## THE CONTRIBUTION OF AIR PHOTOGRAPHY TO THE SETTLEMENT PATTERNS AND FIELD SYSTEM CHANGES IN BOHEMIA

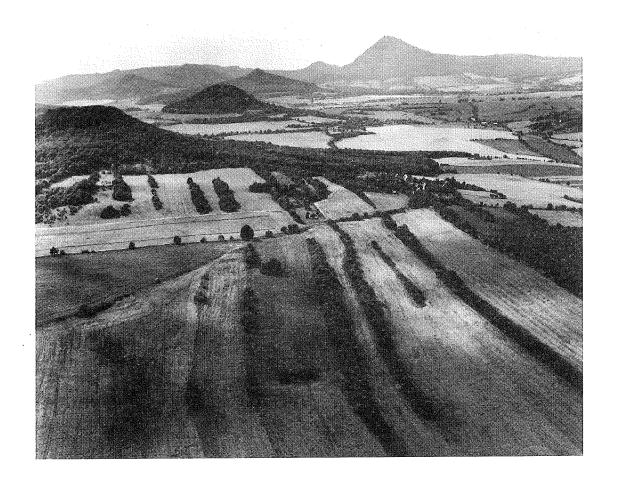
Martin GOJDA

Since the early 1990's the limitations imposed by state control which rendered flying and the photography of landscapes from the air impossible were abolished in Bohemia. This situation put forward the initiation of aerial archaeology programme in the Prague Institute of Archaeology, The Czech Academy of Sciences. Part of this programme is aimed at the systematic documentation of Bohemian historical landscape. Library of air photographs, negatives and diapositives has been managed by the Department of Spatial Archaeology of the Institute and by now it includes around 250 air-photographed sites, monuments and landscape transects dated to the medieval and post-medieval period. All of them show a rich variety of particular elements of Bohemian historical landscapes and, at the same time, they indicate their present state of preservation.

Of the medieval rural sites documented by aerial photographs the most interesting are those which show remains of late- and post-medieval landscape division and field systems. Enormous hits into Bohemian cultivated landscape at the turn of the 1940' and 1950' (comparable in its scale with the early Tudor or parliamentary enclosure in England), caused by the nationalization of small private fields which were unified into large pieces of land and passed to the administration of big cooperative farms, completely changed its appearance in most parts of the country. Ancient field boudaries disappeared in lowland territories and their remains are rarely traceable there (Fig. 1 - the Elbe basin in NW Bohemia with the Central Bohemian Highlands in the background). More often they remained preserved in hilly areas, mostly in the form of long strips (Fig. 2 - the Berounka basin 30 kilometres south-west of Prague).

A specific kind of field system is that connected with the so-called forest villages with long narrow stripes of land processing from village backyards. This type of land division is dated to the high-medieval period (13th-15th cents.) and attributable to the colonists who would be invited by kings and who started to occupy virgin border parts of the country covered by deep forests. Each stripe of land was in the possession of one owner. These units included crofts, fields, pastures, and woodland and climed up from valley bottoms to upper slopes of local hills including, quite often, their tops amounting up to one kilometre in length. The remains of this system of land division are still visible in the Bohemian-Moravian Highlands, in the Giant Mountains of northern Bohemia and in hilly parts of the country in the south (Fig. 3).

Another phenomenon of rural environment is a *village*. The study of how far the original plans and morphology of medieval villages have remained preserved till today deserves attention. Until the systematic aerial reconnaissance and documentation of villages started a couple of years ago it was impossible to estimate the state of preservation of original village cores and the range of occurence of their various forms. We have found out that even in higly industrialized parts of central Bohemian landscape there are number of villages with surprisingly well visible original ground-plans of either row-street plans: Fig. 4 - a village founded as late as the 1820's or agglomerated form (radial plan: Fig. 5; Fig. 6 - regular oval plan). A built-up moated site situated at the edge of a two-row green plan village displays Fig. 7.



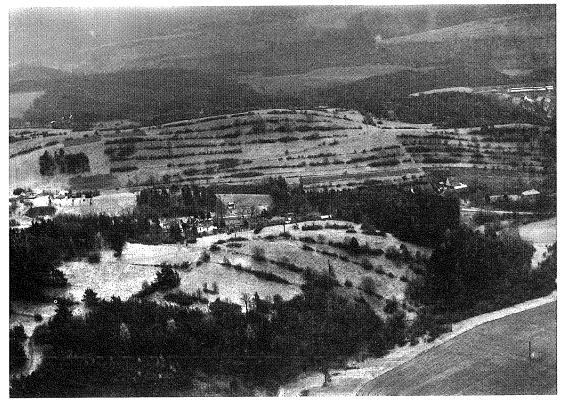


Fig. 1. Vchynice, distr. Litoměřice Fig. 2. Sýkořice, distr. Rakovník





Fig. 3. Jelemek, distr. Prachatice Fig. 4. Karlova ves, distr. Beroun

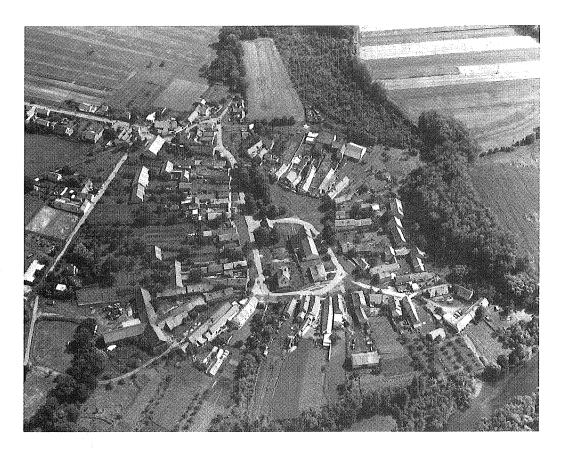




Fig. 5. Písty, distr. Litoměřice Fig. 6. Slatina, distr. Litoměřice



Fig. 7. Mnichovice, distr. Benešov