$\mathbf{\hat{c}}$ YEAR2 MARCH2010 CROATIAN MILITARY MAGAZINE

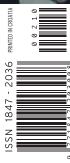
INTERVIEW CHIEF INSPECTOR OF DEFENCE LIEUTENANT GENERAL MARIJAN MAREKOVIĆ

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10 YEARS OF PARTICIPATION IN PEACEKEEPING MISSIONS

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FUTURE SOLDIER

HEAD-UP DISPLAY (LOOK THROUGH) -

The Head-up (or look through) display is very important part of the Future soldier. It means that the Soldier does not need to stare in to SDT's computer display instead to do his task. The display could be mounted on to a helmet and used when necessarily only. Certain audio signals have been used for basic communication with the Soldier to have the Soldier's activities maximum time concentrated on the battlefield.

PERSONAL ROLE RADIO

The development of the system has led to use of the PRR (Personal Role Radio). This is a module that enables networking with other members of the unit with data and voice (voice over IP - VoIP) capabilities, with spectrum for high speed data transfer enabling real-time video features. For budget saving purposes, SDT-T and SDT-P computers could have wireless capabilities: in this case PRRs functions will be done by SDTs software and radios.

SOLDIER'S COMPUTER and PRR

Typically, the Future soldiers has been equipped with a version of the SDT (Soldier Data Terminal). The SDT is available in a two formats:

- Commander's Planning System (SDT-P) - Tactical terminal (SDT-T)

Both the SDT-P and the SDT-T utilise a mature and highly intuitive humancomputer interface (HCI). The SDT-T differs from the standard SDT in that it is physically smaller and much lighter, with a display reduced to reflect the area of interest (AOI) applicable to a tactical operation.

MOUSE-LIKE INTERFACE

To have much more soldier-friendly man-machine interface, mouse-like interface has been installed.

OTHER PRODUCTS/PROJECTS DEVELOPED BY SDT SUSTAV:

ARTILLERY FIRE CONTROL SYSTEM

Bm21 "GRAD" 122mm MRLS MODERNIZATION

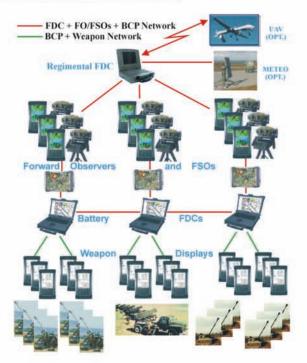
MORTAR FIRE CONTROL COMPUTER/SYSTEM

BATTLEFIELD MANAGEMENT SYSTEM FOR MBTs AND AFVs (INCLUDING DISMOUNTED SOLDIERS)

SPECIAL MILITARY SOFTWARE FOR:

GEOGRAPHIC INFORMATION SYSTEMS (GIS) According to MIL-STD-2525 / NATO STANAG 1241 Interoperability

AD HOCK MASH NETWORKING Including WiFi, tactical VHF/UHF, PRRs, Soldier's Radio



SDT SUSTAV d.o.o., Ante Jakšića 49, 10000 Zagreb, Croatia www.sdt.com.hr, info@sdt.com.hr, tel. +385 98 316784 fax +385 1 6637927





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INTERVIEW

CHIEF INSPECTOR OF DEFENCE LIEUTENANT GENERAL MARIJAN MAREKOVIĆ

CROATIAN MILITARY MAGAZINE

I am pleased with how the Defence Inspectorate has kept up with the changes that in the last period were rapid and significant in all segments. I hope that we have contributed to the overall betterment of the Armed Forces' status with our work, both with the "corrective element" as with our cooperation with experienced employees...

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IMPROVEMENT OF STATUS AND CAPABILITIES A COMMON INTEREST

Lieutenant General Marijan Mareković has been Chief Defence Inspector for over two years. In an interview at the beginning of his mandate, he announced specific changes to be made to that position and presented plans related to the work of the Defence Inspectorate. We found out first hand what has changed since then and to what extent he has accomplished what he had planned.

> Over the past two years, the DI has conducted 200 inspections. 55 of these inspections were of CAF's control commands, units and institutions and 145 inspections were of carriers of defense preparations hosts, whether they were of MOD components such as defence administrations or offices, or parts of other ministries or other legal persons

How would you describe your work in this position up to this point, with specific regards to the most important moves and decisions you have made in the elapsed period?

It is difficult to evaluate oneself; the same goes for one's own work, but one's work can be evaluated with facts. Namely, over the past two years, the DI has conducted 200 inspections. 55 of these inspections were of CAF's control commands, units and institutions and 145 inspections were of defence preparation hosts, whether they were of MOD components such as defence administrations or offices, or parts of other ministries or other legal persons. As for CAF, an inspection of the reorganisation of the Armed Forces and of complex and elaborate tasks was conducted, the MOD's and CAF's major projects (Sky, Sea, Cadets, etc) are periodically inspected, and the CAF's preparation for assigned and scheduled tasks are also regularly inspected. More specifically, what I have in mind here is the inspection of forces at a high alert level and of all bodies relevant in the preparation of force's participation in international missions, as well as the inspection of the implementation of voluntary military service and so on. In addition to this, international military cooperation with defence inspectors from countries that are NATO members as well as with soon-tobe members and neighbouring countries has also been greatly increased. The recruit-

INTERVIEW



ment of quality staff and the furnishing of the necessary technical equipment has been completed, all in accordance with the MOD's means. Also, we put much effort into finding new optimal evaluation systems for CAF units and for defence preparation hosts that are in conformity with Croatia's new position of NATO member.

At the beginning of your mandate, you announced the manning of the Inspectorate with quality staff and the betterment of the material conditions of inspectors' work. Has anything changed?

Two years ago when I had taken over the office of Defence Inspector General, the manning of the Inspectorate and the creation of better conditions was necessary for more effective work. We have made significant progress in both segments. Along with a change in some of the staff, the approach to work organisation was also changed, as was the training of existing employees through the organisation of expert teams for specific areas of work and through the organisation of functional trainings. Also, there was an improvement in material work conditions that was consistent with our means, especially our financial means.

The expansion of international cooperation was also planned for the Inspectorate. What is the state of the current bilateral and multilateral?

In 2008, twelve international activities within international military cooperation were planned, but only ten took place. Because of last year's recession in Croatia and in other countries, eight of the seventeen planned

Certain NATO forces adopted NATO programs, respectively standards and certified assessors, while the remaining NATO forces' apply national standards. For these assignments, the **Defence Inspectorate** and CAF have a specific number of persons certified for assessing, first and foremost for IMOs





activities were postponed by mutual agreement, and this year we planned only twelve activities. We agreed to the joint inspection of forces with the Inspectorate of the Republic of Slovakia in an international mission in which members of both our countries are present, and this is the first such cooperation between our Inspectorates. I believe that this says much about the improvement of cooperation and the exchange of experience with other inspectorates. I also must mention the initiative that several defence inspectorates from neighbouring surroundings have taken in a more intensive cooperation with MOD's Inspectorate along with the request that we reveal our organisation and implementation documents for the implementation of inspection oversight. Of course every country and army is particular and therefore it isn't always possible to accept the same solutions, but it is possible to adapt them to concrete needs.

Croatia's entry into NATO initiated specific changes, both for CAF and for the structure and the work of the Defence Inspectorate. What are the particular changes that have been made to the previous role of the Inspectorate?

I have already mentioned how much attention we pay to examining materials that relate to that issue in the Inspectorate. Thanks to these efforts and to the sharing of experiences with inspectors from other countries, we are nearing the end of the creation of a concept that will assess the role and tasks of the Inspectorate in a new way. We are preparing proposals regarding a new approach to assessing CAF's units, which would lead to change in certain elements of combat readiness. The assessing would generally focus on the tasks assigned to units. I will also suggest that the roles of the Inspectorate in the resolving of complaints, appeals and other individual statements from CAF members be more clearly defined.

The assessment and verification of the Armed Forces' combat readiness is also part of the Inspectorate's scope, which is certainly also to be subject to change in order for our forces to achieve interoperability with members of other Armed Forces in international missions.

The Inspectorate General is authorised to conduct inspections of civil and military defence under the current legal and sublegal

CROATIAN MILITARY MAGAZINE

legislation. According to Defence Law (NN 33/02, 58/02 and 76/07), authority is given to the Inspector General and this is reflected in the implementation of the Republic of Croatia's Plan of Defence; military service affairs, the manning and mobilisation of the Armed Forces, the creation of a cryptologic protection of classified information service and the implementation of security measures and cryptologic protection of classified information; the implementation of defence preparation; material and financial operations of Armed Forces units, headquarters and institutions; enforcement of human rights laws, enforcement of measures of occupational safety and environmental protection. However, with Croatia's entry into NATO we are obliged to use readiness evaluation programs for full members, such as CREVAL (Combat Readiness Evaluation - evaluation of combat readiness of headquarters and ground forces units), TACEVAL (Tactical Evaluation – tactical evaluation of aircrafts), MAREVAL (Maritime Evaluation - naval assessment) and JOINTEVAL (evaluation of joint command), which came following June of 2009, and a program for the assessment of special units is also being drafted. Certain NATO forces adopted NATO programs, respectively standards and certified assessors, while the remaining NATO forces' apply national standards. For these assignments, the Defence Inspectorate and CAF have a specific number of persons certified for assessing, first and foremost for IMOs. However, for a complete adjustment to the new manner of assessing, much effort and time is still needed, especially in regards to a change in the existing legal and sublegal legislation in that area, and the Defence Inspectorate gives its maximum support in the preparation and recommendation of the necessary changes.

Do you carry out inspections and assessments of the readiness of CAF units that head for peacekeeping missions?

The Defence Inspectorate is not a binding link in the preparation, training and readiness assessment procedures of those forces. That task is comprehensive for many states of the Inspectorate, it requires various versatile teams, depending of the type of unit. Therefore, in accordance with the aforementioned concept and assessment authorities, the final grade is given by the superiors in the command system. In other words, the As far as plans are concerned, I would like to put an emphasis on the completion of the new concept of the role and tasks of the Defence Inspectorate, with which I believe we will increase efficiency in conducting inspection activities under the new circumstances General Staff is responsible for the organisation of the assessment process of CAF's units for IMOs. The Defence Inspectorate will concentrate on the validation of evaluations upon a request from the Minister of Defence or from the Chief of Staff. This comes down to judging whether the adequate procedures and tools are being used for assessments, whether the assessment criteria were properly applied and if the final evaluation was properly performed in all elements and areas.



THE CROATIAN ARMED FOR

Vesna Pintarić, photos by Tomislav Brandt

10 YEARS OF PARTICIPATION IN PEACEKEEPING MISSIONS

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CROATIA - A COUNTRY THAT UNDERSTANDS THE VALUE OF PEACE

croatia is today recognised as one the most active guardians of world peace, stability and security as it has participated in thirteen different peacekeeping missions and operations under UN auspices, both in NATO-led operations and in European Union operations



EXCELLENTLY TRAINED

Croatian peacekeepers go on missions voluntarily. They are excellently trained and qualified for the implementation of all tasks

CROATIAN MILITARY MAGAZINE

At the end of September 1999, the Republic of Croatia sent its representatives to one of the United States' peacekeeping missions for the first time. It had to do with ten unarmed military observers who had their first such international experience within the UNAMSIL in Sierra Leone. Today, the Republic of Croatia has ten years of continuous participation in peacekeeping missions and operations under UN auspices behind it, both in NATO-led operations and in European Union operations. The sheer number is indeed impressive; representatives have participated in twenty different missions and operations. We emphasise this fact with pride because last year, among 119 countries that supplied peacekeeping staff, Croatia was in first place in terms of the number of missions it participated in.

In some of these missions, we put an end to our participation because of the reduced need for such actions or because they were aborted; in other cases our commitment was numerically and technically increased. 145 members of the CAF are participating in the ten UN peacekeeping missions we are active in. Most, that is, 93 of them, are participating in the UNDOF mission in the Golan Heights. Fifteen members of the Special Operations Battalion are participating in the MINURCAT mission in the Central African Republic and in Chad, 15 members are on duty as staff officers, while 22 members of the CAF are employed as military observers. Another equally important segment is the CAF's participation in the NATO-led mission ISAF in Afghanistan, which began in 2003 with the sending of our First Military Police

INTERNATIONAL CONFERENCE

A CHRONOLOGY OF THE INCLUSION OF CAF MEMBERS IN PEACEKEEPING MISSIONS

September 1999: UNAMSIL March 2001: UNMEE August 2002: UNMOGIP December 2002: MINURSO February 2003: ISAF July 2003: UNMISET October 2003: UNMIL June 2004: MINUSTAH August 2004: UNOCI September 2004: UNFICYP March 2005: UNOMIG April 2005: UNMIS June 2007: UNIOSIL July 2007: UNMIN July 2007: UNIFIL September 2007: BINUB May 2008: UNDOF January 2009: MINURCAT (the first rotation was sent in October of 2008 on the EU's EUFOR TCHAD/ RCA peacekeeping mission) April 2009: EU NAVFOR Somalia -ATALANTA

July 2009: **KFOR**





Platoon, comprised of fifteen members, on the mission. Since then their number has steadily increased, especially in 2006 when their overall capacities were also increased; today in Afghanistan there are nearly 300 Croatian soldiers on various assignments within the main and the regional headquarters and the various teams that operate across the whole country.

A new step was the sending of 20 members of the CAF with two Mi-171-Sh transport helicopters in mid-July of 2009 to the KFOR operation is Kosovo and the participation of members of the Navy in the European Union's EU NAVFOR Somalia - Atalanta peacekeeping mission in the Gulf of Aden. If we count all that was mentioned, members of the CAF are currently engaged in thirteen different missions and operations.

Croatian peacekeepers go on missions voluntarily. They are excellently trained and qualified for the implementation of all tasks, in which an important role was played by the Training Centre for International Military Operations located in the "Vitez Damir Martić" barracks in Rakitje, near Zagreb, whose importance and possibilities have grown along with Croatia's increased participation in missions. It would not be an exaggeration to say that all those dedicated individuals have to a large extent contributed to the Republic of Croatia's two-year membership to the UN Security Council as well as to full membership in NATO, in addition to contributing to Croatia's being today recognised as one the most active guardians of world peace, stability and security.

The Republic of Croatia, which in a short period of time went from being the object of international peacekeeping missions to an active factor in these missions, is today an important entity in the spread of world peace and security. This is the conclusion reached by all senior government and military officials as well as guests from abroad, who on October 16th spoke at the "Responsibility and Action: Building a Safer World" international conference. The conference was held to commemorate ten years of Croatian participation in peacekeeping missions, with the goal of contributing to political, scientific and professional debates on the spectrum of civil and military contributions to global peacekeeping activities. The conference was attended by the Croatian political officials as well as by foreign representatives from the three most prominent international organisations, the UN, NATO and the EU. The conference's work session was focussed on the greater exposure of Croatian and foreign officials and experts and was divided into four panels: "Creating Synergy and a Comprehensive Approach - the UN, NATO, the EU and National Perspectives", "Croatian Path - From a Security Consumer to a Security Provider", "Developing the Right Capabilities - Military Responses" and "Lessons Learned – Future Challenges". This was a serious attempt at detecting problems and offering solutions in the best manner in order to achieve the goals of the international community on the road to building a safer world.



One of the key capacities of the Croatian Air Force that only a few countries in the world have is that of training its own pilots... Croatian Air Force pilots are trained at the Aircraft Squadron of the 93rd Air Force Base in Zemunik, near Zadar... We are the first in the world whose pilots move to fighter planes right after their training on Pilatuses without training on some kind of transitional aircraft...

THE CROATIAN AIR FORCE

Leida Parlov, photos by Tomislav Brandt

THE TRAINING OF **MILITARY PILOTS**

Anyone who has spent some time with military pilots will tell you that they are truly in a class of their own. There isn't much to say. Give them an assignment, an aircraft and let them fly. Although they are a part of the system, they are simply special. To become a pilot you must follow your heart and have it in you. Behind all this stand years of schooling and hundreds of flight hours alongside the flight instructor. Well-trained pilots are the pride of every country's Air Force.

One of the key capacities of the Croatian Air Force and that only a few countries in the world have is that of training its own pilots. The importance of training pilots in the Croatian Air Force was recognised early on, so much care is given to the pilots' training system. It is safe to say that the training system is at the highest world standard.

10 MARCH 2010 | CROMIL

Croatian Air Force pilots are trained at the Aircraft Squadron of the 93rd Air Force Base in Zemunik, near Zadar. An excellent location, great climate and ideal meteorological conditions as well as young flight instructors who are ready for challenges and whose lives revolve around flying are a winning combination. The training of military pilots is a long process. There are many phases that they must go through before new opportunities are presented to them. They acquire their technical knowledge at the Faculty of Transport and Traffic Engineering and their practical knowledge at the 93rd Air Force Base. 13 generations have been trained in the Squadron up to now, and the training of the 14th generation of Air Force and Air Defence pilots is currently in progress. After selections and basic training on Zlin 242L airplanes



STRICT CRITERIA

For the practical part of their training, pilots return to their squadrons. Pilots who choose to specialise as flight instructors are chosen according to strict criteria

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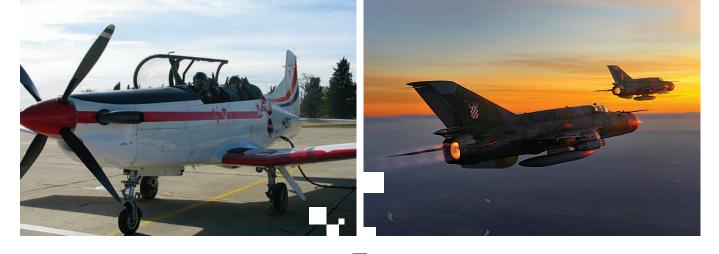
in the Aircraft Squadron, pilots are assigned to Bell 206 helicopters or PC-9M airplanes according to their capabilities, interests, affinities and needs. One specificity as far as the training of Croatian pilots is concerned is that we are the first in the world whose pilots move to fighter planes right after their training on Pilatuses without training on some kind of transitional aircraft. Pilots who leave the Squadron with 300 flying hours make excellent MiG pilots, Canadair and An-32 captains. All this confirms the knowledge, experience and quality of the Croatian Air Force Staff, the flight instructors in the Aircraft Squadron who are all young people whose enthusiasm and love of flying come first to them. The Squadron has 20 Pilatuses and 5 Zlin 242 Ls in its composition which have replaced the Utva aircrafts that were previously used. The pilots who remain in the Squadron further their trainings on Pilatuses to become instructors, and are assigned to other squadrons if necessary. Croatian Air Force pilots are well-known at home as well as in other countries because of their exceptional flying qualities. The peak of their training and expertise in their calling is embodied by the Croatian Air Force's acro group Krila Oluje, which in only five years has established itself as being one of the best acro groups in the world. To have one's own acro group means

The pilot training system has developed to the extent that we are able to offer trainings to all partner countries, but first and foremost to **NATO members** and PfP member countries. First **Lieutenant Robert** Mitrovski. a pilot from the **Macedonian Air** Force, was the one who broke the ice



and Air Defence, where they receive the theoretical part of their training. For the practical part of their training, pilots return to their squadrons. Pilots who choose to specialise as flight instructors are chosen according to strict criteria. After he has had his first flight selection, the candidate receives a personal file in which his flight, work and other capacities are monitored. Who does and who doesn't correspond to the profile of a flight instructor is decided based on the cumulative results received during schooling. Those who want to become flight instructors for Pilatuses, Zlins and Bellas must commence training immediately after completing basic officer training. Captains may receive a specialisation in multi-seat aircrafts, and pilots who have completed a full training on MiG-21s may receive a specialisation in combat aircraft. This is the procedure that was described to us by Colonel Željko Jurković, commander of the Pilot Training School and flight instructor. Flight instructor training is conducted in three modules.

It all begins with the mastering of the theoretical knowledge that flight instructors need in order to do their job well. This is followed by flight training which entails the instructor's training in flying in the instructor's seat, and the third module consists of an internship in units as a flight instructor.



to have a category of pilots who are top-quality in all aspects of flying. Anyone who has seen their performance at world acro rallies can value the worth of their school of training. The Croatian Air Force schools airplane and helicopter pilots and continues their professional training until they reach the level of flight instructor.

Flight Instructor Specialisation

Teaching someone to manage aircraft is a demanding job. Flight instructor specialisation is conducted on the 93rd Air Force Base of the in the Pilot Training School of the Croatian Air Force Flight school students spend the second module on the specific type of aircraft for which they will be instructors. The theoretical part of the training is conducted in collaboration with the University of Zadar and consists of a civil-military education which leads to the further development of flight personnel. Professors from the University of Zadar teach classes on pedagogical-didactic and methodological and psychological topics, while lecturers from the Croatian Air Force are in charge of such subjects as flight safety and aviation psychology.

After they have successfully passed the theoretical part, they must go through training in the

THE CROATIAN AIR FORCES

13 generations have been trained in the Squadron up to now, and the training of the 14th generation of Air Force and Air Defence pilots is currently taking place. After selections and basic training on Zlin 242L airplanes in the Aircraft Squadron, pilots are assigned to Bell 206 helicopters or PC-9M airplanes according to their capabilities, interests, affinities and needs

air in order to receive the title of flight instructor. Thus, the classic flight instructor training for those working with Pilatuses or Bellas consists of three-and-a-half to four months of intensive flying which translates into 76 to 80 flight hours. Following this is a three-month internship, and independent work leading a class with an experienced flight teacher mentoring the work.

First Lieutenant Robert MITROVSKI

The pilot training system has developed to the extent that we are able to offer trainings to all partner countries, but first and foremost to NATO members and PfP member countries. First Lieutenant Robert Mitrovski, a pilot from the Macedonian Air Force, was the one who broke the ice. Lieutenant Mitrovski is the first Macedonian pilot to receive training abroad and is also the first foreign pilot to be schooled at the Croatian Air Force. "I am breaking the ice in two different situations" said Lieutenant Mitrovski who is delighted that the opportunity to receive his pilot training in Croatia was given to him. He chose the vocation of pilot because of his desire to fly, because of what he calls "the third dimension" that flying gives him. "That," he says, "is crucial in choosing the vocation of pilot". After graduating from the Military

Croatian Air Force pilots are well-known at home as well as in other countries because of their exceptional flying qualities. The peak of their training and expertise in their calling is embodied by the Croatian Air Force's acro group Krila Oluje, which in only five years has established itself as being one of the best acro groups in the world



Academy in Skopje, he passed selection and training with a Zlin and received the title of pilot. He continued his education with the Croatian Air Force and received professional training to become a helicopter pilot. He has been in Croatia for a little over a year. He has completed a full flying training on a Bell 206 helicopter and immediately after his training continued with the specialisation to become a flight instructor. "I finished the complete flying training on a Bella in one year and I had 193 flight hours, which truly is a lot," said Lieutenant Mitrovski. He also thanked everyone in the 93rd Air Base who he says have helped him, both in his work and his private life. "It is an honour for me to have been on this training. You can truly learn a lot over here. Staying in the barracks is great for me and all the conditions that are needed by a pilot are met here". After the flight training Mitrovski chose to continue his education and start flight instructor training. "The Specialisation Program is excellent. We have top-quality professors, and the knowledge and experience of the lecturers from the Pilot Training School is priceless. I will certainly pass on the great experience that gained here to my colleagues in Macedonia". He believes that the Croatian Air Force will continue to train pilots from other countries.



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NBC - PROTECTION Isolation protective suit OZI M-2 Protection level: Duration time of mustard gas (yperite) drop penetration test - 24 hours

BOROVO

d.o.o.

0ZI M-2

BALLISTIC PROTECTION Protective vest against bullet B2 Protection level: NIJ STD 0101.03 III-A

-**BALLISTIC PROTECTION** Protective suit against fragments Protection level: STANAG 2920 V50=480, 520, 550 m/s

OFFICER'S SHOE

FEMALE OFFICER'S SHOE

🛐 MILITARY BOOT



📑 BOROVO BOO'

THE NEXT JOINT EXERCISE

which will be held in Croatia in September is particularly important to the Battalion. This is when the final assessment of the Battalion will be conducted. This will be followed by NATO's certification of the unit and by the unit's involvement in one of the peacekeeping missions, most probably ISAF



CAF'S MILITARY POLICE

Leida Parlov, photos by Tomislav Brandt

RECOGNIZED AS TOP PROFESSIONALS FROM THE VERY BEGINNING

Some of the many tasks of the Military Police include the prevention of undesirable events in the Armed Forces and in the Ministry of Defence, cooperating with other institutions and the prevention of undesirable consequences on society as a whole, the security and protection of military facilities as well as of all those who work in them, escorting VIPs and involvement in international activities. The CAF's Military Police had many important firsts. Its units were the first military police units to have gone on the Preparations for the exercise in Croatia are in progress and expectations are high

ISAF mission in Afghanistan and were recognised and acknowledged as top-quality professionals in an international environment from the very start. Also acknowledged were our military police dogs that are raised and trained at the Dog Training Centre near Zagreb. These dogs detect explosives and drugs and are used for search and protection. All this is not a coincidence but rather the result of the work and good organisation that the Military Police has had from the very start. The Military Police, like other components of the



➔ LOGISTIC SUPPORT SYSTEM

Within the unit's process of training, the unit's battalion decision making is also practiced in order to improve the command and control system, as is its logistic support system

department has professional authority over MP

units for military-police work and its tasks are

professional leadership, training military police

officers and planning international military-police

cooperation. The department collaborates with

all segments of the safety system of the Armed

Forces in the implementation of military-police

assignments as well as with other ministries

and government bodies. Highly motivated and

experienced professionals work for the Military Police. Veterans transmit both their military and professional knowledge and experience to

newcomers and this is how continuity is maintained

in their good-quality work, both at home and

throughout the world. Given the tasks that they

perform, they must be superiorly psychophysically ready and need good power of observation, calmness, composure, the ability to predict the outcome of some situations, and knowledge of all the laws and bylaws in their field of action. The Military Police is not only known within CAF but also recognised throughout the world in the international military-police and security field

CROATIAN MILITARY MAGAZINE

One the important international activities of the Military Police is its participation in the Multinational Military Police Battalion. The MN MP Bn immediately entered NATO composition after its establishment in 2007. Even then it was discussed how Croatia, which had not yet become a full member of NATO, would enter NATO through the "back door" thanks to its military police...

> Besides bilateral contacts with a number of countries and participation in the ISAF mission, one of the important international activities of the Military Police is its participation in the Multinational Military Police Battalion

because for its training ability.

The MN MP Bn immediately entered NATO's composition after its establishment in 2007. Even then it was discussed how Croatia, which had not yet become a full member of NATO, would enter NATO through the "back door" thanks to its military police. With Poland as the leading nation, Slovak, Czech and Croatian military police make up the Multinational Military Police Battalion. Multinational Battalion activities are currently taking place in the form of joint exercises between member countries, and the purpose is to achieve the interoperability of the multinational composition. Up till now, two joint exercises have been held within NATO's MN MP Bn project. The first was in Poland, and the second, LIVEX "Black Bear 2009" was held in September in the Czech Republic with the basic goal of training and preparing NATO's Multinational Battalion Military Police for participation in international operations. The exercise's Command, NATO MN MP Bn headquarters and tactical units of the battalion practice their work through the execution of a whole spectrum of military police operations. The goal is not competition but coordination. 39 CAF

Armed Forces, has gone through restructuring. The Military Police Department was established as a professional umbrella organisation of the CAF GS, and the Military Police units were established within Armed Forces branches. The Military Police Regiment in the Croatian Ground Army accounts for 80 per cent of the total military police work in Croatia. The Military Police Department has three departments; one for crime processing, one for military-police records and support and one for doctrine and use of the military police. The





members participated in the "Black Bear 2009" exercise, including members of the Military Police's Ground Army Regiment and of the Special Military Police Company and the criminal processing team. Three military police dogs for the detection of explosives and drugs and for search and protection were also part of the composition. The situations and incidents, which according to the scenario were a part of the exercise, corresponded to actual situations in which CAF members may find themselves in international missions.

Within the unit's process of training, the unit's battalion decision making is also practiced in order to improve the command and control system, as is its logistic support system. All this is done in addition to NATO MP tactics. Some of the activities that were practiced in all the joint exercises that were held up to present include protective searches of terrains and buildings, securing areas, building raids for the neutralisation and arrest of terrorists, forces' performance in quick reaction, reaction in case of surprise attacks on the camp, force's infiltration by helicopter for quick reaction from the air as well as forces' extraction, crime investigators' work, patrol of areas of risk, medical evacuation, escorting of VIPs, work at checkpoints, hiring guides with trained dogs for the detection of drugs and explosives, investigation, witnessing and shooting battles. The next joint exercise which will be held in Croatia in September is particularly important to the Battalion. This is when the final assessment of the Battalion will be conducted. This will be followed by NATO's certification of the unit and by the unit's involvement in one of the peacekeeping missions, most probably ISAF. This information was given after the exercise in the Czech Republic by Colonel Tihomir ZEBEC,

Up till now. two joint exercises have been held within NATO's MN MP Bn project. The first was in Poland, and the second, LIVEX **"Black Bear** 2009" was held in September in the Czech **Republic with** the basic goal of training and preparing NATO's **Multinational Battalion Military Police** for participation in international operations



office-holder of the CAF's MP and Chief of the Multinational Unit Headquarters of the MP. He mentioned that the Unit is to be profiled for multinational military-police teams that will train Afghan security forces. "We create the unit, but the participating countries make the final decision on the engagement of the forces. There is no unilateral decision, a consensus must be reached and everyone must be in agreement. It is worth mentioning that this is the first NATO project of its kind, and I believe that this unit has the capacity to fulfil its purpose. For those of us in CAF, this is an excellent way to train which also includes unit training, and our goal is to have as many members of the MP as possible pass the entire training cycle within this battalion so that they may be better prepared for work in an international environment and for the assignments that await them during missions" said Colonel Zebec. Preparations for the exercise in Croatia are in progress and expectations are high. As work in an international environment was not strange to Croatian military policeman and taking their experience from the Homeland War into account, they had a very good base for successful work even in this type of international cooperation with similar units from other countries. All activities that have so far taken place within MN MP Bn were a good opportunity for the exchange of experiences and the acquisition of new knowledge. This was a valuable experience and a good preparation for work in any kind of international mission for all of those who had not worked in an international environment until this point, not only for members of our armed forces but also for those of the other countries that make up the Multinational Military Police Battalion. All in the name of world peace and security.

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DOK-ING, Žitnjak bb, 10000 Zagreb, Croatia, Europe Phone: + 385 1 2481 300, Fax: + 385 1 2481 303 e-mail: dok-ing@dok-ing.hr, www.dok-ing.hr The **"Croatian pride"** exercise is the final and most important part of preparation before leaving for Afghanistan. This time, it was members of the 15th Croatian Contingent who had to go through the trials of this exercise that began on the 18th of January and for which they had begun preparations months before

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HV 151-AA

18 MARCH 2010

CROMIL

THE CROATIAN ARMY

MILITARY EXERCISE

ON MILITARY TRAINING GROUND

Domagoj Vlahović, photos by Davor Kirin



→ CRISIS RESPONSE OPERATION

The exercise, according to the scenario, was conducted as a Crisis Response Operation conforming to UN mandate in a complex, multinational environment

CROATIAN MILITARY MAGAZINE

"Croatian Pride" is an exercise of paramount importance for Croatian participation in the ISAF mission which, at the moment, is the most demanding assignment that CAF members are executing. The exercise is the final and most important part of preparation before leaving for Afghanistan. This time, it was members of the 15th Croatian Contingent who had to go through the trials of this exercise that began on the 18th of January and for which they had begun preparations months before.

Although "Pride" is a traditional exercise, new challenges, which were set by the Croatian Ground Army, stood before the Guard Armoured Mechanised Brigade with its associate units and before the director of the exercise, Brigadier General Mladen Mikolčević. This year's first "Pride" (hence the designation 10/1) was the first exercise on Croatian territory that CAF has completely independently planned and structured in accordance with NATO's Bi-SC Exercise Directive 75-3. The execution of the exercises in accordance with the Directive implies that exercise organisers must make sure that the situation that could occur on the field dependably simulates reality. The team from the 15th Contingent, under command of Colonel Berislav Jezidžić, will soon be sent to one of the most dangerous areas in the world and simply must be ready for the most unexpected of scenarios. In short, the exercise was very demanding; not only for those who were training, but also for those who organised it. The foreseen scenarios were successfully resolved, as if done on an assembly line, and the pace was exceedingly fast and arduous. Officially, the goals of the exercise are the "the proper functioning within the NATO ISAF con-

The exercise, according to the scenario, was conducted as a **Crisis Response** Operation according to **UN mandate** in a complex. multinational environment which required the joint participation of the army, of the police and of humanitarian organisations



cept and the final training and certification/evaluation according to elements of CREVAL (evaluation of combat readiness) of all components of the 15th HRVCON and of its constituent elements". Judges with NATO references as well as the GS CAF's Evaluation Team strictly monitored the whole exercise.

The focus of "Croatian Pride 10/1" was on three components from the contingent stemming from the Croatian Ground Army: the ground infantry, commanded by Captain Robert Poljak, the OMLT, commanded by Captain Mario Maslov and specially organised forces of the military police, with Lieutenant Mario Majetić in command. All these men took the exercise very seriously as they were fully aware that the exercise would help them accomplish their mission as best as they can, and, more importantly, that it would raise their safety to the highest of standards. The exercise, according to the scenario, was conducted as a Crisis Response Operation conforming to UN mandate in a complex, multinational environment which required the joint participation of the army, of the police and of humanitarian organisations. We saw how the OMLT resolves a situation in which they are attacked with firearms in a mock village, followed by a bomb and ground attacks on the operative base of our infantry. We also witnessed criminal processing conducted by the military police, as well as the retrieving of a wounded soldier by helicopter. They completed the exercise a day later, on the 29th of January and will most certainly "iron out" all the details by the time they leave for a mission. The next "Pride" is intended for the 16th contingent headed for Afghanistan, and the planning and implementation of the exercise will be done by the Guards Motorised Brigade.



EXERCISE DIRECTOR BRIGADIER GENERAL MLADEN MIKOLČEVIĆ

"The exercise is definitely something new and different, after its completion we will work independently according to NATO procedures. As a CAF general and commander of a large gombr unit, I can safely say that such difficult weather conditions are perfect for a soldier who is preparing for a peacekeeping mission in a dangerous zone. The high standards that this

exercise set will not pose a problem to our people. I assert that our soldiers are extremely capable, well prepared, and motivated. They will carry out their missions and justify the trust that was given to them by the Croatian public, by their superiors and that NATO gave Croatia when they granted us membership."

INTERVIEW

FIRST NCO OF THE CAF SERGEANT MAJOR ŽELJKO BILIĆ

AN IMPORTANT LINK IN THE DEFENCE SYSTEM

In 1998 the Croatian Armed Forces began developing an NCO work system which is based on Western countries' and NATO member's models. Within the framework of cooperation among NCOs, we strive to be active participants in the processes that are unfolding in our region as well as in NATO...

CROATIAN MILITARY MAGAZINE

A few months have passed since Sergeant Major Željko Bilić was named first NCO of the CAF. This was the next logical step in his long career as an NCO, during which he gained significant experience, both in the CAF and in the international environment.

How do you rate NCO's career development opportunities in the CAF and what do you think should eventually be changed in regards to this?

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In 1998 the Croatian Armed Forces began developing an NCO work system which is based on Western countries' and NATO member's models and that presents NCOs with opportunities for advancement even after the completion of their duties as commander of a squad, which is a vital NCO duty in all armies. This means that career NCOs, that is, staff or first NCOs, can advance and receive considerably more duties than they did previously. As far as first NCOs are concerned, after commanding a squad, they are promoted in rank and to other higher duties, in other words, to first NCO of a platoon, company, ship or battalion, which is at the same time the crown of most NCOs careers. After acting as first NCO of a battalion, it is possible to advance to the highest of NCO duties: to those related to a brigade or regiment, to a base, to NCO schools and branches, to support command, to the Croatian Military Academy, even to the duties of the first NCO of Armed Forces. When speaking of staff NCOs, it is important to mention that the changes in the training system and organisational modifications have created new staff NCO duties that provide these NCOs with an opportunity for advancement in their field of expertise. Therefore, NCOs are no longer simply support in the administrative work of staff; they also carry out the part of work performed by NCOs in their staff field (personnel, operational, etc.) and progress in their field of expertise.

What is the role of NCOs and of the NCO chain of support in our defence system?

An NCO is always responsible for the individual readiness of NCOs and soldiers. The introduction of an NCO chain of support and of staff NCO duties helps to bring and maintain the state of individual readiness to the level which the defence system requires of us. That is why it can be said that the duties of the commander of a squad and of the first NCO of a platoon are some of the most



Currently on duty as a part of our military missions are six deployed NCOs as well as five NCOs in other departments. However, since Croatia has become a member of NATO, we have been preparing for twelve new engagements which we had to fight for to obtain and then had to choose the best candidates for them



important, because they are directly responsible for the individual readiness of each soldier and NCO in their units. The role of the NCOs who work in higher positions- at the level of a battalion, a brigade, a branch or at the level that we are talking about- is to attend to and advise the superior commander, who in my case is the Chief of Staff, about all issues related to NCOs and soldiers, for example: professional development, individual training, the NCO education system, etc. Of course, in these areas, first NCOs work closely with all other agents who, in their field of expertise, are most responsible for some of these areas. Thus, at lower levels it is important to develop professional, trained and ready NCOs- leaders- and at higher levels it is important to recognise the most competent NCOs who have sufficient experience, knowledge and personality to be able to help in proposing the best solutions for the development of NCO academies. We can say that since the establishment of an NCO support chain NCOs have participated in all phases of training.

Can you tell us about the international cooperation of Croatian NCOs?

In international activities we strive to give our full contribution and also to gain experience and to adopt good decisions at home as well. Within the framework of cooperation among NCOs, we strive to be active participants in the processes that are unfolding in our region as well as in NATO. For the

INTERVIEW

fourth year in a row, the NCO support chain has been the host of the International NCO Camp where colleagues from countries in the region and beyond participate along with NCOs from Croatia. We are a member of the International Senior NCO Forum in the Central and South East Europe Region. This is a new initiative; it was formed last year to support the exchange of ideas and cooperation within the work of NCO corps. It is with pride that I say that the Croatian NCO Academy, one of the only such academies among European countries, is officially recognised as a centre for this type of training in the broader region and for seven years has educated foreign students from surrounding countries. It is important to mention that we also had an outstanding cooperation with joint NATO commands, which on several occasions sent us its mobile training teams and prepared our members for work in NATO departments and with its staff.

How many CAF NCOs are engaged in the work of NATO's command structure?

Six NCOs have been deployed and are currently on duty as a part of our military missions, as well as five NCOs in other departments. However, since Croatia has become a member of NATO, we have been preparing for twelve new engagements which we had to fight for to obtain and then had to choose the best candidates for participation in them. Preparing NCOs for these engagements is our priority this year. We expect to be even more engaged in the future, so we are steering our courses towards a more concrete preparation for these duties.

Croatia has received many compliments and much gratitude thanks to CAF member's participation in peacekeeping missions throughout the world. How do NCOs contribute to our Armed Forces' increasingly significant and comprehensive assignments?

Speaking from my personal experience within the multinational mentoring training corps team for the ISAF mission, which Croatia has been participating in with two NCOs since 2006, I can conclude that we are recognised as top-quality and reliable partners and mentors. During my stay in Afghanistan, other mentoring teams announced that they would seek greater support from our NCOs, particularly Nordic countries which do not have developed NCO academies. In fact, it is small units where NCOs are at the forefront An NCO is always responsible for the individual readiness of NCOs and soldiers. The introduction of an NCO chain of support and of staff NCO duties helps to bring and maintain the state of individual readiness to the level which the defence system requires of us

and where they are one of the pillars of action that often participate in modern military operations such as responses to asymmetric threats. In these conditions not only do NCOs need to have new knowledge and skills, but they also must have the ability to make independent calls and quick decisions on the spot. It is precisely these new requirements that provide additional motivation for the continued work, advancement and improvement of Croatian NCOs. I am convinced that under these conditions the Croatian NCO Assembly, which I am the head of, will confirm its distinct feature as the backbone of the Croatian Army.



Leida Parlov, photos by Tomislav Brandt

THE CROATIAN ARMY



THE PIONEERING BATTALION OF THE CROATIAN ARMY'S ENGINEER REGIMENT

The tEODor Robot

In today's age of asymmetrical threats, one of the most common methods of asymmetrical warfare used is improvised explosive devices. Every modern army should be ready to respond to these kinds of threats, to disable and destroy explosive devices before they cause accidents and human casualties. One of the CAF's answers to this kind of threat is the tEODor robot. Members of the Pioneering Battalion of the Croatian Army's Engineer Regiment are trained to work with the robot. This is a unit that was established ten years ago and whose assignment was to demine the remaining suspected minefields within military facilities by humanitarian mine clearance. Members of the Pioneering Battalion are also actively involved in the training of members of the Croatian Armed Forces who go on peacekeeping missions and operations

The Battalion soon began to also implement EOD activities, or the removal of explosives devices, not only with mines but also with all other deadly devices that can be found within the area of the operations. Following this, the development of C-IED capabilities i.e. actions against improvised explosive devices began. This was one of the assignments of the Pioneering Battalion, which, within its group, has two tEODors, robots that are at the top of world technology when it comes to deactivation and destruction of improvised explosive devices. Along with the robots they also have all the accompanying equipment and EOD 9A heavy protective suits.

THE CROATIAN ARMY

This is how work with the tEODor robot unfolds. Upon receiving notification of a suspicious item, a move is made to scout the location. If it is determined that there is no external threat, a tEODor equipped with cameras and explosive destruction devices is sent on the field. It then takes X-Rays of the item, and based on data on the density of the materials decides if it is indeed an explosive device. If it is, the robot destroys it and withdraws. After that, the team leader wearing an EOD 9A heavy protective suit reviews the item to determine further actions.

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A Protective Suit Weighing 40 kg

The suit can repel debris weighing one gram at a speed of 550 m in a second. This is currently the maximum protection in the world. Along with the accompanying helmet that has a visor, it weighs almost 40 kg. Thanks to its cooling system, up to two hours can be spent in the suit. In order to put on the suit, 20 minutes to a half hour and the help The suit can repel debris weighing one gram at a speed of 550 m in a second. This is currently the maximum protection in the world



of two people is required. Along with the equipment for the EOD team come all the other important tools, the endoscope for review, a camera and digital video camera for investigation, a laser rangefinder...

All of the equipment as well as the robot itself function as safety means for people because the deminer approaches the device only when it is deactivated. There are four men in an EOD team, and only deminers with a minimum of three year's experience in demining can access the EOD unit. They are a part of the Pioneering Battalion, the only CAF unit involved in demining, in which the best and most expert members of the Armed Forces from all parts of Croatia are involved in the demining process. They spend almost ten months a year on the field and every day risk their lives among the mines. Quality equipment guarantees their safety, as does their knowledge and experience, which is recognised even among their colleagues in Armed Forces from other countries.





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The Training of Members for International Missions

The training of the deminers, among other things, is conducted in cooperation with the Ministry of Interior Affairs and with the Croatian Centre for Demining. They also collaborate with them in other areas related to demining and exchange data and knowledge that they acquire among themselves. What is most important to them is people, their safety, the quality of the performed tasks as well as the safety of those who will use the area that they have cleared of mines. They work well, so that they may 'sleep peacefully' after they have completed their tasks.

The fact that the Croatian army attaches a great deal of importance to the fight against mines speaks a great deal about the organisation of the Pioneering Battalion. This is also seen in how much attention is paid to training and to the equipping of the unit with the latest equipment which provides maximum protection to whoever is conducting the demining.



Up to now they have demined 2.5 million square metres and found over 200 000 mines and other explosive devices. The Republic of Croatia has documentation for all its military facilities Up to now, they have demined 2.5 million square metres and found over 200 000 mines and other explosive devices. The Republic of Croatia has documentation for all its military facilities. Although there are still areas that are believed minefields, they are all marked not to be used and they are visited in accordance with the annual plan and the orders of the superiors. They strictly comply to all laws pertaining to their trade because otherwise they would not be able to work.

Members of the Pioneering Battalion are also actively involved in the training of members of the Croatian Armed Forces who go on peacekeeping missions and operations. Namely, it is well-known that 80 percent of incidents in the areas of the operations are caused by improvised mine devices. It is because of this that all those who go on the areas of operation, members of the Pioneering Battalion, are trained in identifying explosive devices, reporting and in intervention.

➔ FIRST PUBLIC DISPLAY

The first public display of the capabilities of the new equipment was held last year in the 'Bilogora' barracks in Bjelovar, 80 kilometres east of Zagreb



PARTICULAR ATTENTION

It is important that particular attention is paid to environmental issues so that the decontamination itself does not create a different form of pollution

Domagoj Vlahović, photos by Tomislav Brandt

THE CROATIAN ARM

THE NBKO BATTALION'S TRAINING THE NBKO BATTALION'S TRAINING DISPLAY OF THE DISPLAY OF THE CAPABILITIES OF NEW EQUIPMENT

The NBKO Battalion has recently received new basic equipment for decontamination that corresponds to the new demands of the field. The demands are all the greater because Croatia has registered its NBKO squad for participation in NATO operations



COMPLEX ASSIGNMENTS

The decontamination of armoured combat vehicles is one of the most complex assignments in that field and demands expertise and time, as well as a great compliance

CROATIAN MILITARY MAGAZINE



The term protection from nuclear, biological and chemical weaponry has unfortunately become a reality in the 21st century. This has been reflected in military doctrine, including NATO's. The possibility of effective protection from these threats must exist within every serious Armed Forces. Of course, even the youngest member of NATO could not ignore this. The fact that Croatia has registered its NBKO unit for participation in NATO's operations shows that we have taken this very seriously, which is good not only for Croatian participation in global security, but first and foremost for the security of the Republic of Croatia itself. In addition to being complex and almost exclusively a product of the 20th century, these threats are also very real. Furthermore, they continuously 'evolve' and because of this those who fight against them must be adequately equipped. The NBKO Battalion has recently received new basic decontamination devices, MPD-100 mobile systems from the German manufacturer OWR. Of course, soldiers from the NBKO battalion must get accustomed to them. In spite of regularly undergoing theoretical training and following trends, it is clear that there is no better practice than training.

The young team performed its tasks with visible speed and enthusiasm, and so Lieutenant Colonel Kratohvil expressed his great satisfaction with the work of the Battalion's employees as with the efficiency of the equipment that was 'premiered' in such a case

The first public display of the capabilities of the new equipment was held last year in the 'Bilogora' barracks in Bjelovar, 80 kilometres east of Zagreb, as a part of a joint training between the Battalion and its host from the Guard's Armoured-Mechanised Brigade's Artillery Missile Battalion. Cooperation between the two units, lead by the commander Lieutenant Colonel Slobodan Kratohvil, has allowed the 'chemists' to confirm unit member's preparedness to work with self-propelled 2S-1 'Gvozdik' howitzers. Several howitzers found themselves in areas that were chemically contaminated, but thanks to the NBK filtroventilation system their interiors were not contaminated. The incident was reported in the headquarters of the NBKO Battalion in Dugo Selo near Zagreb, and in a short period of time people and techniques were sent to Bjelovar. The NBKO members translated intelligence of the contaminated area and also decontaminated the combat technology of the unit and the highway, allowing the passage through to the contaminated are. An area for the eventual decontamination of people was quickly created. Training was a great challenge for both units. Namely, the decontamination of armoured combat vehicles is one of the most complex assignments in that field and demands expertise and time, as well as a great compliance. It can certainly serve as a good indicator of the implementation of the other given assignments. In addition, it is important that particular attention is paid to environmental issues so that the decontamination itself does not create a different form of pollution.



The term protection from nuclear, biological and chemical weaponry has unfortunately become a reality in the 21st century The process of joining NATO and the participation in international missions that lied ahead for CAF's entire training system presented, and continues to present, great challenges to them. It can be said that the **Simulation Centre** was at all times with our forces, thanks to the constant renewal of professional staff and to the procurement of JCATS, a new simulation system, which meets the headquarters training needs of all of the armies that are members of NATO...

SIMULATION CENTRE

Domagoj Vlahović, photos by Davor Kirin

DOCTRINE COMMAND'S SIMULATION CENTER

CREATES NEW POSSIBILITIES

Today, computer simulations are an inevitable part of the military training process, especially when it comes to staff training. The efficiency and cost-effectiveness of computer-related exercises was already recognised by CAF in the nineties and was put into practice in late 1999, when the Tactical Simulation Centre was established. The establishment of such a structural unit and new way of training, which at the time represented something completely new, took a great deal of time. The atypical unit needed military professionals as well as capable computer scientists with various specialisations. Of course, the Centre had to be equipped with the appropriate computer software and with sophisticated simulation systems. At the time, Spectrum and Janus were the systems that fulfilled those requirements.

The GS CAF joint-simulation exercise, which will be definitive proof of the Centre's as well as its employee's potential, is expected to take place in 2010.

In short, in early 2001 the Centre became functional and soon after CAF units began their rotations there. NCOs and officers, who had actual war experience, were introduced to new methods of training and of improving their decision-making abilities and quickly embraced these new methods. Soon after, cooperation with similar centres abroad was established and many international exercises were conducted. Croatian civil structures such as the National Protection and Rescue Directorate also got the opportunity to train in the Centre. Over the years, the Centre has gone through restructuring and has taken on increasingly complex tasks. It had changed its official name several times before going with "the Simulation Centre". The unit operates in the "Petar Zrinski" barracks in Zagreb within the Croatian Ground Army's Training and Doctrine Command (TDC).





SIMULATION CENTRE

All exercises first take place in the Simulation Centre at the staff and command level with the assistance of computers, and then take place "live" on the training grounds in accordance with the scenario

CROATIAN MILITARY MAGAZINE



Requirements have constantly increased with time. The process of joining NATO and the participation in international missions that lied ahead for CAF's entire training system presented, and continues to present, great challenges to them. It can be said that the Simulation Centre was at all times with our forces, thanks to the constant renewal of professional staff and to the procurement of JCATS, a new simulation system, which meets the headquarters training needs of all of the armies that are members of NATO. A great step was made with the association to the Military Training Facility located in the "Eugen Kvaternik" training grounds in Slunj, south of Zagreb. All exercises first take place in the Simulation Centre at the staff and command level with the assistance of computers, and then take place "live" on the train-



Deputy commander Lieutenant Colonel Pavao Tokić ing grounds in accordance with the scenario that was written at headquarters.

Deputy commander Lieutenant Colonel Pavao Tokić informed us of the actual state of the Simulation Centre in greater detail. According to him, the interests of the units which are training and which choose their own training dates are a priority. The Centre is there to provide them with all the necessary support in the implementation of exercises, in accordance with the wishes and possibilities of the "guests". This is a long process; it is necessary to plan the exercise, to create the scenario and to constantly negotiate the details. JCATS, with its sophistication, has enabled simulations to be worked out down to the smallest detail, which means the situations seem all the more realistic. For example, it is now possible to include up to ten opposing sides in one simulation scenario. The planning of the exercise is limited only by the processing power of the computer. Hence, now even joint-forces exercises can take place, but what is important is for brigade headquarters to be able to train. The only limiting factor is the physical space that is available for accommodation, but even this is soon to be resolved.

As for the international environment, Lieutenant Colonel Tokić claims that the Centre is able to participate in any given exercise that NATO or any of its members conducts: "We are 100% compatible with NATO and can carry out any exercise with anyone"

> The Centre needed time to adjust to the changes that came to JCATS in June of 2008, but no work suffered due to this. The manufacturer carried out the Centre's employee's trainings, paying particular attention to the technicians who maintain the system and fill the database. The demanding JCATS, which is an American system, needed to be adjusted to Croatian circumstances. For example, in the database, tanks could no longer be of the Abrams type; instead they had to be Croatian M-84s. This is but one of many examples. The database is now almost complete and continuously undergoes updates (the same goes for the software, which the manufacturer continuously updates, according to contract), depending on what is new or on the unit that is training. The adaptation has greatly affected the instructor-controllers, some of whom have been to the U.S. and have learned exercise implementation methodologies. Furthermore, in Croatian exercise scenarios there are specificities that are rarely found elsewhere and that are included because there were examples taken from the Homeland War. Military experts such as engineers and armour, artillery and infantry experts are needed for such authentic scenarios. In accordance to the present needs, the current staff occupancy of the unit is very high.





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INTERNATIONAL COOPERATION

Today RACVIAC - the Centre for Security Cooperation - is an international, diplomatic, independent, non-profit and academic regional organization whose mission is to promote dialogue and cooperation on security issues concerning South East Europe through a partnership between countries of the region and international partners...

LADARD A DE APERAL GARAGE DER ES POO

Written and photographed by Nikola Hrastić

THE CENTRE FOR SECURITY COOPERATION

RACVIAC - The Centre for Safety Cooperation dates from 2000, when the Regional Arms Control Verification and Implementation Assistance Centre - RACVIAC was established following a bilateral agreement between the Republic of Croatia and the Federal Republic of Germany. Later on, Italy and Turkey also signed the agreement. Initially, the goals of the organisation were to conduct training for arms control, the promotion of mutual trust and security measures, and strengthening cooperation in South-Eastern Europe.

INTERNATIONAL COOPERATION

New developments in events and changes in security in the region of South-eastern Europe in the second half of the decade prompted a reform in the

The new focus of RACVIAC's activities can be divided into 3 branches, namely into International **Relations and** Cooperation, **Security Sector Reform and** Cooperative Environment Security

organisation, in its goals and structure, in order to act in accordance with future security challenges. The core of RACVIAC's activities (security, dialogue, reform in the security sector, arms control, building security measures, defence conversion) are related to the new ones (prevention of the proliferation of weapons of mass destruction and of small arms weapons, control of the export of weapons, counterterrorism, combat of international organised crime, integrated management of borders, crisis management, search and rescue). And so in 2007 the name of the organisation was changed to RACVIAC - Centre for Security Cooperation. The name RACVIAC was kept because it had become a kind of recognis-

CROMIL.

INTERNATIONAL COOPERATION

THE CROATIAN CONTRIBUTION TO RACVIAC

The Republic of Croatia's - especially the Ministry of Defence's and the Armed Forces' - contribution to RACVIAC has been very important from the organization's beginnings. Croatia, along with the Federal Republic of Germany, is the cofounder of RACVIAC, and the headquarters of the organisation is located in Rakitje, near Zagreb, in the CAF's "Vitez Darmir Martić" barracks. Since the beginning of the activity of the organisation, it has been tradition to have a Croatian officer fill the position of Deputy Director and Chief of Staff. In addition to the position of Deputy Director, Croatian representatives also work in the Public Relations office, on operative-administrative tasks, in the Department for Defence Conversion and in logistics. There are currently 19 employees from the Republic of Croatian working for RACVIAC, 9 of them being active military personnel. In 2009, the Ministry of Defence's State Secretary Pjer Šimunović served as MAG's Chairperson. The Republic of Croatia, i.e. its Armed Forces and Ministry of Defence also have given logistical support to the Centre over the course of its ten-year activity.





able brand in the South-eastern European region. The new focus of RACVIAC's activities can be divided into 3 branches, namely into International Relations and Cooperation (with a particular focus on Euro-Atlantic integration), Security Sector Reform and Cooperative Environment Security (with a particular focus on arms control).

RACVIAC's strategic goals are: strengthening stability and security in the South-eastern European region, the establishment of trust and security through arms control mechanisms, promoting security sector reforms and the promotion of regional cooperation in defence conversion, strengthening regional cooperation in the war against terrorism, international organised crime and the illegal proliferation of arms and people, supporting European and Euro-Atlantic integration, helping the Regional Cooperation Council (RCC), and supporting the European Security and Defence Policy (ESDP).

In the planning of the preparation and implemen-

RACVIAC's watchdog is the Multinational Advisory Group (MAG), comprised of representatives from member countries. MAG provides guidance to the centre's activities and oversees its activities and development



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tation of its activities, RACVIAC consults and cooperates with international organizations – partners (NATO, EU, OSCE), with similar European and regional organizations and centres (CESS, DPPI SEE, the Geneva Centre for Security Policy, DCAF, the George C . Marshall Centre, the Oberammergau NATO School, RCC, the SECI Centre, UNICRI, the United Nations Office on Drugs and Crime), with the national verification centres of the countries of the region, as well as with non-governmental organizations and academic and educational institutions.

RACVIAC's watchdog is the Multinational Advisory Group (MAG), comprised of representatives from member countries. MAG provides guidance to the centre's activities and oversees its activities and development. Members of the group chose its representative for a period of one year. The core is comprised of member states from South-eastern Europe; Albania, Bosnia and Herzegovina, Bulgaria, Montenegro, Croatia, Greece, Macedonia, Moldavia,

COURSES, SEMINARS, WORKSHOPS WHICH ARE HELD IN RACVIAC - Arms Control and Verification

- Security Sector Reform
- Defence Conversion
- Counter-Terrorism
- The fight against the proliferation of weapons of mass destruction - The fight against the smuggling of small arms weapons
- Supervision and security of borders
- Democratic control of Armed Forces
- Parliamentary oversight of security sector
- Combating international organized crime - Crisis management
- Search and rescue relief
- Arms control terminology in English
- European and Euro-Atlantic integration
- Strategic Resources and Security
- Demining



Romania, Serbia and Turkey. RACVIAC staff are military and civilian experts (officers and ministry officials) from 12 European countries. In its 10 years of existence, over 6500 attendees and lecturers from Europe and the rest of the world have participated in RACVIAC's seminars, workshops and courses.

Attendees of RACVIAC's courses and workshops are military and security officers, NCOs, officers from ministries, agencies and verification centres from South-eastern European countries as well as from the rest of Europe and the world. The lecturers are state officials, military and civilian experts in the field of defence and security, university professors and a wide range of other experts. Activities other than those at RACVIAC headquarters are also carried out with practical field work, where practical knowledge can be applied. With its successful actions and results, RACVIAC has proven itself to be one of the most successful projects of the Stability Pact for South Eastern Europe.

In the planning of the preparation and implementation of its activities, **RACVIAC con**sults and cooperates with international organizations - partners (NATO, EU, **OSCE**), with similar European and regional organizations and centres



Colonel ŽELJKO CEPANEC, **Croatian representative and Deputy Director of RACVIAC**

Over the course of RACVIAC's ten-year existence, first as a centre for assistance in the verification of arms control and then also as the Centre for Security Cooperation in South-Eastern Europe, there has been visible progress in the safety of the entire region. The Centre's contribution is indisputable, up until now over 200 activities took place with over 6500 attendees and lecturers. We are particularly pleased with top officials' praise during their visit to RACVIAC and with the support given to projects that contribute to the creation of security in a region that is still dynamic and turbulent. Support for the Centre by the Republic of Croatia was expressed by State Secretary Davor Božinović from the Ministry of Foreign Affairs and European Integration and by State Secretary Pjer Šimunović from the Ministry of Defence. In my opinion, this is strong support from an international institution on the Republic of Croatia's territory. Of course, all such organisations are met with difficulties, mainly of a financial nature, because of the omnipresent recession, but in spite of this, RACVIAC continues to work on the realisation of activities that will further contribute to the stability of the region, with the support of the 30 member countries. In doing so, we expect even greater support at the implementation level, especially with the selection of Croatian representatives in this already prestigious regional organisation. In conclusion, a successful cooperation will certainly continue, not only within the region and between the member countries, but also with the many international organisations with which activities are regularly conducted. The signing of the new legal status of the Centre is soon expected, in which the member countries would confirm their commitment to the idea of a secure and stable region, within a secure and stable Europe.



INTERVIEW

Marija Alvir, photo archive of the Croatian Navy

Since the summer of 2009 the Croatian Navy has been actively involved in the ATALANTA maritime operation, the engagement being agreed upon in February of the same year during the visit of the Navy's commander Rear Admiral Ante Urlić to the Command of the Royal Navy of the United Kingdom in London. This is the first European Union maritime operation in which most EU member naval forces have participated, as well as other countries such as Norway and Croatia that are not members of the EU. Naval forces from China, India and NATO member countries are also contributing to the security of maritime traffic in the Gulf of Aden. The Croatian Navy is participating in this operation on many levels - Commanders Grgo Kero and Ivo Musulin were on French and Belgian vessels, and Lieutenant Commander Antun Flegar participated in the work of Operation Command in Northwood in Great Britain, where he spent six months as an operations analyst. The participation of Croatian Navy officers contributes to the security of the Gulf of Aden where Croatian ships and crew members sail.

What is the purpose of Operation ATALANTA?

Operation ATALANTA began on the 8th of December 2008 by decision of the EU with the purpose of the protection from and the deterrence and repression of piracy and armed robbery in the Gulf of Aden and in the western part of the Indian Ocean. The operation began as support to the implemen-



THE CROATIAN **NAVY'S CONTRIBUTION** TO THE FIRST EU MARITIME OPERATION

tation of UN resolutions 1814, 1816 and 1846 and has two primary purposes: the protection of vessels which carry humanitarian aid to Somalia as a part of the World Food Program (WFP), and in more recent times, the protection of vessels that provide logistic support to African Union forces which are located in Mogadishu within the AU's AMISOM mission and of vessels that pass through the area of the mission. Another purpose is the deterrence, protection and repression of the criminal act of piracy and of armed robberies in the Somali EUNAVFOR uses the available monitoring, surveillance and reconnaissance systems maximally in order to insure a comprehensive view of the surface situation

area. The operation is a part of the joint efforts of EU members to solve the crisis in Somalia. The operation has political, security and humanitarian aspects, as well as economic weight- 12% of world oil maritime transport and 20% of all maritime traffic pass through the Gulf of Aden. In other words, over 25000 ships pass through the Gulf of Aden annually. However, WEP transports over 90% of its humanitarian aid by sea and the high level of pirate activity threatens traffic security and the safe delivery of humanitarian aid in that area.

How would you assess the effectiveness of EUNAVFOR?

Objectives were reached thanks to the contribution of the EU naval operation that was mentioned and whose warships and aircrafts contribute to maritime security in the region, particularly in regards to the protection of WFP and AMISOM vessels and other unprotected vessels throughout the duration of the mission. The permanent reduction of piracy and of armed robberies at sea could be achieved by developing appropriate levels of law and order on the Somali mainland. The sole deployment of warships can not achieve lasting effects without the simultaneous providing of support to the development of Somali legislation and establishment of order and economic development. The EU set its own goals in terms of contributions to the reduction of piracy and to ensuring humanitarian access to Somalia and therefore accepted to extend the length of the operation to the 12th of December 2010.

What would you underline as the possible limits of this operation?

A large number of the ships do not apply Self Protection Measures. Also, the size of the area of operation significantly affects the operation's efficiency and is one of the limiting factors. One of the greater problems is the formation's requirements for the release of pirates because EU members as well as Third World countries do not wish to take any legal action against the pirates, and bordering countries do not want to take legal action unless there is concrete evidence proving their involvePiracy has traditionally been focused in the area outside the eastern coast of Somalia and has been taking place for over 200 years. There is good evidence that modern piracy has partially developed as a result of the illegal fishing of foreign fishing fleets in the immediate region of Somalia. Former Somali soldiers and members of the Coast Guard established groups that began to fight against foreign fisherman and started to hijack their floats. They created significant financial resources by demanding ransoms for the release of the hijacked fleets. The activities occurred in 2007 and focused on pirates in the Gulf of Aden area, which is a very busy maritime route. Recently they have been making many media statements in which they try to recruit new people, and consequently the so-called "weekend pirates" phenomena arose. Attacks increased in 2008 and pirates now operate over an area that is more that 1000 nm off the coast of Somalia. This includes a growing trend of pirate attacks that took place outside the operation area of ATALANTA.

Operation ATALANTA began on the 8th of December 2008 by decision of the EU with the purpose of the protection from and the deterrence and repression of piracy and armed robbery in the Gulf of Aden and in the western part of the Indian Ocean

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ment in piracy. Very often when pirates realise that they are about to be caught they throw all evidence, such as weapons, GPS systems, climbing equipment and so on, into the sea. In spite of aerial photographs, it is difficult to prove their guilt as solid material proof is sought in court and it is impossible to cover the entire area of the operation with the resources that are available.

Given the vast area of operations, how do you track the situation in the area of responsibility?

EUNAVFOR uses the available monitoring, surveillance and reconnaissance systems maximally in order to insure a comprehensive view of the surface situation. The picture is additionally completed by the complex relationships between key players in the area of the operation that leads to the exchange of information and intelligence. This approach contributes to understanding pirate tactics, which is extremely important in order to be able to optimally utilise all available capacities. EUNAVFOR contributes to the international coalition in the fight against piracy in the Gulf of Aden, and they interfere with pirate attacks by intercepting ships when their number of boats allows them

EUNAVFOR contributes to the international coalition in the fight against piracy in the Gulf of Aden, and they interfere with pirate attacks by intercepting ships when their number of boats allows them to do so. In the Indian Ocean area the protection of merchant ships is significantly more demanding and heavily relies on air surveillance and data exchange

It was shown that pirates have recently reduced their effectiveness and currently only succeed in hijacking every fifth vessel that they attack. The number of incidents in the second half of 2009 compared to the first half was reduced by 50%. During the last year, a total of 46 vessels were hijacked and it is expected that part of the pirates will give up piracy and legalise their work in neighbouring countries. The ransoms that to-tal from 3 to 7 million USD are the main motivation for piracy, and the restrictions of legal measures against pirates significantly affect the credibility of anti-piracy coalitions. Namely, throughout the course of the EUNAVFOR operation, its forces have apprehended a total of 90 pirates, 75 of which are in the Seychelles and in Kenya, where several trials are in progress. However, so far not a single pirate has been convicted of the criminal offence of piracy.

to do so. In the Indian Ocean area the protection of merchant ships is significantly more demanding and heavily relies on air surveillance and data exchange. The interruption of pirate attacks and operations in that area is guided by intelligence, but all boats are ready to respond to the entire area of operation. 11 European countries with a total of 27 war ships, tankers and aircrafts participated in the operation in 2009. The smallest engagement was in December of 2008 with 4 boats, while the biggest engagement was in 2009 with all of 13 boats.

HRVCON

is directly subordinated to the commander of KFOR, who commands the tactical-reserve forces. Besides transport, the contingent's tasks also include training in individual and group flying. Up to this point, a number of these trainings have been executed with members of U.S. forces



KFOR MISSION IN KOSOVO

Domagoj Vlahović, photos by Davor Kirin

Towards the end of their participation, CAF's delegation visited HRVCON's second contingent in the **KFOR mission.** Mission **commander General** Markus J. Bentler took this opportunity to speak of the professionalism and preparedness of the Croatian contingent, as well as of the contributions that the **Croatian contingent gives** to the Mission in terms of its task, which is to transport people and cargo...

SUCCESS AND PROFESSIONALISM IN THE

The CAF's delegation, led by Croatian Air Force and Air Defence commander Major General Vlado Bagarić, visited the 2nd Croatian Contingent in the NATO-led KFOR operation (Kosovo Force) in Kosovo in late December of last year. The Second Contingent, comprised of 20 members, mostly from the Air Force, with two Mi-171 Sh helicopters at its disposal, has been participating in the KFOR mission since October of last year. The Croatian military contingent's task in the mission is to transport people and cargo, and the contingent consists of three helicopter crews and an aeronautical technical team for maintenance and for support. This is the first NATO Besides transport, the contingent's task also includes training in individual and group flying

operation in the Balkans in which Croatian soldiers are participating using their own transport.

The Commander of the mission, Lieutenant General Markus J. Bentler of Germany, welcomed CAF's delegation at Mission Headquarters in Camp "Film City" in Priština during their visit.

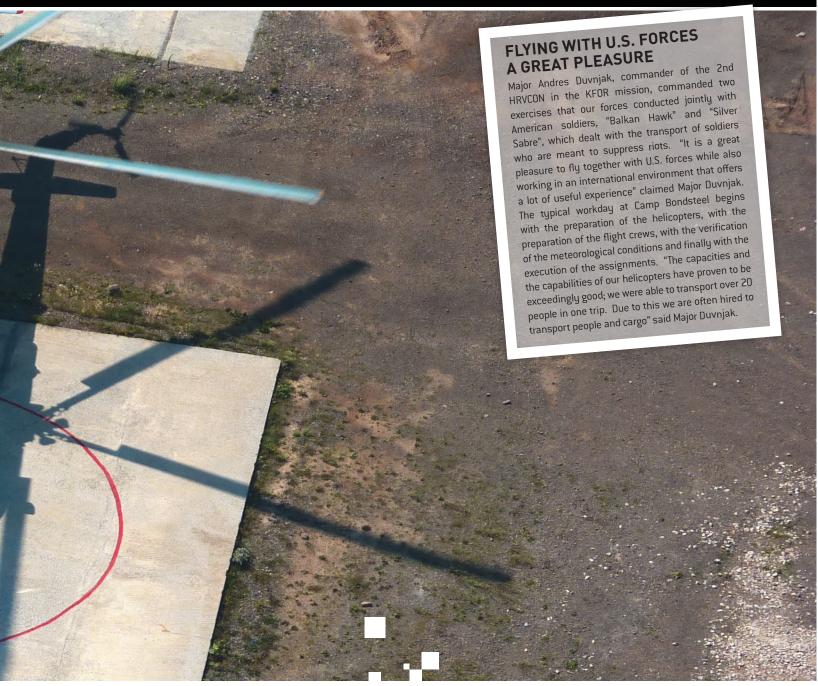
General Bentler spoke of the professionalism and preparedness of the Croatian contingent, as well as of the contributions that the Croatian contingent gives to the Mission in terms of its task, which is to transport people and cargo, emphasising how important the task is considering that mobility is of prime importance. He also expressed



TO KOSOVO VIA AN-32 B AIRCRAFT

In its visit to Kosovo, CAF's delegation travelled via the Croatian Air Force and Air Defence's An-32 B Aircraft, while a Mi-171 Sh helicopter, the aircraft used by our forces in Kosovo, was used for the flight out of Priština between Camp "Film City" and the "Camp Bondsteel" base

CROATIAN MILITARY MAGAZINE



how content he was that the Croatian contingent is participating in the Mission because the contingent greatly contributes to the successful implementation of the NATO-led KFOR operation. General Bentler also presented the current KFOR operation's situation to the CAF delegation as well as the current deployment of forces, stating that in the next phase, a reduction of KFOR forces in 3 steps is to be expected, provided that the security situation remains stable, as it is today. He also mentioned that the reduction of forces involves the number in personnel, the number of bases and the number of KFOR's security assignments.



Croatian Air Force and Air Defence commander Major General Vlado Bagarić took the opportunity to mention Croatia's readiness for further involvement in the KFOR mission, and also said that Croatia welcomes the assessment about the betterment of the situation in Kosovo.

Upon his arrival in Camp Bondsteel in Ferizi / Ferizaj in the largest American military base in Europe, where the Second Croatian Military Contingent was stationed, General Bagarić greeted members of the Croatian contingent and its commander Major Andreas Duvnjak. General Bagarić expressed his satisfaction with the top quality and



professional execution of the contingent's tasks, adding that according to the information he was given by the commander of the Mission General Bentler, the expertise and professionalism they showed in the execution of all tasks was often noted.

Major Andreas Duvnjak informed CAF's delegation about regular tasks within the Mission, and pointed out that HRVCON is directly subordinated to the commander of KFOR, who commands the tactical-reserve forces. Besides transport, he mentioned that the contingent's task also includes training in individual and group flying. Up to this The Commander of the mission, Lieutenant General Markus J. Bentler spoke of the professionalism and preparedness of the Croatian contingent

point, a number of these trainings have been executed with members of U.S. forces. He also stated that during the local elections in Kosovo, both helicopters and their crews were moved to Camp "Film City" where they played a role in KFOR commander's tactical reserve.

Following General Bagarić's visit, CAF's delegation was also received by the Commander of the Multinational Task Force East in Ferizi / Ferizaj American Brigadier General Alan S. Dohrmann, who mentioned that there are currently 1400 soldiers in the 12th American Contingent on the Mission.

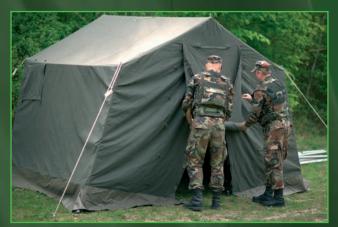


A THIRD CROATIAN CONTINGENT SENT ON MISSION

A third Croatian contingent, consisting of twenty members of the Croatian Armed Forces, mostly from the Air Force and having two Mi-171 Sh helicopters at its disposal, was sent to operation KFOR on January 10th 2010 for a period of four months. For the first time, there are two women in the Croatian KFOR contingent, one pilot and one technician. The Commander of the 3rd HRVCON in the KFOR peacekeeping operation is Major Marijan Skorija. Third Croatian contingent will be deployed in the area of Camp Bondsteel in Ferizi / Ferizaj. The fundamental task of the Croatian contingent, consisting of three helicopter crews and an aeronauticaltechnical team for maintenance and support of the national element, is transporting people and cargo.



With our various programmes, we at Werkos respond to the needs of the broad community. Our innovations are the result of our experience and our commitment to field-testing. Our products have earned us the image of a recognisable company specialized in engineering and in a range of specific products. The Mobile Units for Military and Civil Purpose Programme includes the equipment for the needs of the domestic market, yet it also shows our global orientation and our commitment to respond to increasing challenges of the unpredictable powers of nature - not to harness them, but to protect ourselves against them or to adjust to them. Mounting and assembly of Mobile Units is easy, quick and simple. The equipment including the lining, the cabin and the floor enables the usability of the tent even in some extreme situations, such as for medical corps and decontamination purposes. Spacious and airy, the tent can take in a large number of people (depending on its size): the wounded, the sick and the isolated. It is also suitable for safe storage of various types of goods.



M_01

TENT M-01-W is a tent type most frequently used to accommodate a small number of people for the following purposes: military, civil protection, the Red-Cross, fire department and scouts

- material: cotton
 structure: aluminium pipes and joints 3 m 2.5 m 2.5 m 1.7 m 7.5 m² 3 beds • width: length: crown height: lateral side height:
- floor surface: accomodation for:



BOX BARRIER

Box Barrier is a foldable mesh structure, made of heavy galvanized, double-braided wire. The internal structure is lined with geotextile, and has no bottom or lid. It can be filled with any available material: gravel, card, acid sand. soil.

Dimension of the Box Barrier are: • Width: 1 m 3-5 m 1 m Length Height

MOBILE UNITS FOR MILITARY AND CIVIL PURPOSES

- TENT
- ĽK I.



-01-W

TENT V-01-W is a general name for the tent type which, when combined with certain components, can be used as follows:

- For H.Q. (military) use : 28 m²
 As warehouse tent: 70 m²
 For medical use

- For decontamination (it has a cabin, and can have a floor as well): 84 m²
 For kitchen (trailer): 14 m²

warehouse tent

- material: cotton
- structure: aluminium pipes and joints
- 5.6 m 2.5 m • width:
- length:
 crown height:
 lateral side height: 2.8 m
- 1.8 m
- floor surface: 14 m² accomodation for: 6 beds
- * Dimensions refer to one tent section



FOLD-UP BED L-04-W

What seems to be an ordinary bag, easily turns into a comfortable foldable bed that is easy to transport or carry. The bed is delivered in a bag provided with a zipper and synthetic strap for carrying.



In 2004 Werkos has been awarded the NCAGE code A009B (NATO Commercial and Government Entity Code) and the NATO Stock numbers (NSN) for Small Tent and Large Tent products, including all respective spare parts. The Codification into the NATO system is a proof of high quality and significance of the Werkos Mobile Units programme and of our recognisability in military and civil practice, on both domestic and foreign markets. FEEL FREE TO CONTACT US AND ASK FOR MOBILE UNITS BROCHURE...



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TRAINING

Michael Hallett and Krešimir Lokas, photos by Davor Kirin

ENHANCING THE GROATIAN ARAB FORESSONS LEARNED CAPABILITY

The operational environments in which we find ourselves are extremely dynamic and complex, and demand of our forces new ways operating and in some cases the development of entirely new capabilities. In addition, achieving NATO Force Goals requires the further development of existing Croatian Armed Forces capabilities and the creation of new ones. The Croatian Lessons Learned Capability is a tool that can facilitate this development process.

The LL process is a structured, repeatable way to take the knowledge that people gain from experience about how to perform their tasks better, implement the changes recommended on the basis of this knowledge, and share the changes with others so that they can similarly improve their capabilities. The Capability includes the doctrine, organization, training, material, leadership, personnel and facilities necessary to execute the process

While this process can be applied to a wide range of activities, civilian and military, military LL is often concerned with making improvements to protect the most vital resource of all, human life. It is therefore important for all service members to understand how to use the process.

The LL process depends upon the LL Capability for its effective operation. What do we mean by LL Capability? The Capability includes the doctrine, organization, training, material, leadership, personnel and facilities necessary to execute the process. For example, without training in analysis and implementation techniques completing the five steps of the process, as seen in Figure 1, The LL Process: 5 Easy Steps, will be more difficult.





The Value of Lessons Learned - a historical example

LL are especially useful when innovation in tactics, techniques and procedures are essential for survival - when, for example, the enemy knows your doctrine.

Southern Croatia: 1992

The Croatian Armed Forces were faced with such a situation in 1992. In the early stages of the war for independence, the new Croatian Armed Forces were operating with two significant disadvantages: they were significantly outnumbered by and used the same doctrine as the former Yugoslav People's Army. We will use an example from artillery placement to illustrate the threat this situation presented to the Croatian Armed Forces. LL are especially useful when innovation in tactics, techniques and procedures is essential for survival - when, for example, the enemy knows your doctrine According to the official doctrine, heavy, towed artillery pieces should be placed behind a masking object (like a hill) that would provide some protection while still allowing effective firing, 6 to 8 kilometers from the front lines. The firing position should also be located close to communication lines (roads) and close to structures that could serve as ammunition storage and living facilities.

This doctrinal guidance created a problem for the Croatian Artillery units: since the enemy forc-

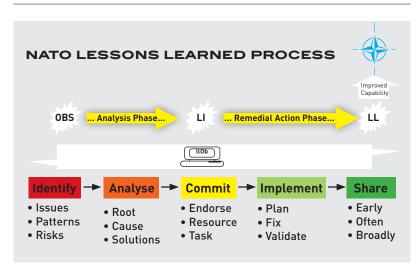


Figure 1: The LL Process: 5 Easy Step

The LL process is a structured, repeatable way to take the knowledge that people gain from experience about how to perform their tasks better, implement the changes recommended on the basis of this knowledge, and share the changes with others so that they can similarly improve their capabilities

> es had the same doctrine, following the doctrine would have effectively revealed the location of the artillery pieces, since the suitable areas were readily evident on the maps both sides were using. Therefore, operating in accordance with the doctrine would not have led to military success, but would have enabled the enemy forces to rapidly and with devastating effect, target and destroy the Croatian artillery.

> Using the LL process, the Croatian armed forces were able to develop and implement innovative solutions to this problem. This resulted in a better practice employed by other Croatian artillery units. We will now examine this LL process application in more detail.



→ CROATIAN LL CAPABILITY

Just as the LL capability enabled the Croatian Armed Forces to triumph in the 1990s, the enhanced Croatian LL Capability can help the Croatian Armed Forces meet today's challenges

TRAINING



LL Process Application

Identify: The observation was made that positioning the artillery pieces in accordance with the doctrine would lead to their destruction.

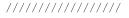
Analyze: Upon further analysis it became possible to articulate the root cause – the doctrine clearly defined artillery placement, and since the enemy had the same maps they would be able to quickly deduce the gun's location based on the common doctrine. This analysis resulted in the formulation of several recommended remedial actions. The primary recommended remedial action was to shift the position of the artillery outside the doctrinal belt, away from the 6 to 8 kilometer zones, using engineers to create new lines of communications to get the weapons to the non-Yugoslav Army Doctrinal emplacement. Deception, not adherence to established doctrine, became the means to success.

Commit: Although initially skeptical, the Corps Commander was persuaded to violate the established doctrine, and he committed his forces to operate in accordance with the new Croatian Armed Forces procedure.

Implement: The guns were moved into position. Application of the new tactics enabled the artillery to generate effective fires downrange while minimizing the enemy's ability to discover the location of the Croatian artillery positions.

Share: Once the new techniques proved effective in battle, they were shared among Corps headquarters area, improving the effectiveness of the entire force.

Military LL is often concerned with making improvements to protect the most vital resource of all, human life. It is therefore important for all service members to understand how to use the process





LL Today

Just as the LL capability enabled the Croatian Armed Forces to triumph in the 1990s, the enhanced Croatian LL Capability can help the Croatian Armed Forces meet today's challenges.

As a way to enhance this capability, Croatia, as a NATO member, is participating in the NATO LL Capability development training programme. From 2 to 6 November, COL Zvonko Brigljević, COL Marijo Sambolec and LTC Krešimir Lokas from the Croatian Armed Forces Joint Staff and Allied Command Tranformation's CDR Michael Hallett held the first Croatian Lessons Learned Staff Officer course at the Croatian Forces Base in Kupari, Croatia. The course, while based on the NATO LL Staff Officer Course, was tailored to meet the specific training needs of the Croatian Armed Forces. This included detailed discussions of the Croatian LL Doctrine and training on the Croatian LL Process, with an emphasis on the Croatian Observation, Lessons Identified and Lessons Learned tracking and reporting formats. The final course project required detailed analysis and implementation planning on six issues of importance for the Croatian Armed Forces.

Twenty-two students, from the Croatian, Army, Navy, Air Force, and Joint Staff attended. These students, now qualified LL trainers, will train their units on the Croatian LL process and thus further enhance the Croatian Armed Forces LL capability. This capability will improve the military effectiveness of the forces as they continue to perform their missions in national, NATO, UN and EU operations.

Domagoj Vlahović, photos by Tomislav Brandt

THE CROATIAN MILITARY INDUSTRY



A COMPANY WITH A WORLDWIDE REPUTATION

Humanitarian demining today is a greater matter of interest to military deminers and other experts, as the role of the world's armies is changing and their job is more than just military. This has contributed to the interest in DOK-ING's machines among foreign armies for use in international peacekeeping missions and to help local communities. Over time, the growing small company from a country that felt the threat that mines present first hand exported machines to 27 countries on all five continents

At the beginning of this year, Croatian media followed the latest news on the construction of the first Croatian electric car called XD. Although similar projects have been ongoing throughout the world for quite some time, the construction of this small car, which is proving to be quite advanced, has surprised everyone. After the successful premiere of the prototype at the fair in Geneva, questions such as "who made this?" and "was it really a Croatian company" quickly started to be asked, as our country is not known for its automobile industry. However, as soon as they saw what "workshop" the car was produced in, the better-informed were not at all surprised. Behind the name "DOK-ING" The greatest recognition of all is the export into countries such as the USA and Sweden which invest much into technology

stands a company that has a worldwide reputation in its field. Despite the great importance of saving human lives, the design and manufacture of demining devices isn't an attractive business. Even in Croatia many only heard of the company after the appearance of the XD.

Travelling to Zagreb's industrial district where DOK-ING headquarters are located, we were probably the only journalists who weren't there first and foremost because of the XD. As is the case with other successful Croatian medium-sized companies, DOK-ING's administrative branch is closely connected to the working facilities. The founder and owner, engineer Vjekoslav Majetić, is a true in-



novator, enthusiast and is involved in every project. He oriented the company which he founded in late 1991 towards communications: satellite systems, telephone centrals... The shift occurred with the end of the Homeland War, in early 1996. Quite by accident, Majetić went to Karlovac, at city 50 km south of Zagreb which had just started to recover from the consequences of war. There he had the chance to see how deminers demine critical areas, which at the time were numerous in Croatia (and unfortunately there are still such areas today). People were exposed to danger in the difficult conditions caused by tall vegetation and impassable terrains. His innovation-oriented mindset immediately prompted him to begin thinking about other solutions that would not threaten people's lives. These thoughts can be summed up in DOK-ING's slogan: "Don't send a man to do the work of a machine".

The creation of DOK-ING's demining machines was based on two main points from the very start.

Thanks to its small size and high mobility, it is able to demine yards, woods, river shores, sediments and other types of terrains that are inaccessible to larger machines



The first was that the machine be developed as a separate unit, in other words, not as an upgrade to another machine (construction device, armoured vehicle, tank), which had been customary up till that point. This approach was unique, pioneering throughout the whole world! The second point has to do with the type of demining. There are two types: military and humanitarian. The military kind is directed towards the clearing of as much as is necessary for the safe passage of military units. The aim of humanitarian demining is the clearing of entire areas, and because of its technological complicatedness it is not as advanced as military demining. Aware of the situation in Croatia, Majetić focussed on the latter. The first prototype was already built by the end of 1996, and two years later in 1998 the first concrete results were seen.

The MV-4, introduced in 2002, has completely satisfied all criteria. It is a remote-controlled machine that is designed to disable infantry mines, and





The MV-4, introduced in 2002, has completely satisfied all criteria. It is a remote-controlled machine that is designed to disable infantry mines, and is still being developed today



The American Armed Forces have bought 30 MV-4 machines up to now, many of which are being used in Afghanistan. Besides military and commercial companies, various governmental organisations and international humanitarian organisations, including some of the UN's, have also bought the machine

is still being developed today. Thanks to its small size and high mobility, it is able to demine yards, woods, river shores, sediments and other types of terrains that are inaccessible to larger machines. Embraced in our country, the machine soon caught the interest of foreign companies, many of which had worked in Croatia, purchased or rented the machine, and spread word of it.

Humanitarian demining today is a greater matter of interest to military deminers and other experts, as the role of the world's armies is changing and their job is more than just military. This has contributed to the interest in DOK-ING's machines among foreign armies for use in international peacekeeping missions and to help local communities. Over time, the growing small company from a country that felt the threat that mines present first hand exported machines to 27 countries on all five continents. The greatest recognition of all is the export into countries such as the USA and Sweden

The creation of DOK-ING's demining machines was based on two main points from the very start. The first was that the machine be developed as a separate unit, in other words, not as an upgrade to another machine (construction device, armoured vehicle, tank), which had been customary up till that point.



This approach was unique, pioneering throughout the whole world!

which invest much into technology. The American Armed Forces have bought 30 MV-4 machines up to now, many of which are being used in Afghanistan. Besides military and commercial companies, various governmental organisations and international humanitarian organisations, including some of the UN's, have also bought the machine.

What is particular about DOK-ING is that it uses its very own products through DOK-ING Demining, a company which is also owned by Matejtić and successfully operates throughout Croatia and the neighbouring region. This very much helps in the development of MV-4 and MV-10s, a machine that is specialised in anti-tank mines and other explosive devices. The current focus is on Jelka-4 and Jelka-10 machines whose use has spread to fire-fighting vehicles. Also produced are machines for mines (pits), a part of which were delivered to South Africa. In accordance with Croatia's entry into NATO, now in progress is the obtaining official Alliance certification. DOK-ING has recognised the opportunities that NATO member countries present to Croatian companies and therefore has also introduced itself to NATO's supply agency (NAMSA). The company receives the MOD's and CAF's wholehearted support in these activities. The first question that is asked by foreign clients is often "does your army use your machines?".

At the end of the story we'll return to its beginning. The XD electric automobile resulted from the margins of the project in which KOK-ING wanted all of its machines to be powered by electricity. This will be achieved, and the benefits will be immeasurable: a machine which will not have liquid fuel in it is ideal for work in areas that are under threat of fires and explosions. The first electrical machine was introduced last year in Šibenik and proved to be successful. The continuation is predictable, especially for a company that began its operations in a garage but now counts over 200 employees and is a world leader in its field...

MULTIMEDIA CD

HE MINISTRY (

The second amended edition of the multimedia and interactive CD about the CAF is just another contribution to the quality promotion of our Armed Forces given by the Croatian Military Press Division of the Public Relations and Information Department. The bilingual (Croatian/English) CD was designed as a personal map of our Armed Forces and gives full insight into the Croatian Army's structure, assignments, activities, documents and its development path from the beginning of the Homeland War up until now. Included on the CD are video clips that visually complement the text and depict the most important events in recent Croatian history.

We are convinced that this amended edition of the CD will enable all of its users to get a clearer picture of the Ministry of Defence and of the Croatian Armed Forces as a whole and will show how they fulfil their primary purposes.

PROJECTS THAT WE ARE



10 YEARS OF CROATIAN PARTICIPATION IN PEACEKEEPING MISSIONS

Currently participating in thirteen different peacekeeping missions and operations under UN auspices, both in NATO-led operations and in European Union operations, Croatia is now recognised as one of the most active guardians of world peace, stability and security. In September of 2009, Croatia marked the tenth anniversary of its soldiers' first participation in a peacekeeping mission, and over these ten years we have participated in a total of twenty peacekeeping missions. Our intention was to present Croatia's complete participation in missions with this book that was released on the occasion of this very important anniversary. The book contains a short section on the establishment of Croatian participation in each one of them and is illustrated with photograp that were taken during our soldiers' involvement in the missions. The book is bilingual, printed over one hundred and ten pages and in hardcover. We believe that the book will provide valuable information on Croatian participation in peacekeeping missions to everyone who is interested in the topic, that it will give insight into the weight of the assignments that our soldiers accomplish throughout the world and that it will also promote Croatia as a country that knows how to appreciate the value of peace.



CROATIAN DEFENSE INDUSTRY CATALOG FOR 2010.

In an effort to ensure that the Croatian Defence Industry has a successful performance in foreign markets, the new edition of the Croatian Military Press Division's catalogue Croatian Defence Industry 2010, containing a database of 38 Croatian companies that operate in the field of defence production, was published. In the catalogue, companies and manufacturers that produce a variety of defence equipment, from clothing and footwear to complex simulators and combat systems, are presented along with their basic contact information as well as a brief description of certain products. Many companies are ready to offer their products to a global market.

We hope that this catalogue will be useful to everyone outside of Croatia who wants to familiarise themselves with the Croatian defence industry and establish contacts for future business cooperation.





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PRINT-OFFICE ZELINA D.D, K. KRIZMANIĆ 1 10 380 SV. I. ZELINA, HRVATSKA

TITLE OF THE EDITORSHIP:

MINISTRY OF DEFENSE OF THE REPUBLIC OF CROATIA PUBLIC RELATIONS AND INFORMATION DEPARTMENT. P.P. 252, 10002 ZAGREB, REPUBLIC OF CROATIA http://www.hrvatski.vojnik.hr e-mail: hrvojnik@morh.hr

Views expressed in this magazine are not necessarily those of the Ministry of Defense.





Na temelju Zakona o medijima (stavak 1 članak 34) objavljujemo podatke o financijskom poslovanju tiskovine Cromil u 2009. godini:

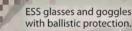
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Rashodi

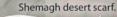
MINISTARSTVO OBRANE REPUBLIKE HRVATSKE Trg kralja Petra Krešimira 1, Zagreb u 100%-tnom vlasništvu Republike Hrvatske 22.000.00 kuna 27.195.00 kuna Prosječna naklada: 1000 komada svakih 6 mjeseci

CROATIAN NATO SOLDIER

Panoplied with top-line military equiment, with special accent on high quality Croatian made products.



Backpack Kroko M115 with 3L Camelbak watter blader.



desert scarf.

Combat helmet with ballistic protection, product of Sestan-Busch company, Croatia.

U-shaped 2-way neck communication device, developed by RIZ company, Croatia



Protective combat vest Kroko M120 with ballistic panels, Thermotex and Outlast linning for better breathability and temperature regulation.
Anti-slip rubber on shoulders.
Pouches for hand granades, ammunition, gas mask and other equipment can me modulary positioned depending of the operation needs.
Front, back and side body protection. Developed and produced by Kroko International, Croatia.

> - Tactical fire retardant summer gloves, made and developed by Kroko International, Croatia

Assault rifle VHS, soon to be released by HS-Product company, Croatia **HS** Produkt



Survival set Kroko, consists of top quality components such as Leatherman, Surefire, Camelbak...

Outershell: Jacket, underjacket and trousers made from 3-layer membrane material that is breathable but waterproof. Also made in Croatian desert digital pattern with outstanding camouflage properties in desert enviroment.



New BDU in Croatian desert digital pattern with outstanding camouflage properties in desert enviroment, made from modern materials, treated for IR KECKO invisibility, armed forces . "OSRH" watter mark for copyright protection. Developed and produced by Kroko International, Croatia.

First aid kit.

Face protective — mask (gas mask).

Duty belt with closed type holster Kroko M116 and holster extention.

Pistol HS2000, developed and produced by HS-Product company, Croatia **HS**Produkt



Underwear: UnderArmour for hot climate conditions, Outlast with temperature regulation for cold weather conditions, and polypropilene for extreme conditions.

Boots: Various types according to the need, made in Croatia by Jelen, Inkop, Borovo and Sloga companies.

Other equipment in development.

Knee protectors, developed and produced by Kroko International, Croatia

Combat Knife, Extrema Ratio or Solingen Waffentechnik, distributed

by Kroko Interna

tional.

manufacturer of military and police equipment: KROKO INTERNATIONAL d.o.o.

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