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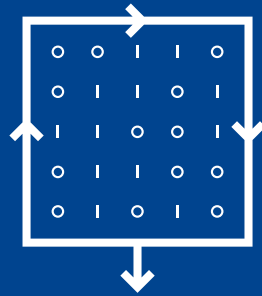
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EDITORIAL

Dear readers,

this issue is published mainly on the occasion of the General Meeting of the Defence and Security Industry Association, which is taking place again in Brno after a two-year distance hiatus. DSIA CR currently has over 130 members, which is a record number since its establishing. You can browse the report on the DSIA CR activities for the 26th General Meeting, the so-called Information Bulletin, in the middle of the Review.

We have prepared for you some interesting interviews, in particular with the Deputy Minister of Foreign Affairs of the Czech Republic, Dipl. Ing. Martin Dvořák or with the President of the International Police Association (IPA) - Czech Republic section, Dipl. Ing. Josef Neruda.

Šárka Cook, Editor in Chief



6



11



13

CONTENTS

Interview with the Deputy Minister for Government Affairs of the Ministry of Foreign Affairs, Mr. Martin Dvořák 6

Interview with the President of the International Police Association (IPA) - Czech Republic Section, Ing. Josef Neruda. 8

The Czech brand CleanAIR offers the highest level of respiratory protection. 11

New Ground and Synthetic Training Center in LOM PRAHA 13

FOTAS - OPTTA 14

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Interview with the Deputy Minister for Government Affairs of the Ministry of Foreign Affairs, Mr. Martin Dvořák



Dear Deputy, you have held a number of civil and political positions in your career so far. Which ones appealed to you the most, and what did they mean to you?

How do you think the thoughts and opinions on the current affairs of Czech society are gradually changing with your long-term social and political commitment? Can you say what contributes to this?

I think that our country and its people together are slowly but surely approaching to profess those proclaimed European or Western values. These are faith in democracy and human freedom as inseparable pillars on which our country and society stand. We learn to live in such new conditions. This shift is also due to the fact that the young generation entering public life has already

been born into freedom, and considers it a natural environment for living, even with all the difficulties that life in freedom brings. Today, these people are more than 30 years old and it is high time they begin to assert themselves in significant positions in the country's leadership. Moreover, the recent developments in Ukraine convince us very drastically that freedom is not a matter of course and is not for free.

For many years you worked in many positions in the Hradec Králové region. What did and, conversely, what did not you achieve?

Mainly, I was connected with the regional city of Hradec Králové itself, where I was the City Mayor from 1990 to 1998, the first one freely and democratically elected. At that time, there were no regions; the battle for their establishment lasted until the year 2000 when I was already working abroad. So in the 1990's, I sometimes took part in some events as an "alternate" representative of the whole region. In that position, I also took part in a number of debates that preceded the creation of the regions. And so I considered it a great victory, when on January 1st, 2000, they were finally established, albeit at the cost of big compromises. In Hradec Králové itself, during the 8 years of my mayoration, a lot of good things have certainly taken place and, on the contrary, something went wrong. It was a very happy year for me because we managed to correct some old sins that we were left with after the communists in the city relatively quickly. My very first concern was to quickly find at least a temporary capacity for a landfill for household waste. Every year of my two electoral terms,

we had to repair at least one bridge in the city because of its dangerous condition, etc. But as I said in one interview, my mayoration can be evaluated, praised, and criticized by anyone, with one exception, myself.

You certainly have a lot of experience and knowledge from abroad, which foreign "missions" appealed to you the most and what they meant for your work?

Each mission was something beautiful, something special, and something new. In Kosovo, I had a very pleasant feeling that what I was doing made sense. The area I "administrated" was 70% burnt out when I first arrived. There were only a few weeks left for the people from those destroyed houses to get under a roof to warn housing before winter, repair the bombed roads, put the water mains into operation, and open schools. I could see some little progress every day, and that was very uplifting. Iraq was then my first experience with the Arab world. America was a dream destination, where I did not find the courage to emigrate, and suddenly opened up to me for a beautiful 10 years. Kuwait, where I became the Ambassador, was definitely a nice end to my diplomatic career.

Mr. Deputy, you have worked in the USA for many years. Can you give our readers an idea of the content of your work in the USA, and what this function meant for you?

As I have already admitted, America was my dream destination, a country I had only dreamed of for many years, devouring American literature, music,

and movies. Then I got there for the first time in 1991 at the invitation of the American government, and my love for this country only deepened. When I left New York after 5 weeks, I cried that I would never come there again. Well, you see, then fate brought me there for almost 10 years...

At first, I served as a Commercial Counsellor at our Embassy in Washington DC for more than 4 years. So my job was logically to support Czech companies in penetrating the US market and to attract American investors to invest their money in our country, but also to monitor the development of the US economy, negotiations on a new investment agreement, delegations, trade fairs, promotions, seminars, etc. And for the last six months, I have chaired 4 economic working groups under our then EU Chairmanship.

The second American chapter of my life was then New York. For 5 years, as the Consul General, I was responsible not only for issuing visas to Americans and for helping Czech citizens in need during trips around the USA, but also for supporting the export of Czech companies. However, we also devoted a large part of our time to presenting Czech culture to the New Yorkers. I had a unique tool for this, i.e. the historic Czech National Building on 73rd East Street, which underwent extensive reconstruction just before my arrival and there was a lot of difficulties with its operation, but even more joy. Cooperation with compatriotic associations, some of which have been operating in New York for more than 100 years, was a great fortune and gave me a chance to meet amazing people, such as Ája Vrzáňová, Petr Sís, Laco Déci, and Martina Navrátilová, but I only mentioned the most famous ones. I really enjoyed it there and again I had the pleasant feeling that I actually see the results of our joint efforts on a daily basis. In a year, we managed to organize over a hundred events there regularly with compatriots and the Czech Center.

In the past you have worked at the Ministry of Foreign Affairs. What are you currently in charge of?

As a "political" deputy, I do not lead any specific professional section, but my task is to coordinate the performance

of certain tasks arising from the government's program statement. So, under my responsibility, I need a "revision of relations with Russia", which, however, has given a completely new nature and dynamism in recent weeks. Russia's aggression against Ukraine has completely changed virtually everything that has existed in that bilateral relationship. Visas work differently, mutual trade or cooperation in institutions that have survived since the time of the "socialistic sphere" has completely changed. Now we are dealing with it mainly operatively and as quickly as possible, but at the same time, we are already working on a comprehensive strategic document, which should take into account, if possible, all aspects of our mutual relations and their prospects for the future. Not only do several sections of our Ministry (practically all of them) have to cooperate in such a task, but we also have to involve other Ministries in that work, because it will really affect all areas of our lives.

How do you perceive the level of the Czech Defence and Security Industry from your experience and work abroad, do you see some as yet unutilized opportunities of the Ministry of Foreign Affairs, the Ministry of Industry and Trade and the Ministry of Defence in supporting the Czech Defence Industry internationally?

The high quality of the Czech Defence and Security Industry is widely known throughout the world. For example, did you know that the word "Brno" is commonly used for rifles in Arabic? But even elsewhere you will find a lot of traces of Czech armouries. I took part in negotiations with armouries in the USA and Kuwait, and the prestige of our companies cannot be overlooked. The recent merger of Česká zbrojovka with Colt is an excellent proof of this.

However, the role of the Ministry of Foreign Affairs is also to ensure that our great products do not fall into the hands of people and states that would use them in violation of international rules and agreements. We understand that sometimes our licensing policy conflicts a bit with the interest of a company that could do a profitable business, but we believe that eliminating reputational risks in our products is also

very important and ultimately helps our market penetration in countries and democratic and friendly regimes. And one more remark. Russia's brutal aggression against Ukraine is certainly changing some views on where to export weapons and where not. I think we can be proud of how many and how good weapons we have already delivered to Ukraine.

We are pleased that after years you have re-accepted the membership in the representative editorial board of the Review magazine, in time you will certainly have advice on the content of the magazine and its improvement. Can you outline some of them?

I'm just finding my feet in that new or renewed role, and I don't dare advice yet. But I noticed an interesting debate in the Review's editorial board on "electronic or paper versions". Yes, time wants digitization; soaring prices for paper and other materials are likely to accelerate this trend. It makes sense to transfer a large part of the production to the digital version. On the other hand, there are still many situations where high-quality printed material is very suitable. At trade fairs and exhibitions or at personal meetings and gatherings. I would therefore plead for at least part of the issue, especially in English, to remain in paper form. I have no worries about the quality of the content of "Reviews" over the years, as well as about the fact that there would not be enough quality products to be presented in this way.

*Dear sir,
thank you for the interview.
Eva Soukupová*

Interview with the President of the International Police Association (IPA) - Czech Republic Section, Dipl. Eng. Josef Neruda.

Now already retired Colonel of the Police of the Czech Republic. Dipl. Eng. Josef Neruda had served in this security force for 40 years. Initially, at the IT Department, where he gradually held a full range of management positions, in 1993-2017 he was responsible for the economic area as Deputy of the Regional Police Director in Hradec Králové. He has been the President of the Czech IPA Section continually since 2001.



Mr. President, could you introduce this organization to our readers?

The International Police Association (IPA) is an international organization whose members are current or former police officers regardless of rank. It is the largest international association of police officers, with approximately 420,000 members in almost 100 countries, of which 68 are affiliated to the National Sections. It is a non-governmental organization (NGO*) with advisory status to the UN Economic and Social Council and the Council of Europe. It is still the only international organization of police officers, regardless of rank, function, language, race, religion, and worldview, politically and professionally independent, it is not tied to any other group or institution. It is open to the police of each state, which will allow international contact and exchange

of experience between police officers. Our international motto is "Servo Per Amikeco", which means "Service through Friendship".

What is the organizational structure of the Czech Section?

IPA in the Czech Republic is a registered association and legal entity, and it is organizationally divided into the Presidium, which is based in Prague, and territorial groups in the regions. We currently have 48 of them, each headed by a territorial group leader. The membership base in the Czech Section has around 4,000 members; their numbers vary in each territorial group.

When did the Czech Republic join, what is its main mission and what place does it occupy globally?

The IPA section of the Czech Republic was recognized at the 14th IPA World Congress, held in Luxembourg on June 10th, 1994. As of March 14th, 2015, the official name of our national section is the International Police Association – Czech Republic Section z.s.

Its mission is, among other things, to promote friendly relations and mutual assistance between police officers in our country and abroad, to facilitate and support the exchange of police experience and thus contribute to facilitating international police cooperation, cooperation with the public to influence the image and ideas about the police and thus have a positive effect on relations between citizens and the police. Through study trips and meetings, it expands the knowledge of its members and understanding of the problems of others. Within its possibilities, it helps in the social field, promotes mutual tolerance, and thus contributes to understanding between nations and peacekeeping.

Mr. President, has the war in Ukraine affected the activities of this international organization in any way?

Of course, it has because the Russian National Section is also a member of IPA. The outbreak of the war with Ukraine violated all the principles on which IPA is based. The World Presidium responded to this by immediately suspending the membership of the IPA section of the Russian Federation in the organization.

What does IPA offer to police officers?

For example, IPA not only offers seminars with a wide range of training programs at

the Gimborn Castle Information and Training Centre in Germany, regional, national, and international training meetings on all five continents, scholarships abroad to supplement further training, police studies, and training trips to distant countries. Annual international youth meeting (each time in a different part of the world) for young members of IPA and sons and daughters of IPA members. In 2014, we organized the 14th daily international meeting of IPA members in the Czech Republic, which was attended by participants from 28 countries.

There are also friendship weeks, sports competitions, and anniversaries with social and cultural backgrounds, to support international meetings between members, international youth exchange programs, a unique opportunity for new experiences in education and culture, cost-effective holiday stays in IPA houses, versatile information in local or regional IPA communications and magazines, opportunities to get to know police facilities at home and abroad, and to exchange experiences with colleagues regardless of nationality, rank or job classification.

Unfortunately, over the last two years, due to the Covid 19 pandemic, we have had to reduce our activities considerably, as it has not been practically possible to organize these events.

Can you please be specific?

For example, we helped our members who were affected by the catastrophic floods in 2000. But we also dealt with a funny case where an amorous Italian police officer forgot his luggage at the airport baggage room in Prague and then we had to send it to his country. Quite often we help foreign IPA members with accommodation during their visit to the Czech Republic. But the help is mutual, just as they help our members to solve problems abroad, often to solve traffic accidents.

In November 2021, I also handed over two certificates of approved social assistance in the form of a financial donation, each of CZK 100,000 for IPA members affected by a natural disaster, to two IPA members in Moravská Nová Ves. I would like to remind you that extreme storms and hailstorms with several tornadoes passed through several villages on the border of the Břeclav and Hodonín regions in southern Moravia on Thursday, June 24th, 2021, in the evening. Certainly, our financial donation will help to mitigate these consequences, but it will take some



time before it is all finished.... We wish our colleagues to do it as soon as possible.

How does IPA cooperate with the management of the Police of the Czech Republic?

On May 7th, 2008, the IPA Section of the Czech Republic concluded a "Cooperation Agreement" with the Police of the Czech Republic in accordance with the statutes of the association and the Act on the Police of the Czech Republic. Both parties agreed to increase the effectiveness of the cooperation in fulfilling the mission and tasks of its parties, in particular creating conditions for expanding and deepening relations between police officers with police officers of foreign police forces, mutual exchange of information needed for fulfilling tasks, training, preventive and promotional activities of both parties. Furthermore, the Agreement enshrines cultural, sports, and other social activities, including international events, common media policy, and party promotion, including assistance in finding and recruiting people suitable for employment within the Police. There was no omission of mutual organizational and methodological assistance, activities aimed at helping police officers who got into a difficult life situation, mutual legal and legislative assistance, and practical assistance in the material, technical and organizational areas.

How are these points declared in the said Agreement fulfilled in practice? Does IPA in any way interfere with tenders for

purchases of police material, equipment, or gear? Does it cooperate in any form with the Czech industry?

The content of the cooperation is defined in the Agreement and continuously updated by the needs of both parties. The methods and forms of cooperation of the parties are chosen with regard to the content of cooperation in specific cases and include, in particular, the organization of joint training, seminars, cultural and other social events, or participation in similar events organized by one of the parties.

Concerning tenders for the purchase of material, technical, or weapons equipment, IPA does not interfere in any tenders, we are not members of selection committees or we are not part of any comment procedure.

In the past, we have often been referred to as "new police unions", which of course is not true and would be in direct conflict with our statutes. In principle, we do not interfere in service activities, we are, figuratively speaking, a "professional interest association". You can read more about our organization on our website www.ipacz.cz

* NGO (Non-Governmental Organization) is a non-profit organization that is not established by the state and is independent of the state, which is intended for public benefit or non-profit activities for private gain.

Mr. President, thank you for the interview

Jaroslav Jonák

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The Czech Brand CleanAIR Offers the Highest Level of Respiratory Protection.

Company MALINA - Safety s.r.o. focuses on the design, development and manufacturing of CleanAIR® respiratory protection systems, which can be used in industry, agriculture, civil protection and healthcare. The company was founded in 1990 as a wholesale company and in 1993 developed the first powered air respiratory unit, which was approved for the European market in 1996.

CleanAIR® products have been successfully exported to more than 40 countries in Europe, Asia and Australia. The company's long-term goal is to provide technically advanced and reliable respiratory protection solutions for use in different areas. The quality management systems ISO 9001: 2015 and ČOS 051672 (AQAP 2110) ensure the high quality of CleanAIR products.

CleanAIR® personal respiratory protection systems are based on the principle of overpressure of the filtered air in the breathing zone. The powered air purifying respirator on the user's belt drives the air through a particulate or chemical filter and delivers it to the protective hood, mask or suit. An alternative source of air can be an external compressed air supply. The overpressure prevents pollutants from entering the breathing zone. This slight overpressure also ensures high user's comfort even if the equipment worn for a long time without having to overcome the breathing resistance of the filter.

This respiratory protection system and complete sets CleanAIR based on this principle are meeting the highest demands on respiratory protection. For example, the new Panoramate lite full-body coverall achieves a minimum protection factor of 10,000.

Thanks to our own team of designers and production facilities in the Czech Republic, the company is able to respond very flexibly to specific customer requirements and deliver exactly the solution that is needed for a specific activity. In 2006, for example, the company participated in the OPCH-05

ventilated chemical protective clothing project for the Czech Armed Forces by developing the CA Military powered air purifying respirator.

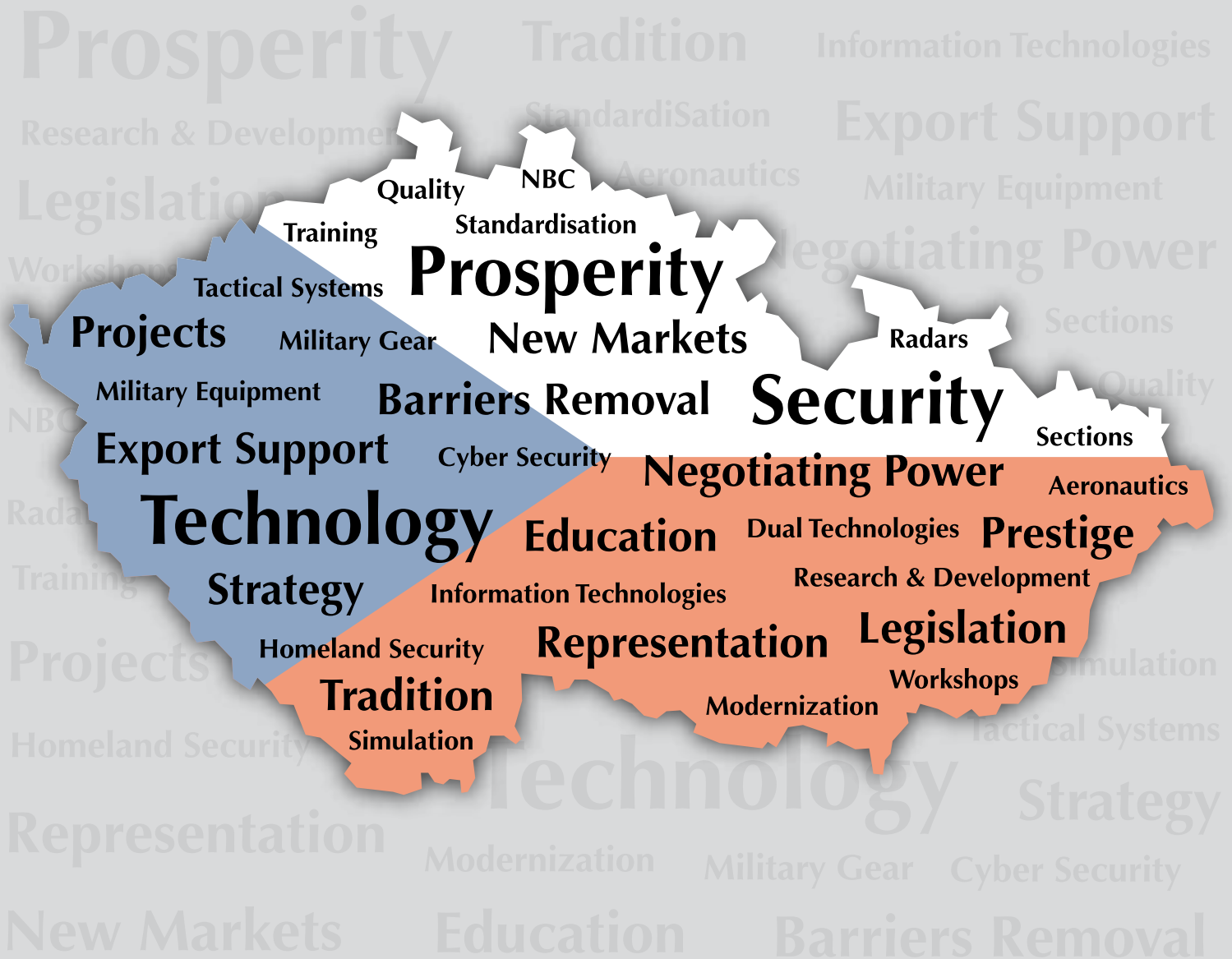
CleanAIR products have also recently been massively tested during the covid crisis. Healthcare professionals across the Czech Republic have been equipped with MedicaER sets, which offer the hi-

ghest level of respiratory protection and at the same time are very user-friendly and easy to use. The set, which is delivered in a transport case and contains everything needed for immediate use, can be used in a few minutes without the need of major preparation. Medical facilities were able to easily and effectively protect their staff from Covid-19.





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New Ground and Synthetic Training Center in LOM PRAHA



Director of LOM PRAHA s.p. Jiří Protiva got acquainted with the possibilities of cabin procedure simulators

The Ground and Synthetic Training Center is a new part of the Pardubice Aviation Training Center, which is an organizational unit of the state enterprise LOM PRAHA. Its operation began in early March. The center is designed for ground training of technical ground staff and pilots and for synthetic training of aircrews of the Czech Air Force. As part of ground training, it will provide language and technical training, and as part of synthetic training, it will primarily provide simulation training for individual pilots and complete helicopter crews. The free capacity of the center will be offered to other customers. The language training of the staff will focus on aviation English. Technical training will include theoretical training of technical ground staff and pilots. Simulation training will focus on familiarizing flight crews with helicopter cabins, on training and rehearsing normal and emergency procedures in flight and on the ground, and on training in navigation procedures in all weather conditions. The center includes three Cockpit Procedure Simulators for Mi-2, Mi-171 and Enstrom 480B-G helicopters, which were

supplied and integrated by VR Group company. VR Group is a subsidiary of LOM PRAHA. The Mi-2 and Mi-171 trainers are similar in concept, equipped with a simplified but fully functional cabin. It is interesting that the real navigation computer FMS CMA-9000 was integrated into the Mi-171, which allows pilots to practice the control of the on-board computer on the simulator in full compliance with the real helicopter. The simulator for the Enstrom 480B G is equipped with high fidelity replica of the cockpit. All trainers have electro-mechanical control load systems that faithfully simulate the forces in the controls and thus provide students with training conditions very close to a real helicopter. The training can be performed over the entire territory of

the Czech Republic, which is represented by a detailed photorealistic terrain database. If the customer requests it, it is possible to implement another terrain database, which he will supply. The simulators are equipped with a wide range of tools for evaluating simulation exercises and thus provide very effective tools for improving the training of future helicopter pilots.

"For our company, the Aviation Training Center represents a major customer and is a key element of long-term successful cooperation with the state-owned company LOM PRAHA," says the Chairman of the Board of VR Group, a.s. Vít Ryška.

The main benefit of simulators is in increasing the safety of flight training. Because it is possible to practice non-standard flight situations on simulators, which cannot be performed in real training. The activities of the Ground and Synthetic Training Center in LOM PRAHA will undoubtedly contribute to higher efficiency of flight training, as well as to the reduction of financial costs for the training of Czech Army professionals.

Text: Pavel Lang

Photo: Jitka Šuláková



The simulators will contribute to the higher efficiency and safety of flight training of helicopter crews.

FOTAS - OPTTA

Optical fiber-based distributed sensor

OPTOKON FOTAS is technology based on analyzing signals in a fiber optic cable, which changes the characteristics based on the vibration in its area. One segment of this technology is capable of detecting noise and vibration at distances of up to 100 km.

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- e.g., state borders, airport areas, military bases, drinking water sources, railroads, highways, pipelines, etc.
- Detection of failure and sabotage on long lines:
 - gas and oil pipelines, EHV lines, railroads, highways.
- Monitoring the movement of vehicles along the sensor cable
 - e.g., determining the position of a train in real-time.
- Unusual situation detection
 - events such as an emergency brake used on a train, an accident on a highway, or detection of traffic jams.

Main features – Detect-Prevent-Respond:

- Control of large areas
- Electronic or power failure in the field
- Manual adjustment of the settings for each detection zone
- All major components are duplicated with the implementation of continuous self-testing
- Detects any activity in the protected area
- The system is insensitive to electromagnetic fields

ADVANTAGES:

- Easy to install: lay the cable in a trench or along a fence
- Does not need any special cable as the sensing element is a conventional single-mode fiber optic cable – however, better results might be achieved using a special type of cable, designed solely for monitoring purposes
- Do not require cutting the cable, the installation of joints, or welding of fibers in each detection zone
- Option to use an underground cable sensor in any type of soil
- Does not require power wiring along the perimeter of the protected area

FOTAS is an acoustic sensor based on fiber optic infrastructure that can be easily distributed in various terrains. FOTAS keeps fences and borders secure and sends early threat warnings. Laser beams emitted by the laser source travel the entire system providing information while flowing through the fiber optic cable. Laser beams coming back to FOTAS are analyzed by computer software. Noises and unrelated data are eliminated through the software. Finally, FOTAS AI classifies the alarms. Actions that create vibration can be watched live on the system. Noisy areas can be isolated and deactivated at the request of the

user. All alarms are received and reported over the web interface, which can be stored and exported. FOTAS is a proven early warning security system that can detect third-party intervention, illegal crossing attempts and unauthorized excavations along a line spanning several to thousands of kilometers.

The FOTAS fiber monitoring system includes several devices, single or dual channels, and is designed for various cable lengths:

Models	Single Channel				Dual Channel			
	SF-5	SF-10	SF-30	SL-50	DF-5	DF-10	DF-30	DL-50
Detection distance	5 km	10 km	30 km	50 km	Dual 5 km Single 10 km	Dual 10 km Single 20 km	Dual 30 km Single 60 km	Dual 50 km Single 100 km
Position Accuracy	4 m		10 m		4 m		10 m	
Number of Channels	1 fiber per device				2 fibers per device			



OPTTA:

The device operates on the principle of a distributed fiber sensor and can detect violations and signals caused by mechanical and acoustic affecting the fiber optic cable. All these signals are transmitted to the control center where they are evaluated for whether they are harmless due to meteorological phenomena, such as wind, rain, or natural interventions caused by animals or if they are a direct disturbance of the monitored object or perimeter.

A powerful computer platform is required for these and similar

applications as large data processing and evaluation, image recognition and various types of signals are involved. For field use, mobile devices also need to be resistant to various climatic and mechanical influences.

The OPTOKON OPTTA-PP62X high-performance computer platform is designed for processing large amounts of data:

The OPTTA-PP62X is a fully ruggedized mission computer for state of the art combat vehicles and field communication nodes. It features a state of the art Intel® Xeon® Scalable Processor CPU and NVIDIA® GPU high-performance parallel processing, HD full-motion video capture and encoding, and complete sensor integration and data fusion. The OPTTA-PP62X provides unparalleled capability in a SWaP optimized system.

The OPTTA-PP62X integrates maximum computing and networking throughput and enables deep learning and artificial intelligence capability through the use of neural networks. OPTOKON's advanced thermal management engineering ensures survival in extreme operating conditions.

The OPTTA-PP62X is a fully ruggedized system, built to exceed the harshest military specifications including shock and vibration, dust and water ingress, and EMI/EMC.

All these parameters predetermine the OPTTA device for solving AI – artificial intelligence tasks, deployment in C4ISR / EB systems - battlefield digitization.

The digitization of the battlefield is the current trend in the development of advanced armies, especially those of NATO member states. The digitization of the battlefield interconnects weapons that are implemented based on computer-controlled systems.



The OPTTA-PP62X is a high-performance platform with parameters that require corresponding ruggedized housing of sufficient size to be able to accommodate the required hardware.

Not all artificial intelligence requirements for deployment in C4ISR / EB systems – battlefield digitization – require the top parameters of the computer platform. Especially at lower levels of headquarters or in mobile vehicles, where it is necessary to consider limited space, less powerful HW can be used in a smaller version, but with a higher degree of protection against climatic and mechanical influences.

In such cases, the deployment of the newly developed LMCP-7H server can be expected. Even while maintaining a sufficient level of performance, the LMCP-7H is a highly compact, durable, small platform optimized for installation in mobile devices

The compact ultra-durable OPTOKON LMCP-7H server is equipped with an Intel® Xeon® CPU, removable SSD disc and 6 Giga-bit Ethernet ports. The LMCP-7H supports up to 64 GB of DDR4 memory, resulting in a reduction in overall power consumption compared to DDR3-based servers.

The LMCP-7H provides military-grade features in ruggedized housing making it the ideal platform for applications in harsh and rugged environments. The LMCP-7H can operate in harsh environments in temperatures from -32°C to 75°C and is sealed against dust and debris. Our ruggedized Line stands up to shock, vibration and extreme temperatures.



Ing. Pavel Pospíchal
 Technical Director
 OPTOKON, a.s.

We are pleased to announce that OPTOKON will be participating in these exhibitions.



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An L-39NG aircraft is shown in flight, banking to the right. The aircraft is dark grey with a white geometric pattern on the fuselage. The tail fin has the number '15 7001' and 'L-39NG' written on it. The fuselage has the number '0475'. The aircraft is flying over a green landscape with a winding river and a runway visible in the distance. The background is a dark, moody sky.

L-39NG

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