

UNIVERSITY OF PUBLIC SERVICE
Doctoral School of Military Sciences

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**The specialities of the establishment of an independent Hungarian
air arm and its first combat use (1918–1919)**

author's review for Doctor of Philosophy (PhD) thesis

Supervisor:

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FORMULATION OF THE SCIENTIFIC PROBLEM

The period of the First Hungarian People's Republic and the Hungarian Soviet Republic can be considered one of the stepchildren of Hungarian military history, and this is also true for the arm, such as the aviation troops, which was organised and operated mainly on a professional basis, mostly independently of political conditions and changes. Prior to the change of regime, only two studies had been published that attempted to deal with the subject in any meaningful way, while the volumes of summarised aviation history published in 1977 and 1986 each devoted a short section to it, but did not explore it in any depth; after that, military aviation of that era was essentially forgotten. This was despite the fact that the core of the flying soldiers who fought in and survived the World War I formed the core of the aviation troops not only of the Hungarian People's Republic and the Hungarian Soviet Republic, but also of the Horthy era during the period of the hiding, at least at the beginning, ensuring the stability and quality of this particular force. Likewise, the technical background of the military air service dates back to the years of the Great War. This is certainly one of the main, if not the main, difficulties in researching the subject, as it can only be dealt with in a meaningful way if the background is thoroughly understood.

Another reason for this omission may be the subjective approach to the history of the turbulent period following the end of the „Great War”, which has been characterised by a kind of alienated detachment, the result of conflicting and sometimes extreme assessments over the past century. However, the centenary has brought the events of these divisive years back into the historiographical discourse, providing a basis and motivation for a similarly objective examination of military history. This is greatly aided by the wide range of surviving sources, but it is also important to underline that in recent decades relevant research on the history of aviation has been carried out and published in all the neighbouring countries. In the light of the above, it seems timely and necessary to provide a detailed source-based analysis and presentation of Hungarian military aviation of the period.

RESEARCH HYPOTHESES

Before starting the research and writing the dissertation, I made the following assumptions:

1. Having (partial) information on the functioning of the Austro-Hungarian Monarchy's air service, their personnel and their members of Hungarian origin (I conducted research on these in

parallel with the topic of this dissertation), I assumed that based on this information, the Hungarian military leadership was able to organise a functioning, independent aviation corps after World War I, which met the requirements of the time.

2. I assumed that for effective operation it was essential that a significant number of the surviving airmen (mainly the flying personnel) should serve in the Hungarian aviation troops, regardless of their political views, and that a (partially) permissive attitude of the political/military leadership was also necessary, which gave priority to professional aspects.

3. Also based on prior knowledge, I assumed that the Hungarian aircraft factories operating during the world war could continue their productive activity, which ensured the necessary supply of the air service, and that this effective production capacity served as the primary source of the aircraft stock.

4. I assumed that in the fighting of the Hungarian Soviet Republic, the Hungarian aviation troops were able to accomplish their tasks, performing a meaningful activity, even superior to the opposing parties. This was based on the capabilities, numbers and world war experience of Hungarian airmen, which presumably had an impact on the role of the aviation troops during the campaigns.

5. I also assumed that the characteristics and effects of the aerial warfare (e.g. in the form of air attacks on the hinterland) appeared as a result of the fighting activity in the country's airspace in 1919 in a typical way during the world war, but I had no data on the characteristics and parameters of this before the research began.

RESEARCH OBJECTIVES

The scientific objective of my dissertation is to present the establishment of the independent Hungarian flying corps, its operation between November 1918 and December 1919, its organisational system, personnel and material conditions, mainly supported by archival sources, using domestic and foreign literature. In this dissertation I plan to achieve the following objectives:

1. To illustrate the establishment and organizational changes of the Hungarian aviation troops as a coherent process, placed in a historical context.
2. To present the development of the personnel of the aviation corps, their characteristics and the underlying processes, thanks to which the tried and tested airmen of the Monarchy – both for and against political changes – not only served in the air service of the Hungarian People's

Republic or the Hungarian Soviet Republic, but also formed the core of the aviation troops of the Horthy era.

3. A quantitative analysis of the performance and changes in the Hungarian aircraft production from the period of the Austro-Hungarian Monarchy, through the months of the Károlyi government and the struggles of the Hungarian Soviet Republic, to the quasi-looting of the Hungarian aircraft industry by the Romanians; demonstrating the productive operation of the Hungarian aircraft manufacturing.

4. A description of the necessary efforts of the Hungarian military leadership to salvage the material of the aviation replacement companies located within the borders of the country at that time, to avert the threats posed by the shifting of the demarcation line and the activities of the Entente troops, and to dismantle the German (air) troops from the Balkans; giving a quantified picture of how much the aviation troops benefited from all this.

5. To show, by means of a comparative analysis, that Hungarian air service outperformed their counterparts from all the neighbouring countries, both in quality and quantity.

6. To focus on the hitherto unknown or little known aspects of the first air war over Hungary, such as the establishment and operation of the home observation and air defence system, the first strategic air attacks against Hungarian targets and the combined use of aircraft on certain front lines (e.g. the battles around Léva, the Tisza offensive).

7. With a detailed and in-depth analysis of all these components, I would like to refute and overwrite the still existing assertion and belief that after the break-up of the Austro-Hungarian Monarchy, the Hungarian military leaders were only engaged in the theoretical realisation of the air arm, and that they did not go any further, i.e. they had no possibility of putting it into practice.

RESEARCH METHODS

To achieve the research objectives, I used the following research methods:

- I studied the available national and international archival documents on the subject, as well as the relevant literature, and processed them through source-critical analysis and evaluation.
- In the course of the processing, the whole research topic was broken down into theoretical and practical levels using analysis and synthesis, and the resulting partial knowledge was then combined into a coherent whole.

- The research carried out was qualitative and quantitative, systematic in nature, and I used induction to formulate general laws from the data obtained, and deduction to draw specific conclusions from the general findings.
- I compared the facts from different sources and examined them to try to resolve any contradictions.
- I consulted experts in the field, mainly from abroad (Czech, French, Italian, Slovak), who provided me with professional guidance and archival sources that they discovered in their own research.
- The partial results of my research were processed and published regularly.

STRUCTURE OF THE DISSERTATION

In the introduction, I formulate the scientific problem on which the dissertation is based, outline the research hypotheses, define the research objectives and methods, analyse the domestic and foreign sources and literature, and describe the structure of the dissertation.

In chapter one, I give an overview of the professional discourse on the organisation of the Honvéd air service that was conducted by the Honvéd flying officers from the spring of 1918 onwards, and, organically related to this, on the organisation of Austro-Hungarian aviation troops.

In chapter two, I briefly outline the air events related to the last Italian offensive launched on 24 October 1918: the air services of the opposing sides in quantitative and qualitative comparison, the extent of the use of air service, and the activities and retreat of the Austro-Hungarian aviation troops after the Italian breakthrough.

In chapter three, I draw the organisational structure of the newly established Hungarian aviation troops, and, in the spirit of continuity, following the transformations brought about by an assessment and reckoning with ever-shrinking opportunities and realities, the structure of the air services of the Hungarian Soviet Republic and, after its fall, of the National Army – with details of the relevant regulations and the organisational and subordinate changes made during the armed conflicts. Linked to this chapter are three sub-chapters, each dealing with a marginal but noteworthy area.

In chapter four, the personnel of the aviation troops are under the spotlight, whose participation and movements are fairly well traced, giving an accurate picture of their numbers, composition and, in places, political sympathies, to show that a large number of the airmen who served the Austro-Hungarian Monarchy were able to serve in the army of the Hungarian

People's Republic without any problems, and then in the Hungarian Soviet Republic, before continuing their service in the National Army.

In chapter five, I first provide an insight into the productive activities of the three aircraft factories operating in the country during the World War I, and, within the limits of the available sources, I will give an approximate picture of their post-war production. I will also take stock of the process of salvaging the material of the eight aviation replacement companies located within the country's borders at that time, which were threatened by the shifting of the demarcation line and the activities of the Entente troops, and of the implementation of the obligation to dismantle the German Mackensen Army (air) troops from the Balkans. The chapter concludes with a summary of the looting of the country's aircraft industry and air force.

In chapter six, I describe the process of building air services in the mostly newly forming nation-states parallel to that of the Hungarians, with particular reference to the countries with which we were at war in 1919, and the role and use of French air units operating in these countries.

In chapter seven, I describe the efforts of the military leadership of the Hungarian Soviet Republic to build up the country's aerial observation and defense system, including the creation of anti-aircraft artillery and the flexible use of fighter aircraft.

In chapter eight, I give an overview of the practical activities of the Hungarian air corps, from the formations of the Hungarian People's Republic through the „red” squadrons to the units of the National Army. The emphasis is, of course, on the air activity accompanying the fighting of the Hungarian Soviet government, in particular the direct interventions of each belligerent in the ground fighting and the attacks on the rear, which can be considered strategic. Also included as a sub-chapter in this section is a topic which, although peripheral, is worth mentioning.

SUMMERISED CONCLUSIONS

In my thesis, I attempted to review the process and details of the establishment and changes of the independent Hungarian military aviation. My thesis covers the events of little more than a year (November 1918 - December 1919), but it was nevertheless it was an opportunity to present changes and new phenomena that were difficult to imagine in the period before. This brief period was perhaps most distinctive in that it was a time of adapting to new circumstances and challenges in an exceptionally fast-changing world, where politics reacted to the turbulence of everyday life, sometimes with freezes and sometimes with extremes. In all this chaotic and

disintegrating disorder, a fledgling, unprecedented arm had to move towards organisation and efficiency, to replace occasionally failing or inoperative transport, postal services or even to perform police/force functions. In the meantime, the international situation was also intensifying, and 4,5 months after the long-awaited end of the world war, Hungary was again involved in armed conflict, but this time it was to defend its own territorial integrity and borders. Even so, the flying profession remained the central organizing element of the new arm, along which the flying community, which knew each other and was largely cohesive, was able to remain functional during the fighting - apart from a few frictions - largely independently of political trends, and the political and military leadership had to adapt to this, as these soldiers had irreplaceable knowledge and experience.

Following the analyses and investigations carried out after my research, my hypotheses on the chosen topic were confirmed as follows:

1. The new Hungarian military leadership, including the flying chief officers and flying officers, which was set up after World War I, was able to successfully organise the institution of independent Hungarian air service, building on the legacy of the Austro-Hungarian aviation troops and the experience gained there, and to ensure its operation in accordance with the rapidly changing circumstances, the available opportunities and the current requirements.
2. Hungarian personnel, including primarily aircrew, played a major role in the operation of the Austro-Hungarian aviation troops, and the opportunity to serve in the Hungarian air service was a motivating factor for many of the members of the company who had trained in the operations of the world war. Political changes did not have a significant impact on this, as most of these pilots could be found in the aviation corps of the Hungarian Soviet Republic and the National Army - with some differences, obviously, since the flying officers who were considered to be persecuted temporarily left the air service or sought refuge in counter-revolutionary Szeged, while the pilots who had compromised themselves during the Hungarian Soviet government or were considered to be above the required number, had no place in the "national" air service. This continuity and relative unchangedness is clearly due to the knowledge and experience of the flying profession and their indispensability.
3. The three aircraft factories acting around the capital during the world war did not cease their activities in the autumn of 1918, after the end of the fighting, but continued their productive output - albeit in reduced operation - and played a fundamental role in supplying the aviation troops, primarily by assembling the aircraft of the series already started. The quality and performance of the aircraft provided by the Hungarian aircraft factories met the requirements of

the time, some of them being among the most modern aircraft of the time (Fokker D.VII, Hansa-Brandenburg W.29), others being exceptionally reliable and/or high performance aircraft in their category (Hansa-Brandenburg C.I, UFAG C.I), thus establishing a significant advantage for Hungarian aircrews.

4. In the first "air war" in Hungarian airspace, the Hungarian air corps met the requirements in most respects. The nine squadrons successfully carried out their mainly reconnaissance tasks (as evidenced by the high number of known sorties), occasionally supported ground combat from the air, and achieved results in the field of air defence. The redeployment and concentration of aviation units in support of operations was carried out regularly and effectively, but it remains an open question why the numerical and qualitative superiority could not be converted into real superiority on the individual front lines or sections of front lines, and whether there was any effort to do so.

5. The deployment of military aircraft over Hungary brought about the phenomenon of the vulnerability of the hinterland, as enemy aircraft attacked strategic targets and civilian installations as well as civilians in the course of the three-dimensional warfare in 1919, which resulted in numerous casualties and sometimes even deaths. It also proved that the first air attacks on the country date back two decades earlier than previously known.

NEW SCIENTIFIC RESULTS

In my dissertation, I achieved the following scientific objectives:

1. Based on archival sources, from the disbandment of the Austro-Hungarian flying corps and the return of the Hungarian airmen, I comprehensively described the process by which the institution of the Hungarian flying corps was established and functioned even in the midst of significant political changes, highlighting a series of hitherto unknown plans and decisions that were essential for understanding the transformation of the organisational structure.
2. Based on extensive research, I compiled a database of the flying personnel who undertook military flying service in 1918-1919, and by analysing and evaluating the data I demonstrated that there is a significant overlap between the personnel (aircrew) of the Hungarian People's Republic, the Hungarian Soviet Republic and the National Army's flying units.
3. Summarizing the performance of Hungarian aircraft factories in World War I, and starting from the known situation at the end of October 1918, I made an analytical comparison of different types of sources (archival documents, international literature, photographs) and prepared a numerical summary of the performance of these aircraft factories after the World War I.
4. I researched, organised and summarised the process of salvaging the material of the aviation replacement companies in the territory of the contemporary Kingdom of Hungary and the decommissioning of the Mackensen army, which was withdrawing from the Balkans. I drew conclusions from the records of the Cinkota Material Depot and from the numerous surviving flight reports, as to how much the Hungarian air service benefited from these efforts.
5. I outlined the attempts of the opposing parties to build up aviation corps, which thus became comparable to the Hungarian air forces in terms of quantity and quality.
6. In parallel with the history of the Hungarian Soviet Republic's battles, I illustrated the changes in the subordination of aviation troops and demonstrated that the military leadership was able to deploy an air service according to the requirements of the operations, forming centres of gravity on a given front (section) or even by the dislocation of detachments created from squadrons. I also compared the different aspects of each belligerent's flying activities, their impact on operations and on industrial actors and civilians, and critically analysed the use of „red” aviation troops.
7. I refuted the earlier views which stated that after the World War I there was no possibility for Hungary to organise and maintain an air service.

My research can be regarded as valuable in many respects, as I researched, analysed and systematised previously unknown, unexplored or unprocessed domestic and foreign archival materials and literature, the examination, description and interaction analysis of which has been missing from Hungarian and international literature or has only been published in fragments.

PRACTICAL USE OF RESEARCH RESULTS, RECOMMENDATIONS

The research results of the doctoral thesis can be used in the fields of military science, history and education (as teaching aids). The results of the research can be used for the courses of the Faculty of Military Science and Officer Training of the University of Public Service in the field of military history and military science, for the work of historical research centres, and for the teaching of social science (history) and military history in higher education institutions of the humanities and teacher training, as well as in military secondary schools.

The new scientific results of the doctoral thesis can contribute to a more thorough understanding of the history of the period, and historians can use it as a supplement to their existing knowledge and as a source for further research with a broader perspective, as well as a source for summarised or thematic research on military history or local history. They can also be an important contribution to research on industrial and transport history, as well as social history, especially with regard to the situation, opportunities and motivations of the military officer class after the World War I. They can also provide an opportunity for international debate, particularly in the academic workshops of the former belligerent countries concerned or their successor states.

The results of the research can also be a source of information for people who are open to military science or military history, but have no previous military training or knowledge.

With regard to the thesis, the possibility of further research is also open and recommended, with the main focus on the activities of the Royal Romanian Army's air service in Hungary, its further details through Romanian archival sources, and the clarification of the personal data of the Hungarian sailors.

The results of the research will be further used in the form of a monograph to be published in Hungary and abroad.

LIST OF RELATED PUBLICATIONS OF THE AUTHOR

A katonai repülés kezdetei Debrecenben (1918–1919). - In. A Hajdú-Bihar Megyei Levéltár Évkönyve 35. (2018) - p. 61–72.

Az első légitámadás déli szomszédunk ellen – 1919. In. Haditechnika, 52. évf. 1. sz. (2018) - p. 67–69.

Katonai repülőök Mátyásföldön (1918–1919). - In. Czigler Klára (szerk.): 100 éves a mátyásföldi repülőtér. Bp., Kertvárosi Helytörténeti és Emlékezet Központ, 2017. (ISBN: 978-963-263-997-0) - p. 11–38.

Tábori repülőtér egy hétig: Győrsemere, 1919. - In. Magyar Repüléstörténeti Társaság évkönyve, 2016. - p. 20–23.

Tábori repülőtér egy hétig – Abony-Sashalom, 1919. - In. Magyar Repüléstörténeti Társaság évkönyve, 2015. - p. 28–30.

A Hansa-Brandenburg W.29-es tengerészeti repülőgép Magyarországon. II. rész. - In. Haditechnika, 49. évf. 5. sz. (2015) - p. 44–45.

A Hansa-Brandenburg W.29-es tengerészeti repülőgép Magyarországon. I. rész. - In. Haditechnika, 49. évf. 4. sz. (2015) - p. 59–62.

Katonai repülőök Mátyásföldön (1918–1919). - In. Magyar Repüléstörténeti Társaság évkönyve, 2014. - p. 54–70.

LVG C.VI felderítőgépek Magyarországon. - In. Haditechnika, 48. évf. 5. sz. (2014) - p. 63–68.

Katonai repülőtér Gödöllőn – 1919. - In. Haditechnika, 47. évf. 3. sz. (2013) - p. 48–50.

Felderítők Albertfalván (1918–1919). - In. Magyar Repüléstörténeti Társaság évkönyve, 2012. - p. 17–36.

Az UFAG C.I felderítőgép. II. rész. - In. Haditechnika, 46. évf. 5. sz. (2012) - p. 16–19.

Az UFAG C.I felderítőgép. I. rész. - In. Haditechnika, 46. évf. 4. sz. (2012) - p. 16–21.

Katonai repülőök Debrecenben (1918–1919). II. rész. - In. Haditechnika, 46. évf. 3. sz. (2012) - p. 21–23.

Katonai repülőök Debrecenben (1918–1919). I. rész. - In. Haditechnika, 46. évf. 2. sz. (2012) p. 72–75.

Hadirepülők Rákoson (1918–1919). - In. Magyar Repüléstörténeti Társaság évkönyve, 2011. - p. 33–48.

Egy repülőszázad viszontagságai Aradtól Békéscsabáig (1918–1919). - In. Békés Megyei Múzeumok Közleményei 34. (2011) - p. 251–260.

Egy zsákmányrepülőgép rövid története – képekben. - In. Haditechnika, 45. évf. 6. sz. (2011) - p. 54–55.

Az első légi háború Magyarország felett – 1919. - In. Hadtörténelmi Közlemények, 124. évf. 2. sz. (2011) - p. 335–361.

A Fokker D.VI-os vadászgép Magyarországon. - In. Haditechnika, 45. évf. 5. sz. (2011) - p. 58–61.

A miskolci repülőtér kezdeti időszaka 1930-ig. - In. A Repüléstörténeti Konferencia Közleményei, 2010. - p. 17–20.

Katonai repülők Mezőtárkányon – 1919. - In. Archivum – A Heves Megyei Levéltár közleményei 19. (2010) - p. 177–190.

A kecskeméti katonai repülés történetéhez (1919). Múltbanéző (A Magyar Nemzeti Levéltár Bács-Kiskun Vármegyei Levéltárának elektronikus folyóirata), I. évf. 1. szám. 2010.

https://mnl.gov.hu/mnl/bkml/multbanezo_1_10

Repülőszázadok Ongán – 1919. Ongai Kulturális Egyesület.

<http://www.okeonga.hu/documents/om/repesz.pdf>

nyomtatásban: 1. rész: Ongai Kékdaru, 11. évf. 11. sz. (2009. november) - p. 10–11., 2. rész: Ongai Kékdaru, 11. évf. 12. sz. (2009. december) - p. 11., 3. rész: Ongai Kékdaru, 12. évf. 1. sz. (2010. január) - p. 10–11., 4. rész: Ongai Kékdaru, 12. évf. 2. sz. (2010. február) - p. 10–11.

A magyar repülőcsapatok 1918–1919. évi történetéhez. - In. Hadtörténelmi Közlemények, 122. évf. 3. sz. (2009) - p. 603–634.

Német repülőgépek a Balkánról. - In. A Repüléstörténeti Konferencia Közleményei, 2009. - p. 168–172.

Az első légitámadások Miskolc ellen és a légvédelem kérdése 1919. május–júniusban. - In. A Hermann Ottó Múzeum Évkönyve 48. (2009) - p. 374–379.

A kaposvári repülőszázad (1918–1919). - In. Somogy megye múltjából – Levéltári évkönyv 38. (2007) - p. 247–256.

Katonai repülés Szombathelyen a „forradalmak korá”-ban, 1918. november – 1920. - In. Vasi Honismereti és Helytörténeti Közlemények, 2007/2. - p. 48–63.

A győri repülőszázad történetéhez. - In. Arrabona – Múzeumi közlemények, 45. évf. 1. sz. (2007) - p. 309–324.

Az aszódi vadászgép. - In. A Repüléstörténeti Konferencia Közleményei, 2007. - p. 83–88.

A polgári és katonai repülés kezdetei Szombathelyen (1911–1921). Savaria University Press, Szombathely, 2006. (ISBN 963-9438-72-3) 132 p.

A szegedi katonai repülés első világháború utáni történetéhez. - In. Belvedere Meridionale, 18. évf. 7-8. sz. (2006) - p. 43–51.

A Monarchia öröksége. - In. A Repüléstörténeti Konferencia Közleményei, 2006. - p. 5–14.

A magyar vízirepülő-század. - In. Ad acta. A Hadtörténelmi Levéltár évkönyve, 2005. - p. 96–109.

Győr első bombázása – 1919. - In. Arrabona – Múzeumi közlemények, 43. évf. 1. sz. (2005) - p. 177–186.

PROFESSIONAL-SCIENTIFIC BIOGRAPHY OF THE AUTHOR

QUALIFICATIONS

EDUCATION:

- 2021–2022 University of Public Service, Doctoral School of Military Sciences
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- 2006–2009 University of Miskolc, Faculty of Humanities, Miskolc
MA degree, arts graduate and teacher of history (2009)
- 2001–2004 Corvinus University of Budapest, Faculty of Public Administration, Budapest
BA degree, administration manager (2005)
- 1994–2000 Berzsényi Dániel (Teacher Training) College, Szombathely
BA degree, teacher of history (2000)
BA degree, teacher of technical skills (1998)

LANGUAGES:

- Hungarian mother tongue
- English intermediate level exam
- German intermediate level exam
- Italian basic knowledge

WORK PLACES, JOB TITLES

- 2015– Vas County Government Office, Szombathely District Office, Authority Department
social, infraction and then (specialised) authority clerk
- 2010–2015 Vas County Police Headquarters, Public Administration Authority Service, Szombathely
executive
- 2009–2010 Mayor's Office Hivatal, Residential Office, Sárvár
infraction and guardianship clerk
- 2008–2009 NYME Institute of Intercultural Studies, Szombathely
study administrator
- 2006–2007 BDF Institute of Intercultural Studies, Szombathely
study administrator
- 2000–2006 BDF Department of Philosophy and Social Theory, Szombathely
administrator, education manager

FIELD OF RESEARCH

Military aviation in the World War I

History of Hungarian aviation troops 1918–1921

Air events of the World War II, mainly in a local approach (Vas County)

SCIENTIFIC, PROFESSIONAL AND PUBLIC ACTIVITIES

2004– member of the Hungarian Aviation Historical Society

AWARDS, SCHOLARSHIPS, RESEARCH TRIPS

2023 Scholarship of Collegium Hungaricum in Vienna for experienced researchers (Austrian State Archives/KWar Archives, Vienna, 2 months)

2013 Research trip supported by Mayor of Szombathely (National Archives, London, 1 week)

2009 Award of the Nívó Prize of the Scientific Advisory Board of the President of the General Assembly of Vas County

2008 Alps-Adria Research Scholarship (University of Udine, 3 months)

2007 Local History Competition of the Hajdú-Bihar County Archives – 1st prize

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