



Bringing Air and Water Together Training School in Aerial Archaeology Barth 1st–5th May 2006

Preparation and Participants

Mecklenburg-West Pomerania called and many wanted to come – this could be the headline for our report on our Second Training School in Aerial Archaeology!

In each of the three years of the Culture 2000 project *European Landscapes: Past, Present and Future*, the department for Archaeology and Heritage Protection of the *Landesamt fuer Kultur und Denkmalpflege* in the Federal State of Mecklenburg-West Pomerania organises such a Training School for young archaeologists. This

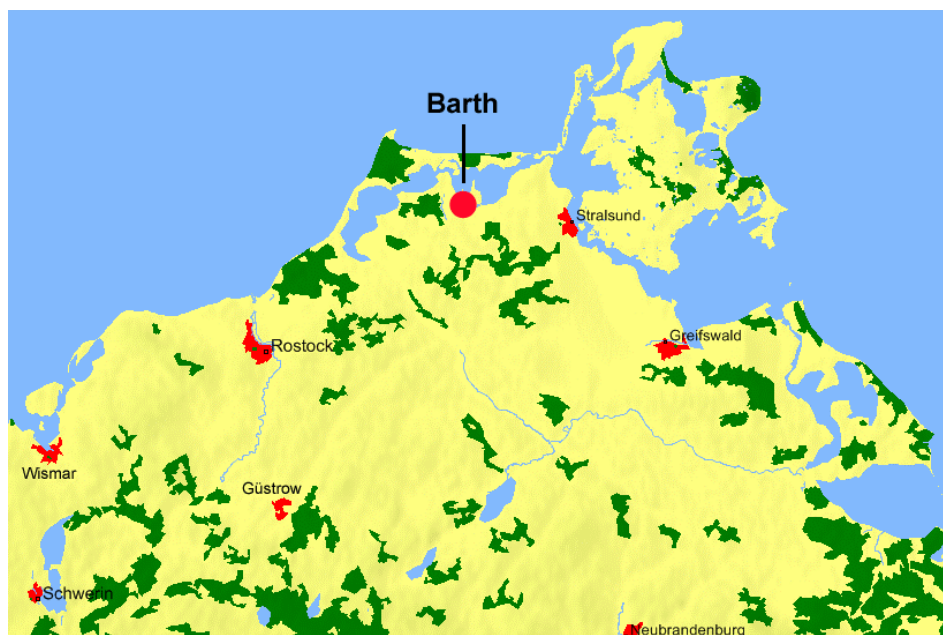
year's event took place from 1st–5th May, 2006, again at Barth in West Pomerania, as in 2005.

GWZO (*Geisteswissenschaftliches Zentrum für die Geschichte und Kultur Ostmitteleuropas an der Universität Leipzig*) generously provided bursaries for four students from Eastern and East Middle Europe to cover their expenses for travel and accomodation. Hauke Joens made this possible thanks to his good contacts to Matthias Hardt from GWZO. Two more students were supported by a sum provided



Geisteswissenschaftliches Zentrum
Geschichte und Kultur Ostmitteleuropas
an der Universität Leipzig (GWZO)

*Co-organisers and
Sponsors of the Second
Training School
in Aerial
Archaeology in Barth.*



*Situation of Barth in
Mecklenburg-
Vorpommern.*

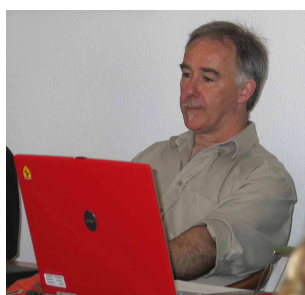


*Tutors in discussion:
 Enrico Donati, Lidka
 Žuk, Chris Musson and
 Otto Braasch (photo: S.
 Gerhard).*

by AARG. Our very grateful thanks to all persons involved in organising and making these bursaries available!

The possibility to apply for bursaries was surely the reason for the very large number of applications we received. In 2005, students had to cancel their application because without bursaries, they would not have been able to pay for travel and accommodation, even though there are no fees for the course itself.

32 applications, from Belgium, Croatia, Slovenia, the Czech Republic, Germany, Poland, Latvia, Lithuania, Sweden, Finland and the Netherlands reached us during the four-week application period – one more arriving afterwards from Romania. In the end, eight female and four male young colleagues were invited to come to Barth: Maja Miše (Split), Anna Lipiec (Warschau), Łukasz Pospieszny (Poznan), Laura Lēgere (Riga),



*Dave MacLeod
 (photo: S. Gerhard).*

Klaidas Perminas (Klaipeda), Diana Saliuniene (Kaunas), Pawel Garszka (Lund), Tarja Knuutinen (Helsinki), Stefan Klatt (Greifswald), Stephanie Nöllgen (Bochum), Karin Reichenbach (Leipzig) and Suzanne Theil (Rostock).

The task of organising the Training School lay again in the hands of Susanne Gerhard in Schwerin, who in co-operation with Hauke Joens and Otto Braasch collected and selected the applications, kept contact with participants and tutors and sent e-mails with train and bus timetables until virtually the last moment.

Tutors were – never change functioning a team! – Dave MacLeod (English Heritage/York, GB) and Lidka Žuk (Adam Mickiewicz University Poznań, PL), together with Enrico Donati (AARG/Ravenna, IT) and of course aerial archaeologist and pilot Otto Braasch (AARG/Landshut, D) who brought his indispensable Cessna 172 with him. Together they supervised a busy programme throughout the whole of the week. Again, our thanks go to AARG for supporting Lidka's and Enrico's travel and accommodation costs.

Chris Musson (AARG/Aberystwyth, GB) who had come as a guest worked, however, as tutor too.

The blend of aerial archaeology ground school and lectures on regional archaeology, tested and proven worthwhile during the First Training School, was retained in 2006.

Ground School – Introductory Lectures

On Tuesday and Wednesday, four lecturers gave an overview on regio-

nal archaeological topics: Mike Belasus ('Introduction to ship archaeo-

logy and aerial photography on the shores of Mecklenburg-West Pomerania'), Hauke Joens ('Managing the maritime heritage in the waters of Mecklenburg-West Pomerania. Principles and examples'), Sebastian Messal ('Early medieval settlements and harbours in Mecklenburg-West Pomerania as seen in Aerial Photography') and Frank Nikulka ('*DenkmalGIS*, an instrument for heritage management and research') all came from the Department of Archaeology and Heritage Protection at the *Landesamt fuer Kultur und Denkmalpflege*.



Karin, Stefan and Suzanne brooding over their network plots (photo: D. MacLeod).

Of great interest was also Goerres Grenzdoerffer's lecture on 'Digital airborne photogrammetry for archaeology' and most of all Reinhard Lampe's lively presentation of 'The geology and history of the Mecklenburg-West Pomerania coast'.

features that they would observe each day during their flying hours. Equally, the interaction between the history of landscape and the history of man in these regions (especially during the early holocene) was made perfectly clear.

With Goerres Grenzdoerffer coming from Greifswald University and Reinhard Lampe from Rostock University, both of the federal state's universities were involved in the Training School.

As in 2005, an evening lecture was part of the Training School. Dr Matthias Hardt from GWZO was talking about 'Christianisation, Rebellion, Colonisation. The northern parts of Germania slavica in the Early Middle Ages' and so rounded off the lectures. He stayed for the night and gained an impression of the busy working and lively evening atmosphere.

Professor Lampe, who co-operates with the Department of Archaeology also through the SINCOS project, illustrated the complex history of the coastal region from Fischland peninsula to the island of Ruegen in a very impressive way, demonstrating to the students the background of the coastal

Most of the guest lecturers took the opportunity to participate in a flight together with Otto Braasch and Training School participants.

Maja, working with the stereo pairs (photo: D. MacLeod).

Ground School – Aerial Archaeology

By and large, the contents of the Aerial Archaeology part of Ground School were identical to those in 2005. After a general introduction on safety at airfields and in aircraft, on navigation, communication, GPS and protocol sheets as

well as on the important points of air sickness and fear of flying, there followed modules on more specialised topics.

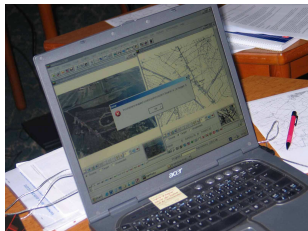
An introduction to aerial archaeology was followed by, for exam-





Maja (left) and Laura (right) together with Lidka during the AirPhoto session (photo: S. Gerhard).

ple, the explanation and demonstration of the differences between vertical and oblique photographs. Criteria to distinguish archaeological and non-archaeological features were demonstrated.



Cause for frustration: AirPhoto on strike! (photo: S. Gerhard).

Exercises in finding and describing archaeological features and working with stereo pairs formed part of the teaching programme, along with the plotting of archaeological structures from aerial photos onto maps by means of the Network Method of plotting.

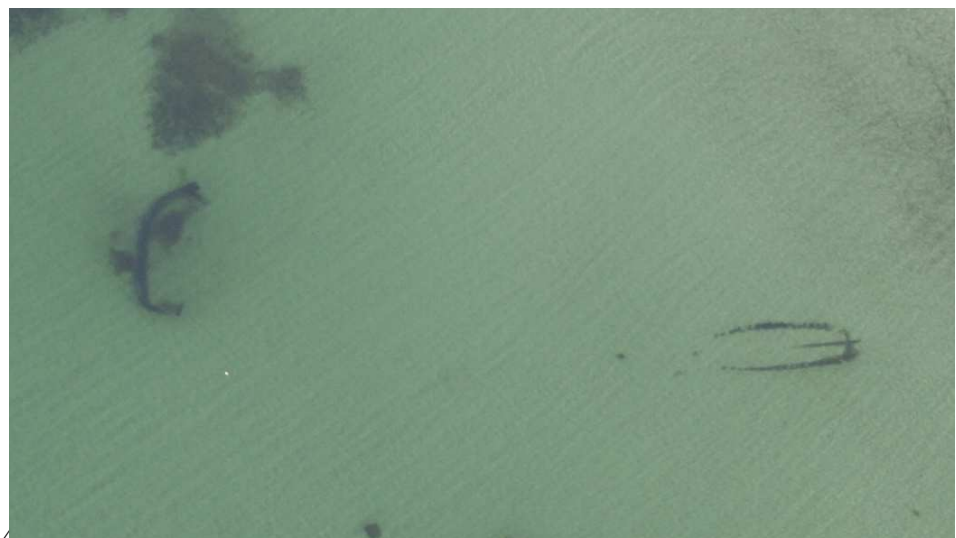
The better part of a day was dedicated to the work with the mapping program *Air Photo*. Irwin Scollar kindly put a Demo version

of the program at our disposal. Lidka Žuk gave the students an intensive introduction. Afterwards, there was time enough for the participants to work, in groups of two, with maps and photos prepared and provided by Lidka. To work concentrated, slowly and meticulously – practised the day before during exploring the network method – was again necessary when doing the same kind of thing by digital methods. Lidka was everywhere in the room, encouraging students and helping them to overcome the complexities of the program.

Instead of the introduction to GIS and landscape archaeology provided in 2005, we had placed on the agenda a contribution on digital imagery.

Enrico Donati presented to the participants an overview of image formats, photo archiving and digital image databases, illustrated by examples from last year's photos and the digital photoarchive of the Area di Archaeologia Medievale at the University of Siena. The more digital photography becomes important also in archaeological work, the more it is important for archaeologists to be skilled in dealing with this kind of data.

Two wrecks in one photo – near Hiddensee island.



Air School – Training and Practice

Suspense, but sometimes also mixed feelings accompanied the participants on their way to the first flight on Monday. Hardly anyone had had previous experience of flying in light aircraft.

But thanks to the weather – nice and mostly calm, as in 2005 (unexpectedly so after the bad weather in the second half of April 2006) – flying was also calm most of the time and bad experiences were rare.



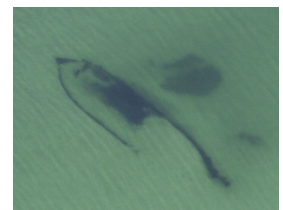
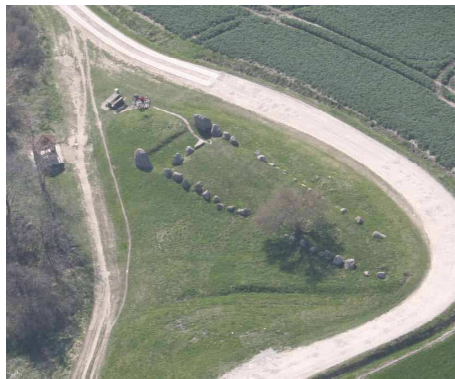
Otto Braasch headed for attractive sites where visibility was good. A special treat was, of course, viewing Kap Arkona during the final flight. But also the shipwrecks, clearly visible in the cold clear waters of the Baltic, were fascinating places.

Light wind and oblique sunlight posed some problems for the



photographers: light reflection made it sometimes impossible to see the structures under water.

This experience can of course be transferred to aerial photographs of terrestrial sites. Aerial School and Ground School complemented one another in an ideal way, Dave MacLeod contributing a wealth of photos and experiences from his own aerial archaeological work to illustrate the technical challenges that face aerial archaeologists in their daily work.



Photos

As in 2005, a digital SLR camera was used throughout (Canon EOS 350D, generously put at the participants' disposal by Otto Braasch).

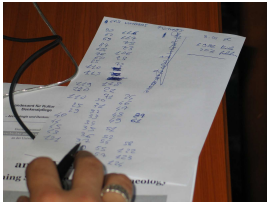
During his archiving work after the flights, Enrico sifted through the 'crop' and so he was able to comment on the photos only a short

time after they had been taken. This was very valuable help for the participants, especially for those who before had not used SLR and/or digital cameras.

All of the photos taken during the School will be sent to the participants on CDs/DVDs.

An impression of the small airfield at Barth (far left), the Chapelcum-Lighthouse from the Gellen (centre, top), the megalithic grave of Nobbin (Rugen) (centre, bottom) a shoal of fish trying to fool the archaeologists (right, top), along with a selection of wreck photos taken during the Training School.

Statistics



Not all statistics can be done by computers ... (photo: S. Gerhard)

All in all, each participant flew an average of around 4.5 hours, exactly as in 2005. The students produced nearly 2,500 photos (4.3

GB of data). Altogether, 64 sites, mostly under water off the coast or directly at the coast, were documented.

Résumé

On Friday: no more lectures, no more flying! Instead, a résumé of the week was drawn together under the chairmanship of Dr Hauke Joens. Enrico presented an overview of common problems, faults and omissions on the photos, illustrated by some of the pictures. Also Otto, Susanne, Lidka and Chris – who had taken over after Dave MacLeod was called away for family reasons – gave their assessment of the week's work.

The participants gave their feedback, too. Should we write a 'wish list' for future Training Schools, a thorough introduction to working with digital SLRs would be included as well as an introduction to GPS use. One or two days more, without flying but dedicated only to introductory work and theory, were regarded as desirable by some.

The absolute necessity for financial support of participants from Eastern Europe has already been stressed above. To ensure this will be one of our aims during the preparation of our last Barth Training School in 2007. Matthias Hardt from GWZO saw the dedication of the students to their tasks on the occasion of his visit and lecture during the Training School and took a very positive impression home to Leipzig. He stressed his intention to support our cause on GWZO official bodies. AARG has already promised to help again with 500 €.

So we left Barth with the certainty that we had passed a great week and that another one will come in spring 2007!

The Barth 2006 crew: Chris Musson, Susanne Gerhard, Otto Braasch, Laura Lēgere, Klaidas Perminas, Stefan Klatt, Łukasz Pospieszny, Tarja Knuutinen (back row), Maja Miše, Lidka Žuk, Diana Saliuniene, Anna Lipiec, Suzanne Theil, Karin Reichenbach, Stephanie Nöllgen, Pawel Garsztko (front row) (not present: Dave MacLeod)(photo: E. Donati).

