fort and settlement at Barboşi. Although the latter has been excavated to a limited extent in the past, most of the remaining area suffered dramatic intervention and destruction in the post-war period when a huge steel factory was constructed there. Recent archaeological interpretation and mapping of archived RAF photographic material from the Second World War helped both to reconstruct the lost archaeological landscape of the area and bring more light on the complex structure of this sector of the Roman Danubian limes.

**THE HOLOCAUST IN AERIAL PHOTOGRAPHY**

Daniel Uziel, Yad Vashem, Jerusalem, Israel

Four years ago a newly-discovered RAF aerial print of Auschwitz taken on 23 August 1944 was published as part of the launch of The Aerial Reconnaissance Archive (TARA) website. The massive wartime aerial photographic coverage of Europe is an important and little-used resource for studying the locations, the chronology, and the consequences of the Holocaust. Many images that contribute to such study remain to be discovered.
The Auschwitz complex was photographed from the air by the allies at least 24 times during World War II, and a small portion of the resulting reconnaissance photos were widely published following their ‘discovery’ in 1978 by CIA image analysts. Research has shown that the Auschwitz imagery was a by-product of the regular allied reconnaissance of the nearby IG Farben petro-chemical factory. Despite speculation, there is no evidence that the sorties were initiated to study the death camp even though the whereabouts and activities had been published at this time. German imagery is another major source available for study. The late war German imagery of Cracow and the Plaszow concentration camp (known as the setting for the “Schindler’s List” story) provides a unique perspective of the sites, helping to explain the logic and structures behind German persecution.

The case-studies illustrate how the photos can supplement the historical and chronological knowledge of the sites and put the ‘mental maps’ of survivors and witnesses into geographical space.

THE ARCHAEOLOGY OF AERIAL CONFLICT: MAPPING UNEXPLODED BOMBS IN THE ADIGE VALLEY

Robin Standring, Aerial Archaeology Research Group

During World War Two, over 30,000 bombs were dropped by the United States Air Force on the Adige Valley of the Province of Trento, Italy. One of the most densely bombed pieces of territory in Europe, the effects of these raids are still being felt sixty years later as growing urbanisation leads to numerous finds of unexploded bombs.

This paper details the response of the UXB Trentino project which was formed by the Civil Defence department of the Provincia Autonoma di Trento in order to analyse and map the extent of wartime targets and bombing locations. Using archival records and contemporary reconnaissance photos held in US and UK archives, the project followed sound archaeological principles of research and analysis in order to provide primary evidence to supplement the ‘folk memory’ of local inhabitants.

Detailed reconstruction of the chronology and extent of wartime activity to produce a ‘stratigraphy’ of attacks and reconnaissance images for individual towns and targets has created a moving cultural record of the dramatic changes to the rural and urban landscape brought about by human conflict.

WORLD WAR ONE AIR PHOTO ARCHIVES: GEOGRAPHIC OVERVIEW AND MAIN APPLICATIONS

Birger Stichelbaut, Ghent University, Belgium

During WWI, for the first time, aerial photography rapidly developed as an intelligence tool that saw large scale application by all the combatants. Large numbers of these photographs have survived in archives all over Europe, the United States and even Australia. These are a remarkable primary record of the progress of WWI, but are also a unique record of landscape at the beginning of the 20th century and a valuable source of data for any archaeologist, landscape historian or cultural resource manager.
This paper briefly describes the results of a large scale archival research project that has created a GIS-based index to the geographic coverage of this imagery, supported by a quantification and characterisation of these collections. This is an invaluable first stage in facilitating access to and use of these photographs. Beyond the overview of the archives, case studies that illustrate the potential applications this material in both traditional archaeology and conflict archaeology will be presented.