# for Defence and Security Industry

1/2023 I online  $\longrightarrow$  I www.msline.cz

The Media Platform of the Defence and Security Industry Association of the Czech Republic









# **EDITORIAL**

Dear readers.

We are entering a period when, even with some delay, we look back upon the past year, and the General Meeting of the DSIA CR is ahead of us, as well as the most important Trade Fair event in the Czech Republic, the 30th IDET, ISET and PYROS 2023.

Yes, time passes quickly and our Publishing House is also entering another quarter of a century. On this account we have prepared the most historically comprehensive Review so far for you, where you will find a lot of interesting information both in the field of the Armed Forces and the Police, and of course also from the sphere of the Fire Rescue Service of the Czech Republic.

We are pleased that, important representatives of the Armed Forces of the Czech Republic, the Police of the Czech Republic, and the FRS CR gave us an initial interview. In this edition, many Czech companies present their results, which were awarded on April 19th at the Annual Meeting of the Editorial Board and a friendly VIP meeting of the Defence and Security Community. We will inform you in more detail about this event in the next edition and partly in our IDET

The first edition of this year's Review includes a lot of information about activities of not only the "big", but especially "medium" and "smaller" companies and also informs about the activities of the Presidium and the Board of Directors of the DSIA CR. Here, you will also find a survey with the opinions of the membership base on the current activities of the DSIA, but we will also introduce a relatively large family of new members of the Association.

The MS Line Publishing House and the editors of the Defence and Security Industry Review thank our readers very much for their favour in 2022 and look forward to meeting you at the IDET Trade Fair, where we are the main media partner for the Czech Republic. We would like to invite you to our stands No. 115 and 116 together with DSIA CR in the pavilion P.

Don't forget to take our traditional IDET NEWS 2023 in the displays at entry!!



Šárka Cook, Editor in Chief







# **CONTENTS**

What we Use in the Hospital in White Colour	6
What we ose in the hospital in write colour	
Vietnam and the Czech Republic Together in Quality	12
FRS Czech Republic is a Worthy Unit of IRS CR	14
Interview with Dipl. Eng. Pavel Švagr, CSc.	18
DENPL Detektor	23
Tatra Defence Vehicle – Production of TITUS	24
AURA Across Continents, via Abu Dhabi back to Brno	40
ORITEST	42
Explosia Managed a Year Full of Twos Perfectly	46
Interview with the Director of the Czech Police Museum	48

Publishing House: Military System Line, s.r.o., Vykáň 82, 289 15 Kounice, Czech Republic, e-mail: info@msline.cz, www.msline.cz Editor in Chief: Šárka Cook • Deputy Editor in Chief: Miloš Soukup • Professional Editors: Šárka Cook, Miloš Soukup Jaroslav Jonák, Vít Práchenský, Adriana Jesenská • Head of Advertising Office: Eva Soukupová evasoukup@seznam.cz Graphic design: Jiří Kuneš, www.jirikunes.cz • Internet Manager: Soliter-polygrafická společnost, s.r.o. • Distribution: MS Line, s.r.o., Translator's Agency: Eva Soukupová, Silvie Fidrová • Print: Magnus I s.r.o. • Key number: MK ČR E 19352 ISSN 2336-3460. Not for sale. Photo on the cover: ORITEST

The Review editorial team bears no responsibility for language and content correctness of text and graphics developed by advertisers and specialist content editors.

# **EDITORIAL BOARD OF CDIS REVIEW 2023**

**CHAIRMAN** 

Jiří Hynek

President of DSIA CR

**DEPUTY CHAIRMAN** 

Filip Engelsmann

General Director of AURA

**HONOURARY MEMBERS** 

General ret. Josef Bečvář

Vice-President of DSIA CR

President Glomex Millitary Supplies

General ret. Pavel Štefka

Advisor to General Director Trade Fairs Brno

for IDET

Michael Hrbata

Honourary Chairman of Editorial Board

Miloš Titz

Honourary Chairman of Editorial Board

PARLIAMENT OF THE CZECH REPUBLIC

Lt. Gen. Drahoslav Ryba

Member of Parliament

Committee on Security

MINISTRY OF FOREIGN AFFAIRS OF THE CR

Martin Dvořák

Deputy Minister for Government Affairs

Miloslav Stašek

Ambassador to the U.S.A.

Tomáš Kuchta

Ambassador Extraordinary and Plenipoten-

tiary to Serbia

Vladimír Bärtl

Ambassador Extraordinary and Plenipoten-

tiary to Luxenbourg

**Marek Svoboda** 

**Director of Economic Policy Department** 

Tomáš Kopečný

Governmental Envoy for the Recovery

of Ukraine

**MINISTRY OF INDUSTRY AND TRADE** 

OF THE CR

Martin Šperl

Department for Export Strategy

and Management Service

General Director

MINISTRY OF DEFENCE OF THE CR

Martin Dvořák

Director, Defence Standardisation, Codifica-

tion and Government Quality Assurance

Authority

ARMED FORCES OF THE CR

Lt. Gen. Karel Řehka

Chief of General Staff

Lt. Gen. Jaromír Zůna

Defence Attache

Brig. Gen. Zoltán Bubeník

Director of the Military Medical Agency

MINISTRY OF JUSTICE OF THE CR

Lt. Gen. Petr Dohnal

**Deputy Minister** 

Maj. Gen. Simon Michailidis

General Direcor of prison service

MINISTRY OF INTERIOR OF THE CR

Milena Bačkovská

Head of Municipal Police, Firearms and

Trafic Engineering Unit, Security Policy

Department

POLICE OF THE CR

Col Tomáš Hytych

Director of the Air Service

Col Petr Sehnoutka

Director of Public Order Police Directorate

FIRE RESCUE SERVICE OF THE CR

Lt. Gen. Vladimír Vlček

General Director

Brig. Gen. Petr Ošlejšek

Deputy General Director for Prevention and

Civil Emergency Preparedness

MINISTRY OF FINANCE OF THE CR

**CUSTOMS ADMINISTRATION OF THE CR** 

Brig. Gen. Marek Šimandl

**ADMINISTRATON STATE MATERIAL** 

RESERVES

Pavel Švagr

Chairman

**REGIONAL AUTHORITY** 

Aleš Boňatovský

Secretary of the Pardubice Region Security

Council

**AFCEA CZECH CHAPTER** 

Tomáš Müller

President

**DEFENCE INDUSTRY REPRESENTATIVES** 

Markéta Maršálek Čadková

Communication Manager

Central and Eastern Europe

SAAB TECHNOLOGIES

Štěpán Černý

Business Director of SVOS

Pavel Čuda

Managing Director of VVÚ

**Adam Drnek** 

Executive Director of FUTURE FORCES FORUM

**Radek Hauerland** 

Vice-President of DSIA CR, Vice-President for External Communication of Česká zbrojovka **Michal Hon** 

Chairman of the Board of MESIT holding

**Martin Hrinko** 

Permanent Advisory Board of the Mol of the CR for the protection of soft targets

Daniel Jesenský

Managing Director of SPECTRASOL

Brig. Gen. Zuzana Kročová

**Rector-Commandant of University** 

of Defence

**Radoslav Moravec** 

General Direcor of ZEVETA BOJKOVICE

**Michailis Busios** 

Director of IDET PYROS ISET

Trade Fairs of Brno

Tomáš Mynarčík

Director of Defence Programs TATRA TRUCKS

Lenka Orlová

Company Executive and Director

of ORITEST

Petr Ostrý

CEO of AGADOS

Marek Pácalt

CEO of PROTECT PARTS

Jaroslav Pecháček

Vice-President of DSIA CR

Managing Director of SWORDFISH

Vojtěch Petráček

Rector of the Czech Technical University

in Prague

Jiří Protiva

Director of LOM PRAHA

Marika Přinosilová

Director Marketing and Communication

of OMNIPOL

Jaromír Řezáč

Chief Executive Officer of GORDIC

liří Řezáč

Vice-President for Cooperation

and Trade Policy of DSIA CR,

Advisor to General Director of OMNIPOL

Milan Starý

Director HR & Communication of ERA

Jiří Šimek

Managing Director of Quittner & Schimek

Jiří Štefl

General Manager of OPTOKON

Jaroslav Trávníček

Vice-President for Industry of DSIA CR

Aleš Výborný

Director - Czech Republic of BAE Systems

# What we Use in the Hospital in White Colour "Goes to the Battle-field in Khaki Colour"

In the past two years, the field of military medical care has experienced an unprecedented test of readiness, resistance and capabilities. The military medical service dealt with the crisis situation related to COVID highly professionally and also honourably. After about four years, we turn to the Director of the Military Medicine Agency and a long-time member of the representative Editorial Board of our Reviews - General Zoltán Bubeník, to answer a few topical questions for our readers.



Mr. General, how have two major global issues - the Covid pandemic and the War in Ukraine - affected our military medical service? Can you briefly summarize what new phenomenon actually appeared before your standard tasks?

Definitely. While the COVID pandemic really had a global impact and, for example, accentuated the so-called civil-military cooperation, where the military medical service of individual member states of the Alliance played a key role in assisting civilian medical facilities, the War in Ukraine has more specific consequences. On the one hand, in contrast to the twenty years of operation in

Afghanistan, where new procedures and, more or less, also the setting of the "alliance integrated rescue system" have been defined during the ongoing air supremacy, on the contrary, in Ukraine, military medical care is returning to specific field issues - emergency care on the battlefield, qualified first aid on the spot and genuine war surgery all-in.

How did the Military Medical Agency react to these extraordinary events? What was actually connected with these events so that you could still handle them seriously?

Not only the Agency but all components of the military medical care system were "deployed" on a daily basis during the CO-VID-19 crisis - both in their own medical facilities and in assisting other units of the civilian medical care system. The preparation of the Active reserves in Těchonín proved to be very effective, as colleagues could immediately transfer the practical routines to their civilian workplaces. Well, in the case of Ukraine - it is mainly indirect help, especially in the training of Ukrainian soldiers in the sphere of first aid and self-help.

Here I also have to appreciate the medics and doctors outside the Agency, especially in the ACR Land Forces. And last but not least, it is a share in the transport and treatment of wounded Ukrainian soldiers, in which mainly military hospitals participate.

We wonder how the "thorny problems" in your sphere of competence, for exam-

ple in the sphere of personnel capacities, were solved in the past years. It is known for a long time that there is a large shortage of doctors and medical personnel in the civilian sphere. How do you solve this problem in the Army?

I would be lying if I claimed that civilian personnel problems do not affect the sphere of military medical care. For now, fortunately, there is still a high interest in studying military medical fields, not only medical specializations, pharmacy or dentistry, but also the branch of military medics. We can say that this is a kind of certainty, which is also confirmed in the long term by the fact that approximately three-quarters of students complete their studies. This gives us some certainty in the calculations, which, however, due to the length of the study, are not easy from the point of view of recruitment into the Army - after all, the length of the complete training of a doctor from the beginning of the study to the end of the specialization, for example in the field of general practitioner, takes up to nine years. Well, the civil sector, especially in this category of general practitioners, sometimes means very poor competitiveness due to their financial incentives. But this is a phenomenon that applies to all alliance states, where the civil sector is built on a private principle. So the task for the nearest period is to motivate the medical staff to stay in the service for at least 10-15 years after graduation thanks to a combination of financial incentives, reduction of administration, and an attractive concept of specific career training.

Now I follow up on our conversation four years ago and ask - What has changed in the medical equipment and the provision of care for, for example, soldiers in missions and war veterans? How does cooperation with similar units of the NATO Armies work?

Of course, medicine, its technical support, and equipment are moving forward, by leaps and bounds, and military medical care, whether in the equipment of military hospitals, field medical facilities, or even the centres of medical services (infirmaries), is trying to keep up with the times. Sometimes the acquisition is sluggish, especially because of bureaucratic delays but finally, we will get the necessary material, technology, or specifically manufactured or modified containers. As we can figuratively say - what we use in the hospital in white or silver colour goes to "the field in khaki colour". Thus, the basic principle of applying the achievements of modern medicine as close as possible to a wounded soldier. Anyway - in the so-called field it doesn't always have to be sophisticated devices, just the situation in Ukraine shows us that bandages and fixation material, tourniquets, thermo-insulating foils, sets of individual first-aid kits or backpacks for combat rescuers are essential needs. And precisely in these relatively simple things, there usually lies the desired cooperation and interoperability, on which the principle of military medical exercises is based.

What role do the Military University Hospital Prague and The Institute of Aviation Medicine play in this direction?



In the last two years, military hospitals and the Institute of Aviation Medicine have intensified the participation of their individual clinics, departments, or workplaces in the SRI (Science, Research, and Innovation) program. Right here, in cooperation with the Department of Military Medical Care of the Ministry of Defence, the Agency of Military Medical Care, the Faculty of Military Health Sciences of the University of Defence, the Industrial Cooperation Section of the Ministry of Defence, and, finally, with the specific civilian environment through the Association of Manufacturers and Suppliers of Medical Devices we try to maximize the use of know-how, avoiding a specific path of "discovering the already discovered" and trying to introduce innovative trends in military medical care in the field of deploy-

ment into operations. And this is where the Military University Hospital Prague and the Institute of Aviation Medicine play their specific roles. While the Military University Hospital directs its activities mainly to various areas of surgery, including robotics, the Institute of Aviation Medicine, thanks to its focus on flying personnel, implements inventions towards special vision requirements or training support on simulators, testing the body's response to overload or training in innovative pressure chambers. And perhaps the pressure chambers are a kind of special bond between the Military University Hospital Prague and the Institute of Aviation Medicine, for example in the issue of treatment of chronic injuries.

# What experience do you have of cooperation with the Czech Industry in the sense of securing pharmaceuticals or medical equipment?

As I mentioned, a key role in this cooperation is played by AVDZP - the Association of Manufacturers and Suppliers of Medical Devices. And this applies to both - the field of technology and devices, as well as consumables and pharmaceuticals. Meanwhile, "hardware", especially medical containers with special equipment, is often the domain of vertical cooperation with the Military Technical Institute in Vyškov. The advantage of the functioning of the military medical care system is the already mentioned interoperability, namely in the use of equipment that is often identical for both civilian and military environments. It is proof that there is only one medicine, just the





environment in which it is practiced is different.

I would like to talk a little bit more about pharmaceuticals. The time of the Coronavirus has already shown us how often we are essentially dependent on eastern markets. Since almost 85 % of the production of chemical substances for the production of pharmaceuticals is being provided from China, paradoxically from the Wuhan region; the production of so-called generic pharmaceuticals (of a general nature) is being provided from India, and almost in the same percentage. And this dependence turns out to be very vulnerable in any crisis. Look at the current problem with essential antibiotics. And this turns out to be one of the possible problems of systemic management of any possible future crises.

# Can you briefly describe the cooperation with the Administration of State Material Reserves of the Czech Republic in the past period?

The military medical service has been cooperating with the Administration of State Material Reserves for a long time. So far only in the form of ideological projects, because the Ministry of Health of the Czech Republic plays a key role in managing crises of a medical nature, but we see our opportunities in this "triangle", especially in the matters of defining the basic portfolio of pharmaceuticals, material, and technologies, ASMR

should, in our opinion, have held for medical crises. Nothing complicated - there is no need for ten types of modern insulin or blood pressure pharmaceuticals if you need to care for many patients in a time of crisis. The Anglo-Saxon logic for dealing with these cases is "keep it stupid simple". As the former Chief of the General Staff, General Aleš Opata, said - "it's not nuclear physics, after all". And based on these facts, we are trying to solve these problems with the Ministry of Health of the CR; we have defined 13 areas of possible cooperation, from processes, through legislation, and medical procedures to medical supplies for crisis management. And just based on the experience with COVID and now with the War in Ukraine, we promise ourselves that the "ice will move". And for storage, use, and at the same time replenishment, the ASMR is probably the optimal platform.

Mr. General, your presidency of NATO's highest medical body has already ended. It was and still is a great honour for you, for the ACR, and also for the entire Czech Republic. At the end of our interview, could you briefly say what this function entailed and what experience you gained from it?

Upon assuming the position, I set the priorities of my presidency and presented them to the COMEDS Committee and also to its individual working and expert groups. It can be said that everyone accepted it as

a guide to the direction of the medical care community for three years. Since those attributes were so-called trauma management and its operational use, interoperability and joint training, and finally the connection of science, research, and innovations, no one had any idea at the beginning of 2019 how important this triad wou-Id become in one year when dealing with COVID and in three years when the Russian-Ukrainian War broke out. Furthermore, we all got used to the system of communication via VTC, both in civilian and military environments. It could be done relatively effectively; however, the loss and temporary interruptions of direct contacts and communication have undeniable negative effects. Nevertheless, even so, the second aspect of the function, i.e. acting in the role of the Chief Medical Advisor of the International Military Committee of NATO, was fully fulfilled. Throughout the presidency, we managed to create and maintain a system of regular reports for this Committee twice a year, which was also the first time in our history of COMEDS since its establishment in 1994. And what about the key experience? We made the best of everything that helps the military medical care community to be perceived and accepted by the general military community as well. Just as I mentioned to my colleagues - whether current modern armament trends are devoted to cyber and space technologies, autonomous means, or artificial intelligence, unfortunately, the results of conflicts still end up on our operating tables or intensive care units.

Therefore, the mutual cooperation and understanding of our military colleagues must continue to be the key attribute of future successes.

Thank you for your answers,

at the same time, I want to thank you for your participation and work in the representative Editorial Board of our Reviews.

With respect,

Dipl. Eng. Miloš Soukup

CEO, MS Line s.r.o.







HLAVNÍ PARTNEŘI



SPECIÁLNÍ PARTNEŘI



























HLAVNÍ PRODUKTOVÍ PARTNEŘI

kofola 🍪











PARTNEŘI



MEDIÁLNÍ PARTNEŘI























# Reconstruction of Pressure Chambers in the Institute of **Aviation Medicine**

In this edition, we follow up on the interview with the Director of the Institute of Aviation Medicine Prague, where top equipment for aviation personnel was also mentioned. It is especially equipment for specialized training and preparation of pilots in the field of aviation physiology. Training and preparation also include special medical equipment in which training and hyperbaric treatment take place. The complex of pressure chambers worked daily for 57 years and it was time to replace them for many technical and other reasons. Almost 9 years of hard work finally bore fruit and now the Institute of Aviation Medicine Prague can boast of top-class equipment not only for pilots.

On 24th May 2022, the Institute of Aviation Medicine ceremoniously put into operation a modern complex of pressure chambers by the German manufacturer HAUX in the presence of the Minister of Defence of the Czech Republic and other important guests. One hyperbaric chamber and one hypobaric chamber thus replaced the institute's original pressure chambers constructed by ČKD in 1962. This complex, once timeless and also very modern for a long time provided reliable and high-quality service for six decades in the field of pilot testing, research, and within the treatment of many diseases that responded positively to the effects of hyperbaric oxygenotherapy. During the service, the pressure chamber complex was carefully maintained by partial reconstructions, hardened by sheathing, and other continuous modernization interventions. A big advantage of the Czech "tailor-made" technology was the long-term and very detailed knowledge of the technical solution by personnel of the Institute of Aviation Medicine and the possibility to intervene in the system as far as possible. During their operation, the chambers were thus literally accustomed to the staff and optimally adapted to expertise, training, and treatment needs. Around 2010, there began intensive discussions concerning the fundamental modernization of the system. A feasibility study in 2013 stated the necessity of carrying out some revisions and controls evaluated as unprofitable. The main risk of continued operation of the pressure chambers was the uncertain service life duration of the long-term exposed pressure vessel and other more or less unavoidable problems (for example, breathing regulators that have not been produced and are not serviceable for many years). Therefore, it was decided that after 57 years of daily service, the entire complex of pressure chambers will be replaced with new equipment.

Ensuring the implementation of the contract and preparing

the requirements for the tender was not easy. From today's perspective, the original chambers were over-dimensioned in many parameters and therefore continuously adapted



New chambers just before the opening ceremony.

to the current needs down to the smallest detail through partial interventions over the years. In addition to the strict requirements for the specification of the required parameters, it was also necessary to take into account the set financial limits. The uniqueness of the technologies, which also resulted in the difficulty of setting the "usual" price of individual subsystems, represented one of the most difficult tasks of the preparatory phase. The flawless and transparent submission of the public contract to the tender had to take place within the set deadline, and the possibility of a second attempt was not allowed. The preparatory team of the Institute of Aviation Medicine completely fulfilled this challenging task.

In the course of the construction, it was necessary to pro-



The original chambers were disassembled part by part because of the conservation of some elements and also because of potential hazardous materials

ceed with fundamental modifications of the building of the flight safety department. The requirement was to construct pressure chambers on a turnkey basis, the necessary interventions in the building and the methods of installation were up to the supplier. The scope of the work carried out has thus grown surprisingly for all those involved. The hall of pressure chambers was excavated down to the foundations of the building, the foundations had to be strengthened, and a sophisticated concrete base was installed on reinforcing pylons (for an idea - the pressure chamber itself weighed almost 70 tons). The technical background has also undergone significant changes. The chamber pressurization technology is different from the original model. Previously, large reservoirs for compressed air or vacuum were used, which formed an unmissable backdrop on one side of the building. Newly, this task is being handled by more powerful vacuum pumps and compressors supplemented by smaller and discretely installed reservoirs.

The relocation of the chambers into the building and their internal movement and arrestment was a literal demonstration of transport skills and professionalism. From the structural aspect of the building, only an opening with a



Inside view in the hypobaric chamber.

limited diameter was possible. Considering the weight of the chambers, this step was carefully planned for several weeks to months. The chambers fit with only a few centimetres left and the transfer from the truck to the building took several hours. The actual moving inside the building and settling into place was already easier, but again it was necessary to involve the most modern, precisely working technologies (for example, high-load hydraulic and synchronized "wheels" for movement). Both pressure chambers got inside unharmed, then further work began with settling, connecting to pressure and electrical mains, completing construction work on the building, and especially administrative processes. Despite the seemingly finished status from a construction-technical point of view, we were approximately halfway through the reconstruction in terms of time.

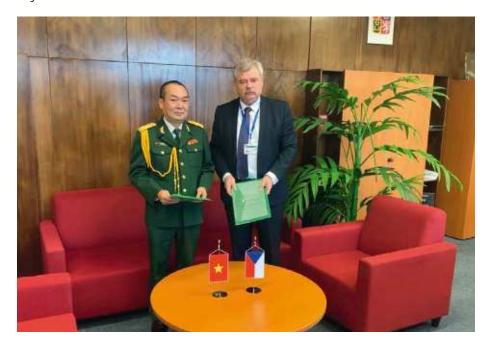
The complex of pressure chambers consists of two systems: hyperbaric and hypobaric. The hyperbaric chamber is being mainly used by divers of the Czech Armed Forces, some other aspects of special military training, but also and especially for therapy, so-called hyperbaric oxygenotherapy. There is clear equipment legislation for hyperbaric chambers, so in this regard, it was mainly about determining the capacity and internal equipment. In the case of hypobaric chambers, on the other hand, it is practically always a unique type adapted to the needs of the customer. Here, the proposers focused on the most critical and complicated parameters. In the case of the training, it was a so-called rapid decompression, where a large volume of air must be pumped out in a very short time. Even in today's conditions, this is a big structural challenge. Another essential requirement concerned breathing regulators, normally fitted into fighter planes. These technologies are military equipment, and the manufacturer has to take them over from other suppliers and thus representing potential complications for delivery. In the case of other systems - communication, monitoring, the requirements were more general, although of course still carefully described.

The reconstruction of the pressure chambers was completed at the end of 2021 and was followed by several months of trial operation and the final construction approval during March and April 2022. After the activation of the new systems, as expected, partial start-up problems appeared, which had to be eliminated. The achieved result and the start of the full operation of the complex can be evaluated just as a great success. Regardless of all the accompanying complications, delays, repeated discussions, or unplanned overcoming of technical obstacles, we can say with pride that a very modern, functional, and valuable facility with the perspective of long-term provision of training, research, and curative services was opened to the armed forces and other clients. Now we should just thank all those who contributed very selflessly to this project.

Boris Onishchenko Institute of Aviation Health Prague

# Vietnam and the Czech Republic Together in Quality

Signing a memorandum of understanding between the Technical Standardisation, Metrology and Quality Authority of the Ministry of National Defence of the Socialist Republic of Vietnam and the Defence Standardisation, Codification and Government Quality Assurance Authority of the Czech Republic on mutual recognition of government assurance of the quality of defence materials and services



The authority ensures the government quality assurance service (GQA) for the Czech Republic. It is independent state control of suppliers of defence and security contracts performed by the Authority within the Czech Republic and for foreign customers under Act No. 309/2000 Coll. The provision of this service for NATO member states and NATO agencies is bound by the standardization agreement STANAG 4107. The above-mentioned law also considers the GQA service for customers from non-member states, and the Authority is authorized to conclude, according to the needs of bilateral international cooperation, agreements (memorandums) on mutual recognition and provision of the GQA service.

On 17th January 2023, the process of signing the aforementioned Memorandum was completed. This final step was preceded by the process of mutual consultations,

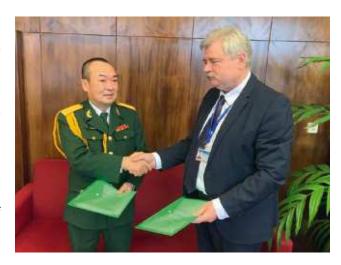
assessments, and exchange of documents for the GQA sphere. For a simpler agenda, the variant of the final signature of the pre--agreed document was chosen in a step--by-step manner by the Vietnam Authori-

ty by Maj. Gen. Nguyen Manh Hung in Vietnam and subsequently by the signature of the Director of the Defence Standardisation, Codification, and Government Quality Assurance Authority Dipl. Eng. Martin Dvořák, Ph.D. in Prague. The signed memorandum enables free provision of the GQA service.

The active operation of Vietnam's Defence Attaché in the Czech Republic, Str.Plk. Caoo Hung Trang, greatly contributed to the trouble-free provision of the preparatory and final organizational processes and the signing of the Memorandum.

The signing of the Memorandum allows each other to use government quality control systems for production, repairs, and other services intended for defence and security. It all depends on the customer's needs, whether they want to have supervision over compliance with the material, technological, and test requirements of specific orders for risky projects from a technical point of view. The Memorandum also includes a description of the process of request (delegation), course, and termination of GQA in the partner country, including the relevant forms. The actual implementation of GQA is established on national principles - in the Czech Republic Act No. 309/2000 Coll.

The signing of this Memorandum will contribute to the expansion of cooperation between the two countries in the field of defence and security technologies.





# FRS Czech Republic is a Worthy Unit of IRS CR

For several years now, the fire department, and therefore the rescue department, has been a regular section of our magazine. On the pages of Reviews, we traditionally bring news and interesting facts from the Integrated Rescue System of the Czech Republic. In this edition, we are pleased to introduce you the new Deputy of the General Director of the FRS CR for IRS and operational control, General Petr Ošlejšek, to whom we asked several questions on this occasion.



Mr. General, first of all, we want to congratulate you on your new position and at the same time on the rank of General.

Among firefighters, you are known and recognized as a direct person with a very active approach to solving problems. So my first question is - what do you see as your mission in the field of further improving the work of the Integrated Rescue System of the Czech Republic? Can you also briefly recap your long career path?

As the Deputy of the GD FRS CR for IRS and operational management - how would you describe the main functions and overall functioning?

Thank you for the congratulation. I take my position as the Deputy of the General Director with humility and at the same time as a challenge and an opportunity to participate in and influence the further development not only of the FRS CR but of firefighters and the Integrated Rescue System as a whole.

If I look back at my history, I belong to those who have had their childhood dream come true. Just like most boys want to be a firefighter at some point in their life, I was lucky enough to achieve this. My beginnings were, as well as in the case of many of my colleagues, in a volunteer fire department. I wanted my boyhood dream to become my profession, which is why I chose the University of Mining in Ostrava for my further studies, which was the only university at the time with a field of study focused on fire protection. I was already close to professional firefighters during my studies when I served at the station in Prostějov during my leisure time. I started there as a novice and went through everything from the very beginning. After finishing school, I joined the professional firefighters in Prostějov and spent ten years of my career there. I had the opportunity to start as a firefighter and work my way up to the director of the territorial department through the team commander and the operations centre. It was a huge school for me, where I not only gained experience as a commander, but we had to deal with personnel and economic matters and, of course, relationships at the workplace. Since 2010, I have been working as the Deputy of the Regional Director of the FRS of the Olomouc region, and again the issue of operational management and

IRS was within my competency. Thanks to my work in the region, I had the opportunity to apply the experience from the regional unions in a larger area. The possibility to influence and adjust the system at the regional level was another big challenge and later also an experience. I perceive my personal experience from all levels of management at the FRS CR and my experience from extraordinary events as a necessary basis for my work at the General Directorate. Although different tasks are being solved at the national level compared to the regions, it is necessary to always keep in mind that all our decisions must lead to the fact that firefighters are always effectively prepared to help citizens in need. But it is also necessary to think about prevention and preparedness for large-scale emergencies and crisis situations. Although I have been working at the FRS CR for my entire professional career in the field of operational management and fire protection units, I try to look at the FRS and IRS from the perspective of prevention and economics as well. This is also related to my ideas about what I would like to promote as part of my work at the General Directorate. It is not only about new technology, and new procedures for dealing with extraordinary events, but also about feedback towards fire prevention or the protection of the population. Of course, for these processes to work, it is not enough just to have set rules and financial resources, above all, it is necessary to have quality firefighters. How the FRS will ensure tasks towards the citizens of the Czech Republic depends primarily on what kind of members it will have. In my opinion, our members are our greatest asset.



In recent years, both Czech and global society have had to contend with significant changes mainly associated with the covid crisis, the crisis associated with the war in Ukraine, and the large--scale fires in Hřensko. How did these events affect the functioning of the IRS? What went well in these unpleasant situations and what did you struggle with the most?

In the last 30 years, there have been fundamental changes in society, and this is of course also reflected in the activities of firefighters and the entire IRS. In the early 1990s, firefighters, whose calls consisted mainly of fires, became rescuers who intervene in traffic accidents and technical interventions. Changes in society and the need for the cooperation of individual organizations during emergencies laid the foundation for what we call an integrated rescue system today. The floods in 1997 only confirmed the need to prepare for large-scale emergencies, which was the basis of today's IRS and crisis management legislation. At that time, the Fire Rescue Service of the Czech Republic, as we know it today, was also created. After 2001, the world began to deal with the issue of terrorism and threats to security in the broader

sense of the word, and the FRS played an important role here as well. In the last 15 years, in addition to everyday emergencies, we have mostly encountered natural disasters, such as floods or storms. In the entire modern history of the FRS, we have not encountered a situation that could fundamentally threaten our ability to act and fulfil our mission. From this point of view, the COVID-19 epidemic was a fundamental turning point, when we also had to think about how to ensure that our firefighters are protected so that they can perform their tasks. At that time, we changed the shift planning system and the internal organization of the stations to limit the possible spread of disease and the associated threat to the performance of the service. And thanks to the approach of our fellow firefighters, we were able to manage this successfully. COVID-19 also confronted us with new tasks that we had to take care of; it was something new that we had to respond to. Firefighters became drivers who delivered protective equipment or disinfection. Firefighters provided mobile collection teams, disinfected premises, helped in social and medical facilities, and unfortunately had to participate in transporting deceased ones. In addition to all these activities, they were called for routine interventions every day.

In managing activities, the established IRS and crisis management systems were successfully used, and firefighters were an essential part of this. Firefighters have shown that they can use their organizational skills and enthusiasm to help people who need this help. In February 2022, Ukraine was attacked and a massive wave of refugees appeared, with an impact on the Czech Republic as well. It turned out that the IRS and crisis management system can be applied in a certain way also to this extraordinary event. The FRS was thus able to use its experience in emergency management and, in cooperation with the Ministry of the Interior, the Police of the Czech Republic, and the regions, set up a system of Regional Assistance Centres for Assistance to Ukraine (KACPU) and the National Assistance Centre for Assistance to Ukraine (NACPU). KACPU and NACPU were among the most commonly used abbreviations among firefighters last year. Firefighters here ensured not only the operation of the centres but also the transport of people or their accommodation in temporary emergency shelters. Firefighters are also directly involved in helping Ukraine, when they ensure the transportation of humanitarian aid to the borders of Ukraine, from where it is further distributed to areas in need. A



charity collection was also organized for firefighters in Ukraine, in which units of volunteer firefighters from all over the Czech Republic took part. The year 2022 was truly a turning point, also in terms of the activities of firefighters: at the beginning of the year, the subsiding epidemic of COVID-19, directly followed by the wave of refugees, was topped off by the largest forest fire in the modern history of the Czech Republic. "As if by chance, so that we don't forget to fight fires despite the new challenges". This event confirmed again that we have a functional system to fight emergencies, but we need to constantly adapt it even when fighting fires. Firefighters in the Czech Republic thus encountered the phenomenon of a forest fire for the first time, which directly threatened their lives, and human habitations and spread in a manner typical for southern European countries. The fire showed that it is necessary not only to change the method of ground forest fire extinguishing but also to fundamentally modernize the aerial firefighting service, which will be ready to intervene effectively. This fire also confirmed that it is necessary to set clear fire prevention rules in forests, to ensure the timely detection of fire, access roads, or sources of water for firefighting. The fact that it was possible to manage all the above-mentioned activities is mainly thanks to the excellent cooperation of professional and volunteer firefighters, cooperation with police officers, paramedics, city mayors, governors, and others who ensure the functioning of the IRS.

The effective functioning of the IRS is

mainly due to the people, the employees who work in the institution on a daily basis. Would you like to highlight some of the deeds you have come across recently? What could motivate other people, for example, young students, to start a career at the fire department?

Thewaythe FRS and IRS work in the Czech Republic is primarily determined by the people working in it. If we have the financial funds, we can buy equipment or build stations, without people who are enthusiastic about it, but there will be only equipment that cannot be used. History shows us that in the case of firefighters, it is a specific group of people who take these activities as their mission, which fulfils them. The first firefighters were volunteers who per-

ceived their activity as essential help in the case of life and property protection, this also gave rise to the firefighter's motto - "to help one's neighbour". Later, due to the increasing number of extraordinary events or the threat of wars, volunteer firefighters became people who performed this activity as their profession. Most of our colleagues at FRS started as volunteer firefighters. It is the willingness to help others, to work together in a team, to learn new things, as well as a certain ability to be flexible and improvisational, that is one of the basic prerequisites for the work of a firefighter. In addition, of course, it is also necessary to have physical and mental resistance. If the FRS CR is to develop further and respond to new challenges, it is essential to have enough enthusiastic people. The best way is through volunteer firefighters and units of the volunteer fire department of municipalities. In connection with today's times and possible threats, it can also be a form of service and help to the Czech Republic.

# Financial resources are currently being discussed by the whole society. What do you think needs to be changed in this area?

The financial resources that are spent on fire protection and IRS are expenses directly related to the safety of the Czech Republic. With increasing threats, new challenges, and the number of emergency incidents in which firefighters intervene in the context of rising prices and shortages of raw materials, it is very problematic to look for savings on the expenditure side of the budget. It is therefore necessary to look





for ways to strengthen revenues, especially with the use of multi-source financing. In the past, this was, for example, the creation of a Damage Prevention Fund, to which insurance companies contribute from selected compulsory motor vehicle insurance. This fund is being used for financing both the purchase of equipment for the IRS units and preventive actions aimed at traffic safety. The participation of financial resources from regions and municipalities is also necessary. It is necessary to examine other possibilities for strengthening multi-source financing, especially in areas where considerable damage can be averted thanks to the quick and effective intervention of firefighters. Another way is to share resources and build capacities in the framework of cross-border cooperation or building common European capacities. For example, the use of "rescEU" funds to support the building of common European capacities is one of the ways to modernize the aerial firefighting system in the Czech Republic, with an overlap to neighbouring countries as well.

With the mentioned changes, the requirements of the IRS CR also increased. How would you describe these requirements? With the increase in these

activities, the financial demands also increased. Is it necessary to adapt or modernize the technical equipment and material support of the FRS CR for these situations?

For firefighters to be able to carry out their tasks, they must have the necessary equipment. From this point of view, it is necessary to invest not only in professionals but also in volunteer firefighters. This is primarily a change in emergency equipment, especially fire engines, and equipment for work at height. This equipment is absolutely fundamental to our activities. There was successfully set up a system where, if new equipment is purchased for professional firefighters, older equipment from professional firefighters is transferred free of charge to municipalities for the needs of volunteer firefighting units. The fire protection system in the Czech Republic is based on the cooperation of professional and volunteer firefighters; from the point of view of models applied abroad, it is one of the best and most effective systems. This is why it is necessary to ensure a renewal of equipment even among volunteer firefighters. In connection with new challenges, it is also necessary to ensure the acquisition of equipment for extinguishing forest fires,

whether it is forest specials or special mobile tanks and hose systems, including transport capacity.

In addition to equipment, it is also necessary to ensure the modernization and construction of fire stations and the construction of training centres. We also perceive the need for the construction of educational facilities where it would be possible to educate children and citizens in an interesting interactive way, on how to prevent extraordinary events and how to behave in the event of their occurrence.

In the coming years, communication and warning systems will also need to be modernized. Due to the requirements for new methods of receiving emergency calls in the form of video calls, the transmission of text communication in real time, and others, it will be necessary to modernize the system for receiving emergency communications.

Mr. General, thank you for the interview. Adriana Jesenská Photo: GD FRS CR

# Interview with the Chairman of the Administration of State Material Reserves (ASMR) - Dipl. Eng. Pavel Švagr, CSc.

Since the last interview, the Administration of State Material Reserves, together with our entire country, has gone through a period of unprecedented challenges. These challenges brought about the necessity of major changes to cope with the difficulties that the previous year had prepared for us. The recovery from the pandemic, the ongoing war in Ukraine, the crisis associated with it, and other emergency events forced the Administration of State Material Reserves to an extreme commitment and flexibility. In this interview, the ASMR's Chairman, Dipl. Eng. Pavel Švagr, CSc. presented how the organization dealt with the difficult tasks of the past year and what these tasks meant for its functioning.



What has changed in ASMR and in your career since the last interview? What are your goals for 2023? Are you planning any changes?

Administration of State Material Reserves has become an institution that is heavily relied upon in terms of crisis preparedness. And rightly so. During Covid-19 pandemic and the current state of war in Ukraine, we demonstrated in practice not only expertise but also managerial mastery of all the situations we went through. Considering the present time, there are new challenges and tasks ahead of us. These include amendment of the legislation to make the entire system of preparedness for crises more flexible, less administratively complicated, and also just to be materially better prepared for potential crisis situations.

But for this, we also need not only financial resources, and not only for the acquisition of state material reserves, but also to provide modern storage capacities and service equipment, but also well-motivated and qualified employees, and then let's also look at how the whole

system works. If any department does not give the necessary priority to crisis planning and does not pass on the requirements for the creation of state material reserves, then unfortunately I couldn't do anything about it. We could talk about it for a long time, but this is the backbone for my further work, it is in principle the basic outline from which my strategic, tactical, and operative steps and tasks must result.

Well, it all has a connection with my career path you're asking about. So on the one hand, I am and always will be a crisis manager, and on the other hand, it's about strategic considerations and the direction of the office. And to tell the truth, I am now abstracting from the need to know ordinary clerical procedures. And believe me, we face many tasks that have never been solved. It's just a different era, there are different challenges, and therefore we need a change in thinking.

In March 2022, at the time of the previous interview, the conflict in Ukraine just started and no one cou-Id imagine how the situation would develop. What has changed in this regard? Are current ASMR activities different than at the beginning? Is ASMR's operation connected with aid to Ukrainian refugees in the Czech Republic or with direct humanitarian aid in the Ukrainian war zones?

Since the beginning of the conflict in Ukraine, we have already issued supplies worth approximately 300 million crowns (in purchase prices) from material reserve warehouses. Already at the beginning of March 2022, we sent, for example, about 40 trucks carrying over 950 pallets of medical supplies to Ukraine. As a whole, this humanitarian aid is unprecedented in the history of the ASMR, it is the largest one-time aid in the history of the Czech reserves.

Furthermore, in the following months, we also provided a total of approximately 127 tons of food, mainly pasta, milk powder, and pâtés. And then there was the provision of approximately 900 temporary bridges which I consider to be important. And there were other items as well. I must also mention the electric power generators that we sent there before the end of last year. This was also important because everyone wants to be assured not only of the supply of electricity but also of heat. It's just that many people simply don't have what we take for granted here, just a few hundred kilometres from us. That is why I consider all this humanitarian aid, and it does not only refer to aid from the state material reserves, to be very important and necessary. And we have to thank everyone who participates in it.

However, our aid was not directed only to Ukraine, we provided support in managing the first wave of Ukrainian refugees who came to the Czech Republic after the start of the conflict. It was about providing beds, mats, sleeping--bags. However, it was also necessary to provide food for the refugees, so we also provided cutlery and mugs.



The effects of the war on the Czech economy are undeniable. This is mainly the current energy crisis, which is closely related to the increasing rate of inflation. Is ASMR trying to work with this somehow? What steps can it take to improve the situation in the Czech Republic? Or is it all different? Some of the commodities that ASMR deals with are crude oil and, more recently, natural gas. How is ASMR doing in this regard and what support do you have from the government?

Of course, we constantly monitor the development of the economy, but our role is not to predict or decide how to approach the current economic or energy situation. This must be done by the government, i.e. the respective ministries within their crisis plans.

Yes, I consider it the right decision of the government that from April 2022 natural gas is a new commodity in the state material reserves. We collected approximately 240 million m³. As far as crude oil and oil products are concerned, for a long time we are below the limit of reserves for 90 days of average consumption in the Czech Republic, so we are not fulfilling the obligation imposed on us by the Czech and European legislation. We are currently trying to change this by purchasing crude oil and diesel oil for a total of about 2 billion CZK. Of course, from the point of view of tenders, and not only in the area of crude oil and oil products, the situation is also very unstable. I can say that I have not encountered this yet, the times are very turbulent and the current events undoubtedly affect commodities and practically all purchases, on their availability and also on the price. Today we are in a situation where prices change very quickly, there is practically no certainty in terms of the functioning of supplier-customer relations, and the market is simply not stable.

As for our orders, of course, all this affects us. Imagine that we want to sign a contract with you, where there is a fixed deadline for delivery and also penalties if you do not deliver within this deadline. This is riskier for suppliers concerning the current functioning of the market than it was in the calm times before the Covid pandemic. And of course, this also affects whether or not you are interested in this state contract. We issue many tenders, but it is also true that for many of them, even if we have the funds, mainly for the reasons I described, we cannot find a supplier.





How is ASMR recovering after the Covid-19 pandemic? Is it considering another potential wave? How is it currently using anti-pandemic reserves? Do you have enough information, regulations, etc. from the state institutions?

I must say that we are definitely much better prepared than before the pandemic outbreak in 2020. At that time, we had a total of about 30,000 pieces of various medical devices in stock and it was in line with the requirement of the Ministry of Health. Nowadays, for such cases as the Covid-19 pandemic, we have reserves of protective equipment for up to two months. So if emergency conditions were to be declared in the Czech Republic in this regard, we would probably have no problem with this equipment. Today, in addition to face masks, we have FFP2 and FFP3 class respirators, FFP3 class half-mask filters, medical gloves, protective shields and goggles, swab sets, rapid tests, protective suits, medical caps, and shoe covers in stock. At the same time, it is also necessary to take into account the situation when the number of domestic producers has increased in the Czech Republic and the supply of the market is simply diametrically different from the beginning of 2022. But let's hope that such a pandemic will not return in the foreseeable future.

In addition to these global problems, the Czech Republic also solved some national problems, such as the elimination of an outbreak of bird flu in a large farm in Brod nad Tichou in the Tachov region or large-scale fires in Bohemian Switzerland and Hřensko. Was ASMR involved in solving such incidents? If so, how do you manage it?

That's right, that's what our supplies are for. The last few years have been difficult from the point of view of crises, and the administration's equipment intervened almost every other day in the past year. As for the liquidation of bird flu outbreaks, a total of 18 pieces of equipment were deployed, including airtight containers from ASMR. Containers for long-distance water transport, mobile filling stations, technical fire-fighting containers, hose containers, but also emergency survival containers were deployed during fires. The equipment helped not only for fighting fires in the Czech Switzerland National Park but also for fighting fires in Prague, and regions of Ústí n.L., Central Bohemia, Pilsen, Moravia-Silesia, Hradec Králové, South Moravia, and South Bohemia. In the case that a similar event occurs, a stock activation system for an integrated rescue system is of course being developed, or the relevant region or municipality will contact us with a request for help. Of course, there are approval mechanisms, but in principle, we react in these urgent cases in terms of supplies from the stock practically immediately - within hours.

# Would you like to tell our readers something else, Mr. Chairman? Maybe something interesting?

I would certainly have many messages on my mind, but I consider it essential not to underestimate preparedness for potential crises. That always backfires. The present times bring new challenges and new requirements for the state material reserves, and without the allocation of funds for this crisis preparedness, it simply will not work. The better prepared we are, the better and more effectively we will manage some unpredictable situations. It sounds like a cliché, but unfortunately it needs to be remembered. And our experience shows that there is not always the will to admit this truth. And then let's think sometimes about how we are prepared at home, for example, if there is an interruption in the supply of electricity or gas for a while, or if there is no water, if we have a minimum stock of non-perishable food in the pantry, etc.

Mr. Chairman, thank you for the interview Adriana Jesenská Photo: Archive of ASMR

# LETUS DESIGN TOGETHER YOUR MOST ADVANCED VEHICLE.



4x4.6x6.8x8 DRIVELINES
CREATING NEW REFERENCES FOR INDUSTRIAL COOPERATION



# Reliable Czech Mobile Surveillance Systems Save Police Time and Money

Illegal migration and smuggling prevention, searching for missing people, surveillance of sports events such as the Biathlon World Cup or petty crime

prevention at music festivals and Christmas celebrations - these are just a few examples of police actions which have involved mobile monitoring systems produced by EVPÚ Defence a.s.

The company's SMV monitoring vehicle with thermal imaging camera is one of the surveillance devices that the police can rely on. These vans are customised and offer a choice of day and thermal imaging cameras, laser range finders and other sensors which can detect objects of interest. The

vehicle interior is designed for two operators who can monitor both the target area and the van's immediate surroundings on separate screens. Other equip-

ment includes a radio station, LTE router for connection to the Internet or secure data network and DVR device for collecting video evidence.

For smaller scale surveillance tasks such as monitoring the venue of a public event, a passenger car equipped with the RBOX monitoring system can be used as an alternative to a fully equipped SMV. In an appropriate configuration, the RBOX system is capable of detecting a person up to 12 km away and

recognize details up to 4 km away. Thus, for example, if a person is reported missing, RBOX can significantly reduce the time and costs associated with conducting the search. The output from the RBOX cameras can be used for further processing, such as streaming live video to the command staff, who can then decide on the next course of action.

Those interested in seeing the range of security and defence electro-optical systems designed and produced by EVPÚ Defence

are welcome to visit Stand 61 in Hall P at the IDET 2023 exhibition which takes place in Brno from 24 May – 26 May 2023.



SALE - MANUFACTURING - INSTALLATION - SERVISING of fencing and access control systems, including accessories

















# DENPL Detektor



Military Research Institute, s.p.

The new highly sensitive DENPL chemical detector is ready for service in the Czech **Armed Forces** 

The new highly sensitive DENPL detector of nerve paralytic agents (NPL) is the result of research and subsequent development at the Military Research Institute, s.p. (Brno) and presents its capabilities in the sphere of SOTA technologies. The birth of the device was supported by the Ministry of Defence of the Czech Republic as part of the defence research and development program.

A distinctive parameter of the detector is its high sensitivity, which is up to two levels of magnitude better than in the case of detectors based on physical principles (e.g. IMS).

Practically, this means that it enables the detection of highly dangerous NPLs in concentrations that do not immediately threaten the human organism, and it was the need to detect sub-lethal concentrations that was the main impetus for the development of the detector. Indeed, it provides clear advantages (a) in the early detection of lethal danger and (b) in the detection of highly dangerous persistent NPLs that are difficult to evaporate and constitute a high contact risk, and (c) in the monitoring and precise determination of the contamination limit. In addition, the detection system uses direct reactions of the sample with cholinesterase, so that other highly dangerous cholinesterase-inhibiting substances, such as pesticides, etc., can be detected.

The DENPL detector is designed for military use according to military standards, it is mechanically and climatically resistant and has compact dimensions, low weight, and low energy requirements. Ease of use, automation of the detection process, and connectivity for data transfer enable its use in automated monitoring and survey systems, both mobile and stationary.

The useful properties of the DENPL detector predetermine it especially for use by special CBRN (OPZHN) units of the Czech Armed Forces. For example, it is expected to supplement the detection equipment of the new light armoured reconnaissance vehicles S-LOV-CBRN, which is also supplied by the Military Research Institute, s.p. for the CBRN reconnaissance units of the Czech Armed Forces. The DENPL detector here replaces the function of outdated Russian-made

solutions (e.g. GSA 12).

The DENPL detector was successfully verified by specialists of the chemical protection troops of the Czech Armed Forces during military tests, it is ready to be put into use in the Department of the Ministry of Defence and will be exhibited at the IDET 2023 Trade Fair in Brno in the exposition of the Military Research Institute, s.p.

The detector solution is unique; you would not find any device with a similar concept and detection properties on the market. The DENPL detector is thus an exceptional achievement that preserves the unique detection capabilities of the special chemical units of the Czech Armed Forces, which are appreciated within the Alliance. Liberec chemists no longer have to rely on technically outdated Russian detectors.





# Tatra Defence Vehicle – Production of TITUS Armoured Vehicles for the Czech Army is in Full Swing

Tatra Defence Vehicle belongs to the Czechoslovak Group (CSG) holding. It deals with the development and production of military and special land vehicles, mainly on wheeled chassis. In addition, it also carries out their repairs and modernization. Currently, its main pillars are the production of TITUS, Pandur II 8x8 vehicles and the development and production of armoured cabins for Tatra vehicles.



The company Tatra Defence Vehicle (TDV) is significant from the point of view that it is one of the youngest companies of the defence industry in the Czech Republic, it was ceremonially opened in 2016. Today it is an efficient and prosperous company that is a reliable partner of the Czech army, other armies abroad as well as large corporations of the defence industry worldwide.

TDV started with repairs of heavy military vehicles, gradually moved to the position of a development company and today it is a full-fledged production company with its own products and development background. The main items in the production portfolio are the already mentioned TITUS and Pandur II 8x8 vehicles and the related development and technical or support services. On the development and production of both models, TDV cooperates with other companies within the CSG holding as well as with foreign partners such

as Nexter Systems or General Dynamics European Land Systems (GDELS).

### **Serial production of TITUS vehicles**

Currently, the production of TITUS vehicles for the Army of the Czech Republic (AČR) is in full swing at the company. The Ministry of Defence ordered a total of 62 TITUS vehicles on the Tatra 6x6 chassis in three versions, the entire project is to be completed by the middle of 2024. TITUS is a universal platform, the Czech army ordered this vehicle in the versions - wheeled armored command and staff vehicle (KO-VVŠ), wheeled armored communication vehicle (KOVS) and fire support coordination point (MKPP). TDV, in cooperation with Nexter Systems, developed a unified bodies for all the Czech army vehicles with the required resistance, but the resistance can be further increased. However, TDV is able to develop other versions, if the Czech army or foreign customers require them in the future.

Last year, TDV completed the testing of six prototypes, which then successfully passed the Czech army military tests in the fall. After that, serial production started. In the first stages, the company Nexter supplied the TDV company with manufactured armored bodies, now the know-how of their production has been completely transferred to TDV, and the production of the main components of TITUS vehicles as well as their final assembly takes place in the TDV factory in Kopřivnice.

# Pandur vehicles for the Czech army and foreign customers

Under an exclusive license from GDELS Corporation, TDV develops, manufactures, modernizes, and services the Pandur II 8x8 armored wheeled vehicles and has the rights to sell them in selected regions. TDV is the only manufacturer of Pandur II 8x8 vehicles in the world, developing new versions and constantly improving them. An example is the special communication (KOVS) and command-staff (KOVVŠ) vehicles ordered by the Army of the Czech Republic in 2017, which were successfully handed over in 2019 and 2020. Improved structural elements have already been built into these vehicles and completely new body parts have been created for them. TDV also delivers Pandur 8x8 vehicles in cooperation with partners abroad. Currently, the company fulfils an important order for the armed forces of Indonesia.

In connection with the conflict in Ukraine, representatives of the government and the Czech army spoke about the need to

acquire additional Pandur II 8x8 vehicles for the Czech army and to modernize its vehicles already in operation. TDV is ready to supply the Czech army with newly manufactured Pandur vehicles with significant improvements and is also able to prepare a modernization project in cooperation with the army for the existing fleet of vehicles. For example, ballistic resistance can be increased, electronic equipment can be modernized and supplemented, more advanced search and targeting systems can be installed, completely new communication and information systems on the Harris platform can be implemented, or more powerful and durable combat turrets can be installed. The Czech army is a key partner for TDV, so the company is ready to prioritize the needs of the domestic armed forces over contracts abroad.

### **Armored cabins for Tatra vehicles**

TDV develops and manufactures various versions of armored cabins for Tatra military vehicles as well as special superstructures for Tatra chassis. A major stimulus for this sphere is currently the project of logistics heavy vehicles for the Belgian army, on which TDV is cooperating with the companies DAF Trucks and Tatra Trucks. As part of it, TDV specialists and designers have developed a completely new armored cabin with resistance in level 3, which is intended for DAF CF Military vehicles on the Tatra chassis and also for the Tatra Phoenix model line. TDV will produce hundreds of these cabins for logistics trucks of the Belgian army.



For the Tatra Force model line, TDV produces armored cabins in cooperation with Israeli partners in level 2 and 3 resistance, but also offers cabins of its own design. These cabins are available in two-and four-door versions. They can also be adapted for special vehicles, for example for self-propelled howitzers. TDV is also able to supply armored cabins of various levels of protection for Tatra Tactic medium trucks. TDV also develops and manufactures special armored superstructures for Tatra 4x4, 6x6 and 8x8 chassis with ballistic and anti--mine protection. The most recent example

is the superstructure for the electronic warfare and jamming vehicles of the Starkom project for the Czech army instaled on the Tatra Force 8x8 chassis.

### Services and technical support

Although TDV is now primarily a manufacturing and development company, it continues to be dedicated to the repair of land vehicles and related services throughout its life cycle. For this purpose, a special service company Tatra Defense Systems (TDS) was established in 2019. In addition to service support for Pandur II 8x8 vehicles, TDV will also service TITUS vehicles in the future. It also specializes in service and maintenance of vehicles on off-road Toyota or Land Rover Defender platforms and Tatra military vehicles in cooperation with Tatra Trucks. It also has the capacity and know-how to upgrade and service tanks and other heavy armored vehicles, both tracked and wheeled. As part of customer support, TDV also manufactures and supplies spare parts, provides logistical and service support for the normal operation of the supplied equipment, or training and education of crews and service teams of users. Both TDV and TDS also have the necessary control and measurement technology for performing technical defecting. TDV is a strategic Czech company in the field of land military vehicles, which is gradually expanding its capacities and the number of its employees. He is currently preparing a project for a new production hall, which will enable further production growth.



# **IDET 2023 will Feature Modern** Technologies for the Defence Industry

The Brno Exhibition Centre will host the 17<sup>th</sup> edition of the IDET international trade fair from 24 to 26 May 2023. IDET marks 30 years since its first edition this year. It is a prominent platform for the presentation of the Czech defence industry, and throughout its existence this fair has built a prestigious position within the NATO area. PYROS and ISET trade fairs are also held concurrently, focusing on the presentation of firefighting and security equipment and services.



Exhibitors have demonstrated high interest in the upcoming season. Among the companies already registered there are Agados, Aselsan, BAE SYSTEMS, CROY, CZECHOSLOVAK GROUP, Česká zbrojovka, Diehl Defence, e.sigma, Elbit Systems, EVPÚ Defence, IAI - Israel Aerospace Industries, KMW, Lockheed Martin, L.P.P. holding, Nexter Systems, OMNIPOL, PRA-GA-Export, Saab Technologies, SKUPINA, STV GROUP and SVOS. State-invested companies LOM PRAHA, Military Technical Institute, Military Research Institute and VOP CZ will also be present. The fair will boast a strong presence of German companies, and a number of exhibitors from Turkey are also bound to return.

An extensive exposition is being prepared by the Ministry of Defence of the Czech Republic and the Armed Forces of the Czech

Republic, which also marks 30 years since its foundation this year. The Ministry of Defence of the Slovak Republic will also be present at the fair.

Thanks to the cooperation with the Defence and Security Industry Association of the Czech Republic, the Security Innovation Zone project will return after its successful debut, offering the opportunity to get acquainted with the offer of innovative start-ups in the field of defence and security. The Gold IDET awards for the best exhibits will also be presented during the fair.

# Terrain polygon and specialised extra programme

An attraction of the security fairs is the IDET ARENA, a terrain polygon for dynamic demonstrations of military, firefighting and police equipment. In addition to the

polygon, additional extra programme is in the pipeline. Two major conferences will be held throughout the fair - the International Conference on Military Technology and the International Conference Defence & Strategy.

## **Presentations of all Integrated Rescue** System components

Concurrently with IDET, the PYROS International Fire Fighting Equipment and Services Fair, and the ISET International Security Technology and Services Fair will also be held. They present a unique opportunity for the introduction of all components of the Integrated Rescue System. The Fire Rescue Service of the Czech Republic, the Police of the Czech Republic, the Customs Administration of the Czech Republic, the State Material Reserves Administration of the Czech Republic, the Prison Service of the Czech Republic and the Brno Municipal Police will present themselves in Hall F.

### **Opening hours**

The IDET, PYROS and ISET security fairs are open from 9 AM to 5 PM on 24 and 25 May. On the first two days of the fair, entry is only allowed to persons over 16 years of age. On Friday 26 May, the gates are open from 9 AM to 4 PM. The PY-ROS and ISET fairs run until Saturday 27 May, when a programme for the general public in the form of a Security Day will be organised. On that day, the exposition of the Ministry of Defence and the Armed Forces of the Czech Republic will be open, and demonstrations of equipment and interventions will continue in the IDET Arena.

Novinky v asembláži MIL a VG konektorů

Těla a povrchové úpravy splňující RoHS a REACH direktivy

Slitina Al s povrchem Ni, Zn-Ni, Ni-Sn nebo Ni-PTFE, ocel s povrchem Ni, nerezová ocel nebo NiAl-bronz



Redukované příruby Zásuvky pro plošné spoje Integrované vývodky

# Konektory D38999 pro High-Speed aplikace

Koaxiální kontakty 50Ω do 65Ghz a  $75\Omega$  do 12GHzKontaktní systém Quadrax a OCS pro datové kontakty Kontakty pro 1, 2 nebo 4 datové páry

až do 10Gb/s

Quittner & Schimek s.r.o. Podlevínská 518, CZ 507 91 Stará Paka +420 493 766 111

www.qscomp.cz



# Agados is Entering IDET Once Again with an Amphibious Off-road Trailer and a Field Kitchen

The Agados company from Velké Meziříčí has become a traditional exhibitor at the IDET International Defence and Security Technology Fair. The fair takes place in Brno from May 24 until May 26 and is a showcase of defence and security technologies in Central Europe.







Just as Agados' participation in the IDET fair is a traditional matter, Agados' involvement in the field of military technology is also a tradition. This may be a little less known information for the broad public as people main-

ly associate the company from Velké Meziříčí with trailers - which make the Agados logo often visible (not only) on Czech roads.

No wonder! Agados is the largest do-

mestic trailer manufacturer and one of the largest European trailer manufacturers in the categories of up to 750 kg and up to 3 500 kg. It sells around 25,000 trailers annually; with more than half of them heading abroad. However, in 2014 Agados first started producing and supplying special trailers for the integrated rescue system, especially for the military. "These are primarily devices that ensure logistics in terms of water and food supply," says Petr Ostrý, CEO and company owner.

### Amphibious off-road trailer

One of the flagships of today's Agados army portfolio is undoubtedly a unique amphibious terrain trailer that can overcome all possible types of difficult terrain. It copes with snow, mud and rocky surfaces, which is helped by the patented system of independent suspension of each wheel and in the same time the engagement of unique skis. The trailer can also be transported through water, it can to swim behind the towing vehicle. The usable load area has a load capacity of up to 1,500 kg and is modularly interchangeable for various uses - not only in extreme conditions. It is a two-axis suspension trailer with four fifteen-inch wheels with a total weight of 3,500 kg. It can serve as a waterproof box, cistern, open platform, container and folding flatbed superstructure in the design with a tarpaulin. It is also ideal for transporting a generator, for example.

The Agados amphibious off-road trai-

ler won the Gold IDET and Bronze IDET News awards at the IDET fair in 2019, and it also became the Exhibit of the Year 2019. It will not be missing at this year's event either. An amphibious off--road trailer with two types of superstructure will be part of the indoor exhibition in Brno. That will be together with the towing track vehicle BvS10 from the production of the Swedish arms company BAE Systems.

### Mobile field kitchen

The Agados army offer also includes drinking water tanks and water treatment plants, which are used not only in the army, but are often used by rescuers during natural disasters. Agados also manufactures a lighting tower, which is suitable for illuminating crash sites, workplaces, military camps and similar. All this in field conditions.

For field conditions, Agados has developed and manufactures another very popular trailer, which is a mobile field kitchen. The company has several types in its portfolio. They differ, for example, in the volume of portions that can be prepared in them, but also in weight or the ability to transport in difficult terrain.

The first PK4 Kaga mobile kitchen was launched on the market in 2017, and the same year this model won the Golden IDET 2017 award. For the Czech army, it was a big step in modernization at the time, as it had been using a 60-year-old model of field kitchens.

One of the models of the field kitchen will also be part of the exposition at the IDET fair this year. It will be on display in the outdoor area, and visitors will have the opportunity to see with their own eyes the specifics of food preparation in the field kitchen. Traditional goulash will be served.

The outdoor exhibition will also feature fire trucks.

### Agados in the army service

Agados military products are part of the equipment of not only the Czech army, but are also used by several armies of NATO member countries. Specifically, we can find them, for example, in Germany, Austria, Finland or Sweden.

In addition, production for the military segment already represents one fifth of Agados' turnover, and this share is expected to grow even further.









# Modular Shooting Ranges are the Standard of the Future

LEDIC MSR, as an exclusively Czech manufacturer, comes to the market with its own unique solution of modular shooting ranges, which meet the high demands for shooting training of the police, armed forces and their individual units. Sophisticated and open systems are based on connecting modules, thanks to which it offers the possibility to assemble variants of shooting ranges tailored to the specific needs of training and thus create an ideal background for shooters.



### **Fully modifiable shooting ranges**

A functional training base/classroom is an essential prerequisite for the fulfillment of the tasks of the police and the army, which have specific requirements for shooting training and the operation of shooting ranges. Modular Shooting Range systems are designed for them. These can be assembled or relocated according to specific needs and parameters, the modules can also be further expanded or modernized. So they will always meet the current and specific requirements of the army, police and other armed forces.

### Modular Shooting Ranges meet high requirements

The concept of modular shooting ranges as closed objects makes it possible to choose a suitable model and its required ballistic resistance, shooting distance and level of equipment. Individual sets of modules can be adapted so that the shooting range meets the requirements, mainly in terms of the type of training and related

functions, the type and performance of the weapons and ammunition used, the number of people training at the same time, the shooting distance, the shooting range's capacity, the choice of target system and other equipment elements.

The range can be supplied with an effective firing distance of 10 to 300+ meters, for 2 to 16+ shooters firing simultaneously, with an adjustable firing range for shooting from a fixed or dynamic firing line and a combined lamellar bullet trap with shotblocks or rubber granulate trap. It can also be equipped with manual or motorized remote-controlled target carriers, and other equipment elements can be added (e.g. variable intensity of target lighting, Dark Mode, variable target equipment, simulation video system for shooting from laser weapons or live fire with an additional system with thermal imaging of impacts/hits etc.). A camera system monitoring imaging of impacts/hits in real time with the possibility of continuous recording for an individual user is used to evaluate the training.

### Functional background and operation

Due to its design, the shooting range offers continuous year-round and self-service operation. Safety, ballistic resistance and sufficient anti-noise measures come first. In addition, intuitive air conditioning and ventilation control, air quality monitoring for automatic air exchange and effective internal temperature regulation guarantee maximum comfort during training. Remote management and service operation supervision are standard.

- In the area of the army, police and other armed forces, shooting ranges are supplied through distributors.
- Come and test the functional shooting range at the Factory Test Center in Křeč next to the manufacturing plant. Book an appointment at www.lscenter.cz.

You can find more information about modular shooting ranges at www.ledicmsr.cz and www.ledictraining.cz.



# **Protect Parts**

protective solutions



**Production of semi-finished** parts

 parts for the military and the civilian sector

# **Production possibilities**

- cut parts laser / 3D plasma
- edged & twisted parts
- drilled, milled & grinded parts

**Delivery of complete sets** 



www.protectparts.cz

# Special Heat-Treated Cables for Use in Demanding Climatic Environments and for Military Purposes from OPTOKON a.s.

The LMCAB series Expansion cable accessory is a high-quality data cable that has been specifically designed for use in rugged industrial and military environments. It is equipped with a ruggedized connector on the server side and industrial IP65 connectors on the peripheral side, making it suitable for use in harsh and demanding applications.

One of the key features of this data cable is its Halogen Free Flame-Retardant Polyether-based Polyurethane material, which has a glossy finish and offers excellent hydrolysis resistance, high microbial resistance, UV resistance, and high flexibility. These properties make the cable highly durable and resistant to damage from exposure to harsh environments, making it suitable for use in challenging conditions.

The cable also conforms to a number of industry standards, including Ethernet Cable, modular connectors RJ45, a 4 pair, 24 AWG, 100 Ohm SFTP round patch cable designed to the ISO/ IEC 11801 Category 5e requirements (cat5e on 76 m), USB 2.0 with a maximum signalling rate of 480 Mbit/s, and the RS-232 standard commonly used in computer serial ports.

Overall, the LMCAB series Expansion cable accessory is a high-quality data cable that offers reliable and high-speed data transmission in harsh and demanding environments. Its rugged design and high--quality materials make it an ideal choice

for use in industrial and military applications where reliability and durability are

Due to the limited space available on the front panel of LMCP, LMSW, and LMSR devices, multipin connectors are often used to provide multiple output ports for Ethernet, video, USB, serial, and other types of signals. These multipin connectors require special types of cables that can split the traffic from one multipin connector to multiple output ports.

These cables are typically designed to be rugged and durable, with high-quality connectors that can withstand the demands of industrial and military environments. They may be shielded to minimize interference and crosstalk between signals, and may also be designed to meet specific industry standards for data transmission.

In addition to splitting signals from multipin connectors, these cables may also be used to extend the reach of signals from devices located in remote or hard-to-reach locations. For example, a video signal from a camera mounted on a vehicle may be transmitted to a display unit located in the vehicle cabin via a multipin connector and a specialized cable.

Overall, the use of specialized cables for multipin connectors helps to maximize the functionality of LMCP, LMSW, and LMSR devices in challenging environments where space is at a premium and reliable data transmission is essential.

### Cable shielding

In military applications, the use of flexible EMI shielding is often critical to ensure not only protection against external electromagnetic interference but also to prevent information leakage from the cable.

Military cables are designed to withstand harsh environments and extreme conditions, such as high temperature, humidity, and physical stress. The use of flexible EMI shielding provides an additional layer of protection to the cable, helping to prevent damage from impact, abrasion, and other forms of mechanical stress.

Moreover, military cables often carry sensitive and confidential information that needs to be protected from unauthorized access or interception. Flexible EMI shielding can help prevent information leakage by blocking electromagnetic signals that could potentially be used to intercept or interfere with the information being transmitted through the cable.

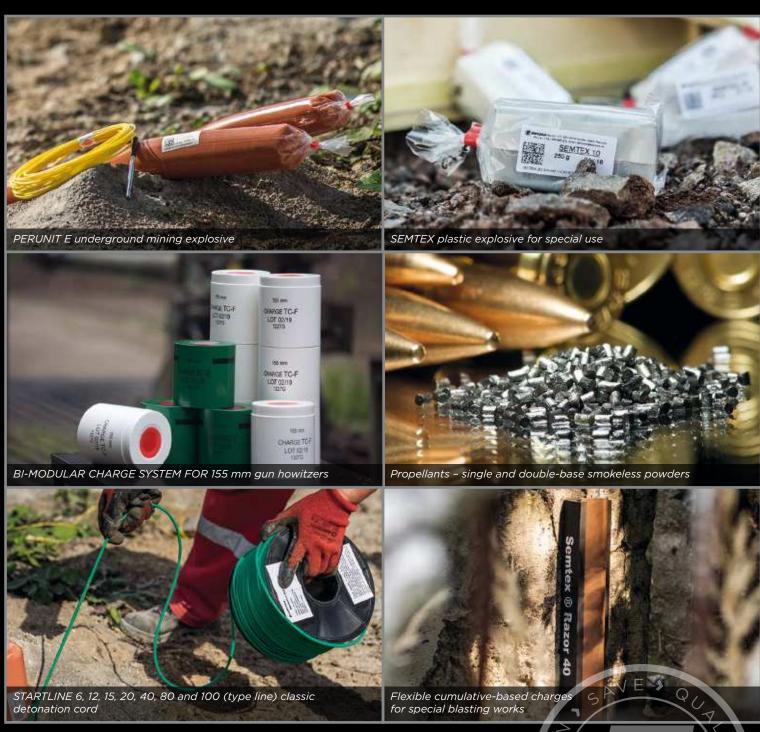
Overall, the use of flexible EMI shielding in military cables is an important aspect of ensuring reliable and secure communication in critical applications.

And finally, the cable is covered with Polyester Braided Tubing which is suitable for the mechanical protection of harness, hoses and all other applications where exceptional flexibility combined with superior abrasion/ cut resistance is required. It acts as an economical tool for wire bundling that will not retain heat or moisture, easily expands to fit irregular shapes, then shrinks for fit and grip.

All our cables are tested and meet all requirements and standards for industrial and military applications. If you are looking for reliable cables that will fully meet the highest demands, do not hesitate to contact us. We will be happy to provide you with more information and make you the best cables for your applications.



Dipl. Eng. Pavel Pospíchal Technical director, OPTOKON, a.s.







# **Export to more than 40 countries**



# RESCUE TRAILER

# RESCUE TRAILER

# profil společnosti:

Rescue Trailer přichází na trh v roce 2022 s novinkou v oblasti logistiky osob a materiálu. Jedná se o českou rodinnou společnost s dlouholetými zkušenostmi v oblasti strojírenské výroby zaměřené na automotive. Svým produktem cílí na armádní a záchranné složky pro zajištění logistických potřeb při výrazně nižších nákladech na pořízení, transport a skladování. Výroba probíhá ve spolupráci s předním globálním výrobcem přívěsové techniky společností Knott, jejíž komponenty jsou zárukou kvality a výdrže v extrémních podmínkách.

## <u>popis produktu:</u>

Rescue Trailer je skládací přívěs pro přepravu osob a materiálu, který svými rozměry vyhovuje standardu NATO paleta 463L. Složení, respektive rozložení, zvládnou dvě proškolené osoby za cca 2 hodiny. Díky své skládací koncepci šetří náklady na přepravu i skladování. Svými výjimečnými jízdními vlastnostmi nabízí komfort přepravované posádce i případným zraněným při jejich evakuaci. Hodí se pro všechny scénáře použití při živelních katastrofách i válečných konfliktech nejen jako doprovodné vozidlo, ale také jako mobilní základna, která poskytuje zázemí a ochranu své posádce. Je vybaven trakční baterií, nádrží na vodu, elektrocentrálou a dalšími přístroji a vybavením, které je individuální dle potřeb objednatele. Konstrukce přívěsu umožňuje instalaci balistické ochrany dle požadavků. Rescue Trailer je homologován do 3,5 t, ale jeho maxi- mální možné zatížení je 9 t. Jeho tažení je díky nastavitelné oji možné za osobními i nákladními vozy.

### klíčové vlastnosti:

- Skládací koncepce
- konstrukce řešena šroubovými spoji snadná výměna poškozených dílů
- Nezávislé zavěšení kol bez vnějších prvků vše je ukryto v těle nápravy
- Skvělé jízdní vlastnosti na silnici i v terénu
- Tažení za osobním i nákladním vozem nastavitelná oj
- Homologace do 3,5 t, celkové zatížení až 9 t
- Balistická ochrana
- Trakční baterie, nádrž na vodu, elektrocentrála, 230V, USB
- Sklopné lavice a nákladová rampa
- Možnost tažení dalšího přívěsu (např. elektrocentrála, nádrž na vodu)
- Skříň s vybavením, nosítka, světelná rampa
- Zabudovaný jeřáb ve střeše nakládání těžkých břemen
- Individuální přístup dle potřeb objednatele specifikace:
- Rozměry ve složeném stavu (ready to transport):
   2,25 x 2,1 x 2,8 m
- Rozměry v rozloženém stavu (ready to GO): 2,25 x 4,9 x 2,8 m
- Délka včetně oje: 6,3 m
- Kapacita: 16 osob na sezení nebo 30 osob na stání
- Ložná plocha stropu: 10m² (nosnost 750 kg)

# company profile:

Rescue Trailer is coming to the market in 2022 with a novelty in the field of logistics of people and materials. It is a Czech family-owned company with many years of experience in engineering production focused on automotive. Its product targets the military and emergency services for logistics needs at significantly lower acquisition, transport and storage costs. Production is carried out in cooperation with Knott, a leading global manufacturer of trailer equipment, whose components guarantee quality and durability in extreme conditions.

## product description:

The Rescue Trailer is a folding trailer for transporting people and material, which in its dimensions complies with the NATO pallet 463L standard. It can be assembled or disassembled by two trained persons in about 2 hours. Thanks to its folding concept it saves transport and storage costs. With its exceptional handling characteristics it offers comfort to the transported crew as well as to the injured during evacuation. It is suitable for all scenarios of use in natural disasters and war conflicts, not only as an escort vehicle but also as a mobile base that provides facilities and protection for its crew. It is equipped with a traction battery, water tank, electric generator and other devices and equipment that is individual to the customer's needs. The design of the trailer allows the installation of ballistic protection according to the requirements. The Rescue Trailer is homologated up to 3.5 t, but its maximum possible load is 9 t. Its towing is possible behind cars and trucks thanks to the adjustable drawbar.

## key features:

- Folding concept
- construction solved by bolted joints Easy replacement of damaged parts
- Independent wheel suspension without external components
- everything is hidden in the axle body
- Great handling characteristics on and off road
- Towing behind cars and trucks adjustable drawbar
- Homologation up to 3.5 t, total load up to 9 t
- Ballistic protection
- Traction battery, water tank, electric generator, 230V, USB –
   Folding benches and loading ramp
- Ability to tow another trailer (e.g. power pack, water tank) –
   Equipment cabinet, stretcher, light ramp
- Built-in crane in the roof loading heavy loads
- Individual approach according to customer's needs specifications:
- Dimensions when folded (ready to transport): 2.25 x 2.1 x 2.8 m  $\,$ 
  - Dimensions unfolded (ready to GO): 2.25 x 4.9 x 2.8 m
- Length including drawbar: 6.3 m
- Capacity: 16 persons seated or 30 persons standing
- Living ceiling area: 10m<sup>2</sup> (load capacity 750 kg)



# **Expert Testing Services for Electronic** Devices: OPTOKON offers Accredited **EMC Testing Services**

As technology continues to advance, the need for high-quality and reliable electronic devices becomes increasingly important. The OPTOKON testing division understands this need and offers expert testing services to ensure that electronic devices meet the highest standards. The testing division OPTOKON can be divided into two laboratories, each offering unique testing capabilities.



One laboratory specializes in Electromagnetic Compatibility (EMC) testing, which is essential to ensure that electronic devices do not interfere with other devices or systems. This laboratory is equipped with a state-of-the-art Lindgren semi-anechoic chamber, which provides an excellent environment for accurate measurement. The laboratory is capable of performing Electromagnetic Interference (EMI) tests in frequencies ranging from 9.5 kHz to 18 GHz, in accordance with the MIL-STD 461 standard for military electronic devices and the EN 55032 standard for consumer electronics. To ensure precise measurements, the laboratory uses Schwarzbeck antennas and the Rohde&Schwarz measurement receiver ESR 26 (up to 26.5 GHz).

OPTOKON offers EMI testing (CE102 and RE 102) and EMS testing - CS101 (susceptibility to conducted emissions, power conductors), CS114 (susceptibility to conducted emissions, injection into the cable harness), CS115 (conducted emission susceptibility, wiring harness injection, pulsed excitation), CS116

(conducted emission susceptibility, damped sinusoid, cables and power conductors) and RS103 (radiated emission susceptibility, electric field)

The second laboratory specializes in mechanical and climatic testing, primarily for optical cables and similar components. However, some of the equipment can be used for

testing other electronic devices according to MIL standards and ČOS standards. This laboratory is accredited and certified according to the ISO 17025 standard, and several mechanical and climatic tests have been accredited in accordance with the EN 60794-1-21 and EN 60794-1-22 standards.

The OPTOKON testing division offers unparalleled expertise and reliability in electronic device testing. With their state-of-the-art equipment and experienced technicians, they are equipped to handle even the most demanding testing requirements. Whether you are developing military electronic devices or consumer electronics, the OPTOKON testing division has the knowledge and capabilities to ensure your devices meet the highest standards. Contact us today on TESTING@OPTOKON.COM to learn more about our testing services and how they can help you achieve success in the competitive electronics industry.

Zdeněk Malý IT & Marketing manager, OPTOKON, a.s.







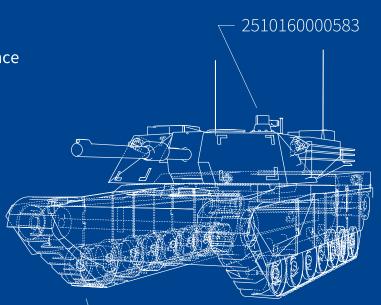


## 0 0 1

## We make the world of information more organised

## 26 countries 5 continents

- Logistics information systems for defence and security forces
- Comprehensive codification services according to NATO standards
- Data cleansing for clear information on assets and inventory
- Controlled distribution of documents with sensitive content



2350160005822



**IDET** 24 – 26 May

hall P, ground floor stand 016





## 16. - 18. října 2024

#### **PVA EXPO PRAHA**

## VÝSTAVA | ODBORNÉ PANELY | NETWORKING

FUTURE FORCES FORUM je organizováno pod záštitou nebo ve spolupráci s































# AURA Across Continents, via Abu Dhabi back to Brno

Interview with the head of the Sales and Marketing Department at AURA, s.r.o., Mr. Libor Gajdoš, about the company's business strategy since 2010, when it started to fully focus on expanding its export portfolio. Currently, AURA is considered the largest Czech exporter of logistics information systems for the defence sector. Its information system for the support of codification, MC CATALOGUE, is currently the most widespread in the world, used by 21 countries on 5 continents.



Mr. Gajdoš, AURA successfully exhibited at the recent IDEX 2023 defence trade fair in the United Arab Emirates. The company's stand was also visited by the Czech Prime Minister Petr Fiala. Are you satisfied with your participation at the exhibition in Abu Dhabi?

This year's IDEX, like all the previous ones we have attended, was prepared very carefully, both within our company and with our domestic and foreign partners. This was not only because we had the honour of representing the Czech defence industry at this significant global defence technologies and equipment trade fair, but also because our company is one of the few Czech companies that have been actively involved

in the development of the defence industry in the Emirates. I would like to point out that our MC CATALOGUE codification information system, which forms the backbone of the Emirati army's logistics DNA, was put into operation in the UAE Armed Forces already at the beginning of 2017. Our delegation at the fair was led by the owner and its CEO Mr. Filip Engelsmann, who in an interview with the Prime Minister of the Czech Government Petr Fiala directly at our stand presented the company's export vision in this region of the Arab world, including the expansion of the export portfolio. Our participation at IDEX 2023 was assessed to be very successful in all aspects and we are looking forward to building on that success at the IDET trade fair in BRNO in the last week of May.

So can we say, with a little exaggeration, that AURA's current business domain is the Arab world?

AURA started to focus its business strategy on exports sometime in 2010. We introduced the aforementioned information system for the support of codification, MC CATALOGUE, in Slovakia, followed by Scandinavian and Baltic countries, Morocco, South Africa, until gradually its codification system became the most widespread in the world, used by 21 countries on 5 continents. And you are absolutely right, after the United Arab Emirates we are currently paying maximum attention to the implementation of a large-scale project in Qatar. For several months now, our

special team has been working directly in Doha with the Qatari armed forces, which are an extremely powerful phenomenon in the country as evidenced by the fact that Qatar is currently the third largest importer of weapons and combat equipment in the world. AURA not only implements MC CATALOGUE, but is directly involved in building the National Codification Bureau in Qatar. Our specific task is the so-called cleansing of codification data of weapons and military equipment of the Qatari army. For the sake of completeness, I would like to mention that we are expanding our business activities in Africa through cooperation with Algeria and we are maintaining ongoing business cooperation with our important partners in Australia, Japan and Brazil.

At the end of March, a delegation of the State Emergency Service of Ukraine (SESU) visited the Brno company AURA. Does this mean that the company is preparing cooperation on an official level in addition to informal assistance to this country?

Since the beginning of the invasion of the territory of Ukraine by the troops of the Russian Federation last year, our company has been actively supporting Ukrainian civilians and soldiers. We provide concrete accommodation for Ukrainian families, employ workers from Ukraine and organise material and financial assistance. However, our humanitarian aid is also taking on the contours of formalised cooperation



with the SESU. The subject of our common interest is the Logistics Information System developed by our company in a configuration to support logistics in a crisis situation, which can also help with processes related to the distribution of humanitarian aid. Another important aspect is that the SESU can also provide selected information on the use of donations to donor countries. We are ready to discuss further assistance to Ukraine with other Czech defence industry companies at IDET.

#### And how is AURA doing on the home front, I am primarily referring to cooperation with the Ministry of Defence or other entities within the security community?

We are very glad that the so-called "CO-VID period", which at certain moments disrupted, sometimes even delayed our optimal cooperation, is over. With the Ministry of Defence, we can once again fully engage not only in the technical support and maintenance of the Logistics Information System, but also in supporting the new codification project within the Ministry of Defence. Our new contracts with the ministry, planned for

a longer period than in the past, also take into account the current and future economic development in Czechia. In the future, we will also focus on cooperation with domestic and foreign partners within the European Defence Fund 2021 - 2027 projects, which offer some very interesting opportunities, though highly difficult to process.

#### AURA is a company that has never missed the IDET trade fair in Brno. What interesting and new things have you prepared for visitors this year?

As a traditional family company based in Brno, 30 years of participation at the Brno IDET trade fairs is very binding for us. Presenting ourselves always in a new, attractive and interesting light is not easy at all. This year, we will follow up on last year's Future Forces Forum in Letnany and present our main standard products for military logistics and material codification support to visitors. Experts and the general public can look forward to the new generation of the Logistics Information System, configured to support logistics in a crisis situation. We will present comprehensive services for the NATO Codification

System. IDET is also an opportunity for us to approach Czech companies that supply weapons and military equipment to armies around the world. We will present to them the services of our AURA Codification Agency operating in Czechia and AURA LOGIS operating in Slovakia. Correctly prepared codification data according to the NATO Codification System standards is now an essential part of every delivery to the armed forces. AURA codification agency is the most requested Czech agency, in its 20 years of existence it has provided services to almost four hundred companies supplying products to the armed forces. We also do not forget the innovations in the area of controlled document distribution and technical translations. This time we will have at our stand also our partner for CBRN from the Danish company BruhnNewTech, which we exclusively represent for Czechia and Slovakia.

We look forward to seeing you at the IDET trade fair in Brno, Hall P, ground floor, stand No. 016!

Thank you for the interview, Antonín Svěrák

## **ORITEST**



#### What major changes have occurred in your organization since the last interview?

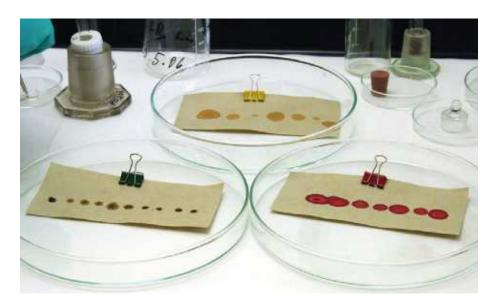
Approximately two years have passed since our last meeting. During this time, our experts at Oritest Saxonia subsidiary completed the development of our new GTD-S detector, which belongs to the IMS (Ion Mobility Spectrometry) group. We also celebrated the company's 30th anniversary in August last year.

Does cooperation, training or exchange of experience with your products also take place outside of the Czech Republic? Our company not only manufactures detectors for the detection of dangerous and toxic substances, but also creates trai-

ning programs at the user's request, for example in cooperation with the Population Protection Institute for the OPCW organization, when the training usually takes place on the user's territory. So we have already participated in several sessions in Paraguay and Uganda and in one case in person. The exchange of experience also takes place during symposia and trade fairs, where end users can try to use our products and also learn more about the individual details of the specific product. Here I would mention the most important important exhibition fairs IDEX in Abu Dhabi, INDODEFENCE in Jakarta, EUROSATORY in Paris, FEINDEF in Madrid and IDET in Brno, the fair we regularly participate in. Regarding Brno, we have never missed our participation since the

beginning of the fair. Other interesting trade fairs include the NCT series, where products are not only exhibited, but also live demonstrations with these products take place. This is the way of getting to know the products and the possibilities of each product in a real situation.

Other interesting collaborations include cooperation with Military Research Institute in Brno, where we provide testing of detection and decontamination systems in real conditions for important alliance partners. We are also in close contact with the SÚJCHBO institute from Příbram, where joint cooperation is very beneficial and interesting, especially on joint development projects.





#### You mentioned the 30 years of the company and 30 years of the IDET. Can we expect something special at IDET fair?

It will be a significant for us from the point of view that, as I indicated, we have not missed participation in IDET yet. And I have to admit that we even participated when the business wasn't so good - for that we are very happy and proud of it. 30 years together in the field of the defence industry is certainly a reason for happiness and a satisfaction. As always, our main products will be exhibited here, supplemented by the aforementioned GTD-S detector. We will share our stand with AVEC, which specializes in the production of protective filters, protective masks and suits. The field of detection is directly linked to protection, which is why we also cooperate outside the fair, for example, in the creation of comprehensive offers or aforementioned training, especially for foreign customers. As a result many of our new product and AVEC new product will be also on display.

#### Where is the main interest of your products in the Czech Republic?

The main and most important customer is the Ministry of Defence, which was our first contracting partner after the company was founded. There are also units of the fire brigades in the Czech Republic.

Our company is significantly export-oriented, with supplier experience from more than 50 countries around the world. One of the most important customers we have now is the NSPA agency. In the last two years we have supplied more than 120,000 sets of detection papers that detect the presence of chemical warfare agents in liquid form. I would also like to mention our ongoing project of implementing GTD-S detectors into Prague's infrastructure system. These detectors have been developed to continuous monitor and to detect the presence of chemical warfare agents and other dangerous chemical toxic substances. We regularly supply our goods to Czech fire brigades. It is a great pleasure for us when we are approached by, for example, the fire brigade from the Caribbean island of St. Lucia - even the smallest customer is important to us. We treat everyone the same.

#### Which of your products is the pillar of your production program?

One of the main products already mentioned is Detection Paper to detect chemical warfare agents in liquid form under the export name CALID-3. This is a product only produced by our company in Europe, can be modified at the request of the user.

#### Why did you mention CALID-3 detection paper?

This is the simplest and at the same time extremely reliable means intended for individual protection. It allows you to easily create various modifications according to the specific user's requirements. And some of the customers have almost unusual requirements, that would be another story. We have users on all continents and from different cultures. The advantage of this product is long-term storage, simple use, quick evaluation of the colorimetric reaction and a relatively low price. Every soldier can carry this detector/booklet.





## New STARKOM Mobile Communication Jammers for the Czech Armed Forces



The mobile communication jammer STAR-KOM, supplied by the state-owned enterprise Military Research Institute Brno (VVÚ Brno) to the Czech Armed Forces, successfully passed demanding military tests, and on October 17<sup>th</sup>, 2022, the first piece of this combat defence device was handed over for use by the 53<sup>rd</sup> Reconnaissance and Electronic Warfare Regiment of the Czech Armed Forces. Deliveries of 8 pieces were thus started, with implementation until the end of 2023.

VVÚ, s.p., as the main contractor for the Ministry of Defence of the Czech Republic, carries out its own production together with several companies of the Czech Defence Industry. The companies URC Systems, s.r.o., which provides exploration-jamming technologies and relevant application software, and then TATRA TRUCKS a.s. and TATRA DEFENCE VEHICLE a.s., supplying armoured vehicles of the TATRA series, have a decisive subcontracting share. Not only VVÚ but also especially URC Systems

with professional ties to JISR Institute, a.s. have many years of experience in the field of electronic warfare based on long-term cooperation with the Czech Armed Forces in this area. In this contract, the mentioned companies implement the specified concept of a highly sophisticated jamming system on the TATRA Force 8x8 chassis platform with steerable axles selected by the user.

STARKOM is a highly mobile tactical communications jammer on the TATRA T-815-7T3RC1 8x8 chassis platform with ballistic and mine resistance. It is designed to conduct electronic warfare in the electromagnetic spectrum for the combat support and protection of units of the Ground and Air Forces of the Czech Armed Forces. It contains technologies for performing the tasks of electronic attack, electronic monitoring, and electronic protection in the range of communication bands, even while moving. By active jamming, the STARKOM system limits the use of the electromagnetic

spectrum by the enemy's communication means, including modern frequency-agile systems. For this, the jammer is equipped with power amplifiers that cover the entire tactical band of voice and data radio communications. The jammer not only fulfils the function of active jamming but is also equipped with radio receivers with the functions of monitoring and overviewing the entire frequency spectrum of radio communications. It also fulfils the function of a passive radio sensor, the output of which can be used to create an overall picture of the battlefield. For this purpose, the jammer is equipped with tools for the technical analysis of radio signals. In this comprehensive concept of its capabilities, it contributes significantly to effective jamming and effective conduct of electronic warfare.

This new and modern equipment of the Czech Armed Forces will be exhibited at the IDET 2023 Trade Fair in Brno in the exposition of the Czech Armed Forces.

### CZECH PRODUCTION OF HAND GRENADES

As a traditional Czech ammunition manufacturer, ZEVETA comes with a new comprehensive range of new hand grenades including a new igniter, so that the user gets a modern means of tactical use that meets all current trends in the field of hand grenades with the greatest emphasis on ZEVETA's ability to produce all parts of a hand grenade, including the initiation chain, by ourselves and under our own direction.

The new hand grenades are designed in such a way that their handling meets the usual handling and safety standards for this type of ammunition, i.e. security against unwanted initiation during handling and at the moment of readiness for use.



# Explosia from Pardubice Managed a Year Full of Twos Perfectly

The company has had an exclusive position in the explosives market for more than a hundred years. Such legends as the Semtex plastic explosive or the Vesuvit LC black powder, popular among historical weapon shooters, emerged from behind its gates. Explosia Pardubice is experiencing a successful period, reporting a record profit and preparing investments at the level of 1 billion CZK.



Explosia already reported on the possible achievement of the record before the end of 2022, as financial indicators predicted that this year would be exceptional for the globally recognized explosives manufacturer. And this happened. "The recently completed audit put an imaginary full-stop point after the year 2022, and we can now express our great satisfaction with its progress," the Chairman of the Explosia Board of Directors, Radomír Krejča, does not hide his joy. We are satisfied mainly with the economic result, which ended with a turnover of 1.2 billion CZK, and a record profit of 198 million CZK before taxation. In the history of its existence, the explosives manufacturer from Pardubice has never achieved such a profit, nor has it come close to it. The economy measures, which were introduced less than four years ago, and which brought their results, contributed significantly to this. "We would like to thank everyone who believed in the future of Explosia as well as in the steps taken by the company's management for its recovery," Radomír Krejča points out the importance of employees. It should also be noted that the worsening security situation in Europe also partly influenced the creation of this profit.

Fully combustible propellant cartridges for large-calibre ammunition contributed the most to the economic result. This is a part of the market that is responding to the worsening security situation in Europe, but it was already on the rise before 2022. That is why Explosia also focused on this type of product in the past. "Historically, production capacity has been increased over the years considering the



ongoing strong demand. Technological equipment was expanded, which made it possible to increase the volume of production," explains Pavel Mareček, the Vice--Chairman of the Board of Directors and Production Director. Despite the increase in the demand for military materials, Explosia remains an industrial enterprise focused significantly on the civilian sector as well. Less than a third of the turnover is the sale of ammunition, i.e. single base, double base and triple base propellants powders, which go to both the civilian and military sectors. Close behind powders are explosives designed especially for industrial use. Two percent of the sales of products come from the Special products section, which is primarily focused on meeting the needs of customers with specific requirements. The Fospol section, which offers customers complex work in stone mining in quarries, can also boast of positive numbers and successful development.

Although the year 2022 can be described as highly above average, it was not without complications either. It is necessary to mention the complicated negotiations with raw material suppliers, where it was difficult to estimate how big price increases Explosia would face. The reputation of the company and its successes did not leave our competitors cold either, so Explosia faced media pressures that aimed to at least disrupt the stability of this company.

The pressure to produce explosives and increase capacity is high, Explosia re-

sponds to it by increasing the investment budget to the level of hundreds of millions of Czech crowns in the next few years. These actions have already been started for many months, but they require long-term preparation as well as the actual implementation, so they can count on their benefit in Pardubice in years. However, it is not enough to build new halls and equip them with new technology. That's why Explosia has taken two more crucial steps. First, it intensified its recruitment campaign to bring in new employees. A basic survey of the labour market confirms that the financial and benefit offers are above the average of the offers of industrial companies in Pardubice. "Both the general increase in wages starting in 2023 and, for example, maintaining the current price of lunches for employees at the level of 19 CZK, contributed to this, although last year alone their price went up twice, which was always covered by the company's funds," Kamil Dudek, the member of the Board of Directors and Director of the Research Institute of Industrial Chemistry, describes the striving for the best possible care of employees. Considering the low unemployment rate, Explosia has to fight not for employees who don't have a job and are looking for it, but above all for those who have one, and going elsewhere is only one option for them. The second step to increase the capacity is to ensure a sufficient amount of raw materials when you cannot be dependent on just one supplier, but it is necessary to secure backup options for the supply of raw materials. We are also working on this in Explosia, but it is necessary to perceive the reality of the market, which does not give many possibilities to contract quantities and the price of deliveries for a longer period of time than a few months.

For 2023, the company's management has set a goal of achieving at least the same economic result as in 2022. It is also essential to make significant progress in the implementation of strategic investments aimed at increasing production capacity and safety.

Martin Vencl Press Agent at Explosia a.s. Photo: Explosia a.s.





## Interview with the Director of the Czech Police Museum -Mgr. Radek Galaš

A retired Colonel of the Police of the Czech Republic, a Czech police officer, but mainly a recognized historian, curator, and publicist, specializing in the history of the Czech Security Forces. He graduated from the Secondary Technical School of Mining in Příbram, after his graduation he worked as a mining technician in Měděnec near Klášterec nad Ohří and after the "Velvet Revolution" in 1989 he joined the Police. Here he went through many positions; in 1999 he completed his studies at the Police Academy of the Czech Republic, and later a master's degree at the Jan Amos Komenský University Prague. In 2003-2008, he worked at the Police Presidium, in 2008-2012 at the Regional Police Directorate Prague, where he participated in the training of police officers. In 2012, he joined the Czech Police Museum as a Curator of collections and has been the Director of the Museum since 2019.

Mr. Director, we can deduce from your brief professional biography that history is not only your profession but also your hobby. From the beginning, was your police career directed towards purely police-historical, thus museum-related activities?

Probably not, although, history has been in my blood since childhood. At first, I wanted to be an Egyptologist, then an archaeologist and, finally, I became a miner. When I joined the Police, of course, I dreamed of being an investigator. But the order service got under my skin so strongly that I stayed with it, even though later I had offers to go to the criminal or investigative department. The order service is simply

the basis of the police and I was happy to stay with it. As for history, the fact is that I have been dealing with it for practically 30 years. It actually started with a family history, when my grandfather was a gendarme from 1935. The history of the security forces is fascinating to me. It contains thousands of destinies of our ancestors - colleagues when many of them lost their lives in the fight against crime or the fight for the freedom of their country. It is not black and white but beautifully coloured. In addition, history gives me a lot of lessons and finally can see that much of what the police are trying to do today was already here in the past in a different form.

Together with colleagues and friends, we founded the civic association "Gendarmerie Search Station Prague" in the past, and it's no secret that I sometimes have the wonderful opportunity to work with directors and film-makers during the creation of series or films as an expert advisor (for example, in the series "Četníci z Luhačovic", "Zločiny Velké Prahy"). However, I also cooperate with Czech Radio and Czech television on programs popularizing history (e.g. "Gejzír", "Bitva o rozhlas", "Historie českého zločinu").

#### Can you please briefly mention the history of the Museum?

Czech Police Museum is located in the Karlov area, Prague, which was founded in 1350 by the Czech king and later Roman Emperor Charles IV. for the



Augustinian monastic order. More than four hundred years later, during the reign of Emperor Joseph II, the order was abolished and all its property went to the state. The building was first used as a Government Issue warehouse, then, in 1791, as a hospital for the treatment of contagious diseases, then as an infirmary, in the years 1914-1918 as a centre for war convalescents, and later as a hospital. In 1955, the building had to be vacated due to its unsatisfactory condition and overall dilapidation.

In 1960, the building was acquired by the Ministry of the Interior and the State Regional Archive was located here. In the years that followed, the area underwent many construction modifications and a general repair of the buildings was carried out. Since the mid-sixties of the last century, a significant part of the area has been used for museum purposes. First, the Frontier Guard Museum was established, which in 1973 was transformed into the Museum of the National Security Corps and the Troops of the Ministry of the Interior.

As part of ongoing modifications, the exhibition hall was put into operation, and the outdoor spaces were also purposefully reconstructed. The park in front of the museum was transformed into a nature gallery and a children's traffic playground was created in the garden.

The establishment of the Czech Police Museum was decided in 1990 and the exhibition was opened to the public on 12th April 1991. This museum objectively documents and presents the history, development, and activities of the Security Forces in the territory of former Czechoslovakia from the time of its creation to the present.

#### What does the Museum offer to visitors?

Criminalistics deals with the detection, investigation, and prevention of criminal activity, and has gradually developed into a comprehensive science with a rich theoretical background and a wide range of practical applications. And its goal? To provide that no crime goes undetected and likewise so that no person is unjustly prosecuted.

It is criminology, to which several halls are dedicated in the Czech Police Museum, that contributes to the successful and apparently endless fight against crime.

We also recall the establishment and development of institutions that dealt with this issue, and their activities basically reflect the level and development of criminology and criminal investigation services in our country. The organization of the Police Directorate in Prague after 1918 became the basis of all police authorities. From the point of view of the criminal investigation service and criminology, the most important component was "IV. Security Department".

From 1901, there was a dactyloscopy department at the Police Directorate



in Prague, and in 1919 the entire department was reorganized into the "Central Dactyloscopy Station" for the entire republic (Decree of the Ministry of the Interior dated 9/5/1919 No. 1650/19-5). In 1922, the need to improve the quality of the search service as well as the desire for independence in the field of criminalistics in the activities of the gendarmerie led to the establishment of a special gendarmerie department at the Identification Office of the Police Directorate in Prague. In 1927, it became independent and operated as the Central Gendarme Search Department in the building of the Regional Headquarters for Bohemia in Prague.

However, neither the state police nor the gendarmerie had an institute that dealt more deeply with issues of criminology, which is why the Ministry of Justice established the "Criminal Museum and Archive" in 1924, collecting documents related to this issue. The museum and archive were established at the Regional Court in Prague, and in 1926, with the approval of the Ministry

of Education, the Institute of Criminology at the Faculty of Law of Charles University was created from them, which, however, did not develop much activity apart from organizing professional courses for justice and security authorities. In 1939, the materials and collections were transferred to the Institute of Criminology at the German Faculty of Law. Criminalistic or security museums have had a long tradition in our country. One of the oldest ones was founded by the former (imperial--royal) Prague Police in the courtyard tower of building No. 4 in Prague 1, Bartolomějská street.

In the same way, the Central Gendarmery Search Department in Prague had its criminal museum in Karmelitská Street, which, like the collections of the German criminal police, was destroyed in the revolutionary days of 1945. In the autumn of the same year, the staff of the Criminal Headquarters tried to collect the rest of the exhibits from the old museums and build a new museum. The Department of Criminal Collections was thus established in

the attic of building No. 10 in Bartolomějská Street. These were gradually supplemented based on new technical and tactical findings, and in 1954 the work of the Criminalistics Cabinet began.

#### Which exhibits should visitors definitely not miss out?

Logically, probably none. But seriously. I think everyone will find something for themselves here. Lovers of uniforms, for which we tried to capture the development over the last 100 years at least, as well as lovers of weapons, I think will find here a very nice representative cross-section. Those who like detective stories and crime stories can look at many original exhibits from cases that everyone could see processed in the form of films or series. We have a number of motorcycles and measuring techniques on display, by which I mean the development of radars. As part of the permanent exhibition, for example, the history of the fight against drugs or the history of security aviation is processed here in a nutshell. And I could go on like this. Our exposition is processed up to 1993. Unfortunately, we do not have room for the rest yet, or the history is too young for a museum.

#### What are the permanent exhibitions in the Museum?

The content of the museum exposition is based on the existence, activity, and development of the Security Forces on the territory of our state from its creation to the present day, i.e. at least since 1785. It is based on the presentation of objective documents and facts, supported by more than one thousand exhibits. The exhibition as a whole is complemented by more than eight hundred photographs. The aim is the presentation of the Police Forces in a democratic legal state and the presentation of their activities in the context of historical development.

The structure of the entire exhibition corresponds in a way to the structure of the building (former monastery). The cloister consists of four parts.

Its first part is devoted to the history of the gendarmerie and the police in our territory in the years 1850-1938, and at the end of this part, an equipped gendarmerie station is prepared for visitors.

The second part of the cloister is dedicated to the exposition from 1939-1945, the activities of our Security Forces in the territory of the Protectorate of Bohemia and Moravia, but also during forced deployment in Germany. This part is dominated by a memorial plague with the names of 117 Prague policemen who were killed, executed, or murdered in the years 1938-1945. The conclusion of the part is dedicated to the role of members of the police and gendarmerie in the May Uprising and the resistance movement as such. The third part of the exhibition follows the creation of the National Security Corps (SNB). It maps the formation and equipment of the Emergency Regiment of the 1st National Security (PP 1 NB). It describes the SNB frontier units, the post-war security air force, the post--war history, the establishment and activities of the Frontier Guard, and its technical equipment and operational technology used mainly by the State Security (StB), etc.

The final, i.e. the fourth part of the cloister focuses primarily on the development of Public Security (VB) from the 1960s to the 1990s. The most significant organizational changes are highlighted, and the presentation of the development of uniforms and weapons in this period is also significant. You can also familiarize yourself, for example, with the activities of the order service, the mounted police, the work of pyrotechnicians, but also the veterinary service, as well as the equipment and weapons of police officers from the Rapid Deployment Unit (URN), etc.

On the ground floor, there is also an exhibition of criminology, which not only maps the development but also shows its most interesting cases. The exhibition is complemented by several scenes, interactive modules, and devices, where you can try out the work of criminologists.

On the 1st floor of the Museum, there is a population protection exposure. The exhibition of the National Anti-Drug Headquarters shows the police's struggle with the drug underworld. Other large spaces are dedicated to short--term or long-term exhibitions.

#### From which period/periods are the collections?

The collection of the Czech Police Museum documents the period since 1918. However, it also includes materials documenting the activities of security authorities on the territory of Austria-Hungary before the establishment of the Czechoslovak Republic. The oldest exhibits in our collections are Cantastoria Songs from the era before 1850, which describe murders, and then the gendarmerie equipment regulation, which is dated 1857, i.e. 7 years after its creation. The collection has been created since the 1960s in connection with the establishment of the Frontier Guard and Internal Guard Museum. The characteristic of this era was the collection of materials on the issue of protecting state borders. With the creation of the successor organization, the Museum of the SNB and the Ministry of the Interior, since 1972, the character of the collection was expanded to cover the entire issue of the security policy of the Czech state. After 1990, the Czech Police Museum began to manage the museum collections.

#### Does the Czech Police Museum cooperate in any way with other police or army museums?

Yes, we have cooperated several times with the Police Force Museum in Bratislava. Within borrowing exhibits, we work with the Military Historical Institute. We cooperate more widely and more often with the National Museum and the Museum of the Capital City of Prague. Our frequent partner is also the Museum of Czech and Slovak Exile and the RAF in Brno and many other, mainly regional, museums.

#### And do you also cooperation with Czech companies? If so, in what form?

Leaving aside "business" relationships, we cooperate with several companies that help us as sponsors, for example, when organizing Museum Nights, the Conference of Police Historians, and other events. Logically, cooperation with the Police of the Czech Republic and especially with some departments, such as the Band of the Castle Guard and the Police of the Czech Republic, the Air Force, URNA, the Institute of Criminology, the Institute of Forensic Medicine in Pilsen and Prague, is very important. Cooperation with the association "Veteránem Policie ČR, z.s.", which we consider to be crucial, is very beneficial. On the other hand, we also try to give back. In particular, we support the Police and Firefighters Foundation organizationally, and in recent years we have also actively supported the organization MDA RIDE, z.s., thereby trying to help people afflicted with muscular dystrophy. We also cooperate very closely with the Church of the Assumption of the Virgin Mary and St. Charlemagne, which is historically part of our area and which is represented mainly by the clergyman of the Police of the Czech Republic and the local deacon, Col. Jiří Ignác Laňka.

#### I also read about the awards you won on the museum website. Can you be specific, Mr. Director?

For example, the Czech Police Museum

took part in the GLORIA MUSAEALIS competition in the Museum Exhibition category with the following exhibitions: "Prostitution of Old Prague" (2004), "Amateur modified and home-made firearms" (2007-2008), "Criminology against crime" (2009) and "The Magic of Forensic Science" (2010). It is true that we have never won awards here, probably due to the fact that these exhibitions of ours are probably too "militant" (with a smile).

In 2007, the Centre for Traffic Prevention at the Czech Police Museum received an award within the Road Safety Awards in Brussels in the category "Institutions category for the clarity and educational quality of its proximity interventions".

The Museum is also the winner of many awards given by the Police of the Czech Republic. As an institution, we have received many honours and awards for cooperation. It is true that since 2004 the public service vows of newly appointed police officers have been held in our Museum. The Prague Police started this tradition, and the Central Bohemian Police joined them. Flags of individual service units are being presented here, some service units hold their days and ceremonial gatherings where awards are presented. We also received an award from the Liberec Police, where we were able to participate in a unique act - the unveiling of a monument to killed policemen. The Liberec Police has advocated for the construction of a dignified place that bears the names of police officers who perished especially during World War II.. A similar monument, or rather its establishment, is unprecedented within the Police of the Czech Republic.

#### How do you get exhibits?

We acquire exhibits in several ways. Firstly by purchase, exchange and then as a gift. Donations are usually unique, because they are often - as museum workers like to say - touched exhibits, i.e. exhibits of specific people. Fates are beautifully reflected in them, and such an exhibit also has a name, a story. That is why they are one of the most valuable to us and we appreciate them very much. Every such donor will receive a letter of thanks from us, and of course his name is kept with the

exhibit and will remain with it until the Museum is a museum.

The so-called transfer of property between us and usually the Police is also an important method. These are mostly unused pieces of equipment that could be interesting for us to add to our collections. This is often technical equipment, but also, for example, motorcycles, uniforms, coercive means, and the like. Here I must highlight our cooperation with the Rapid Deployment Unit (URN), the Air Service, the Regional Directorate of Central Bohemia, South Moravia, South Bohemia, and the Highlands Region. These additions significantly complement our collections concerning developments, such as service motorcycles, bicycles, and other technical equipment. These regions actually participate in preserving the historical memory of not only the Police, and we are very happy to cooperate with them. Reciprocally, we offer these regions the possibility of organized visits to the Museum with interpretation, lectures, and similar activities, which we can tailor to them and bring them to their region if they are interested. However, be frank, this cooperation could be significantly wider and more intensive. The Police have regional directorates and units with national scope slightly more than the ones I mentioned.

#### And what about plans for the future?

Leaving aside the usual operational matters, in 2023 we would like to continue with exhibitions at which the individual services of the Police of the Czech Republic are presented. In the same way, we will continue with art exhibitions that present the works of policemen and former policemen in the field of art, such as photographs, paintings, and sculptures. We want to show the public a policeman not only as a representative of the law but also as a person with an artistic soul. In the same year, a new permanent exhibition dedicated to the history of prostitution and human trafficking will also be made available to the public. We are working on it with the Crime Prevention Department of the Ministry of the Interior, and finally we will open the permanent exhibition "History of Czech Prisons", which we are preparing together with the Prison Service. In the coming years, we would like to start exhibitions presenting individual regional directorates, and this time we will start with Brno, although the oldest directorate is Prague (1785).

We strive to make our Museum a real museum institution so that it is perceived not only by the general public but also by the Police, as a cultural and educational institution. For 15 years we have been regularly organizing the Conference of Police Historians, which is probably the longest-lasting and uninterrupted meeting between the Ministry of the Interior and the Police. It is a three-day meeting of historians, police officers, writers, publicists, as well as non-specialists and enthusiasts, who present their contributions to our wonderful history. We then try to transfer them to the police education system. We intend to continue this effort in the coming years. In addition, we also organize a number of lectures for the public. We also have somewhat bolder visions, such as expanding the outdoor exhibition in new, unused museum spaces, building a permanent exhibition on the history of Karlov, or building a new exhibition for technology. Likewise, we would very much like to substantially expand our publishing activities. And of course, we will continue to expand our collections and make them available to the widest civil and police public. Of course, all of this is primarily a question of finances, ideas and patience. But the fact is that we still have enough ideas and patience.

Mr. Director, thank you for the interview and I wish you many personal and professional successes

Col. Jaroslav Jonák

#### 25 years of Publishing House MS Line



















info@msline.cz www.msline.cz



## See you in Brho

### NCS College 2023 in Brno

#### **NCS Course for Managers & Logisticians**

28 August – 1 September 2023

This course is designed for logisticians at a managerial level dealing with codification and its interrelations at national and international levels.

#### **NCS Course for Codifiers**

4 – 15 September 2023

This course is designed for personnel who are or will be dealing with practical issues of codification and who have already acquired basic knowledge of codification processes.

#### Venue

University of Defence Brno. Czechia

#### Language

English

#### Contact information

W: ncscollege.cz

E: info@ncscollege.cz

T: +420 544 508 111

F: +420 544 508 112

M: +420 602 613 306

#### Registration

will be closed on 15 July 2023 according to the "first come, first served" principle.

NCS College is organised by the University of Defence and National Codification Bureau of the Czech Republic with support of AURA, Czechia.

www.ncscollege.cz



## 17<sup>TH</sup> INTERNATIONAL DEFENCE AND SECURITY TECHNOLOGIES FAIR



24-26 MAY 2023 BRNO, CZECH REPUBLIC





24-27 MAY 2023

FOCUSED
ON SECURITY









# THE FUTURE OF HIGH-SPEED CONNECTIVITY



TEMPERATURE RANGE -40 TO +85 C UPLINK 10/25 GBPS

#### LMCP-7H

Compact, ultra-durable server - desert color

- Intel® Xeon® Processor
- Up to 64 GB DDR4
- Wide operating temperature range: -32 to +75 ℃

#### LMCP-28H-NGa

**Light Mobile Computing Platform – Extended version** 

- Intel® Xeon® processor
- Up to 64 GB RAM ECC DDR4
- 2x removable SSD 2.5 inch, RAID 0,1
- Wide operating temperature range: -40 to +85°C
- Uplink 1/10 Gbps

#### The most powerful LMCP

#### LMCP-28H-NGe

Light Mobile Computing Platforn

- Intel® Xeon® processor
- Up to 256 GB RAM ECC DDR4
- 2x removable SSD 2.5 inch, RAID 0,1
- Wide operating temperature range: -40 to +85°C
- Uplink 10/25 Gbps



New 10G Switch in LMSW family



#### <u>LMSW-164M</u>

**Ruggedized Gigabit Ethernet Layer 2 Managed PoE Switch** 

- 4x 1G/2.5G/5G/10GBase-X FO HMA
- 16x 10/100/1000Base-T, RJ-45 with PoE+
- Wide operating temperature range: -40 to +70 °C