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CV90 MkIV



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EDITORIAL

Dear readers,

In this year's first issue, we will welcome you with an exclusive interview with the State Secretary of the Ministry of Foreign Affairs of the Czech Republic, Dipl. Ing. Miloslav Stašek, concerning the support of the Czech defence and security industry abroad in the pandemic time and on its influence on the export of this sector with exceptionally high added value.

Also, two bidders in the tender for the purchase of the new infantry fighting vehicles for the Czech army will introduce themselves and, of course, there is a bundle of production of the Czech defence and security companies.

In the end you will find a report from the Czech participation in the largest air show in Asia AERO INDIA 2021 and I believe that similar reports from the Czech Republic's participation in international fairs will soon enrich our "Review" again.

Šárka Cook, Editor in Chief



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Interview with the State Secretary of the Ministry of Foreign Affairs of the Czech Republic, Dipl. Eng. Miloslav Stašek



Mr. Secretary of State, what is your current priority as the State Secretary of the Ministry of Foreign Affairs of the Czech Republic and what are your plans for this year?

My principal priority at present is to manage the current epidemiological situation in relation to the protection of the health of our employees, who currently opera-

te not only at the Ministry of Foreign Affairs in Prague, but also at our embassies abroad. My big challenge, as well as the team around me, is to successfully ensure the annual rotation of our several hundred employees between headquarters and embassies at the time of travel and logistics constraints, which we in general manage very well. At the same time, it is my personal responsibility to ensure the

availability of COVID-19 vaccination for our employees. Here it is necessary to perceive the great burden that is placed on the employees of our embassies, who have to deal with their own difficult life situation away from home, often operating in countries with very limited health capacity, while helping Czech citizens abroad. At the same time, our employees still perform routine tasks related to maintaining bila-

teral and multilateral relations in the best possible condition.

It is the stable, efficient and high-quality performance of the foreign service that is and will be also my priority, even in the context of the fact that a large part of the negotiations switched to the online mode. This situation can offer indisputable advantages, but I think we are in accord with foreign partners on the desirability of the earliest possible return to the personal talks and contacts on which the diplomacy is traditionally based.

The major priority is to ensure the Czech Presidency of the EU Council in the second half of 2022. Here I would like to mention the current topic of recruitment and training of trainees - students of the Czech universities, who will help us both in Brussels and other locations of the Czech missions to international organizations or in places where we will perform the so-called local presidency. The aim is to prepare the best possible candidates for the presidency that will be carried out at the high professional level, also thanks to their contribution. I would also like to use this format to educate the future quality diplomats, who would strengthen the Ministry of Foreign Affairs as a part of standard personnel changes and contribute to further deepening of professionalization of the foreign service.

Is the Ministry of Foreign Affairs preparing any measures to assist Czech companies in the area of foreign trade?

Of course, we respond to the current situation in the world. Traveling is very difficult at the moment. We are aware that limitations of business trips is a big problem for defence companies, which often cannot do without personal contacts. In this regard, we, as the Ministry of Foreign Affairs, make an effort to provide companies maximum cooperation. Therefore, in October 2020, we launched a new Business Trip service. As a part of this service, we help with the entry of the business partners of the Czech companies to the Czech Republic and with the foreign trips of the Czech companies. The COVID pandemic has forced us to communicate with companies and embassies much more systematically through video calls. Thus today, we usually invite colleagues from embassies to meetings with

companies directly, according to the requirements of the companies.

Even in the remote mode with our embassies, we help the companies with the orientation on the market, finding opportunities, approaching partners and organizing company presentations. Defence industry companies are among those that can use such services and support of the economic diplomacy. This applies also at the pandemic time.

Since last year, we have been supplementing our services in cooperation with the Chamber of Commerce and the Confederation of Industry and Transport with PROPEA services provided by local partners in selected countries, which are intended primarily for the long-term presence of companies on foreign markets. It is important to have connecting links abroad and PROPEA is one of the effective and efficient tools for getting Czech companies to the foreign markets.

How does the economic diplomacy team at the Ministry of Foreign Affairs of the Czech Republic help with the presentation of Czech companies abroad?

The Ministry of Foreign Affairs cooperates very closely with the Ministry of Defence, the Ministry of Industry and Trade and other ministries within the so-called Joint Instrument for Financing Economic Diplomacy, thanks to which we jointly prepare and finance a number of economic diplomacy activities. This is an established model of inter-ministerial cooperation, which has been working very well for five years in a row, and we will definitely continue with it. The key tool are the economic diplomacy projects, so-called PROPEDs, which are organized by our embassies abroad and for the support of which tens of millions of crowns are being allocated from the joint fund every year. In addition to the Ministry of Defence, the Defence and Security Industry Association (DSIA) is also our important partner for the implementation of projects focused on the defence and security industry.

PROPEDs are basically carried out in two formats - either it is a foreign mission of the Czech companies, where the Czech embassies prepare a program for them and provide all logistic and organization support within the project, or incoming

missions to the Czech Republic. Our embassy brings carefully selected partners to the Czech Republic, with whom it makes visits to trade fairs or conferences, for example, and connect them with the local partners. This year six PROPED incoming mission including Finland, Pakistan, South Africa and Israel, has been prepared just for the IDET fair. Incoming missions are also a great tool for acquainting foreign partners with the production and technological background of the Czech companies.

The pandemic was a major complication for the implementation of economic diplomacy projects, given the limited travel possibilities and other measures in place, and unfortunately many projects have been cancelled or postponed. Hopefully in the second half of this year, we will be able to fully return to the standard format of these events and I can already see a positive trajectory in the area of PROPEDs, ie. many of them will be implemented in presence and without any restrictions. It is positive that we have tested the online implementation and in future we will certainly supplement the classic missions by online connection of the Czech and foreign partners.

How has the current pandemic situation affected the exports of the defence and security industries?

The Czech defence and security industry, as a sector with exceptionally high added value, is a key branch of the Czech industry. Czech exports of weaponry, technologies and military equipment have been growing for a long time, reaching a peak in 2016 with a total amount of CZK 18.2 billion. In 2019, the amount was around CZK 16 billion. As a result of a number of restrictions imposed by both the Czech Republic and neighbouring countries this year and last year, the defence and security industries, as well as other sectors exporting their products, technologies and services abroad, have been affected by border restrictions and delays in supply and distribution chains. However, there was no large extent cancellation of contracts in the defence and security industries.

A number of key Czech companies in this sector did not stop production in the spring of 2020 and continued to fulfil their orders. In addition, the pandemic highlighted the importance of new technologies and the ability to use them and involve them in

production, which may contribute to even greater development and growth of Czech exports in the defence and security industry in future. The fact that most countries have not reduced their defence budgets as a result of the pandemic and want to maintain their defence capabilities, may also contribute to the positive trend in exports in this and the following years. We also expect that the pandemic may continue to exacerbate geopolitical tensions, which will bring increased demand in the sector, among other things.

Quality sources of information from foreign markets are important for companies and their activities. Can you please describe what kind of information service economic diplomacy provides to the Czech companies?

I believe that the pandemic has further emphasized the need to provide the Czech companies with up-to-date, high-quality and verified information from abroad. Thanks to their knowledge of the territory and above-standard contacts in the country, our economic diplomats are

a valuable source of information for the Czech companies. For each country, they prepare, among other things, the summary territorial information, which helps the companies with basic orientation in a specific country and brings them closer to the functioning of its business environment. Starting from this year, we are adjusting the format of such documents so that they are clearer for the companies and contain as practical information as possible. There will be also the new feature, a section devoted to the specifics of cultural and business negotiations, which will be prepared for each country. Then we publish the articles on specific opportunities on foreign markets, as well as the stories of successful Czech exporters, in the magazine Modern Economic Diplomacy, which is published regularly every two months and also online at www.export.cz.

In response to the pandemic situation in the Czech Republic and in the world, we have also decided to modify the content of the Map of Global Industry Opportunities, which we publish on the annual basis. In 2020, we called the publication "Strate-

gic Opportunities Map" and it included 83 carefully selected countries. For this year, we are preparing its second edition with extended number of countries. In addition to the publication, which is segmented by continents and countries, a sector version will also be published this year, which will also include the defence industry. Our aim is to help the companies to find their way in turbulent time and provide them with current and so-called post-COVID opportunities in the world. In practice, this means that with the help of our economic diplomats, we are looking at changes in the priorities of particular countries in the area of investments and demand, and we are thus able to communicate specific opportunities to the Czech companies. In Africa, for example, small arms are in demand due to the deteriorating security situation in some countries, while in Europe, investments in economic recovery include space industry and, for example, control and command systems or communication and electronic software.

Mr. State Secretary, thank you for the interview. Šárka Cook



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BAE Systems Offers the Czech Defence Industry a Helping Hand and a Chance for a Bright Future

BAE Systems and its CV90 MkIV infantry fighting vehicle are competing for the Czech Army's order, but contrary to its main competitor – Rheinmetall – it is primarily relying on cooperation with Czech state-owned companies led by VOP CZ. BAE Systems has identified and been in dialogue with more than 40 additional industrial partners and several of these are already part of deliveries for other Hägglunds customer projects. We discussed this and more with Mikael Segerman, BAE Systems representative in the Czech Republic.



From the point of view of the order for infantry fighting vehicles, the last 12 months have been very turbulent. I have to ask – do you still believe that it will be completed?

The situation has not been easy, mainly due to the impact of the pandemic that affected everything, including the process of selecting a new IFV for the Czech Army. It was delayed, which is under-

standable. It doesn't matter what I or we believe, what's important is what those who prepared and are realizing the project believe. I think, it is clear from many discussions, that the program of having

new vehicles delivered to meet the NATO commitment is crucial and at the same time I believe everyone involved realize the necessity of going through the entire process. If the program would be stopped or delayed further it would cause a fundamental delay and the Czech Army wouldn't in all likelihood not receive any vehicles until well after 2030.

So, you believe that the vehicle tests, final offers, overall evaluation, and contract signature can still be managed on time?

I realize the schedule is tight, but where there is the will there is a way. The entire process was very well prepared, and the Defence Ministry is being transparent. If now – especially after money was returned to the Defence Ministry's budget – everything starts moving again, then the winner could be known in June.

You believe in your chances with the CV90 MkIV?

All contenders offer capable vehicles. We're however convinced we're the only realistic alternative. Based on other vehicle programs across the world the delivery of a new vehicle program is typically a 15 year process and with new vehicle designs it is closer to 20 years. If the Czech Army wants a top modern vehicle that is compliant with the requirements for schedule, technical parameters and an Industrial cooperation based on partnership and the development of the local defence industry, not just assembly, then the CV90 MkIV is in a very good position. And that's without even mentioning that this is the only combat-tested vehicle in the competition that is used in the fleets of seven European countries. Incidentally, this User Club is one of the many benefits included in our offer.

You mentioned your competitors, one being Rhm who announced several fundamental things in recent months. As an example Rheinmetall signed a cooperation contract with CSG with the President in attendance and recently announced cooperation with Česká zbrojovka. Doesn't this reduce your chances of success?

I don't think so at all. From the beginning, we have respected the program condi-



tions and we understand that the program is more than just about the delivery of vehicles for the Czech Army. The program is a unique opportunity for the Czech defence Industry in general but in particular for the Czech state owned VOP CZ. We've offered our advanced and proven industrial cooperation program since the very beginning. We are providing the Czech Republic the CV90 MkIV as a Czech defence Industry project with VOP CZ as our main partner. BAE will offer to transfer our knowledge and experience to our Czech partners and really incorporate them into the production and further development of the vehicle. That's not just for the Czech delivery, but also for the many other projects we have in front of us. The BAE offering will be very competitive if the process continues as outlined by MOD.

We often hear worries whether VOP CZ is capable of handling this in its current condition. Are you worried about those problems if you win the contract and rely so much on this state-owned company?

We've already completed 11 industrial cooperation programs for the delivery of infantry fighting vehicles and something always comes up that needs to be dealt with, but we were always exceptionally successful. We've been in intense negotiations with VOP CZ for several years and we signed our teaming agreement in 2016. I would dare to say we know the company well by

now. We are aware of VOP's strengths and weaknesses. We will continue to build on its strengths, and we intend to eliminate the weaknesses together and we've got our own plan how to do it.

Based on our unique experience from previous programs I'm convinced that after years of mutual cooperation, VOP CZ will get a new impulse and new energy. We don't want to see the company just survive – we want more than that. We'd like to see VOP as a partner for many years to come.

What do you see as important in this respect? You speak of what you want to build on and your cooperation strategy. Can you elaborate?

I believe that our industrial concept, inspired by the Czech innovation strategy, of involving VOP and around 40 additional Czech companies in the development, production, and system integration phase as well as the main support provider will bring VOP CZ more than just a welcome financial impact. We have found the Czech industry to be very skilled and capable but perhaps lacking a larger new project to work with over the past years. The cooperation with VOP will spark real development, inspire to new patents while attracting and retaining the top Czech and foreign engineers. This cooperation would also preserve hundreds of jobs at a traditional Czech factory in a region that has been troubled by structural problems for years. A well-



conceived cooperation plan will bring even more benefits to the entire region thanks to the multiplier effect where one billion invested will bring the area another nearly three billion. Together with VOP CZ and other Czech state-owned and private companies, we want to enter a new age for the national defence industry that continues its respected tradition by building a future based on highly advanced technologies. We are not offering sub supplier dealership but the ability to develop, produce and support the entire vehicle.

You spoke of other projects that VOP CZ could cooperate on ...

Yes, exactly. Recently, we signed orders for more than €1 billion for Switzerland, the Netherlands, and Norway in BAE Systems Hägglunds. Much of what is needed combined with other international programmes could also be made in the Czech Republic, meaning a renaissance of the Czech defence industry, which has been waiting for an impulse like that for years. We at BAE Systems Hägglunds now have work for years to come and we're seeking long-term strategic partners. We found highly qualified engineers and other professions in the Czech Republic. VOP, together with some other Czech industries, has the potential to become

a strategic partner for other potential programs in the region.

The Slovak Defence Ministry recently launched a project similar to the Czech one. The vehicles are gradually presenting themselves. Do you see any chance for cooperation between the two states?

It's clear these are individual projects that are currently independent of one another. On the other hand, I see many opportunities for potential synergies that could eventually lead to the significant development of the defence industries in both countries, as well as beneficial effects on the added value that could come to both. We'll see how the projects develop in time and how both countries are able to get the maximum out of them. We have our own ideas, and we will continue to discuss this with relevant stakeholders.

At the opening of the interview, you said BAE Systems and the CV90 MkIV present the Czech Republic with a number of advantages. You mentioned the User Club. What are the others?

The User Club is a very exclusive opportunity for the Czech Army: being part of a group that shares experien-

ce, cooperates on development, contributes to strategies and tactics, and train together. It also shares the costs of development if needed. No one else can offer that. This form of cooperation brings additional effectiveness in deploying the vehicles and fundamentally increases the safety of the crew. Together with Czech experts, we would like to launch another extraordinary project in the Czech Republic: The Battle Lab, which was inspired by the Czech innovation strategy. This facility could serve as an important tool to deepen international cooperation in training and the preparation of doctrines and tactics on the basis of experience accrued by current users of the CV90, including combat deployments. The Battle Lab would also serve as a key element in developing technologies of the future, such as cybersecurity and artificial intelligence in cooperation with Czech universities and other academic institutions and Czech industrial partners. We see this a major opportunity.

About the CV90 MkIV

The CV90 infantry fighting vehicle from BAE Systems is undoubtedly the most successful vehicle of its kind currently offered by European producers. More than 1,280 units have been sold, serving in the armies of seven countries and repeatedly being deployed in major combat operations. Interest in the CV90 has not ebbed, quite the contrary. Besides the newest MkIV line that the Czech Army could soon proudly field, current users are also investing into the modernization of their existing fleets. Notably the program for the Netherlands include the brand new, modern and for soldiers and army efficient CV90 MkIV turret fitted with the 35 mm Airburst capable Bushmaster III weapon. The MkIV turret will be offered to the Czech Republic in the 30mm version.



SUCCESS STORY

TEAM LYNX

The Lynx KF41 is extremely durable, maximally adaptable to various environments, extremely agile and highly striking. At the same time, it has a large reserve of useful load. This is a new generation combat vehicle designed to be as no other faced the challenges of the battlefields of the future.

Czech companies already play an important role in the Lynx KF41 supply chain. The Rheinmetall automotive division in the Czech Republic employs approximately 1,000 people, who work in its three branches in Trmice and Chabařovice. If the Czech Republic decides to become a member of the Lynx team, it will bring domestic defence industry other significant opportunities at home and abroad.

www.rheinmetall-defence.com/Lynx

Rheinmetall's LYNX KF41

Dominates on the Battlefield

Rheinmetall's LYNX KF41 Infantry Fighting Vehicle (IFV) is making a splash on the world stage. One of the most innovative and lethal battlefield predators available on the market, the LYNX is a contender for the Czech Republic's programme to renew its ground forces with 210 new IFVs. Rheinmetall's next-generation vehicle is a favourite among army professionals around the world not at least due to its variety of powerful armaments and ammunition types ensuring dominance against every threat.



Turret and weapon: a deadly combination

Any IFV's battlefield capability is determined by the power of its armament. Rheinmetall is one of the most experienced turret producers in the world, and the company's Lance turret used on the LYNX KF41 is violent and precise in any mission and on various platform types.

The turret is at the cutting-edge of technological advances in digitisation and electronic-assistance, with a fully digitised drive system and a high-performance digital fire control system ensuring long-range precision targeting. It is also highly customisable, with generic vehicle architecture (GVA) making it almost as flexible as the LYNX vehicle itself. Various addi-

onal systems can be integrated, such as jammers, sensors and even unmanned aerial vehicles (UAV), while different protection packages can be installed depending on the mission type. The LYNX's extremely high degree of adaptability means these packages can be adjusted in the theatre according to the demands of the situation.

The LYNX's Lance turret carries an unrivalled, flexible medium-calibre main weapon. The MK30-2/ABM armament has a controlled rate of fire of 200 rounds per minute and a generic maximum rate of up to 600 rounds per minute. Combining such a high firing rate with the most modern ammunition and fire control technology and a range of up to 3,000 metres,

it is a truly formidable, uncompromising battlefield force. It is no surprise that the MK30-2/ABM has captured the imagination of armed forces around the world since its introduction with the German Army's PUMA IFV in 2012. Australia opted for the innovative weapon for its Boxer CRVs in 2018, and last year Hungary became another MK30-2/ABM user with its decision to procure the Lynx KF41.

Rheinmetall has already sold more than 750 MK30-2/ABM weapons and over 1,500 units from the wider MK30 family. The weapons type is among the best-selling medium-calibre weapons on the world market, and new developments in air defence use suggest even greater future potential for the weapon type.

"The Lance turret with MK30-2/ABM main armament is a truly fearsome combination," says Oliver Mittelsdorf, Senior Vice President Sales at Rheinmetall Defence. "We made use of our decades of experience in holistic design and manufacturing to ensure the turret enhances the LYNX's key attributes of modularity, flexibility, and lethality. The hugely popular and powerful MK30-2/ABM main weapon sits alongside various optional additional systems to counter and defeat all types of threats."

Ammunition innovation

Along with its lethal firing rate, range and precision, the MK30-2/ABM ensures mission adaptability with its "next round, new type" ammunition feed philosophy. A double-belt feed design means the

weapon can fire two different ammunition types simultaneously, allowing effective engagement of multiple targets.

The main weapon uses various types of ammunition. We would like to have closer look on Kinetic Energy Time Fuze (KETF) and Armoured Piercing Fin Stabilized Discarding Sabot with Tracer (APFSDS-T) ammunition. KETF using Airburst Munition (ABM) technology for the engagement of soft- and semi-hard targets, and APFSDS-T for use against hard targets. Rheinmetall is the world's leading manufacturer of a wide range of medium calibre ammunitions and its success in this area is partly due to its constant innovation of new types, including the ground-breaking transfer of Advanced Hit Efficiency and Destruction (AHEAD®) technology from air defence systems to infantry combat vehicles such as the LYNX.

The Armour Piercing Fin Stabilised Discarding Sabot with Tracer is an ammunition type intended for use on heavily armoured opponents, boasting outstanding penetrating power even at shallow impact angles. The tungsten penetrator was optimised by Rheinmetall to destroy even the most modern and well-protected targets.

Kinetic Energy Time Fuze (KETF) ammunition is timed to eject its payload at the exact moment causing maximum fragmentation damage to the target. A unit on the weapon muzzle programs each Airburst Munition (ABM) projectile individually when leaving the barrel based on the measured distance to the target, taking into account the exact measured velocity of each round to calculate the time of flight and the moment of optimal fragmentation. KETF projectiles have a powerful payload of 200 g of tungsten cylinders, giving the LYNX a distinct advantage in the engagement of soft and semi-hard targets. KETF ammunition can also be fired in un-programmed mode, with the cartridge functioning as a frangible armour-piercing ammunition for destroying armoured targets or targets in urban settings. The design of the payload can be adapted to the target scenario for the perfect balance between cylinder weight and number of cylinders: the greater the mass of the individual cylinder, the higher the level of penetration. The higher the number of cylinders the higher the hit probability.

Weapons for every battlefield

LYNX operators benefit from a range of weapon options allowing the engagement of all types of opponents in any fighting environment. Alongside its main armament, the LYNX features a 7.62-mm co-axial machine gun (MG) which can be controlled and fired using the same interface as the main weapon. Besides these main gunnery options there are a range of additional capabilities for engaging targets in non-conventional peer-on-peer warfare.

The optional Main Sensor Slaved Armament (MSSA) gives the LYNX a powerful advantage in close-combat environments. Enabling the engagement of additional targets independently of the main weapon, the MSSA's Line of Fire (LoF) follows the commander's Line of Sight (LoS). The MSSA can be fitted with various calibre machine guns or a 40-mm Grenade Machine Gun (GMG). This allows the LYNX to engage targets at high elevation in asymmetrical warfare environments, such as snipers on roof tops or Unmanned Aerial Vehicles. This dual functionality, in which both the gunner and commander operate weapons independently, is referred to as "killer-killer" functionality.

Another option is an Anti-Tank Guided Missile (ATGM) launcher capable of firing Spike LR missiles. In most IFVs, vibration causes loaded ATGMs to deteriorate, meaning they have to be loaded just

prior to firing. The Lynx allows greater preparedness through a vibration damper allowing ATGMs to be loaded further in advance. The Lance turret's flexible mission pod can also be fitted with a variety of subsystems, including electronic warfare capability, non-line-of-sight strike loitering munitions, and even an Unmanned Aerial Vehicle (UAV) launcher for gaining invaluable surveillance information.

"Adaptability is a key consideration for Armed Forces due to the highly mixed nature of modern warfare," says Oliver Mittelsdorf. "IFVs have to be able to rapidly switch from asymmetrical close-combat warfare with limited mobility to open peer-on-peer conflict with heavily armoured opponents. The LYNX's range of simultaneously operable weapons systems allows it to respond effectively to any environment and in any mission. It is this unique adaptability which makes it a favourite among senior personnel and decision-makers all over the world. The Czech Armed Forces can rest assured that if they choose the Lynx KF41 they will not regret their decision."



Tatra Trucks and its Partner DAF will Deliver Hundreds of Trucks to the Belgian Army

In February this year, the Belgian Ministry of Defence announced a final decision about a tender for the supply of trucks to the Belgian Armed Forces. The contract for almost nine hundred vehicles has won DAF Trucks company in cooperation with the Czech company Tatra Trucks. For the Czech company, this is a crucial reference project that can help further expansion into top markets.

The Belgian Ministry of Defence signed a contract with DAF Trucks for the purchase of a total of 879 logistics trucks. The Dutch company working on the project closely with Tatra Trucks company from the beginning. The success of the cooperation between DAF and Tatra Trucks in the Belgian tender brings Tatra Trucks the most significant military contract in recent years. It also confirms that the qualities and capabilities of Tatra Trucks are more and more known even west of the Czech border.

DAF Trucks is the prime contractor and final supplier in the project. Tatra Trucks will produce chassis for the trucks, Tatra Defence Vehicle (TDV) will manufacture and supply armoured cabins for part of number of the trucks. Top truck manufacturers from Western Europe, that supply large numbers of trucks for NATO armies, also participated in the tender.

So, with this success, Tatra Trucks confirmed its ability to gain a foothold in the western markets. In recent years, for example, it has also supplied chassis for new wheeled howitzers for the Danish army.

The DAF CF series trucks for the Belgian army are based on the Tatra Phoenix model series. As part of deliveries for the Belgian army, Tatra Trucks will produce 636 chassis in a 4x4 configuration and 243 chassis in a 8x8 configuration, all of the trucks will have the Tatra chassis conception with a central backbone tube and independent suspension of swiveling half-axes. The standard non-armoured cabins for more than half of the trucks of both versions will be supplied by DAF Trucks, 352 trucks will be equipped with armoured cabins developed and manufactured in the Tatra Defence Vehicle (TDV) plant in town of Kopřivnice.

Paccar MX-11 and MX-13 engines and ZF gearboxes will be installed in the trucks. DAF Trucks will also equip all vehicles with the required superstructures and equipment, including manufactured by other Czech and Slovak suppliers.

In 2021, the partner companies will jointly prepare prototypes of the trucks, a year later the Belgian army will receive the first serial examples. Deliveries are to be completed in 2025. The list of versions includes vehicles for the transport of containers with a hook loader, flatbeds, a flatbed version with a hydraulic arm and one-sided tippers. In addition, the Belgian Ministry of Defence has reserved the option to purchase additional armoured cabins from Tatra Defence Vehicle production and the relevant technological sets for the possible replacement of standard cabins of already ordered trucks.



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CONTSYSTEM is both a supplier of hydraulic superstructures intended to be mounted on truck chassis and an authorized center for the assembly and service of **HIAB** hydraulic cranes, **MULTILIFT** hooklifts and skiploaders and **STEELBRO** sidelifters.

We are specialists in load-handling technology set for the most demanding operations

The company successfully uses its special technical solutions in tenders for the supplies of the load-handling solutions for the Czech Army. Another important area is the Fire and Rescue Services or the Police of the Czech Republic. Private sector customers include companies from all industries, ranging from the container transport, logistics, waste management to construction.

NEWLY BUILT SERVICE AND ASSEMBLY CENTER IN OSTRAVA

Three years ago, the company moved from the leased premises to a newly built service and assembly hall, thus creating a modern facility that provides sufficient capacity for assemblies and allows to meet increased requirements of customers.



CONTSYSTEM AS THE CERTIFIED SUPPLIER OF TATRA TRUCKS

CONTSYSTEM is a long-term partner of TATRA TRUCKS in the field of superstructures for military trucks, rescue trucks or vehicles intended for the transport of hazardous materials. Nowadays, the delivery of logistics vehicles Tatra 815/7 equipped with MULTILIFT MSH 165 superstructures is in progress for the need of the Czech Army.



VEHICLES EQUIPPED WITH HIAB AND MULTILIFT LOAD-HANDLING SYSTEMS

Other recent realizations include, for example, the delivery of the technical solution for a rescue vehicle equipped with HIAB loader crane for the Fire and Rescue Service of the Moravian-Silesian Region or a special vehicle with HIAB loader crane for transporting explosives and other dangerous materials for the Czech Police - Pyrotechnic Service. In both cases it was Tatra 815/7.

www.contsystem.cz

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AURA continues with development of Logistic Information System

Today's demands for defence are constantly increasing and it is not easy to keep up with them. Flexibility and adaptation to a changing world are becoming key strategic advantages. That is why AURA has combined its 30 years of experience with the development of information systems for military logistics and the latest technologies to create a modern, comprehensive and secure Logistic Information System (LIS) that can overcome the obstacles of today's world.



Accurate information at the right time

LIS provides the users at all organizational levels with quality information at the time they need it for their work. For the supreme command and management, there are prepared comprehensive reports that provide a clear picture of the armed forces current state, and advanced planning functionalities that support the right decisions and increase the chances of success in strategic missions. For the lower command and operational personnel, LIS provides automated and efficient tools with an intuitive user interface to facilitate their daily tasks. We build our product upon experience from a long-term cooperation with the armed forces around the world, in our international team there are retired senior military officers and managers who provide us with their know-how.

Modularity and flexibility

Due to the wide diversity of environments in which our systems must succeed, we have chosen the path of modular architec-

ture that allows us to divide the system into stand-alone modules covering all areas of logistics information support. From the asset management, through the operation and maintenance of equipment and weapons, warehousing and personnel management to the planning of foreign missions. This approach helps us to offer a solution that perfectly fits the customer's needs. LIS improves the overview of assets during their entire life cycle from acquisition to disposal, increases the readiness of equipment and weapons, reduces excessive inventory and helps to monitor financial expenditures and significantly save the budget. In order to create synergies between legacy systems, third-party systems and LIS, we use an integration interface that allows fast deployment and minimizes the risk of data duplication and related errors.

Security

The system is designed primarily for the armed forces and therefore we put maximum emphasis on the security. We apply

principles of safe development and hold international certifications that allow us to deploy LIS in restricted or secret environments. The system is also being developed as a distributed one, which means that different parts can run independently on servers in different geographical locations and work in online, semi-online and offline modes. This significantly increases the availability of the system and its possible use in remote areas and foreign missions, where there is no reliable connection. Thus, the units will not remain without logistical information support in any situation. The distribution also reduces system vulnerability against coordinated attacks as there is no critical central point of failure, and individual servers can take over the function of others.

As acquisition of a new information system is a long-term investment, good mutual relations are the key for us. We make sure that the system is implemented in a short time, we provide continuous care to our customers and they can rely on our expert team to quickly solve any problem. In case of special requirements, we are able to provide consultations and customizations so that the system exactly suits the customer's needs. We have been constantly working to improve LIS and maintain its top level regardless of external circumstances.

By Radim Večeřa

SCARABEE

The first hybrid light armoured vehicle.

MADE IN FRANCE



HYBRID DRIVE



MOBILITY



FIREPOWER

SCARABEE is the first protected hybrid vehicle in its category. A true technological powerhouse, this light armoured vehicle is designed for tackling every type of mission. Its hybrid drive combined with its exceptional mobility enables stealthy and silent movement. Thanks to its rear-wheel independent steering and its two levels of ground clearance, it shows a high level of agility in every situation. **SCARABEE** is ready for high-intensity operations.



ARQUUS

Protective and Safety Barrier PROBAR®



The construction company STRIX Chomutov a.s., which is part of the Integrated Rescue System (IRS) is primarily focused on special construction and geotechnical or mining remediation. As part of its activities, however, it has been active also in the field of research and development for many years.

Within the framework of these projects, together with the partner of the Faculty of Civil Engineering at Czech Technical

University in Prague, was developed the "Protective and safety barrier PROBAR®". It is a system designed mainly to prevent unwanted intentional but also accidental penetration of vehicles into defined areas and spaces, such as pedestrian zones, squares, sidewalks, etc. The PROBAR® system can also be widely used as protection against possible terrorist attacks carried out with the help of vehicles, including the protection of people, buildings, and other possible targets.

The system consists of four key elements:

- Steel Posts
- Steel Cabling
- Energy absorption system integrated into the interior of individual steel posts
- Anchoring to the ground – The methods of anchoring are dictated by the geotechnical characteristics and structure of the barrier site/ground

Basic features of the system:

- Quick and easy to install into prepared foundations

- Easy setting and regulating of the braking-force energy absorption system
- Increased effectiveness by the use of posts and cables into the shock absorption system
- Aesthetic adaption to meet the local environmental regulations
- The ability to dismantling part of the barrier while maintaining the full functionality of the rest of the system
- The PROBAR® system allows the creation of various geometric shapes – right angles etc – whilst still maintaining the full functionality and efficiency of the barrier
- Full functionality of the system already at a barrier length of approx. 10 meters

The functionality of the PROBAR system is verified by impact tests. Issued certificate of testing according to PAS 68:2013.

www.strixchomutov.cz/obchod/system-probar

Self-propelling Inflatable Decoys



Recent armed conflicts show that heavy firepower is not enough to succeed. Due to the increasing availability of modern technologies, the decisive factor is mostly information at the right time and in the right place. For example, in the battles of Karabakh, flying drones were deployed, thanks to which air defence positions were revealed on the enemy's side. And because the other side did not have enough ground

decoy systems to deal with the situation, it immediately became easy prey for the aggressor's relatively inexpensive offensive drones.

Self-propelling inflatable decoys can be considered highly effective information weapons for the ground forces. On the battlefield, it is necessary to use easily accessible resources that are not subject to complex configuration. And that's why

INFLATECH has come up with a solution where any motor vehicle can be transformed in a few minutes into a main battle tank, for example, both in the enemy's optics and on its infrared cameras and radars. Such a solution is very effective, as the price starting from around 20 thousand US dollars for one inflatech decoy system is many times lower than, for example, the price for the now popular Turkish-made attack drone. Very low transport weight, high durability to re-use and easy operability provide a significant tactical tool to users of mobile inflatech decoy systems that can decide on a key strategic advantage.

www.youtube.com/watch?v=g8Y4sW-68Y4



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- * Ultralight compact design
- * Quick commissioning, easy operation and handling
- * Chassis allows movement even in rough terrain
- * Light aluminium transport cover
- * Protective tent 3x3 m

**AGADOS
WILL ALWAYS RIDE
BEHIND YOU**



Czech Manufacturer Builds Custom-Made Weapon Stations

A number of European countries, including the Czech Republic, have recently focused their attention on the modernization of combat vehicles used by their armed forces. What can EVPU Defence, a successful Czech manufacturer and exporter of electro-optical systems, offer in this regard?

Based in Uherské Hradiště, EVPU Defence produces several state-of-the-art electro-optical devices designed for installation on armored vehicles. These include, for example, GLADIUS and ZSRD-07 remote-controlled weapon stations, CMS-1 commander sight, CRANE gunner sights, LAWAREC laser and radar irradiation detection system and GATRIA awareness system.

All of these products share a unique feature: they can be modified by the qualified specialists in the EVPU Defence R&D and testing centre to fit individual customer needs. In the case of GLADIUS, for example, this means that the device can be used in both land and na-



val applications. Not only does it allow the integration of 7.62mm to 12.7mm machine guns and 30mm/40mm grenade launchers, but it can also carry other weapon

systems such as Spike anti-tank missiles. GLADIUS can be simultaneously mounted with multiple weapons and offers the option to install additional protective features including a laser and radar irradiation system combined with smoke grenade launchers. Customer requirements may also be reflected in the choice of individual sensors.

EVPU Defence is scheduled to display GLADIUS and other military products at IDET 2021 in October this year. You are welcome to find out more on www.evpudence.com or contact EVPU Defence for an optimal custom-made solution on sales@evpudence.com.

A Czech Night Vision Device Used by the SOF

In the spring of 2020, based just on "paper data", the BNVD 4G device was chosen as prospective night vision goggles (NVG) for the CZ Special Operations Forces; an upcoming testing performed by the users was to confirm or refute that choice. At that time, it was not apparent that the testing would be very complex and that there would follow a laboratory testing of all the sample devices. The users tested nearly all kinds of tactics for compatibility when:

- shooting from five types of weapons, including a shotgun, MINIMI machine gun, anti-tank weapon;
- parachute jumping including MFF (Military Free-Fall);
- employing three types of helmets including a currently used AirFrame;
- driving two types of vehicles in the woods.

In the Czech laboratories there were tested extreme climatic (4 parameters) and

optical / electronic parameters (12 parameters) in all delivered pieces. The demanding tests proved that a good result could not have been achieved without the Czech know-how (e.g., the angle of BNVD 4G automatic switching-off if ro-



tated was adjusted to all required types of helmets with various inclines of the front part). This advantage has led to a mutually agreed requirement that within the first year of use the BNVD 4G manu-

facturer, PRAMACOM-HT company, would free of charge fill the devices with nitrogen as well as test the watertightness of NVGs employed by a group of divers. The effect was not long in coming - the device was chosen by the elite JTAC units in Náměšť nad Oslavou and supplied along with the SWIR module for night code confirmation in laser-guided ammunition which is a new capability in the CZ Army. PRAMACOM-HT is involved in the system integration and currently the company deals with a projection of direction / position / distance to the BNVD 4G field of view respecting a direction of observation so that the BNVD 4G user does not have to activate the display of MyVector terminal at night. This is a follow-up

to the capability of sharing information within the radio network at night which is an essential part of the Czech soldier's Modular Combat System (MBK) development.

AtlasPRO – Robust Multi-Purpose UAV and MESH System

New compact UAV with autonomous AtlasNEST Docking Station



AtlasPRO is a combination of advanced technologies and an intuitive user-friendly interface and easy operating system. Quick assembly and simplicity of operation determine this drone for tactical deployment and rescue operations, even under bad weather conditions.

AtlasPRO is managed by a robust tablet – AtlasSTATION which has been designed with the simplicity of an operation as the core guideline. It provides a wide range

of output data from predefined actions as well as immediate tasks. In addition, thanks to the AtlasMESH technology, one Operator can control a fleet of drones just with one tablet. One operator – Automated Multi-UAS Operation. One UAS provides multi-device real-time stream to numerous devices on the ground or to AtlasSTATION.

AtlasNEST Docking Station ensures fully automated AtlasPRO Operation. It makes sure your UAS fleet is always ready to be

deployed at a press of a button, using completely automated takeoff, landing and pre-defined flight route. When AtlasPRO runs out of a battery, it returns back and AtlasNEST autonomously swaps the battery, getting AtlasPRO ready to fly right out of the box again in a few minutes.



AtlasPRO was designed to provide high-end capabilities in many applications. Full range of accessories and settings make the Atlas system ultimate choice for any mission in Defence Industry and Rescue Services.

*More details: Audiopro s.r.o.,
info@audiopro.cz, www.audiopro.cz*

The Parachute Simulator SOKOL™



The Parachute Simulator SOKOL™ is a high-performance e.sigma product for the entire spectrum of parachute operations training. SOKOL™ is a holistic solution, which encompasses all func-

tionalities of a jump, including HALO and HAHO jumps and all types of canopies, including reserve and drop chute as well as pilot chute. SOKOL™ was specifically developed for the multistage

and comprehensive training of all parachute jumpers, from beginners right up to paratroopers, Special Forces and amphibian troops. All the functionalities were developed in cooperation with instructors and professional jumpers.

SOKOL™'s extensive 3D geo-specific visual databases offer a variety of different terrain options, serving as the basis for all types of exercise and mission planning.

Due to the advanced customization capabilities, it is possible not only to train in numerous terrains, different times of day and weather conditions, but also in realistic environments and mission specific locations, both alone as well as in a group jumping scenario.

SOKOL™ helps you acquire safe and accurate chute control, for a variety of chute and line related malfunctions. You can also practice evasive maneuvers and collision avoidance, as well as training under stressful situation to help build confidence and calm during jumps.

TRUCK BED STORAGE DRAWERS

For army, police

To have a fast and easy access to your crucial gear is not always an easy task. Especially in your vehicle! The ideal solution are storage drawers for pickups and vans, which are supplied and assembled by ALFAVARIA Group.

Truck bed storage drawers can be used in army vehicles, rescue units, they are also suitable for service vehicles intervening in the field, for police, expeditions, etc.

Fast access to critical gear

When the drawer is extended, the equipment is organized and easily accessible, at waist level. This saves not only your time, but also your back and knees.

Pull-out system: 2 storage drawers and a cover plate with a load capacity of 900 kg

These are two large-volume drawers made of HDPE, each with a load capacity of 90 kg. The drawers are covered by a board on which you can load up to 900 kg evenly distributed. For pickups, it is possible to place the system on the body without a roof - the drawers can withstand rain, snow, heat. The equipment is therefore safe and, in addition, protected from extreme weather fluctuations.

Availability

Find out about the availability of individual sets at the ALFAVARIA Group by email at army@alfavaria.cz or by phone at +420 602 286 881, where they will be happy to advise you on other questions concerning vehicle installations. You can also find more information on the website www.navahocar.cz



TOVEK - producer of a unique comprehensive analytical tool

In the European context, we are a unique supplier of systems for analyzing structured and unstructured data for decision-making, intelligence, investigation, and defense. We represent a unique source of capabilities (we have our research and development capacities, we implement and adapt products to customers' specific needs).

Customers in all security and defense sectors use our solutions as critical systems and operational tools for the ground forces, police, and security agencies.

We provide training for highly specialized personnel/analysts working in defense and security, as well in the civilian sector.

TOVEK, SPOL. s r.o. is a producer and supplier of a software solution **Analytical Research and Monitoring System Tovek (ARMS)** for the entire security sector of the Czech Republic, including other state cooperating units for more



than 27 years. ARMS enables the coordination of analysis and information sharing between individual components in offline and online mode. ARMS is a Czech software solution independent of third parties, constantly evolving according to customer needs. ARMS is not a single-purpose solution.

We provide our customers with a complete ARMS life cycle:

- standard deliveries and development of

ARMS, including modifications according to customer needs,
- tailor-made development,
- testing,
- technical support,
- application support,
- TOVEK Academy - education of analysts, workshops, IMZ

Our solutions' quality is also evidenced by the company's participation in the EDIDP (European Defense Industrial Development Program) project. We are the only Czech company that has succeeded. Specifically, we participate in the project PEONEER - Continuous observation of the Earth from space with an automated interpretation of information in real-time, including artificial intelligence. TOVEK will co-develop software that will support analysts in recognizing elements, subjects, and motion information through artificial intelligence; maritime and land applications to improve decision-making processes.

Special projects

PK 4 (KAGA) MOBILE FIELD KITCHEN FOR FULL-MENU CATERING FOR UP TO 350 PERSONS



AGA ULT MOBILE FIELD KITCHEN LIGHT AND COMPACT KITCHEN DESIGN



AMPHIBIOUS OFF-ROAD TRAILER

POSSIBILITY OF USING THE TRAILER IN ALL TYPES OF TERRAIN AND OVERCOMING SOURCES OF WATER



WATER TRAILER

HIGHLY EFFICIENT WATER TREATMENT
PRODUCES TASTY WATER
WITHOUT CHEMICAL IMPURITIES



UVA 500 WATER TREATMENT TANK INTEGRATED MOBILE DEVICE - WATER CLEAN SYSTEM



NAVA 2000 WATER TANK MOBILE WATER TANK FOR TRANSPORTING 2000 L OF DRINKING WATER



We also offer mobile lighting tower, freezer box trailer and other types of mobile field kitchens.

The ReGUARD Radar was Introduced at IDEX 2021



One of the most important items in the current portfolio of the Czech technology company Retia is the ReGUARD radar. Retia presented the ReGUARD radar at the IDEX 2021, and the company's representatives negotiated with several business partners, and in addition they signed a cooperation agreement with the Jordanian company Jordan Design and Development Bureau. The development of the ReGUARD radar continues and Retia has started offering it to potential customers.

The ReGUARD is a universal radar design

ned for military and civilian applications. This is the first Czech fully digital 3D radar with active electronically scanned array (AESA) technology. Its conception is flexible, and the radar is optimized for the detection and simultaneous tracking of slow low-flying objects with a small radar cross section and ground targets, but of course it can also detect and tracking aircraft or helicopters. It is therefore also suitable for the detection of unmanned aerial vehicles (UAV), so it can be integrated into anti-UAV defence systems.

An important and new feature of the ReGUARD radar is its ability to classify the type of targets. ReGUARD is able to classify the type of targets in the first phase of detection – ReGUARD can differentiate aircraft, helicopters, drones, birds, land targets and other objects. The radar uses advanced artificial intelligence methods, and the different types of targets are distinguished from each other by the colour of the track symbol on a display.

The ReGUARD combines active electro-

nically scanned array (AESA) and mechanical rotation of the radar head. In the case of objects with a small radar cross section, its range is up to 18 km with an altitude coverage of up to 3 km, in the ground target mode, the range is also 18 km. The radar is passively cooled in the basic variant, the Retia designers have also prepared a climate set, which allows continuous operation of the ReGUARD at temperatures up to 55 °C.



Safe Sky, Secure Ground

The military landscape is constantly changing, with battles being fought in all kinds of terrain and environments. As technology progresses, so too do air threats, with modern-day targets now including Unmanned Aerial Vehicles (UAVs), drones and guided munitions. With Saab's Mobile Short-Range Air Defence (MSHORAD) solution, forces have the capabilities to adapt and respond to these challenges quickly and effectively.



Creating a new line of defence

MSHORAD is a package solution that includes the Giraffe 1X radar integrated with C2, and the RBS 70 NG Remote Weapon System (RWS).

The 3D short-range Giraffe 1X provides 360 degree surveillance coverage at a range of 75 km, generating data to a C2 command and control communication system for analysis and action coordination. With an effective intercept range of

9 km, the high-precision RBS 70 NG RWS ensures coverage from ground level up to 5 km, launching unjammable laser-guided missiles with a high hit probability.

Protecting units on the move

MSHORAD is designed to travel alongside manoeuvring units, offering constant protection and defence of a moving conflict zone. First, a vehicle with Giraffe 1X advances to a position at a distance be-

hind the unit. The radar scans the entire search volume in one second, while the Multiple Hypothesis tracker locates the target. The radar can operate while the vehicle is moving, or when static and in position.

The C2 platform then analyses target data, identifying the threat and creating a local air picture to confirm the required action. C2's Tactical Data Link transmits the information to RBS 70 NG RWS for interception.

A complete package

MSHORAD is a complete turnkey solution, designed to complement existing defence by filling in the gaps in long-range radar coverage created by terrain obstacles. As a modular concept, each component can be easily installed onto any type of vehicle platform for deployment versatility, and can be dismounted for autonomous operation – enabling true mobility on the battlefield.



KOUTNÝ
PROSTĚJOV

Battlefield Announcement System VICM 300

MESIT (a member of OMNIPOL Group) is a manufacturer of tactical communication systems supplying complete solutions of tactical radios and vehicle intercoms, including personal headsets. MESIT has also developed and launched a system for loud broadcast to vehicles' surroundings, so called Public Address (PA) System – VICM 300 Battlefield Announcement System.



The Challenge

Prior to VICM 300 full military specification PA system, there was no way for a commander inside a vehicle to communicate with a civilian population without opening the access hatch and then exposing themselves to danger. The military vehicles are deployed in a wide variety of situations, including travelling through occupied territories and interacting with local populations. Reducing risk and protecting personnel is therefore of critical importance.

The Solution

VICM 300 Battlefield Announcement System keeps personnel in a vehicle under cover, whilst giving them this Public Address communication capability. Also, with a range of 300 metres and an ability to output both live and pre-recorded messages, this is a new enhanced and valued additional benefit. VICM 300 is made up of two rugged loudspeakers mounted on the rotating

turret or the body of a combat vehicle and a programmable control unit installed inside the vehicle. VICM 300 can be operated as a completely autonomous system or it can be integrated with vehicle's electronic and communication systems like Secure Audio Interface System (SAIS) developed and produced by MESIT.

The Benefits

With VICM 300 installed, verbal communication becomes safer and can be included in escalation of force potentially, not only informing local civilians, but also communicating alternatives to combat. De-escalation of potential conflict is not only desirable, but now more attainable and with reduced risk.

The system meets or exceeds all MIL-SPEC to ensure it survives the harsh environments it will encounter in the field.

Czech Republic–United Kingdom Relations for a Benefit of Czech Army

United Kingdom is one of the closest allies of the Czech Republic in modern history. Relations with the Czech Armed Forces have been very intensive since the early 1990s. It is essential for both countries to deepen their military and economic cooperation and to find new opportunities since Great Britain left the European Union. Cooperation between the British company SC Supacat and the Czech LPP is one of the best examples.

SC Supacat is world famous manufacturer of unique, high mobility terrain vehicles that are in arsenal of armies of many countries, such as Australia, Great Britain or the United States of America. LPP focuses on the development and production of its own vetronics, data and control terminals, diagnostic units, monitoring devices as well as on the integration of vehicle information system that is in several types of combat and support vehicles.

Alliance of SC Supacat and LPP offers to the armed forces high quality and battle-proven vehicles. "Creation of strong partnership build on trust is absolutely crucial for us," says about partnership with LPP the Head of SC Supacat, Phil Applegarth. "We bring to the Czech Republic the same benefits that our partners in other countries experienced, including ownership of the product that can be manufactured here for other countries in the region. Our cooperation with LPP is a next step in long and rich history of Czech-British military relations."

Joint team of SC Supacat and LPP brings to the Czech Republic know-how and experience from development and production of special vehicles as well as lessons learned from their deployment in various conflicts. Thanks to LPP's rich experiences with integration of electronic systems which help



soldiers to fight, the Czech Armed Forces can get a vehicle adjusted according to their requirements.

"Our mutual cooperation is still deepening," says General (retired), Miroslav Žižka, Head of strategic projects at LPP. "Supacat's presence in the Czech Republic, and especially our cooperation, will be a guarantee for Czech Armed Forces that they will receive the best quality platforms in category of light assault vehicles. It will not be a benefit only for us but also for other Czech suppliers."

ORITEST



Based on the two decades experience of Oritest's reliable Product Range of Detection Tubes and Papers, Oritest Group, is now extending its activities as a manufacturer to provide innovative and complete CBRN Solutions with a strong focus on supplying the whole range of CBRN Detection and Protection Equipment.

Furthermore we strongly focus to provide the Users with complete CBRN Integration Solutions; like completely equipped Mobile Labs, CBRN Reconnaissance Systems as well as Toxic Waste Recycling Management Treatment and we offer our Customers complete Evaluation, Testing and Training programs at accredited Competence Centres using our extremely experienced, highly skilled Experts, Specialists and Scientists.

Our Team has more than 25 year experience in dealing with CBRN and Environmental Protection Aspects, both in the Military and Civil Area. We hold more than 80 Patents, exporting our products in more than 50 countries worldwide.

Explosia Wants to Deepen Cooperation with the Czech Army

Explosia is one of the traditional companies on the explosives market in the Czech Republic and in Europe. Its best-known product, Semtex, has become a synonym to plastic explosives around the world. Explosia from Pardubice is a major producer of many other products that find application in the areas of the defence and security industry.

Semtex has been an integral part of the company in the past and nowadays. In the fifty years of its existence, its variety has expanded thanks to the customers' requirements and currently ten types of Semtex are offered by Explosia. "Semtex is also used in other products, such as the very popular Semtex Razor, which is applied for



Fully combustible modules for large-caliber ammunition from the production of the Explosia Pardubice.

cutting metals and other materials by e.g. police and military units. It is also in Semtex Desintegrator, which is used for the disposal of suspicious suitcases, for example at airports," adds Radomír

Krejča, Chairman of the Board of Explosia.

Fully combustible modules for large-caliber ammunition have been essential products in recent years. Currently, Explosia has been successfully negotiating with potential customers inside and outside of the EU. Among the deliveries already made, it is possible to mention, for example, the armies of neighbouring countries (Poland, Slovakia). However, the long-term goal is also to secure supplies for the Army of the Czech Republic. "Exp-

losia wants to continue to be a strategic partner of the state. It is a state-owned, stable and verified company. We are ready to provide these supplies for the Czech army," concludes Radomír Krejča.

AERO INDIA 2021



Aero India 2021, the biennial Air show and Defence exhibition organized by the Ministry of Defence of India took place in Feb 03-05 2021 at the Air Force Station Yelahanka, Bengaluru. It is considered to be the largest air show in Asia and traditionally attracts a large number of exhibitors from the world's leading industries in the field of Military and Civil Aviation, Aerospace, Airport Infrastructure and Defence Engineering. The show includes both air displays and static exhibitions of a large array of military platforms from the Aerospace sector. This year, more than 600 exhibitors presented their products and services at the Bangalore airport. In addition to that, for the very first time in history, the virtual exhibition took place online which enabled the exhibitors to reach more than 1,5m global customers regardless of their actual GPS position or time zone.

The Czech representation was united under the official stall organized jointly by the CzechTrade and the Embassy in Delhi. The Czech delegation was supported by the presence of His Excellence Mr. Milan Hovorka; Mr. Jaromir Sebesta, the defence attaché; Mr. Milan Dostal, the Commercial Counsellor and Mr. Ivan Kamenik and Mr. Lubos Ulc (both CzechTrade). The Czech business associations were represented by Mr. Jaroslav Pechacek Jr. (AOBP)

and Mr. Petr Tomasek (MORAVIAN AERO CLUSTER). Czech companies such as TATRA Trucks, PBS India, ELDIS Pardubice, OMNIPOL, SWORDFISH and Czech Aviation Training Center presented their products and services both visually and personally.

Right after the grand opening, the Czech delegation had been consequently invited to the official meetings with all major Indian officials as well as to the key exhibiting companies. Amongst all, let's list the

most important ones: The Defence Minister of India, The Chief Secretary of the Defence Production; The Chief Minister of Karnataka State, Chiefs of the Army Staff, Air Staff, Naval Staff and Defence Staff. From the commercial sphere let's name BEML Limited, HINDUSTAN Aeronautics, BHARAT Dynamics or DRDO R&D. All listed above were introduced to what Czech Republic and its industry can offer from its long tradition of aero & defence production. The Indian partners pointed out





the areas and the ways of proposed cooperation with the stress to the Make In India programme fully supported by the Indian government. In addition to that, individual meetings with local counter parts led to a success and positive development with both current and new contracts e.g. at Tatra Trucks, PBS India or Eldis. Tatra,

with its currently more than 9000 trucks at service in the Indian Army was the most visible wheeled vehicle during the show. In Bangalore, the home town of BEML corporation, Tatra representatives managed to finalize contract for the 300+ truck chassis 8x8 sets for delivery to the Indian Army. Negotiation for another lot

counting 6x6 and 8x8 chassis was also successfully started. The company PBS India was really satisfied with the meetings, especially with the Chief of Indian Air Force. The discussions were focused, besides other areas, on the supplies to the Indian Army's Mi-17 helicopters. ELDIS Pardubice is well known in the civil aviation sector, covering over 90 % of the Indian air space by their radar systems. The representation focused this time their activities towards the use of their products in the military sector.

Last but not least it is important to mention that the event was well organized even in the current pandemic situation and thus offered a unique opportunity for personal meetings under strict security measures. All participants from the Czech delegation evaluated the event as very beneficial and we could name it as a "little miracle" that it happened with no hiccups. Therefore a big appreciation belongs to everyone who participated in this Czech mission organisation as well as to all the participants for the great representation.

Currently due to external circumstances that forced changes in the way of work, especially from home, is more important than ever to keep your devices under full and safe control, even when they leave your corporate computer network. Not only from the point of view of remote user access to the company's environment but also ensuring secure access to devices for their remote management.

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Company TONER s.r.o. is a traditional Czech brand of cutlery and tableware utensils with a longterm manufacturing tradition dating back to the year 1883. Cutlery made in the Czech-Moravian town of Moravská Třebová is known by generations of customers across Europe under our former trade

marks BIBUS, SANDRIK, ROSTEX and for more than 50 years we are proud to be TONER®.

Last year we launched our new product - ARMY field cutlery. We succeeded in a tender for the supply of 14 000 pieces of field cutlery for the Ministry of Defense of the Czech Republic. This

year, the goal is to get this exclusive cutlery among the general public and into the business sphere. The ARMY cutlery forms a compact 4 pieces unit and consists of these parts - a table spoon, a table fork, a hardened table knife and a can/bottle opener. The individual parts can be easily pulled out of the case. The cutlery can be folded again by simply inserting the parts into the case. We use first-class stainless steel material for the production of this cutlery, which is in accordance with TS EN ISO 9445-2, ASTM A240 / A240M and ASTM A480 / A480M. The ARMY field cutlery also has a declaration of conformity.

It is possible to place any laser engraving on this ARMY field cutlery you wish - both in black and colour. Your logo will be presented on the case in which the cutlery is packed. ARMY cutlery with your company's laser logo can be used as a gift to your employees or business partners.



Gumárny Zubří Inc. is engaged in the development, manufacture and marketing of protective full-face masks for military as well as civil uses. In addition, the Company's products range includes OPCH-05 special ventilation chemical insulating suit, developed to meet the needs of the chemical troops of the Czech Army.

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