

for Defence and Security Industry **Review**®

2/2017 | online   | www.msline.cz

The Media Platform of the Defence and Security
Industry Association of the CR | www.dsia.cz



Train as you Fight!
German Combat Training Centre

LEGATUS®

 **RHEINMETALL**
DEFENCE

**WE ARE NOW
THE WORLD'S NO. 1**

AURA

**We help with materiel
procurement
for the armed
forces**



**We are building
bridges between
the military
and industry**



facebook.com/aura.brno



www.aura.cz



Propellants, Explosives, Specialities



Export to more than 40 countries



www.explosia.cz

Propellants: +420 466 824 649, Explosives: +420 466 825 331, Specialities: +420 466 825 774

EDITORIAL

Dear readers,

the magazine first pages offer you views of national government administration representatives. The first one is the Chief of General Staff of the Czech Armed Forces who mentions the hopeful grow of defence budget among others. The following interview with the deputy minister of defence Ing. Tomáš Kuchta brings an assessment of MoD support and successful cases of Czech industry abroad or the current priorities of the Industrial Cooperation and Organisations Management Division. I should not forget here other interviews, though, such as with the Customs General Director or the new Deputy Director General of the Czech Fire Rescue Service

for prevention and civilian emergency readiness.

The largest international fair of defence and security technology in this year - IDET - and concurrently held PYROS and ISET exhibitions in Brno will open in few days already. The following pages will acquaint you the great homeland event hosted by BVV Trade Fairs Brno including presentations of some of the exhibitors coming from and outside the Czech Republic along with invitations to their stands.

The IDET NEWS Award ceremony with the announcement of the best product nominated by international jury of journalists will take place during the course of the fair. I wish all visitors nice time spent in Brno and the exhibitors many successful business activities.

Šárka Cook, Editor in Chief



CONTENTS

6 Are there Indeed New Opportunities of Development ...?

10 Interview with Deputy Minister of Defence

14 Interviewing the Customs General Director

16 Crucial Missions and Activities of FRS of the CR...

22 IDET, PYROS, ISET 2017

38 Hybrid Communication System

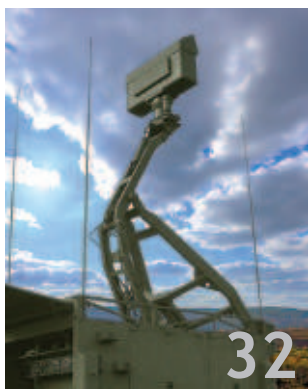
40 Tactical Tablet Getac MX50 - Battle Ready!

43 Fully Equipped Field C4 Workplace

50 Meet the CZ P-10

54 Containerized Decontamination Systems

60 New Laboratory of the Investigate Causes of Fire



EDITORIAL BOARD OF REVIEW 2017

CHAIRMAN

Jiří Hynek
President of DSIA CR

1ST DEPUTY CHAIRMAN

Antonín Sed'a
Member of the CR Parliament, Head of the Permanent Delegation of the CR Parliament at the Parliamentary Assembly of NATO, Member of the Committee on Defence, President of EURODEFENSE CZ

DEPUTY CHAIRMAN

Bohuslav Chalupa
Member of the CR Parliament, Vice-Chairman of the Committee on Defence

DEPUTY CHAIRMAN

Radek Hauerland
Vice-President of DSIA CR, Vice-President for External Communication of Česká zbrojovka

HONOURARY MEMBERS

General Petr Pavel
Chairman of the NATO Military Committee
Jaromír Novotný
Advisor to the Czech Prime Minister
General ret. Pavel Štefka
Advisor to General Director Trade Fairs Brno for IDET
Miloš Titz
Honourary Chairman and Founding Member of Editorial Board

MILITARY OFFICE OF THE PRESIDENT of the Republic

Maj.-Gen. Jan Kaše
Chief of the Staff

SENATE OF THE PARLIAMENT OF THE CR

Michael Hrbata
Advisor to Senate of the Parliament of the CR for Defence Policy

THE OFFICE OF THE CR GOVERNMENT

Jiří Winkler
Defence and Security Department, Office of the Government of the CR

NATO SUPPORT AGENCY (NSPA)

Antonín Zlinský

MINISTRY OF FOREIGN AFFAIRS OF THE CR

Miloslav Stašek
Deputy Minister for Economic and Operational Section

MINISTRY OF INDUSTRY AND TRADE OF THE CR

Vladimír Bärtl
Deputy Minister - Section of European Union and Foreign Trade
Zdeněk Richtr
Director of License Administration
Martin Šperl
Deputy Director, Department for Export Strategy and Management Service

MINISTRY OF DEFENCE OF THE CR

Tomáš Kuchta
Deputy Minister - Head of the Industrial Cooperation and Organisations Management Division

Martin Dvořák

Director, Defence Standardisation, Codification and Government Quality Assurance Authority

MINISTRY OF JUSTICE OF THE CR

Maj.-Gen. Petr Dohnal
General Director of Prison Service of the CR

• • • • •

ARMED FORCES OF THE CR

General Josef Bečvář
Chief of the General Staff
Maj.-Gen. Jaroslav Kocián
Deputy Chief of the General Staff

POLICE OF THE CR

Maj.-Gen. Tomáš Tuhý
Police President
Col Tomáš Hytych
Director of the Air Service

FIRE RESCUE SERVICE OF THE CR

Maj.-Gen. Drahoš Ryba
General Director
Brig František Mencl
Director, FRS Region Hradec Králové

NATIONAL SECURITY AUTHORITY CR

Martin Fialka
Director of Administrative and Physical Security Department

REGIONAL AUTHORITY

Aleš Boňatovský
Secretary of the Pardubice Region Security Council, Head of the Crisis Management Section

• • • • •

CZECH PROOF HOUSE FOR TESTING ARMS AND AMMUNITION

Milan Kukla
Chairman

CESES FSV CHARLES UNIVERSITY

Miloš Balabán
Head of the Center of Security Policy

AFCEA CZECH CHAPTER

Tomáš Müller
President

GREMIUM ALARM ASSOCIATION

Václav Nepraš
President

• • • • •

DEFENCE INDUSTRY REPRESENTATIVES

Štěpán Černý
Business Director of SVOS
Miroslav Dvořák
Chairman of the Board of PAMCO and T-CZ
Filip Engelsmann
General Director of AURA
Andrej Hronec
General Director of Audiopro
Josef Hudeček
Vice-Chairman of the Board of MESIT holding

Lucie Kadlecová

Marketing Manager - Rubber and Plastics Branch - GUMOTEX

Petr Kokeš

Commercial Director of INTV

Jan Köhler

Commercial Director of T-CZ

Antonín Mohelník

Director of the Prague branch of ELDIS Pardubice

Radoslav Moravec

General Director of ZEVETA

Petr Novák

General Director of RETIA

Lukáš Novotný

Marketing Manager of Czechoslovak Group

Lenka Orlová

Company Executive and Director of ORITEST

Jaroslav Pecháček

Vice-President of DSIA CR, Managing Director of SWORDFISH

Marika Přinosilová

Director Marketing and Communication of OMNIPOL

Karel Ritschel

Director - International Defence Programs - TATRA TRUCKS

Jiří Rousek

Exhibition Director of IDET, PYROS/ ISET

Petr Rusek

Chairman of the Board of TATRA TRUCKS

Pavel Růčka

General Director of Intercolor

Jaromír Řezáč

Chief Executive Officer of GORDIC

Jiří Řezáč

Vice-President for Cooperation and Trade Policy of DSIA CR, Advisor to General Director of OMNIPOL

Milan Starý

Marketing Manager of ERA

Pavel Šalanda

Vice-President of DSIA CR, Director of ROHDE & SCHWARZ - Praha

Jiří Šimek

Managing Director of Quittner & Schimek

Ladislav Šimek

Vice-President of DSIA CR, Managing Director of DROPPER and SHIMEQ Air

Marek Špok

Director of VOP CZ

Jiří Štefl

General Manager of OPTOKON

Josef Tichý

General Director of EXPLOSIA

Jaroslav Trávníček

Vice-President for Industry of DSIA CR, Deputy of Technical and Business Director of VTÚ

Igor Valníček

General Director of EVPÚ Defence

Aleš Výborný

Director - Czech Republic of BAE Systems

Are there Indeed New Opportunities of Development and Modernization for the Czech Armed Forces?

According to optimistic estimates, the defence budget is expected to grow by as much as some CZK 5 billion a year; the Ministry of Defence can spend CZK 52.5 billion this year, CZK 57.8 billion next year, and even CZK 62.7 billion in 2019. This is a substantial influx of money invested into national defence capabilities and, naturally, improved security of our citizens. The budgets are based on needs defined by representatives of the Ministry of Defence. We asked Army General Josef Bečvář, Chief of the General Staff of the Czech Armed Forces, to learn whether the proposals and plans referred to above are realistic.



In the beginning of 2015, i.e. at the time you assumed your current position, you gave the Review an interview concerning main tasks of the Czech Armed Forces in 2016, major acquisitions, and your satisfaction with the budget. I will remind you of your answer at that time: “Starting from the end, I am very pleased with the agreement on the growth of the defence budget. The Ministry of Defence will be allocated CZK 47.8 billion in 2016, which means an increase of CZK 4 billion. The defence budget will continue growing, and the coalition parties have agreed that the budget of the Ministry of Defence will gradually increase up to 1.4 % GDP by 2020. Personally, I expect a further growth, depending on how the global security situation will be developing, that will enable us to achieve a level of about 2 % GDP in the long run.”

OK, here’s the first question: What has changed since then, why, and how?

Personally, I expect that the commitment to strengthen the Czech Republic’s defence capabilities, i.e. to achieve the 1.4 % GDP level by 2020 and a further growth of the defence budget up to 2 % GDP, will be met. At every meeting we have, I am being assured that all parties across the board agree on the necessity to increase defence expenditures. I thus do not see any forth-

coming change for the worse, and the prediction of the defence budget outlined above is proof positive of that.

Reflecting MoD’s priorities and planned step-by-step increases of the defence budget in the years to come, there is now a proposal to increase the total defence budget above the mid-term plan figures, i.e. from CZK 57.77 billion to CZK 59.56 billion in 2018 and from CZK 62.65 billion to CZK 67.96 in 2019.

The 2019 budget also includes an increase of mandatory personnel expenditures of almost CZK 1 billion, which is required particularly for a planned recruitment of professional soldiers. As to 2020, a budget equal to CZK 77.31 billion is envisaged, based on a macroeconomic forecast of January 2017.

The 2018 - 2020 budgets referred to above will help us finance needs formulated in the approved Czech Armed Forces Development Concept 2025, in particular requirements for modernization of vehicles and equipment and the planned increase of the number of professional soldiers.

In December 2015, the Czech Armed Forces Development Concept was approved. General, what has already been accomplished and what do you regard as the greatest achievement?

In 2016, we launched key processes toward the implementation of the Czech Armed Forces Development Concept. More specifically, we were working on legislation, implementation tools, elaboration of the document for various tiers within the Ministry of Defence, and preparations for all major projects that have already been launched by now, or will follow one by one in the next stage. I am referring not just to modernization and armament projects, but also personnel-related matters, planned changes in the command and control system, improvements of the logistic support system, or immovable infrastructure.

As to the area of concepts, the year 2016 saw the development of the general policy documents down to lower hierarchical levels, including the Land Forces Development Concept, Air Force Development Concept, Training and Education Facilities Development Concept, and a draft Czech Armed Forces Command and Control System Concept.

Last August, we also started working on the Concept of the Use of Czech Armed Forces until 2030, which we will use as a springboard for updating the Czech Armed Forces Development Concept in the next period. By the end of 2016, we had also prepared generic scenarios of potential uses of the Czech Armed Forces.

As to the “tangible” part of the implementation of the Czech Armed Forces Development Concept, i.e. upgrading and modernization projects and stock replenishments, we proceeded with purchases and deliveries of state-of-the-art small arms,



materiel, and ammunition; deliveries of Tatra trucks are underway, a project of data repositories has been completed and, as mentioned above, strategic projects are being prepared and implemented in accordance with the Czech Armed Forces Development Concept.

Yes, we are still using obsolete Soviet equipment or equipment dating back to the 1970's in many cases. There is no doubt we will have to replace it, and this is exactly what the strategic projects are about. However, procuring a helicopter, a field gun or an infantry fighting vehicle in six months or a year is out of the question. First and foremost, it is necessary to define the requirement and to harmonize all interlinked areas involved.

Regarding the rearmament of the 7th Mechanized Brigade, the year 2016 saw a detailed costing exercise of the BMP 2 replacement project. A contract for a delivery of command and communication vehicles built on the Pandur wheeled APC chassis has been signed, and the government received a document dealing with the acquisition of similar assets built on the TITUS chassis. Works are underway on the upgrading of our self-propelled gun howitzer. Offers of potential suppliers of twelve multi-purpose helicopters to replace the existing fleet of Mi-24/35 "Hind" attack helicopters, which contract is of crucial importance for maintaining and enhancing capabilities of our rotary-wing aircraft in the years to come, are being evaluated, and we are close to a final decision. The supplier of eight 3D MADR mobile radars has been selected and parameters of the contract are now being discussed and negotiated; and contracts for airfield radars, the first of which will be delivered as early as this year, have been signed. The lease of 14 JAS-39 Gripen multi-purpose supersonic jets continues. In short, changes do take place.

The implementation of the Czech Armed Forces Development Concept has so far been very successful in the field of human resources. Thanks to a successful recruitment campaign, we have managed to increase numbers of soldiers in units and at bases. The year-on-year increase of the actual number of soldiers was 1,098, i.e. 6.2 %; at the same time, there was a year-on-year increase of TOE numbers of troops by 1,200. It is true that the average ratio of actual to TOE numbers continues to be 80%, but it is a tremendous leap forward insofar as actual numbers are concerned.

After many idle years, we have also been successful in reviving the recruitment and increasing the number of active reservists. For many years, there were some 1,200 of them, now we have more than 1,600. We are forming up new units, and we offer broader opportunities and more attractive training.

The improvement of the active reserves is unquestionably linked to legislative changes, namely to an amendment of defence legislation which took effect last year. There were immediate benefits for the defence sector; we could use a different way of selecting personnel for the armed forces and the reserves, we were able to publish new regulations, to redesign the structure of units of active reservists etc. The new legislation is also a step forward with respect to building up capabilities and capacities, in particular for emergencies.

One part of the amended defence strategy which is being drafted at the moment says that the numbers of combat forces and combat support forces should be increased, as security has been deteriorating in recent years. What is this expected to involve?

The defence strategy is based on three pillars. The first one is a responsible approach of authorities of the state to defence of the Czech Republic and commitments to its allies. The second pillar is a combat-ready army, and the third pillar is the citizens' duty to defend their country. All of them are equally important and irreplaceable. The increase

qs

Quittner & Schimek

WIRE HARNESSES

ELECTROMECHANICAL
ASSEMBLIES

FIBER OPTICS

CONNECTOR ASSEMBLY

COMPONENTS AND TOOLS

for DEFENCE
& AEROSPACE

Quittner & Schimek s.r.o. - Podleřinská 518 - 507 91 Stará Paka, CZ - Phone +420 493 766 111 - qs@qscomp.cz





above the planned number which you refer to is mentioned in the second pillar. The relevant provision says that steps should be taken to establish new units and formations in the long run, in order to increase combat capabilities of especially the ground forces, and thus increase the size of the Czech Armed Forces by another 5,000 men and women above the initial planned number of about 24,000 defined in the Czech Armed Forces Development Concept.

The additional 5,000 soldiers thus represent the second development stage which we will implement after achieving our primary objectives. The plan is to distribute them according to future needs; although most of them are expected to join the ground forces, there will be allocations to other elements of our armed forces, as all of them are “communicating vessels” and must be capable of delivering synergic effects.

According to Pavel Beran, Deputy Minister and Head of the Armaments and Acquisition Division, the Ministry of Defence is preparing a major project known as the “21st Century Base”, which is expected to bring 11 important bases/garrisons close to standards common in armies of Western NATO allies. Which bases are a priority in this respect?

The project of revitalization of immovable infrastructure of selected bases, or the “21st Century Base” project, if you wish, is being prepared on the basis of a memorandum of the Director of the Immovable Property Management Agency and in cooperation with the Land Forces and Air Force commanders. It reflects the need for revitalization and development of immovable infrastructure, taking into account its existing condition and requirements of the Czech Armed Forces and investments necessitated by purchases of new armament and equipment.

The selection of bases for the project thus reflects available capacities of all elements involved. The list includes: Páslavice, Hranice, Lipník nad Bečvou, Žatec, Jince, Opava, Bechyně, Praha - Kbely, Pardubice, Bučovice, and Štěpánov. However, this does not mean that we will neglect activities aimed at improving the condition of and developing other bases. I would like to say that our priority is now an overall improvement, not preferring a few selected bases at the expense of others. The bases/garrisons listed above are thus, first and foremost, a model for other bases and further steps.

The project itself is divided into two phases, or stages. The first output will be studies that will assess the bases and their immediate surroundings in the light of potential limitations, such as land use maps and justified interests of neighbouring municipalities, condition and capacities of connections to utilities, or transport services. Factors that will be taken into account include the potential and capacities for further development, construction and renovation of buildings, estimated costs of the work, and development timetables for the next ten years.

The second phase will consist in using the studies as the basis for further planning of the revitalization and development of

immovable infrastructure at the selected bases. The studies will therefore provide a guideline for decisions which bases or buildings will continue to be used and, if necessary, repaired or renovated, which will be demolished, and which will be built from the scratch.

The studies will therefore provide a general standard of sorts, which we will be able to use as a model.

What do you think about the operations of our Gripen fighters in Iceland?

For me, the air policing missions abroad are extremely valuable, whether in Iceland, where our Gripens have already been deployed three times, or in the Baltic countries, where they have operated twice. As a matter of fact, these activities demonstrate capabilities of our air force within the NATO Integrated Air and Missile Defence System (NATINAMDS), namely the ability to protect both the airspace of the Czech Republic and that of our allies. It is not just about the deployment of our pilots and aircraft, about their experience acquired when flying in an environment different from ours; this is just the proverbial icing on the cake. It is also about an overall development of capabilities of ground personnel, related logistic services, or command and control elements.

In this regard, I would like to mention that we are even now preparing for the next air policing mission in the Baltic countries in 2019.

The last question concerns the forthcoming IDET, ISET and PYROS fairs. Can you give us a brief outline of the presentation of the Army of the Czech Republic at this major Central European event?

I am very happy that the Czech Armed Forces is a regular and important participant at the IDET international fair. I would like to emphasize that we perceive the event in a broader context, primarily as an opportunity to present our army’s equipment and vehicles to both the professional community and the general public, and to show where we are heading.

I believe that this year’s IDET will be an opportunity to show that our armed forces, after many years of radical budget cuts, are getting into shape again and that we have started acquiring and developing additional new capabilities which a modern army needs.

The motto of this year’s stand of our armed forces is “My heart is beating for the army”; I see it as a chance to present the connection between the equipment and the soldiers who use it, including their training and preparations. This year’s stand attractions will thus surely include, apart from many various weapon systems, training and simulation technologies. We will also attempt to provide an insight into what the soldier’s job amounts to, and present the opportunities the army offers to those who will decide to hitch their future career wagon to it.

General, thank you for the interview.

Miloš Soukup

Photo by the Czech Armed Forces and Antonín Svěrák



14TH INTERNATIONAL DEFENCE AND SECURITY TECHNOLOGIES FAIR



31. 5. – 2. 6. 2017

BRNO, CZECH REPUBLIC



31. 5. – 3. 6. 2017

BVV Trade Fair Brno
Výstaviště 405/1
CZ – 603 00 Brno
phone: +420 541 152 926
fax: +420 541 153 044
idet@bvz.cz
www.idet.cz



Capabilities and Reliability Give Credit to Czech Industry

Czech industry has recently turned back to prosperous trends. The Ministry of Defence support should claim part of the credit for that while the personal presence of deputy minister of defence Dipl. Eng. Tomáš Kuchta to international fairs and the promotion of Czech defence and security industry play a role that cannot be neglected. That is the reason why we asked him for a brief summary of actions taken over the last year and the plans in near future.

Deputy Minister, in your last interview for Review you confirmed remarkable interest in Czech enterprises as well as government cooperation with partner organisations abroad. Would you assess the year 2016 and outline the expectations in those terms in this year?

From the Ministry of Defence point of view, the key achievements include primarily the establishment of the new framework for home defence industry development. The new framework reflects the new Strategy of armament and support for defence industry in the Czech Republic by 2025 approved by the government in December.

The strategy represents a culmination of the two years of effort paid by the Industrial Cooperation and Organisations Management Division formed as late as in 2014 but showing a big deal or work done. We had worked on the strategy together with the Armaments and Acquisition Division.

Along with developing and approving the strategy, we have been highly active within the security area of the European cooperation framework. We have submitted the national attitude to the

implementation of Defence Package, analysis of Security of Supply (again security system of supplies but at European scale) and of the role of Central and East European countries, while we completed the last one with the national attitude. We have placed accent on the concept of cooperation within European Defence Agency (EDA) where we helped enforce the political initiative concerning the Middle and Eastern European industries.

In the last year, we successfully developed the cooperation with the territories of interest sending or receiving more than forty missions. In collaboration with the representative offices, we co-ordinated and supported ten projects to promote economic diplomacy (PROPED) last year. Unstinting praise was the feedback. With regard to PROPEDs proved successful, their number in this year has exponentially grown - new projects acceptance procedures are still going on so that the number may grow further but we estimate, at the point, the Ministry of Defence is going to support about 40 projects to promote economic diplomacy.

The last estimates mention the export of special materiel in the last year repeated the records achieved in 2014 and 2015



growing by twenty to thirty per cent to reach the record amount of EUR 700 to 750 million, which equals approximately 19 to 20 billion in Czech currency.

Thus, the enterprises that had been on the verge of bankruptcy or at standstills are substantially growing now thanks also to the support provided by the Ministry of Defence. Such an increase is not expected to happen in this year but only because the enterprises are running at the very limits of their capacity. It is relatively good news and I believe that after the enterprise managers realise their further investments will pay back and manage to recruit enough qualified labour, their takings will keep growing.

You made a diplomatic trip to Abú Dhabi, UAE, with the official participation of the Czech Republic in the international fair of IDEX land military technology early this year. Czech exhibitors positively evaluated the fair itself but also your personal participation. Another similar fair will take place in London in September. What are the expectations there for Czech industry?

Generally, our products are very popular in the world as they have excellent added value and Czech industry's capabilities and reliability or support during the entire life cycle give it globally high credit. Most of our export go to EU countries but we help our partners beyond it as well. Thus, the London fair will be a very important event for a number of Czech companies.

On the other hand, engagement in the anti-Islamic State coalition is the most significant event beyond the EU. A squadron of light multipurpose combat aircraft has engaged in the fight successfully. The trade itself, it means the purchase of L-159

planes by Iraq, got support from the Czech Ministry of Defence and from the Czech forces who help training Iraqi pilots.

The projects are the key to increase the bilateral relations with the countries of interest, such as Iraq, to a higher level but also in the relations with our allies, including United Kingdom or USA, as they manifest our commitment to support the Alliance in fighting global terrorism.

Many products of the kind are categorised as "dual-use" technologies. On no account, we present solely weapons abroad.

The Czech Army cannot always purchase all products offered by the domestic market. Therefore, we understand the necessity of reference for international partners and the customers of Czech defence and security industry enterprises. We are thinking about



nexTER

CREATING NEW REFERENCES IN DEFENSE | WWW.NEXTER-GROUP.COM



the options of ideally set up certification system for the domestic defence industry enterprises to be a reference for markets abroad. It will confirm the quality complying with the Czech military standards also for such products the Czech military forces have not purchased.

Undoubtedly, your personal participation in international fairs, overseas missions, conferences and industry days in CR and abroad support the credit of Czech defence and security industry. What have your activities helped to achieve in this year and what are the next plans in the support of Czech industry export in the following period?

As a part of the industry days in the CR, for example, we arranged an exceptionally successful project in Vyskov town presenting light armoured and off-road vehicles from which the Czech military forces will choose. Another positively assessed event was the Czech-German Day held in March. That business forum gave floor to negotiations to the leading Czech and German enterprises.

In the outward terms generally, the issue is the support of defence and security industry in countries with a long tradition of Czech companies involvement as well as the attempts to establish new partnerships and to identify incoming opportunities where Czech products and/or services have not presented yet or where Czech traces have disappeared.

Speaking about the former category, I personally pushed forward the development of relations in the United Arab Emirates as you mentioned earlier or in Brasil participating in two largest global trade fairs in the regions, IDEX 2017 and LAAD 2017, respectively.

It was IDEX, first of all, where a numerous businessmen delegation accompanied me. I put it down to that minister Stropnický agreed to allocate a special charter aircraft to the event. IDEX was an incredibly successful event, also thanks to the attention media paid to Czech companies or to the VIP visit by crown prince Sheikh Mohammad to Czech stands. Signing the agreement between Czech VOP CZ and UAE's NIMR Automotive was the proverbial icing on the cake climaxing the long-term excellent work done by the Czech company.

State owned companies - speaking in this context namely about the four of VOP CZ, LOM PRAHA, Military Technical Institute and Military Research Institute - have also risen after years of starving and failing, thanks to the changes in management, new goals set and the support provided by the Czech Ministry of Defence. They are developing their own technologies or meeting success at the markets abroad.

In Brasil, we focused on the development of relations we had supported, together with minister Stropnický, already in 2015. We had inspiring appointments with the minister of defence Raul Jungmann and his deputy Flávio Basílio. Especially the meeting with Mr. Basílio was very long and detailed as the companies contributing to the fair could present in detail their products and services to the Brazilian defence ministry representatives.

Oman, where the Defence Committee accompanied me, belongs to the other category, being a country with a little of Czech defence export but because of warming bilateral relations, opening economy and incentive options you can see apparent interest and numerous opportunities for investors and exporters. I was very pleased to learn of the awareness of Czech products in those countries and of considering Czech industry often an inspiration.

In May, I will participate in the IDEF exhibition in Turkey that will again attract the leading

Czech and other nations' exporters. Our Division is going to engage in a number of significant activities, visits and projects to promote economic diplomacy in the following month of 2017.

Last year, you mentioned a system to certify Czech enterprises' products even if the Czech military forces have not fielded them. Have you succeeded in establishing the system? Would you mind to specify it to the readers?

At this point, we are working on particular issues of the system specification and distributing responsibilities and powers among the bodies who will act as national authorities in the field. It is a very comprehensive project participated also by the Defence Standardisation, Codification, and Government Quality Assurance Authority. In my opinion, the effort moves in the right direction. However, our goal is thoroughly and carefully harmonise all details, as the system should cover the entire NATO certification range, all STANAGs.

Certificates of such kind may fundamentally help our export-oriented defence and security industry, in both cases of the Alliance member countries who require compliance with STANAGs and of the non-member countries who often take into consideration the standards and try to implement them in their armed forces. Recognised standards of one another country will than represent another mechanism of supporting export opportunities. Successfully finished that particular system is currently a priority of ours in the nearest period.

Dear Deputy Minister, I thank you for the interview and wish you lots of success in your effort in future.

Šárka Cook, photo MOD CR





We Work to Make the World a Safer Place



Since 1997

**Defence and Security Industry Association of the Czech Republic
has been a Significant National and International player.**

www.dsia.cz

Interviewing the Customs General Director

On 25 July 2016, Brigadier General Milan Pouliček was appointed the General Director of the Customs Administration of the Czech Republic. Mgr. Milan Pouliček has worked for customs since 1987 in various positions, such as the Director of Customs Investigation office in Pilsen or the deputy Director of Customs Office in Rozvadov. He had taken the office of the Investigation Director of the General Directorate of Customs since 2003. Considering the fact customs duty covers also the defence and security industry products, we asked the general director for a brief interview.



Some media flashed news of growing powers of Customs Administration. Customs officers should get ready to new competencies - from sales records checks, gambling, to the competency of tax crime investigation that is under preparation. General Director, how do you perceive it and how do you plan to accomplish the competencies? In your opinion, what should cooperation between customs and the Police of the Czech Republic look like in those terms?

I do not think the situation lets customs powers grow. Legislation modifications added two new competencies to customs: electro-

nic evidence of sales and gambling surveillance. The former one has been in force since December 2016, the latter since last January. Customs Administration have had to take measures that would allow accomplishment of the new competencies, such as personnel training and recruitment of new personnel. The presented results of customs activities let me say it is obvious we can cope with the new responsibilities. The inspections aimed at the two competencies are always efficient and we are successful in forcing out illegal gambling.

Customs Administration today investigates the crimes in value added taxes. We endeavoured to enhance the competence with tax crime investigation but we have failed. If it were so instead of submitting the files to our Police colleagues, in a logic way the detective department that disclosed the illegal activity and is thus well acquainted with the issue would do the investigation phase. It may be stated, it would make the investigation shorter and more efficient. The public prosecutor can always decide of assigning a particular case to that or the other security element. We have been active in the cooperation with Czech Police in many issues, such as illegal employment, tax crime as mentioned before, as well as gambling, the last two within Kobra operation.

Publicly available information says the number of customs officers should increase by another 200 to 300 new professionals. Recruitment related to customs' broader competencies will probably be a challenge for the administration as military, police, prison service and some other security services announce more recruitment. What is your comment on this for the readers?

We are aware of possible pitfalls in the recruitment process in the period of absolute minimum unemployment rate in the Czech Republic history, as the conditions of signing a service contract



for all security services, including customs, are much more complex than normal employment contract. Nevertheless, I assume there are citizens who find customs service attractive and help us by joining our personnel. Customs Administration is running recruitment campaign in regions in the effort of addressing as many potential applicants as possible.

Another topic is the migration wave from the East and particularly from the South. What is your cooperation in the issue with Immigration Police? Do you have available new equipment, such as ReTWis type by RETIA a.s. Company?

Customs Administration in cooperation with the Czech Immigration Police and with the Police of the Czech Republic has contributed to cohesion exercises aimed at illegal migration. The exercises verified the signal system and communication between the elements, equipment sharing, and tested the rotation plan of the elements in continuous shifts, too. We are pleased to say we are ready to stand accomplishing all tasks issuing from potential re-establishment of national boarder checks.

We do not have a ReTWis radar available as we do not have a use for it within our competencies. We use full body x-rays, endoscopes and other devices for cargo and other closed space inspections to scan for hideaways. Customs Administration has noted several cases of illegal migration into the Czech Republic.

Quite an intensive transport of usual goods, but also of weapons, equipment and material, is running through this country. One reason is special purchase and sells and another is transport to exhibitions, such as IWA, ENFORCE TAC in Nuremberg or DSEI in London, and others. Do you cooperate with other competent authorities, such as Licensing Administration of the Czech Ministry of Industry and Trade in these terms?

Yes, we do, of course. We have established a close cooperation, which has lasted many years, with the Licensing Administration who is responsible for issuing export licenses, import measures and firearms and their parts and ammunition transit. We are informed of all licenses issued by the Licensing Administration.

You must have had vast experience from your previous appointments in Pilsen or Rozvadov in cooperation with particularly German customs. What is your assessment of cooperation between neighbouring countries customs? Do you feel a need of a change or an improvement?

There is naturally an eternal possibility of improvements. The cooperation between the Czech and German customs is at a high professional level, especially the regions at the national boarder can confirm. Generally, I am pleased to say Czech Customs Administration maintains very good relations with other customs within V4 Group nations caused primarily by a close cooperation in dog breeding and handling and detective work. In terms of customs, we engage in many issues related to fighting tax fraud, introducing electronic customs procedures and facilitating administration for trading public. Another factor no less important is of course a uniform customs policy toward third countries.

At the end a question concerning the oncoming significant exhibitions held in Brno. Will the visiting experts and our readers, who belong to them, be able to see Czech Customs Administration's presentation at IDET, ISET, PYROS 2017 fairs? What will it contain?

Customs Administration participate in IDET exhibition for the second time. The visitors can take a look at a large x-ray device, a dog transport vehicle and a mobile laboratory with unique equipment to taking samples of mineral oil from bottom-filled tanks in the static display. During the exhibition, customs dog handlers will perform shows of service dogs trained and specialised in weapons and ammunition search. I wish all visitors many nice experiences from the exhibition.

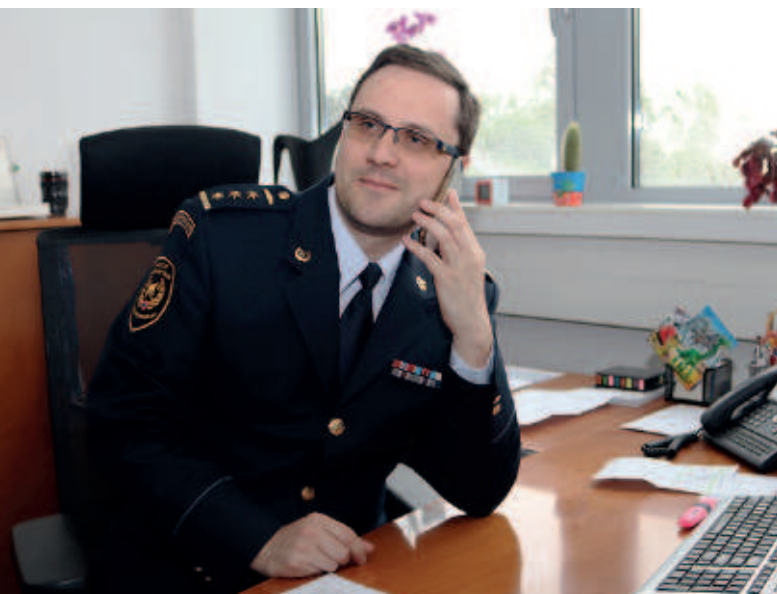
General Director, thank you for the interviews.

Šárka Cook, photo General Directorate of Customs



We are Facing Many Challenges while Preparing for the Situations with a large Number of People Involved

Appointed the deputy Director General of the Fire Rescue Service of the Czech Republic with the responsibility for prevention and civil emergency preparedness on 1 April 2017, Colonel Ing. Daniel Miklós, MPA, replaced in the office brigadier general Ing. Miloš Svoboda, who had been a member of REVIEW journal board of editors for many years. We used the opportunity to ask the new deputy Director General for a short interview.



Mister deputy Director, can you acquaint our readers with your professional background?

I started my career in 2003 at the Directorate General of the Fire Rescue Service of the Czech Republic (FRS CR). I worked for the planning division that time with the responsibility for crisis, emergency, flood and defence planning. The division later passed through restructuring process and a new one combining the responsibilities of the former planning and population protection divisions replaced it. I worked for the newly established population protection and crisis management division from 2007 in the position of the head of crisis management department, being charged with the responsibility of managing the division for the period of director's health problems in 2014 and then in 2015 I had been appointed the division director. During my work for the Directorate General I have been responsible for projects, such as the crisis act amendment, development of the last Population Protection Concept till 2020 with the prospect till 2030 or representing the Fire Rescue Service of the Czech Republic to international projects (such as OASIS project within the EU's 6th framework programme). I have strained to use modern trends and approaches in my entire career, such as project management that has become a hobby of mine. I am certified by IPMA (level D) and for PRINCE 2 (Practitioner) project method applications.

Since its establishment, the Fire Rescue Service of the Czech Republic has turned into a significant part of our citizens' awareness. Would you mind to characterise briefly the crucial missions within your responsibility?

The Prevention and Civil Emergency Preparedness Section's scope is quite wide involving fire prevention, inspections, fire forensic

investigation, population protection, crisis management, education and training, as well as strategic issues or support of FRS CR's interests within the European Union and NATO. Last but not least, we have also a research organisation: Population Protection Institute. Out of the division's vast portfolio of activities, I would like to point out the contribution to the new fire protection law as the current act came already into effect in 1985 failing to comply with current situation in all aspects and to consider modern trends. It also relates to our deliberations of making the fire protection standard system easier or to applications of modern fire engineering methods. Having the Czech Republic population ready for emergencies is another very important part of FRS CR scope. This issue is not fully implemented into Czech national security system. We have been cooperating with involved government departments in the effort of introducing a new obligatory school course that would prepare the children for all security snags (from traffic or health care education to emergencies, crises, and we cannot omit issues related to war). We often hear similar idea from some lawmakers. However, most of them draw analogy between the new one and the former civil defence education, which used to be more paramilitary oriented. Such a narrow view is incorrect and insufficient in my opinion. Education has been and still is a priority of ours within the EU and NATO.





What principal tasks and with what outcomes in prevention and civil emergency preparedness were in FRS CR focus in 2016?

All departments within the section are very specific in their activities though, the activities require interaction. Therefore, we have to work together to accomplish all tasks. I think we have been successful in it, also thanks to a good team. They have related, primarily, to the implementation of the goals and tasks embedded in the two essential conceptual documents of our section in recent period. The documents are Fire Prevention Concept and Population Protection Concept. Speaking of the tasks, I should mention the modifications in the law on fire protection in relation to Regulation no. 34/2016 Col., on cleaning, checking and inspecting exhaust channels, soft target protection issues, threat analysis of the Czech Republic, a document for government informing of the situation in security education with an appeal for introducing a special school course, or elaboration of Strategy on Development of the Fire Rescue Service of the Czech Republic. In addition, our Population Protection Institute won the Czech National Quality Award 2016 in one of the most prestigious programmes, which is EXCELENCE of public sector. All mentioned above represents a huge commitment for us to continue in the very good results trend.

How would you characterise the cooperation with the FRS and other regional bodies?

I would describe the cooperation using “key” as the single word. FRS CR consists of the Directorate General, fourteen regional Fire Rescue Services, Emergency Unit and the School and Training Facility. Despite its diverse components, FRS CR is a unified corps joining all effort and forces to accomplish the unequivocal mission: protect lives and health of population, environment, animals and property against fires or other emergencies or crises. In support of such a challenging mission, FRS CR is in charge of accomplishing and arranging the partial tasks of fire protection, population protection, civil emergency planning, integrated rescue system, crisis management and other issues following the law. That is why it coordinates the activities of central authorities as well as regional and municipal bodies. A well-functioning co-

operation then stands for an absolutely indispensable requirement. My own experience shows that cooperation throughout all authorities is very good because we have a common goal: to contribute together to Czech national security and population protection.

Could you give examples of cooperation with Czech industry accomplishing particular tasks?

We meet the Czech industry representatives primarily for security research projects from which unique solutions often come out. Another place of cooperation is making documents, regulations and standards as we meet the experts representing Czech industry within a number of technical standardisation committees or expert groups, such as the Association of Chemical Industry. Finally yet importantly, expert companies engage in particular incident solutions (e.g. as other elements of the IRS) using their expert knowledge to contribute to efficient coping with the situation and to resuming the original situation.

Deputy Director, FRS CR has undoubtedly kept improving its operation turning more professional. There are some lacking points in these issues remaining, sure. What are they?

Every system, no matter how good or perfect, lacks behind in a point or two. Everyday life is very colourful and varied rather than black and white and it can prove the humans that they cannot know or understand everything every time they think they can. The current security situation in the world shows that we are facing many challenges in the preparations to the situations where a large number of people is involved. We have to know how to develop planning documents for such a great number of events and consider lot of details at the same time. Moreover, the events are very often of the kind we have never practiced and we hope it all will remain in paper form. A crucial factor affecting our operation and requiring us to keep up actively is progress, information technologies, new trends and equipment. It all implies human resources management and recruitment of good personnel, tailoring the education system and the bonus system.

What is the current situation in cooperation with the other elements of the Czech Integrated Rescue System in your opinion?

The cooperation between the core and other elements of the integrated rescue system in the Czech Republic is at a level daringly comparable to other nations at European and global scale. We have managed to establish a very robust and intertwined system, where each element knows exactly its tasks and responsibilities. Cooperation between them is excellent and completely natural. Today, we can hardly imagine it could be otherwise. This year we mark 25 years since laying the first foundations of the system.

A new event of the trio of security exhibitions ISET, PYROS and Interprotect 2017 is coming. Has the Fire Rescue Service of the Czech Republic arranged special activities on that occasion?

What we have arranged in this year is the marking of the 25th anniversary of integrated rescue system. It will accompany the IDET, Pyros and ISET exhibition in the form of Pyromeeeting Conference that will take place on 1st June in Continental Hotel Brno. Rather than purely reminiscence and retrospect, the conference rather will concentrate on the trends of development of the cooperation between IRS elements during joint rescue and relief operations. The agenda includes speeches and presentation given by the representatives of some important other IRS elements connected to FRS CR through lasting and good cooperation, such as Water Rescue Service, Czech Red Cross, Prague Municipal Police, or the National Institute for Nuclear, Chemical and Biological Protection. I believe that the exhibitions and the conference will give us a chance to prove the very good cooperation between IRS elements and to declare the readiness of the Fire Rescue Service of the Czech Republic to cope with incidents and crises.

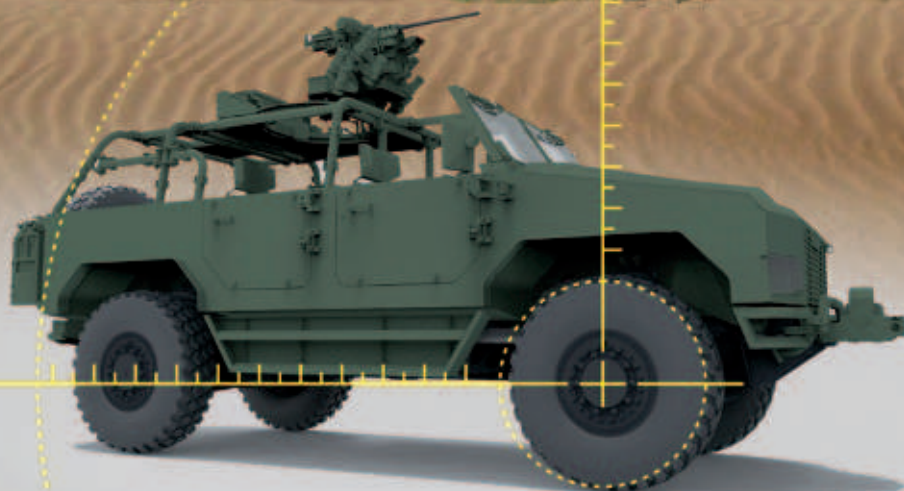
Mister Deputy Director, thank you for the interview.

Eva Soukupová
Photo FRS CR





MANUFACTURER
OF
SPECIAL MILITARY VEHICLES



VISIT US

31.5. - 2.6. 2017

IDET
2017

PAVILON P / 106



SVOS, spol. s r. o.,
Chrudimská 1663,
535 01 Přelouč,
Czech Republic

www.armsvos.cz
tel.: 466 955 743, svos@armsvos.cz

Business Missions Help Build Positions of Czech Companies, Particularly in Countries with Dynamically Growing Markets

We asked Dipl. Eng. Jaroslava Beneš Špalková, Head of the Department of Export Strategy Management and Services of the Ministry of Industry and Trade, for an interview.

What innovations does the updating of the Export Strategy of the Czech Republic in the end of 2016 bring for the state's support of export and how is your cooperation with the Ministry of Foreign Affairs, Ministry of Defence, or Ministry of Interior proceeding?



The updated Export Strategy, which the government discussed in the end of 2016, aims to reflect feedbacks from representatives of companies; compared to its predecessor approved in 2011, it is more specific and envisages more intensive cooperation with other ministries in the field of support of export activities. Of course, its most essential element is the cooperation between the Ministry of Industry and Trade and the Ministry of Foreign Affairs, in respect whereof the division of labour is clear - the Ministry of Industry and Trade is responsible for the support of export and the trade policy, the Ministry of Foreign Affairs is responsible for coordination of external economic relations and economic diplomacy;

a successful pro-export policy thus cannot do without the cooperation. Both ministries have been coordinating their activities and cooperating intensively since 2014, when an agreement between the ministers of industry and trade and foreign affairs was signed, laying the groundwork for the establishment of what is called the United Foreign Network, which comprises economic departments of embassies and foreign offices of the CzechTrade agency. Another product of the agreement is the Client Centre for export, operated jointly by MoIT/CzechTrade and MoFA; a catalog of services provided free of charge by MoFA/embassies, MoIT and CzechTrade, and also of paid ones provided by CzechTrade foreign offices, has been put together as well. A major change which the updated Export Strategy brings consists in complementing the territorial focus, i.e. the identification of priority countries and countries of interest for the implementation of export-supporting measures, by a sectoral approach, i.e. focusing pro-export activities on opportunities arising in different industries. The Ministry of Foreign Affairs, in cooperation with other institutions, has prepared a so-called Map of Global Sectoral Opportunities the purpose of which is to identify potential opportunities for Czech enterprises in foreign markets and to give potential exporters an idea of specific export opportunities in specific territories. Another new tool are so-called Economic Diplomacy Support Projects, EDSPs, which offer Czech companies an opportunity to establish or deepen contacts with foreign partners, present their products and services at specialized fairs, or sign new contracts. Other ministries, such as the Ministry of Agriculture or Ministry of Defence, have recently been also involved in these processes. Representatives of the two

ministries and deputy ministers of industry and trade and of foreign affairs meet at regular coordination meetings the purpose of which to ensure smooth and seamless cooperation in the field of support of export activities and economic diplomacy. All the three ministries, i.e. the Ministry of Industry and Trade, Ministry of Defence and Ministry of Agriculture, have been playing a major role in economic diplomacy projects, which they make use of in the implementation of specific pro-export activities focusing on industrial enterprises, defence and security industry, and agriculture. Cooperation with other ministries, such as the Ministry of Labour and Social Affairs and Ministry of Interior, consists in the preparation of measures and projects in the area of positive economic migration.

Can you give us a comparison of export figures in the last three or four years?

Since 2010, Czech exports have been growing steadily; in 2014, there was a year-on-year increase of 14.3 %; in 2015, the exports were 7.5 % higher than the year before, and even the year 2016 showed an increase, although lower than in previous years - 2.4 %. However, because of the high basis, the overall trend is positive, and it continued in the first two months of 2017 as well - compared to the same period of 2016, the exports were 3.6 % higher. Most of our exports go to EU countries, which account for about 83 % of the total volume of export of the Czech Republic; to be more specific, the figure was 83.6 % in 2016. The overall trade balance in 2016 resulted in a surplus of CZK 501,460 million; with respect to EU countries, the surplus was even higher, amounting to CZK 986,360 million. Just like in previous year, machines and means of transport were the pillars of exports, accounting for about 55 % of the total volume (56.3 % in 2016). However, the high territorial orientation to EU countries and the dependence on the automotive industry as the main export driver may pose a problem in the years to come. The government is trying to facilitate the access of Czech businessmen to non-European markets, but the favourable economic situation in the European Union combined with demand for Czech goods means that the share of EU countries in Czech exports is going up. Conditions of the EU

BESTIS[®]

**INTERNATIONAL TRADE WITH MILITARY EQUIPMENT WITHIN
THE SCOPE OF THE VALID LICENSE.**

**MANUFACTURE, REPAIR, MODIFICATION, TRANSPORTATION,
PURCHASE, SALE, LEASE, STORAGE, DISABLING
AND DESTRUCTION OF ARMS AND AMMUNITION.**

CEO's name: Stanislav CHLEBEK

E-mail: fmo@bestis.cz

Mobile: +420 602 767 867 (Non-Stop)

common market have been continuously improving, efforts to remove trade barriers between EU countries have been around for decades, so it is quite natural for exporters to prefer EU countries to faraway states where they are restricted by various tariff and non-tariff barriers. Still - or perhaps because of this - the government must continue to implement measures supporting diversification of exports and to assist companies in their expansion to non-European markets.

What do business missions with representatives of the state and ministries mean for businessmen?

Delegations of businessmen accompanying constitutional representatives during their trips abroad are one of the forms of support of export activities. They are an effective and much-demanded tool, as they help build positions of Czech companies, particularly in countries with dynamically growing markets. Apart from being very successful in their "door opening" role in markets abroad, they are also important from the viewpoint of promotion and strengthening of the good reputation of the Czech Republic. In this respect, it is possible to mention, for example, the visit of Deputy Minister of Industry and Trade Vladimír Bärthl and representatives of leading Czech defence companies to Argentina in the end of March, the essential part of which was a presentation of the Czech defence and security industry. The presentation involved representatives of Czech aerospace companies or enterprises manufacturing weapon systems and modern radar and software products. A Memorandum of Understanding between the ministries of defence of the two countries is now being drafted, the aim of which is to foster mutual cooperation in this field.

Do you plan any changes in the concept of support of Czech defence and security companies' participation in international fairs and exhibitions?

Following a recommendation of the Defence and Security Industry Association of the Czech Republic, the Ministry of Industry and Trade organizes two official participations of the Czech Republic in events abroad. One of them, IDEX in Abu Dhabi (February 19 to 23), has already taken place, the other, DSEI in London, will take place from September 12 to 15. The Defence and Security Industry Association has also proposed

two events for the next year, DSA in Kuala Lumpur and EUROSATORY in Paris. At these exhibitions, we attempt to combine, in the most suitable way, the Czech Republic's official stand and stands of Czech companies that have booked more space at their own expense or participate without MoIT's support. Due to great interest of companies in being a part of the Czech Republic's official stand, we are now looking, together with the Ministry of Defence, for ways of getting more exhibition space for Czech enterprises in the years to come. The Defence and Security Industry Association also regularly utilizes a programme of incoming missions, generally comprising two events a year. As these forms of cooperation have proven very useful and are, in our opinion, very effective, they will continue to be made use of in future. I can also mention EU programmes - NOVUM projects, which fall under the auspices of CzechTrade. These projects are co-financed by the European Union, namely through the Competitiveness and Innovations Framework Programme, with the Ministry of Industry and Trade acting as the control body on the Czech side. The objective of these projects is to facilitate the access of small and medium-sized enterprises (SME) to foreign markets through their joint participation in fairs and exhibitions abroad, marketing support of SMEs, particularly in the field of new technologies, improved international competitiveness of SMEs through new product designs, including an assessment of their market potential, and promotion of industrial designs at events abroad. These programmes are expected to support seven defence and security industry-related fairs and exhibitions in 2017, and a further eight in 2018.

The License Administration was heavily involved in improving transits of Czech defence products, especially via Germany and Poland, last year. How do you view the current situation?

I am not directly responsible for this area, but according to information provided by the License Administration, there have not been any major problems in this field recently. If any problems occur, there is an arrangement in place with the Defence and Security Industry Association, which will be used to deal with them.

Dear Mrs. Špalková, thank you for the interview.

Šárka Cook, Photo by MoIT



Mediální partner Asociace obranného a bezpečnostního průmyslu České republiky
The Media Partner of the Defence and Security Industry Association of the Czech Republic

VISIT OUR STAND
No. 134 in Pavilion P
31. 5. - 2. 6.



IDET, PYROS, ISET 2017 - Trade Fairs of the Integrated Rescue System

The state plans to invest billions to strengthen its security; large acquisitions are planned by soldiers, police forces, firemen, customs officers and other units. Governments of other countries are progressing in a similar fashion, which is good news for the export-oriented Czech defence and security industry. This year's trade fairs in Brno are expected to be the most comprehensive showcase for the last few years. About all this we talked with an General ret. Pavel Štefka, advisor to the general director of trade Fairs Brno for the IDET and PYROS/ISET.



In 2017, you highlight the Integrated Rescue System more than in the past. What is the reason behind it?

Yes, it really is so. The security situation in the world is the main reason. While there are no major wars or conflicts in the world at present, there are situations where there is a need to provide assistance to the population in various disasters, terrorist attacks and humanitarian crises.

The weight of prevention and resolution of these problems lies on the Integrated

Rescue System and its units. This system is sophisticated and functional in the Czech Republic, so why not impress and present these unique capabilities to the world, the politicians and the population of our country, who are scared by some of the terrorist attacks.

Business executives will be able to speak with the heads of individual departments and will be able to introduce their products. The sections and units of the Czech Army, the Police of the Czech Republic, the Fire Brigade and other units often use the same or similar material such as uniforms, weapons, ammunition, optical instruments, radio stations, protective devices (bulletproof vests, helmets), vehicles etc. And these are the reasons why the three-some of our trade fairs is very profitable. It offers them the chance to be successful with one product addressing several security units. And as I like to say - "Contact means Contract".

What did you focus on in preparing this year's international fairs and what can we look forward to?

We started preparing this year already during the last one, in 2015, when we returned to the well-established programme of fairs after many years. We have returned to the show polygon (IDET Arena) as well as the Golden IDET award for best products. We organized seminars and conferences with the participation of top specialists in their fields. The number of exhibitors has increased by about ten percent. This is important information for prospective exhibitors, and they notice it. That was our starting position. We had to ask ourselves, why foreign and domestic companies would want to attend the trade fairs? What do they need and

what do they expect from us? We have an extensive analysis of the trade fairs from 2015 at our disposal. We focused mainly on personal contact with the management of local and foreign companies. We talked to them at trade fairs, industrial days, and at their premises. This method is exhausting - we have had hundreds of meetings - but it is very effective.

I am pleased to say that this year's IDET, PYROS and ISET fairs will be more extensive and I firmly believe that also more successful. Not only for us as organizers, but also for the companies.

We have approximately one fifth of exhibitors more than in 2015. We expect higher participation of foreign delegations and visitors. It is important for our exhibitors, as well as foreign exhibitors, due to the pro-export policy of our defence and security industries. We also prepared new events with the participation of units who never attended the fairs.

That's interesting, could you be more specific?

In addition to the Ministry of Defence, the Ministry of the Interior, the Czech Army, the Police of the Czech Republic, the Fire Brigade and the State Material Reserves Administration, this year also includes other armed forces - the Customs Administration, the Prison Service and the Municipal Police from 17 cities in the Czech Repub-





lic. They will present themselves not only by static demonstrations of their equipment at the exhibition stands, but also at the IDET Arena, demonstrating their skills, latest technology and equipment. Examples of the individual units of the Integrated Rescue System will take place every day. We have enlarged the IDET Arena by about a third compared to 2015 and we added new obstacles.

I talked about the public. The fairs will be open to the public every day; only the opening day will be available to persons over fifteen. On Saturday 3 June, we prepared a Safety Day at the Brno Exhibition Centre in cooperation with the individual IRS units, where the general public will be able to get acquainted with the capabilities of our IRS, test the work of rescue workers and engage in many competitions and events. We have also adjusted the entrance fee on Saturday - children have free admission, adults pay 50 Crowns.

On the occasion of the PYROS trade fair, the General Directorate of the Fire Brigade organizes the PYROMEETING conference. AFCEA has prepared CYBER GYM, a Cyber Pavilion, where the final of the nationwide secondary school competition will take place, attended by pupils from four hundred secondary schools. People will be able to test hacker attacks and defence against them.

For the first time in the history of IDET, we have an official foreign partner. It is Turkey with fourteen top companies. Austria organizes an industrial day for Czech and Austrian companies.

After a long time we will see aircraft at the trade fairs - L-159, helicopters and experimental plane constructed by the Czech University of Technology. It is difficult to describe these very interesting events; you should rather attend and see for yourself.

Why is it important for companies to participate in IDET, PYROS, ISET?

There are several aspects. We could discuss the trade fairs, their usefulness and the opposite opinions for a long time. If a company wants to be successful, it must be visible. Large government contracts are not solved on the Internet. In the security sector, projects are being prepared and implemented for two, three years or more. Therefore, active participation in trade fairs is important. It is also about finding new contacts, new collaboration. An increase in funds that the state invests in security is also an important aspect.

The ACR prepares and implements extensive acquisitions in ground forces, aviation and logistics. The Police demand better quality equipment for police officers. The Fire Brigade plan to upgrade their vehicles and equipment. This also applies to other security units. This is also an important impetus for the participation of local and foreign companies in our trade fairs.

Last but not least, there is advocated support for the domestic defence industry from the Czech government. The trade fairs have great support from the Ministry of Defence, the Chief of Staff of the ACR, the Police President, the Fire Brigade, the SSHR Chairman and many others. We must thank them for their support - without this support the organization of our fairs would be problematic.

The trade fairs will be attended by the President of the Czech Republic, Miloš Zeman, who will also conduct the official opening.

An interview with you suggests that not all exhibitors prepare for the trade fairs well enough...

This is one of the conclusions of our analysis and feedback from exhibitors.

For example, I had a very interesting discussion at EUROSATORY with the COGES president, General Patrick Colas. They have come to the same conclusion as we did - companies are often unhappy with the attendance of their stands. They assume that attendance will be ensured by the organizer. This is true, but only partially - these are joined vessels. Visitors will come to see when there is something to see and companies will exhibit when they have the opportunity to present their products. This clearly indicates that both sides must be prepared.

If you do not get prepared for the trade fair, then you must not be surprised that there is not much interest in your products. You can not just prepare a beautiful exhibition, a beautiful stand with beautiful hostesses. Companies must, with due time in advance, pay attention to inviting guests with whom they want to meet and not only rely on foreign delegations invited by the organizer. The staffing of the exhibition stand throughout the fairs is equally important. Often, there is no company executive present; only specialists who, while explaining everything necessary, are not able to meet the executives of other institutions and companies.

Trade fair participation is not always properly analysed and evaluated, which leads to the repetition of inappropriate practice in the future. That is why we've created a manual that we regularly update: "How to Succeed at the Trade Fair", which is available on the BVV website. I am very pleased to note that even in this area; we notice some development among the exhibitors. I have the advantage of being able to assess the preparation and events at the fairs from three points of view - as the former Chief of Staff, as an exhibitor and now also as an organizer of this important event.

General, thank you for the Interview.

Jiří Erlebach

Supporting Programme at IDET, PYROS, ISET Trade Fairs 2017

Security experts from many countries are heading to Brno to attend prestigious conferences; their programme is particularly busy this year. The Brno University of Defence traditionally organizes the CATE (Community-Army-Technology-Environment) conferences with four sub-conferences on Military Technology - ICMT 2017; Distant Learning, Simulation and Communication - DLSC 2017; Security and Protection of Classified Information, and Logistics in the Armed Forces - More Efficient Operation of Military Bases in Future Operations.

The SECURITY TRENDS opening conference of last year's IDET is followed up by the Cybernetic Pavilion in Hall P. There will be, for example, the final of a secondary school cyber security competition, a public hacking competition, lectures, debates and so-called Life Hacking. "The Cyber Pavilion responds to current security issues. The aim is to prepare a new concept of presenting modern trends and solutions in the area of cybernetic and information security for new partners, exhibitors, professionals and the general public, as well as introduce cyber security as part of a modern society dependent on information and communication technologies," says Petr Jirásek, Regional Vice President of AFCEA International for Central and Eastern Europe. The Cybernetics Pavilion will feature presentations of a number of state, academic and private institutions. National bodies will for example include the National Centre for Cyber Security (NCKB) or the Ministry of Interior of the Czech Republic. Academic institutions such as Masaryk University in Brno, the University of Defence of the Czech Republic or the Faculty of Electrical Engineering of the Czech Technical University in Prague will also be there. Private companies that must be mentioned include the general partner of the cybernetic pavilion, CyberGym Europe, who operates a modern cybernetic arena in the Czech Republic.

Two hundred representatives of municipal police units from the Visegrad Four countries will discuss migration, international cooperation, cyber security, legislation and modern technologies at the International Conference of Municipal Police of the Visegrad Four Countries. It will take place during the international security fairs IDET, PYROS and ISET as official supporting programme to commemorate the anniversary of 25 years since the renewal of municipal police. The conference is held on 31 May and discussion is divided into three thematic sections where Czech and foreign experts will exchange their experience and discuss current topics related to the activities of local and municipal police. "The first section will deal with migration issues, international cooperation and epidemiological risks related to migration and their possible prevention," said Daniel Bednařík, director of FT Technologies, who organizes the international conference. In the second section, the speakers will focus on cyber security issues in public administration or data protection, and will also inform conference attendees about new legal challenges in cybersecurity. The final section will focus on current legislation related to the work of city and municipal police officers. "Participation in this panel was confirmed by two most experienced experts. Chief Inspector of the Slovak Office for the Protection of Per-





of Prague and the State Institute for Nuclear, Chemical and Biological Protection. The programme will also focus on emergencies involving the occurrence of hazardous substances, development of operational and information centres and training of commanders and leaders of the Integrated Rescue System. The conference is intended only for participants who will receive an invitation from its organizer, the Ministry of Interior - the General Directorate of the Czech Fire Brigade.

Legiotrain at IDET

An attractive excursion in history will be prepared on the rail track outside Hall F. IDET will present three Legiotrain cars and a crew with a legionary database. Every visitor can thus find out if they had a legionnaire among their ancestors. Thanks to the abundant attendance where just last year, Legiotrain was visited by nearly 200 000 people, the database succeeds in adding photos, documents, me-

sonal Data Tatiana Valentová, and Milena Bačkovská from the Security Policy Department of the Ministry of the Interior of the Czech Republic," adds Daniel Bednařík. The conference also includes a visit to the security fairs themselves, located in several halls of the Brno Exhibition Centre and in the outdoor areas. An attractive programme of the IDET ARENA field polygon will also be available, featuring dynamic demonstrations of military, fire and police vehicles. The International Conference of Municipal Police of the Visegrad Four countries is organized by FT Technologies, a leader in the Czech IT market for city and municipal police. "We consider the organization of the conference an added value, a kind of duty towards our partners - it is primarily not a commercial project, but a professional and above all a friendly exchange of experience," concludes Bednařík. As is clear from last year's reactions, not only the organizers but also the participants themselves see it this way. The conference is intended for commanders and directors of local and municipal police, mayors and representatives of local governments, partner organizations and representatives of the integrated system from the Czech Republic and abroad. The first year took place last June at a military shooting range in Bzenec and more than two hundred participants from the Czech Republic, Hungary, Poland and Slovakia took part in it. The organizers expect such participation this year as well.

PYROMEETING 2017

The PYROMEETING conference will be included in the supporting programme of this year's IDET, PYROS and ISET trade fairs held at the Brno Exhibition Centre from 31 May to 3 June 2017. The conference will be held on 1 June 2017 at the Hotel Continental in Brno. The Prime Minister of the Czech Republic, Bohuslav Sobotka, was asked to grant his patronage to the conference and hold the opening speech. This year's conference will focus on the 25th anniversary of the Integrated Rescue System. It should not only look back and review, but present the emergence, current state and development trends of the basic components of the IRS in synergy with common rescue and liquidation deployment. The programme will include speeches by representatives of some important other units of the Integrated Rescue System, which have long-term cooperation with the Czech Fire Brigade, such as the Czech Red Cross Water Rescue Service, Municipal Police of the City

of memories and material items from people's estates. Since the train's departure in 2015, some 2500 legionary cards have been completed. This year's display will particularly involve a tailor's car where repairing old or sewing new uniforms took place for our foreign army in Russia; a blacksmith car that was the only one of this train was involved in combat. Up to now, you can find a shot and a few smaller traces of small firearms on the black roof beams. The last car of the set will be a postal ambulance car. Using these wagons, Czechoslovak post was transported on the Trans-Siberian Railway for legionaries and allied soldiers from 1918 to 1920. The original ambulances were modified from freight wagons that previously carried flour, coal or lime.

IDET ARENA

Demonstrations of army, fire and police vehicles and special components on the field polygon will also be a real attraction. Visitors can look forward to e.g. demonstration rides of vehicles, canine and mounted police units and the Municipal Police public order units, dynamic demonstrations of the Prison Service of the Czech Republic (escort attacks, vehicle intervention, intervention using a dog and Kraken), dynamic demonstrations of the Police of the Czech Republic using technical equipment, intervention of a mounted police unit, demonstration of the Brno Intervention Unit), drone flight demonstrations, IRS units and much more.

More information can be found at www.idet.cz



Train as You Fight!

Rheinmetall's innovative and proven Legatus Live simulation technology not only enables the realistic Training of complete units with their original equipment in a real environment. It also allows a very detailed exercise control and evaluation, as an essential prerequisite for the tactical leader, in order to detect and eliminate possible deficiencies.

By bringing its LEGATUS Live Simulation hardware to IDET 2017, Rheinmetall is highlighting its globally leading role in the field of simulation and training.

The LEGATUS Live simulation system bridges the gap between virtual reality and the real world, supplying training solutions that prepare personnel for their next mission. The LEGATUS system is a family of modular live training systems and is Rheinmetall's approach to satisfying all customer requirements in the field of live training. The system encompasses personal equipment, weapon equipment, vehicle equipment, urban equipment, exercise control, support equipment and training area communications equipment.

The core elements of the LEGATUS system include state-of-the-art communications technology and laser engagement simulators. Every participant in live training operations - from individual soldiers to main battle tanks - is equipped with laser sensors, transmitters and compact data transmission device. This device features a GPS satellite receiver that constantly transmits information concerning the position and status of each participant to the exercise control centre.

When training for military operations in urban terrain (MOUT), special sensors track the position of soldiers even when they are inside buildings. The effects of heavy weapons fire on buildings and the troops inside them can also be simulated.

Moreover, mobile video teams accompany the participating units,

transmitting imagery back to headquarters in real time. There, the complete array of data from an exercise flows together, including all voice transmissions. The position and status of all exercise participants are then depicted on workstation computer monitors and large screens on a 2D/3D situation map, including video recording in real time. All events taking place during major exercises are electronically recorded and processed for subsequent after-action review, so that they can be presented to exercise participants during the After Action Review.

Rheinmetall's leading simulation technology can be customised to any specific customer requirements including applications for highly mobile and deployable combat training centres.

For the Czech Armed Forces Rheinmetall will offer the complete range of equipment and simulation technology which is easily deployable. Thus, Rheinmetall mobile live simulation technology can easily be used by the Czech Armed Forces to transform any location in the Czech Republic and around the world into an exercise area.

In order to offer highly mobile capabilities for monitoring, controlling and evaluating exercises with features from combat and urban operation training centres, Rheinmetall has developed the LEGATUS Mobile Combat Trainer. This system comprises a carefully selected set of components that can be added to all LEGATUS harnesses, vehicle equipment sets and weapon simulators, and supports live simulation exercises from squad up to





company level. The Mobile Combat Trainer consists of an ergonomic harness featuring a lightweight radio base station. Furthermore, the also included control and monitoring tablet provides a digitized map or satellite image with NATO symbol overlays that display the position and status of the exercise participants in near real time. Rheinmetall also provides significant operational and technical

support services for facilities including the German Army's Combat Training Centre (GÜZ) at the Altmark training area in Saxony-Anhalt, Germany, as well as for a combat training centre of similar size for customers in the MENA region, together with mobile and MOUT training facilities. Rheinmetall has been equipping the world's armed forces with simulation and training systems for ground, air and naval appli-



cations for decades, continuously perfecting its state-of-the-art solutions.

With over 2,000 systems in operation worldwide, Rheinmetall Defence offers a comprehensive array of simulation and training products - from inexpensive PC-supported training systems to highly sophisticated full-mission simulators for surface, subsurface, aerial and land-based platforms, right through to advanced

simulation capabilities for fully networked joint and combined operations.

Visitors to IDET 2017 can learn more about the Group's globally leading simulation technology in Brno Exhibition Centre, Pavilion P, Stand No. 037.

www.rheinmetall-defence.com



German Combat Training Centre

The German Army combat training centre in the Colbitz-Letzlinger heathlands offers the soldiers highly realistic field exercises within their battalion. The training area covers an area measuring about 230 square kilometres and is one of the most modern military training facilities in the world.



Rheinmetall Defence is the internal services provider with complete support at the combat training centre (CTC), so that the soldiers can fully concentrate on their training. This work is part of the Simulation & Training division.

As many as 15 hundred participants, that is to say soldiers and several hundred wheeled and tracked vehicles, take part in a training session. Rheinmetall Defence maintains various sets of equipment for the soldiers and for different types of vehicles at a fully automatic high-shelf warehouse.



Each soldier and fighting vehicle is equipped with this simulation technology in the set-up building. All the components are maintained, looked after and prepared for use here. The company,

which works as an industrial operator, ensures that the technology is available for highly realistic practice sessions and displaying them on a digital situation map. Everything that the participants do and experience during the training session is recorded and watched in the exercise control centre.



The job of training military personnel can be fully accomplished through this link with data and simulation technology. Rheinmetall Defence operates the complete systems technology at the combat training centre and is responsible for ensuring that the communications network and all the data processing equipment work perfectly.



Eight radio stations and a complex data network form part of the instrumentation available at the site. All the radio communications, position data and video transmissions are recorded round the clock and archived.



The vehicle fleet at the combat training centre comprises more than 400 vehicles. In addition to scheduling, Rheinmetall is also responsible for the drivers.



If there is an incident during a training session, teams drive out to repair or recover equipment. There is strong demand for this assistance the exercise can continue as quickly as possible.



There is a permanent training battalion of regular troops at the combat training centre and they play the role of the enemy or friendly forces or the local population during military manoeuvres. Rheinmetall Defence is responsible for ensuring that the vehicles and weapons of these 500 soldiers work properly. There is a maintenance workshop and a weapons arsenal both of which are operated by Rheinmetall.



Camera teams of Rheinmetall Defence record scenes during the manoeuvres. All the data is transmitted to the control centre.



The data from an exercise can be transferred in the form of multi-media presentations to the troops out on the battlefield.



The complete field manoeuvres are analyzed in the auditorium at the CTC at the end of an exercise period, which may last up to two weeks. The Rheinmetall team prepares the multi-media presentations and controls the equipment.



The management operations at the combat training centre are extremely complex and involve coordinating different kinds of processes. Rheinmetall Defence ensures that more than 25,000 soldiers, who pass through the German combat training centre on 250 exercise days per year, are optimally prepared for their missions.

www.rheinmetall-defence.com

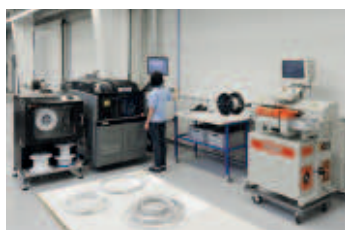
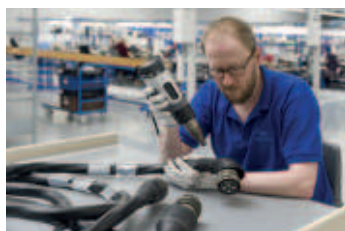
New Premises of Quittner & Schimek Seen Through the Lens

Last year we presented an interview with Mr. Jiří Šimek, Managing Director of the company. One of the topics was relocation to the new site and joining of all activities and departments under one roof.

The firm is dynamically growing and the previous situation was on the limit with regard to large production volume of wire harnesses and electromechanical assemblies for Aerospace & Defence Industry, not only from production area perspective, but also rapidly increased demands for procurement, delivery and stocking of components, wires & cables and finished products before despatching to customers as well.

Currently there are 260 employees of various professions. Investment in the acquisition and upgrading of large production area has created excellent conditions for further expansion of the company. We were impressed by the scope and the quality of new production areas, intelligent distribution systems for energy and IT, workshops and offices.

In total it has been upgraded 7,500 m² till now and additional hall with area of 8,000 m² are ready for future development or new activities. We are pleased that we can bring you closer to the new premises thanks to high-quality pictures and allow you to look at the offices, stocks, production areas and the production itself.



Countering threats from remote controlled commercial drones

Commercial drones present a potential danger to air traffic, critical infrastructures, political and sport events. R&S[®]ARDRONIS provides full spectrum awareness and alerts security personnel early on, even before drones take off. It geo-references the drone pilot and can terminate the pilot's control of his drone. R&S[®]ARDRONIS thus stops drone threats, either as a standalone unit or integrated in larger security concepts.

www.rohde-schwarz.cz



ROHDE & SCHWARZ

RETIA Company Delivers the Next Short Range Radar ReVISOR to the Czech Armed Forces

RETIA Company the leading Czech radar and an electronic systems producer, belonging into the CZECHOSLOVAK GROUP Holding Company, delivered in recent days the Short Range Radar ReVISOR to the Czech Armed Forces (CzAF). By this delivery the CzAF capabilities in the area of ground targets and units protection against air attacks have been extended.

In the last days of March the representatives of CzAF took over the next Short Range Radar ReVISOR in the RETIA premises. The new radar became the part of 25th GBAD regiment inventory after the product acceptance procedure.

Short Range Radars ReVISOR are used by GBAD units as a primary radar sensors in connection with SHORAD weapon systems RBS-70. RETIA is going to deliver to the CzAF one more ReVISOR this year.

“The CzAF have been very important partner for RETIA for a long time and of course CzAF provide a very good reference, that Short Range Radars ReVISOR fulfill customer’s needs and expectations. We believe RETIA can still offer something to the CzAF in the future”, stated Mr. Petr Novák, Chairman of the Board.

The ReVISOR No. 1, which was completely developed and manufactured by RETIA, was delivered to the CzAF in April, 2014.

The acceptance and introduction of ReVISOR No. 1 into the CzAF inventory was allowed after the several months of very demanding tests. ReVISOR is a basic air space radar surveillance mean and it can be connected with almost all types of VSHORAD a SHORAD weapon systems.

ReVISOR detects and identifies air targets and sends real time information to a higher command post. When in autonomous deployment (task force ReVISOR a SHORAD systems only) the Command and Control module (part of ReVISOR) is used for transferring information directly to the first line GBAD units.

ReVISOR is used in the CzAF together with SHORAD systems RBS-70 in order to protect the combat units or to defend the important infrastructure targets.

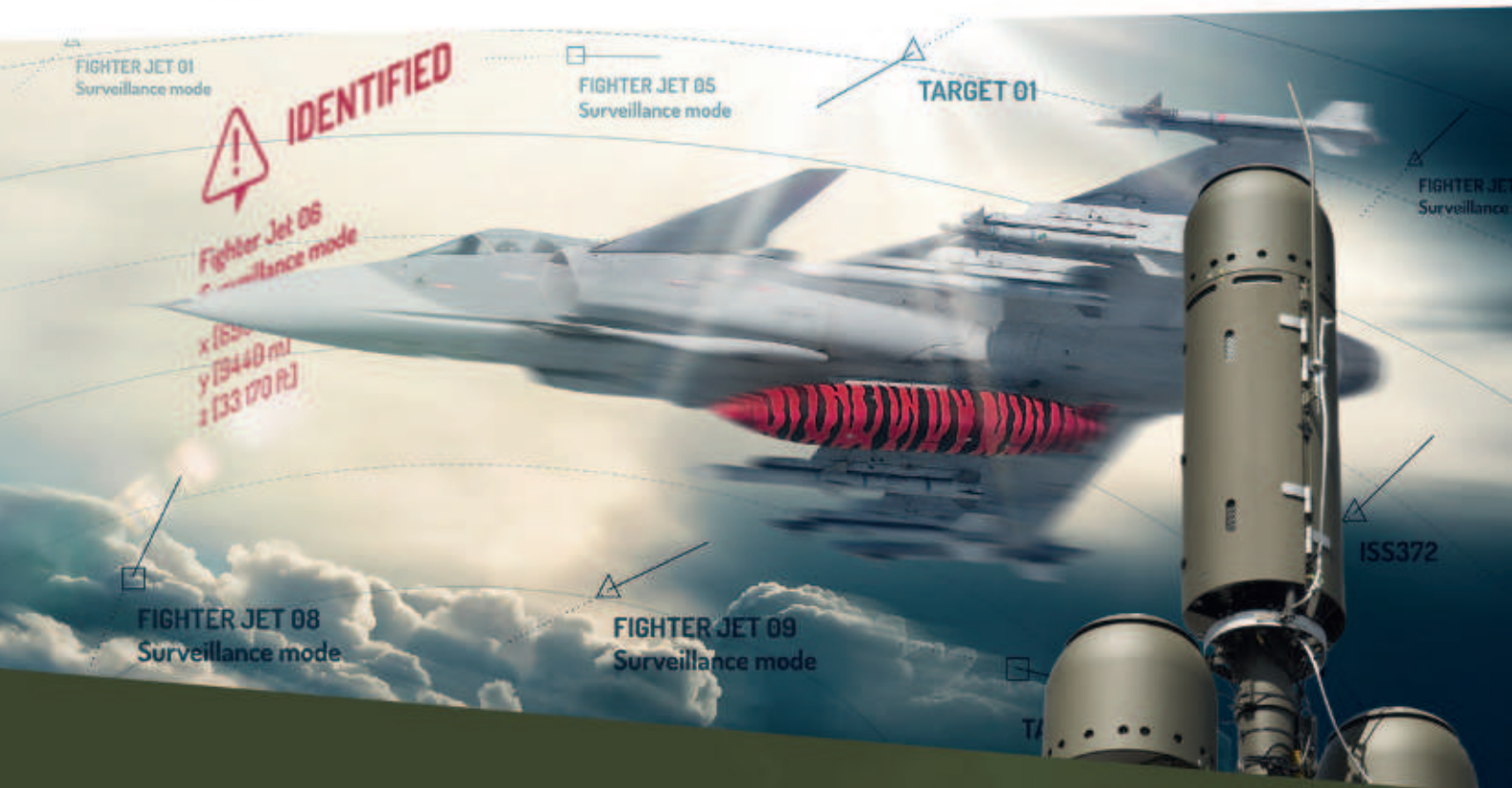
ReVISOR is fully interoperable system which during the international exercises was connected into NATO countries armed forces command and control assets. ReVISOR is characterized by compact dimensions for transportation and in deployed configuration too.

The CzAF ReVISOR is installed on small one ax trailer which can be towed by different types of trucks. The ReVISOR radar head can be installed on a light truck or on the roof of APC such as PANDUR or TITUS.

The radar head is installed on a raising mechanism which can lift the antenna up to height of 6,5 meters. The radar detection range is up to 25 km for conventional fix and rotary wings and up to 19 km for small UAVs.

www.retia.cz





ERA SOLUTIONS

MORE THAN SENSORS

UNIQUE PASSIVE
SURVEILLANCE SYSTEM

COMMAND & CONTROL
SYSTEM

DATA DISPLAYS

SIMULATION TOOLS

CONSULTANCY / TRAINING
CUSTOMER QUALITY SERVICES

RESEARCH & DEVELOPMENT

Trade Fairs as a Source of Current Trends Information for Us

Military Technical Institute (MTI) activities maintain and advance the Czech strategic know-how in defence and security research and development, particularly in weapons, ammunition, land equipment, unmanned aerial reconnaissance vehicles, onboard aircraft equipment, electronic and airfield equipment, simulators, communication systems and related testing, verification and certification. MTI's most successful achievements and the current and planned activities were our question to its director Mgr. Jiří Protiva.



feet round after period of the economic downturn in 2014. At the beginning of 2015, after my appointment I realized that we had to reverse the unfavourable economic figures and that it can not be at the expense of massive layoffs of experts or reduction of capabilities and investments. This efforts succeeded. In addition, we generally managed to defend the state enterprise's position, gain support from the founder of the defence department and establishing a closer cooperation with other armed and security forces bodies of the state that are using increasingly our capabilities. I give an example the cooperation with the Czech Police, Customs Administration and Prison Service of the Czech Republic. There has been a great deal of success in the projects area in two and a half years. Every year we implement about two hundred projects into which we put our technical know-how and move significantly the whole company forward. The cornerstone for the overall shift of a state enterprise is in positive communication, at all levels from the top representatives of the state to the employees of our business partners and of course, the own employees.

Mr. Director, what plans and tasks does the state enterprise Military Technical Institute have for the upcoming period?

The key task is to keep and further develop the company's capabilities so that to meet the state's needs in the field of research, development and testing. At the forefront of our company's initiatives are the issue of investing in new technologies and the issue of education or improving our employees' professional qualification. From the point of view other specific tasks such as especially the employment policy, we gradually create favourable working conditions and target young people who should naturally replace existing professional staff in the course of time. In this respect, we cooperate with many secondary schools and universities, including departmental military colleges and universities as Czech Technical University in Prague, University of Technology in Brno, Technical University of Ostrava etc. We offer them the opportunity to enter the educational programs and thus to do de facto also active recruitment activities. I would also like to strengthen role of the Military Technical Institute as an authority for compliance with military technical standards, or for arms industry products certification, and also as a project office in performing systems tasks for the benefit of different state bodies.

What greatest successes of the Military Technical Institute that you could highlight have been achieved during your serving in the position as a director?

The biggest success was that the state enterprise has gained its

Every year, you implement about two hundred projects. Could you provide readers with more detailed information on these key projects?

That is always an complicated question to pick the key ones out of so many different and diverse projects, but I will try to mention at least some of each branch. In the Air Force and Air Defence Military Technical Institute in Prague we continue to implement human factor projects this year, testing resilience and adaptability of selected groups of military pilots for stress at high information load or in unexpected situations. At the same time, we implement system integration of military and civilian air traffic control, creating functional equipments built on air traffic control towers, including data and voice connections. In addition, we have involved together with the state enterprise Air Navigation Services of the Czech Republic in the SESAR 2020 international project (Single European Sky ATM Research). I should not forget the area of unmanned aerial vehicles, where we focus lately on special applications, for example, with using for building operations at creating orthophotomaps or digital processing of building defects. The Military Technical Institute of Ground Forces in Vyškov is currently works at maintenance and rescue vehicles, which are in the testing phase, and implements special build-in into medical containers for foreign missions. In Vyškov there is an interesting portfolio - testing laboratories, where we offer except for other use so called 3D seismic stand with a capacity up to 10 tons. The Military Technical Institute of Armament and Ammunition in Slavičín focuses on the development and production of

ammunition to ANTOS mortars for the Polish army, and I can mention in the field of observation and monitoring devices, development of an autonomous reconnaissance ground robot and modern monitoring set to protect areas of interest. This branch is also focused on testing. In addition, besides from the weapons and ammunition testing laboratory in Slavičín, the company also has its own testing shooting range in Bzenec, where the projects outputs are tested, but it is also offered to various bodies of the Integrated Rescue System for training. This is a favorite destination especially for snipers, for its specific location, where the shooting range's bedrock is made up of 10 meters of sand in some places and there can be used a firing line up to one kilometer.

It is generally known that the number of technically educated people is decreasing. Does the Military Technical Institute have the ability to improve this condition?

The issue of the shortage of technically educated experts on the labor market is up-to-date for the Military Technical Institute, as a large part of our experts is just before retirement. The gradual generational change will be necessary. We are interested in young experts so to take over gradually the experience of „old bards“ and we are doing particular steps for that. On my opinion, the close cooperation between the enterprise and the schools and the setting up of an attractive working environment is the path to success. So we are reaching to various educational institutions, involving our experts in lectures, inviting students to excursions and offering professional internships in our branches. As part of our presentational activities, we are expanding our awareness of the existence of the company and supporting various military sports and cultural teams, including events related to the Czech Army. The point of view of the interesting employment conditions setting, besides salary which is to a large extent limited by our status of the state enterprise, we try to offer various benefits such as a pension insurance supplement, sick days or benefits from Cultural and Social Needs Fund for each employee. In addition, the Military Technical Institute offers work on very interesting projects in a specific area of defense and security. We are ready to assist in the implementation of defense education in schools, in particular we support the activity of children's summer camps where children and youth learn forest wisdom and basic defense literacy.

In February, you actively participated for the first time in the IDEX Fair in Abu Dhabi as an exhibitor with positive



assessment. Do you plan a regular presentation at such international fairs and what can you offer from your portfolio to foreign partners?

IDEX 2017 was the first fair in the Middle East region, what the Military Technical Institute actively took part in, and I must say that we had success with such an opening night within the Czech exposition and with the Ministry of Defense's support. In evaluating our expertise, capacity possibilities and in order to provide the multi-resource management of a state enterprise, we want to develop the offer to foreign customers from the state and non-state spheres. This year we take part in IDET 2017 as a matter of course, we expect further active participation in NATO Days in Ostrava, Polish fair MSPO Kielce and DSEI in London. We are represented at fairs as part of the Czech defense and security industry, and offering specific services in the field of accredited testing and system integration. From specific products, I can mention unmanned aerial vehicles, command and control systems, filtering and ventilation equipment, mast technology, monitoring sets or weapon systems, including ammunition. Fairs are, of course, also an information source on the current trends and solutions that appear in the world. When I come back to this year's IDET, we will introduce here, among other things, the real mobile version of Biobox, a monitoring set for the Czech Police or an anti-drone ammunition.

On March 10, 2017, you have introduced the annual business logo. What anniversary is it about?

This year the Military Technical Institute commemorates the 95th anniversary of the foundation of the Military Aeronautical Institute, the direct predecessor of the current branch of the Air Force and Air Defence Military Technical Institute. The state enterprise as a whole will celebrate the 5th anniversary of its modern existence at the same time. We chose the slogan "We write the history, we create the future", that which expresses the branches' historical roots connected with modern trends and reaction to the current security threats of the present time. Under one the Military Technical Institute's logo, we want to continue offering specific capabilities, unique interconnection of three branches and a comprehensive view of projects solutions.

Dear Director, thank you for the interview.

Šárka Cook
Photo VTÚ



Holding STV INVEST a.s.

History of STV GROUP a.s. in the special production reaches as far back as 1920 when a company for the manufacture of munitions under the title “The first military munitions factory” was founded in Polička in direct response to the need for increasing the state’s defense in a difficult period after the First World War. At this time, the production was focused primarily on the production of hand grenades and artillery ammunition. In 2015, already under the name of Poličské strojírný a.s. this traditional manufacturer of ammunition has become a part of holding STV INVEST a.s. A similar business activity of STV GROUP and Poličské strojírný a.s. in the field of special production resulted in the consolidation of these activities and their transfer to the STV GROUP a.s.

The STV GROUP a.s. and Poličské strojírný a.s. are now part of STV INVEST a.s. holding. The main activities of the whole holding are directed to the area of defense and security industry, currently employing more than 500 employees. In 2016, the turnover reached almost 1.5 billion CZK.

The main motivation of holding STV INVEST a.s. for Poličské strojírný a.s. acquisition in January 2015 was the revival of traditional production of ammunition in Polička, with an emphasis on securing the future needs of the army of the Czech Republic and other NATO armies. Equally strong motivation was then to use high-quality mechanical engineering background for the further development of the activities of the holding in the field of the production of hand and anti-tank weapons, modernization and repair of automotive, artillery and tank technology. In the last two years, the holding has realized investments totaling more than 240 million CZK within the premises of Poličské strojírný a.s. Repairs of series objects were carried out and the overhaul center of heavy military equipment was built and the modernization of premises for the processing of energetic materials was implemented. In the next few years, investments of more than 700 million CZK are planned in the area of Poličské strojírný a.s. In the framework of these

investments, there will be, inter alia, installed new automated lines for production of small caliber and large caliber ammunition, and modernization of operation of ecological disposal of ammunition will be realized. Further 300 jobs will be created through the planned investments in the next two years.

The history and present of ammunition production in Polička

Poličské strojírný a.s. history dates back to 1920, when in the area of Bořiny the construction of “The first military munitions factory” began whose task was to ensure the supply of ammunition to a the newly built Czechoslovak army. Production, modernization and disposal of ammunition took place in this factory continuously until 1990, when the political changes influenced the termination of the production of ammunition and an overall decay of special production.

In 1958, when Poličské strojírný a.s. became a subsidiary plant of Adamovské strojírný works, the civil engineering development program began. This program currently includes the production of pneumatic systems with a focus on the automotive industry, the production of measuring and pumping equipment and custom engineering production.

Within 2007 - 2013 a decline in special production in the Poličské stro-





Strojírny a.s. took place. The turning point was after the incorporation of Poličské strojírný a.s. into STV INVEST a.s. The new investor brought to Poličské strojírný a.s. through STV GROUP a.s. so much needed know-how, obtained within a long-term successful activity in the sector of the defence and security industry and an extensive program of development of the manufacture of weapons and ammunition, which also includes security required funding.

Between 2014 and 2016, small caliber ammunition - 9 mm bullets - was transferred to Poličské strojírný a.s. Further, large caliber ammunition production was restored being mainly intended for armies of NATO countries.

The operation of STV GROUP a.s. in Polička currently covers small caliber ammunition (9 mm and 12.7 mm bullets), middle caliber ammunition (such as a hub to the outboard 40 x 46 mm grenade launchers), and in particular large caliber ammunition. Thanks to the production of mortar rounds of 60 mm, 81 mm, 82 mm and 120 mm caliber in the HE version, the production of PG-7V, TB-7 and PG-15 reactive grenades, and the manufacture of artillery ammunition of 152 mm caliber or tank ammunition of 125 mm caliber, STV GROUP a.s. belongs to one of the largest manufacturers of large caliber ammunition in Central Europe.

This year STV GROUP a.s. will introduce the new offensive hand grenades that could become a quality replacement for obsolete URG-86 grenades which are implemented in the armament of the Czech Republic Army and the Slovak Republic Army.

In the near future, we expect the expansion of production covering 22, 7,62x39, 7,62x51, 7,62x54 and .223 caliber ammunition and above all, the introduction of manufacturing of 30 mm ammunition for 2A42 Cannon and, not least, the expansion of production of artillery ammunition of 122 and 155 mm caliber.

Revision of ammunition and ecological disposal of ammunition

Besides the own production of ammunition also revision and ecological disposal of ammunition of various types and calibers are carried out in the premises of the STV GROUP a.s. In recent years, we have made delaboration or revision of more than 81.800 tons of ammunition. For a better imagination, this quantity represents more than 3,400 trucks fully loaded with ammunition.

In the framework of the revision of the munitions, operations related to the life-cycle of munitions are carried out - inspection, repair and, where appropriate, modernization, extending the life of ammunition in a matter of years and significantly saves budgetary funds of the various armies.

In connection with the end of the life cycle, respectively, with the change of weapons systems also ecological disposal of ammunition takes place. This process is set in order to recycle each component of ammunition in the maximum extent possible - in particular metal (80 %), energy (15 %) and packaging. Their further use is solely for civilian purposes.

Production of engineer charge and of explosives

Other parts of the program of STV GROUP a.s. is a manufacturing-based TNT demolition charges that is used primarily by engineers. For units of rapid deployment and the bomb squad then STV GROUP a.s. manufactures plastic explosives on the basis of hexogen and penthrite.

Manufacture of weapons

In the wake of the high-quality supplier and engineering production facilities in Poličské strojírný a.s. the STV GROUP a.s. has also developed in 2016 the production of firearms and weapons systems. So today it can boast not only the production of a LGL-7 40 mm light grenade launcher, or HGL-9 73 mm caliber heavy grenade launcher, but also the first series of assault rifles M17 that is structurally based on worldwide the most widespread weapons of the AK-47 (Kalashnikov).

Modernization and military equipment overhaul

In 2014, the Centre for modernization and overhaul of heavy military equipment was moved to the Bořiny premises. This Centre gets long-term contract for upgrading and repairing howitzers, rocket launchers, tanks and infantry fighting vehicles, mainly from the Czech Army and other armies of NATO countries. In past years, overhauls of the RM-70 rocket launchers and howitzers 152 mm DANA for the Polish Army Among could be included among important contracts as well as the supply of remanufactured BVP1 infantry fighting vehicles intended for the training of U.S. Army Special Forces. An important milestone is the obtaining of the contract to maintain the serviceability of the vehicles on the chassis of infantry fighting vehicles for the Czech army worth about 75 million CZK.

Production of civilian detonators-boosters

One of the key operations of STV GROUP a.s. in Polička is a line on the casting of TNT. This operation uses the TNT that is recycled within the disposal of ammunition and produced from it are igniters charged with for use during blasting works in the quarries. Yearly we produce over 500,000 pieces of these trinitrotoluene cartridges.

Research, development and training

STV GROUP a.s. company and Poličské strojírný a.s. and implement extensive investments in research and development. These investments are made both with the use of its own resources as well as subsidies from the operational programs of the Czech Republic and the EU. Our development workshops and research laboratories shall cooperate closely and provide a service to other accredited testing, for example, The Czech Proof House for Arms and Ammunition, which is based also in the area in Bořiny. The staff of the Research and Development Department also regularly trains the professional public. It is enough to mention about pyrotechnic courses that have been organized for more than 70 years.

HYKOS COMMUNICATION - COALITION - COGNITIVE

HYbrid COmmunication System is a communication concept designed and promoted by Czech companies associated in the AOBP - C4ISTAR section. It focuses primarily on company level and below, comprehensively covering the needs of a company task group. It integrates all the components of advanced battlefield from the point of view of voice and data communications, from combat units through ground and air fire support units, intelligence and surveillance, to engineering, medical and logistical support. The system is ready for independent operation exclusively under the control of the Czech Army and it contains all interoperable elements required in NATO environment.

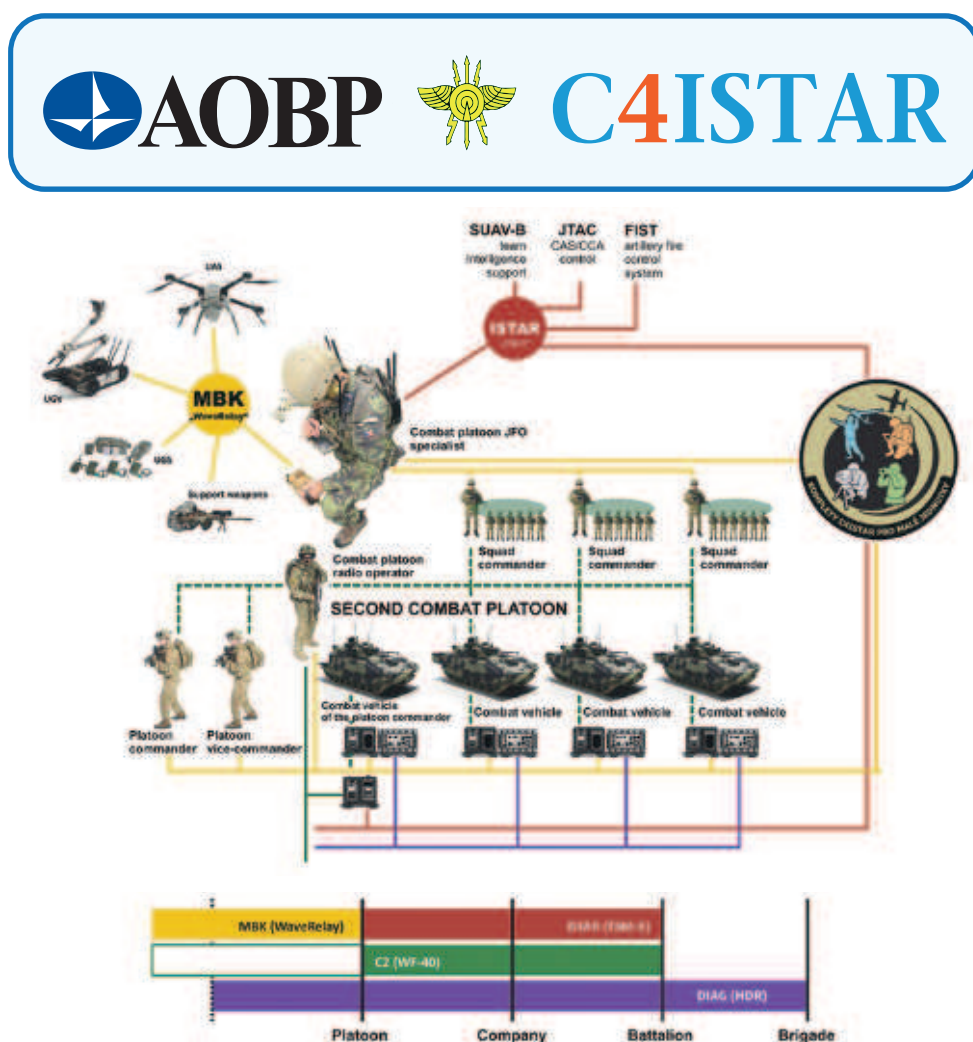
"There is no Command without Communication" is a slogan that has been linked to the battlefield and army environment since time immemorial. Yet, this automatic requirement has in itself become insufficient. We take it for granted. Today's approach is rather in the spirit of "there is no command without high-quality communication". Quality in communication is embodied by such concepts as structuring and diversification of communication technologies. Simply put, the approach where one-to-one communication technology from point A to point B used to be sufficient to provide information of all kinds, primarily voice, at different communication distances, in different field profiles, and in the context of electronic warfare, has become obsolete. Today's modern battlefield is interwoven with a number of independent, complementary, yet intertwined interconnected transmission networks, which together form a robust communication environment. Emphasis is placed on reliability and security of the transmitted information.

The basis of almost all networks today are MANET-type waveforms, which have been written about and demonized to a considerable degree. If we disregard some unrealistic expectations, it remains an undisputed fact that this is the right trend in military tactics at the tactical level. Their technical development has recently reached such a degree of progress that their deployment in the battlefield has become a reality. They can be divided into broadband high-capacity networks with many nodes (hundreds of nodes, theoretically up to an unlimited number) and narrowband networks with a relatively low number of users and throughput, but with low demands on frequency spectrum and a wider choice of operating frequencies with optimal signal propagation in the field.

In HYKOS, broadband waveforms are represented by WaveRelay and TSM-X technologies. The WaveRelay serves as a basis for a network that supports situation awareness of a company (MBK network - yellow) and due to the very short transmission time of PLI (position-location information) it allows platoon maneuver command to be switched from visual to radio visibility. In addition, the MBK network shares positions, metadata and video from unmanned ground systems (UGS) and unmanned ground vehicles and unmanned aircraft systems (UGV/UAS). All platoons within a combat company operate in 5 MHz channel in L-band with a shared capacity of up to 40 Mbps. TSM-X, on the other hand, creates a communication environment for ISTAR elements within the company (ISTAR network - red) to support targeting. There is communication between JFO, JTAC, FIST and S-2, which involves real-time sharing of PLI and transmission of images/videos, metadata and e-mails. The network for all battalion companies operates in a single 5 MHz channel, sharing a 16 Mbps transmission capacity.

The backbone command and control network (C2 network - green) is based on WF40 narrowband waveform. An economic 250 kHz channel with a shared capacity of 270 kbps that covers the needs of the complete platoon down to the individual can be set within a wide range of 30 to 512 MHz. Its ability to use band up to 88 MHz is one of its undisputed advantages. Thus implemented C2 network provides robust voice communication and variable message format (VMF) transfer. You can receive and send text and position messages, predefined signals, or tactical overlays. The HYKOS system has a separate network to support maneuvering and transmission of status, diagnostic information (DIAG network - purple). In order to support the decision-making of the commanders, it provides a comprehensive view of the position and available technology (information from vehicle electronics and weapon systems) in real time across all command levels. The link consists of a set of HDR waveforms that offer high adaptability to changing theater of battlefield conditions. Depending on channel configuration and bandwidth in VHF/UHF, network offers a shared capacity of up to 800 kbps. The DIAG network also acts as a backup to the C2 network.

However, HYKOS does not stop at company level. It also communicates with higher battalion and brigade networks. It implements such techno-



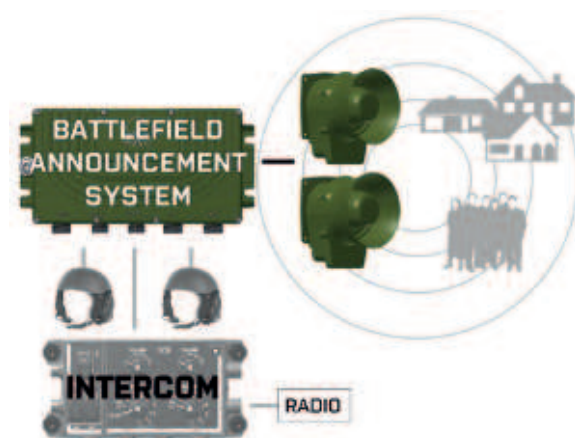
logies as Link 16 (STANAG 5516) to control air and ground forces cooperation, transmission of videos from pilot or unmanned vehicles through DDL or STANAG 7085 protocols, to transmission of e-mail across various MIL-STD-188-184 radio devices.

Part of the HYKOS functional system will be presented at the IDET 2017 exhibition in Brno at a separate stand opposite the exhibition of MESIT, a major supplier of components for this system.

Dipl. Eng. Ondřej Šohajek
www.mesit.cz

The VICM 300 Battlefield Announcement System Protects Life

The companies of the MESIT group are long-time producers of tactical communication means and reliable partners of the Armed Forces of the Czech Republic. They produce and supply comprehensive solutions in the form of radio systems and vehicle-mounted intercoms, including headsets. Their products are the results of their own development. MESIT aerospace is launching a vehicle-mounted public address system, the VICM 300 Battlefield Announcement System, which is a response to the present and future needs of military operations, usually taking place in asymmetrical environments.



The VICM 300 Battlefield Announcement System enhances the safety of vehicle crew members and prevents the escalation of tensions during combat. Using this system, vehicle crew members can relay information and warnings to a distance of up to several hundred meters, while remaining safe from the hazards that usually occur around the vehicle in unknown and often hostile environments (IED, etc.). The Battlefield Announcement System enables the loud broadcasting of recorded voice messages, warnings or alarm signals (automatically

repeated, in any language version). The use of the described system is justified wherever it is necessary to ensure the protection of one's forces, i.e. typically on all combat and reconnaissance vehicles involved in asymmetrical conflicts. In addition, this system is suitable for PSYOPS and CIMIC units. It can also be efficiently used in interventions during natural disasters - fires, floods, industrial and other emergencies.

The core of the system is a digital electronic unit, installed inside a vehicle and enabling the connection of a microphone or a headset. The electronic unit controls the entire system and activates the external loudspeakers installed on a rotating turret, weapon station or hull of a military vehicle. The Battlefield Announcement System can be operated as a stand-alone system or integrated with other communication systems such as RF 20/40 series transceivers, the VICM 200 COMBAT intercom and other accessories produced by the MESIT group. This integration enhances the tactical capability of the system and brings additional value to the vehicle crew in the form of directing the transceiver signal to external loudspeakers, control of outside communication directly from the vehicle intercom, etc.

The Battlefield Announcement System is recognized for its highly intuitive operation, high intelligibility and a reach suitable for its tactical use. The number of loudspeakers integrated into the system depends on the customer's requirements. The system is prepared for further development thanks to its digital technology and the software-defined character of the device. It can be easily installed on various military or police vehicles, vessels or at mobile command posts or advance bases. The durable design allows the use of the device even in very demanding off-road and climatic conditions. The Battlefield Announcement System is a special offer for modern armies, designed for protecting the lives of soldiers and civilians.

Dr. Jaroslav Hovorka
www.mesit.cz



MESIT

Tactical Communication



Radio Systems
Intercoms
Headsets
PA Systems

www.mesit.cz



Navigation Systems
Landing Systems
Aerodrome Lights
Communication with VCS

Aviation Electronics

IDET

PAV P 009, VP P 006

31.5. - 2.6. 2017
Brno Exhibition Centre
Czech Republic

Getac MX50 - Battle Ready!

The MX50 tactical tablet delivers defence personnel high processing speeds and low power consumption to quickly view, manipulate and receive or send data, access battlefield applications, disseminate blue and red forces tracking, fire control orders, and mission command information.

The new Getac MX50 wearable tablet is the first rugged tactical tablet carefully crafted to meet strict government guidelines for combat ready military forces including dismounted warfighters, elite enforcement agencies, and Special Forces military units. Getac designed the MX50 wearable tablet based on feedback from Special Forces and tactical operators in need of a small and lightweight, battle-ready tablet solution. This robust device is built to exact tactical specifications in order to eliminate the currently deployed consumer-grade technology

that is lacking rugged design and system security.

The Getac MX50 runs Android 5.1 Lollipop operating system, making it easy to build a custom application or use one of the top operating utilities available on the market. The Getac MX50 tablet is powered by an Intel® Atom™ x5 Processor with a base frequency of 1.44GHz and burst speed up to 1.92GHz for optimal energy efficiency. It has a quad-core chip as well as Intel® HD graphics, so it can perform well, even with the most challenging graphic applications. The MX50 offers 2GB of RAM and 64GB or 128GB of eMMC storage, which can be complemented via microSD card. It has a 15.5 watt-hour pack. If more battery power is needed, Getac offers an optional SnapBack Battery.

The MX50 display is of the IPS variety, which means it has virtually perfect viewing angles from all directions. 1280 x 720 resolution on a 5.7-inch screen translates into 258ppi (pixels per inch). That is in the same class as Apple's "retina" iPads, both the iPad Air 2 and the big iPad Pro. Perfectly sharp indeed. And there is of course, capacitive multi-touch.

One of the primary purposes of the MX50 is to provide modern smartphone functionality in a much tougher package. To that extent, the MX50 can handle 5-foot drops, has an operating temperature range of -20 ~ 60 °C, carries IP67 sealing where the "6" means it is totally dustproof, and the "7" that it can full immersion. It also passed MIL-STD-810G tests for vibration, humidity, and altitude.

Getac in addition gave considerable thought to handling and operation of a device such as the MX50, one that had to be readily available without being in the way. On a battlefield one cannot stumble around staring at a smartphone. That is why engineers designed the MX50 to be fully interoperable with current and legacy soldier systems, including tactical hubs and power management systems like the Black Diamond Advanced Technology APEX – if the MX50 is needed to operate independently for extended periods then the SnapBack battery can be attached to increase operating time.

The Getac MX50 rugged tactical tablet meets strict government guidelines for capturing and protecting classified data in the field. The MX50 meets the Common Criteria ISO/IEC 15408 computer security certification, and the NSA's Commercial Solutions for Classified (CSfC) guidelines (certification pending) and Data-at-Rest (DAR) requirements, enabling commercial devices to be integrated into layered solutions to protect classified national security systems information.

New MX50 is available to order from ELVAC a.s. For more information please visit www.elvac.eu.

Key Features on the Getac MX50 tactical tablet include:

- SoC Intel® Atom™ x5-Z8350 Quad Core Processor
- Android 5.1 Lollipop operating system
- Capacitive 5-Point Multi-Touch Screen with Rain, Stylus and Glove-Touch Modes
- 2 GB of RAM and 64 GB or 128 GB of eMMC storage
- Front Camera: 2 MP Fixed Focus; Rear Camera: 8 MP Autofocus
- Dedicated GPS With Built-in Antenna (GPS+GLN55)
- Front Camera: 2 MP Fixed Focus; Rear Camera: 8 MP Autofocus
- GlenAir 6 Pin (Plug with Pins) With Cable, or AB or ODU 20-Pin Connector (Plug With Pins), MicroSD slot, MicroUSB OTG, 3.5 mm Earphone Jack
- P67 (1 m Waterproof)/MIL-STD 810G (5' Drops)/MIL-STD 461G Compliant/Operating Temperature Range from -20 °C to 60 °C (-5.8 °F to 140 °F)

www.elvac.eu



**Getac
V110 G3**

Fully Rugged
Convertible Notebook

- 6th Generation Intel® Core™ i7 / i5 vPro™ Processor
- 11.6" LumiBond® Display with Getac Sunlight Readable Technology and Capacitive Touchscreen
- LifeSupport™ Battery Swappable Technology
- Optional Dual Mode Touchscreen (multi-touch and digitizer)
- Reliable, Speedy Solid-State Drive Storage



**Getac
X500 G2**

Fully Rugged
Notebook

- 15.6" TFT LCD FHD (1920 x 1080 px)
- Getac QuadraClear™ Sunlight Readable
- MIL-STD-810G and IP65 Certified
- Optional Nvidia® GeForce® GTX 950M 4GB GDDR5 Graphic Controller
- Optional Rubber Backlit Keyboard with Fingerprint Scanner
- Multimedia Bay
- PCI/PCIe Expansion Unit



**Getac
S410**

Semi-rugged
Notebook

- 6th Generation Intel® Core™ i7 / i5 vPro™ Processor
- Unprecedented security options for data protection
- Greater flexibility and I/O options
- LifeSupport™ battery swappable technology for uninterrupted battery life



Interview with the AURA General Director, Mr. Filip Engelsmann Concerning not Just Participation in the IDET 2017



Dear General Director, it has become a tradition that AURA participates in the International Defence and Security Technologies Fair (IDET) in Brno. What can we expect from your display this year?

First of all, the IDET visitors and those attending concurrently organized international trade fairs of ISET and PYROS are cordially invited to the stand No. 003 in Pavilion P, which is the exposition site of the AURA Company based in Brno.

Company specialists and marketing staff will present our innovated products and services related to the information systems designed for military logistics and for industry.

Special attention will be paid to all-embracing services in terms of the NATO Codification System where we can offer almost everything that is necessary and desired: starting with the globally unique codification software MC CATALOGUE developed solely by us, up to the assistance with the implementation of the NATO Codification System and establishment of the National Codification Bureau (NCB) including all sorts of related training. The new thing is the extension of our services in the area of training in the form of on-line courses and webinars.

Apart from the standard configuration of MC CATALOGUE for NCB, we will also present MC CATALOGUE Industry tailored for processing of codification data pertaining to products. It is so called draft item identification for NCB done directly by the manufacturers which is designed to exchange these data between the manufacturers and the NCBs. The manufacturers can also employ this product for administration of their own master data related to the material and put and keep in order their data which is a prerequisite for cost-effective material management.

Our current and potential clients will also have the opportunity to discover new options in codification services offered to the manufacturers and suppliers of arms and equipment for armed forces which are successfully provided by our certified codification agencies in the Czech Republic and Slovakia. Therefore, any supplier, having the so called codification clause in the agreement with the Ministry of Defence, can address us.

Another new product of the company for this year's IDET will be software supporting legal agendas which will be of efficient help not just to lawyer's agencies but also to our current clients having their own legal departments.

When presenting your products and services you have also mentioned the capability of all-embracing support in the codification area. What is new in this strategic sector of the company and what are the latest successes of AURA?

There were several important successes achieved by our company in the area of development and implementation of codification tools in the two last years. At the beginning of this year, the Armed Forces of the United Arab Emirates launched live operation of the MC CATALOGUE 5 codification information system and they started international data exchange with nations participating in the NATO Codification System. Our Near East partners highlighted the essential value of the project for the logistics of the Emirate armed forces. One of the AURA teams including our foreign experts is staying permanently in Abú Dhabi and continues supporting just emerging National Codification Bureau of the United Arab Emirates.

I wish to stress that the United Arab Emirates is the first Near East nation and already seventeenth nation worldwide currently employing in the meantime globally most spread codification information system of MC CATALOGUE.

Last year, we also started live operation of the latest version, MC CATALOGUE 5, for the Australian National Codification Bureau. It is the first implementation of Software as a Service for the Australian Department of Defence. In cooperation with our Australian partner we guarantee operation in compliance with strict security parameters. The information system of MC CATALOGUE 5 was also launched in the Swedish Armed Forces last year. And the year before AURA successfully handled the supply of its codification software to the Brazilian Armed Forces.

These indisputable successes in achieving AURA's export strategy are primarily to be credited to a competent and stable team that is, without exaggeration, company's major treasure. Company's acknowledgement belongs as well to the Industrial Cooperation and Organisations Management Division of the Ministry of Defence and to the Defence and Security Industry Association of the Czech Republic for their efficient support in our export endeavour.

General Director, AURA is a purely Czech company and, to be even more specific, a Brno company. But in today's sophisticated world you cannot possibly do without co-operation with foreign partners. Which of them can you mention and which of them might you represent at this year's IDET?

You are one hundred percent right. It is obvious that our company, even though we are emphasizing our affiliation with Moravia and its capital, cannot do without important foreign partners. We have an agreement on long-term cooperation with the Swedish Saab AB Company. In the area of material codification management we are cooperating with Allan Webb Ltd. from Great Britain with more than sixty years of experience in the field. This year on IDET, like in the past, AURA will represent the Danish BRUHN NewTech A/S Company which is the world leader in information systems evaluating threats in connection with weapons of mass destruction. We are representing this company not just in the Czech Republic but also in Slovakia. One can say that within be it scientific or applied projects we are cooperating with the academic and scientific community all around the world and besides we are active also within NATO. We are organizing international expert training activities and we are one of the main guarantors for the international codification courses within the NCS College organised biennially at the University of Defence in Brno.

When answering this question, I would like to point out that I highly appreciate the opportunity that is offered to us by IDET in terms of various meetings enabling us to establish and to extend cooperation with our foreign partners and clients. And this is also one of the reasons why AURA must not be absent from IDET!

By Antonín Svěrák



Fully Equipped Field C4 Workplace for Operations and Crisis Management

Rapidly Deployable Dispatch (RDD) is a set of hardware equipment with software dedicated to on-site command and control including its own communication equipment. The solution has been developed in response to Police of the Czech Republic demand. After Proof of Concept, the original prototype soon became a part of KOMCENTRA portfolio. KOMCENTRA works on further enhancements and offers its solution to the customers in various modifications.

The RDD comprises of several components, installed and transported in ruggedized boxes. RDD has a powerful server, digital radio terminals, VoIP phones, a complete antenna system and a data link. It is composed of the server kernel and one or more dispatch positions upon customer's request. Its advantage is easy handling, portability, durability, ease of rapid deployment and start-up close to the incident theater as needed.



The RDD is currently being used for operations command by the Czech Police as a remote site of Regional Operating Centers in cases as natural disasters, emergency security measures, riots etc. In daily practice, the RDD is used wherever the situation demands on-site command. The work positions of RDD are identical, as far as IT and communications support is concerned, with the workplaces of any Regional Operating Center. The RDD is interoperable with the nationwide JITKA system of the Czech Police for operations control. Thanks to it, the Police can use a fully-fledged command center on-site and let the Operations commanders enjoy full comfort and support. The current complex and uneasy security situation, possible escalation of migration flows as well as various other security



risks, events like intentional and unintentional explosions, epidemics, epizootics, riots etc. may require the deployment of a detached Command and Control Center, making use of strong communication infrastructure, located apart from the static Police sites. In response to customer demand, KOMCENTRA offers RDD - an advanced self-contained transportable operating center solution capable of rapid deployment and activation in virtually any location. Providing the necessary comfort for the operating staff of such a center is obvious. KOMCENTRA has lot more to offer in the field of ICT development and supply of modern security technologies, thus contributing to handling security problems both on national and European level.

www.komcentra.cz

Prevent Security Risks Using a New Analytical Tool

Protection of information today should not be only a statutory duty but mainly the necessity to continue existing. The attacks of the 21st century such as DDos attacks, malware, ransomware, phishing, SQL injection, wiretapping, spoofing, and other, represent the threats for everybody working with sensitive data. And it is nothing new to say that a great majority of the companies work with this type of data.

The number of cybernetic attacks continues increasing, often causing such a damage to the respective organization that cannot be expressed by numbers. If anybody believes that is not necessary for him to resolve the issue of security, just three principle legal rules will show him that he is mistaken. It concerns the Law on Cybernetic Security (ZoKB), eIDAS Regulation primarily concerning record managements system, and last but not least, Regulation of the European Parliament and Council GDPR.

KYBEZ BEAN is a solution

The analytical tool KYBEZ BEAN was designed for the purpose of a simple and rapid analysis telling you about the information and threats resulting from the legislation that can concern you, when the analysis considers various types of organizations. The results are therefore precise, and due to them, you can prevent potential security threats.

KYBEZ BEAN provides two options of security information level, when both options are placed on KYBEZ portal (www.kybez.cz) when a visitor can freely select any of them. For the first option, it concerns a lightened version containing more general questions. The second option, advanced one, will contain a more comprehensive set of questions covering a larger scope of security information area. This option is currently at the preparatory stage. However, KYBEZ BEAN contains one more analysis which is GDPR analysis. The analyses are targeted at IT specialists, security employees of the organizations, and other relevant persons.

Using a simple test, everybody can find out about his level of security, to learn how to prevent threats but also how to resolve these threats.

A responsible interested person, especially the person who has not anyhow resolved information security yet, can simply try a structured test and learn what threats represent the risk for him and

how vulnerable the systems he works with are. The objective is that the people find out what risks they are exposed to. On the grounds of this information, they would logically want to learn how to deal with these risks. We are preparing for them, again within KYBEZ, the educational topics and specialised trainings.

KYBEZ BEAN includes also GDPR Regulation

A general regulation on the protection of personal data (GDPR - General Data Protection Regulation), coming into force on May 25, 2018, brings revolutionary changes in the area of personal data protection, specifically concerning its processing and dealing with it. Extremely high penalties can be imposed for the violation of the regulation. The person resting on his laurels has the highest time to start doing something and actively prepare for GDPR.

It is just KYBEZ BEAN analysis that can help. It includes a set of questions that were directly prepared for this new regulation. Following the completion of questionnaire, a user will find out about his current state of readiness and position taken by the organization concerning the regulation.

How does the analyse work?

After choosing one of the options, a form will be displayed for the user, containing the questions concerning various areas of security including various types of answers. In order to make the analysis as most accurate as possible, the user has to enter the precise type of organization, where he works and for which the analysis is being made. After completion of the questionnaire, a „score“ is calculated, it means what level of security the concerned organization reaches. In addition, the analysis will offer recommendation for the improvement and the threats that can concern the organization with regard to the above standards, laws, and regulations.

The benefits of this tool consists in the speed of verification of information security, relevant results for more detailed analyses, and recommendations for the solution of problematic areas. The questions are built on ZoKB, ISO, GDPR, KII, VIS, Act on personal data protection and regulation of the National Security Authority. Consultations with them are for free.

What the KYBEZ platform actually deal with?

KYBEZ is the platform for effective cooperation of academic institutions and commercial companies dealing with public education, systematic training, management, services, and technologies in the area of information security, including cybernetic security and defence.

Systematic training, public education, and effective cooperation of academic institutions and companies are the most important task of KYBEZ platform. It is not only about the courses, trainings, audits, and seminars, the objective is to enforce information security at all levels of education from the basic to PhD study level. In addition, the platform seeks cooperation with partners and preparation of the courses and trainings as interesting as possible, and at the same time, as important as possible for general public. If there is no awareness of risk and threat, people even do not think what all represents the risk for them. Information security and health hygiene are similar concerning many things, everybody should realize and follow common rules not to put himself or other at risk.

The partners of KYBEZ project are ready to help the organizations of public administration (public authority), other interested



Example of the output analysis showing the state of information security in the respective company

entities considering information security a serious issue, not only concerning the compliance with the requirements that are imposed on them by the Law on Cybernetic Security. KYBEZ is not only an association of companies; it is a communication plat-

form of cooperating companies. And also of such companies that compete with each other.

Radka Šustrová
www.gordic.cz

Do we Know the Arms of our Enemies?

Motto: „Social engineering is nothing new. It is a tool of psychological manipulation that has been used from the dawn of mankind.“ Wendy Zamora: *Hacking Your Head, Malwarebytes*

Part 3: Social engineering and network attacks

We were already partially dealing with the network attacks in the preceding parts of the serial. However, not infrequently, the network attacks relate to another group that is collectively called social engineering. As the name suggests, more than at the network itself, social engineering is directed at the users of network or the equipment connected to it.

Social engineering

Social engineering means the techniques of psychological manipulation of people that can result in the leakage of confidential information or harming in a certain way the owner, operator, or clients of the network and related computing or information system. To release the information, social engineering uses a number of various techniques. The most frequently used methods include the situation when the attacker is acting as someone else than he is in reality: an IT worker, colleague, member of management, or even a government officer. The basis of social engineering is to convince the victim that the requesting person is entitled to know the confidential information. A typical example can be a phone call of the person acting as an employee of IT department with the request to provide information on the access data to an account as he is allegedly just installing a new software. This type of attack is often called Vishing (Voice Phishing or VoIP Phishing). The targets of social engineering are the same as the targets of hacking, from obtaining confidential information or secret information, through espionage, to disturbance of services or making the services impossible.

Phishing

Social engineering uses the already mentioned phishing, frequently applied when obtaining access to various accounts, especially bank accounts. Attackers, through the e-mails looking like the authentic ones, seeming often very credibly, try to re-direct users to fraudulent webpages, opened with the objective to get access data from the victims, or the webpages containing, for example, harmful programmes. Phishing targeting a certain group of people, for example, the clients of one bank, is called targeted phishing (Spear Phishing); a special form of phishing targeted at top managers of the companies is called Whaling. A new type of phishing recently appears, so called social phishing (Social Phishing). Despite the fact that its targets are the same, it means to get from the users a confidential access data

and finally to obtain access to their finance or data, the method of attacking is different. To direct to the fraudulent webpages, sometimes successfully imitating the well-known pages of social media, such as Facebook, they use attractive links or even communication placed again especially on social networks. A trusting user visiting the fraudulent webpage might not know at all that he is giving his access data to thieves. The links are targeted also at the pages including the offer of various well-looking or attractive applications that are in reality only the bearers of viruses or harmful programmes. The invention of cybernetic cheaters does not have any limits. They use anything what they can use. Fraudulent links are often hidden behind various slogans or attractive pictures, but also behind the buttons that no one would suspect. It is enough, for example, to re-program the function of the button „Like“ in such a way that instead of increasing popularity, it will serve as the instruction to install an undesired application in the computer.

Falsification (Spoofing)

Spoofing are the techniques allowing the person, program, address, or another component of network communication to act as someone else and ensure in this way unlawful access to the affected network or system. With regard to the fact that almost any part of computer communication can be imitated, we will mention only the most frequent forms of spoofing.

Falsification of IP address (IP Address Spoofing), when the attacker creates packets with the source IP address looking like they come from a reliable source so the target system accepts and process them. A high number of the packets with the fraudulent addresses are often the basis during so called DoS attacks that are targeted at paralysing or putting the affected system, for example, a web server, out of order.

Falsification of ARP messages (ARP Spoofing, ARP Poisoning) consists in sending false ARP messages. ARP messages inform about the fact what real serve in the network a respective IP address corresponds to. By fraudulent placing of the false address of the real server in the ARP message, the operation is redirected to the fraudulent server.

DNS Spoofing (DNS Cache Poisoning) means entering false data into the buffer of DNS server. DNS servers, ensuring administration of the names and addresses in the network, provide instead of the correct IP addresses, the addresses of fraudulent servers.

Falsification of e-mail sender (Email Spoofing) consists in alteration of the actual address of e-mail sender in the field „From:“ by another address, not infrequently the actual address of the person not being aware of anything. Falsification of the sender's address is usually used when distributing not requested e-mails, especially of phishing.

Abuse of search engines (Search Engine Poisoning) means a number of methods abusing web search engines to offer webpages of harmful content. The objective is to get the requested harmful webpages and links during search in the well-known search engines to the preferential positions. Webpages can contain, for example, an offer of fraudulent anti-virus systems or other applications, often searched.

Packet catching

Catching the packets flowing in the network, through network analyzers (Packet Sniffing, Network Sniffing) is often used by network specialists for the analysis and diagnostics of network activity. However, they can be used in the same way by saboteurs, trying to read the information from them that can be misused. It can either concern the content of transmitted packets or, for example, information on IP addresses.

Dag Jeger



Revision's Pioneering Helmet Systems: Matching the Aggressive Pace of Modern Warfare

Much has changed in the decade-and-a-half since the U.S. Army fielded the first-generation Advanced Combat Helmet (ACH) in 2003. Kevlar and Twaron helmets are now outmoded and cumbersome compared to innovations pushing the envelope of attainable weight reduction. New hybridized material applications are now the vanguard of manufacturing, R&D, and head systems design. Ultra-high-molecular-weight polyethylene (UHMWPE) helmets, in particular, reduce weight dramatically while maintaining, and even elevating, ballistic, blunt force, impact, and fragmentation protection. This radical new playing field paved the way for the U.S. Army's 2017 ACH Gen II solicitation, a program that will undoubtedly have a worldwide impact on the head systems industry.

More than any other company, Revision Military is at the forefront of this head systems revolution. Revision's standing as the standard-bearer of the industry was recently cemented with the announcement of the U.S. Army's selection for the ACH Gen II contract: This five-year indefinite delivery, indefinite quantity (IDIQ) helmet contract, awarded on a full and open competition basis to Revision, has a maximum value exceeding \$98 million and an estimated completion in 2022. The stated goal of the upgrade program was to offer weight reduction with equal protection compared to the legacy helmet. Revision has more than accomplished that mission, and, in the process, has reinvigorated the traditional Advanced Combat Helmet, aligning this essential equipment with the realities of modern combat.

Utilizing composite, hybridized UHMWPE material applications, Revision has manufactured a truly advanced infantry helmet that is up to 24 % lighter than the legacy ACH system. The next-generation ACH solution submitted to and selected by the U.S. Army will be known as the Viper P4 Head Protection System. The Viper P4 helmet represents the first large-scale, significant advancement in ACH technology in 15 years. The tape-based polyethylene solution selected for the Viper P4 head system provides excellent high velocity fragmentation protection, as well as superior 9mm RTP, compression, and impact resistance, with minimal to no change in ballistic performance at extreme temperatures whether

soldiers are wearing this helmet in the Arctic or at the equator, the performance and protection will be consistent.

In a hearing in the wake of the ACH Gen II contract announcement, Brig. Gen. Robert L. Marion told U.S. senators that this helmet and other lightweight body armor items now being developed are among the Army's most promising new technologies. "The quality of these helmets will protect soldiers from ballistic impacts, while also making them more comfortable with their up to 24% lighter build," said U.S. Senator Patrick Leahy (D-Vt.). "In past visits to [Revision's] facility, I have seen firsthand the commitment these employees have to their trade, a commitment depended on by the men and women of our Armed Forces," Sen. Leahy added.

Since last contracted by the U.S. Army in 2012 when Revision delivered a total of 180,000 advanced combat helmets Revision has invested millions of dollars in new manufacturing equipment and processes and optimization of advanced ballistic materials. In the process, Revision has assembled a world-class team of scientists and engineers to grow the Company's capabilities. Additionally, since 2013, Revision's Newport, Vermont facility where helmets for the ACH Gen II contract will be manufactured has expanded by 16,000 sq. ft., and the number of employees that work at this facility has more than doubled. Revision has made substantial



Revision's Viper P4 helmet represents the first major development in advanced combat helmet (ACH) technology in 15 years.

For the next two years, Revision is set to deliver Cobra Plus Head Systems a bespoke solution created for UK troops Wolfspider goggles, and Sawfly spectacles to the UK Army for the VIRTUS Programme.



In July 2016, Revision was awarded a development contract by USSOCOM, contributing significantly to the shape of the Family of Tactical Headborne Systems (FTHS) program solicitation.



Revision's Caiman Head System is a multipurpose helmet suite developed from the ground up in collaboration with Special Forces users.



investments in new molding presses, added preform presses, increased chilling capacity, new molds, and increased cutting capacity. This supports an increase in overall PE manufacturing capacity by an additional 10,000 helmets per month.

Over Revision's history, the Company has delivered 1.1 million helmets to the U.S. military, with an additional 300,000 helmets internationally. Leading up to the ACH Gen II contract win, a number of important contracts have solidified Revision as a major player in the worldwide helmet industry, particularly in the European protective equipment market. In early 2016, Revision (UK) began operations in Bristol, England, the newest office in the Revision portfolio and a hub for the Company's European market presence. This new facility will further Revision's ongoing contract with the British Army to deliver their next generation head system for the VIRTUS Program. With this win in the autumn of 2015, Revision unseated the decades-long supplier for the British Army, offering a bespoke Cobra Plus head system constructed from hybridized layers and UHMWPE materials that provides up to a 10 % increase in fragmentation protection over previous Kevlar shells, with up to 20 % weight reduction. Revision is also delivering ballistic visors and mandible guards, and Sawfly spectacles and Wolfspider goggles. In two years' time, over 54,000 Cobra Plus helmets will have been issued to British forces.

Revision has also been a major contributor to USSOCOM's next-generation Special Operations Forces (SOF) helmet program the Family of Tactical Headborne Systems (FTHS) development project which kicked-off at the beginning of 2016. Revision was awarded a development contract in July 2016, and the Company's helmet suite, submitted the following September, helped shape the official industry solicitation. For this program, Revision upended the traditional methods of head systems development, working directly and collaboratively with SOF operators, incorporating feedback from a spectrum of special forces experience to craft a ground up solution Revision's skeletonized, scalable Caiman Head System suite.

Beyond head systems and eyewear, Revision's scope of capabilities has also expanded to include thriving Power and Integrated Systems business units. Revision lithium-ion, soldier-worn energy management solutions have gained notoriety lightweight and durable Nerv Centr SoloPack and Nerv Centr SharePack systems that treat energy like water or ammunition, as a conservable resource that can be harvested, stored,

shared, and used flexibly, thus reducing cabling and the overall weight burden on soldiers in the field—and the Company has made tremendous strides in large-scale vehicular power platforms particularly, Silent Watch Battery Packs that deliver energy reserves for power-hungry armored vehicles in the harshest environmental conditions, ensuring that thermal and acoustic signatures are managed.

"With the ACH Gen II solicitation, PEO Soldier challenged the helmet industry, raising the technology bar substantially. Revision answered in a big way, dedicating significant resources to set a new standard for lightweight helmet design and performance," concluded Jonathan Blanshay, CEO, Revision Military, in the wake of the Company's latest achievement. "Our investment in this program epitomizes Revision's unwavering dedication to forward-thinking head systems technology and manufacturing. In recent years, we've become a much stronger company and head systems technology innovator, securing helmet contracts around the world and emerging as the vanguard of the international helmet industry." In the coming years, U.S. forces will benefit greatly from the improved performance and significantly lower weight of the pioneering head system Revision is developing, and this changing of the guard is sure to ripple out to international markets. In short, Revision is modernizing the industry, creating protective and soldier systems equipment that can match the aggressive pace of modern warfare.

www.revisionmilitary.com



The Nerv Centr SharePack is a conformal, lithium-ion power management system with dual inputs, programmable voltages, upgradable software, and seamless plug-and-play for storing, delivering, harvesting, and sharing energy.



Revision's Nerv Centr SoloPack is a rugged, high power density lithium-ion battery that is slim, lightweight, and packs enough power in one charge for a 12-hour mission.

Established in 1995

The Koutný spol. s r.o. Company is a successful family business with a Czech capital only. In the manner of brands from the early 1920s such as Rolný and Nehera, we specialize in traditional men's clothing. We focus on high-quality suits, jackets, trousers and tuxedos.

Koutny specializes in the manufacturing of professional clothing for government departments and state administration institutions, which require high quality supplied products. Our uniforms and occupational clothing include all types of gentlemen's and ladies' garments such as suits, jackets, trousers, skirts, waistcoats, sports jackets, overalls, special combat clothing, etc. In addition, we are well known for the traditional manufacturing of classic men's clothing and made to measure. Our staff carries on the proud traditions of tailors whose fine craft in Prostějov, Czech Republic, dates back to the 16th century. We pride our-

selves in the manufacturing of garments of the highest quality, made in small or large series.

To best serve our diverse clients who prefer high-grade materials, delivery speed and an individual approach, we systematically develop our ability to secure and react quickly to our client's individual requirements and expectations. We maintain and further expand our position in the market by using new technologies, including latest garment manufacturing technologies, a systematic approach to innovation in cuts and materials used and development of partnerships with premier suppliers of materials.





Clients:

- * The Dutch Army
- * The Austrian Army
- * Army of the Czech Republic
- * Ministry of Defence of the Czech Republic
- * Police of the Czech Republic
- * Prison services of the Czech Republic
- * Customs Administration of the Czech Republic
- * Fire Brigades throughout the Czech Republic
- * Voluntary Fire Brigades
- * Prague Airport
- * Czech airlines
- * Private Aviation companies

We offer products for our customers allowing them to equip their employees completely with professional clothing for any season or climate. Our products are offered in a very extensive size assortment. We have also built a special measurement system for suits, jackets and trousers, enabling a wide scale of design and material variants if classical size assortment does not fit. In addition, our clients have the ability to place an individual order according to their specifications and requirements for any elements such as: cuts/design, colors, patterns, materials, special sizes, and tailor-made clothing.

Since the quality of the products is our main priority, it is necessary to use top quality, durable materials. These materials are known for their softness, pleasant touch, and resistance to wrinkling. For dress uniforms, processed materials are mainly from Italian, French and Spanish renowned companies, 100% wool or mixed with polyester, polyamide, elastan and lycra. 100%-wool materials are most suitable for areas with subtropical and tropical climates.

www.koutny.cz



ISO 9001 certified since 2001 and AQAP 2110

Meet the CZ P-10

For decades, the CZ brand has been synonymous with high quality yet affordable self-loading pistols with an external hammer. Now, Česká zbrojovka a.s. has decided to answer the pleas of their numerous supporters and offer them a pistol in the increasingly more popular configuration - a striker fired model. The result is an entirely new line, the CZ P-10.

The resulting CZ P-10 pistols represent a modern version of its class, pleasing to the eye of the shooter with their sleek design and at the same time aggressive shape - unlike many rival models, the CZ P-10 is so original that you will recognize it at first sight. Regarding the construction, you will find everything you require from a modern striker fired pistol. The CZ P-10's modified Browning system slide locks into an enlarged ejection port, it has a partially pre-cocked linear striker, it is very safe despite an absence of a manual safety, it has a durable polymer body with interchangeable backstraps, a high capacity magazine... But that is not all. It is no coincidence that three design features of the new CZ pistol have obtained patent protection.

A nice 25 N

Two patents concern the trigger and striking mechanism, and set the mind right of anyone who may have thought that it was impossible to come up with anything new in this field. The trigger mechanism brings an original way of applying principles so typical for CZ pistols, that is, using the trigger as a single-arm lever. This system allows the forces to be transmitted "one-way", creating an ideal situation. The result is a relatively short and completely smooth trigger travel with a linearly increasing pull weight reaching its peak point just before firing.

The factory set maximum trigger pull weight is a standard 25 N. For

pistols of a primarily defence and service nature, it is a nice and still completely safe value our rivals can only dream of. The 4mm beautifully readable reset allowing shooters to repeat shots rapidly is also excellent.

An automatic striker block guaranteeing drop safety is a standard. This is another original element which, thanks to its simplicity and effectiveness, has rightly been granted a patent protection. Then there is the, today, obligatory safety in the trigger blade. Together with the trigger and striking mechanism, the CZ P-10 is an extremely safe weapon whereby successive disabling of security features comes easy with correct handling.

The CZ P-10 is characterized by having the slide guides on the outside. Because of this, the width of the frame is reduced and there are two pairs of cocking grip surfaces on the distinctive protruding sides of the slide. Nothing was spared on their design. The upper edges of the slide at the front are slanted for easier drawing and holstering, a "trademark" of CZ polymer frame pistols ever since the appearance of the CZ P-07 DUTY.

Digital Firearm Ergonomic Design

The frame of the CZ P-10, made from carefully selected material reinforced with glass fibre, is a result of the practical application of





the latest scientific methods in industrial design. Česká zbrojovka has established cooperation with a specialized university facility, resulting in a unique methodology called DiFEND (Digital Firearm Ergonomic Design). With this method, a biomechanically accurate human model is used to enable designing the best ergonomics for the anticipated target market. In the case

of the P-10, this method was combined with an analysis of the ideal checkering, a crucial feature especially during prolonged shooting or shooting with sweaty hands.

The grip of the CZ P-10 looks simple but as soon as you grip it, you will know that you are holding something exceptional. The pistol will stay in the ideal position at all times, it will not move about even in a very sweaty hand, targeting is natural, the muzzle climb is minimal and all hits will be in alignment.

The size of the grip can be partly altered with the easily interchangeable backstraps which come in an S, M and L size, and the comfort of the grip is significantly transformed by using an extended magazine baseplate.

The characteristic shape of the CZ P-10 is further enhanced by a large trigger guard with a roughened front edge, above which there are the tried and tested roughened surfaces on the sides of the frame for the safe "resting" of the index finger of the shooting hand and for a firmer grip with the thumb of the other hand. On the front of the frame, there is the standardized mounting rail with one transversal groove in the compact design models.

Bonuses that count

The CZ P-10 pistols are one of the few on the market that offer a fully ambidextrous control of the slide stop and the magazine catch. Together with the ambidextrous magazine catch, CZ polymer pistols will now also have universal magazines with an additional opening in the front of the case. Apart from the striker fired P-10, they can also be used for the CZ P-07 and CZ P-09 hammer models. As part of the changes, the new magazines have a distinctive red follower which is clearly visible through the ejection port when the slide is caught in the rear position and is easily spotted for example when dropped on the ground. The big advantage of the new CZ P-10 series is its superior durability, the life time of barrels is at least 50,000 rounds and of smaller parts it is 30,000 rounds. A significant contribution to this is also the highly durable finish. Another step forward in the P-10 is the use of stainless steel for all

other internal metal parts which makes the weapon completely resistant to corrosion.

Users will also undoubtedly appreciate the excellent sights. The basic CZ P-10 model has an original rear sight with an added edge for one-handed cocking, for example, against a belt. The rear sight is made from high quality aluminium alloy (therefore it is also anticorrosive)

and is anodized in black. Both the rear sight and the front sight are accentuated with three luminescent dots.

A compact with an impressive capacity

The CZ P-10 was created as a comprehensive model series ranging from a full size pistol to a subcompact. The first to enter the market is the CZ P-10 C, ranking amongst the currently most sought after category, the compacts. In fact, it is a full service and defence striker fired pistol in 9 mm Luger (9x19) or .40 S&W cal. with an impressive firepower capacity. For the 9mm there are 15+1 cartridges (17+1 with a baseplate), in the .40 it is 12+1, or 15+1 cartridges respectively. In the first phase, the CZ P-10 C pistol is primarily intended for the insatiable US market, with one exception - as early as the spring of 2017, a number of models should also be available in Czech shops. Other regions can look forward to seeing this incredible weapon at the turn of 2017/2018.

CZ P-10 C

calibre	9x19
overall length	187 mm
height	132 mm
width	32 mm
barrel length	102 mm
sight radius	163 mm
magazine capacity	15, or 17
weight of weapon unloaded	0.760 kg

www.czub.cz



Armoured Infantry Fighting Vehicle PUMA Pounces

The German procurement project AIFV PUMA has reached the most important milestone of the program in 2015; on 17th of April the German Army signed the official documents as starting point for the In-Service-Phase of the IFV PUMA.



The series production of 342 AIFV PUMA and eight training vehicle systems for the German Bundeswehr has already commenced after extensive verification and qualification trials have been successfully concluded in 2014. The German Bundeswehr has already received more than 120 AIFV PUMA mission systems with the final delivery scheduled for 2020. Half of the AIFV PUMA will be produced at Krauss-Maffei Wegmann's facilities in Kassel and the other half will be produced at Rheinmetall Landsystem's facilities in Unterlüss. The delivery of the most advanced AIFV mission system of its type will be complemented with the supply of a modern training suite, spare parts and ammunition.

The German Bundeswehr receives the most advanced AIFV technology in the world. The AIFV PUMA will gradually replace the AIFV MARDER which has been successfully in service for over 30 years. The Mechanised Brigade is eagerly awaiting the delivery of the AIFV PUMA which will be a significant technology leap. A staff officer at the German Defence procurement office has likened this technological leap as advancing from an analogue phone with dials to a smart phone.

The German soldiers have all reasons to be excited in receiving such advanced and highly capable armoured infantry fighting vehicle. The protection level of the AIFV PUMA is unrivalled and protects the crew even against Rocket Propelled Grenades RPGs and IEDs. Its mobility matches that of the MBT Leopard. The modern 30 mm calibre remote controlled stabilised turret system with computer controlled fire control system and modern

ammunition technology guarantees maximum firepower and highest precision. The laser range finder and latest thermal imaging technology complements the latest weapon technology. Due to an independent 360° sighting system for the commander with the same capabilities the AIFV PUMA offers a full hunter killer capability comparable to a modern main battle tank.

In addition, the AIFV PUMA is fitted with the German Bundeswehr's digital radios, satellite communication, a modern battle management system and the German future soldier system. These capabilities ensure that the AIFV PUMA is fully integrated and networked into the Bundeswehr's major systems.

In 2014, the German Bundeswehr has created an organisation (EinführungsOrganisation) which is solely focussing on the introduction of the AIFV PUMA into service. This organisation (EFO) is coordinating all necessary activities for a smooth transition in the current launching phase, including an extensive train the trainer program. The introduction into service is conducted by experienced trainers of the mechanised brigade and will be located at the German Armour School in Munster.

The initial training for these 'train the trainer courses' has already taken place. In addition, a comprehensive training package for logistic support will be conducted at the Bundeswehr's Technical College for Land Systems. This training will ensure that the soldiers will be highly capable of conducting service and maintenance tasks for the AIFV PUMA.

The PUMA industry service personnel will be at hand to support the AIFV PUMA until the Bundeswehr personnel is ready to fully support their AIFV PUMA.

To guarantee the logistic support for the complete life cycle of the AIFV PUMA Bundeswehr and industry have signed several long term support framework agreements. One of these agreements is a contract for a long time onsite service and maintenance support by industry for every deployed battalion. To complement one another a second contract regulates fourth line repairs for vehicles, subsystems and components on manufacturer's sites.

A third contract gives a framework to organize the technical and logistical support in case of obsolescences, necessary (software) updates and / or smaller improvements on subsystem's level along the complete life cycle, including an overall post design support. Another focus of this agreement is a database supported configuration management on vehicle-, subsystem- and component-level.

In addition to the longterm service and maintenance contracts for the initial launching and train the trainer phase a specific support organisation was required by the customer. In the first year of vehicle deployment at the Armour school a special industry team of experienced maintenance and training personnel is deployed in Munster to give best practice advices, general support and to have repair capabilities onsite within shortest time.

Beside a standard spare part procurement program, also an initial spare part kit was designed and contracted for the first period of deployment at the armour school to grant a high rate of vehicle availability for training purposes in the launching phase. This customized logistic support program establishes a reliable basis to enable the AIFV PUMA to unfold its outstanding capabilities today and in the future. The PUMA is the world's best AIFV and will not have any serious competitor for the next decades.

www.psm-spz.de





Military Research Institut, s. e.

HISTORY
TRADITION
FLEXIBILITY
EXPERIENCE

Main activities

- Research, experimental development and innovation conducted to ensure national defence and security in fields of science, on especially ground forces equipment, material and logistics in field of activity:
 - a) chemical, biological and radiological protection and security,
 - b) sensor technology of electronical warfare, camouflage and deception,
 - c) special metallic and non-metallic materials, surface protection, quality systems and technology of logistic;
- Research work is focused on protecting the population against WMD, chemical and nuclear accidents, chemical and electronical terrorism and attacks against important state infrastructure objects;
- Providing technical support and services in the area of technical, organizational and economic activities related to the armament of the Czech Armed Forces, Ministry of Defence, enterprises and research organizations of the Czech Republic.



Mobile shelter IGLOO



RC IED



IVECO mobile camouflage



Ballistic test of endurance



MKEB II - RUP FM



IED explosion next to the vehicle



S LOV - CBRN



READER - CH



Product portfolio

- Military science development prognosis, technical analysis, studies, technical documents and proposals for the needs of MoD senior management and General staff in all phases of the life cycle of military equipment and material;
- Development of hardware and software for the system decision of MoD and General staff before starting the process of Czech army armament;
- Solving the issues of standardization, codification and cataloging of military equipment, materials and their subsystems. Performing functions of National Authority to ensure the filling process of standardization agreements STANAG;
- Technical and experimental activities in emergency situations and accidents;
- Training and education of chemical specialists;
- Foreign trade with military material within the scope of the permit issued under the Act No. 38/1994 Col., especially in the area of:
 - a) sales of information obtained on the basis of contractual solutions research and development projects in the areas covered,
 - b) implementation of contract examinations and tests, training and training of members of foreign armed forces and employees of international organizations for activities related to the detection, identification, protection and liquidation of consequences of the use or misuse of WMD,
 - c) sales of functional prototypes and demonstrators, hardware and software, materials and technologies in the fields of competence.

Address:
Vojenský výzkumný ústav, s. p.
Veslařská 230
637 00 BRNO
CZECH REPUBLIC

Visit us:
Hala P - 144

GSM: +420 607 639 774
Phone: +420 543 562 101
Fax: +420 543 562 100
vvu@vvubrno.cz
www.vvubrno.cz

Reliable Containerized Decontamination Systems made in Germany

CBRN threats may occur anytime in many different environments. They may be biological epidemics or terrorist attacks - unexpected, sudden situations with limited or no early detection possibilities. Whenever they occur, immediate and well-planned responses are required. The aim of CBRN decontamination is to destroy or inactivate hazards as quickly as possible. As one of the leading experts in decontamination technologies, Kärcher Futuretech supplies robust, complex, container-based military decontamination systems of any size. Their innovative power has enabled them to design and built various different medium sized and heavy decontamination systems for multiple worldwide customers in the past few years.

Cage Based Decontamination System: System

for decontamination of vehicles, persons and road sections

To cope with all modern requirements for a decontamination system, a new modular approach has been developed for a maximum flexibility per function of each unit.

Based on a lightweight but robust cage frame, the new modular system consists of individual, compact and interoperable transport units, which are rapidly mounted, e.g. up to 9 modules on a 20' transportation platform compatible with the ISO twist lock system.

The "choose the modules you need"-principle allows selection of specific decontamination functions necessary for individual decontamination scenarios.

The System contains water transport modules with pumps and heating included, a power generator module with hydraulic engine, a universal treatment module for high-pressure cleaning and decontaminant application, a personnel decontamination module including a fully equipped shower tent with heating and a generator unit for a full-scale power supply and equipment for treatment of road sections.

Additionally, the system can be configured with a mounted crane for the off-loading of the individual cage modules for operations. The crane could also be used for the treatment of the top of larger vehicles.

Spain's UME was the first customer beyond the German Armed Forces who introduced this new innovative modular concept for

decontamination. Kärcher Futuretech is currently working on adding new Cage modules to the system portfolio.

"One-for-all" MPDS 2 decontamination system



The System contains a universal treatment module for high-pressure cleaning and decontaminant application

The MPDS 2 is an independent, universally applicable system for the complete decontamination of vehicles, material, and personnel. Equipped with three lances, the MPDS 2 can carry out the three obligatory phases of decontamination - pre-, main-, and post-treatment - in parallel. In comparison with normal system modules, which have two lances at most, this means a significant saving in time and logistics effort. Thanks to an integrated power generator, a pump for discharge of non-aqueous decontamination agents, and a supplied set of decontamination and cleaning agents from Kärcher Futuretech, the MPDS 2 is ready for immediate use anywhere. Its compact design, ease of operation, and compatibility with accessories and decontamination agents from other manufacturers make the MPDS 2 the most advanced system of its kind at present.

At IDET (31st Mai to 2nd of June 2017) in Brno, Czech Republic, Kärcher Futuretech is presenting this among other innovations.

Kärcher Futuretech GmbH with its headquarters near Stuttgart (Germany) develops, manufactures, and markets modular products and systems worldwide for rapid deployment missions in disaster areas and complex emergencies. The company offers solutions in the product categories: Water Supply, Mobile Catering, Field Camp and CBRN (Chemical, Biological, Radiological, and Nuclear) Protection. Kärcher Futuretech was spun off in 2005 and became an independent subsidiary of Alfred Kärcher GmbH & Co. KG. Today the company employs around 120 people.

The "choose the modules you need"-principle allows selection of specific decontamination functions necessary for individual decontamination scenarios



FUTURETECH

Kärcher Group



COMPLEX SOLUTION FOR THE ARMY, RESCUE AND CIVILIAN SECTOR

- CBRN decontamination units
- Mobile catering systems
- Turnkey tent camps
- Watertreatment systems

Visit our **stand 005 in pavilion P** at the fair **IDET Brno**,
May 31, 2017 – June 2, 2017

Kärcher spol. s r.o.
Modletice 141, 251 01
Tel.: 602 226 104
E-mail: futuretech@karcher.cz

www.karcher-futuretech.com

PK 4 (Kaga) - Mobile Field Kitchen

For full-menu catering for up to 350 persons

Evolution in the world of field kitchens

The main motivation for making the mobile field kitchen PK 4 (Kaga) was the fact that the last product of this kind has been in operation for 60 years. The old field kitchen PK 60 has been used up until now by the Czech Army and by the integrated rescue system. Thus, we needed to develop a new field kitchen, which meets all current requirements. PK 4 offers easy handling and enabling for operation. It is mobile, flexible, made of high quality materials and has passed terrain tests successfully.

PK 4 was developed by Czech company Agados, which specializes in development and manufacturing of trailers. The company has experience with deliveries for foreign armies as well (Qatar, Sweden). It has 25 years of experience on the market.

Advantages:

- Chassis allows redeployment of PK4 in difficult terrain
- Fast and simple preparation of PK 4
- Usage of modules on the trailer and also set up separately
- Modular design for flexible application and wide meal preparation versatility

General description

With its modular structure, the PK4 is a trailer cooking system

capable of adjustment to the cooking habits of any user group in field operation. The special feature of the PK 4 are four free places on the off-road single-axis trailer can be freely configured to individual requirements. The system can be ready for operation within 30 minutes and depending on the equipment configuration, the PK 4 system is suitable for cooking a complete menu for up to 350 people. For rescue operations, depending on the equipment configuration up to 900 persons can be served a simple meal. All the cooking modules of PK 4 are made of high grade, stainless steel and they meet the highest hygienic requirements. The rounded corners of the cooking module and their seamless design permit convenient cleaning using a mini-



NEW CZECH PRODUCT IN ITS CATEGORY IN 60 YEARS



mum of time and detergents in compliance with the HACCP - concept (Hazard analysis and critical control points). The PK 4 can be used with different burners, e.g. pressure, atomization and a gas or solid fuel burner. All of them designed by Karcher Futuretech.

MODULES OVERVIEW

1. Frying - Baking Module 25 L / 78 L

The roasting oven module is transportable and can be used in the PK4 Modular Field Kitchen or as an independent cooking unit. The roasting oven module allows various preparation methods such as cooking/boiling, blanching/poaching, stewing, steaming, braising, frying, baking and keeping food hot.



2. Pressure-Cooking Module 125 L, double walled

The double-walled 125 l pressure-cooking kettle can be operated independently. It is transportable and can be used in the Modular Field Kitchen PK4 or as an independent cooking unit. The cooking module consists of seamless stainless steel boiler and a stainless steel casing, which comply with the highest hygienic standards.



3. Cooking module 125 L, double walled

The double-walled 125 l cooking kettle allows various preparation methods such as cooking/boiling, blanching/poaching, stewing and steaming. All parts coming in contact with food are made of seamless, high-grade stainless steel.



4. Convection oven

Convection oven KCS 15 MF combines the possibility of preparing food in steam and hot-air oven. The Multi-Fuel boiler technology makes it ready for creating heat within the cooking space independently on the energy source (e.g. kerosin, diesel oil, paraffin). KCS 15 MF can be operated independently through convection connection of 220 V, however for the operation a small generator of 1,5kVA is enough.



POSSIBILITIES OF MODULES EXTENSION

5. Frying module 70 L

The roasting boiler oven module can be used in the PK4 or as an independent cooking unit. It is particularly suitable for the preparation of large and small pieces of meat, such as steaks.

6. Stowage Module

The stowage module is transportable and can be used in the MFK PK4. It is intended for storage of accessories and has stainless steel work top.



7. Refrigerator module 400 L

This refrigerator module can be used in the Modular Field Kitchen PK 4. It is ready for operation immediately after arrival on site and allows a long-term supply of fresh fruit, vegetables, meat, sausages, cheese, eggs and dairy products. The refrigerator module can be operated at an ambient temperature of up to +49 °C. It operates on electrical energy, i.e. a 230 V 50 Hz.



8. Deep -Freezing Module 400L

The 400 l freezer module is intended for the long-term storage of food, keeping it fresh without the loss of nutrients and vitamins. It can be operated at an ambient temperature of up to +49 °C. The module operates on electrical energy, i.e. a 230 V 50 Hz.

EVPU Defence a.s. Introduces the Latest Imaging System "SeeCheck"

„SeeCheck” is an imaging system intended especially for vehicle surroundings monitoring or for vehicle crew protection outside the vehicle at day or at night.



The system is equipped with a positioning sensor unit with integrated imaging modules. The positioning sensor unit allows a fluent azimuth (movement range 0° - 350°, rotation speed 0 - 90° /s) guiding to ensure continual tracking around the vehicle.

The sensor part of the positioning unit consists of the day and night surveillance division. An uncooled thermovision module

(image sensor uncooled microbolometer, FPA format 640 x 480, spectral band 7.5-13.5 µm, sensitivity <50 mK at f/1.0, interface RS232) with a fixed focus is used in the night division. In the day division, there is used a high resolution of 650 TV lines CCD module, again with a fixed focus. CCD module image sensor is 1/3" color CCD, resolution 976 x 582 PAL, 976 x 494 NTSC, sensitivity 0.005 lx at F1.2.

The imaging system can be controlled via a controlling unit with installed user SW, which displays image information to selected monitors and allows following options of control:

- control of the display unit via function buttons or a touch-screen
- display of the image information from the selected module
- control of the positioning unit
- switching of the image from individual modules to display monitors
- parameters settings of IR modules (brightness, contrast, colour pallets, digital zoom)
- creation of „scanning“ modes
- fusion of the IR a CCD image
- addition of digital image stabilization for the system usage during a ride

Its weight 2,5 kg and smaller dimensions 125 x 169 x 123 mm make this system very easy to install on any type of vehicle.

The product complies with EN61000, MIL-STD-810 a MIL-STD-461. www.evpudéfence.com



development | design | production | sale of:

- special fixed and mobile surveillance systems
- surveillance vehicles equipped with TV, infrared and optical sensors and laser rangefinders
- multisensory heads and containers
- two-axis pan/tilts with or without stabilization
- special cameras and SW applications

www.evpudéfence.com



EVPU Defence a.s. | Jaktáře 1781 | Uherské Hradiště | Czech Republic

AJBAN CLASS

The AJBAN Class of 4x4 vehicles provides a multipurpose platform for all military requirements, from utility vehicles to fully protected patrol vehicles. Due to the modular nature of the vehicle, it can be configured to suit a variety of operational roles and catering for various mission systems.



VISIT US AT



31 May – 2 June 2017

Hall P, Stand 137
Brno Exhibition Centre

NIMR RIV

The NIMR Rapid Intervention Vehicle (RIV) is a light 4x4 vehicle, enabling high-speed response to tactical situations in remote sites, either by fast ground transit or helicopter insertion both underslung or inside a CH-47.



Population Protection Institute - Establishing Causes of Fires

With their newly acquired fire site documentation and digitization tools, the Ministry of Interior, General Directorate of the Fire Rescue Service of the Czech Republic, and Population Protection Institute based in Lázně Bohdaneč, winner of the EXCELLENCE programme of the National Quality Award of the Czech Republic, have expanded the boundaries of the use of forensics in the investigation of causes of fires.

The premises of the Population Protection Institute in Lázně Bohdaneč house a newly built experimental and training laboratory the purpose of which is to investigate causes of fires (hereinafter "ICF laboratory") and where ICF scientific and research projects will be conducted in the years to come. The laboratory will be used to verify the course and progress of fires in specific areas or of domestic appliances, to conduct small-scale tests, or to back-track causes of real fires. The facility will also educate and train fire investigators of the Fire Rescue Service of the Czech Republic and other security elements - the Police of the Czech Republic, Prison Service of the Czech Republic, Customs Directorate, or Military Fire Supervision Office.

The Fire Scene Unit uses a new vehicle, VA-L1Z, custom-designed and -built to meet specific requirements of fire investigators. Based on a Mitsubishi Outlander chassis, it is equipped with a modular telescopic system housing various devices, including a versatile switchboard, meters for determining electro-technical parameters, or a FLUKE Ti400 IR camera. In addition, the vehicle is equipped with a fire site sampling set. It also comprises fire site documentation and digitization equipment which can, inter alia, take a spherical photograph of the site or make use of a laser scanning system.

Insofar as traditional methods of fire site documentation are concerned, the use of the panoramic method of photography provides the most comprehensive and most detailed picture. The fully automatic Gigapan Epic PRO panoramic head enables automatic

collection of photographs in a defined sector of the fire site, but can also provide an all-round, 360° picture. The automatic head speeds up and simplifies the collection of photographs and their subsequent processing. It ensures that the photographs are properly linked and aligned and that they have a sufficient overlap. It also provides for advanced functions, such as HDR photography. These functions are very useful for taking photographs of a fire site with considerable light intensity differences. The panoramic head is used together with a Nikon D5300 digital camera featuring a zoom lens (focal length 18-105 mm, F3.5 - F25).

On the other hand, spatial ground laser scanning is a new progressive method of fire site documentation and digitization. It is the fastest, most comprehensive and very detailed way to produce both pictorial and surveying/topographic evidence. This was also the reason why the ICF laboratory has procured a FARO FOCUS X130 3D laser scanner. The scanner can scan any object, room, building or equipment. Spatial scanning is a geodetic method of measuring spatial coordinates; it consists in automatic and accurate measurements of a multitude of points (up to 976,000 spatial points per second). The system radiates a monochromatic laser beam the wavelength of which is 1,550 nm. The scanner can scan anything in the line of sight and within a range of up to 130 m. The beam falls on a revolving oblique mirror and is refracted at an angle of 90°, which provides spatial scanning in the vertical direction. Horizontal scanning is provided by the scanner's rotation around its vertical axis. The scanning range is 360° hori-



**Gigapan Epic PRO**

horizontally and 305° vertically, but the operator can set his or her own parameters. This specific scanner can also operate in a position reversed by 180°, thus being able to digitize the area underneath. The 3D scanner is contactless, which means its measurements do not destroy or tamper with any traces left on the fire site. By default, its 3D data is shown in a remote infrared spectrum, which means that spots with bad light conditions or no light at all can be scanned as well. The scanner also features a built-in camera, GPS sensor, digital compass, thermometer, altimeter, digital level, and other sensors. The scanned data is subsequently

processed by specialized software, FARO SCENE and POINTCAB. It is possible to take dimensional measurements with millimetric precision at any time. The software enables making virtual tours or printing reports, including an option to create 2D or 3D topographic documentation. It can also produce ground plan views, cross-sections or isoviews. All the outputs mentioned above support the preparation of technical analyses and expert's opinions concerning fires. The 3D laser scanning method described above and its application in investigations of causes of fires are unique in the Czech Republic.

Another new piece of fire site documentation equipment is NCTech's iSTAR. The camera permits taking a spherical HDR-standard photograph. Thanks to its precise calibration and special SW, it can also use the photographic data to measure dimensions and distances. It is fully compatible with the FARO FOCUS X130 laser scanner, which means that a better-quality colour photograph can be laid over, or integrated into, the laser's precise 3D data.

The output of combined spherical photographs or 3D scans is a virtual tour for a so-called "virtual file". When clicking on one of the "hotspots" in the virtual file, the corresponding photograph, detailed view, ground plan view, expert's opinion, file paragraph video segment, audio or other recording is opened and displayed/played. All evidence, photographs, analyses and protocols attached to the virtual tour can be stored on a DVD or another memory medium, which can be subsequently opened on any computer without any installation or PC quality limits. The virtual tour can also be linked to an internal computer network (Intranet) and the access to it protected by a password. The virtual tour permits especially those who were not physically present on the fire site (e.g. forensic experts or public prosecutors) to get acquainted in detail with the site and its condition at the time the photographs were taken.

The commissioning of the ICF experimental and training laboratory and the new vehicle for the Fire Scene Unit together with the procurement of special equipment has enhanced the capabilities of the Population Protection Institute and indeed of the entire Fire Rescue Service of the Czech Republic insofar as establishing causes of fires is concerned.

LtC Dipl. Eng. Miroslava Nejtková
Photos: archive of the author

**iSTAR NCTech a panoramic camera**

Current state of emergency preparedness in the health care sector with a focus on dealing with an emergency situation with a large number of injured persons and the coordination of the Integrated Rescue System



EGO Zlín and Faculty of Logistics and Crisis Management of Tomas Bata University in Zlín organize the XX. Jubilee annual conference and associated exhibition Disaster Medicine 2017. At the same time, an incoming mission for foreign partners will be held under the patronage of AOBP in close cooperation with the Czech NBC Team.

The purpose is to present the systems and technologies of Czech companies for military/civil operations in dealing with disasters and emergencies. Both of these associations associate companies whose production is directed mainly to the two last three thematic blocks of the conference, which are:

- ◆ Health security - readiness and legislation of individual ministries for dealing with emergencies
- ◆ Disaster medicine - preparedness for CBRN threats
- ◆ Practical demonstrations - radiation, chemical and biological threats

www.egozlin.cz



EGO Zlín and Faculty of Logistics and Crisis Management, Tomas Bata University in Zlín organize

Jubilee XX. Annual conference

Under the auspices:

Zlín region
Ministry of Health
of the Czech Republic
Ministry of Health
of the Slovak Republic
WHO Offices in the
Czech Republic
WHO Offices in the Slovak
Republic

With the support of:

Association of Medical Rescue Services
Health Crisis Preparedness Companies
Association of Defense and Security
Industry
Ministry of Industry and Trade



13. - 15. June 2017
in Luhačovice



DEFENCE & SECURITY INTERNATIONAL EXHIBITION

2018

EUROSATORY

11 - 15 JUNE 2018 / PARIS

THE
LAND & AIRLAND
REFERENCE



Identify your company
as a key player



GICAT

www.eurosatory.com

 **COGES**

Publishing Plan for CDIS Magazines in 2017

REVIEW for DSI (  online edition on www.msline.cz)

Review for Defence and Security Industry 3/2017

Deadline: 25. 8. 2017

Put into print: 8. 9. 2017

Expedition: 15. 9. 2017

Available at NATO Days.

Review for Defence and Security Industry 4/2017

Deadline: 1. 12. 2017

Put into print: 15. 12. 2017

Expedition: 22. 12. 2017

Available at the annual editorial board meeting in Ministry of Defence resort in January 2018.

CDIS REVIEW ( on-line edition on www.msline.cz)

Czech Defence Industry & Security Review 2/2017

Deadline: 11. 8. 2017

Put into print: 25. 8. 2017

Expedition: 1. 9. 2017

DSEI (London) - 12.-15. 9. 2017 and NATO Days (Ostrava, Czech Republic), MSPO (Kielce, Poland) - 5.-8. 9. 2017

Czech Defence Industry & Security Review 3/2017

Deadline: 27. 10. 2017

Put into print: 9. 11. 2017

Expedition: 16. 11. 2017

MILIPOL (Paris, France) - 21.-24. 11. 2017, Intersec (Dubai, SAE) - 21.-23. 1. 2018, Enforce Tac (Nuremberg, Germany) - 7.-8. 3. 2018, IWA (Nuremberg, Germany) - 9.-12. 3. 2018



Mediační partner Asociace obranného a bezpečnostního průmyslu České republiky
The Media Partner of the Defence and Security Industry Association of the Czech Republic



- ☐ CDIS Review
- ☐ Review for Defence and Security Industry
- ☐ IDET News
- ☐ Security & Defence Technologies Catalogue

www.msline.cz



for Defence and Security Industry
Review

Publishing House: MS Line, s.r.o., Vykáň 82, 289 15 Kounice, Czech Republic, phone/fax: +420 321 672 601, e-mail: info@msline.cz, www.msline.cz • Editor in Chief: Šárka Cook • Deputy Editor in Chief: Dipl. Eng. Miloš Soukup • Professional Editors: Dr. Antonín Svěrák, Dipl. Eng. Petr Miklík, Jana Tučková • Language Editing: Šárka Cook, Eva Soukupová • Translator's Agency: Jiří Mareš, Eva Soukupová, Stanislav Poráň • Design: Miroslav Pelz • Marketing: Eva Soukupová (e-mail: esoukupova@msline.cz) • Internet Manager: Soliter-polygrafická společnost, s.r.o. • Print: Magnus I s.r.o. • Distribution: MS Line, s.r.o., A.L.L. production, s.r.o. • Put into print: 9. 5. 2017 • Issue published: 19. 5. 2017 • Key number: MK ČR E19352, ISSN 2336-3460 • Not for sale • Photo on the Front Cover: Rheinmetall Defence Electronics GmbH.

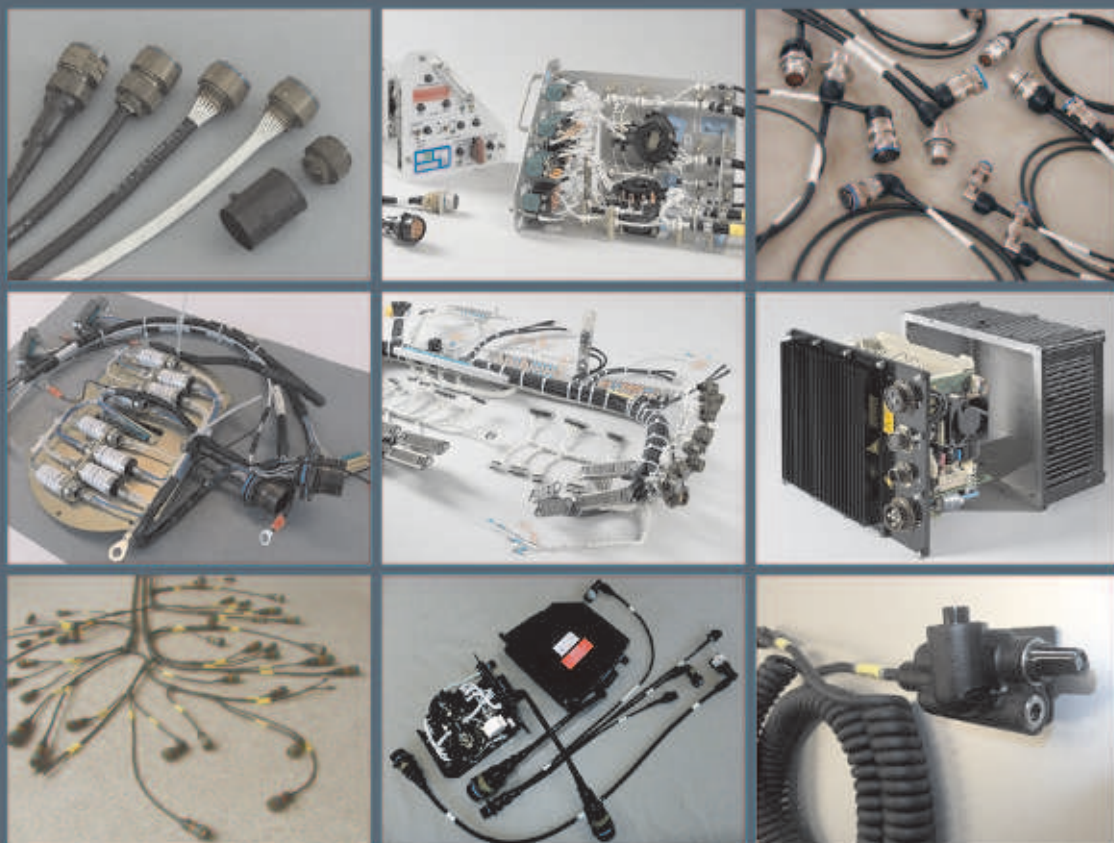
The CDIS Review editorial team bears no responsibility for language and content correctness of text and graphics developed by advertisers and specialist content editors.

DEFENCE & AEROSPACE



Quittner & Schimek

INTERCONNECTIONS



WIRE HARNESSES

ELECTROMECHANICAL

ASSEMBLIES

FIBER OPTICS

CONNECTOR ASSEMBLY

COMPONENTS & TOOLS



Quittner & Schimek s.r.o., Podlevinská 518, 507 91 Stará Paka, CZ, Tel. +420 493 766 111, qs@qscomp.cz



SINCE 1934

EXPERIENCE • INNOVATION • SOLUTIONS

SINCE 1934



THE WORLD IS CHANGING, EVEN THOUGH THE GLOBE REMAINS ROUND

Omnipol, a well-known Czech company, has been around since 1934. It has an excellent global reputation as a supplier of technical solutions in defence and security as well as equipment for food processing and manufacturing industries.

Our considerable historical experience is continuously used to bring to the world modern and innovative technologies and solutions.

Our logo is changing, but our experience, innovation and reliable solutions remain world class.

www.omnipol.com

EXPERIENCE • INNOVATION • SOLUTIONS