

# Training School in Aerial Archaeology Barth, Mecklenburg-Vorpommern 13–17 June 2005

From 13 to 17 June, the first Training School in Aerial Archaeology, organised by the Archaeological State Museum Mecklenburg-Vorpommern under the umbrella of the Culture 2000 project „European Landscapes: Past, Present and Future”, took place in the small town of Barth near the coast of the Baltic.

Otto Braasch from Landshut, Dave MacLeod from English Heritage in York and Lidka Zuk from Poznań university were the tutors. Enrico Donati from Ravenna and Antje Faustmann from Freiburg participated as advanced students (and future tutors). Ladislav Šmejda from Plzeň, Mantas Kvedaravicius from Vilnius, Ian Doyle from Kilkenny, Sabrina Kluwe, Ines Mueller and Kerstin Westphal from Bochum university and Melanie Gruener and Rolf Schulze from Muenster university completed a group that was very mixed with regard to age and previous expe-

rience in aerial archaeology, but nevertheless worked well together.

Susanne Gerhard from the Archaeological State Museum had prepared the course (in co-operation with Otto Braasch and Dave MacLeod) and had a busy week transporting the participants to and from the airfield. Susanne also took care of all the important organisational details, from pens to translation service, that ensured the school ran smoothly.

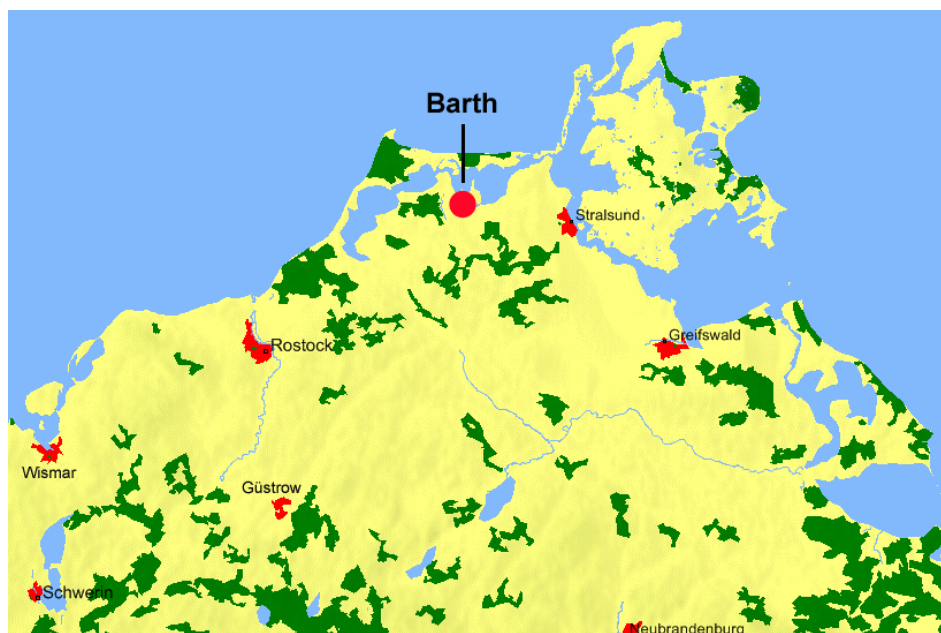
Otto Braasch was already familiar with the comfort and convenience of the Pommernhotel situated as it is only minutes from the airfield and had no hesitation in recommending it als base for the school. It proved to be an ideal choice and the friendly and patient staff coped very well with our frequent last minute requests for menu changes and irregular meal times (lunch at 3.00 p. m.!).



Otto Braasch and Dave MacLeod at Barth Airfield (photo: L. Šmejda).



Lidka at work (photo: D. MacLeod).



Situation of Barth in Mecklenburg-Vorpommern.



Otto Braasch's Cessna – for four and a half hours in average the participants's flying home during the school (Foto: L. Šmejda).

### Monday, 13 June

On Monday morning the head of the department for the Protection of Archaeological Monuments, Hauke Jöns, welcomed tutors and participants on behalf of the institution. He then gave a lecture where he explained the determining geological factors of the country in connection with late- and post-glacial landscape genesis, but highlighted also the heritage legislation with consideration of the special situation of archaeological sites in the Baltic. He also gave an overview of the institution's work in the Culture 2000 MoSS project (see also [www.mossproject.com](http://www.mossproject.com))

Otto Braasch and Dave MacLeod followed with introductions to safety at the airfield and in the aircraft, navigation and communication during the flight, photo technique, GPS and finally – not to be neglected – the points fear of flying and air-sickness.

The participants were then, in groups of three, taken to the airfield, where they entered for the first time Otto Braasch's Cessna for a forty-minute flight above Barth and the adjacent coastal area. For the rest of the group, Dave

MacLeod gave an introduction to aerial archaeology and explained which archaeological and non-archaeological features may be observed on aerial photographs. Practical exercises in air photo interpretation followed during the afternoon.



Taking a walk to town: Ladislav, Ian, Antje, Lidka, Enrico and Mantas (photo: D. MacLeod).

Monday evening was used for a pleasant walk through the small town and the only local pub, the "Schmuggler", was unerringly tracked down!



Listening carefully: Lidka, Antje and Susanne (photo: L. Šmejda).



Mantas Kvedaravicius working with the stereoscope (photo: L. Šmejda).

### Tuesday, 14 June

On Tuesday morning two colleagues from the State Office for the Protection of Archaeological Monuments joined the group to present the work of the Office as well as the principal traits of the country's prehistory. Frank Nikulka gave an overview of prehistoric monuments in Mecklenburg-Vorpommern as seen in aerial photographs, from megalithic tombs and neolithic ring ditches up to Bronze Age grave mounds. Questions of source criticism and representativity were mentioned. An overview of Iron Age settlements and funerary monuments followed.

Harald Luebke talked about underwater archaeology in Mecklenburg-Vorpommern and especially the SINCOS project with its sensational stone age sites off the shore. The participants enjoyed this insight into the work of underwater archaeologists and proved to be very interested in technical details.

Frank Nikulka then demonstrated the Office's "DenkmalGIS"-system – a GIS adapted for the use of

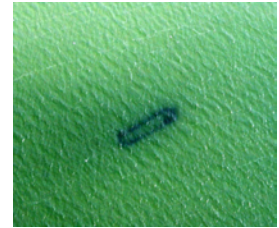
the Office containing all the information of Mecklenburg-Vorpommern's archaeological sites from stone age up to modern times. The system is an important tool not only in the field of heritage protection but also in scientific research. Frank Nikulka afterwards took the opportunity to join Otto Braasch and Enrico Donati for a flight.

Parallel to the lectures the participants went flying – this time in groups of two and for about an hour – with Otto Braasch. During the flights, they received further introduction to the recognition and photographing of monuments on land and under water.

Dave continued his instructions in the afternoon. The characteristics of oblique and vertical photographs were discussed and specific problems illustrated by numerous examples. Then Lidka and Dave explained the use of stereoscopy followed by practical exercises using stereoscopes and vertical photographs. Not only the recognition of structures was practised but also the drawing of the relief as it could be seen with the stereoscopes. Finally Dave took over again for a last session on the theory and practice of the network method of plotting.

In the evening, Włodek Rączkowski from the Institute of Prehistory at the Adam Mickiewicz-University Poznań (a partner in the Culture 2000 project), talked about the possibilities and results of aerial archaeology in Poland as well as about the difficulties to further establish the method there.

During and after dinner, participants, lecturer and tutors continued their lively discussion – long after the restaurant's closing time!



Wrecks, military sites, coastal dynamics – as seen and documented by the participants.



Kap Arkona (photo: E. Donati).

### Wednesday, 15 June

Wednesday morning was again filled with lectures. Sebastian Mesal from the State Office for the Protection of Archaeological Monuments talked about „Early medieval strongholds and harbours in aerial photography" and Jochen Brandt (State Office) reported on „Linear Projects in Mecklenburg-Vorpommern". Finally Mike Belasus from Kiel university gave an overview of shipwreck archaeology and the evolution of ship types in the Baltic. Both Jochen Brandt and Mike Belasus joined Otto Braasch for a flight as well as Włodek Rączkowski.

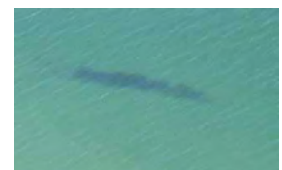
Wednesday morning in addition brought a visit from Ms Claudia Haiplick, journalist from the local newspaper Ostsee-Zeitung. She observed the takeoff of the first two participants in the morning, then met the group in the hotel's conference room for some questions on the Training School but also on the participant's impressions on Barth and the region. The article appeared on Friday – just in time to read it at breakfast before the first participants had to leave.

Wednesday afternoon, Lidka and Dave demonstrated the computer aided transformation of aerial photos. Participants then had the opportunity to use the air photo rectification software AirPhoto for the first time.

On Wednesday evening, some of us took the opportunity to go to the famous peninsula Darss, and three very daring people even took a bath in the Baltic – even though it was quite short! We enjoyed the evening despite being eaten by mosquitoes during our al fresco dinner. Enrico, our most courageous mosquito killer, bagged at least 80 zanzare ...

### Thursday, 16 June

On Thursday, the flights were extended to about 90 minutes. These longer trips gave participants the chance to see famous Kap Arkona on the northernmost part of the island of Ruegen. The ongoing excavation near the abrupt cliff as well as the rampart section could be seen clearly and became object of numerous photos.



Some more wreck sites.

Meanwhile, Lidka continued the instruction in AirPhoto. In the afternoon, Antje Faustmann gave an introduction to GIS programmes at the example of MapInfo and explained basic concepts of landscape archeology. Dave continued with further instructive examples of aerial photographs from England. Well into the evening, people worked with the stereoscopes, on the rectification of photos or tried the network method.



Enrico had, during the whole week, taken over the job of archiving the (digital) photos and managed to do that in a very effective way. What would have we done without Enrico, who not only archived the photos but also told us the best way to cook spaghetti and – as you will read below – made a spectacular discovery!

### Friday, 17 June

Friday morning was dedicated to a retrospective of the school. Different photographs made during the week were discussed. Ladislav had even prepared a Powerpoint presentation.

During this session, special attention was of course paid to the newly discovered site named “The Donati Circle” after its discoverer. Only about some kilometers from the airfield, two concentric ring ditches showed up in a field – unknown up to now in spite of Otto Braasch’s numerous flights in the region during the last 12 years.

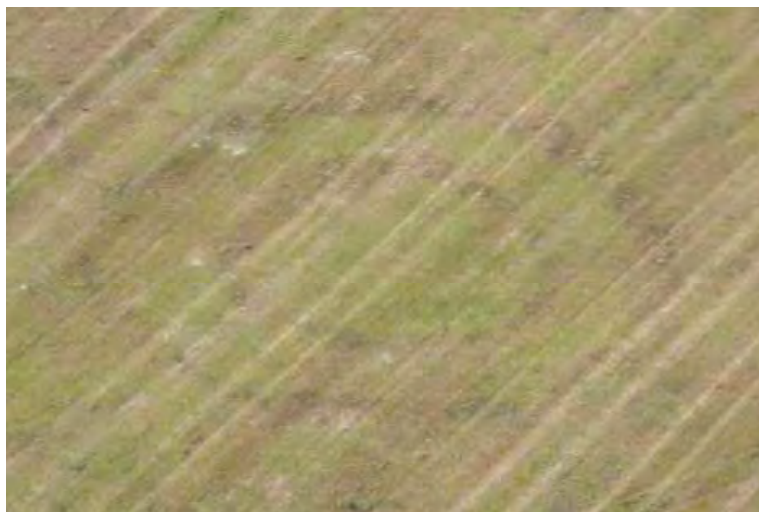
Hauke Jöns joined the group again and was pleased with the very positive feedback. The invariably long working days left participants indeed with tired eyes and their heads full of new information and impressions. The very positive

atmosphere created by the tutors helped, however, to overcome all symptoms of fatigue! The great experience and competence of the three main tutors Lidka, Otto and Dave as well as the always helpful junior tutors Antje and Enrico gave the participants a hardworking but nevertheless absolutely pleasant week from which they returned home with new experiences, knowledge and ideas – and friends!

At the end, a few numbers: The time that was spent in the aircraft per participant was four and a half hours in average. More than 3.5 GB of data were produced during the week in form of 2056 digital photographs (filling 6 CDs). The Sick Bags provided by Otto Braasch in great number did not have to be used and also from his

The small town of Barth  
(photo: I. Doyle).

The Donati Circle  
(photo: E. Donati).



famous chewing gum against sickness only three small pieces have been needed. Vorpommern's weather goddess was well disposed as there was only some rain on Monday afternoon and in the night from Thursday to Friday.

With this Training School, some of the main aims of the Culture 2000 project have been reached:

- the school gave young students and colleagues the opportunity to take their first steps in aerial archaeology or, in case of advanced participants, to broaden their knowledge and experience;

- the professional network of aerial archaeologists across Europe was enhanced and new meshes of the net were created, reaching countries where aerial archaeology is not yet a common means of archaeological prospection;

- creating awareness of threatened submerged sites in the Baltic.

The Archaeological State Museum of Mecklenburg-Vorpommern will, after this successful premiere, carry out two further, and similar training Schools in the years 2006 and 2007 and hopes to again be host to such enthusiastic groups of participants.



The nicest framework Culture 2000 can get (photo: D. MacLeod).