

UNIVERSITY OF PUBLIC SERVICE

Doctoral School of Military Sciences

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**The History of the 101<sup>st</sup> Independent Reconnaissance Squadron, also the Examination of  
the Service of the Su-22M3 aircraft from 1983 to 1991**

the author's resume and the official review of the PhD dissertation

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## Scientific problem:

- The Szu-22M3 third generation aircraft purchased in 1983 (later – AC) was not in the Hungarian People's Army (later -HPA) yet. Our military leadership did not have any concept of leadership and management of the new type of organization. In the structure of the infrastructure, staff organization belonging to this type was trying to adopt both the infrastructure and the management system of the first and the second-generation principles that have been regularized in the organization of the HPA.

- The leadership of the HPA has not yet worked with a striking device with such a force, so the Warsaw Pact (later - WP) - tried to follow the expectations already in use in the system of the United Armed Forces (later - EFEF) proposing the modernization of the army.

- After the system change, or after the integration of century into the Kapos Fighter Wing, there are some documents which cannot be found /the secret diaries of the type-certified timekeeper, among others/ or they were filed incorrectly and disappeared somewhere during archiving. (It may be especially true during the closing of the Kapos Air Base, when documents such as the airport's encrypted operating instructions could not be found.)

- Lightly or imprecisely archived documents can lead researchers to draw incorrect conclusions later on, or even worse, they can mislead them. So far in any written materials or newspaper articles published there are some false events, things presented false names or dates, which were so subjectively judged that are accepted as fact by later researchers. Under the current circumstances, the multi-directional analysis of records, archives, research, studies, and recalls give the most complete and most accurate picture of the real life of the 101<sup>st</sup> Independent Reconnaissance Squadron (hereinafter - IRS). I have already had literature in my hands in that the pilot's name was given wrong who flew the type at the squadron, or such pilots were also mentioned, who did not even fly the Su-22M3 fighter jets. I also came across a publication with with an other cabin drawing instead of the Su-22M3 jet's cabin.

– The Su-22M3 AC classified as reconnaissance /with us/, but reality is the AC is a fighter-bomber (later - FB), and the task that can be executed with it even as a reconnaissance AC is 75% striking so using the on-board weapon system. Especially according to the basic principles of warfare in WP based on the reconnaissance AC 25% of scouting and 75% of striking against the detected object. / according to the tactical

principle of "detect and destroy!" / Then, I wonder why there was no deputy commander of striking in the leadership, the impact measurement deputy?

- Throughout the organizational and technical historical investigation, I point out some circumstances and consequences that fundamentally influenced the later life and organization of the Hungarian Air Force (or some flying units). In my opinion, the termination of the flying squadron still effecting even the present state of the Hungarian Armed Force.

### **Hypotheses:**

H1: I assumed that the Hungarian People's Army obtained the type of Su-22M3 AC instead of the type M4 was based on economic considerations, not operational-combat requirements due to the known and experienced difficult economic situation of Hungarian People's Republic at the time.

H2: I assume that the 101. IRS's separating and organizing into a reconnaissance flying regiment (later - RFR) was not sealed by the integration into the taszar out by the.

H3: I assumed that any other reasons of the decision of failing the 101. IRS's organizing into a RFR could be: the undone purchase of Su-25 (later – attack AC) in the former HPA, as well as the drastic reduction of budget available for procurement in the early 1990s in the HDF (later - HDF).

H4: I assumed that with the withdrawal of the type of Su-22 AC, the aerial reconnaissance (later - AR) /information gathering/ task has not been replaced for nearly ten years, as well as a significant amount of air-to-ground (later -AG) combat support (striking) capability ceased with this withdrawal for the HDF ground troops.

### **Research goals:**

My goal is to carry out objective research, which essentially uncovers the 101. IRS events and happenings in it's life based on the still available original documents, recollections, interviews, and recitals of existing persons, which, thanks to their later retrievability, giving back the reality of the 101st IRFS's life for those interested and researchers of the topic.

I also aim to highlight and analyze the Su-22M3 AC the consequences of withdrawing the type from the system and the possible investigation of the replacement of the tasks to be solved by the squadron (later - SQDN). /Potential possibility of using drones/.

With my work, I would like to provide an opportunity for future generations interested in the 101. IRS about the key events of its history, with the organized data I collected to facilitate later research.

With my work, I would like to provide to the future generations of military leadership and management things like lessons, experiences, and decision-supporting facts in the 101. IRS by publishing experiences accumulated during its operation, to set up a subunit or unit with a possibly similar purpose and structure, and to organize its operation,

With my work, I would like to contribute to the selection of the appropriate methods of military technology development and military reconnaissance, in the future for the security policy of our country, and at the same time to the procurement of the most suitable combat equipment application for the task and the the most appropriate methods to the 101. IRS based on the publication of experiences gained during its operation.

### **Research methods:**

I have made analysis using the materials and documents of the Military Archives (later - MA), Central Archives (later - CA). I have processed the research materials during source critical analysis and evaluation;

I have used, analyzed and synthesized using sketches, preparation booklets, diaries, maps which have been in pilots possessions as well as the still living – unfortunately, several have already passed away – pilots analysis of their personal experiences, and with the help of notebooks and map sketches that remained in their possession.

I divided the entire research topic into theoretical and practical parts, and then connected the partial knowledge obtained in this way into a unified whole;

Using the method of induction, I formulated general laws, and using the method of deduction, I drew unique conclusions from the general findings;

I compared the facts from different sources, and after examining them, I tried to resolve any possible contradictions between them;

I continuously processed the partial research's results which were regularly published.

### **Memories:**

Recalls, memoirs, opinions of the 101. IRS's commander (later - cmdr), deputy commanders - dc), branch managers, members of the armaments technical service (hereinafter ATS), the Engineering and Technical Support (hereinafter -ETS);

External observers, other flying squadron's pilots - interviews of civilian employees.

In my work, the examinations I have carried out per chapter:

**The first chapter** and its partial summary:

In the first chapter, I described the regularized combat-technical equipment of the 101st Independent Reconnaissance Flying Squadron and its personnel.

I introduced the aircraft of the reconnaissance squadron, the fighter-bomber used as a reconnaissance aircraft in the Hungarian People's Army, the Su-22M3/ the export version of the Su-17M3.

Afterwards, I introduced the fighting crew on that type of aircraft, the flying staff of the reconnaissance aviation squadron, based on the correction sheet / staff table attached to the staff board of the 101st Reconnaissance Flying regiment from 1983.

According to the same staff table, I described the ATS of the squadron.

Also, according to the attached version, I presented the body of the reconnaissance squadron and the political apparatus responsible for the ideological and political assurance of the squadron's personnel.

Finally, I explained the military supply service of the reconnaissance squadron.

Subsummary of the chapter:

I tried to give as objective description as I could of the strength, capabilities and capabilities of the reconnaissance aircraft regularized at the 101st Independent Reconnaissance Squadron, thus suggesting the potential opportunities inherent in the subunit. The basic type of the third-generation fighter-bomber aircraft in service in the Soviet army since the 1960s was provided by the Soviets as a military-operational fighter-bomber as a regularized main type.

I explained the staff of the reconnaissance squadron sent for retraining, the preparatory staff created for the time of retraining, its composition, tasks and work.

I presented the type retraining carried out in the Soviet Union according to and based on the retraining material provided by the Soviets.

I also mentioned the WP as an interesting point, as in the member states's strength of the union it is assumed the possibility of similar types of aircraft put into service.

**Second chapter** and its partial summary:

In the second chapter, I presented the acquisition of the weapons and technical equipment of the 101<sup>st</sup> Independent Reconnaissance Squadron, the selection of its aircraft pilots, and its retraining.

I described the antecedents of the acquisition of the Su-22M3 aircraft technology, the acquisition of the technology itself.

I covered the procurement conditions for the Su-22M3 fighter-bomber aircraft.

Then, I shared my partial conclusions regarding procurement.

I found it important and also described here my partial conclusions about the development acquisitions regarding the Air Force of the Hungarian People's Army of the 6<sup>th</sup> and 7<sup>th</sup> five-year plan period

I presented the retraining of the staff of the 101st Independent Reconnaissance Squadron designated in ministerial order in the Soviet Union.

I also described my partial conclusions regarding retraining carried out in the Soviet Union.

#### Subsummary of the second chapter:

In the chapter, I examined and searched for an answer to the reason for the selection of the Su-22M3 aircraft type purchased in 1983, examining the circumstances of its procurement history based on the materials of the Military Council of the Ministry of Defense, and the Ministry of Defense's pre-study about procurement, as well as based on the WP UAF recommendation.

In order to form my conclusions, based on my consultation with the military technical engineer in charge of the procurement, as well as the conclusions formed based on the opinions of several engineering and technical specialists, I could say that the procurement of the Su-22M3 aircraft type was based on economic considerations. I proved my first hypothesis.

#### **The third chapter** of my work and its partial summary:

In the third chapter, I am presenting the setup of the 101<sup>st</sup> Independent Reconnaissance Squadron at Taszár Air Base, and then the acquisition of the combat personnel's intended proficiency on the Su-22M3 aircraft type.

In the chapter, I present the setup of the 101st Independent Reconnaissance Squadron at Taszár Air Base;

I will describe the plan in front of the public; the failure of our introduction in 1985;

I touch upon our relocation to our operational airfield to Mezőkövesd in 1985, to practice the squadron's long-range maneuver;

I present the squadron's 1986 long-range, international dislocation operational-combat practice in the Polish People's Republic.

Subsummary of the chapter:

In this chapter, I try to reproduce our not-so-easy integration, with its difficult circumstances and the organizational problems that arose as authentically as possible - based on the recalling of the squadron's commander, flight engineer, and flight crew.

Afterwards, I shed light on the real reason of the failure of the Szu-22M3 fighter-bombers of the Hungarian People's Army's introduction at the 1985 parade.

I introduced the execution of the squadron's first long-range maneuver by moving to the operational airfield /Mezőkövesd/.

On the basis of authentic archival documents and the recalling of the squadron's combat personnel, I introduced in the chapter the live combat exercises of the 101<sup>st</sup> Independent Reconnaissance Squadron (1986) done in two steps – in Hungary, in Hungary and in the Polish People's Republic) aerial and earth sharpshooting tasks. With the successful and excellent execution of the exercise, the reconnaissance aircraft squadron acquired its intended proficiency, with that the assigned combat staff of the squadron provided combat readiness service almost immediately.

**The fourth chapter** and the partial summary of the chapter:

I present several cross-border long-distance deployments of the reconnaissance squadron with the 77<sup>th</sup> fighter-bomber regiment of the National People's Army of the German Democratic Republic, carried out within the framework of the Warsaw Pact-level alliance cooperation.

By describing our training year in 1987, I present the reception of a squadron of the 77<sup>th</sup> Fighter-Bomber Aviation Regiment of the National People's Army of the GDR at Taszár Airport.

I present the long-range deployment of the 101<sup>st</sup> Independent Reconnaissance Squadron to the Laage airfield of the 77<sup>th</sup> Fighter-Bomber Regiment of the German Democratic Republic.

Subsummary of the fourth chapter:

We hosted a squadron of the 77<sup>th</sup> fighter-bomber regiment of the National People's Army of the German Democratic Republic in the first half term of our training year. I will present of an executed ground-fire tasks at the international ground-fire shooting range in Nádudvar, combined with the home side air combat exercise carried out together with the allied German air squadron.

Then I will present in detail the long-distance deployment of the 101<sup>st</sup> Independent Reconnaissance Squadron to the territory of the German Democratic Republic - Laage Airport - and the implementation land and sea shooting organized by both of us. The experience provided by the deployment in Germany expanded the squadron's intended proficiency, the experience of its aircraft pilots, its combat staff, its combat deployment and its ability to engage allied forces.

**The fifth chapter** and the partial summary of the chapter:

In this chapter, I present the activities of the 101<sup>st</sup> Independent Reconnaissance Aircraft Squadron during the system change and the integration of the squadron into the Kapos combat aviation regiment;

I present the implementation of the 1988 training year of the reconnaissance aircraft squadron;

Then, through the training years of 1989-1990, the life of the squadron during the regime change;

I make a partial summary of the events of the time of the system change;

I describe the termination of the 101<sup>st</sup> Independent Reconnaissance Squadron with its integration into the Kapos combat aviation regiment;

Then I draw partial conclusions about the events of the period.

**Subsummary of the fifth chapter:**

With the changes brought by the series of changes in Hungary at the the years of 1988-1989-1990, in the Hungarian National Army becoming the Hungarian People's Army and in the life of the 101<sup>st</sup> Independent Reconnaissance Squadron, was not ending yet. These years brought historical changes and it would have been naive to believe that the 101<sup>st</sup> Independent Reconnaissance Squadron would avoid these changes. The reconnaissance squadron did its job in terms of training and combat readiness. At the beginning of the 1988 training year, we lost our first aircraft due to aircraft failure. In 1988, the reconnaissance aircraft squadron participated in WP level codenamed "Gránit-88" level

multi-stage air defense and flying operational-combat exercise, taking part designated units of the Romanian presenting passive activities, conducted by the WP UAF's commander-in-chief /Viktor Kulikov/. In 1989, however, the squadron only participated in home cooperation exercises. In the last quarter of 1989, the squadron received three new pilots who had just graduated from the flying school in Kassa.

On 1 December 1989, Minister of National Defense Ferenc Kárpáti banned all kinds of party activities within the army.

Under the codename "GERECSE-II." the transformation of the peace organizations of the Hungarian Armed Forces has began, it lasted until 31 December 1991.

The exercise codenamed "Pajzs-90" has been cancelled by simply saying no by the new Minister of National Defense from the government was elected at the first free election in 1990 on the Hungarian side, he cancelled at V. Ny. Lobov with the Soviet army general.

On 11 October 1990, an experimental, practice bombing was carried out for the first time in the history of Hungarian military aviation / Lieutenant Colonel György Éberhardt and Major Mihály Racskó / for the possible development of a nuclear bomb launch profile. The elaborated profile resulted in a hit in every case.

On 18 April 1991, the 1<sup>st</sup> Homeland Air Defense Corps Commander /Major General Csurgay Miklós/ and the CSRP regulated the Kapos Honi fighter wing and the MH 1929 /101. Independent Reconnaissance Squadron/ operation at an air base, followed by the CSRP just three months later. On 31 July 1991 he signed the measuring on the termination of the 101<sup>st</sup> Independent Reconnaissance Squadron, as a result of which MH 1929 /the 101<sup>st</sup> Independent Reconnaissance Squadron was fully integrated into the MH 4563 formation, /Kapos Homeland Fighter Division/ on 1 February 1992 thereby establishing the 31<sup>st</sup> Kapos Combat Fighter Regiment, with two fighter aircraft /MiG-21s/ and one reconnaissance aircraft squadron /Su-22M3/.

### **Summarised conclusions:**

I tried to give as objective description as I could of strength, capabilities and capabilities of the reconnaissance aircraft regularized at the 101st Independent Reconnaissance Squadron, thus suggesting the potential opportunities inherent in the subunit. I explained the staff of the reconnaissance squadron sent for retraining, the preparatory staff created for the time of retraining, its composition, tasks and work. I presented the type retraining carried out in the Soviet Union according to and based on the retraining material provided by the Soviets.

I also mentioned WP as an interesting point in the member states of the other union, it is assumed possible that the fleet of similar types of aircraft has been put into service. In the chapter, I investigated and sought an answer for the reason for the selection of the Su-22M3 aircraft type purchased in 1983, examining the circumstances of the acquisition history of the MD. Materials of the Military Council, and the MD pre-study in procurement, as well as the WP UAF based on its recommendation.

In order to form my conclusions, based on my consultation with the military technical engineer in charge of the procurement, as well as the conclusions formed based on the opinions of several engineering and technical specialists, I could say that the procurement of the Su-22M3 aircraft type was based on economic considerations. I proved my first hypothesis.

As authentically as possible - on the basis of the remembering of the squadron's commander, flight engineer, and flight crew - I try to reproduce our not-so- integration, together with its difficult circumstances and the organizational problems that arose. I shed light on the real reason for the failure to introduce the Su-22M3 fighter-bombers of the Hungarian People's Army, newly established in the military, at the 1985 parade.

I presented the execution of the squadron's first long-range maneuver by moving to the operational airfield /Mezőkövesd/.

□ On the basis of authentic archival documents and the recollections of the squadron's combat personnel, I presented in the chapter the live combat exercises of the 101<sup>st</sup> Independent Reconnaissance Squadron (1986) in two steps – in Hungary, in Hungary and in the Polish People's Republic with its integrated measurement. With the successful and excellent execution of the exercise, the reconnaissance aircraft squadron acquired its intended proficiency, with which the assigned combat staff of the squadron provided combat readiness service almost immediately. I present several cross-border long-distance deployments of the reconnaissance squadron with the 77<sup>th</sup> fighter-bomber regiment of the National People's Army of the German Democratic Republic, carried out within the framework of the Warsaw Pact-level alliance cooperation.

I will present the execution of the joint live-fire ground-fire tasks at the international ground-fire range in Nádudvar, which is integrated with the domestic air combat exercise carried out jointly with the allied German air squadron.

Then, I will present in detail the long-distance deployment of the 101st Independent Reconnaissance Squadron to the territory of the German Democratic Republic - Laage Airport - and the implementation land and sea shooting organized by both of us. The

experience provided by the deployment in Germany expanded the squadron's intended proficiency, the experience of its aircraft pilots, its combat staff, its combat deployment and its ability to engage allied forces.

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### **My new scientific results:**

- 1. In connection with the events of the 101st Independent Reconnaissance Squadron, I was the first to carry out extensive research in the Military Archives, the Central Archives, as a result of which I reconstructed for the first time, comprehensively and verifiably formulated the history of the Hungarian use of the Szu-22M3 variable-wing, third-generation aircraft type belonging to the squadron. (the security policy and economic antecedents of its procurement, covering the logistical considerations related to the procurement of the type, showing the processes of procurement, regularization, retraining, training, and operation, as well as their professional and infrastructural background, in both their contexts and professional details) from 1983 to 1991.**
- 2. Using archival and primary sources, I verified the process that led to the creation of the 101st Independent Reconnaissance Squadron in 1984 and its disbandment in 1991.**
- 3. As a result of my research work, I reconstructed and was the first to universally record the starting roster of the flying staff of the 101st Independent Reconnaissance Squadron and the squadron leadership.**
- 4. As a result of the investigations, observations and extensive research, I was the first to compile the chronology of the 101st Independent Reconnaissance Squadron, the authentic sequence of events of its existence.**
- 5. By examining the hypotheses, I revealed the significance of many circumstances related to the Century (security policy and economic antecedents, level of technological development, logistical considerations, warfare, maintenance system, human resources and infrastructural background, etc.) they also had a significant impact on the combat capabilities of the former Hungarian People's Army and its successor, the Hungarian Defense Forces.**

### **My recommendations and usability:**

I recommend my completed work to the personnel performing the procurement task for studying prior to the procurement of combat equipment of a similar purpose. There can be obtained useful and beneficial information from this material for the Hungarian economy and the national defense with sufficient conclusions and a view of reality for the procurement assigned to them.

Furthermore, no matter what kind of aircraft they want to put into service in the HDF in the future, based on my work, it is worth thinking about and considering the following:

Human life is always the most expensive thing. With help of remote control technology, in many cases it is possible to eliminate the factor according to which aircraft pilots with high-value and long-term training must be exposed to a significant risk. I recommend, if there is any possible solution to purchase as many and more advanced, modern drones as possible, preferably Hungarian-developed ones, at least those built in Hungary - even if those manufactured by license - to be used for aerial information gathering activities.

In my opinion, the tasks of the Su-22M3, the so-called "detect and destroy" combat principle and method, can be implemented with drones, and in the near future even with the integration of artificial intelligence, although for a while only (and for reliable operation, even this time is also required) can be used in autonomous operation when serving targets that can be well defined in advance.

At the same time, when procuring on-board, manned reconnaissance aircraft, it must be kept in mind that the task of these aircraft is not only to collect information, but also to be equipped with appropriate weapons, good maneuverability, in terms of exerting force on targets that are scouted, of high value or of great importance. low detectability as well as effective electromagnetic and electronic combat countermeasures are also important aspects. At the same time, it is an important and feature to be kept in mind to have an effective air support capability for other forces and components.

## **Published publications of the author regarding the research topic**

1. Katona István: A 101. felderítőrepülő-század, és az annak állományába tartozó Szu–22M3 típusú repülőgéptípus története Magyarországon a kezdetektől a rendszerből történő kivonásig. In: Orbók-Berkovics Veronika; Orbók Ákos (szerk.): A hadtudomány és a XXI. század. Budapest, Doktoranduszok Országos Szövetsége (DOSZ) (2018) 311 p. pp. 91-103. 13p.
2. Katona István: The Hungarian People's Army's Efforts into Reconnaissance Aircraft Development during the Cold War Years. HADTUDOMÁNYI SZEMLE XI.: 4. pp. 256-267. 12p. (2018)
3. Katona István: A 101. felderítőrepülő-század beosztott állománya hazai átképzésének, a repüléstechnikai jártassága helyreállításának körülményei. HADTUDOMÁNYI SZEMLE XI/3. pp.305-323. 19p. (2018)
4. Katona István: A taszári teljes berendezkedés – rendszerbeállítás, az osztályos harckiképzési szint helyreállítása a Szu–22M3-as típusú repülőgépen. HADTUDOMÁNYI SZEMLE XI./1 pp.181-198. 18p. (2018)
5. Katona István: A 101. Felderítőrepülő-század – a „Szuhojszázad” – életének beindítása Magyarországon – a taszári indulás. HADTUDOMÁNYI SZEMLE X./3. pp.356-369. 14p. (2017)
6. Katona István: A Magyar Néphadsereg korszerűsítése gyakorlati megvalósításának kezdete a 101. felderítő-repülő-század szempontjából. HADTUDOMÁNYI SZEMLE X./2. pp.7-22. 16p. (2017)
7. Katona István: A Szu–22-M3 repülőgéptípus beszerzésének előzményei, körülményei és háttere (1983-1987). HADTUDOMÁNYI SZEMLE IX./3. pp.17-29. 13p. (2016)
8. Katona István: Néhány gondolat a légifelderítés kialakulásáról. HADTUDOMÁNYI SZEMLE IX./1. pp.102-110. 9p. (2016)

## Curriculum Vitae

### Studies:

2015-16 National University of Public Service - Faculty of Military Science and Officer Training - Doctoral School of Military Sciences - Phd student;

2017-18 successful pre-degree certificate from the doctoral program;

1991-1994 academic training at Miklós Zrínyi National Defense University – department of air defense and aviation;

1971 György Killián aviation technical college /Szolnok/ – aircraft pilot department;

1972-1975 United Military Aviation Technical Officer College /Krasnodar/ - aircraft pilot qualification;

1967-1971 K.G.M. "Tibor Szamuely" General Mechanic and Transport Mechanic Industrial Technikum /Szolnok/ - Technician;

1959-1967 "Pál Kiss" State Primary School /Tiszafüred/ - primary school education;

### Service locations:

1975-1977 Kecskemét 59<sup>th</sup> Combat Aviation Regiment, 3<sup>rd</sup> flying squadron, aircraft driver;

1977-1983 Taszár – 31<sup>st</sup> Combat Aviation Regiment, 1<sup>st</sup> squadron, aircraft commander;

1983-1991 Taszár – CSRP, 101<sup>st</sup> Independent Reconnaissance Squadron, Combat Training Division leader;

1991-1995 ZMNE - University studies;

1995-1997 Taszár – 31. Combat Aviation Regiment. III assigned deputy squadron commander.

1997- Retired pilot, major; member of MHTT.