

Archaeology of Conflicts II

Pavel Drnovský – Petr Hejhal – Ladislav Rytíř (eds.)



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edited by
Pavel Drnovský – Petr Hejhal – Ladislav Rytíř

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Aviation Archaeology in South Bohemia

Rescue excavation at Airport Planá České Budějovice

Tomáš Pancíř

Abstract: *The subject of the article is a report about the rescue archaeological research in the area of Planá Budweis Airport (LKCS). This site was intensively used by military until 1989 and was not the subject of archaeological interest so far. Apart from a historical works, archival records, documents, or oral statements, until recently there was an absence of archaeological outputs that would otherwise present an impressive and important aviation monument of 20th century. The presented research is thus the first event in which the area of the airport near České Budějovice (Budweis) was archaeologically examined. The research was carried out by the Museum of South Bohemia in cooperation with the Archaeological Institute of the University of South Bohemia in České Budějovice. The reason for the rescue excavation were the two construction projects affecting the airport complex – construction of a building and roads, together with other related construction interventions (water supply, sewerage, modification and fencing of the complex, etc.). Before the research, the extensive preparation was made – the excerpt of available literature, archives, municipal chronicles and the study of historical aerial survey images. The example is also interviews arising from cooperation with witnesses, conducted primarily about the operation of the airport during World War II and about the individual aircraft crashes during the whole period, whose points of impact can be pre-localized and protected from agricultural or amateur activities thanks to cooperation between archaeology and research methods of oral history.*

The presented archaeological research methods have led to the unique opportunity to learn more about the military aviation complex. Thanks to the use of a metal detector, numerous materials have been registered at the construction site, reflecting the function of the airport from its creation to the present. These materials were mostly items related to the time when the airport was under the leadership of the German Luftwaffe. In addition to the separately stored findings, there was also identified the disturbed significant situation from this period. This situation was verified by making a trench, which confirmed the burned area and the building element of the barracks, dated to the period of the airport under German administration. For a better understanding of the site, magnetometry was applied in a certain part of the airport, thanks to that, another area with numerous archaeological finds was confirmed and defined in a non-destructive way, which will be considered in other reported construction activities.

The chapter will provide the reader with a report about the first rescue archaeological excavation of the airport near České Budějovice and will present a summary of the current state of archaeological knowledge about this site, associated with the aviation of the 20th century. The research seeks to supply the current state of knowledge of these and similar sites from the 20th century, associated with the military, and based on the presented methods the research want to bring new knowledge to the research of aeroarchaeology and conflict archaeology of the 20th century.

Keywords: Conflict Archaeology – World War 2 Archaeology – Aerial Archeology – Budweis Airport – Modern Conflict Archaeology.

Introduction

Monuments, which are the subjects of the archaeology of modernity (Krajíc – Vařeka – Měřínský 2017, 374; Vařeka 2013, 8) or the archaeology of modern times (Vařeka 2017, 392), currently receiving an increased attention and interest. Newly, the monuments related to the so-called dark cultural heritage of the conflicts of the 20th century are also being examined. Thanks to archaeology, we have a unique opportunity to look at the period of relatively recent but burdened by the negation and pain of war (Thomas – Seitsonen – Pekka Herva 2016, 1). World War II left various remnants across the world that can be archaeologically examined today. Many objects have been set up for the purposes of the conflict, the relics of which are often still visible to this day. Trenches, defensive positions, fortresses and other various military structures, not only these monuments can still be observed in the field with the naked eye. In addition to the rich spectrum of military equipment, there are, for example, radar stations, airport complexes and hangars, which often remain used to this day. The territory of the Czech lands is no exception; in the article we will take a closer look at the former military airport, located in southern Bohemia, close to the village of Planá near the town of České Budějovice (Budweis) and we will describe how the stay of individual armies, especially the German one, was reflected in the archaeological record during the rescue archaeological research.

Interim archaeological knowledge of the site. Excursion of the phenomenon of aeroarchaeology and an overview of archaeological research in the Czech Republic

At present, the conflict archaeology of the 20th century is devoted to military airport areas and similar monuments, especially the subdiscipline of aeroarchaeology (commonly known abroad as aviation archaeology), which we intend to focus closely. Within this discipline, crashed aircraft and monuments related to aviation, such as airports, are examined (Rak 2010, 250; Vařeka 2013). Research on similar sites and monuments in Czech lands, related to aeroarchaeology has been modest so far, so the scope for comparison with similar events or sites is not large at all. Nevertheless, we would like to mention a similar event, the excavation of a part of the airport complex near the town of Havlíčkův Brod, whose headquarters was superior to the Platzkommand Budweis (The Budweis Airport) during the war. The excavation was triggered by the construction work related to the cycle path. Under the leadership of the staff of the Vysočina Museum (Knápek – Rous 2014), many interesting objects related to aviation and military were discovered at the airport site, reflecting the function of the local airport and events in the region at the end of the war.

Aviation-related monuments also include anti-aircraft defense sites (see Cancer 2013, 129). Anti-aircraft batteries are closely related to the airport and its defense during the war, and abroad these monuments are also included in aeroarchaeology (Daly 2015, 69). As an example, from the Czech territory, we present the significant archaeological research of the site near Libkovice near the city of Most (Bohemia – Křivánek – Soukup 2014). Also, the relics of air defense in the Pilsen region are very well mapped; within the project “Air Defense of Pilsen”¹, it is possible to monitor the location of these objects on the website using an interactive map. These monuments are often captured on a historical aerial survey images, and similar shapes have been registered in the research area of Planá Airport.

The excavation and research of Planá Airport intends to supply the current state of knowledge of these, and similar sites connected with an air traffic in the twentieth century and represents the very

¹ Available at: www.protivzdušnaobrana.plzne.cz.

first event when the Budweis Airport (LKCS) complex was archaeologically examined. Due to this fact, the finding set described in this report may potentially be used in future for comparison with finding sets from similar events.

Planá ČB Airport – historical excursion of the site

The exposed place lies just 400 meters from the Vltava River and is located near the two medieval villages, dating from the 13th century (Planá) and the 14th century (Homole). According to previous observations, the place was not part of any historic settlement, but during the Middle Ages and modern times the place was used as an agricultural area. The historical map of the 18th century shows evidence of communication between the two villages just 150 meters south.

A new use of the area was given with the construction of the airport complex for the needs of the Budweis Aeroclub and the Czechoslovak Air Force. The construction works began in the 1930s, and in 1937 the airport was put into operation. In March 1939, the civilian airport was occupied by the German army and air force, the airport was attached to the headquarters in Vienna. The air connecting school for pilot training was established here, the runway was extended and a new hangar, air traffic control tower and a voice were built. The whole area was also guarded by a massive anti-aircraft defense. The airport soon became a large base, consisting of about 2,500 air and ground personnel, and assembly workshops, 20 of which were built by Gerhard Fieseler, located in the northeastern part of the complex. From 1944 to the end of war, the airport became the target of Allied air attacks, and its northern and eastern sides were then used as a place for piles of debris. The amount of waste, aircraft material and weapons remained at the airport even after the army left in May 1945 (Pecha – Vondra 2006, 110–112).

After the war, the airport soon became operational again. In 1948, for example, Israeli pilots were trained here (Irra 2017, 38–42). The airport and its area have undergone further modernization since the 1950s, and during the year of 1952 a concrete runway was built and put into functioning. In 1952, the Mig-15 jet planes appeared on Planá and in 1959 the first supersonic planes were also placed there (Irra 2004, 7–11).

Until the year 1989, the airport is an important military base with modern types of aircraft, the area undergoes several modernizations, consisting, for example, in the construction of three combat dispersions, reconstruction of the runway and barracks camp – the military barracks. The loss of its importance over time met the southern part of the airport complex, located outside of a concrete base. Specifically, it was a part near the hangars of the original and the oldest air base. Most of the landing area there became a field and still is an agricultural area to these days. In 2005 the airport acquired the status of a public national complex and in 2006 and 2007 the Czech Army abandoned the use of the rest of military facilities in the area.²

Archaeology and the oral history. Cooperation with witnesses of historical events

For the purpose of provide a comprehensive description of the historical events, that took place in the vicinity of the airport or nearby and could have been reflected in the archaeological record in any way,

² Source: Infoservice for the ceremonial signing of the agreement on the handover of Planá Airport near České Budějovice 2007. Department of Communication Strategies of the Ministry of Defense, Press and Information Service [online] [cited on 18 April 2021]. Available from www.army.cz (https://www.army.cz/images/id_8001_9000/8459/036.doc).

we contacted (in cooperation with the council of the adjacent village of Homole) old residents and witnesses.

Working with public memory accounts for the needs of archaeology is nothing new in the conflict archaeology of the 20th century, the cooperation of historical archaeology and oral history is very well established abroad and often leads to interesting findings (cf. Moshenska 2007; 2006; Riley 2005; Tolson 2014).

The elder local people were the ones who could come into contact with the individual events, and the direct interaction with the archaeological source was also possible or even common. Witness statements were often used by archaeologists to locate fallen aircraft; in the past, for example, archaeologists used witness statements during the excavation of the Hawker Hurricane in central London (Moshenska 2007, 92) or the Avro Lancaster near Fléville in France (Tolson 2014, 5). The local people memories were also valuable for archaeology during the study of the military facilities in Lapland (Seitsonen 2018).

The memories of the locals about the airport were acquired for the purpose of clarification of the situation during the war and after its end, and in particular, whole attempt was also made to try to partly locate some unregistered aircraft crash sites based on personal testimonies. The human memory about the historical events has the potential to point out the unknown historical events and even the aircraft accidents, which can be registered and so protected in future, also archaeologically examined.

In this article we present you short parts of some of the carried-out interviews with local people who personally remember what happened near the airport during Second World War and after its end:

*I saw those plane crashes there. After the end of the war there was the Spitfire there and one pilot made a flight and he lost consciousness and fell from a height. It was destroyed to pieces and the plane started to burn and then completely burned. Every now and then, the plane fell... That night, a German bomber was flying around Homol, at night and it was the dark. And they just had no connection (note: with airfield) and did not know, they flew around Homole for about 2 hours and could not find the airport. And finally, they fell. As there is a municipal office, there were oaks and over those oaks he fell and he was full of bombs and ammunition, so till the morning that ammunition was shooting there and meanwhile we all the locals fled to hide by the creek. Then, I went to school the next day and I saw them (note: the crew) there and they (note: their bodies) were whole burned. I looked at them and then I almost fainted."*³

*"There was a flak just behind the bridge, but it never fired. When the Americans attacked the airport, there was so much of clouds from schrapnels as the anti-aircraft guns fired on them. But the flak at the bridge never fired... There were stacks and boxes of ammunition, we cut bullets out of it and pulled out stockings with gunpowder, and we always put it somewhere and ignited it... I remember what was flying here. For example, Junkers (Junkers Ju 52)... There was a downed plane near Srubec village. Messerschmitt (note: Messerschmitt Bf 109) from the airport shot him down here. My good friend remembers that well. He saw the shot down, he looked at it. Even then, he survived a raid on Budweis in the Pětidomí district."*⁴

*When we went with boys from the Czech school. We went and then here flew a training aircraft German Arado (note: type of aircraft unknown), it was not as big as those Messerschmitt it was maybe a training aircraft, and it had a strange sound. Because of that sound, everyone knew that Arado was flying again. The pilot flew up and down, training. We stare, and suddenly he went down and burrowed into the field here... Our Czech school had an outbuilding, like a barn, a nice woodshed made of brick bricks and such. And there the German plane suddenly crushed itself near that house, and it was said that it was the turbine one (note: probably Messerschmitt 262 Schwalbe). So here in the field, it's Arado crush site and the Messerschmitt is at that school."*⁵

³ Memories of Josef Hes, the citizen of Homole.

⁴ Memories of František Čížek, the citizen of Černý Dub near Nové Homole.

⁵ Memories of Václav Votroubek. The citizen of Nové Homole.

Location of the excavated area

The researched area represents the construction site and related construction modifications and interventions, taking place in the part of the České Budějovice Airport (LKCS) complex, which falls under the cadastral area of Planá near České Budějovice. The site of the archaeological research was located outside the historical district of České Budějovice, 600 meters east of the village of Planá near Budweis and about 800 meters northeast of the village of Homole.

In terms of geomorphological composition within the Czech Republic, the site is located in the area of the České Budějovice Basin, less than 6 km from the border of the CHKO Blanský les. The geological basis of the environment here consists of fluvial soils with pre – Quaternary clay soil and whitewashed non – carbonate sands and floodplain gley soils, formed by non – carbonate middle deposits, towards the Vltava riverbed. The pedological conditions of the site and the studied environment were significantly changed as a result of construction modifications during the 1930s, when the construction of roads, drainage of the area and the construction of the airport took place. Construction modifications and interventions continued during the following years and they continue till this day, especially because of that, the pedology of the site is significantly changed – by frequent additions of rubbish layer. The destruction of the terrain is also historically documented due to Allied air raids on the airport during the war.

As part of the field archaeological observations by Tomáš Pancíř, the doctoral student of archaeology who specializes in 20th century conflict archaeology, an ongoing construction works were discovered near the hangars of the southern part of the České Budějovice Airport (LKCS) airport complex, where the airport helipad and the airport hangars, as well as spaces for renting business companies, are located. The leaderships of each of the construction works were immediately contacted and the rescue archaeological fieldwork was planned on site. The rescue research was triggered by two construction projects, the construction of freezers, the construction of roads and related construction activities (water supply, sewerage, landscaping and fencing, etc.).

The Archaeological research of the airport Planá

Research method and goals

The research was carried out in the form of watching-brief, documentation and rescue of archaeological finds and situations. The fieldwork was accompanied by non-destructive survey on the grassy side plot, which aimed to capture archaeologically interesting sites in advance. The identified simple stratigraphic situations were documented by drawing, photo documentation and GPS location.

The assessment of the site for the excavation took place in the field manually, the position of the surveyed object was subsequently generated on a topographic map and a cadastral map of the area in the GIS program. The same method was used during the metal detector survey of the construction site, where all archaeological findings were also located by the system of GPS. For the better orientation and localization of monuments as part of the site research we also used historical aerial survey photographs of the landscape from 1946, provided by the Czech Surveying and Cadaster Office.

The subject of the rescue archaeological excavation on the construction site was an overburden for the foundations of construction and widening of roads in the repair shops, including the dig and relocation of water supply, sewer construction, work on the gas pipeline and cable lines, and last but not least leveling the terrain, such as laying gutters for water drainage and others.

The location and its immediate surroundings have long struggled with the well-known phenomenon of treasure hunters. As a result of unprofessional activities and interventions on the site, it makes an overwhelming loss of objects of historical value every year, especially of the objects that could, from

an archaeological point of view, valuably supplement or clarify various organizational and functional aspects of the airport complex throughout its 90 years of existence. In addition, in 2007 the Ministry of Defense handed over the former military complex under civilian administration, so very little prevents amateur searchers from moving around the site. Due to this long-lasting phenomenon, a full-fledged survey was carried out with the help of metal detectors and volunteers from a number of collaborating individuals and certified staff for the ČB Museum and the JU Archaeological Institute.

The aim of the rescue archaeological excavation was to document and rescue movable and immovable archaeological finds from disturbed situations, as well as preliminary non-destructive survey of the adjacent plot to obtain more additional information about the site, which was long time unknown from the archaeological perspective. Non-destructive research was carried out using the method of magnetometry, the aim was to define another possible area with archaeological finds, which would be considered in the future.

The course of excavation and description of the site report

The archaeological watching-brief took place without stopping or delaying the course of construction. The archaeologist and potential collaborators operated during full construction activities, under the condition of notify the action to the construction management, which also gave the lectures about the principles of safety. There were not defined any points of archaeological interest in advance, which within the framework of the protection of monuments of archaeological significance, may alert the builders and arrange a prudent procedure when intervening in the terrain. To explain, absolutely the entire area where the construction works took place was classified with the potential of archaeological finds. Due to the nature of the aviation complex and to the related construction modifications, which consisted of making additional layers and re-leveling terrain with the airport waste, the excavation of a site could most likely provide the finds of military material and recent artefacts related to 20th century archaeology. Artefacts reflecting the function of the airport during its entire period of existence, when the area has many times become the scene of interesting, historically documented events, were assumed almost everywhere. For this reason, the construction area was monitored by archaeologists completely and supervision was not necessarily limited to certain sections.

At the beginning, the survey started with the help of a metal detector. Metal detector was to capture mainly surface artefacts at the level of turf and to register possible surface archaeological situations. Survey by the metal detector was also the last chance to locate the metal finds and to prevent the loss of their context. Each finding was recorded by using of the GPS and the individual coordinates of the finds were carefully recorded. The vast majority of registered artefacts were related to time of the airport area operation period, there were no older finds of items from earlier historical periods. The oldest finds from the metal detector survey are related to the military use of the place during World War II, the youngest finds are dated to the post-war period and the 21st century. Furthermore, the classic watching brief of the stripped area was planned and possible archaeological situations were monitored, the metal detector was used throughout the archaeological research, with the prediction of ubiquitous metal airport waste.

In the immediate vicinity of the dig for the water supply system at the construction site, we visually discovered the exposed burnt layer, mixed with typical clay – under normally conditions forming the surface of the airport.

The metal detector used at that place confirmed the numerous occurrences of metal objects and one large cumulation, proving that the archaeological situation was partially disturbed there. This was subsequently confirmed by setting the test pit 120x120 cm and lowering the terrain by 15 cm. The trench uncovered the foundations of the concrete pavement and was thus further extended around its perimeter by means of a network of square zones. The relics of the sidewalk stretched from the door, towards the line of the dig for the water supply system, unfortunately the construction work there removed its

nearest part and irreversibly disturbed the layers and the surrounding terrain. Under the preserved paving, however, when we excavated first 20 cm, an intact burned layer was discovered, which stretched along the entire surface of the trench to the edge of the water supply line and contained relics reflecting the airport's function at the time of use by the German Air Force and Army. Under the paving, we also managed to find a large accumulation of finds, which was originally reported by a metal detector. The accumulation consisted mainly of short and long lighting types of ammunition for the German-made signal pistol (see Anderson 2011; Dolínek 2007), marked in red and green, variously inscribed. There was also located a fired iron cartridge, an airline tag and other interesting objects. In addition to the separate hoard of flares with metals, in a layer, which consists mainly of charcoal and sinter, we also found other material of various kind and a random arrangement – scattered just below the paved slabs.

From the find assemblage, it is certainly worth mentioning the rank insignia of the German Luftwaffe Air Force, buttons from the German uniform and coins from the period of Protectorate of Bohemia and Moravia. Furthermore, there were also present a lot of components and parts, categorically preliminarily included in aviation technology.

The registered layer with the described artefacts, scattered in a cumulation or deposited randomly, under the bricks and blocks forming the sidewalk, can be hypothetically interpreted as a remnant of the airport cleaning during the war. There were frequent air accidents at the airport, and the area also faced several air raids by American planes during the war, which severely damaged the airport and the aircrafts located there (Irta 2011, 17). As a result of the air attacks, the debris was subsequently removed and moved to the eastern and northern part of the airport, the accumulation of it is also historically documented (Pecha – Vondra 2006, 111). However, this was not necessarily the rule, and a waste could be randomly taken away throughout the wider area. The material, registered in the burnt layer, can thus be a reflection of individual events and activities taking place at the airport under German administration.

For the possible interpretation of the origin of the layer and its finds we also provide another hypothesis, in which the layer with material represents a remnant of after-war cleaning activities, which according to historical records was to take place immediately after the conflict and affected a large part of the area, when the airport and surroundings were cleared of ammunition and waste material.

Due to this hypothesis, the sidewalk itself could be completed during the post-war period. According to historical data, immediately after the war, the task of material and technical security was solved at the airport and its surroundings, and military material, which the German army left here in large numbers freely scattered in the surrounding forests and airfield, was concentrated. This material was consisted of ammunition – from guns and rifles, bombs and mines, which was urgent to clean up and dispose of. During several months of hard work, 200 000 pieces of ammunition and 110 tons of bombs were collected, and this event could hypothetically affect the cleaning of all material related to the military (Irta 2017, 14–15). In this regard, it should be noted that no explosives or active ammunition were found during the archaeological excavation, and it was not necessary to contact the pyrotechnic service. Despite a fact of the absence of live ammunition, however, we asked for the telephone contact for the person to consult military findings.

The excavated disturbed situation near the one of the airport buildings contained, due to the rest of surrounding examined terrain of the construction site, the largest number of objects from the period of World War II. During the metal detector prospection of the surrounding terrain, we did not find so many relics, the absence of findings supports the hypothesis of clearing of the area. Moreover, the whole fact would hypothetically lead to define the disturbed situation as the original and undisturbed layer, dated to the period of the German administration of airport.

Examples of findings

The finding assemblage is gradually processed due to the high number of artefacts and complexity of conservation. Due to the area and its purpose as the air base, we registered aircraft components and

air equipment from the war period to the present. In addition to aircraft finds and artefacts, they were also discovered the parts of military equipment, armaments, and personal equipment. Most of the findings identified so far reflect the activity of the German army and the Luftwaffe at the site, other registered items reflect the post-war use of the area by the Czechoslovak Army. These are mainly army gas masks. According to the construction management, there were dozens of them in the area, but most of them were unfortunately taken away as a worthless garbage before the start of archaeological research. Coins were also found. This category of finds is represented by a coin from the period of the Protectorate of Bohemia and Moravia, which was registered in the examined disturbed situation. Another find includes a post-war coinage from 1949, which was discovered during a metal detector survey of the area near the one of hangars. As already mentioned, the finding of sharp ammunition at the site was not made, there was only a finding of a larger, probably flak cartridge made in Germany, but the artefact is difficult to specify due to the heavy corrosion.

By far the most numerous find of ammo represent the cumulation of fired cartridges of the German signal pistol, the find was made in a disturbed situation in the layer directly under the sidewalk blocks. The signal pistol was generally used for communication between troops, especially for signaling and lighting. The cartridges were light (leuchtpatrone) and signal (signalpatrone) (Anderson 2011, 21–26). Initially, during the World War II the German army used Walther signal pistols, then they were replaced during the war by a model 42, caliber 26.65 mm (Dolínek 2007). During the excavation of the disturbed layer, the cartridge for the signal pistol was a common find, we discovered twelve pieces of cartridge, which consisted of various color designations, as well as design. Not only for this reason, but we also decided to introduce the individual types of cartridges and at least briefly describe the finding. During the research, all types of cartridges were registered. Some of the cartridges were so well preserved that they bore the preserved German inscriptions, color markings, or expiration date.

Salvage non-destructive survey of the grassy side area using magnetometry

As it has been said, no type of non-destructive or destructive archaeological research has ever been carried out on the site of the České Budějovice airport. The site did not enjoy the interest of archaeologists and before the monuments of the most recent periods in the context of modern conflict archaeology began to be taken into account, many finds were dismantled by amateurs or disappeared as part of building modifications. This often happens even after drawing attention to the potential of these modern monuments, the non-professional public usually still misses the point why study this period archaeologically and solving the preservation of the cultural heritage of modern times. The presented research is indeed the first professional event when the airport was examined by archaeologists.

During the rescue excavation, the possibilities of how to better define the site with archaeological finds and thus survey individual areas with archaeological potential were addressed. For this reason, the magnetometry was applied in the grassy part of the airport, close to the construction site. Thanks to that fieldwork we were able to register potential deviations of magnetism caused by metal objects. This device is very sensitive to metal and burned materials – pipes, magnetically inhomogeneous weights, fireplaces, bricks, production waste, etc. (Křivánek 2016, 292). The main complication in surveyed area represented two metal football gates, as the grassy area was formerly the area of a football field that the army had built here. Despite these negatives, the measurement was performed without problems and was not affected by the surrounding negative influences.

By using a measuring tape, the area of 100x100 meters was marked for the survey, this area was then surveyed in a network of 1 x 0.25 m (profile distance 1 m, survey density within the profile 0.25 m) using a fluxgate magnetometer FM256, Geoscan Research. The resulting data were then interpolated

in the Surfer program. On the model, you can see the numerous anomalies, detected by the device during the survey. In addition to the standard values, marked in green, there is also presence of numerous fluctuations. In certain parts, they reach more than 100 nanotesla in the positive scale, this number probably means an indication of larger metal items or situations with a large number of metal material. These registered situations are truly large, represented by anomalies, often with a size of 15 to 20 meters. Some of these large accumulations have been identified as period midden due to the eye-visible surface parts. It could be assumed that the surveyed area, where the material ended, could be defined as a reflection of various landfills or rubbish disposal throughout its existence. Furthermore, away of these numerous findings there is a part of area with standard values and only smaller fluctuations. This is an area of the football field, which was probably cleared, and the material was taken away during the cleaning of the airport area.

Conclusion

As a part of the archaeological excavation of the place, we tried to document and save all of the registered finds of various periods and capture even the oldest archaeological finds. However, after the excavation of the area and evaluating the potential of the site from the 20th century, the research focused mainly on the preservation of World War II artefacts and situations, whose documentation and rescue, due to the complete absence of finds from older periods and a large set of material from the described period of the airport, eventually became the primal fill of work. The airport and especially the publicly accessible parts of the area have long escaped the interest of archaeologists and were more of a destination for amateur seekers of World War II valuables, as a result of which hundreds of artifacts with valuable contextual information about the operation and organization of the airport disappeared. The activities of individual construction companies aroused the urgent need to recognize the site from a professional archaeological view, in connection with which a justified effort arose to save as many historical artifacts as possible. In the context of Budweis Airport, even ordinary waste, forming a variety of items, parts and plane components, became very valuable evidence of operation on the airfield, depicting the chaotic situation at the end of World War II, when the area underwent several air raids by the Allies and the runway itself was littered with large number of aircraft wrecks, equipment and materials. The finding assemblage documents the presence of the airport crew, apart from the finding of several buttons and the rank of Luftwaffe, it is good to mention the finding of a total of twelve cartridges for the signal pistol, whose presence may refer to the signaling of the military complex during the German occupation. The presence of a large number of these finds located in the burnout layer may hypothetically indicate a loss finding or waste, leveled together with the rubble during the war, or shortly after. For a better understanding of the site and in order to define other areas of the airport base with an archaeological potential of finds, a non-destructive survey method, magnetometry, was performed. The survey confirmed a large area literally littered with magnetic anomalies, thanks to this advance action the thing is registered and in case of further construction activities, part of the area with archaeological situations will not be left to destruction but will have a chance to be properly examined. In the future, it would be a welcomed to subject to geophysical survey the entire airport complex, including the agricultural areas used to be the runway during the certain period. However, this event would be financially demanding and time-consuming. Accessible parts of the area are still visited by military searchers with metal detectors and the site loses many artifacts. Archaeologists do their best to address and encourage these amateur individuals or groups to cooperation. All the findings presented here from the archaeological excavation certainly represent an extremely valuable insight into the history of aviation and the organizational use of the airport area and facilities at Planá Airport throughout its existence. The complete evaluation of the found file and its conservation is a longer-term issue, it will be solved in cooperation with specialists in the field of aviation.

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Memories and oral statements

Josef Hes, the date of testimony 26.5.2021

František Čížek, the date of testimony 8.6.2021

Václav Votroubek, the date of testimony 11.7.2021

Tomáš Pancíř

Archeologický ústav

Filozofické fakulty Jihočeské univerzity v Českých Budějovicích

pancir.tom665@gmail.com

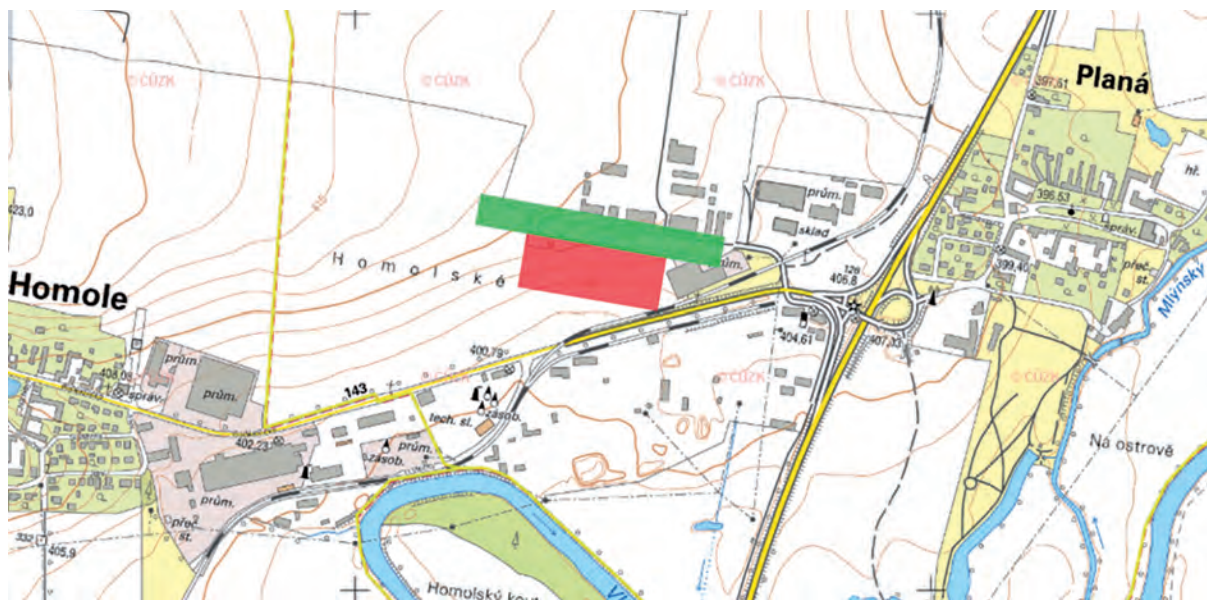


Fig.1: The current state of the site on a topographic map at a scale of 1: 10,000 with a marking of the area of individual construction activities. Note: Green – Road construction; Red – Hall construction.



Fig.2: Detail of the buildings and the area of the original airport on the aerial survey image from 1946. The picture was provided by VGHÚR in Dobruška. © ČÚZK.



Fig.3: Detail of the buildings of the original airport, built before the war, from 1937, mostly remained to these days. Plan of the site from 1950. 1 – plane hangar number one, 2 – plane hangar number two, 3 – internship building, 4 – the squadron building, 5 – building for airplanes, 6 – building of flight control, meteorology, telex, 7 – the building for planes s-199 Avia (Irra 2017, 104).



Fig.4: The area of the original airport site from 1946–1947. View from the East (Irra 2017, 33).



Fig.5: The ubiquitous airport waste – technology and material left by the German army at the airport site, which is currently the subject of archaeological interest (Irra 2017, 15).



Fig.6.: Planá – airport complex. Position of construction of the road and laying of the water supply, (Photo by T. Pancíř). Overburden as part of landscaping, related to the construction of the hall – a building in the distance



Fig.7: Survey of the construction site and area of the airport using a metal detector. The group of the finds (photo by T. Pancíř).



Fig.8: Survey of the construction site and area of the airport using a metal detector. Post-war Czechoslovak coin from 1948 (photo by T. Pancíř).



Fig.9: Trench 1. Artificial layer 15 cm. Preserved part of the historic sidewalk to the one of the Planá airport building. In the southern part of the trench, the paving was destroyed due to a ditch for the water supply (photo by T. Pancíř).



Fig.10: Trench 1. Artificial layer 15 cm. Detail of the sidewalk. (photo by T.Pancíř).



Fig.11: Trench 1. Artificial layer 15 cm. The find of the German aviation rank designation (photo by T. Pancíř).



Fig.12: Trench 1. Artificial layer 20 cm. The layer under the paving and detail of the cumulation of finds (photo by T.Pancíř).



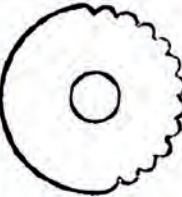
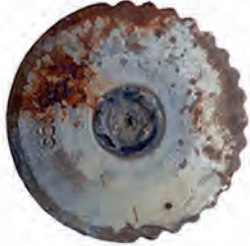
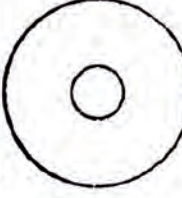
Fig.13: The detail of cumulation. The find of ammunition for a German signal pistol (photo by T. Pancíř).

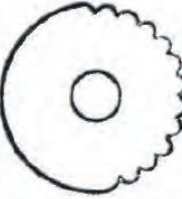
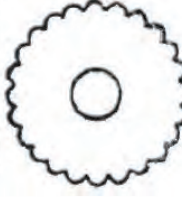


Fig.14: The type of finds. A – Aircraft parts and airport equipment B – military equipment, armaments and personal equipment: Fragments of porcelain and plastic scale, together with military material (lid with german Inscription, button, gas mask buckle, decontamination ointment, signal pistol cartridge, eternit lid, shoe polish, etc.) (photo by T. Pancíř).



Fig.15: The type of finds. Tags. A – with German description; B – with the number of 808 (photo T. Pancíř).

Patronenart	Farbe der Papphülse	Fühlbare Merkmale am Bodenrand	Sichtbare Merkmale durch den Lackabschluß	
Leuchtpatrone M.-Patrone R.-Patrone	hell-grau schwarz hell-grau	 Bodenrand halb glatt, halb rau	weiß weiß, mit aufgedrücktem schwarzem M	
Signalpatrone Einzelstern, rot Doppelstern, rot	rot	 Bodenrand rau	rot rot, mit schwarzem Trennstrich	
Sinalpatronen Einzelstern, grün Doppelstern, grün	grün	 Bodenrand glatt	grün grün, mit schwarzem Trennstrich	

Patronenart	Farbe der Papphülse	Fühlbare Merkmale am Bodenrand	Sichtbare Merkmale durch den Lackabschluß	
Leuchtpatrone M.-Patrone R.-Patrone	hell-grau schwarz hell-grau	 Bodenrand halb glatt, halb rau	weiß weiß, mit aufgedrücktem schwarzem M	
Signalpatrone Einzelstern, rot Doppelstern, rot	rot	 Bodenrand rau	rot rot, mit schwarzem Trennstrich	
Sinalpatronen Einzelstern, grün Doppelstern, grün	grün	 Bodenrand glatt	grün grün, mit schwarzem Trennstrich	

Obr.16: Left: Individual types and markings of ammunition from the manual Heinz Denckler, Die Leuchtpistole und ihr Gebrauch, Berlin 1942; Right: Identical examples of ammunition design, forming a finding set (photo by T. Pancíř).



Fig.17: Fig. 17: Individual types and markings of ammunition from the finding set (photo by T. Pancíř).

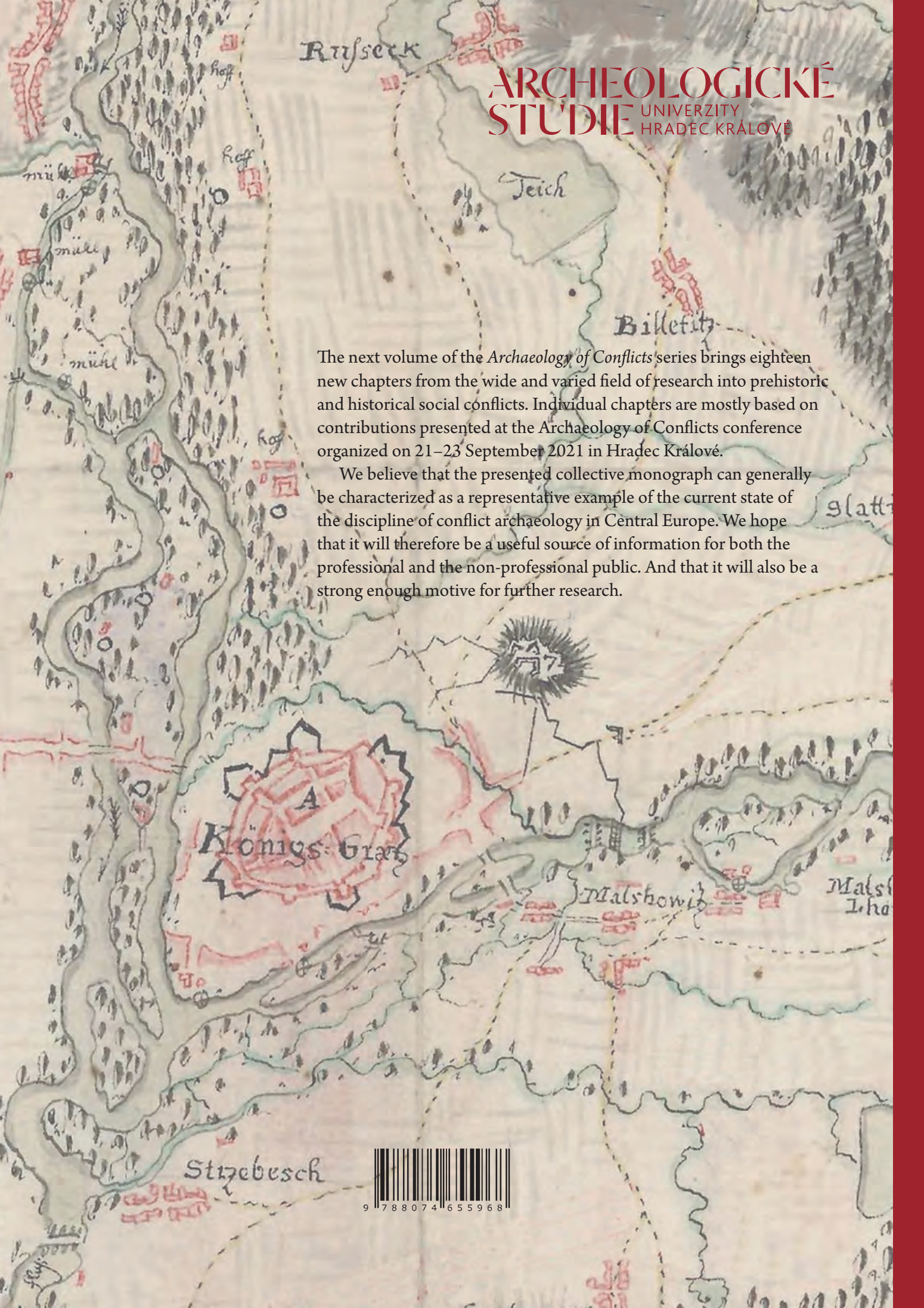
Fig.18: Pieces of signal cartridge with preserved inscription "Rauchspurpatrone", 1943 on the left site (photo by T. Pancíř).



Fig.19: The magnetometric survey of the area (photo by T. Pancíř).



Fig.20: The results of magnetometric survey (processed by J. John).

A historical map of the Hradec Králové region, showing the city of Hradec Králové (Königs-Gratz) in the center, surrounded by a river and various settlements. The map is drawn in a hand-drawn style with red and black ink. The city is labeled 'Königs-Gratz' and 'A'. Other labels include 'Russek', 'Teich', 'Biletitz', 'Stizebesch', 'Malschowitz', and 'Malsch I. h'. The map also shows various roads, rivers, and small settlements.

ARCHEOLOGICKÉ STUDIE

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The next volume of the *Archaeology of Conflicts* series brings eighteen new chapters from the wide and varied field of research into prehistoric and historical social conflicts. Individual chapters are mostly based on contributions presented at the Archaeology of Conflicts conference organized on 21–23 September 2021 in Hradec Králové.

We believe that the presented collective monograph can generally be characterized as a representative example of the current state of the discipline of conflict archaeology in Central Europe. We hope that it will therefore be a useful source of information for both the professional and the non-professional public. And that it will also be a strong enough motive for further research.



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