

# CROMIL

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**CROATIAN ARMED  
FORCES IN STAND-BY  
WITHIN EU BG**

**CONSTRUCTION  
OF NEW INSHORE  
PATROL BOATS FOR  
THE CROATIAN  
NAVY**

**INTERVIEW**

**ŽELJKO PAVLIN,**  
DIRECTOR OF HS PRODUKT

**STANDING STRONG  
AGAINST THE GLOBAL  
CRISIS**

**ALOJZIJE ŠESTAN,**  
DIRECTOR AND CO-OWNER  
OF "ŠESTAN-BUSCH"

**NEW HELMET BY  
"ŠESTAN-BUSCH" WILL  
HALT BULLETS FROM  
ASSAULT RIFLE**

**25<sup>TH</sup> ANNIVERSARY OF THE OPERATION "STORM"**

# DECISIVE BATTLE

**FOR THE FREEDOM  
OF CROATIA**

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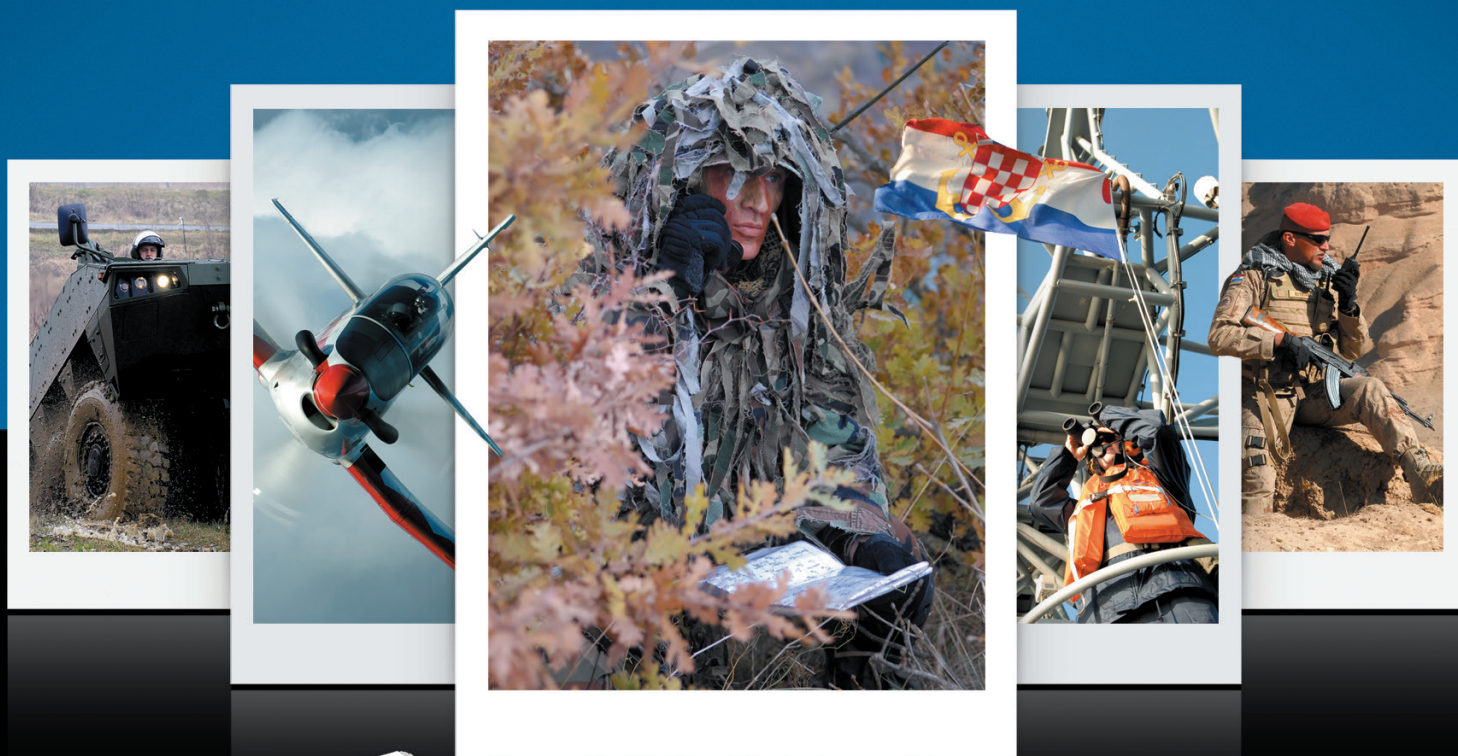


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DEFENCE MINISTER  
**MARIO BANOŽIĆ**

"OUR GOAL IS TO REALISE 13 PROJECTS OF VITAL IMPORTANCE FOR THE CROATIAN ARMED FORCES, AND THE FIRST STEP TOWARDS THE REALISATION IS THE NEW LONG-TERM DEVELOPMENT PLAN OF THE CROATIAN ARMED FORCES, INVOLVING THE PROJECTS THAT WERE NOT REALISED PREVIOUSLY, PARTICULARLY THOSE COMPRISING EQUIPMENT AND DEVELOPMENT"



I shall insist that training and equipment underpin the role of the assistance to civilian institutions.

Text: Croatian Soldier, Photos by: Josip Kopi

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# FUTURE DEVELOPMENT

## OF THE CAF RESTS ON TRAINED, MOTIVATED AND EDUCATED SOLDIERS

**THE MINISTRY OF DEFENCE IS SOMETIMES LABELLED "A STATE WITHIN THE STATE". DO YOU FEEL READY TO TACKLE THE ACCUMULATED PROBLEMS AND WHAT DO YOU PLAN TO DO FIRST?**

After a year in service as Minister of State Property, Mario Banožić was appointed Defence Minister on 24 July 2020. We talked to the newly appointed Minister ahead of the 25th anniversary of the Operation "Storm", and he shared his plans for his mandate. The priority is placed on the strengthening of the Croatian Armed Forces, and the goal is to implement 13 key projects.

**YOU ARE AN EXPERIENCED MINISTER, HAVING EXECUTED THE OFFICE OF THE MINISTER OF STATE PROPERTY PREVIOUSLY. HOW READY ARE YOU FOR WHAT AWAITS YOU IN THE NEW DEPARTMENT?**

My previous professional experience will certainly be of use in this duty and I am looking forward to change. I am aware of the responsibility, but am also honoured with the appointment as defence minister. I have a degree in economics but I am also a person who reflects on national values and goals. I have always identified the military with order, work and discipline.

The COVID-19 pandemic and the earthquake in Zagreb have harmed the Croatian economy as well, which reflected on the budget of the Ministry of Defence, reducing it by HRK 530 mil (now totalling HRK 4.5 billion). A challenging period is ahead of us, particularly in economy terms, in view of 13 projects of vital importance for the Croatian Armed Forces. The first step towards the goal is the development of a new Long-Term Development Plan, involving the projects not realised previously, vital for the equipment and development of the Croatian Armed Forces.

I am aware of the implications of the duty of defence minister and am ready for it. The priority is to continue strengthening the Croatian Armed Forces. Trained, motivated and educated members are their biggest strength and the basis for their further development. We shall therefore focus on investing into Croatian soldiers, NCOs and officers and also continue the investments aimed at improved living and working conditions in the barracks throughout Croatia.

We shall conclude the ongoing capital infrastructure projects in the Croatian Defence Academy and in the Barracks "204<sup>th</sup> Brigade of the Croatian Army" in Vukovar, where the remainder of the Engineer Battalion from Vinkovci will move in during November.

Shortly before the end of the tenure, the former Government adopted the Bill on the Founding of Defence and Security University. I expect that the Bill will be introduced into the Parliament and that we shall start the founding process very soon.







**YOU ALSO ANNOUNCED CONTINUE EQUIPPING AND MODERNISING THE CROATIAN ARMED FORCES AND THAT YOU EXPECT THE COMPLETION OF THE LAUNCHED CAPITAL INFRASTRUCTURE PROJECTS WITHIN THE FIRST SIX MONTHS. HOW WILL THE MODERNISATION OF THE CROATIAN ARMED FORCES DEVELOP AND WHAT PROJECTS ARE PLANNED?**

What I stated means that I will see to that all the initiated projects are continued. In September we shall discuss the offers for the procurement of a multi-purpose fighter aircraft. The Government's position is well-known - Croatia does need combat aviation. However, we have to take into account the current economic situation, the financial aspects and the current priorities. The procurement of four Black Hawk helicopters is planned for 2022, which means that in the meantime we need to prepare the infrastructure and train pilots and technicians. We shall also continue procurement of inshore patrol vessels for the Croatian Coast Guard, i.e. the Croatian Navy. The priorities for the Croatian Army consist in equipping Patria APVs and the procurement of the U.S. - made Bradley fighting vehicles.

**We shall soon discuss the offers for the procurement of a multi-purpose fighter aircraft. The Government's position is well-known - Croatia does need combat aviation.**

**YOUR PREDECESSOR RESIGNED AFTER THE TRAGIC DEATHS AT DUTY OF YOUNG SOLDIERS. DO YOU THINK THAT MINISTERS HOLD RESPONSIBILITY FOR THE ACCIDENTS OF THE KIND?**

Accidents occurring in the Croatian Armed Forces are not and cannot be the sole responsibility of the Minister. Each accident, particularly the fatal ones, involving death, severe injuries or major property damage, always receives special attention from all relevant officials in the defence system.

In my view the defence minister has to readily accept his/her share of responsibility, political and moral responsibility. I also believe that in every accident there is a wider circle of individuals who are objectively or subjectively responsible. This is not about moral responsibility but also pertains to command responsibility, or discipline, or even criminal liability.

Military profession is more challenging, demanding, and risky than most civilian jobs. The fact itself that soldiers operate large, complex and potentially lethal equipment,





The priorities for the Croatian Army consist in equipping Patria APVs and the procurement of the U.S.-made Bradley fighting vehicles.

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#### THE RESIGNATION OF THE PREVIOUS DEFENCE MINISTER HALTED THE TALKS REGARDING THE PROCUREMENT OF AIRCRAFT FOR THE CROATIAN AIR FORCE. WHAT DO YOU PLAN TO DO ABOUT IT?

After the analysis, the interdepartmental commission for the procurement of a multi-role fighter aircraft at the Government sent a request for bids to the United States for the F-16 and Sweden for JAS Gripen, and to France (Rafale), Italy (Eurofighter), Norway, Greece and Israel for used F-16 aircraft. I hope that the overall process, after the bids survey, will conclude by September, after which the Commission will propose the appropriate decisions.

The procurement of four **Black Hawk** helicopters is planned for 2022, which means that in the meantime we need to prepare the infrastructure and train pilots and technicians

#### TODAY, THE CROATIAN ARMED FORCES ARE MUCH MORE OPEN AND CLOSER TO THE CITIZENS, AND SOLDIERS REGULARLY TAKE PART IN DISASTER RELIEF OPERATIONS. DO YOU FORESEE THE MILITARY GROWING CLOSER TO THE CIVIL COMMUNITY OR YOU SEE A NEED FOR SHARPER BOUNDARY BETWEEN THE MILITARY AND THE CIVILIAN SECTORS?

The Croatian Armed Forces, being a component of the homeland security system, have shown many times that it is always ready to help our people in need. We saw this after the earthquake, but also during the firefighting season. In my capacity as Minister I shall insist that training and equipment underpin the role of the assistance to civilian institutions.

#### We shall also continue procurement of inshore patrol vessels for the Croatian Coast Guard, i.e. the Croatian Navy

often under stress, requires top-level training, practice and utmost attention. Unfortunately, sometimes even that is not enough to prevent accidents. Each incident is investigated officially, in detail and thoroughly. Even in cases where an unfortunate turn of events or technical malfunction is established, it is probably caused by human factor, either as an effect of lack of accuracy in the system maintenance, a fault related to training or preparation for operating the system, up to the direct responsibility of the individual through misreading, carelessness, negligence or over-reliance on routine. No accident should be considered as an uncontrollable circumstance. Upon investigation and analysis each accident can be used as a lesson learned to improve the system. Each perceived detail should offer a measure to eliminate in order to avoid or reduce accidents.





## 25<sup>TH</sup> ANNIVERSARY OF THE OPERATION "STORM"

THE OPERATION "STORM" IS THE GREATEST MILITARY VICTORY IN THE HISTORY OF CROATIA. WITHIN THE 84-HOUR FRAMEWORK OF THE OPERATION, WHICH ENGAGED NEARLY 200,000 TROOPS) THE CROATIAN ARMY LIBERATED MORE THAN 10,000 KM<sup>2</sup> OF THE TERRITORY AND ACCOMPLISHED ALL PLANNED OBJECTIVES. IT WAS THE FINAL VICTORIOUS OPERATION, PROUDLY COMMEMORATED ON 5 AUGUST SINCE AS HOMELAND GRATITUDE DAY, IN MEMORY OF THE BRAVERY OF THE CROATIAN DEFENDERS AND THE FREEDOM WE ENJOY TODAY...



# DECISIVE FOR THE FREEDOM



The Operation "Storm" was launched following years-long futile efforts of the Croatian state authorities and of the international peace forces to reach a peaceful political and diplomatic solution and to establish constitutional order and security throughout Croatia.

Following another futile peace initiative, a decision was made to launch the Operation "Storm" at a meeting of President of Croatia Franjo Tuđman and the commanding staff of the Croatian Army in Brijuni on 31 July 1995.

The attack by the Croatian military forces was launched early on 4 August 1995. The Operation was intended to break through the defence of the rebelled Serbs in a simultaneous attack along several directions, to liberate the entire occupied area of north Dalmatia, Lika, Kordun and Banovina and reach the internationally recognised borders on Bosnia and Herzegovina, maintaining persistent defence of east Slavonia and southernmost part of Croatia, and to prevent the Serbian forces from occupying the protected zone of Bihać.





**On the very first day the Croatian Army advanced 5-15 km and surrounded or semi-encircled the aggressor's strongholds and 80% of the planned combat tasks were accomplished.**



# BATTLE OF CROATIA

The principal assignments tasks in the first phase of the Operation was to take control of the avenues towards Knin, the Ljubovo and other passes pass in Velebit Mountain and to effect breakthrough along the avenue of attack of the 1<sup>st</sup> Guards Brigade (Glibodol – Plitvice – Tržaska Raštela) and of the 2<sup>nd</sup> Guards Brigade (Gora – Banski Grabovac – Obljaj) respectively.

The main attacks were planned along the routes Bosansko Grahovo – Knin and Josipdol – Plaški – Tržić, with the aim of disrupting the Serb forces, converging with the forces of the 5<sup>th</sup> Corps of the Army of Bosnia and Herzegovina and liberating Knin, the centre of the Serbian rebellion.

After the first defence line of the rebelled Serbs was broken, in the second phase the Croatian forces introduced fresh forces and resumed the attack towards the state border on Bosnia and Herzegovina. Following the initial strikes by the Croatian Air Force against the aggressor's signal centres and by the artillery strikes against military



targets, the Croatian forces advanced from 30 directions concurrently along a 70-km long frontline. The striking forces along the main avenues were the guards brigades augmented with the Croatian Guards Division, the Special Police of the Ministry of the Interior, the Home Guard units and the reserve forces.

The striking forces along the main attack avenue from Dinara Mountain towards Knin were the 4<sup>th</sup> and the 7<sup>th</sup> Guards Brigades. The 9<sup>th</sup> Guards Brigade and Special Police operated on the avenue from Velebit Mountain towards Knin, while the Croatian Guards Division infiltrated deep behind the aggressor lines by helicopter. The 1<sup>st</sup> Guards Brigade was the main force to the north, from Kapela Mountain in the directions towards Slunj, Rakovica, Titova Korenica and Plitvice, and the 9<sup>th</sup> Guards Brigade was tasked with seizing the Ljubovo Pass and neutralising the Yugoslav air base at Udbina. The operations were conducted in the zone of responsibility of the Military Districts Split and Gospić.





The forces of the Military District Split were tasked with neutralising the forces of the 7th Corps of the Republic of Serbian Krajina and to liberate the occupied areas in north Dalmatia. The forces were divided into four operational groups – (OG Zadar, OG Šibenik, OG Sjever ("North") and OG Sinj), and the striking force was the OG Sjever with the 4<sup>th</sup> and the 7<sup>th</sup> guards brigades. The forces of the Military District Split broke through the first defence lines of the enemy units around Knin on the very first day, and later on pushed the enemy towards the border on Bosnia and Herzegovina and liberated the entire area of north Dalmatia.



During the Operation "Storm" in the area of Banovina the 21<sup>st</sup> Kordun Corps was encircled by the forces of the Croatian Army units and forced to surrender. The original journal kept during the negotiations and the surrender of the Corps reveals the course of the disarmament and evacuation of the Krajina military and of the civilians, and above all the humane conduct by the members of the Croatian Army, who adhered to all international humanitarian law rules as always.

**The majority of the occupied Croatian towns were liberated (Kostajnica, Petrinja, Glina, Slunj, Gračac, Obrovac and Drniš in the first days). On 5 August the forces of the 4<sup>th</sup> and the 7<sup>th</sup> guards brigades entered Knin, whose liberation constituted the major strategic political and military objective of the Homeland War. A few days before enemy forces in the north battlefield (21<sup>st</sup> Kordun Corps) were forced to surrender.**

The main task of the Military District Gospić was to disrupt the defence of the 15<sup>th</sup> Corps of the Army of the Republic of Serbian Krajina and to cut off the Serbian forces in the wider area of the Plitvice lakes and to converge with the forces of the 5<sup>th</sup> Corps of the Army of Bosnia and Herzegovina. In the second phase of the Operation the forces were ordered to liberate the entire territory of Lika and reach the state border on Bosnia and Herzegovina. The striking forces of the Military District were 1<sup>st</sup> and 9<sup>th</sup> guards brigades.

The area of responsibility between the Military District Gospić and the Military District Split in Velebit Mountain was assigned to Special Police of the Ministry of the Interior, which was tasked with taking control of the wider area of Gračac and Sv. Rok, and with seizing the Čelavac radio relay hub (the Serbian forces' main signal hub). In the following phase the Special Police was tasked with converging with the Croatian Army and execute breakthrough towards the border on Bosnia and Herzegovina in the area of Donji Lapac.

On the first day of the Operation the Special Police of the Ministry of the Interior (1,500 members of the Special Police and 700 more in the reserve) launched attacks of one main and on four supporting avenues from Ivine vodice and Sveto brdo to the west to Bukva and the Tulove grede peak to the east.



Marking 5 August - the Victory and Homeland Gratitude Day and Croatian Defenders Day - a crew of 11 of the River Flotilla Company of the Engineer Regiment of the Croatian Army set sail aboard the Patrol Boat "Šokadija" (OB-93) in Osijek and arrived to Vukovar. Passing by the Memorial Cross on the confluence of Vuka into the Danube in Vukovar the crew manned the rails aboard the decorated boat paying respects to the heroic town of Vukovar. The voyage began on the eve of the anniversary – on 4 August – when a crew of 11 set sail from the Barracks "Vrbik" in Osijek early in the morning and after 12-hour navigation along the Drava River and the state border along the Danube arrived to Vukovar. Passing near Batina, Aljmaš, Erdut and Dalj, the boat crossed more than 150 river miles.





## SOLEMN CEREMONY IN KNIN

The year 2020 is the jubilee 25<sup>th</sup> anniversary of the greatest and decisive military victory in the Homeland War of 5 August. It was a time of determination, pride and unity on which we build the future, it was the closing chapter of the victorious advance of the Croatian Army and the final liberation of Croatia, and the ceremony held in Knin, commemorating the great military victory gathered the highest state and military officials. The church bells rang at 9:43 signalling symbolically the moment of entry of the Croatian Army into Knin during the Operation "Storm" operation, and a Croatian flag was hoisted on the mast atop of the Knin Fortress 25 years earlier. In addition to the recount of the Operation and the reciting of the roll of honour of the 241 fallen and missing participants in the Operation "Storm", 25 honorary volleys were fired and two MiG-21 fighter aircraft flew past the town in honour to the fallen defenders. The 2020 ceremony differed from the past ones in view of safety and people protection measures in vigour, and was displayed live on a video wall on the main square in Knin.

The forces arrived and dispersed to the initial postings secretly by walk, along with the logistic and medical support, to reach the Serbs' positions as closely as possible. The forces of the Military District Karlovac were tasked with disrupting the defence of the 21<sup>st</sup> Corps of the Army of the Republic of Serb Krajina and preventing the shelling of the towns and industrial facilities in its area of responsibility, and also liberating of the wider area of Ogulin, Karlovac and Kordun and halt possible counter-offensive in the area between the Korana and Mrežnica rivers. The tasks completed, the order for the forces of the Military District Karlovac was to liberate the entire area of Kordun (jointly with the forces of the Military District Zagreb and of the Military District Gospić) and reach the state border on Bosnia and Herzegovina. The units of the Military District Zagreb and the Military District Bjelovar were tasked with liberating the province of Banovina. The planned action previewed encirclement of the area from several routes.

The striking force of the Military District Zagreb along the route towards Petrinja, where the enemy resisted fiercely further towards Glina, was the 2<sup>nd</sup> Guards Brigade. Augmented with the units subordinated to the General Staff of the Croatian Army and with the special forces of the Ministry of the Interior, the military districts were tasked with neutralising the defence of the 39<sup>th</sup> Corps of the Army of the Republic of Serb Krajina, liberating the Banovina province, converging with the forces of the 5<sup>th</sup> Corps of the Army of Bosnia and Herzegovina and reaching the state border.

The Operation was planned along three avenues – direction Petrinja, Hrvatska Kostajnica and Glina. In the first phase the striking forces of the military districts were tasked with cutting off Petrinja, destroying or forcing the encircled Serbian forces to unconditional surrender and with liberating the town. The forces operating along the supporting route were tasked with liberating Hrvatska Kostajnica, and with liberating Glina in the second phase. The forces of the Military District Bjelovar were tasked with crossing Sava River, destroy the enemy in the right

bank, to execute an offensive with the striking force along the route Jasenovac – Hrvatska Dubica, to liberate Hrvatska Dubica and converge with the forces of the Military District Zagreb.

The units of the 3<sup>rd</sup> and 5<sup>th</sup> guards brigades were put in the state of alert in east Croatia, under the command of the Military District Osijek in the event of aggressor manoeuvres. The Military District Osijek's defence task (codenamed "Feniks") was to halt the advance of the Serb forces in east Slavonia.

The Croatian Air Force provided support to the land forces along the routes of attack, secured the air defence of the Croatian territory (with the focus on the area between Zagreb-Karlovac-Sisak-Kutina and in the Sinj area), performed air reconnaissance flights, transported the air forces and evacuated the wounded. The entire resources were engaged in the Operation (17 MiG-21 aircraft, three transport aircraft, five assault and nine transport Mi-8 helicopters, the electronic reconnaissance aircraft (An-2) and the Mi-24 electronic thermo-vision reconnaissance helicopter) and all airports and airfields across the country. The first targets were the fortified Serbian military installations and positions at dominant elevations, the communications centres, arms depots, artillery and armoured units, while in later phases it provided fire support to the Croatian land units in offensive actions. The Croatian Navy spent "Storm" in the elevated alert, prepared for active naval defence with a focus placed on anti-ship, anti-submarine and counter-mine combat. Naval defence in the north and central Adriatic was conducted according to the Order Turs-95, and in the south Adriatic as part of the defensive operation "Maestral" in the Southern Dalmatian Battlefield.

In tactical and strategic terms it was the greatest military victory in the history of Croatia. Sadly, 204 Croatian soldiers and policemen lost their lives, 1,100 were wounded, and two are listed as missing.





# CAF WILL DEVELOP AS MODERN, WELL-EQUIPPED AND TRAINED MILITARY

Author: Domagoj Vlahović, Photo by: Mladen Čobanović

**"WE SHALL CONTINUE INVESTING INTO OUR PERSONNEL – THE MAIN PRIDE OF THE CROATIAN ARMED FORCES, AS THEIR MAIN VALUES AND POTENTIAL"**

Except during the Homeland War, hardly any chief of the General Staff encountered a series of extraordinary and unexpected events and circumstances as did Admiral Hranj shortly after assuming the duty on 1 March 2020. At this critical time Admiral Hranj's rich experience from the Homeland War and the previous duties in military diplomacy and NATO, in the Croatian Navy and as Director of the General Staff is valuable. In an interview on the occasion of the 29th anniversary of the Croatian Armed Forces for our magazine, Admiral Hranj elaborated on the Croatian Armed Forces' response to crises and how they affected their future.

**WE WITNESSED TO THE ENGAGEMENT OF THE CROATIAN ARMED FORCES PITCHING THE TENTS IN FRONT OF THE CLINICAL HOSPITAL DUBRAVA, AND ALSO CLEARING THE RUBBLE AFTER THE EARTHQUAKE IN ZAGREB. HOW DO YOU EVALUATE THEIR PERFORMANCE?**

As part of the Homeland Security System, our task is to help our citizens when it is most difficult. Assistance to civilian institutions when the legal conditions are created is one of the three core missions of the Croatian Armed Forces. I believe we displayed good readiness, organisation and motivation to assist when necessary. At 6.30 on Sunday 22 March 2020 – immediately after the strong earthquake – the Croatian Armed Forces were put on high alert at 6.30, and 150 members arrived to Zagreb and started clearing the rubble in the town centre. The Croatian Armed Forces provided rapid response in the epidemic conditions too, pitching an expeditionary camp in front of the Clinical Hospital Dubrava within just 72 hours. I feel deeply proud of the quick reaction and organisation of the Croatian Army, which placed its capabilities and equipment at the disposal of the country and its citizens, in a difficult and unpredictable situation, minutes after the strongest earthquake over the past 140 years, and engaged with assistance to the City of Zagreb in relief activities.

**HAVE THE CROATIAN SOLDIERS ADHERED TO THE EPIDEMIOLOGIC MEASURES AND HAVE THEY BEEN PROVIDED WITH SUFFICIENT PROTECTIVE AND HYGIENIC EQUIPMENT AND WITH MILITARY MEDICAL SUPPORT?**

The situation with the COVID-19 pandemic is evolving daily. We have made efforts to implement the protective measures within the Croatian Armed Forces in full accordance with the guidelines of the National Civil Protection, paying due attention to maintaining their readiness for task execution.

The figure is 14 infected individuals among the personnel of the Ministry of Defence and of the Croatian Armed Forces since the first cases in Croatia. Having the insight into the working and living conditions of our soldiers we undertook all available measures against the entry of the COVID into the ranks of the Croatian Armed Forces. Some of the members got infected during the international deployments, where some factors were beyond our control. In most cases the members got infected within their families, and few on duty. Hygienic measures are followed strictly, and sufficient supplies of protective equipment are in place. The members of the medical staff have monitored the implementation of the measures, and epidemiologists promptly conduct expert supervision upon each reported suspected infection case. All contacts of the sick – not only the identified members of the Croatian Armed Forces – are placed in isolation – and surveilled by the Military Police, which has not registered any case of violation of the measures. This speaks enough of the awareness and consciousness of Croatian soldiers.







## INTERVIEW

### HOW DID NATO'S MILITARY COMPONENT RESPOND TO THE PANDEMIC? HOW DID THE MILITARY COMMITTEE OPERATE AND WILL IT RECOMMEND REFORMS IN ORGANISATION, OPERATION AND TASKS?

Almost all countries, NATO member nations included, have been faced with the outbreak of COVID-19. NATO as organisation took the potential threat very seriously and set immediately to prepare a response. NATO's Task Force for COVID-19 has been put in place, tasked with co-ordination, integration and harmonisation of NATO's military activities and capacities in support to the Allies and partner countries. The strategic, operational and tactical activities are co-ordinated, and the needs of individual member nations are co-ordinated with the capacities of other ones to offer tangible assistance. The Task Force coordinate the NATO's unique strategic airlift capability, which delivers hundreds of tons of necessary equipment quickly and efficiently, and provides support in building field hospitals and with the deployment of additional military medical personnel for civilian purposes. NATO recognised instantly that the pandemic should not impair the collective capability of deterrence and defence and that it had to ensure that the health crisis did not grow into a security crisis. The Chairman of NATO Military Committee talked to the chiefs of defence of each member nation to exchange the respective national experiences with response to COVID-19, to facilitate the drafting of the collective crisis response strategy, primarily for NATO forces in operations. The Chairman was briefed on Croatia's experience with fighting the pandemic as well as on the plans and activities of the Croatian Armed Forces. The measures introduced into the area of operations were effective, as evidenced by the absence of the entry of the virus into the military population in many NATO-led operations. In addition to collective efforts, each member nation undertook measures estimated as necessary. Thus, Croatia sent-off a medical team with additional medical equipment to provide medical care for the Croatian contingent deployed to NATO's Enhanced Forward Presence. Medical reinforcement was agreed and implemented jointly with Germany as the Lead Nation of the EFP Battlegroup in Lithuania. The Croatian Government lent an aircraft to the transport of the team and of the equipment. Croatia provided contribution to KFOR too, seconding a highly competent physician as chief medical advisor to Commander of KFOR.

### WHAT IS THE ROLE OF THE PHYSICIANS, IN PARTICULAR OF THE EPIDEMIOLOGISTS OF THE CROATIAN ARMED FORCES IN THE STRUGGLE WITH THE COVID-19 PANDEMIC?

The military physicians were assigned an additional duty with their basic tasks of providing healthcare of forces, which they implement in the conditions characterised by transmission of a novel and unfamiliar cause of a contagious disease. They were provided assistance from our epidemiologists, who have monitored the situation from the very outbreak of the epidemic and issued guidelines on prevention measures. For instance – they prescribed wearing of protective masks during their service and intensified disinfection of the dispensaries, restricted access to the dispensaries waiting rooms, and all hygiene measures for the members of the Croatian Armed Forces. The General Staff has been actively involved in the operation of the Civil Protection Headquar-



**Most exercises, particularly the large international exercises and courses planned for the first half have been cancelled due to the pandemic. Some of them have been postponed for the latter half of the year. In the forthcoming period the intensity of the training activities and exercises will be reduced. The focus is currently placed on individual training and training of small teams and groups.**

ters, and the physicians of the Croatian Armed Forces have been engaged assisting the civilian institutions, as a component of the overall healthcare system, and many have been assigned as POC with the county healthcare authorities. The best indicator of their efficiency is the low incidence of infection among the members of the Croatian Armed Forces at work, and no incidence whatsoever among the medical staff.

### SHOULD THE CROATIAN ARMED FORCES REINFORCE THE MILITARY MEDICAL SECTOR?

The foundation for elaborating the development of the military medical system can be drawn from our experiences from the Homeland War, when we relied strongly and successfully on both the military medical service and on the national health system. Bearing in mind national defence as the core mission of the Croatian Armed Forces, in my view we need to develop the concept of integrated civil-military approach to the military medical system. A possible organisational solution in terms of strengthening of the military capabilities of the medical system is to ensure a balance between the capabilities of the active military medical system and the personnel reinforcement, which can be ensured through the contract reserve system for physicians and other medical staff. The experience with the epidemic is an opportunity for better adaptation and new plans for development of a system with a well-defined role of the medical service. Judging from how various institutions at the national and global level responded to the crisis, we cannot neglect the importance of the organisation and the response speed provided by the military.

### WILL THE PROCUREMENT OF THE ROLE-2 AND OTHER EQUIPMENT FOR THE MILITARY MEDICAL SECTOR BE SPEEDED UP AS A CAUSE OF THE PANDEMIC?

The project of equipment of the Croatian Armed Forces with the deployable ROLE 2 system is under way. The implementation plan considers several options of equipment with the costly military medical infrastructure. The development of ROLE - 2 infrastructure stems from the requirements related to NATO Target Capabilities and the required capabilities for national defence and the assistance





by the Croatian Armed Forces to civilian institutions in emergencies. The project is complex, with specific technical requirements and realisation timeline. Although it was given a priority status, given the present challenges, it is hardly likely that the project will be expedited. The provision of the military medical sector with other appliances is planned as a multiannual equipment project. The equipment timeline will depend on the financial capacities, and the end solution has to be reached in a broader consensus on the development of the military medical system.

**THE ANTI-PANDEMIC MEASURES REDUCED THE NUMBER OF EXERCISES AND TRAINING ACTIVITIES FOR THE CROATIAN ARMED FORCES. WILL THIS AFFECT THEIR COMBAT READINESS? WILL THESE ACTIVITIES INTENSIFY AND BE COMPENSATED AS THE MEASURES EASE?**

Indeed, most exercises, particularly the large international exercises and courses planned for the first half have been cancelled due to the pandemic. Some of them have been postponed for the latter half. In the forthcoming period the intensity of the training activities and exercises will be reduced. The focus is currently placed on individual training and training of small teams and groups. Another important task are drafts and revisions to doctrine publications, tactical manuals and training programmes for training activities. Training for the operation of new systems, the maintenance of key combat capabilities and pre-deployment training have remained unchanged and are conducted as planned, while an additional cycle of the Specialist Military Training and of the Voluntary Military Service is planned by the end of 2020.

**WILL THE DRAFTING PLANS IN 2020 REMAIN THE SAME AS BEFORE THE PANDEMIC? IS THE INTEREST IN MILITARY CAREER INCREASING OR DECLINING?**

The COVID-19 pandemic has halted all drafting processes, and the size of the reception has been adapted. I am glad that the interest of the youth to join the Croatian Armed Forces has not declined. I firmly believe that in spite of the problems we shall carry out the drafting as planned, according to the needs.

**The Croatian Armed Forces procured a set of AGM-114 Hellfire missiles from the United States to mount on the OH-58D Kiowa Warrior helicopters. It ensured full operational capability for the helicopters, and the Croatian Armed Forces have obtained additional striking combat power.**

**WILL THE LONG-TERM DEVELOPMENT PLAN SEE SOME SUBSTANTIAL CHANGES PRIOR TO THE PUBLICATION?**

The Croatian Armed Forces are undertaking the new Long-Term Development Plan, which is an important task and a challenge. The Plan will mostly be oriented towards the development of the Croatian Armed Forces over the upcoming 12-year period, as a modern, well-equipped and well-trained force, interoperable with the Allies' armed forces and capable of exercising the tasks requested by the civil community. Our future efforts will be focussed on more intensive modernisation for development of capabilities to respond to classical and new hybrid threats (terrorism, expansion of weapons for mass destruction and also threats which are presently not associated with the military but may soon require our participation too. The Long-term Development Plan will certainly be revised. Due to the COVID-19 crisis the changes will reflect in the GDP and in defence budget. I hope that we will just have to delay some projects and not cancel them.

**WHAT IS THE SITUATION WITH THE INSHORE PATROL VESSEL AND BLACK HAWK HELICOPTERS?**

Given the current situation, we do not expect any negative reflections on the realisation of the projects of Inshore Patrol Vessel and the Black Hawk helicopters. The two projects are proceeding as planned and in compliance with the contracts signed with the manufacturer and supplier.

**CROATIA HAS RECEIVED THE AGM-114 HELLFIRE MISSILES. WHAT WILL BE THE BENEFIT OF THE PROCUREMENT OF THE MISSILES?**

The Croatian Armed Forces procured a set of AGM-114 Hellfire missiles from the U.S. Army for the purpose of equipping the OH-58D Kiowa Warrior helicopters to attain full operational capability, and the Croatian Army built additional striking combat power. By procuring the rockets missiles, we ensured long-distance and high-precision anti-armour combat capability applicable in day and night conditions and with reduced risk for the crew. The AGM-144 are sophisticated anti-tank missile by Lockheed Martin, and is guided to the target using a laser beam from an aircraft or ground guidance station and is operable in any field conditions. The procurement of the Hellfire missiles is part of the overall plans to enhance the Croatian Armed Forces' defence capabilities.





MEMBERS OF THE CROATIAN ARMED FORCES CONTINUE TO PARTICIPATE IN NUMEROUS MISSIONS AND OPERATIONS WORLDWIDE, ON LAND AND SEA AND IN THE AIR, ALONGSIDE THE ALLIES AND PARTNER COUNTRIES

**THE CROATIAN  
ARMED FORCES  
HAVE PROVIDED**

# PEACE SUPPORT

**IN OPERATIONS ON LAND AND SEA AND IN THE AIR**





The missile boat RTOP-2 "Dubrovnik" of the Croatian Navy in early September set sail from the Barracks "Admiral flote Sveto Letica-Barba" in Split to take part in NATO-led peace support operation "Sea Guardian" in the Mediterranean. It serves as 3<sup>rd</sup> Croatian Contingent with a crew of 32, commanded by the Commander of the Missile Boat, Lieutenant (N) Ante Uljević. The engagement of the vessels of the Croatian Navy in the operation "Sea Guardian" is a Croatian contribution to the Allied efforts to ensure joint security at sea through the basic operation missions: supporting counter-terrorism, supporting maritime situational awareness and contributing to the development of regional maritime security, preserving freedom of navigation, conducting maritime interdiction, countering the proliferation of weapons of mass destruction and protecting critical infrastructure. Croatia has taken part in "Sea Guardian" on an annual basis since 2018.







## LITHUANIA AND POLAND

Regarding the collective security along NATO borders, the Croatian Armed Forces has taken part in NATO's Enhanced Forward Presence in Lithuania and Poland. The 2<sup>nd</sup> HRVCON composed of 188 members, mostly the members of the 3<sup>rd</sup> Mechanised Battalion "Pauci" of the Guards Mechanised Brigade of the Croatian Army, was sent off to Lithuania in late 2019. Having completed their mission and displayed professionalism in aggravated circumstances of the risk of spread of COVID-19, the Contingent returned to Croatia on 23 July 2020.

In NATO's Enhanced Forward Presence in Lithuania Croatian forces are engaged in the Germany-led Battlegroup, alongside the armed forces of the Netherlands, Norway, Belgium, Luxembourg, France and Lithuania as the Host Nation. The 6<sup>th</sup> HRVCON, composed of 80 members (six females), is presently deployed in NATO's Enhanced Forward Presence in Poland. The main component is manned by the members of the Artillery and Rocket Battalion of the Guards Mechanised Brigade of the Croatian Army, a Military Police Team, a NSE, a CIS team and staff personnel. The Contingent is commanded by Captain Antonio Burazer. In a six-month rotation the Contingent will continue participating in NATO's Enhanced Forward Presence in the U. S.- led Battlegroup, alongside the members of the armed forces of Romania, the United Kingdom and Poland as Host Nation. Prior to the send-off the Contingent spent a two-week quarantine in the

Barracks "Predrag Matanović" in Petrinja, in accordance with the epidemiologic measures and recommendations in effect. Testing negative to COVID-19 after the quarantine the Contingent fulfilled the last requirement for the deployment in the area of activity in Poland.

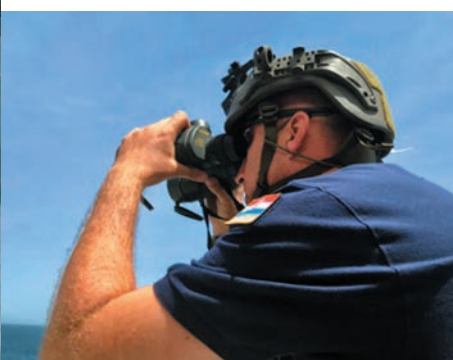
## AERIAL SUPPORT MISSION IN KOSOVO

In mid-summer the B-rotation of the Air Component of the 33<sup>rd</sup> HRVCON arrived to the area of NATO peace support operation in Kosovo aboard a MI-171Sh helicopter of the Croatian Air Force. The B-rotation is composed of 11 members of the Croatian Air Forces, and is commanded by Major Bernard Bartoluci, the Group Commander of the 194<sup>th</sup> Multi-purpose Squadron of the 91<sup>st</sup> Wing of the Croatian Air Force. The Croatian Armed Forces have provided support to KFOR since 2008, when the first Contingent was deployed.

## LEAVING AFGHANISTAN

The lowering of the Croatian flag at Camp Marmal in Mazar-e-Sharif, Afghanistan on 12 September 2020, officially marked the conclusion of the 12<sup>th</sup> HRVCON participation in NATO-led peace support mission "Resolute Support", after which no Croatian soldiers will remain in the mission. The 107-member 12<sup>th</sup> HRVCON was deployed to the mission in Afghanistan in March, commanded by Colonel Ivica Matanović, and returned to Croatia in September.





The main flag-lowering ceremony was held at the Ehrenthain Memorial – a monument to the fallen members of the coalition forces in Afghanistan, at which the flags of all the participating states are flown. After the performance of the national anthem, the TAAC-NORTH Commander, Brigadier General Ansgar Meyer handed over the Croatian flag to Colonel Ivica Matanović, the Commander of the 12<sup>th</sup> Croatian contingent. Concurrently, the members of the 12<sup>th</sup> HRVCON also lowered the Croatian flags at seven remaining locations within the Camp Marmal camps too. Brigadier General Ansgar Meyer in his address shared his pride over commanding the Croatian soldiers and appreciated all members of the Contingent for their contribution and professional commitment towards the assigned tasks and towards members from other countries contingents. The victory of the Croatian team in a triathlon competition enhanced the ceremony. The team (Private Antonio Đurčević, Private First Class Mladen Paudenović and Private First Class Dejan Knežević) competing with five teams from Germany and the Netherlands displayed superb physical readiness and proved Croatian teams' superiority in the competitions organised in the Camp Marmal. Since 2003 more than 5,500 members of the Croatian Armed Forces took part in the missions in Afghanistan, first in ISAF and after 2014 when it was concluded, they continued their contribution in Afghanistan alongside the allies and partner nations through the Resolute Support peace support mission.

**Since 2003 more than 5,500 members of the Croatian Armed Forces took part in the missions in Afghanistan, first in ISAF and after 2014 when it was concluded, they continued their contribution in Afghanistan alongside the allies and partner nations through the Resolute Support peace support mission.**

The Croatian contingents were assigned with force protection, individual staff officers' duties, advisor tasks, mentoring of members of the ANSF and national support to the Croatian contingents. The Croatian contingents also incorporated members of the armed forces of the U. S.- Adriatic Charter nations (Montenegro, Albania, Bosnia and Herzegovina and North Macedonia).

### "INHERENT RESOLVE" IN KUWAIT

Since 2017 members of the Croatian Armed Forces have been participating in the US-led operation "Inherent Resolve", engaging Coalition forces, tasked with combating the so-called Islamic states in the territory of Syria and Iraq. "Inherent Resolve" is the largest coalition operation in history. It has engaged more than 120 countries and organisations, and 27 countries have presently deployed their forces to the area of the Operation. The Croatian Armed Forces have assigned one staff officer to the Operation Command in Kuwait. Captain Mario Vukadin, a member of the Military Police Regiment, assigned since 2019, has been awarded the U.S. Army Joint Service Commendation Medal for achieving outstanding results and contribution to Operation "Inherent Resolve".



### AFGHANISTAN

As many as 4,432 members of the Croatian Armed Forces took part in ISAF, and 1,290 in Resolute Support Mission respectively – a total of 5,722 Croatian soldiers.

"When the overall peace building efforts in Afghanistan are evaluated, I am convinced that members of the Croatian Armed Forces will be commended for invaluable contribution", said the Defence Minister Mario Banožić at the homecoming ceremony for the 12<sup>th</sup> HRVCON from the mission in Afghanistan.



On 1 July 2020 the Federal Republic of Germany took over the presidency of the Council of the European Union and the German Armed Forces have assumed command of the Battlegroup composed by 4,100 soldiers from nine countries, including a Croatian contingent of 225 soldiers, tasked with support. The major component of the Croatian forces within the Battlegroup is manned by the members of Motorised Infantry Company of the Battalion "Vukovi" of the Guards Mechanised Brigade...

# CROATIAN ARMED FORCES IN STAND-BY WITHIN EU BG



The Germany-led EUBG 2020-2 with a Croatian contingent has been placed on stand-by as of 1 July 2020. On 1 July 2020 the Federal Republic of Germany took over the presidency of the Council of the European Union and the German Armed Forces have assumed command of the Battlegroup composed by 4,100 soldiers from nine countries. The Croatian contingent of 225 will provide support to the stand-by forces by 31 December 2020. The EUBG consists of forces ready for rapid reaction, deployable within a range of up to 6,000 km from Brussels. The concept of the EU Battlegroup is a foundation for the rapid reaction of the European Union and its main goal is to guarantee the strategic independence of the European Union.

On the first day of the stand-by period the Commander of the German Army's Rapid Response Division (LDK), Major General Andreas Hannemann and the Deputy Commander Colonel Maurice Timmermans held a video-conference for the media to present the EU Battlegroup. The commanders concluded that the forces were ready for the tasks they may be assigned.

EUBG missions may include conflict prevention, stabilisation mission, military evacuation operations, crisis management and peacekeeping. The Battlegroup comprises an infantry battalion and of the command group, and in the event of its activation General Hannemann becomes the Commander of the EUBG forces.



Edited by Petra Kostanjšak  
Photo archives of the Department  
of Military Publications

CROATIAN MILITARY MAGAZINE



## CROATIA'S SIXTH ENGAGEMENT IN EUBG

Croatia has been engaged in five EU battlegroups to date – in the Sweden-led EU Battlegroup in the first half of 2011; in the Germany-led Battlegroup in 2012 and in 2016, in the Italy-led EU Battlegroup in 2017, and in the Poland-led EU Battlegroup in the latter half of 2019.



The European Union battlegroups (EUBG) constitute a military capability of the European Union ready for rapid action. They comprise two battlegroups, which operate on a 6-month rotation basis. Two battlegroups are on permanent stand-by - presently a Battlegroup led by Germany and incorporating the members of the Battalion "Vukovi" of the Guards Mechanised Brigade and the other Battlegroup is an Italian-led amphibious combat group.

### DEPLOYABLE WITHIN 72 HOURS

The German Rapid Forces Division (Division Schnelle Kräfte – DSK) from Stadallendorf provides modular command deployable worldwide.

Should the European Union decide to deploy the Battlegroup, after the activation of the forces, the first contingent of soldiers has to be at Stadallendorf and ready for deployment within 72-h.

Within the following five days the forces need to be deployed at the given location.

The EUBG 2020-2 comprises the Core Battlegroup, the Medical Task Force (MedTF), the Combat Service Support Battalion (CSSBn), the Military Police Company, the CIMIC Support Unit, the PSYOPS Task Forces, Special Forces and an ISTAR Platoon.



### SOLE FEMALE M-ATV DRIVER - PRIVATE MARINELA DOMORAD

Private Marinela Domorad is presently with the forces declared for the EU Battlegroup with Germany. The unit she belongs to - "Vukovi" is under the German leadership. "Our pre-deployment for the EUBG took us to various fields and in various international military exercises, in which I have acquired a lot of experience. We have practiced for a year and a half and have been evaluated "ready" and will spend the next six months stand-by"; says Pvt. Domorad, whose assignment in the possible engagement would be as M-ATV driver.



During the stand-by period the national components exercise their regular tasks within the national territories, and in the event of decision on deployment each member nation initiates the respective national procedure for force deployment within the area of operations.

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# **EUROPEAN UNION BATTLEGROUP (EUBG 2020-2)**

Stand-by from  
1 July – 31 December  
2020

  
**THE CZECH REPUBLIC**  
**160**  
members

  
**FINLAND**  
**80**  
members

  
**CROATIA**  
**225**  
members

  
**GERMANY**  
**2,600**  
members



  
**AUSTRIA**  
**575**  
members

  
**SWEDEN**  
**20**  
members

  
**THE NETHERLANDS**  
**730**  
members

  
**IRELAND**  
**155**  
members

  
**LATVIA**  
**10**  
members



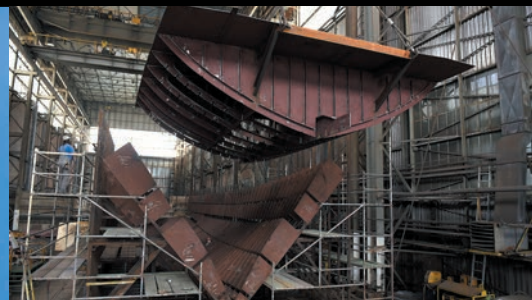
The steel cutting ceremony held in the Brodosplit Shipyard in Split on 10 August 2020 marked the continued construction of a series of four inshore patrol boats ordered by the Croatian Ministry of Defence, pursuant to the contract signed in February 2020. The prototype – Inshore Patrol Boat OOB-31 “Omiš” – was delivered in 2018, and today is a part of the fleet of the Croatian Coast Guard of the Croatian Navy.

Three weeks later – on 2 September 2020 – keels were laid for new models (541 and 542) of the inshore patrol boats. The boats are 3.16-m long with a 8-m beam, and are armed with the basic Coast Guard weapons – 30-mm automatic gun and two 12.7-mm machine guns and 4 man-portable air defence missile systems. The hull of inshore patrol boats will be made of AH36-grade steel plates, and the superstructure of aluminium alloy.

They are unsinkable in the event of flooding of two adjacent hull compartments (for instance, in the event of flooding of both engine rooms the ship will not sink).

The boats are protected from CRBN agents with a special NBC air filtration unit and the machinery and crew accommodation spaces are sealed.

**The construction and introduction into operational use of the inshore patrol vessel constitutes the modernisation and development of capabilities of the Croatian Navy.**



They will be equipped with a stern ramp and a 7.7-m long rigid hull inflatable boat carrying a crew of 6, and with a propulsion diesel engine that allows speeds of up to 40 knots and sailing autonomy of 60 NM. The capacity of the inshore patrol boats is 16 persons with a sailing autonomy of 10 days. They are highly fit for pursuit and achieve speeds of up to 29 knots, which are provided by the main engines of 2 x 2525 kW. They are equipped with an active rocking stabilization system that allows the ship to be fully operational at sea level 4 and meet NATO maritime criteria (STANAG 4154).

They are well-suited for pursuit and achieve speeds of up to 29 knots, which are provided by the main engines of 2 x 2525 kW.

The patrol vessels will be equipped with an active roll stabilisation system that ensures full operability at sea state 4 and meet NATO Seakeeping Criteria (STANAG 4154).

A special feature of the inshore patrol boats of the series are optimised ship systems, with one loading of the fuel enables a 1,000-nm voyage at 15-knot speed. The optimised fuel consumption enabled by the innovative hull design and excellent seaworthiness ensure a highly efficient use, to results in significant savings compared to similar vessels.

AFTER THE DELIVERY OF THE PROTOTYPE NAMED OOB-31“OMIŠ”, NOW BELONGING TO CROATIAN COAST GUARD FLEET, IN THE CROATIAN SHIPYARD “BRODOSPLIT” KEELS WERE LAID FOR TWO OF A TOTAL OF FOUR NEW VESSELS

# CONSTRUCTION OF NEW INSHORE PATROL BOATS FOR THE CROATIAN NAVY



The first vessel of the new series will be delivered to the Croatian Navy in 540 days, and remaining ones at 180 days intervals. According to the timeline, the last vessel will be assigned by February 2023 at the latest.

Edited by: Domagoj VLAHOVIĆ; Photos by: Brodosplit, Archive HVG1

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The construction and introduction into operational use of the inshore patrol vessel continues the modernisation and development of capabilities of the Croatian Navy. "I am particularly glad that the vessels will be built in a Croatian shipyard, whereby the Ministry of Defence and the Croatian Armed Forces contribute to the economic development of our homeland. The Croatian Navy has to be strong to fully guarantee safety in the Adriatic Sea", stated the Croatian Defence Minister Mario Banožić at the keel-laying ceremony.

The Inshore Patrol Boat OOB-31 "Omiš" was officially delivered to the Croatian Navy on 7 December 2018. The vessel underwent thorough testing during the takeover and through 87 reliability and overall ship and ship systems reliability tests, with the focus on tests on very high sea (sea state 5) according to the World Meteorological Organisation.

"The boat has met all our expectations, not only during the tests but also during the operational service", stated the Commander of the Croatian Navy Rear Admiral Ivo Raffanelli for the "CROMIL" Magazine.

Rear Admiral also stated that the boats' characteristics even exceeded the technical and tactical requirements and provided additional capabilities: stability at all speeds and conditions at sea, negligible decrease of speed at high sea states, which significantly increases seaworthiness in adverse conditions; high automation, stability of the propulsion system, high-precision weapon systems at high sea states and night-time search-and-rescue capability with the use of thermal camera.

"In brief, the boat is of commendable quality", said Commander Raffanelli, and added that no important changes



were needed in the construction of the rest of the boats". The minimum changes will follow the improvement suggestions provided by the constructors and the Croatian Navy Project Team.

"According to the delivery timeline specified in the addendum to the Contract, signed in February 2020, the first vessel of the new series will be delivered to the Croatian Navy in 540 days, and remaining ones in 180 days intervals" said the Commander of the Croatian Navy. The constructor's intent is to accelerate the construction, and he has our support", says the Commander.





**ALOJZIJE ŠESTAN,**  
DIRECTOR AND CO-OWNER  
OF "ŠESTAN-BUSCH"

Director Alojzije Šestan  
holding a helmet, known as the  
Kalashnikov-proof helmet



# NEW HELMET BY “ŠESTAN-BUSCH” WILL HALT BULLETS FROM ASSAULT RIFLE

WE HAVE COME CLOSE TO OUR GOAL THROUGH ADJUSTMENT IN MATERIALS PROCESSING: STOPPING THE RIFLE BULLET AND KEEPING THE HELMET WEIGHT AT 1,500 g. OUR WISH IS TO FINISH AND TEST THE HELMET LATE IN 2020 OR EARLY NEXT YEAR, AND TO PRESENT IT TO THE MARKET, TO BOTH MILITARY AND CIVILIAN USERS.

It is always interesting to talk to a businessman whose products from the facility in Prelog have protected heads and bodies of Croatian soldiers for years. It is not only because of the international reputation of the brand and the impressive export results but also because one always learns something new. Šestan-Busch attaches great attention to research and development and will soon launch novelties to the market to confirm its status.

## HOW HAS THE COMPANY ADAPTED TO THE COVID-19 PANDEMIC, THE LOCKDOWN AND TODAY'S "COEXISTENCE" WITH THE VIRUS?

Immediately upon the outbreak of COVID-19 we introduced protective measures (temperature measuring, rigorous entry check for the non-employees). The firm was even closed for ten days. However, we received so many orders that we had to start working soon, of course under controlled conditions and protective measures. I would say that we have adapted to some measures more successfully than other firms, as our staff is used to wearing masks in certain production phase anyway. I would say, all summed up, that the lockdown and living with COVID-19 have not harmed our business in any way.

## IT IS MORE PLEASANT TO TALK ABOUT THE ŠESTAN-BUSCH'S 25<sup>TH</sup> ANNIVERSARY

Yes, the firm was started during the last years of the Homeland War, when my firm Koplast-Šestan in delivered a thousand helmets to the Croatian Army, in co-operation with the German company Busch. The two firms merged in December 1995, and launched production

**A typical Šestan-Busch helmet consists of 350 different parts. Our products are designed to protect lives and health, and require special attention and great responsibility of the development and production staff. Each helmet is handled manually over fifty times during the manufacturing process, so it is not made by robots.**

**The multifunctional protective helmet is developed within the project of dual civil-military purpose, developing in several directions**

the following year. Initially, our production capacity was 3,000 helmets per year. Today we produce some 1,200 on a daily basis and have become one of the biggest manufacturers. Over the years we have developed a wide range of 35 different models, earned the trust of institutions in over 70 countries, delivered 2.5 mil helmets and “conquered” the world market. We talk with our present and future clients about new projects and deliveries. I like to say that we have entered the Champions League. Thanks to the status we have gained the communication goes from our customers towards us, and the former ones contact us again. This year we have received so many orders that we will have to delay some deliveries. I think we have achieved it with our quality-oriented approach, which is normal in view of the fact that our business is protecting health and lives.





## INTERVIEW



### WHAT IS YOUR SITUATION WITH THE STAFF?

In our 25 years of experience we have co-operated with numerous research institutions and with the Croatian Army and the police too. In addition to our plant in Prelog, we also run production with our partners in the facilities in Germany, in the Czech Republic and in Italy. The networking helps us to use a wide range of knowledge and technology. For the business in Croatia we mostly rely on our staff, headed by the excellent engineer and technology, research and development manager Božo Bujanić. He mentors the staff necessary for Šestan-Busch, in the sector under his responsibility, and as an experienced university professor. We don't really have a problem with any staff profile, but it is also true that it is not easy to find the adequate staff. Our trade necessitates diverse profile, not specifically determined. We have mechanical, chemistry and textile engineers and technicians among us, but we need them to be able to work in two and more areas.

Protection level provided by the Šestan-Busch's polyethylene helmet is also ensured by steel helmets, a 1000 g heavier







Initially, our production capacity was 3,000 helmets per year. Today we produce some 1,200 on a daily basis and have become one of the biggest manufacturers. Over the years we have developed a wide range of 35 different models, earned the trust of institutions in over 70 countries, delivered 2.5 mil helmets and “conquered” the world market.

“Working for the Croatian Armed Forces is a privilege, we have grown side by side with the Croatian military over the past 25 years”

#### IS THERE A RECOMMENDATION TO KEEP THE STAFF IN A TIME WHEN THE ENTRY TO THE EU ENSURED ACCESS TO THE WIDE LABOUR MARKET?

So far only two employees left Šestan-Busch, having reached the retirement age.

Respect, fair remuneration and other standards that need to be available in any job will keep a good person and employee, although I prefer to say “co-worker”, in the company. Šestan-Busch employs 75 people, the vast majority of whom come from the 20-km belt around Prelog – an area with industrial and craft tradition. During the 1960-ies a lot of locals left the area to work in the Western European countries, where they acquired know-how, work habits and discipline.

#### IS ŠESTAN-BUSCH'S PRODUCTION PROCESS HEADING TOWARDS AUTOMATION, WHICH IMPLIES CUTTING OF JOB POSTS?

The production by Šestan-Busch is specific: a typical helmet consists of 350 different parts. Our products are designed to protect lives and health, and require special attention and great responsibility of the development and production staff. Each helmet is handled manually over fifty times during the manufacturing process, so it is not made by robots. On the other hand, automation is of great assistance, and we tend to implement as many modern technologies and machines as possible.

We will soon receive a new water jet cutter, where a robotic server will put the helmet in a processing position, which will upgrade the safety of our personnel. We have also invested into a modern finishing shop that is expected to come into operation by the end of the year. We will ensure better protection from harmful vaporisation for our staff and obtain quicker and better final helmet coating.

It is a combination of factors that yields a good product. Even if when we automate some production processes, it is not to displace jobs but to increase production capacity. We are following only the world's top standards of production and protection, which we would compare to the Japanese.

#### DO YOU STILL OFFER THE CONCEPT OF COMPLETE PROTECTION, BEYOND THE HELMET?

Our customers have demanded us to expand the range, especially for the police. We delivered some 1,300 personal protective suits (from head to toe) to the Croatian Ministry of the Interior, and we can claim that the Croatian police are the best equipped in Europe today.

We are also developing a COVID-19 protective mask. We have produced the M95 and M98 protective masks in co-operation with the Finnish company Scott for 15 years. Thus, we have experience in that area too and we responded to the situation immediately and have developed the ŠB-1 half mask, which is now tested and is designed to protect against COVID-19 as well.

Half-mask ŠB-1 is undergoing testing and is supposed to offer anti-COVID 19 protection





### ŠESTAN-BUSCH IS DEVELOPING A PROJECT OF A MULTIFUNCTIONAL PROTECTIVE HELMET?

It is a dual civil-military purpose project, which develops in several directions, to design a helmet useful for the army, police, search and rescue services, medical services and for safety at work. Our intention is to develop a quite novel concept of an integrated helmet and a protective mask. While putting on protective masks users perform several procedures, which leave them exposed, whereas the multifunctional protective masks ensures double protection within a few seconds.

The helmet is co-funded from the European Regional Development Fund. The funding is obtained through co-operation with state institutions and partners from Croatia and abroad. Our company also operates in the Croatian Defense Industry Competitiveness Cluster, and our common goal is to withdraw additional EU funds of benefit for the entire defence industry, through fairs or project proposals.

▲  
One of the helmets tested in Šestan-Busch ballistic testing laboratory

### YOU EXPOSED A POLYETHYLENE HELMET (SO-CALLED WHITE HELMET) AT A SPECIAL PLACE IN YOUR FIRM. DO YOU HAVE HIGH EXPECTATIONS FROM IT?

Our helmets are made mostly of aramid. We intend to launch a polyethylene helmet ensuring increased protection level, which will protect from pistol bullets, blast waves and grenade shrapnels as the most common head injury causes, and also from assault rifle bullets. We have therefore named it Kalashnikov-proof helmet. The protection is available at the moment, but is enhanced with heavy steel helmets (mass 2,500 g). We are close to achieving the  $V_{50}=875 \text{ m/s}$  protection from the bullet, through adapted processing of the material and the mass equal as the aramid helmet (1,500 g) with protection level  $V_{50}=670 \text{ m/s}$ .

Our wish is to finish and test the helmet late in 2020 or early next year, and to present it to the market, to both military and civilian users.



We intend to launch a polyethylene helmet ensuring increased protection level, which will protect from pistol bullets, blast waves and grenade shrapnels as the most common head injury causes, and also from assault rifle bullets.

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▲ Although the production process is automated, each helmet is handled manually more than 50

“Our initial capacity was 3,000 helmets annually. Today we produce some 1,200 on a daily basis”



This is what differentiates us from the competition as well – we produce unique pads in terms of solid installation, shape, materials, comfort and several other characteristics. These aspects are very important. Just to give you an example – on one instance we lost a tender in a NATO nation because our price per helmet was half euro higher than other bidders. However, it turned out that the competitor's helmets padding inflated so as to cause the helmets to slip off. The customer then ordered pads and helmets from us.

#### **THE MEDIA REPORTED THAT ŠESTAN-BUSCH WAS “POSITRON PLUS” CHIP. WHAT IS IT ABOUT?**

The POSITRON PLUS chip boosts psychological and physical stamina of soldiers and policemen, equipped with various accessories that run on electricity. The chip can be built into the helmet and is designed to reduce the level of electromagnetic radiation by neutralising the harmful spectrum. The chip is part of the SUPERIOR HELMET package, which combines some ten Šestan-Busch innovations.

#### **ŠESTAN-BUSCH IS THE FIRST MANUFACTURER OF THE CROATIAN DEFENCE INDUSTRY TO HAVE EARNED NATO AQAP QUALITY CERTIFICATE. WOULD YOU RECOMMEND IT TO OTHER MANUFACTURERS TOO?**

Yes, I think each Croatian manufacturer should aspire to obtain it, as the certificate adds to the ISO standard. I shall just say that we failed two tenders we had hoped to win just because we didn't have AQAP. The status of AQAP holder facilitates the process for Šestan-Busch as foreign customers do not have to visit our facilities to assure themselves of the quality but can leave it to the Ministry of Defence. It all assists us to realise our main idea: to be ahead of the competition. If we make a mistake, if we show incompetence or greed, it is a risk for our users' lives.

#### **AN IMPORTANT ELEMENT OF DEVELOPMENT AND PRODUCTION IS YOUR OWN BALLISTICS LABORATORY?**

Yes, we are the only company in Croatia with its own ballistics laboratory. We don't have to send helmets to the US or Germany, and we can test the products on a daily basis.

#### **IS THERE STILL ROOM TO DEVELOP THE INTEGRATED INTERIOR EQUIPMENT SHOTECK, PATENTED BY ŠESTAN-BUSCH?**

The SHOTECK as buffer lining between the head and the dome is still certainly one of the best systems available today, primarily for the wearing comfort. However, the increasing use of modern accessories worn by soldiers today, such as radio headgear systems, favours the use of the pads. We have not renounced to SHOTECK and we never will; we are constantly developing it and applying our experience to new interior equipment systems such as pads.





"We always highlight our co-operation with the experts of the Ministry of Defence in development and testing of our products, and we have recently initiated co-operation with the Croatian Defence Academy  
(Photo: Filip KLEN)"

"NEW CIRCUMSTANCES HAVE LED TO A SIGNIFICANT INCREASE IN PRODUCTION AND SALES, AND IN NEW EMPLOYMENTS. WE HIRED 200 NEW WORKERS BY THIS SUMMER. WE ARE PRESENTLY ONE OF THE FEW FIRMS EXPORTING TO THE UNITED STATES AND OTHER COUNTRIES"



# STANDING

## AGAINST THE GLOBAL CRISIS

The Croatian small arms manufacturer HS Produkt enjoys world reputation is known in the world, mostly for the pistols with which it became famous on the American market in cooperation with Springfield Armory, as well as VHS rifles in bull-pup construction which it supplies to the Croatian Armed Forces and others. The headquarters of the factory is located in Karlovac, some 50 km south from Zagreb, are not slowing down even at a time when the entire world economy has been affected by the COVID-19 virus pandemic. HS Produkt is not only satisfied with excellent sales results and the expansion of the company, but is increasing the number of new projects. The impression we gained in conversation with the director Željko Pavlin is that the Croatian company is consolidating at the top of the world market, but such a status can be consolidated only through intensive work, development and innovation pace.

### HOW IS THE PANDEMIC AFFECTING THE WORLD MARKET, PRIMARILY IN THE UNITED STATES? HOW HAS HS PRODUKT ADAPTED TO THE SITUATION?

The pandemic has led to social instability and a decline in business activity in the United States and elsewhere. Crises normally lead to increase in the market demand for pistols and small arms in general, both for civilian and military and police needs, the business has been harmed by restrictions, reduced availability and weapon delivery options. HS Produkt prepared for the situation on time and responded through increased production in demanding and complex working conditions, and managed the transportation of the products despite the restrictions.

We are currently one of the few companies to sell our products to the United States and other countries. In short, HS Produkt's sales increased significantly compared to the previous year, primarily in the United States,



"I think we may claim that HS Produkt is the firm with the biggest robot stock in Croatia".

Author: Domagoj VLAHOVIĆ

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but deliveries to other countries were also made, thus fulfilling our obligations arising before the outbreak of the pandemic.

Along with the market trends, the increased production is also a result of HS Produkt's success models, such as the Hellcat and XDM Elite in various models, which are currently among the best-selling guns the United States. I would also like to state that HS Produkt did not seek financial assistance provided by the Croatian Government during the lockdown period and that we donated two ventilators to the Karlovac Hospital as well as a significant quantity of protective masks to other hospitals and other public institutions, even some customers who could not procure them by themselves.

**WE HAVE LEARNED THAT YOU ANNOUNCED TO HIRE MORE PERSONNEL; ON THE OTHER HAND, DO YOU INTEND TO INCREASE AUTOMATED PRODUCTION?**

The new circumstances have significantly increased the production and sales, and by extension additional new personnel hired. We hired 200 new employees by summer, which is a critical fact in the light of the many jobs lost due to the pandemic. Also, HS Produkt continues its

programme of modernised and automated production, and has invested EUR 3 mil in the course of 2020. We also continued with the activities of autonomous development of individual robotic applications, which will show in the future. I think we may claim that HS Produkt is the firm with the biggest robot stock in Croatia.

**IS IT DIFFICULT TO FIND COMPETENT WORKFORCE IN CROATIA? DO YOU ENVISAGE TAKING OVER A EUROPEAN FIRM OR A FIRM OF OTHER ORIGIN?**

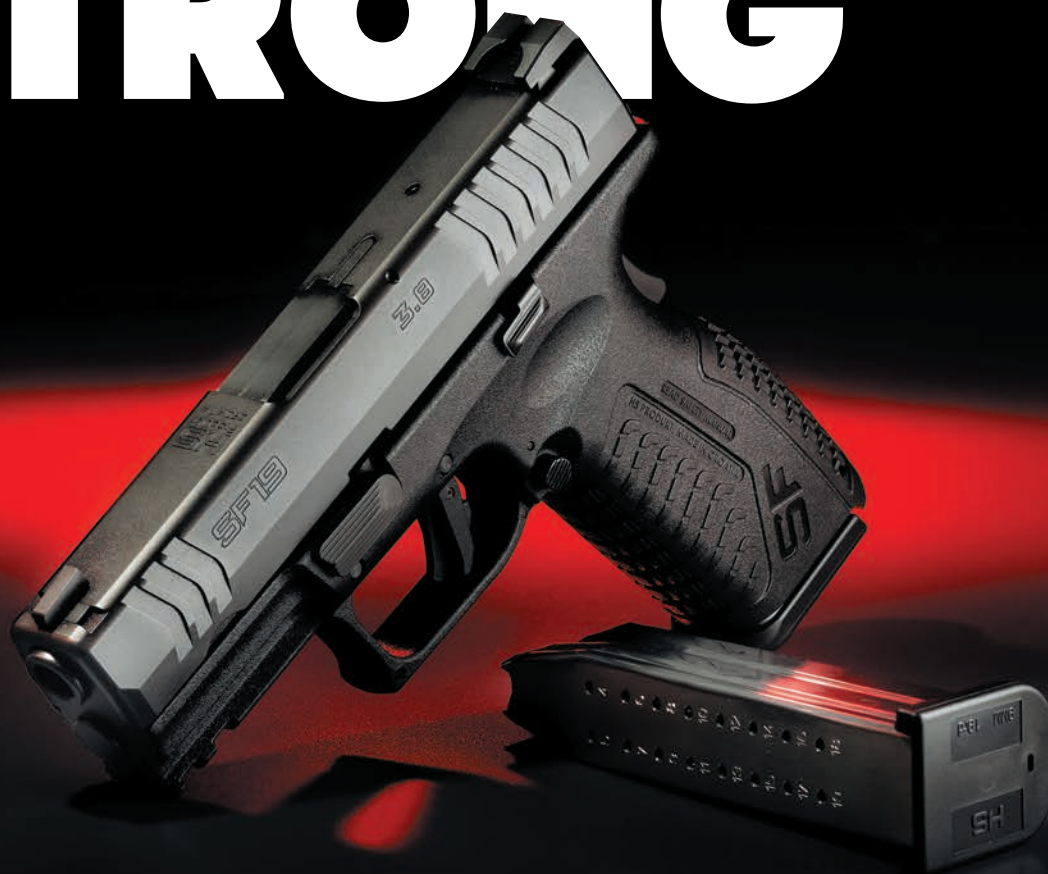
Hiring competent, educated and expert employees with relevant experience fitting the needs of HS Produkt has always been demanding, to this day. Because we produce all products autonomously and at one location, we often have to seek highly specialised staff outside Karlovac and the Karlovac County, where our firm is based.

In order to find the solution and to take an active part in education of young people and new experts, we have been engaged in on-the-job training for various backgrounds and age categories at the local level. Furthermore, we have signed partnership agreements with the local secondary schools, polytechnics and faculties to co-operate in youth education.

HS Produkt's SF19 was a shortlisted bidder for new equipment of the French Armed Forces with new official pistol or the French Armed Forces

(Photo by: HS Produkt)

# STRONG







I need to praise the co-operation with research institutions in Croatia, particularly with the Ruder Bošković Institute and also with some foreign faculties and firms, in order to promote the development activities, research and co-working through EU projects.

Regarding the takeover of European firms, we do not envisage it at the moment. Croatia's membership in the EU facilitates business and rules out takeovers as unnecessary. On the other hand, in certain cases the HS Produkt conducts talks to open local production outside the EU where it is a prerequisite for the sale of our products.

#### **DOES HS PRODUKT STILL CO-OPERATE WITH THE MINISTRY OF DEFENCE AND THE CROATIAN ARMED FORCES IN THE DEVELOPMENT OF ITS PRODUCTS?**

We always highlight our co-operation with the experts of the Ministry of Defence in development and testing of our products, and we have recently initiated co-operation with the Croatian Defence Academy, whose students do their on-the-job training in the HS Produkt and consult our expert staff with the tests within their diploma theses.

#### **YOU HAVE PRESENTED THE PROJECT CEKOM NP 4.0., CO-FUNDED BY THE EUROPEAN UNION? WHAT DOES IT INVOLVE AND WHAT ARE THE OBJECTIVES OF THE PROJECT?**

The full title of the project is Centre of Competence for Smart Technologies and Mechatronics (CEKOM NP 4.0). The total value of the project is HRK 7.4 mil, and the EU funds totals HRK 30.7 mil. The Project is running from 13 January 2020 to 13 January 2025. The partners in the project are RINEL IT and FANUC ADRIA. The Centre will be organised as an innovation cluster and will be focussed on the co-operation of the three partners in the defined research areas.

▲  
The H11 Hellcat was proclaimed the pistol of the year in the United States, as the fifth HS-produced weapon to receive the recognition

Briefly, the objective and the expected outcome of the project (operation) is to establish a development and innovation centre for support to IRI activities in the domains of robotics, smart mechatronics, automation and the testing of the capabilities of advanced components of Industry 4.0.

The initial focus of the project will be placement and equipment of the infrastructure for the research projects aimed at proving functionality and fast commercialisation of the findings. When the Centre becomes operational, the goal will be to constantly generate new research projects focussed on developmental and industry-related studies to stimulate continued growth of transfer of know-how, skills and technologies.

The founding and development of CEKOM NP 4.0 were a direct result of the needs of the Croatian and foreign economists, and the project is oriented on the stakeholders whose production consists in materials processing (particularly the metalworking industry) and who strive to efficiently combine various components of the production systems (the CNC machines, integration of Internet of Things etc.). The CEKOM NP 4.0 in a way keeps pace with the global trends in the industry which will increasingly stimulate automation, networking of the productions systems and increased productivity with fewer resources.



### THE PAST YEAR WAS MARKED BY THE NEW H11/HELLCAT MICRO COMPACT PISTOL. HAS IT BEATEN YOUR OWN EXPECTATIONS?

No, it hasn't beaten them as we always set our expectations very high. We can claim that both our customers and HS Produkt are used to the successes and we are expected to achieve them, so Hellcat was configured to repeat it. Moreover, we expect to sell various varieties of the Hellcat model in the quantities as the HS Produkt's best sold models ever, or even more. It depends on a series of factors, but we do expect such sales figures. Hellcat has been proclaimed the Handgun of the Year 2020 in the United States, as the fifth HS Produkt's product to win such recognition, which speaks of the continuity and top-level abilities of the firm's development team. We hope that H11 will reach the sales figures of an XDS, which was sold in 1 mil models, or the standard HS/XD model which follows a constant trend of good sales for years, with over a million sold makes as well. Since 2001 HS Produkt has sold more than five million pistols and some 100,000 rifles and has become a world leader in its market niche. The Hellcat pistol is presently the champion of our success, which we hope will continue.

### ARE YOU PREPARING ANY NOVELTIES IN THE PRESENT RANGE OF PRODUCTS, MAYBE THE NEW VERSIONS OF THE EXISTING PRODUCTS?

HS Produkt is constantly upgrading the existing line of products – we plan to manufacture new and upgraded versions of the existing semi-automatic pistols in the upcoming period. Considering the HS Produkt's history, new models of pistols or other new products in our trade definitely need to be developed.

**"The co-operation may supply the Croatian Armed Forces with the best machine gun in the world at the most favourable prices and conditions"**

We believe that our efforts will yield results, and that HS Produkt will continue developing as a firm that continuously markets new products, understanding the needs of the market and the possibilities of placing of the new products.

### IS HS PRODUKT DEVELOPING COMPLETELY NEW SYSTEMS? IS THERE A POSSIBILITY TO EXPAND THE PRODUCT RANGE WITH REVOLVERS AND AR-15 RIFLES IN FUTURE?

HS Produkt has always planned and worked on the development and expansion of its product range. In addition to the pistols, we have also recently marketed the assault rifle and other products, which we believe may be an important part of our range in the future. An example is our pistol with a built-in RFID chip used by the French police, which is the sole pistol of the kind in operational use that we know of. In this sense we can announce more new products and new models of pistols and rifles that we are developing and that will be in the market in the forthcoming years. In view of the high competition in the industry branch that we operate in, some things still cannot be disclosed. Something has to remain a surprise for our customers.

### IS HS PRODUKT STILL WORKING ON THE PROJECT OF FN MACHINE GUNS, INTENDED FOR THE CROATIAN ARMED FORCES?

It is. We are working intensively on the co-operation between HS Produkt and FN Herstal, but runs on a broader basis than the production or assembly of machine guns. The co-operation may supply the Croatian Armed Forces with the best machine gun in the world at the most favourable prices and conditions.

**From 2001 HS Produkt has sold more than 5 mil pistols and some 100,000 rifles**  
(Photo by: Mladen ČOBANOVIĆ)





INTERVIEW





◀ The procurement of VHS-2 rifle from the part of the Ministry of Defence ensures its NATO codification, awarded only to the weapons used by a NATO member nation (Photo by: Mladen ČOBANOVIĆ)

A member of the Intervention Police of the Ministry of the Interior at the 2019 Fittest Soldier of the Croatian Armed Forces competition at the training range at Udbina. From the late 2017 the Police are equipped with HS rifles too (Photo by: Tomislav BRANDT)

I need to say that HS Produkt is a guarantor of quality and safety with regard to maintenance, training and supply of spare parts. However, as the co-operation between HS and FN is primarily related to the needs of the Ministry of Defence, it is the Ministry that leads the way. The pandemic has certainly slowed down the planned activities, but we hope that once the new defence minister takes the office the project will see its realisation, especially considering the need for such weapons in the Croatian Armed Forces.

**IS THE PROCUREMENT AND USE OF THE VHS-2 RIFLE FROM THE PART OF THE MINISTRY OF THE INTERIOR IMPORTANT FOR ITS FURTHER EXPORT AND DEVELOPMENT? HAVE YOU RECEIVED ANY INTERNATIONAL ORDERS FOR THE RIFLE?**

The procurement of the VHS-2 rifle by the Ministry of the Interior and the Ministry of Defence is of great value and is important for future sales and development of the rifle. Basically, it constitutes an important reference as a basic prerequisite for any further trade. Also, the procurement from the part of the Ministry of Defence is a foundation to obtain NATO's codification, which is awarded only for the weapons used by a NATO member nation.

The fact that we are supplying the rifle to the Ministry of the Interior is also important as the Ministry set specific requirements regarding the use of the rifle. It provided us with valuable information on the required adaptations on the rifle to meet the police needs.

As a similar version had already been sold to the police forces of some foreign countries (the Albanian Special Police), we can confirm it first-hand that the Croatian Ministry of the Interior is familiar with the latest worldwide trends and requirements of the police, and we can its staff's professional support and advice which helped us produce an even more competitive product. In that sense we see the co-operation as mutually beneficial and think that it will continue.

**WHAT IS THE SITUATION WITH THE CROATIAN AMMUNITION FACTORY? WHAT ARE THE HS PRODUKT'S REQUIREMENTS AND INTERESTS TO TAKE PART IN THE PROJECT?**

The ammunition factory is a highly complex project of strategic and economic interest for Croatia, where the state has to lead the way. HS Produkt uses large quantities of ammunitions in its production process to test the functionality of its products. So it consumes many times more ammunition than the Ministry of Defence and the Ministry of the Interior put together.

The interest of the HS Produkt lies in competitiveness (both in terms of price and quality) of the ammunition produced by a potential factory in Croatia compared to the ammunition the firm manufactures in its own production process" (Photo by: Filip KLEN) HS Produkt will continue its engagement in the project and assist both with its realisation and with the marketing of the ammunition for its own needs and for its customers.





"The co-operation with the Ministry of Defence is of major importance for us. The products of our co-work intended for the Croatian Armed Forces can easily be applied to other lines and offered to foreign markets", stated Slobodan Mihalj, the director and founder of HEMCO for our magazine  
(Photo by: Domagoj VLAHOVIĆ)



# TANK CREW AND PILOTS GARMENT **MANUFACTURERS**



◀ **HEMCO show-cased adaptability under lockdown circumstances too, manufacturing cotton face masks**  
(Photo by Mladen ŠALINOVIĆ)

Modest professionals receive little media attention, even making constant progress, business and hiring additional staff. It is true for HEMCO, a family-owned firm from Đakovo in east Slavonia, opened in 1992, which today employs a staff of nearly 190. It manufactures mainly the working garments and equipment and has been a provider for the Croatian Armed Forces as well, although it is much less in the limelight than the providers of weapons systems. In addition to co-working with the group of manufacturers of the recognisable uniform of the Croatian Armed Forces with pixelated pattern of the Croatian territory, HEMCO is well-known for the apparel designed for members of the Croatian Air Force and



## SMART GARMENTS

HEMCO has developed a "smart garment" concept in partnership with the Faculty of Textile Technology of the University of Zagreb, purpose-designed police personnel and firemen. The sophisticated light sensors to replace the present fluorescent bands will illuminate the wearers and make them visible in any weather conditions.

Croatian M-84 tank crew members repair the caterpillar track. They are wearing special-designed overalls made by HEMCO  
(Photo by Tomislav BRANDT)

THE CROATIAN FIRM HEMCO FROM ĐAKOVO (SLAVONIA) EARNED AND RECEIVED NATO AQAP QUALITY STANDARD, CONFIRMING ITS SUCCESSFUL IMPLEMENTATION. IT HAS BEEN A SUPPLIER OF THE CROATIAN ARMED FORCES FOR YEARS, AND CAN NOW ENTER FOREIGN MARKETS MORE AMBITIOUSLY

armoured and mechanised units of the Croatian Army. The overalls designed for air personnel, tank and other armoured vehicles crew members are manufactured in the company's production hall situated in Đakovo. A recognisable product is also officer's blazer, and the protective apparel specially designed for fire fighters and also worn by soldiers on routine or special tasks. "The co-operation with the Ministry of Defence is of major importance for us. The products of our co-work intended for the Croatian Armed Forces can easily be applied to other lines and offered to foreign markets", stated Slobodan Mihalj, director and founder of HEMCO for our magazine.

## A STRICTLY DEFINED PROCESS

HEMCO achieved a major success of international relevance – it won and received a AQAP Certificate confirming the successful implementation of NATO's AQAP quality control standard. An important factor was co-operation with the Ministry of Defence. Prior to the presentation itself HEMCO underwent a certification audit (on 10 June 2020) and evaluation of compliance as requirements for the certification. They had in turn been preceded by a process conducted jointly by HEMCO and the certification authority of the Service for Reception and Quality Control of the Ministry of Defence. The Ministry of Defence was authorised for certification by NATO. The certification process consisted in consultations with the members of the board of directors, survey of documents and processes implemented by the firm and similar procedures. The process was successfully concluded the implementation of quality standardisation in accordance with the AQAP 2110 (NATO Quality Assurance Requirements for Design, Development and Production).



## AN IMPORTANT MOMENT

The certificate was officially presented to CEO Slobodan Mihalj for HEMCO by the Assistant Defence Minister for Material Resources Roman Mikulić, stating that all products of the Croatian firms supplying the Croatian Armed Forces were world-class quality. "The Croatian Ministry of Defence and the Croatian Armed Forces firmly support the Croatian defence industry; the strength of our military depends on the strength of our defence industry. The AQAP certificate means that HEMCO is entering NATO family, and we hope it will become a supplier for the allies' armed forces", said Assistant Minister Mikulić. Put differently - NATO certification system ensures the

The members of the "Wings of Storm" aerobatic team wearing the special-designed overalls – another product by HEMCO (Photo by Tomislav BRANDT)

Ministry of Defence top-quality products and services and the firms receive a strong reference for business in foreign markets. The small ceremony marking the success meant an important moment for HEMCO, said the owner: "For us the certification means capability to realise all tasks assigned in terms of quality. NATO AQAP adds to the civilian ISO 9001 certificate already in our collection and strengthens our position in foreign markets".

## EXPANSION AND DEVELOPMENT

HEMCO has more good news – expansion and development. During the tour we saw new halls built, and learned that the existing ones were expanded by 400 m<sup>2</sup>,



In addition to the Croatian Armed Forces, HEMCO is a supplier of the Ministry of the Interior, the firefighting association, medical, pharmaceutical, energy and civil constructions institutions, the companies INA and MOL - an impressive fact is that the garments made by HEMCO are worn by some 200,000 working people daily! The size of a second largest town in Croatia!





◀ **HEMCO is investing into new halls, and will soon hire many new employees**  
(Photo by Domagoj VLAHOVIĆ)

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50 new work posts were created, new machines were procured and the existing ones upgraded and that new technologies were developed.

We are exploring new niches and new products, and developing an export strategy. We intend to increase the present 18% to 30% of trade", says Mihalj. The firm displayed adaptability to lockdown in the Croatian economy during the initial period of the epidemic. The same as other companies, HEMCO was faced with the problem in delivery of products. At the same time, the firm received orders for manufacturing of face masks. "We had no experience with face masks, but we adapted quickly, by

simplifying the production line and engaging the willing employees for extra work, and almost all accepted. We even reached the production of 13,000 masks on a daily basis and a total of 175,000", says a member of the Board of Directors Krešimir Bogunović. Following the unlocking the production has been restored and "HEMCO" is operating in full gear again and in adherence to the epidemiologic recommendations in effect. "We know which direction we are going, but we don't know how far we will get", concluded Mr. Mihalj half-jokingly.



### FIVE CROATIAN HOLDERS OF AQAP

Alongside HEMCO, five more manufacturers are holders of NATO AQAP Certificate: "Šestan-Busch from Prelog, "Čateks" from Čakovec, "Kroko" from Zagreb and "Upgrade" from Veliko Trgovišće, while three more ("Galeb" from Omiš), "HS" from Karlovac and "Hidraulika Kurelja" from Donja Stubica are in the process of implementation. The presentations of the quality assurance system in accordance with the AQAP are underway with some more firms, and the Service for Reception and Quality Control of the Ministry of Defence is awaiting their decisions.





Photo: Marko Majetić

Although the largest military range used by the Croatian Armed Forces - "Eugen Kvaternik" near Slunj often hosts large-scale training events and military exercises, it is also the habitat to various wild animals, particularly the three species: bears, wolves and lynxes. With respect to lynxes and wolves the area of the military range is strategically very interesting, and their movement is monitored attentively. In this regard the Ministry of Defence's Department of Environmental Protection and the Croatian Armed Forces co-operate with the Faculty of Veterinary Medicine of the University of Zagreb in the implementation of the international project LIFE Lynx, aimed at collecting data on the lynx population found in Croatia.



**"Periodical military activities are less disturbing for the animals than constant and pervasive human activities outside the military areas. This makes the Range a rare natural asset in Europe",** says Colonel Smajli



"LIFE Lynx is an international project, initiated in 2017 and due to end in 2024. It engages five countries - Italy, Slovenia, Croatia, Slovakia and Romania. Lynxes are caught in Slovakia and Romania for repopulation in Croatia, Slovenia and Italy, with the objective of importing fresh blood into the genetically threatened local population, lacking genetic diversity", explains Ira Topličanec, a doctoral student of the Faculty of Veterinarian Medicine and expert assistant in the Project.

The lynx population has decreased since the 1990ies, mainly due to in-breeding. Their status was revised as a species in danger of extinction, and introduction of new animals was advised as the only solution for in-breeding. The lynx has the most population in the central Lika (Velebit Mountain) and in Gorski kotar, but some have been spotted in Dinara Mountain as well.

Some 60 lynxes live across the Croatian territory. As many as seven have been translocated from Slovakia and Romania to Croatia and Slovenia to date, and three of four lynxes have been released in Croatia.

## BIOLOGICAL DIVERSITY

"The Ministry of Defence and the Croatian Armed Forces entered co-operation with the Faculty of Veterinarian Medicine of the University of Zagreb, and the training range "Eugen Kvaternik" was selected as the research spot as an ideal natural habitat for lynxes in view of the location, the size and the terrain configuration. The Military Infrastructure Sector and the Environment Protection Department of the Material Resources Directorate of the Ministry of Defence realised the importance of





Author: Martina Butorac, Photos by Mladen Čobanović, photo archive of the Faculty of Veterinarian Faculty

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# RESEARCH ON LYNX IN THE TRAINING RANGE "EUGEN KVATERNIK"

THE RANGE "EUGEN KVATERNIK" IS A HABITAT AND A MATING LOCATION FOR THREE SPECIES OF WILD ANIMALS: BEARS, WOLVES AND LYNXES. THE MINISTRY OF DEFENCE CO-WORKS WITH THE FACULTY OF VETERINARIAN MEDICINE WITHIN THE INTERNATIONAL PROJECT LIFE LYNX, FEATURING THE SURVEY OF THE LYNX POPULATION IN THE AREA OF THE "EUGEN KVATERNIK" TRAINING RANGE NEAR SLUNJ

the project in protecting the biological diversity of locations used by the military", says Colonel Enver Smajli of the Environment Protection Department. Although the Range hosts a number of military exercises featuring live firing, the animals don't seem to be distressed so much as to leave the area.

"Periodical military activities are less disturbing for the animals than constant and pervasive human activities outside the military areas. This makes the Range a rare natural asset in Europe," says Colonel Smajli.

## DATA COLLECTION

The co-operation between the Ministry of Defence and of the Faculty of Veterinarian Medicine was launched in 2018, and the staff soon placed camera traps to monitor the presence of the lynx in the area of the training range. "Two camera traps have been placed in the training range. At least two lynxes are present in the area that we know of and we have their photos", says Colonel Smajli.

The lynx was imported into Croatia and implanted with telemetric collar connected to the GSM network and the satellite for tracking before released into the habitat. The collars collect and transmit critical quantity of data via the network and furnish valuable behavioural findings. "Thanks to the telemetric collar the lynx, released in Slovenia, was spotted mating with the resident female lynx, which was soon confirmed to have given birth to a kitten and we now have a first offspring obtained by breeding lynx from the Carpathians with resident lynxes, which was the objective of the LIFE Lynx project in the first place", says Magda Sindičić, Assistant Profes-

sor at the Faculty of Veterinarian Medicine and Project Co-ordinator, and also praises the co-operation with the Ministry of Defence in studying lynxes and wolves to better manage the protection of the species.

"All three species being present in the area of the training range, the Ministry of Defence gladly assists with the collection of accurate information on the animals. Our goal is to assist the research community", says Colonel Smajli.



## PACKS OF WOLVES AND BEARS SPOTTED IN THE TRAINING RANGE

The range "Eugen Kvaternik" is a habitat for wolves, the protected species in Croatia, and for bears too. Three packs of wolves live around the "Plitvička jezera" National Park and in the surrounding areas, each using their own habitat, one of which is the area of the training range near Slunj. The monitoring of wild animals in the area of the National Park revealed the presence of a male bear, which was taken shot of several times. We named him Željko", says the Professor of the Biology Institute of the Faculty of Veterinarian Medicine Josip Kusak.





# A SOLDIER AND PEACEKEEPER

IN THE CROATIAN ARMED FORCES ONE OFTEN MEETS INDIVIDUAL MEMBERS WITH REMARKABLE COMMITMENT TO DUTY, AND WITH A BROAD SPECTRUM OF INTERESTS, WHO SET AN EXAMPLE AND ARE ROLE MODELS TO ANYONE WHO MEETS THEM. ONE OF THEM IS 1<sup>ST</sup> SERGEANT ROBERT BARBIR NICKNAMED RAMBO, THE 1<sup>ST</sup> PLATOON 4<sup>TH</sup> COMPANY OF THE MP REGIMENT SENIOR ENLISTED LEADER...

Before even meeting 1<sup>st</sup> Sergeant Robert Barbir Rambo, we heard from his colleagues that he was a “model” military police officer. And indeed, on first meeting him it was clear – his stance, the way he walks, and the communication with other people fully justify the commendations. However, 1<sup>st</sup> Sergeant Barbir receives the compliments with embarrassment, as all these qualities go without saying. “The army is a reflection of the country. It means discipline and commitment, and whenever on duty I stick to that”, says 1<sup>st</sup> Sergeant Barbir.

“As a child I lived in the countryside, surrounded mostly by people older than me so I had no one to play with. I was a child of nature, I made spears, arrows, traps”, says 1<sup>st</sup> Sgt. Barbir, convinced that his childhood survival games somehow predicted his later enlistment into military service. “The war movies I watched as a child also shaped my decision to become a soldier, but a peacekeeper soldier, was becoming stronger and stronger”. His nickname – Rambo – was given to him by his school mates, having seen the films on the TV on the character who bore a striking resemblance to him.



His wartime history began with joining the 1<sup>st</sup> Company of the Naval Infantry Company of the Croatian Navy, in the Ploče Navy Port, established in October 1991, which was the first unit of the Croatian Army (then Croatian National Guard) manned by conscripts. During 1992 it operated in the south Battlefield, from Šipan and Ston to Bistrina. His abilities quickly became evident, and so he was soon promoted to corporal of the guard and deputy commander of the Company. “We only had the carbines from the World War II available, with which we believed we could destroy tanks, so strong was our enthusiasm. We were guided by a youthful zeal and desire to live in a sovereign and free Croatia”, he says.

## THE BEST PERFORMING TRAINEE

After completing his military service 1<sup>st</sup> Sergeant Barbir remained in the ranks of the Military Police, to defend his homeland. He took his first training with the first group of 40 members of the Military Police Corps from all over Croatia in the Training Centre in Delnice in 1993 and completed the MP Authorised MP Course, where he was awarded the pistol with the dedication by the Head of the Military Police Directorate as the best performing trainee, and embarked on his MP officer career which has continued to this day. In view of his almost 30-year long service we would see him as a witness of the times, so we asked him about his view of the Croatian Armed Forces today: “We rose from the scratch, and today we stand side by side with the world’s strongest. We may lag in terms of equipment, but the quality and the personnel can keep pace with NATO and other organisations member nations”. His favourite period in the career are international missions: “Multinational environments are the finest for me, for the dynamics, encounters with various people and cultures, observing familiarising with the attires, breaking taboos and challenges ... If I could go to a mission again, I would get ready in a minute”. He was deployed to the mission in the Golan Heights in Syria in 2011/2012, at the time of ravaging conflict in the area, and his three tours in Afghanistan earned him the “Three-star Veteran” status.







1<sup>st</sup> Sgt Barbir's wartime history began with joining the 1<sup>st</sup> Company of the Naval Infantry Company of the Croatian Navy, in the Ploče Navy Port, established in October 1991, which was the first unit of the Croatian Army manned by conscripts. 1<sup>st</sup> Sergeant Robert Barbir Rambo is a passionate collector of military uniforms, insignia, flags and coins. His collection presently comprises some 120 camouflage uniforms.



"Whenever I go abroad, I represent my homeland, my unit, family and region first and myself, in that order. That's the rule I follow."

## CROATIAN ARMED FORCES



"Whenever I go abroad, I represent my homeland, my unit, family and region first and myself, in that order. That's the rule I follow." The second rule is familiarisation with the area. I always stick to the same ritual: "Give me two weeks to make a 360° mapping of the area and to take a close look at the situation. You can trust me that I knew every hole and rock in Afghanistan".

He asked us to commend his English teachers at the Croatian Armed Forces' Foreign Languages School in Split, and stressed that the proficiency in English was ability much to his advantage. Guided by his idea of a peacekeeper Sgt. Barbir launched a number of charity campaigns in missions, most often for the children and the people in need.

### FRIENDS ALL OVER THE WORLD

Watching his memories from the missions where he served, among which a video in which he teaches a Philippine soldier sing Croatian songs or photos depicting him teach his colleagues from the mission bake bread, one is caught in the impression that off-duty Sgt Barbir is a born initiator and entertainer. He has friends from all over the world, which helped him a great deal with his hobby – Sgt. Barbir is a passionate collector of military uniforms, badges, flags, coins, with some 120 camouflage military uniforms in his collection at the moment. "I don't know how to really describe how I do it. We all help each other with the collecting. Right now I am collecting berets from Croatia for a Polish collector. I got him a few berets from Switzerland, and am now waiting for a Japanese colleague to send me one from their army as has no berets from Asia".

He exchanged a lot of items at eight military pilgrimages in Lourdes he attended. "My first pilgrimage to Lourdes was in 2008, at the jubiliary 50<sup>th</sup> event. I have no words to describe it – Lourdes is really a place for people to find the peace, which is why I went again so many times. It is also a perfect place for us collectors", says Sgt Barbir.

**His favourite period in the career are international missions: "Multinational environments are the finest for me, for the dynamics, encounters with various people and cultures, familiarising with the equipment, breaking taboos and challenges ... If I could go to a mission again, I would get ready in a minute".**

"You know, after all these years serving in the military everyone thinks that retiring will be hard for me, but I think that my hobby will make it enjoyable". 1<sup>st</sup> Sgt. Barbir is writing a book about camouflage uniforms, but it will probably take time, bearing in mind his many engagements.

We thought it would be difficult for him to choose a favourite exhibit, but he readily showed us a coin in the shape of Afghanistan with the United States and Afghan flags on one side and with figures of soldiers, NCOs and officers in Afghan hills on the other. The coin is of great value to him because it was given to him by the U.S. Army Colonel Cedric Carrington, whom he respects deeply. In our further talk with Sgt. Barbir about his off-duty activities we got the impression that his day lasted for 48 hours. "Austrians once gave me the nickname Duracell. I am always on the move, since early morning", he says laughing.

Along with the wartime companions Sgt. Barbir works in the association "First Conscript of the Croatian Army – Ploče", with the aim of obtaining recognition for their status as first conscripts in Croatia ever. They achieved it in 2014. The Association often organises humanitarian donations, and each year on 18 November they visit Vukovar, which has a special place in his heart, so he attaches importance to marking the date, whether he is in Croatia or in missions. In 2015, during his term in Afghanistan he marched for 18 km carrying full equipment. He is also a member of the Stablin Boatmen's Association, while his special passion – much to our surprise – are carnival festivities. Each year he and his team take part in the Bačina Carnival, where they give let off steam and work hard to present creatively their dotty ideas. He also does some agriculture work, cultivating tangerines and producing olive oil. It all makes part of his daily routine. We were impressed with the stories, experiences and the energy of this exemplary member of the Croatian Armed Forces, but we also somehow felt that it was not all.



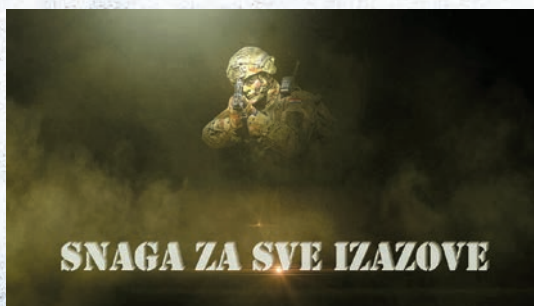
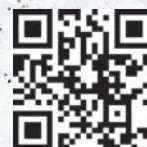


# Our products...



## WE ARE THE CROATIAN ARMED FORCES

This year the Multimedia Department of the Public Affairs Service of the Ministry of Defence of the Republic of Croatia produced a congratulations video of the Croatian Armed Forces for citizens of Croatia on the occasion of the Statehood Day



## THE CROATIAN ARMED FORCES – A FORCE FOR ANY CHALLENGE

In 2020 the Croatian Armed Forces mark the 29th anniversary. On that occasion the Multimedia Department of the Public Affairs Service of the Ministry of Defence of the Republic of Croatia produced a video summary in a few stories about the Croatian Armed Forces today.



## A HISTORIC FEAT OF REMOVAL OF THE SPIRE OF THE ZAGREB CATHEDRAL

Members of the Croatian Armed Forces were engaged in the successful removal of the north spire of the Zagreb Cathedral, which was about to collapse due to the earthquake hitting Zagreb. The Multimedia Department of the Public Affairs Service of the Ministry of Defence produced a video on the historic feat.



## EDITORIAL BOARD:

### Publisher:

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### Approved by:

Colonel Dražen Jonjić,  
Head of the Public Affairs and Publishing Service  
www.morh.hr

### Editor-In-Chief:

Željko Stipanović (zeljko.stipanovic@morh.hr)

### Deputy Editor-in-Chief:

Vesna Pintarić (vpintar@morh.hr)

### Journalists:

Domagoj Vlahović (domagoj.vlahovic@yahoo.com)  
Lada Puljizević (ladapuljizevic@yahoo.com)  
Petra Kostanjšak (petra.kostanjusak@morh.hr)  
Martina Butorac (mbutorac@morh.hr)

### Photographer:

Tomislav Brandt

### Translation:

Dubravka Marić

### Layout:

Predrag Belušić

### Marketing and finance:

Mila Badrić Gelo (mbadric@morh.hr)

### Print:

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### Title of the Editorship:

Ministry of Defence of the Republic of Croatia  
P.P. 252, 10002 Zagreb, Republic of Croatia

http://www.hrvatski.vojnik.hr  
e-mail: hrvojnisk@morh.hr

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