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A P R I L 2020

INFORMAL MEETING OF THE EU DEFENCE MINISTERS JOINT OPERATION FOR A SAFER ENVIRONMENT

CROATIAN MILITARY INDUSTR

### CONQUERS THE WORLD

NATO SPECIAL AIR OPERATIONS TRAINING CENTRE OPENED AT ZEMUNIK

> **CROATIA JOINS ELITE CYBER SHIELD**

CROATIAN ARMED FORCES ASSIST CITIZENS







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... provides information on the activities in the Ministry of Defence of the Republic of Croatia and the Croatian Armed Forces and features articles about foreign armed forces, armaments and military technology, military history and other current military topics...

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#### INFORMAL MEETING OF THE EU DEFENCE MINISTERS







Author: Doris Ravlić, Photos by: Tomislav Brandt

# **OPERATION** SAFER ENVIRONMENT

In January 2020, the Republic of Croatia assumed the Presidency of the Council of the European Union. The following four priority areas of the Presidency have been defined: development, connection, protection, influence, which are closely tied to the sectoral priorities and activities of the Ministry of Defence and of the Croatian Armed Forces. Within the Croatian Presidency an informal meeting of the EU defence ministers was held in Zagreb on 4-5 March 2020

> In January 2020 the Republic of Croatia took over the Presidency of the Council of the European Union. The six-month presidency is of significant importance for positioning both at the EU and at the world level. It is also a great opportunity to promote the Croatian political and economy interests. In November 2019 conferences were held throughout Croatia to presente the four main priority domains of the Croatian Presidency of the EU: Europe that develops, Europe that connects, Europe that protects and an Influential Europe.

> An Influential Europe is a common responsibility of the Ministry of Foreign and European Affairs and of the Ministry of Defence, and the Croatian Deputy Prime Minister and Defence Minister Damir Krstičević presented the four main sectoral priorities and activities of the Ministry of Defence and of the Croatian Armed Forces during the Croatian semester at the head of the Council of the EU. First priority - Implementation of the EU defence initiatives, lays emphasis on Permanent Structured Cooperation, whereby the member nations strengthen the EU defence capabilities through defence investments and joint projects, through the Coordinated Annual Review on Defence, the European Defence Fund (EDF) and Military Mobility, aimed at unhindered cross-border movement and swifter task execution.

> The main goal of the initiatives is to develop capabilities through cooperation, avoiding of duplication and unneccesary expenditure of human and material resources. The second priority consists in the strengthening of the EU-NATO co-operation, and the Ministry of Defence advocates complementary operation of the two organisations and avoiding of unnecessary duplication, which is important for all member countries.

#### INFORMAL MEETING OF THE EU DEFENCE MINISTERS

For Croatia the EU defence initiatives quoted within the first priority constitute a contribution to the strengthening of NATO, which remains a guarantee of Europe's stability.

The enhancement of industrial and research dimension is the Ministry's third priority of the Croatian Presidency. For a small-sized member it is highly important to mind the availability of resources for small and mid-sized enterprise, as the sole way to ensure even distribution of resources and development of they defence industry and of the research community.

The fourth priority pertains to Intensified EU efforts in defence and security in southeast Europe. Bearing in mind the security and stability in our immediate neighbourhood, the aim is to bring the focus of the EU back and to point to new threats faced by the countries of southeast Europe and to provide them with adequate support.

Within the Croatian Presidency of the Council of the European Union an informal meeting of the EU defence ministers was held in Zagreb from 4-5 March 2020, hosted by the Croatian Deputy Prime Minister and Defence Minister Damir Krstičević and chaired by the High EU Representative for Foreign Affairs and Security Policy and Vice-President of the European Commission Josep Borrell, and attended by NATO Secretary General Jens Stoltenberg alongside the EU defence ministers.

During the working sessions the ministers discussed defence priorities and common challenges for the up-coming period.

The EU defence ministers discussed further development of the European defence cooperation, the European **Union's strategic** operational and defence priorities and the development of possible guidelines pertaining to security and defence bearing in mind that the EU, NATO and the UN are complementary organisations, which prompts joint and coordinated operation aimed at contributing to a safe environment.





#### FOUR MAIN PRIORITIES AND ACTIVITIES OF THE MINISTRY OF DEFENCE AND OF THE CROATIAN ARMED FORCES DURING THE CROATIAN PRESIDENCY OF THE COUNCIL OF THE EU

**FIRST PRIORITY** Implementation of the EU defence initiatives, laying the emphasis on Permanent Structured Cooperation, whereby the member nations strengthen the EU defence capabilities through defence investments and joint projects, through the Coordinated Annual Review on Defence, the European Defence Fund (EDF) and Military Mobility, aimed at unhindered cross-border movement and swifter task execution.

**SECOND PRIORITY** entails strengthening of the EU-NATO co-operation, with the Ministry of Defence advocating the complementarity of the two institutions and avoidance of duplications, which is of critical importance for all member countries.

**THIRD PRIORITY** concerns development of industry and research dimension of the EU defence and refers to the enhancing of industrial and research dimension of the Ministry.

**FOURTH PRIORITY** pertains to Intensified EU efforts in defence and security in southeast Europe. Bearing in mind the security and stability in our immediate neighbourhood, the aim is to bring the focus of the EU back and to point to new threats faced by the countries of southeast Europe and to provide them with adequate support.



Minister Krstičević underlined the importance of continued implementation and consolidation of the EU defence initiatives, particularly those focussed on enhancement of defence capabilities. The Minister underlined the role of the European Defence Fund – EDF, which is expected to provide significant means for research and development of key capabilities of the EU for the 2021 – 2027 period, and stated that the programmes of the Fund were an excellent opportunity for the Croatian defence industry, whose products had been recognised worldwide for their quality.

The participants stressed that PESCO initiative was in the strategic review process, which is expected to provide new information aimed at improved implementation and development of new EU defence capabilities an capacities.

Concerning the need for strategic elaboration of the future of the European defence, the ministers exchanged views on the development of a strategic document, envisaged as a proposal containing guidelines to the member nations for the transposition of the political level of ambition into concrete defence capabilities. The ministers also underlined the importance of a pragmatic approach to strategic deliberation of EU defence,



The High EU Representative for Foreign Affairs and Security Policy Josep Borrell confirmed excellent co-operation between the Republic of Croatia with other EU member countries.

Addressing the item of the EU-led operations, the ministers discussed the operational priorities and the EU-led military operations and missions contributing to the building of stability and security. In the six presently ongoing operations some 5,000 soldiers from the EU have been engaged, said the High EU Representative, adding that NATO was critical for security and stability of Europe.

"We want to strengthen the EU-NATO co-operation, which has to be complementary", concluded the High Representative.

Speaking of the new initiative – the Strategic Compass, comprising crisis management, capabilities, policies and protection – the High Representative said its main function would be identification of new threats faced by the European Union and development of a common strategic culture.



MILITARY POLICE

# MISSION: VIP PROTECTION

THE MP REGIMENT IS THE MINISTRY OF THE INTERIOR'S MAIN PARTNER IN SECURITY OF THE CROATIAN PRESIDENCY OF THE COUNCIL OF THE EU, AND THE MP PROTECTION COMPANY IS IMPLEMENTING THE MAJOR PORTION OF SECURITY PROTECTION Author: Martina Butorac, Photos by: Tomislav Brandt

#### CROATIAN MILITARY MAGAZINE

When the Republic of Croatia took over the Presidency of the Council of the EU from the Republic of Finland in early January, one of the units subordinated to the General Staff of the Croatian Armed Forces – the MP Protection Company will be responsible for the major portion of security protection of foreign delegations.

In addition to regular security and protection tasks, the Military Police Regiment was designated as the main partner of the Ministry of the Interior as the overall EU Presidency security authority.

The overall personnel has been engaged in the activities, but the main responsibility of securing and protecting the VIP is on the MP Protection Company.

"Alongside the MP Protection Company as the main authority, the task engages the Anti-diversionist and Protection Section, with which we have co-worked closely, and the basic Military Police. The Military Police Regiment will be the main unit of the security for all events organised by the Ministry of Defence and will assist the Ministry of the Interior for the rest of the activities", says the Commander of the MP Protection Company Captain Boris Dujmić.



#### MILITARY POLICE







#### **EXHAUSTIVE PREPARATIONS**

Security protection during the Presidency is highly demanding, especially since it added on to the regular activities of security of the Ministry of Defence, of the General Staff of the Croatian Armed Forces and of visiting delegations. To deal with the task efficiently the Company had to be augmented, and the Military Police Regiment, the MP Training Centre "Major Alfred Hill" and the instructor team of the MP Protection Company trained members of other units of the MP Regiment for security protection tasks.

"The security task will engage triple the size of the MP Protection Company, so we had to train some 60 new officers, who attended the Basic VIP Protection Course and will support us with the task", says Cpt. Dujmić.

Although the new regime for the Company began on 1 January, its members underwent exhaustive preparation.

To ensure efficient performance the Company has been augmented, and the MP Regiment, the MP Training Centre "Bojnik Alfred Hill" and the Protection MP Company trained the personnel of other units of the MP Regiment for security protection.





#### **HIGHER EFFICIENCY**

The MP Protection Company follows the standard annual training process, and has over the past year received extra assets and equipment, garments, and CIS equipment. The training was conducted in three cycles and augmented the Company with trained security officers.

"The MP Protection Company conducted several joint VIP and facility securing tasks with the Special Security Affairs Directorate of the Ministry of the Interior, as well as several joint training events aimed at increased standardisation of task implementation" procedures procedures when performing tasks" says the Company Commander.

Cpt Dujmić also explains that the preparations involved intensified driver training, driving in secured columns, training of escorts and practice in small arms shooting were further enhanced during the training process, and commends that co-operation with the Ministry of the Interior is at an exceptional level and does not doubt that the unit, jointly with the UPPS Police Directorate, will successfully carry out all the tasks and activities that will require the engagement of security forces during the Croatian presidency of the EU Council.

The members of the Protection Company and of other units of the Military Police Regiment, have been fully trained and prepared to conduct the Presidency tasks and activities", concluded Cpt Dujmić.



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The MP Protection Company conducted several joint VIP and facility securing tasks with the Special Security Affairs Directorate of the Ministry of the Interior, as well as several joint training events aimed at increased standardisation of task implementation







# ONT EFFORTS COMBATING AND HANDLING DODD BUDGED BUDG

AT A TIME OF GLOBAL COMBATING THE **COVID 19** PANDEMIA, THE CROATIAN ARMED FORCES HAVE AGAIN PLACED THEIR CAPABILITIES AT THE SERVICE OF THE CROATIAN PEOPLE. AS IS OFTEN THE CASE, IT NEVER RAINS BUT IT POURS – SO AMIDST THE HARD BATTLE AGAINST THE PANDEMIA THE WIDER AREA OF ZAGREB WAS HIT BY THE STRONGEST **EARTHQUAKE** IN THE PAST **140 YEARS**, AND THE HARDSHIP DEMONSTRATED THE MEMBERS OF THE CROATIAN ARMED FORCES TO BE THE MAIN FORCE AT CRITICAL MOMENTS. WITHIN A VERY SHORT PERIOD OF TIME THEY PLACED THEIR CAPABILITIES IN RELIEF EFFORTS.

#### CROATIAN ARMED FORCES ASSIST CITIZENS









Members of the Croatian Armed Forces came to aid Zagreb and its citizens in the wake of a devastating earthquake measuring 5.3 on a Richter scale that shook the capital of Croatia on 22 March, which destroyed numerous housing, cultural and sacral buildings in the heart of the town.

Operating in coordination with the authorities of the City of Zagreb, some 420 members of the Croatian Armed Forces cleared the roads and sidewalks, and assisted for two days the hospitals hit by the earthquake, using ten engineer machines. The Croatian Armed Forces were called in ten minutes following the earthquake, after being put in highest readiness, and the very next moment a total of 150 members headed towards Zagreb.

"Immediately on arriving to the centre of Zagreb, we realised the dramatic impact of the earthquake. We set to



420 members of the Croatian Armed Forces engaged clearing the impact of the earthquake

work and started clearing the debris in the centre, from the Ban Jelačić Square, dispatching the forces into the adjacent streets. Based on our first estimates we planned a two-day clearing operation. However, our primary task was to clear the roads and sidewalks to restore normal life in the town", said the Deputy Commander of the Croatian Army Brigadier General Tihomir Kundid explaining the course of the clearing operations in the wake of the grave emergency.

The central square, the main street and the western part of Zagreb were cleared by the members of the Engineer Regiment and of the mechanised battalions "Tigrovi" and "Gromovi" of the Guards Mechanised Brigade of the Croatian Army, while the members of the Support Command assisted with the evacuation of the prematurely born babies from the damaged wings of the Clinic of









Gynecology and Obstetrics and the University Hospital for Infectious Diseases "Dr. Fran Mihaljević" to quickly restore the functioning of the Hospital, in front of which the Croatian Armed Forces also pitched tents to provide care for the patients.

"The Croatian Armed Forces are in possession of elaborated plans for emergency situations. They comprise the earthquake relief forces, which are engaged in the situations of the kind. They also have operational plans for any other disaster situations, and a significant contingent of soldiers can be engaged within a very short time span, alongside the required equipment", said Brig. Gen. Kundid. Among the soldiers clearing the streets of Zagreb was the Commander of the 1<sup>st</sup> Motorised Platoon of the Guards Mechanised Brigade, 2<sup>nd</sup> Lieutenant Mihovil Šarić, who shared his own and



10 engineer machines engaged in clearing the debris

his colleagues' high motivation to handle the damage inflicted on Zagreb within the shortest term possible. "We are going to work as long as it takes, around the clock if necessary. We are motivated and ready to assist, which is just what I expected from us Croatian soldiers, and I believe everything will turn right in the end. These are hard times, but there is no reason to fear. The Croatian people is known to demonstrate its greatest strength in hardest moments. We can do everything together", said 2<sup>nd</sup> Lt. Šarić.

The Croatian soldiers engaged in the clearing operations were visited by the Defence Minister Damir Krstičević and by the Chief of the General Staff Admiral Robert Hranj, who extended appreciation to the Croatian Armed Forces and all services engaged for the assistance and solidarity provided to Zagreb.

#### CROATIAN ARMED FORCES ASSIST CITIZENS









Members of the Croatian Armed Forces had been engaged in combating COVID-19 before the earthquake. Within a two-day time frame an expedition camp with the 270-bed capacity was pitched in front of the Dubrava Clinical Hospital, to accommodate patients with COVID-19. The decision to engage the Croatian Armed Forces as a component of the Homeland Security System to provide addiditional space for medical care of patients through the setup of a self-sustained camp and Alaska tents for primary intensive care to assist the Ministry of Health was adopted by the Government of the Republic of Croatia, as a function of the need to implement measures to protect the citizens of the Republic of Croatia during the COVID 19 epidemy.

While the set -up of the camp of the kind normally takes five to seven days, the members of the Croatian Armed Forces managed to pitch the tents within two days, says the Commander of the Support Command Major General Mladen Fuzul.

The Croatian soldiers set up a self-sustained camp with 15 tents intended for accomodation of a 300-member unit, primarily in the initial phase of combat and



Having set up the self-sustained 15tent camp at record speed, the members of the Croatian Armed Forces also built a roofed space - a 350-m communication corridor - connecting the Dubrava Clinical Hospital with the tents within the Camp.

#### 







#### A CROATIAN ARMED FORCES MEDICAL TEAM DISPATCHED TO LITHUANIA

A medical team of the Croatian Armed Forces, provided with the necessary medical equipment on 29 March 2020 was transported to Lithuania aboard the state aircraft to provide additional care to the members of the Croatian Armed Forces 2<sup>nd</sup> HRVCON to NATO's Enhanced Forward Presence.

The Croatian Armed Forces are presently engaged in the 187-member 2<sup>nd</sup> HRVCON, among whom four members have been tested positive and developed milder symptoms, whereas 39 members are in isolation.



non-combat operations in extreme conditions, but is also intended for civilian uses, in the event of humanitarian disasters. The Camp was toured by the President of the Republic Zoran Milanović, by the Prime Minister of Croatia Andrej Plenković, by the Defence Minister Damir Krstičević and by the Minister of Health Vili Beroš. The Minister of Health explained that the Dubrava Clinical Hospital was planned to accommodate patients should the University Hospital for Infectious Diseases capacities become overstretched, and expressed the hope that the situation would not escalate to the point that all available capacities were needed.

Minister Krstičević stated that additional plans for the engagement of the Croatian Armed Forces were prepared, for the purpose of providing support to the Civil Defence headquarters and that they possess large logistic capacities and more than 100 medical teams ready to assist any time it is requested.

Having set up the self-sustained 15-tent camp at record speed, the members of the Croatian Armed Forces also built a roofed space – a 350-m communication corridor - connecting the Dubrava Clinical Hospital with the tents within the Camp. The tunnel has been built by the members of the Support Command and by the members of the Engineer Regiment.







BARRACKS "PUKOVNIK MIRKO VUKUŠIĆ"

Edited by: Željko Stipanović, Photos by: Tomislav Brandt

Multinational

ogramme

Special

viation



# NATO SPECIAL AIR OPERATIONS TRAINING

"THE MULTINATIONAL SPECIAL AIR OPERATIONS TRAINING CENTRE IS A NATO BODY WITH A POTENTIAL TO GROW INTO A NEW NATO CENTRE OF EXCELLENCE. THIS IS A PROOF OF CROATIA AS A CREDIBLE NATO NATION.

The newly opened training centre for helicopter crews and teams for special air operations formally opened in the Barracks "Pukovnik Mirko Vukušić" at Zemunik on 11 December 2019 was designed as a centre which would plan and administer training of helicopter crews and integrate them with special forces teams for planning and conduct of special operations. The programme will comprise the in-class and hands-on training, first for the instructors, who will pass on the expertise and skills on to the members of the units that need to acquire the required capabilities.

The first steps towards the establishment of the MSAP date back to the year 2015, when the Republic of Croatia as NATO member accepted Target Capabilities and assumed the responsibility to establish a Special Operations Air Task Unit (SOATU). The same target capabilities were taken by Hungary, Bulgaria and Slovenia too. In NATO Headquarters in Brussels the defence ministers of Croatia, Hungary, Bulgaria and Slovenia on 4 October 2018 signed a Memorandum on Establishment of



Multinational Special Aviation Program Training Centre (MSAP) and the Centre was formally opened in the Barracks "Pukovnik Mirko Vukušić" at Zemunik a year later. By assuming the host role, Croatia undertook an important step in development of the Alliance's capabilities, establishing a training centre as an overarching co-operation framework. The MSAP is open to include other countries or to be used as training capacity for their armed forces, either through full membership or through periodic attending of individual training modules and/or exercises.

#### **MSAP PURPOSE**

The purpose of the MSAP is to train crews operating multi-purpose helicopters designated for special air operations through in-class and weeks-long flight training for the conduct of non-conventional special air forces tasks in accordance with the Target Capabilities assumed by each MSAP member. The training will be conducted by highest standards and in a most cost-effective



# **CENTRE** OPENED AT ZEMUNIK

way and will eventually increase interoperability, fully complying with all NATO standards. The benefits of the programme include the enhancement of national defence capabilities, adoption of common NATO standards and interoperability upgrade, the conditions created for joint exercises and real-life NATO-led operations, most economic and effective training through shared resources and availability of standardised flight training plans and programmes and SOPs.

The Barracks at Zemunik was chosen as the base for the MSAP given its favourable climate and geographic features that ensure sufficient meterological conditions for flying. Special operations are conducted in various settings and climate conditions, and the conducting forces need to be trained for the purpose. The climate conditions around Velebit Mountain and in the Ravni kotari plateau are most favourable for mountain and IHF flying, and the nearby islands and sea are ideal settings for maritime operations practice. In addition, the MSAP location is 30-min flight away from most training ranges 28

of the Croatian Armed Forces.

Within the internationally supported training programme, in co-operation with experienced lecturers, flight instructors and mentors of NATO Special Operations Headquarters (NSHQ) and other NATO member nations which have the special air operations capability, the first training cycle will be attended by national instructors for in-class and flight training, who will subsequently administer the training for special air operations with the declared crews. In military aviation the training for special air operations is considered the most complex training and a challenge for helicopter crews. It provides helicopter crews with the necessary qualification and is the entry to the élite club of aviation special units.

The in-class training is followed by the most interesting part – the flight training on helicopters of the member nations' air forces; the Croatian Air Force designated the Mi-171Sh helicopters, the Hungarian Air Force EC-145M (in the initial phase), and Bulgaria and Slovenia will use AS 532 AL Cougar helicopters respectively.

Author: Domagoj Vlahović, Photos by: Tomislav Brandt

#### INTERVIEW

#### LTG ERIC P. WENDT,

COMMANDER, NATO SPECIAL OPERATIONS HEADQUARTERS



Lieutenant General Eric P. Wendt took over the command of NATO Special Operations Headquarters on 7 November 2019 from the U.S. Vice-admiral Colin J. Kilrain, who visited Croatia on several occasions, each time underlining the superb co-operation and abilities of the Croatian special forces and of the overall Croatian Armed Forces. His successor will follow the suit, and he first visited Croatia in December 2019 on the occasion of the opening of the Multinational Special Aviation Program Training Centre at Zemunik. Lt. Gen. Wendt is an experienced officer with multiple decorations and leader posts in the U.S. special forces, from operational squads to commands and education and training centres.

#### YOU CAME TO VISIT CROATIA SHORTLY AFTER TAKING OFFICE. IS THIS EVENT IMPORTANT FOR YOUR TERM OF OFFICE?

I am extremely pleased that Bulgaria, Croatia, Hungary, and Slovenia have jointly succeeded in opening this Multinational Special Aviation Program Training Centre. I praise the Allies who built this dedicated training centre. This facility makes the delivery of a one-stop training opportunity in Europe more feasible and affordable, laying the foundation for seamless joint operations.

#### WHAT ARE YOUR EXPECTATIONS OF THE MSAP?

The aim of the Multinational Special Aviation Program (MSAP) is to provide training required to create and sustain Special Operations Aviation Units in an efficient and interoperable manner. Given NATO Special Operations Headquarters' role in the inception of the project, we will continue involvement by providing support as the centre aligns with our focus on coordinating the development of special operations forces (SOF) capability and interoperability for Allies and NATO Partners.

### WHAT INFORMATION HAVE YOU RECEIVED ABOUT ZEMUNIK? WHAT MAKES THE BASE STAND OUT?

Zemunik is an excellent location for the Multinational Special Aviation Program given the established military training infrastructure and support services, diverse geography including mountains,

Zemunik is an excellent location for the Multinational Special **Aviation Program** given the established military training infrastructure and support services, diverse geography including mountains, sea and islands coupled with the normally good flying weather. sea and islands coupled with the normally good flying weather. The infrastructure's improvements are a sign of a well-coordinated national and multinational development plan. This sets an example for the Allies and facilitates further opportunities of cooperation. - It seems that helicopters are an indispensable part of special operations.

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#### CROATIA IS CURRENTLY IN THE PROCESS OF PROCURING BLACK HAWK HELICOPTERS. DO YOU EXPECT THAT THIS TECHNOLOGY WILL BE INCLUDED IN THE OPERATIONS CONDUCTED BY THE MSAP?

Helicopters are a useful asset for Special Operations, and all helicopter crews supporting NATO missions and Special operations will gain technical and tactical experience from their training at the MSAP.

#### HAVE YOU ALREADY HAD PROFESSIONAL CONTACT WITH CROATIAN SOLDIERS?

Croatia contributes personnel to my command and has done so with highly competent and professional Special Operations members. They also contribute to NATO's effort in helping the Afghan security forces create the conditions for international peace and security. Additionally, Croatian Special Operations Forces provide key support to NATO's KFOR mission as it creates stability, peace and protection to all communities in Kosovo.

### WHAT ARE YOUR IMPRESSIONS OF CROATIAN SPECIAL FORCES AND THE AVIATORS WORKING WITH THEM?

My NATO Special Operations Headquarters Air Development Program team continues to value the support of Croatian special operations forces and aviators and know they will certainly make this programme a superb one. Cooperation with other countries and NATO SOF aviators will also provide the opportunity for better integration with land and maritime SOF units.

CROMIL



I AM EXTREMELY PLEASED THAT BULGARIA, CROATIA, HUNGARY, AND SLOVENIA HAVE JOINTLY SUCCEEDED IN OPENING THIS MULTINATIONAL SPECIAL AVIATION PROGRAM TRAINING CENTRE. I CONGRATULATE THE ALLIES WHO BUILT THIS DEDICATED TRAINING CENTRE. THIS FACILITY MAKES THE DELIVERY OF A ONE-STOP TRAINING OPPORTUNITY IN EUROPE MORE FEASIBLE AND AFFORDABLE, LAYING THE FOUNDATION FOR SEAMLESS JOINT OPERATIONS...

#### WITH WHAT AMBITIONS DID YOU TAKE OVER THE HELM OF THE NSHQ? WHAT ARE YOUR PRIMARY OBJECTIVES?

NATO has kept our Alliance and its people safe by continuously adapting to new security challenges. The role NATO Special Operations Headquarters plays for the Alliance is key, and we must maintain focus on networking, interoperability, total defence, and on NATO land, sea and air SOF readiness to counter potential aggressors and terrorist threats.

#### SHOULD MEMBER STATES OF NATO INTENSIFY THE SHARING OF THEIR EXPERIENCES WHEN SPECIAL FORCES AND SPECIAL OPERATIONS ARE CONCERNED?

There are unique operational benefits available through multinational cooperation and today is an example where the entire NATO SOF team looks forward to using this state of the art training centre. The Multinational Special Aviation Program and Training Centre is a demonstration of multinational cooperation through knowledge, skills and abilities that paves the way towards increased readiness and capability.

#### YOU HAVE BEEN IN SPECIAL OPERATIONS FORCES FOR SEVERAL DECADES AND HAVE TAKEN PART IN MANY MISSIONS THROUGHOUT THE WORLD. WHAT WAS YOUR MOST DIFFICULT AND MOST DANGEROUS EXPERIENCE?

Can one endure such a job and such a lifestyle for a long time? Every time one deploys, there are challenges and hardships in some form or another. What remains constant is the importance of ensuring effective training, readiness, and unity of purpose. These are areas where NATO SOF contributes across the Alliance.

#### U.S. ARMY SPECIAL FORCES AND THEIR OPERATIONS ENJOY GREAT REPUTATION. DO AMERICAN STRATEGIES, TECHNIQUES AND DOCTRINES DOMINATE IN NATO?

We are an Alliance bound by shared history, values and goals to prevent conflict and preserve peace for nearly one billion people. For seventy years, the bond between Europe and North America has made NATO the strongest Alliance in history. The Alliance relies on the shared strength of the 29 NATO nations whereby each nation adds value so that we are faster, more capable, and stronger by relying on each other and not dependent on a single country.

#### HOW DO YOU ENVISION THE FUTURE OF SPECIAL FORCES AND SPECIAL OPERATIONS? WILL THEY TAKE THE PLACE OF "CLASSIC" MILITARY UNITS IN THE FUTURE?

NATO is strong, and has made historic progress over the past few years adapting to a changing security environment. NATO SOF has and will continue to play a prominent role in ensuring the Alliance can effectively address the threats to the Euro-Atlantic security. NATO SOF's contribution now and in the future complements. NATO's capabilities across all domains. NSHQ is committed to improving the readiness of our forces to respond to any threat.

INTERNATIONAL CO-OPERATION

## USAREUR LFX **"Serrated Edge"** AND **"Eagle Royale"** NEAR SLUNJ

The members of the 173<sup>rd</sup> Infantry Brigade Combat Team-Airborne of the U.S. Army in Europe conducted two training events in Croatia from 20 January through 8 February 2020. The training activity titled "Serrated Edge was conducted in the Training Range "Eugen Kvaternik" near Slunj and in the Barracks "Josip Jović" near Udbina from 20 through 31 January 2020, engaging nearly 300 members of the 54<sup>th</sup> Brigade Engineer Battalion-Airborne of the 173<sup>rd</sup> Infantry Brigade Combat Team-Airborne – IBCT(A)) of the U.S. Army in Europe. The objective of the activity was to certify the U.S. platoons/squads and to train manoeuvre units.



Authors: Martina Butorac, Doris Ravlić, Photos by: Tomislav Brandt, Mladen Čobanović

CROATIAN MILITARY MAGAZINE

THE MEMBERS OF THE 173<sup>rd</sup> INFANTRY BRIGADE COMBAT TEAM-AIRBORNE OF THE U.S. ARMY IN EUROPE (USAREUR) CONDUCTED TWO TRAINING EVENTS IN CROATIA – THE "SERRATED EDGE" TRAINING EVENT IN THE TRAINING RANGE "EUGEN KVATERNIK" NEAR SLUNJ AND IN THE BARRACKS "JOSIP JOVIĆ" FROM 20 THROUGH 31 JANUARY 2020, AND THE EXERCISE EAGLE ROYALE IN THE "EUGEN KVATERNIK" RANGE TOO, IN BOTH EXERCISES THE HOST NATION SUPPORT AND THE REAL LIFE SUPPORT WERE PROVIDED BY THE MEMBERS OF THE CROATIAN ARMED FORCES.

Within the international military exercise "Serrated Edge" over 160 paratroopers egressed four C-130J aircraft on 22 January and performed descent in the Barracks "Josip Jović" near Udbina and headed towards the Training Range "Eugen Kvaternik" near Slunj, to take part in training activities. This is a co-operation between the U.S. Army who are taking a training and the Croatian Armed Forces who provide support, presently with a engineer platoon, and later with a mortar platoon of the Croatian Army. We have cooperated with 173<sup>rd</sup> Brigade for the second year already, they were here on a similar training activity last year", explains Lieutenant Colonel Andrija Žarinac, Head of Exercise Coordination, Observation and Reporting Team.

"Today we have seen a successful landing by 163 paratroopers", said Sergeant First Class Zachary Moore, who monitored the conditions for the Exercise from the ground, stating that he was very pleased with the support provided by the Croatian Army during the Exercise.



#### INTERNATIONAL CO-OPERATION



#### **HOST NATION SUPPORT**

In the Barracks "Josip Jović" the participants practiced element and material demolition, barrier system reaching, construction of passages in the minefields, a Live-Fire Exercise (LFX) at the squad level, as well as preparation of fighting positions.

The Croatian Armed Forces (engaging some 60 provided Host Nation Support (HNS) and Real Life Support (RLS) in the Exercise "Serrated Edge", in co-operation with the Engineer Platoon of the Guards Mechanised Brigade of the Croatian Army. The Exercise engaged some 60 members of the Croatian Army and a helicopter of the Croatian Air Force providing MEDEVAC.

Host Nation Support is an important element of each operation and exercise. It comprises a spectrum of activities in joint operation of the civilian and military structures, in consideration of the Croatian legislation and of the national interests, and in adherence to the declared capabilities of Croatia as Host Country.

The Exercise "Eagle Royale" was conducted by the 173<sup>rd</sup> Brigade IBCT (Infantry Brigade Combat Team-Airborne) of the USArmy in Europe (USAEUR) was conducted in the Military Range "Eugen Kvaternik" near Slunj from 31 January through 8 February 2020.

The Exercise was conducted at several locations in Germany, Slovenia and Croatia, by some 350 members of the 1 503 IN BN (Infantry Battalion-Airborne), and 503<sup>rd</sup> Paratrooper Infantry Battalion of the 173<sup>rd</sup> Brigade.

The members of the USAREUR conducted a Base Defence LFX (Live Fire Exercise), a Base Defence, a Squad-level LFE, a platoon-level STX (Situation Training Exercise) and a firearms qualification.

"We have cooperated with 173<sup>rd</sup> Brigade for the second year already, they were here on a similar training activity last year", explains Lieutenant Colonel Andrija Žarinac, Head of Exercise Coordination, Observation and Reporting Team. The Exercise "Eagle Royale" engaged some 60 members of the Croatian Armed Forces (the support elements for Host Nation Support and Real Life Support, one 82-mm Mortar Platoon and a unmanned aerial vehicle team of the Guards Mechanised Brigade of the Croatian Army (a total of 35 members).



#### **INTEGRATED FIRE SUPPORT**





The Exercise featured live firing by the 82-mm Mortar Platoon of the Battalion "Pauci" of the Guards Mechanised Brigade of the Croatian Army. Although the initial plan previewed the engagement of the 173<sup>rd</sup> Brigade's mortar platoon, the U.S. platoon was deployed to the area of operations in the Middle East, and was replaced by the Croatian Platoon, with a total of 35 members, which used an UAV for the first time.

"We are conducting the integrated fire task with UAV target homing, which is a novelty both for us and for the members of the 173<sup>rd</sup> Brigade (in charge of guidance in the Exercise), as it is normally a duty of forward observers", said 2<sup>nd</sup> Lieutenant Petra Popović of the Support Platoon of the 2<sup>nd</sup> Company of the 3<sup>rd</sup> Mechanised Battalion "Pauci", which is represented by four crews in the firing. The young officer commended the co-operation with the members of the U.S. Brigade. During the first days spent in the "Eugen Kvaternik" Range, the members of the two armed forces prepared firing positions, co-ordinated radio-procedures and the Call for Fire. "We agreed on common terminology, in accordance with NATO standards.









During the firing the UAV spots the target at the distance of three and more km and thus beyond our sight, and conveys it to the forward observers of th  $173^{rd}$  Brigade, who in turn report us on the target location", explains  $2^{nd}$  Lt. Popović. "The UAV over the target is not static, the gunners will have to act really quickly to hit the target".

#### **LOGISTIC SUPPORT**

That is just what the gunners did – they hit all the targets, as we could see for ourselves.

"The Exercise outcome exceeded our expectations. The radio-communication with the U. S. forces and UAV target homing went impeccably" said 2<sup>nd</sup> Lieutenant Popović after the round. The members of the 173<sup>rd</sup> Brigade will most certaintly continue to train in the Training Range "Eugen Kvaternik" next year, as they are very satisfied with the offered training condition in Croatia as a host country, says Lt. Col. Žarinac.

"Our colleagues of the U.S. brigade are very happy with the terrain, very suitable for live firing and with our logistic support, the accommodation, messing, and ground support. They highly value the way we perform our tasks and plan to come again next year".



#### **CAPTAIN QUENTIN BROOKS,** TACTICAL COMMUNICATIONS COMMANDER OF THE 1 BATTALION 503 REGIMENT 173<sup>RD</sup> AIRBORNE BRIGADE



The objectives for the Eagle Royale are company METT and we are here essentially using the training area to fire weapon systems. Our primary weapon systems are M 4. We conduct in a series of ranges of short-range marksmanship, medium-range marksmanship and longrange marksmanship

Conducting battle drills training for us is battle drills training and means room clearing, so we are conducting some training in your facilities;

We also use the training area for Squad STX (Situational Training and Exercise). We test our squad leaders's ability to react in certain situations, we have our specialty platoons here as well – our mortar platoon is here connecting joint training with the Croatian mortars here. working procedures together, to see how the Croatians shoot to get a better understanding of how we can work together and implement our systems together.

Our snipers are here as well, shooting at long-range.

We have our forward observers here as well (who they will observe for the shootings the Croatians will conduct). The training we are conducting here in cooperation with the Croatian forces is vital in our building partnership capacity within the European theatre.

It is important that we conduct relations with each other to further our nations' abilities to defend Europe and against any threats that might come up.



#### INTERNATIONAL CO-OPERATION

BY JOINING NATO'S COOPERATIVE CYBER DEFENCE CENTRE OF EXCELLENCE CROATIA AND ITS MINISTRY OF DEFENCE WILL ENJOY MANY BENEFITS OF THE MEMBERSHIP, SUCH AS ACCESS TO COURSES, PUBLICATIONS AND DOCUMENTS. THE MEMBERSHIP IN THE CCDCOE WILL DETERMINE THE OVERALL CROATIAN CYBER DEFENCE SYSTEM AND ENHANCE THE MINISTRY OF DEFENCE'S RESILIENCE TO CYBER THREATS

**CROATIA JOINS ELITE** 

NATO-'s Cooperative Cyber Defence Centre of Excellence (CCDCE), is an accredited and interdisciplinary cyber defence Centre of Excellence, established in 2008 and headquartered in Tallinn, Republic of Estonia.

CCDCOE conducts research, training and exercises in four key domains: technology, strategy, operations and application of international law in cyber space. Researchers, analyticians and lecturers are from the army, government administrations, academic community and industry. The CCDCOE is manned by experts from 24 allies and two Partner countries. The Head of the CIS Sector of the Ministry of Defence Colonel Bruno Bešker announced that the process of affiliation of Croatia is underway. Previously, a Letter of Intent addressed by the Ministry of Defence in mid -2018. Croatia will join the Centre after all member countries sign the Note of Joining.

The accession will be concluded on signature of the NATO CCDCOE Operation Memorandum of Understanding and NATO CCDCOE Functional Relationship Memorandum of Understanding.

#### Participating countries

Austria, Belgium, Bulgaria, the Czech Republic, Denmark, Estonia, Finland, France, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, the Netherlands, Norway, Germany, Poland, Portugal, Romania, Slovakia, Spain, Sweden, Turkey, United Kingdom and the United States.









Croatia will thus acquire the status of Sponsoring Nation, and is obliged to pay the annual membership fee proportionate to the CCDCOE personnel size. The Ministry of Defence designated Captain Tomislav Žarinčić, a member of the Cyber Space Command, who will also act as liaison officer for the Ministry of Defence and the Croatian Armed Forces and other interested subjects with CCDCOE.

#### **EXCHANGE OF KNOWLEDGE**

"The Ministry of Defence has direct and indirect benefits from the involvement in CCDC. The assignment of a Croatian officer to the Centre ensures direct insight into the elaboration of the curricula in cyber security. The affiliation also ensures attendance of courses free of charge and the insight into all results of the research by the CCDCOE. The biggest benefit is exchange of knowledge and lessons learned among the representatives of the Centre's member nations", says Colonel Bešker. The accession process is managed by Colonel Vladimir

#### INTERNATIONAL CO-OPERATION

Štimac, Head of the Department of Security and Monitoring of IT Systems of the CIS Service of the Ministry of Defence Col. Bešker says the CCDCOE competences are broad and well-defined.

"Since 2018 the CCDCOE has been responsible for identification and co-ordination of solutions for education and training for cyber defence for all NATO bodies. The Allied Command for Transformation (ACT) has assigned the CCDCOE unconditional accreditation for high-level education and training of NATO and partner countries personnel. Furthermore, the CCDCOE administers various courses at various locations, which cover a wide range of topics in technical, legal, strategic and operational domains of cyber security", said Col. Štimac.

Among the CCDCOE activities previously presented in the "Hrvatski vojnik" magazine, the most remarkable is "Locked Shields" – the world's largest and most complex cyber defence exercise. "The Exercise has been conducted annually since 2010 and has expanded to simulate the complexity of the large cyber incidents. In addition to regular IT and military systems and critical infrastructure cyber security experts can practice strategic decision making, and legal and media communication", says Col. Štimac.

#### **ENHANCING THE RESILIENCE**

Among other activities the CCDCOE organises annual conferences on cyber conflicts – the CyCon, which are of relevance for the academic research in cyber security. NATO's Centre of Excellence is active in the application of international law on cyber space. It also produced an important internationally recognised manual "Tallinn Manual 2.0 on the International Law Applicable to Cyber Operations", which was authored by the Centre's staff, the respectable international law professors and legal advisors from various countries and partners. The Manual was published in 2017 and supplemented the first edition (published in 2013) with a legal analysis of most common cyber incidents occuring daily.





### WHAT WERE YOUR FIRST IMPRESSIONS ON ARRIVAL TO ESTONIA?

Shortly after gaining the independence the Estonian leadership spotted the benefits of economising through IT technology for governance and management in the judicial, education and health systems, as well as of military and the police and the government itself. It is no wonder that over the past decades they have capitalised on the acquired experiences with the development of information security and cyber operation. There was also the critical experience from the hacker attack in 2007, which threat-ened the entire country and the acquired high-level of computer services. Given the intensity and the duration the attack can be characterised as a cyber attack and even cyber warfare. Today, Estonia is the European and even world leader in IT technology . The nick-name e-Estonia implies the use of tens of public Internet services for the citizens.

#### WHAT IS YOUR DAILY SCHEDULE LIKE?

I commenced working at the Centre (in the training department) recently and I now need to familiarise with the activities. I am a staff officer for co-ordination of training and distance learning and I work with some 60 officers from 25 countries. We have daily briefings with the head of the service and continuous review of daily, weekly and monthly assignments. We also regularly co-ordinate on cyber defence training activities administered by the Centre, as well as evaluations of the training programmes offered by other centres within NATO. Although complex, the programmes evaluation mechanism yields positive outcome as lessons learned, exchange of experience among the Centre and NATO staff and the inception of new pilot projects with the Partnership for Peace member countries. It takes attending relevant programmes and training in my line, though.

#### CAPTAIN TOMISLAV ŽARINČIĆ,

CCDCOE,

STAFF OFFICER FOR COORDINATION OF TRAINING AND DISTRIBUTED LEARNING AND MINISTRY OF DEFENCE AND THE CROATIAN ARMED FORCES LIAISON OFFICER WITH CCDCOE



#### HOW IS CCDCOE EQUIPPED? WAS IT DESIGNED IN A FUTURISTIC STYLE?

The CCDCOE is a modern centre of excellence. The first thing you'll notice is physical security of the workplace, in terms of regulated ID access to security zones, the management of user identity and authority. In addition, a sound and productive business co-operation among NATO nations, working on projects in material and applicative solutions and tests on IT equipment we use and develop for NATO.

#### WHAT ARE YOUR MAIN PROFESSIONAL CHALLENGES?

In this branch the training and coordination related to the design of new courses within NATO requires a scientific approach that applies the methodology from the education. It calls for expertise and experience from lessons learned that is applicable in the next iteration of newly designed cyber courses and exercises. I continue to study and am going to attend specialist courses. Learning and planning or updating the teaching is a long process and a skill built upon, and is based on flexibility among the subjects (in this case the interested subjects in NATO), on expertise and finally on co-operation between the entities in the training development process.

#### IS CYBER SECURITY IN CROATIA AND NATO DEFENCE SYSTEM CHALLENGING ENOUGH FOR AN EXPERT IT OFFICER?

Certainly. It is a concentration of the most complex information system and applied technologies security solutions implemented to ensure the triad – confidentiality, integrity and availability of information that we dispose with and manage in the MoD and the Croatian Armed Forces information system, and in NATO too. After years of best experiences at duties or at various education and training activities and exercises one becomes aware of the progress achieved and the benefit for the system you work for.

### OUR MISSION IS TO CONTRIBUTE TO THE ALLIANCE'S EFFICIENCY AND COHESION

In December 2019 a delegation of NATO Defense College visited the Croatian Defence Academy "Dr. Franjo Tuđman". It was an opportunity to talk to the Commandant, Lieutenant General Christine Whitecross on the College's mission, teaching modalities and the co-operation with the Croatian Defence Academy.

### CAN YOU TELL US ABOUT THE MISSION AND THE VISION FOR THE NATO DEFENSE COLLEGE?

NATO Defense College was established in 1951, shortly after the founding of the Alliance by the 12 members. The idea to open NATO Defense College came from General Dwight D. Eisenhower, the first Commander of the U.S. Forces in Europe, who perceived a need to establish an international institution assigned with a unique mission of educating military and civilian leaders. The College's mission is to contribute to the Alliance's efficiency and cohesion by developing its role as the main hub of education, achievements and security studies.

Our teaching methodology is aimed to assist the graduates to develop interoperability necessary for efficient performance in international environments.

#### HOW IS THE COLLEGE PLAN AND PROGRAMME ADAPTED TO NEW CHALLENGES?

Our program has been continously updated and tailored to the challenges of the future. The Alliance has seen important changes, there was the Cold War, a number of international missions have been launched, the Strategic Concept developed in 2010, and most importantly, from 12 founding member nations we are now 29. Also, we co-operate and have included into dialogue nearly 40 partner countries. The NDC has changed too, but its mission has remained the same – educate the military personnel to enhance their knowledge and understanding for the people they work with. The underlying idea from 1951 is still alive today. Only the way we do it has changed.

The Senior Course has remained the same since the very start, and has served as base for other courses. We have included more and more students and countries, and invite the partner countries too to discuss the topics of common interest.

We have established a Research Department, focussed on the topics of importance for NATO and its member nations. The focus has been on climate changes, new technologies, space, AI; migrations, and we integrate these topics into the existing curriculum.

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NATO Defense Col-

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**Armed Forces** 

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#### HOW DO YOU VALUE THE CO-OPERATION WITH HE CROATIAN DEFENCE ACADEMY?

Through the Senior Course we conduct visits to NATO member nations, and it has brought us to Croatia for several times already. Our intent is to come as often as possible, to familiarise with the members' defence and security challenges and the way they affect NATO and the way NATO impacts their decisions. NATO Defense College has excellent co-operation with the Croatian Defence Academy and we attended a few conferences held here. On each visit we learn something, both about the challenges faced and about the innovative ideas promoted by the Croatian Armed Forces.

#### HOW WOULD YOU DESCRIBE THE POSITION OF WOMEN IN THE MILITARY TODAY?

There are still many armies with small percentage of women. Whatever the reason, it is a wrong mindset for me. Women in the military bring a perspective that get from men. It is not necessarily a better one, just different. My point is that women are really good at what they do. If you exclude women, you have excluded 50% of the population, and remained short of innovative solutions, opinions, diversity. Women can offer new solutions for old problems, provide a new picture of a given situation, so accept women in the military. After 38 years of service I can see the position of women is changing, but it can and definitely has to be even better.

#### YOU VISITED CROATIA DURING THE HOMELAND WAR? WHAT IS IT LIKE TO COME BACK AFTER ALL THIS TIME?

My first visit to the Croatian Defence Academy "Dr. Franjo Tuđman" in 2017 took place 20 years after my visit to Croatia, and it was an extraordinary moment for me. My memories of wartime Croatia were gloomy and negative. It was a time of hatred and animosity. Coming back to Zagreb 25 years later and to see a vivid city with determined people who believe in democracy and the rule of law, who make part of the European Union and of NATO, to see the way Zagreb has evolved since then was a most liberating experience for me. It is an honour for me to stay here, because each time I come my faith in the people is renewed.

#### DO YOU REMEMBER THE WALL OF PAIN - THE MONUMENT TO THE FALLEN AND MISSING CROATIAN DEFENDERS?

I certainly do, and I even have a tiny secret related to the Wall. I was working in the UNPROFOR headquarters behind the Wall. Every day on my way home I watched the red bricks inscribed with names. I wanted to build a part of me into the Wall, which gave me comfort and faith, and on one occasion I hid a coin into the soil beneath it. So my memories are forever tied to the Wall.

LIEUTENANT GENERAL CHRISTINE WHITECROSS, NATO DEFENSE COLLEGE COMMANDANT

"OUR PROGRAMME IS CONSTANTLY DEVELOPED AND ADAPTING TO THE FUTURE CHALLENGES. THE ALLIANCE ITSELF HAS BEEN THROUGH MANY CHANGES, AND SO HAS THE COLLEGE TOO. ITS MISSION HAS REMAINED THE SAME, THOUGH – TO EDUCATE THE MILITARY PERSONNEL TO ENHANCE THEIR KNOWLEDGE AND UNDERSTANDING FOR THE PEOPLE THEY WORK WITH. THE UNDERLYING IDEA FROM 1951 IS STILL ACTUAL TODAY".



## **CONQUERS THE WORLD**

The interest of the Croatian and foreign media for HS Produkt's Hellcat pistol is understandable given the novelty of the model and the need to present it.

The company based in Karlovac– a town cca 50 km from Zagreb, has a long reputation for manufacturing top-design and quality weapons. Its models have won five prizes in the U.S market, where they are sold in collaboration with Springfield Armory as XD (eXtreme Duty).

The development of Hellcat pistol labelled H11 at the market outside the United States is about the development of "compact" pistol. The appearance of Glock 9-mm pistol and 15-round magazine in late 1980ies brought to market a weapon with acceptable dimensions and large fire power in both segments: capacity and calibre power. The Glock 19 inaugurated a new category of "compact" weapons.

The solution has proved as an ideal concept of a universal police weapon, fitting the most aspects of the police needs today. The concept of pocket weapons has returned to its rudimentary configuration beginnings with larger calibres or more up-to-date solutions with smaller



calibres sufficient for self defence. The worsened security situations, particularly in urban zones in the 21st century has increased the need for self defence.

The higher incidence of daily threats and risks for security has changed the police's needs in specific equipment and weapons and also the criteria for self-defence and back- up weapons. The weapons need to combine small size with higher fire power. The shortened version of "compact" weapons - the subcompact does not meet the modern needs of true self-defence weapons; they are still too bulky

There has never been a bigger need for concealed armament. The new category has been named "micro compact". Many experts consider it an ideal for a concealed carry gun. However, as this category has evolved over time, the micro compact is a separate category.

The latest Croatia-made pistol – the HS Produkt's H11 (Hellcat) model is among the few pistols available that fits into the category. In the author's view, the H11 is a pistol whose designer managed to produce a leading pistol in the category, beating SIG P365.

THE LATEST PISTOL OF THE HS PRODUCT FIRM FROM KARLOVAC HAS RECENTLY BEEN SOLD IN THE UNITED STATES MARKET AROUSING A GREAT DEAL OF INTEREST OF THE EXPERTS MEDIA AND LAY PUBLIC. THE AUTHOR PROVIDED A DESCRIOPTION OF THE WEAPON, AND COMPARED IT WITH THE DIRECT COMPETITION. HE ALSO COUNTS THE FIRING EXPERIENCE AT THE SHOOTING RANGE.

H11 with extended 13-round magazine. The polymer surface of the magazine received Adaptive Grip texture to improve the weapon grip

HS PRODUK MADE IN CROA

H11 (HELLCAT)	
Calibre	9 x 19 mm
Barrel length	79,5 mm
Overall length	153 mm
Height	107 mm
Weight without magazine	455 g
Empty magazine weight	58,5 g / 61 g / 68,5 g
Line of sight	127,5 mm

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CROATIAN MILITARY INDUSTRY

#### **"FULLEST" AMMUNITION BOX**

A month after the launching of the pistol at the U.S. market under the label Hellcat, the HS Produkt presented it at the Milipol Paris (19 – 22 November 2019) under a simplified name - H11 – the same market label as in the U.S. The new HS Produkt model labelling is a part of the strategy of brand recognition to highlight the Croatian origin. The H11 /Hellcat has been a success ever since it was launched in the U.S. market. Its importance is best illustrated by comparison to the earlier leading model – the SIG P365.

HS PRODU

To tell the truth, the SIG P365 did not create the category, it only ruled it until Hellcat emerged. There were similar models before SIG P365 itself – the U.S. Kel-Tec P11 (by Grendel manufacturer) and some models by the U.S. - Brazilian Taurus - but did not endure the market. Technical faults, unreliability and poor quality (particularly of the Taurus pistols, which were withdrawn from the market due to poor safety) compromised the market success, let alone positioning. Shortly after the entry of Hellcat, "micro compact" class pistols were presented by Smith & Wesson and the Turkish Canik, but both models were bigger, and are not challenging the Hellcat position.. At first sight the HS Produkt's H11 and SIG P365 features are almost identical, except for the difference in the magazine capacity; the 11 rounds in the Croatian basic model magazine versus 10 rounds in the competition model. It may be a small difference, but HS Produkt pistol model magazine is the biggest in the "micro compact" class. In addition to the standard flush plate magazine, it also has an equal capacity pinky extension magazine and an extended 11-round magazine, all made of stainless steel. HS Produkt's H11 in Optical Sight Pistol version is equipped with Shield RMSc red dot sight. 0



#### LIGHTER AND SAFE

Although it follows the recognisable polymer casing with embedded striker, the H11 differs from the former HS Produkt model range, mostly in safety properties.

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H11 is the first strike-fired HS Produkt without grip safety . Although the brake is the trade mark of the HS Produkt pistols, the manufacturer followed his intent. The small size of the "micro compact" class entail the reduced weight. In order to achieve this, the HS Produkt redesigned the weapon and launched an entirely new pistol model, not a downsized bigger one.

In addition to the grip safety, the H11 also displays a redesigned loaded chamber indicator, which is no longer configured as a rod outside the slide, but as semicircular grooves on the slide and barrel.

They form a circle or a round opening through which the presence of the round in the chamber is checked, whereby the weight was reduced without compromising the safety. On the contrary, it maintained high safety standards characteristic of all HS models.



The H11 magazines from left to right: standard "flush plate", the 11-round "pinky ext"with protruded hold for small finger and the "extended" 13-round magazine

The pistol is fitted with three brakes – the trigger brake, the falling brake of the trigger mechanism and the passive blockade of the striker, which prevent accidental firing in the event of a fall. The brakes function independently, and pulling the trigger just before firing deactivates them all. The trigger mechanism is similar to the Glock's semi-cocked striker, but it's not the same. When the pistol is loaded, the striker is in partially cocked position, and by pulling the trigger it is further halted then released to fire the gun.

Given the small size and different geometry and the force ratio, and for an enhanced firing reliability, the H11 was fitted with an outer extractor, continuing the trend that started with the XDS pistol line. Combined with a large ejection hole (a part of Petter- Browning modified barrel locking system with barrel oscillation, the system guarantees high reliability.

The loading grooves on the slide are cut on the front and rear sides, while in the rear section the slide is extra cut to enable safer loading.

#### **MISSION: TESTING!**

The pistol is manufactured in the standard and Optical Sight Pistol (OSP) version, configured for fitting with optical sights with red dot; on the OSP version the plate that covers the sight assembly is also cut on the upper side. The loading of a pistol with red dot sight turned out faster than the weapons with classic clide, as the sight itself is a good handhold. The slide and other metal parts received Melonite finish. A look through an optoelectronic sight with a red dot, with high-visibility luminescent-ring front sight fitted onto H11 The sights are metal, fixed, mechanical and have been reconfigured too, with a U-notch rear sight outlined in white, and two versions of the front sight exist: one with a red fiber insert and one fitted with a large tritium luminescent shooting dot for shooting in low visibility conditions. When tested, the front sight with a red fiber insert performed better, but it was probably a personal impression and preference. It showed remarkable precision.

We shot precisely at 10-, 15- and 25-m distances in the test, and the hit groups were no larger than 5 cm in diameter at 25 m. At rapid firing, the target acquisition is surprisingly easy and fast, and the initial skepticism over the U-notch turned into a pleasant surprise.

The shooting with an OSP model with a fitted optoelectronic sight takes adaptation time for anyone not accustomed to the sight type. The impression we got at the shooting was quite as expected for the mechanism of the kind, no better or worse. The shooting weight is just over four pounds and the trigger is comfortable under the finger. It is a self-defence weapon, not a shooting gun. The weapon control at fast shooting fits the purpose, but the gun is much better controlled with a 13-round magazine. It is a small-size pistol and the control, given the good ergonomics of the grip, is more than acceptable.



#### CROATIAN MILITARY INDUSTRY



#### **SUPERIOR AND BETTER CONFIGURED**

The author being in possession of the first generation of XDS and having fired thousands of 9-mm Para and .45 ACP rounds over the past two years, claims to be right about H11 being superior and better configured in all aspects and easier to handle than XDS. It is also important that the XDS grip is adapted for a single –sided magazine and requires a firm hold of the pistol. In addition to improved ergonomics, the Adaptive grip texture enables firmer, safer and more comfortable grip and the new contact surface texture.

The model combines two different micro-pyramides, the taller pyramids with flattened tops and the shorter ones with pointed tops. To achieve this, in the absence of a software or a machine that could make a pattern, the forms and pyramids were hand made in the factory. In this way hand slippage was prevented and grip firmness was preserved, neutralising the negative and hazardous effect of rubbing and ripping the garment.

There have been cases where the handgun owner dropped the pistol when pulling it out of the jacket. Unlike the SIG P365, the H11 grip is fitted with the Picatinny rail in the front part. Excellent ergonomics enables high and correct pistol grip without the risk of the Glock – induced slide bite (between the thumb and the index finger) It brings a major advantage as H11 allows the fitting of most standard extra equipment while SIG requires a a special adapter or customised extra equipment.

The magazine latch is not the classical double-sided model, but is reversible to fit the users needs. It was configured with a purpose, like with the security elements, in order to reduce the overall weight.

#### A CLEAR GOAL

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The target market for HS Product's "micro compact" gun is the United States - the most demanding and powerful and each success brings addition to financial gain, strengthens the status for the manufacturers in addition to the financial gain. HS Product has enjoyed reputation as one of the most successful weapons manufacturers in the United States for years anyway. In cooperation with the U.S. partner - the renowned Springfield Armory, - the Croatian manufacturer has decided to beat the latest micro-compact model - the SIG P365 pistol. The first results of the independent tests have revealed high reliability of the pistol with any type of ammunition and durability of the materials, congruent with the factory acceptance testing.


The H11, now Hellcat, is a result of years of toilsome research, testing and trying of different approaches for best solutions. For better marketing strategy the practice of labeling a gun with the initial letters XD (eXtreme Duty) has been abbandoned for the first time and the new gun received an American label – Hellcat.

However, given the complex business cooperation and singularity of the U.S. market compared to the rest of the world, the HS Produkt markets the pistol under a simplified title H11. Even with the new simplified title, the gun is still a terrific and powerful weapon, defiantly entering the zone of the SIG P365 with a clear goal of overthrowing and taking the throne from its manufacturers as soon as possible. Despite the small size, the H11 proved as an accurate pistol. We shot at the standard HS-9 pistol test target.

### DISASSEMBLY

The pistol is simple to disassemble. The disassembly lever is on the left side, on the handle in the middle below the cover, slightly in the direction of the barrel in front of the trigger.

To disassemble the pistol release the magazine from the frame and lay it aside. Then pull the slide rearward and inspect the chamber to be empty. If so, point the pistol into a safe position and dry fire it. Then pull the slide backwards and block with the slide stop lever, which has to fit The guide stopping rod needs to rest in a groove on the slide.

The rod is rotated 90 degrees upwards. The slide is released into a front position while the trigger is pulled and is removed from the grip. The disassembly lever is rotated upwards 90 ° degrees. The recoil spring guide rod and the barrel are then removed from the slide. To reassemble, simply reverse the procedure.



Loaded H 11 trigger (left). The trigger is forward when the pistol is loaded, and is pulled rearward if the pistol is not loaded. (right). It is a distinctive and useful, although not safety –relevant, indicator that the pistol is loaded.





#### INTERNATIONAL PEACE SUPPORT OPERATIONS

By participating in international peace support operations and in the Enhanced Forward Presence Croatia continuously contributes to world and European security building processes. In addition to the years-long presence in KFOR in Kosovo and Resolute Support in Afghanistan, its soldiers have been engaged in recent activities too.

#### **OPERATION "SEA GUARDIAN"**

In late August 2019 members of the Croatian Navy set sail from Split to take part in NATO's Sea Guardian peace support operation in the Mediterranean, and returned from on 17 September anchoring in the Port of Dubrovnik.

The 2<sup>nd</sup> HRVCON to "Sea Guardian" was manned by 33 members of the Croatian Navy assigned to the "RTOP Dubrovnik" missile boat, commanded Lieutenant Commander Stipe Mornar, while the Commander of the Missile Boat is Captain (N) Ante Uljević.

The RTOP-42 "Dubrovnik" missile boat of the Helsinki Class is 45 m long and has a 8.9 m beam and 28 knot speed . In the Operation "Sea Guardian" the Croatian missile boat covered the area in the central Mediterranean (from west coast of Sicily and the shores of Tunisia towards Malta).



CROATIAN MILITARY MAGAZINE

Author: Petra Kostanjšak, Photos by: M. Čobanović, J. Kopi

BY PARTICIPATING IN THE OPERATION SEA GUARDIAN IN THE MEDITERRANEAN AND OF ENHANCED FORWARD PRESENCE IN POLAND AND LITHUANIA, MEMBERS OF THE CROATIAN ARMED FORCES CONTINUE CONTRIBUTING TO WORLD AND EUROPE-AN SECURITY BUILDING PROCESSES

# **CROATIAN ARMED FORCES IN NATO-LED OPERATIONS AND ACTIVITIES**

The Contingent was tasked with developing a thorough maritime awareness picture, detection, identification and tracking of potential threats and with exchange of information.

The engagement of the Croatian Navy vessels in "Sea Guardian" adds to Croatia's continuous contribution to NATO's efforts to provide common maritime security through the main mission of the Operation - to support maritime counter-terrorism, to support maritime situational awareness, to contribute to maritime security capacity building, as well as to uphold freedom of navigation, to conduct maritime interdiction, to combat the proliferation of weapons of mass destruction and to protect critical infrastructure.



INTERNATIONAL PEACE SUPPORT OPERATIONS





#### **5 HRVCON TO EFPBG POLAND**

In late October 2019 5<sup>th</sup> HRVCON to NATO's Enhanced Forward Presence activity to Battlegroup in Poland was sent off from the Barracks in Bjelovar NATO's Enhanced Forward Presence in Poland.

The Croatian soldiers have been assigned to the U.S.-led Battlegroup attached to the 15th Mechanised Brigade of the Polish Armed Forces, alongside the members of the Romanian Armed Forces and of the British Armed Forces. The main mission of the Battlegroup Poland (BG-POL) is joint training and upgrade of interoperability among the allies participating in Enhanced Forward Presence. The 80-member main component of the 5th HRVCON, among whom three females, consists of members of the Guards Armoured Mechanised Brigade of the Croatian Army. The Commander of the 5th HRVCON to eFP BG -POL Major Marijan Žukina said on departure to Poland that all HRVCON members had successfully completed a demanding pre-deployment training and were thoroughly prepared for the tasks and challenges assigned. The deployment in NATO eFP BG POL is a worthy and challenging experience for the members of the Croatian

The Republic of Croatia has contributed to NATO-led operations since 2003, and since its full membership in NATO in 2009 it has continuously proved itself as a committed and credible ally. Armed Forces as they will be exercising their normal duties in an international environment.

In early February the Contingent members conducted a live-fire tactical exercise titled "Storm" in the Gaudynek training ground in Poland, which also engaged the U.S. forces from NATO's Enhanced Forward Presence Battlegroup. The objective of the Exercise was to test the readiness of MRLS Battalion, which is the main component of the 5<sup>th</sup> HRVCON, for tactical operations and procedures from the mission essential task list, to fulfill its basic mission of providing fire support to the maneuver forces.

In NE Poland the members of the Croatian Armed Forces have been engaged in peacetime activities designed as NATO activities for acquisition and maintenance of readiness support to enhanced security of the Alliance and its member nations, which mainly consist in joint training activities aimed at increased interoperability. The Battlegroup Poland is one of four battlegroups in tangible implementation of the concept of NATO's Enhanced Forward Presence and are positioned along NATO's eastern borders (in Poland, Lithuania, Latvia and Estonia).





CROATIAN MILITARY MAGAZINE



#### **BATTLEGROUP LITHUANIA**

Late 2019 saw the formal send-off of 2<sup>nd</sup> HRVCON to NATO Enhanced Forward Presence (eFPBG-LTU) in Lithuania from the Barracks "4<sup>th</sup> Guards Brigade" in Knin. The 188 -member Contingent belong mostly to the 3<sup>rd</sup> Mechanised Battalion "Pauci" of the Guards Mechanised Brigade of the Croatian Army.

The Commander of the 2<sup>nd</sup> HRVCON 1<sup>st</sup> Lieutenant Robert Bajan in his address at the send-off said the Contingent members were highly motivated, trained and ready for all tasks, and that they were responsible and honoured to represent the Croatian Army as well-equipped and trained. The deployment in NATO eFP BG POL is a worthy experience for the members of the Croatian Armed Forces as they will be exercising their normal duties in an interenvironment gaged in Germany as the Lead Nation, Croatia, the Netherlands, Norway, the Czech Republic, Belgium, Luxemburg and Iceland. The multinational Battlegroup in the 7<sup>th</sup> rotation is manned by 1,200, with Croatian Contingent as the second largest to the Lead Nation. The members of the 2<sup>nd</sup> HRVCON to NATO's eFP from 9-12 February 2020 took part in the joint military exercise "Winter Saber".

Through participation in Enhanced Forward Presence, NATO member nations showcase unity, capability and readiness to defend the integrity and sovereignty of the borders, and NATO's commitment to deliver its core responsibility – collective defence of all member nations from any possible threats.



THE EXERCISE "ODIN SPEAR" 20 ENGAGED THE U.S. AIR FORCES IN EUROPE AND MEMBERS OF THE CROATIAN ARMED FORCES. FOR THE FIRST TIME IN HISTORY THE CROATIAN PC-9M PILOTS LED A JOINT ATTACK WITH THE U.S.'F-16 AND SHOWCASED INTEROPERABILITY IN ACCORDANCE WITH NATO'S PROCEDURES FOR CLOSE AIR SUPPORT.

The Training Range "Eugen Kvaternik" near Slunj hosted a joint training event of Croatian and American pilots and JTAC (Joint Terminal Attack Controller) titled "ODIN SPEAR 20" during February 2020. The objective of the drill was joint practice of the Croatian and the U.S. troops in close air support scenarios during Major Combat Operations (MCO). The MCOs in close air support are characterised by the presence of the opposing force's air defence system and equivalent capabilities and forces of the two sides.

In potential future conflicts with equivalent opponents in possession of the state-of-the-art weapons it will be harder to achieve air superiority, and the efficiency of close air support will be decreased However, in dynamic joint operations, the land forces will still rely on close air support to provide fire support. Without close air support, the joint forces operating in such perilous environments will be at risk of destruction and mission failure. The exercise "ODIN SPEAR 20" tested the co-operation of the land and air forces in the assessment of the requirements for of close air support in a conflict of the kind.

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All the items of the Exercise scenario concluded successfully and the Croatian forces showcased the ability to take part on an equal basis with the allied forces in close air support activities within MCO.

Author: Marijan Turkalj, Photos by: Marijan Turkalj

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### **ODIN SPEAR 20** TESTING THE JOINT OPERATION OF AIR FORCE AND OF LAND FORCE

#### **JOINT ATTACK**

An essential role in MCO is assigned to FAC (A) - Forward Air Controller (Airborne) - the sole element with the authority to attacking aicraft alongside the JTAC. They were experienced F-16 pilots and experts for close air support and able to join the forces with JTAC to conduct the brief, stack, mark and control. At the ODIN SPEAR 20 the FAC(A) and JTAC co-ordinated the joint attacks by F-16 and PC-9M aircraft aimed at neutralising the air defence and high-value targets in a single run, while the Croatian joint fires observers directed the artillery, which enabled the suppression of the opposing force's air defence. For the first time in history the Croatian PC-9M pilots led a joint attack with the U.S. F-16 and showcased interoperability in accordance with NATO's procedures for close air support. In addition, the Croatian and the U.S. JTACc co-ordinated combined arms with the land forces manoeuvres and the helicopter infiltrations with the HH-60G and Mi-171Sh.

The activity engaged the United States Air Force Europe (US-AFE) and the Croatian Armed Forces. The USAFE engaged JTAC instructors of the 4th Combat Training Squadron, the staff and simulation assets of the Detachment 3 "Polygone", the F-16 aircraft of the 555 Fighter Squadron and the helicopters of the 56th Rescue Squadrona. The two squadrons belong to the 31<sup>st</sup> Fighter Wing, based in NATO Air Base "Aviano" in Italy.

The Croatian Army engaged the JTACs of the Guards Mechanised Brigade, the Guards Armoured Mechanised Brigade and the Special Forces Command, and the joint fire observers of the Artilley and Missile Regiment. The Croatian Air Force engaged the PC-9M Pilatus aircraft of the 392 Fixed-Wing Squadron of the 93rd Wing and the Mi-171Sh helicopters of the 194th Multi-purpose Helicopter Squadron of the 91st Wing.

ARE CONSTRUCTION

The Mi-171Sh helicopters were used for helicopter infiltration and exfiltration and MEDEVAC. This was their first engagement in close air support operations, which opened the way for the future full synergy with JTACs.

#### PARTICIPATION ON AN EQUAL BASIS

The HH-60G helicopters were also engaged as a platform for infiltration and exfiltration, and as additional capability for close air support with a 12.7-mm machine gun and Personnel Recovery. 4th Combat Training Squadron (4 CTS) - a unit tasked with training, evaluating and certification of JTACs and joint fire monitors - is a part of the Warrior Preparation Center within the USAFE, as well as Detachment 3 "Polygone", which was engaged too, and the opposing force's air defence's visual and radar simulators. The activity concluded successfully. All the scenario items were completed and our forces displayed the ability to engage in close air support during MCO with allied forces. The participants consider the ODIN SPEAR 20 as a valuable experience and expressed the desire to continue cooperation. For both Croatia and for the allied forces new lessons learned are important which will help further upgrade the techniques, tactics and procedures. One of the most important Lessons Learned is that some skills need refreshing and restoring.

The decades of counterinsurgency operations have led to forgetting of processes and procedures necessary for success in symmetrical warfare. In potential future conflicts against opponents with equivalent capabilities the efficient combined arms will necessitate convergence of common expertise and effects, including close-air-support and joint suppression of the opposing force's air defence from various domains, to enable operational and tactical freedom of manoeuvre and fire.

#### CROATIAN ARMED FORCES

ON RETURN FROM THE MEDICAL SUPPORT TASK AT A MILITARY POLICE TRAINING EVENT IN THE TRAINING RANGE "JOSIP JOVIĆ" AT UDBINA A MEMBER OF THE MILITARY MEDICAL CENTRE OF THE SUPPORT COMMAND MARTINA DIR HAD A GRAVE ACCIDENT CAUSING HER A SERIOUS LEG TRAUMA. THE MEDICAL TEAM OF THE CLINIC FOR TRAUMATOLOGY IN ZAGREB, HEADED BY ASSISTANT PROFESSOR DINKO VIDOVIĆ RESTORED THE LEG FUNCTION FOR THE 24-YEAR NURSE ENABLING HER TO WALK ALONE WITH A USE OF A CRUTCH

"Doctor, please do not cut my leg. Please save it, if you can". The doctor answered: "I will do my best!" That is how our battle started", says Martina, a 24-year nurse of the Military Medical Centre, recounting the moments she went through after a grave accident at the motorway near Posedarje and the primary care she received in the hospital in Zadar. On 30 August 2019 she was transported aboard a military helicopter to the Clinic for Traumatology of the University Hospital Centre "Sestre milosrdnice" in Zagreb, where she was received by the attending doctor – Assistant Professor Dinko Vidović, who is to credit for the leg recovery and walking alone with a use of a crutch.

"I laid trust in him and his treatment from the first moment. If it hadn't been for my colleague and driver Mihovil I would have lost my life and if it hadn't been for Doctor Vidović I would have lost my leg.

We talked to Martina shortly after termination of rehabilitation at Krapinske toplice, before heading to Pula where she was to undergo another surgery – the ninth one. With a wide smile on her face Martina shared her satisThe doctors in the Clinic for Traumatology were stunned by both the gravity and uniqueness of the injury. The patient's huckle-bone and the knee were transported in a bag with her but out of her body - a scene they had never seen in their careers. faction over her recovery and deep gratitude to Doctor Vidović for saving her leg, which six month earlier was only a hope. She had the accident on her return from the Training Range "Josip Jović" at Udbina, where she provided medical support at a Military Police training event. The van that took the team back hit a lorry, which smashed the right front section of the van beyond recognition.

#### A DISLOCATED HUCKLE-BONE

"Don't die, please, don't die", begged her colleague Mihovil, and told her not to look down on her leg, but she did so automatically. "My uniform was torn and I saw a bone sticking out. But it did not hurt. When I realised that I felt no pain, I fainted. The next thing I remember were the firemen cutting us out, and the colleague still sitting next to me. He did not leave me alone for a second, and he saved my life. There was a crowd outside and I wanted to go out. My leg then twitched and lost my senses again. When the rescuers drew me out of the vehicle my bone just fell on the road", 24-year Martina recounts her painful experience.

#### Author: Martina Butorac, Photos by: Filip Klen, private archive

#### CROATIAN MILITARY MAGAZINE

Martina was taken urgently to the hospital in Zadar, where the doctors installed an external fixator used in treatment of open fractures and consulted Doctor Vidović of the Clinic for Traumatology in Zagreb, reporting that they received a patient with a serious and atypical injury that was beyond their expertise.

"Surprisingly, considering the gravity of the injury, the patient was in good general condition. The team in the Clinic for Traumatology was stunned by both the gravity and uniqueness of the injury. The patient's huckle-bone and the knee were transported in a bag with her but out of her body – a scene I had never seen before in my career. "In addition to a dislocated bone, she also had a fractured patella, with an open injury and damaged tissue. At first, seeing such an atypical injury that I had never seen in the reference either, I did not what to do", said Doctor Vidović.



## A CROATIAN ARMED FORCES NURSE RECOVERS FOLLOWING A GRAVE INJURY AND MIRACULOUS SURGERY

"The huckle-bone was infected and as such was not to be repositioned as the patient would develop sepsis, necessitating amputation. In other scenario, even with the decontaminated huckle-bone the problem would still be to revive and revasculate it, whereas the third challenge lied in the ligaments repair to establish the femur-tibia continuity to form a functional joint.

Doctor Vidović and his team deposited Martina's huckle-bone and knee in a tissue bank until a concrete treatment plan was devised. It proved later to be a critical procedure, given the bone infection and all microbiological samples testing positive to highly pathogenous bacteria, and the bone had to be decontaminated in the tissue bank by a special procedure.

#### **A MULTIDISCIPLINARY APPROACH**

"I consulted some foreign clinics about this case, among whom a German orthopedic and traumatology clinic, who lacked a ready solution given the uniqueness of the injury. The German surgeons suggested the repositioning of the huckle-bone and fixing it with a long gamma nail The surgery took over 11 hours, and at one moment it was performed by a team of 15, including a vascular and microvascular team, an orthopaedic and traumatology team and other medical staff.



and performing arthrodesis, but it would result in stiffed limb, the patient's inability to bend the knee and therefore in serious disability.

It was an option for the surgical team, but I had a different plan for Martina – I intended to try to restore the function of the knee and the entire extremity. It took a multi-disciplinary approach though", explained Doctor Vidović. A surgical team was established to plan the surgery down to the tiniest detail.

"I waited 16 days to the surgery, during which time I was prepared for anything. I even accepted the necessity of amputation, glad that my spine was spared at least. A day before the surgery Doctor Vidović told me that the likelihood of losing my leg was 90% versus 10% of restored function. As he had previously had told me that the likelihood was 1%, I said that 10% were great odds" says Martina, laughing. She cherished the heartfelt support from her parents and her fiancé – a member of the Battalion "Pauci" of the Croatian Army.

The surgery proceeded well as the medical team had planned it meticulously before.

#### CROATIAN ARMED FORCES

The doctors had been prepared for the worst scenario, and for each step a possible solution had been prepared in the event of complications.

"The surgery took over 11 hours, and at one moment it was performed by a team of 15, including a vascular and microvascular team, an orthopaedic and traumatology team and other medical staff. Each new step was harder than the previous and we had to recourse to the Plan B. We had devised a Plan C too, but fortunately it was not necessary. Some of the staff joined us after their duty periods, and we were all united in the wish to help that young woman", says Doctor Vidović recounting the unique and singular surgery case.

There was no other option if the surgery did not proceed well. Extremities cannot work on skin and muscles alone, the external fixator cannot be in place permanently and so amputation was the sole option. What the doctors feared the most was the post-operative infection, but all inflammation parameters decreased in the following days and the patient recovered very well.





Martina spent the following six months in the hospital taking a treatment with a physiotherapist, and she first stepped on her foot in January. On bidding farewell to the hospital staff, she could stand on her feet without aids, and walked with a crutch.

#### **POSITIVE ATTITUDE**

"The first aim is to save the patients life, which is what our colleagues in the hospital in Zadar did. The next goal was to save the extremity and the third was to save the function of the leg. We won in all three", said doctor Vidović, stressing that Martina's psychological stamina and positive attitude certainly facilitated the successful outcome.

"I was stunned by the psychological stamina of our young patient. She went through a strong trauma particularly if you consider her young age. She experienced it early in her life but endured it with enviable courage. In my medical practice I come across cases with minimal injuries with poorer outcome because of the patients psychological condition. Not Martina!"

Martina spent the following six months in the hospital taking a treatment with a physiotherapist, and she first stood on her foot in January. On bidding farewell to the hospital staff, she could stand on her feet without aids, and walked with a crutch.

"I am very satisfied with her recovery. She is an amazing patient. You may come across such a case once throughout your career, and Martina is my unique patient. Treating her was the essence of my work" concluded dr. Vidović.

Although Martina's treatment is far from finished, she doesn't lose optimism. She praised the Military Solidarity Foundation, which made it possible for her parents to be by her side during the treatment in the hospital in Zagreb. We closed our discussion by asking Martina about her plans for the future, whether she intended to continue her service in the Croatian Armed Forces, and she answered with a big smile: "Of course, always devoted!".

Our products...





#### THE BOOK: "MODERN AIRCRAFT CARRIERS"

In early 2020 the Military Publications and Publishing Department of the Public Affairs Service of the Ministry of Defence of the Republic of Croatia published the book "Modern Aircraft Carriers". The book contains an interesting overview of aircraft carriers since the earliest makes, the outline of the key units and their interdependence, and the present state of the carriers in the fleets of numerous navies. The author complemented his experience and expertise in the field with the relevant and useful information from various international and Croatian sources. The result is a 40-chapter and 168-page book offering lengthy texts and attractive photos.

#### THE CD: "CLARINETTING"

In early 2020 the Multi-media Department of the Public Affairs Department of the Ministry of Defence of the Republic of Croatia released a CD of the Symphonic Wind Orchestra of the Croatian Army titled "Clarinetting". The CD was produced to record the most performed clarinet and wind orchestra pieces in Croatia, and the solo parts are performed by one of the best clarinet players in Croatia Radovan Cavallin.

#### TRAINING IN THE PRIMARY LEADERS DEVELOPMENT CENTRE "MARKO BABIĆ"

The Multi-media Department of the Public Affairs and Publishing Service of the Ministry of Defence of the Republic of Croatia reported on the training administered at the newly established Primary Leaders Development Centre "Marko Babić" based in the Barracks "Josip Jović" at Udbina, whose main goal is to develop and build the capabilities of the NCOs and officers of the Croatian Army and produced a promotional video on the weeks-long training of the first group of trainees.



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