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COMMUNITY

CSEL

BEAUTIES AROUND US



▶ FOREWORD by Commander NRDC-ITA



A very busy second semester for NRDC – ITA community, indeed! Your hard work and dedication in preparing for our NATO validation paid off: we concluded Exercise Steadfast Jackal 2022 with flying colours and we are now the in-readiness Joint Task Force HQ for NATO. With HQ Multi National Division South, we had the privilege of being able to train with a fantastic support from NATO Joint Warfare Centre in Stavanger, our Response Cells and Augmentees and the NATO Command Structure at large.

Well done the Staff and the Support brigade! I am mindful that – as ever – this would not have been possible without the continued support from our families. To them a very warm thank you. It is now time to dedicate to them, take stock and recharge for another exciting new year, in the service of NATO and our Nations.

Eagle Eye 2022 Seminar Protection of Civilians in Military Operations



INTRODUCTION

In the framework of the EAGLE EYE seminar series, on 12th October 2022 the HQ NATO Rapid Deployable Corps (NRDC-ITA) hosted a conceptual seminary, with a focus on Human Security (HS) approach and Protection of Civilians (PoC) in military operations relevant to all three of NATO's core tasks.

NATO's commitment to safeguarding the freedom and security of its members has driven the Alliance for over 70 years. During these decades, challenges to Allies' shared security – and the contexts in which NATO addresses these challenges – have evolved. It is increasingly the case that challenges to security occur and must be addressed in spaces inseparable from civilian populations. In the modern security environment, civilians are being deliberately targeted in conflict and their safety and security is being leveraged to serve military objectives; this has become clearer with Russia's war of aggression against Ukraine.

The armed conflict in Ukraine and the atrocities caused by Russia's aggression, have given renewed impetus to address HS for NATO. The notion of HS directly links NATO's common values of individual liberty, human rights, democracy and the rule of law to NATO practice. A HS approach provides a heightened understanding of conflict and crisis. This allows NATO to develop a more comprehensive view of the human environment, consequently enhancing operational effectiveness and contributing to lasting peace and security.

Colonel
LVA Army
Valts ABOLINS

Human Security And Protection Of Civilians: The Nato And Un Approach

For the first time the 2022 NATO Strategic Concept emphasized the high importance of HS and subsequently it was endorsed by the Operation Policy Committee on 24 June 2022¹. The HS approach is an umbrella concept allowing for the coordinated and concerted further implementation of the Cross Cutting Topics (CCTs).

To date, within the NATO's Human Security in Operations (HSIO) framework there are six CCTs: Children And Armed Conflict (CAAC); Cultural Property Protection (CPP); Building Integrity (BI); Protection of Civilians (PoC); preventing and responding to Conflict-Related Sexual Violence (CRSV), and; Combating Trafficking in Human Beings (CTHB). Other international organisations, particularly the UN, take a different approach and sometimes a much wider view of what Human Security encompasses or how the topics relate to each other. The UN conceptualised human security as a multi-sectoral approach to security that identifies and addresses widespread and crosscutting challenges to the survival, livelihood and dignity of the people.

According to NATO definition², PoC³ includes all efforts taken to avoid, minimise and mitigate the negative effects that might arise from NATO and NATO-led military operations on the civilian population and, when applicable, to protect civilians from conflict-related physical violence or threats of physical violence by other actors, including through the establishment of a safe and secure environment.

NRDC-ITA Commander Foreword: Lessons from Afghanistan, Ukraine and Africa



¹ PO (2022)0280.

² PO(2016)0407.

³ Not only persons, but also objects and services.



As Keynote speaker, Lieutenant General Lorenzo D'Addario, the NRDC-ITA Commander focused the discussion on how for the future crisis, NATO could take lessons from conflicts in Afghanistan, Ukraine and Africa, experiencing complex and dynamics human environments.

HS and PoC are central to the Alliance's purposes, conquering and holding the support of the population, both within the operating environment and at home, have proven to be vital to mission success. As the Alliance's "long war" in Afghanistan demonstrated, military dominance means little if we are unable to protect the people from our actions and the actions of others. Civilians have and will continue to be the "key terrain". Failure to protect will lead to strategic failure, as it has been the case in Afghanistan where we won every tactical engagement but still failed to achieve our end-state.

The security of NATO's one billion citizens is the heart of the Alliance. Yet, the collective defense often focuses on state-centric challenges such as military capabilities and territorial integrity relegating the human-centric approach to CIMIC function and humanitarian aiders' efforts. However, what we are witnessing in Ukraine is that HS has a pivotal role: national integrity and HS are two sides of the same coin. When an adversary employs strategies that deliberately target civilians, as we see in Ukraine, is of undeniable importance that NATO as it develops additional and advanced capabilities to safeguard civilians at risk from different types of violence and from different perpetrators' rationales. The highly challenging task for NATO is to understand how to anticipate and counteract. However currently this is not a capability that NATO has fully developed.

NATO is aware of how the entire region of the Sahel and central Africa continues to be characterized by conflicts and other multiple threats to the civilian population, including climate change-based risks. All of this poses serious dilemmas for the stability and security of many NATO member states, particularly along the southern flank. In this regard, the new strategic concept endorsed during the 2022 Madrid Summit broadens the definition of security to transcend the more traditional definition of territorial integrity and military capabilities to include human security and gender equality consideration, which provides a much more comprehensive approach to the heart of the conflicts we are witnessing in our southern flank.

In this framework, how could NATO and its Allies take advantage of the new strategic concept and lessons learned from Afghanistan and Ukraine? NRDC-ITA's Commander envisages two key opportunities:

- HS and PoC need to be further implemented in all phases of any military operation. Future conflicts will most likely continue to occur close to civilians and their essential infrastructure, probably in urban and digitally connected environments, against adversaries that will intentionally target civilians.
- NRDC-ITA must foster its role as a training hub by integrating and testing PoC and HS throughout all future exercises including Exercise STEADFAST JACKAL 2022. While serving as a facilitator for national education and training by facilitating the integration of the NATO PoC and HS framework into Allies' Human national policies, doctrine, and guidance.

Outcomes From Speakers

Mr. Marco Grandi⁴ performed as moderator of a series of notable speakers including representatives from ICRC, the University of Turin, SHAPE J9 and the Office for Legal Affairs, the Parliamentary Secretary of the Ministry of Defence of Latvia, and the AFRICOM Humanitarian Assistance Advisor to the Military.

The speakers and participants explored contemporary perspectives from an academic and practitioner's approaches in order to understand the challenges of PoC in different scenarios. However, most importantly, for people to understand the actions and next steps that the NATO alliance should take in delivering implementation.

⁴ He is Military Advisors of the Dutch INGO "PAX for Peace" and is specialized in the design and delivery of tailored PoC training solutions for security actors in support of multiple NATO Force Structure Corps HQs.

The speakers outlined the challenges faced when military operations are conducted within a complex and modern operating environment with large numbers of civilians in conflicts and perpetrators who attack them, and how NATO could prepare and respond. It was noted that military means, although essential, are not enough on their own to meet the many complex challenges to the security of own forces and civil population. The NATO Comprehensive Approach requires commanders and staff to be clear about their mission, the objectives they seek and to analyse the human factors of the operating environment relevant to the achievement of these objectives. Synchronize military and non-military activities is a key.

In particular:

- Prof. Stefano Ruzza from Turin University addressed the historical evolution of the Human Security and Democracy from post-WW2 to Ukraine;
- OF-1 Ivana Kudlackova from SHAPE Office of Legal Affairs focused on Legal Aspects of Protection of Civilians in the Context of Cyber Domain;
- Ms. Marianna Tonutti, Stabilisation Advisor from SHAPE J9 introduced the new NATO approach of Hs in Operations (HSIO concept);
- Ms. Maryna Domushkina, a humanitarian practitioner from Ukraine presented a dramatic video on the physical consequences that Ukrainian people is facing due to conflict and with grave implications for the enjoyment of human rights, including economic and social rights;
- Ms. Baiba Bēdodniece, Parliamentary Secretary of The Latvian Ministry of Defence gave a stimulating lesson on how the Baltic States are preparing against the Russian threat, in terms of Civil Preparedness and Comprehensive national defence;
- Mr. Chris Hall, Head of Delegation ICRC Delegation to NATO and the EU and the Kingdom of Belgium, explained how ICRC understands the PoC concept and why Commanders have to look at the "trilemma

triangle model" to balance the use of the force with the obligation to protect civilians and the aim to accomplish the mission.

- Ms. Elizabeth K Blanchford, Humanitarian Advisor to USAFRICOM illustrated the US Interagency Approach to PoC and implications of the Civilian Harm Mitigation and Response Action Plan (CHMR-AP);
- Lt. Gen (ret) Christopher Coates, Senior Director, Single Synthetic Environments (SSE), Military Applications at CAE Inc. gave a demonstration of the use of the SSE to facilitate improved operational HQ response to a specific Protection of Civilians challenge.
- Col. Valts Ēboliņš, NRDC-ITA ACOS J9 explained how NRDC-ITA is pioneering the Human Security approach and PoC within the NFS through the J9 Human Security Implementation Plan, which also includes the PAN HQ SOP on the operationalization of Human Security and PoC.

NRDC-ITA Deputy Commander Final Remarks

Major General Jez Bennett CBE, the NRDC-ITA Deputy Commander, closed the seminary focusing on the requirement of a paradigm shift in thinking from an 'enemy' to 'population' centric mind-set to solving PoC. 'Civilians on Battlefield' should be considered more 'War among the People' as we can see in the RUS/UKR conflict where the centrality of POC resulted in a 'Defend forward' approach. While Russia might make quicker decisions by not caring about POC in its targeting but is losing battles & probably the war due to strengthening the will of the UKR by harming the civilians, not breaking it. NATO should not replicate what the humanitarian workers traditionally do in the battlefield but must co-ordinate with and support them to increase the Host Nation Human Security resilience: 'prevention & anticipation' are better than 'cure'. Comprehensive approach, de-

CONCLUSIONS

To address the HS approach, PoC must be recognised as central when assessing the human environment. The integration of PoC into the operations planning process will ensure proper consideration during military planning and allow NATO commanders to take informed decisions. Such endeavour will require a mind-set shift to a cross-functional effort for all military planners, that are supported by dedicated subject matter experts to enable integrated PoC into military planning. NATO must continue to develop a practical understanding and delivering PoC during exercise and operations. It must be able to educate others about the role of the NATO as protection actor. It should consider that NATO approach to PoC as an evolutionary one, taking steps toward the goal of protecting civilians, while being open to adapting its approach in partnership with key stakeholders. It must be recognised that PoC encompasses a broad set of challenges that military forces cannot address on their own, so it must develop tools and processes to connect military forces to supporting actors. Humanitarian protection agencies have considerable expertise that NATO must learn how to leverage effectively. Finally, NATO force elements must achieve this through sustained engagement, and development through interaction with local communities, national authorities, and international actors is a fundamental requirement for success.



confliction, interagency perspectives, communication & trust, may enable military ends to be met by alternative means that do not harm Hum Security.

Prof. Stefano Ruzza talked about how military (violent) actions cause effect in civilian environment but it is also true that non-military actions (e.g. economic measures & cyber) can cause harm to Hum Sy too, and can also trigger further military activity. Key is to break the vicious circle through co-ordination of pol/mil and civ/mil and a comprehensive understanding of human security terrain.

The ICRC covered briefly the additional complexity of security force assistance/partnering and NATO must to work out how to address the use of partners and proxies and how civilians may become engaged in military activity for short periods of time before reverting to civil status again. All of which leads to a need for greater, more modernised and robust training and to enhancing our planning & execution.

Finally, Major General Jez Bennett introduced the lecture of Mr. Christopher Coates, Senior Director of Single Synthetic Environments based on a demonstration of the use of Artificial Intelligence (AI) applied in response to a PoC challenges. AI and digital modelling has an increasing role in adding predictive science to the art of planning, war gaming and exercising procedures.



International Day 2022

A social event for friendship and charity



More than two years after the last edition, NRDC-ITA held its traditional International Day (ID22) on 9 July 2022.

The event focused on the soldiers and families of the 19 allied nations based at the Headquarters. The aim was to foster bonds of friendship and increase cohesion by sharing the culture of all the nations at HQ through displays of the typical traditions and customs of each participating country.

After a long pause due to COVID-19 pandemic restrictions, this social event was of particular importance to the NRDC-ITA international community, representing a sort of restart of HQ social activities after a prolonged break.

ID22 was held at the Ugo Mara Barracks where NRDC-ITA staff and their families gathered in a relaxed atmosphere, enjoyed spending time together and had the opportunity to taste some traditional food from each nation while listening to live music and enjoying some amazing performances. For this, a large music stage was set up in the main square of the barracks and each contributing nation was given the chance to manage a national stand on one of the two main avenues of the barracks, offering food and promotional gadgets.

The attractions included a special area for little guests, with a playground, magic show, inflatables, an amusement train, and special food and baby-sitting services. Older children and adults could take part in e-scooter driving sessions, organized by the provincial branch of the Automobile Club of Italy, which also put on a vintage car display and an automobile driving simulator.



Lieutenant Colonel
ITA Army
Antonio CONVERTINO

As a cherry on the cake, there was a performance by the Italian Army's "Folgore" Brigade music band, which played some classic military and international songs to accompany the breathtaking launch of three skydivers from the Italian Army Military Parachute Training Centre who jumped off an Italian Army Aviation helicopter carrying the NATO, Italian and NRDC-ITA flags. Close to the flag landing area, the NRDC-ITA Support Brigade organized a static display of military vehicles and equipment, with a shooting simulator and an exhibition of historic uniforms.

A large area was dedicated to sponsors and external companies with business links to NRDC-ITA HQ that helped to stage the event and the related charity initiative.

The ID22 program was enriched by the presence of the "Vesellie" Bulgarian folk group, which performed some very traditional dances to the typical music rhythms and sounds of Bulgaria.

During the night, the main stage hosted a great performance by the Eagle Band, a music group made up of NRDC-ITA members and friends that entertained the audience by playing some famous international rock greatest hits.

As mentioned, charity initiatives were an important part of the event. NISIC very successfully raised funds through a raffle with great prizes, giving the proceeds to two local non-profit organizations that help people with disabilities.

The organization of the event, managed by the NRDC-ITA Support Division, was possible thanks to the fruitful cooperation between NRDC-ITA and Support Brigade HQs, with the direct involvement of many soldiers from the Italian Army 1st Signal regiment and the 33rd Tactical and Logistic Support Regiment "Ambrosiano", which worked very proactively to overcome difficulties and last minute challenges.

All in all, International Day 2022 was a great success, with more than 2,500 people involved. It provided a unique opportunity to highlight the shared values that have guided men and women serving in Solbiate Olona since 2001 under the NATO Rapid Deployable Corps insignia as well as demonstrating, through specific charity initiatives, practical solidarity towards those experiencing difficulty.



Eagle Adventure: Vertical Endeavor

In the beautiful scenery of La Thuile (Aosta) lies the “Monte Bianco” Barracks, the location that hosted the “Eagle Adventure 2022” exercise for the first time, from 11th to 17th July.

The exercise saw the involvement 70 men and women of all ranks from all the Allied countries based at the NATO Rapid Deployable Corps Italy (NRDC-ITA). The participants, including junior ranks, non-commissioned officers and officers from the Ugo Mara Barracks, were deployed to this specific Alpine area for the first time to take part in one of the key events of the year. During the week, they were deployed in mid-altitude mountain terrain, undergoing training that was conducted as part of an intensive program that included various methods of movement in a mountainous environment.



The varied activities proved to be very demanding. The NRDC-ITA personnel practiced 2 mountain marches to Deffeyes Hut (2587 m) and to the “Croce” pass (2485 m), typical Alpine troop routes wearing light equipment, a Casimiro Via Ferrata and a specific training day. This training day gave the personnel instruction about technical materials and specific equipment, and taught them how to approach a rock wall and how to climb it safely and effectively. The NRDC personnel also visited Cantore castle, an emblematic historical building where the Mountain Training Center HQ is located. During this visit, they were briefed about a military alpinist extra-European expedition to “Siula Grande” (South America), concluded at the end of July, that managed to reach a very taxing, inaccessible peak.

The combination of Mountain Training Center climbing instructors and the alpine personnel who are serving at NRDC-HQ (that organized and attended the exercise, providing quality instructors/SMEs) offered a unique opportunity for all the personnel to improve their physical and

Lieutenant Colonel
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Paolo PIANGERELLI



technical skills, and gave everyone the chance to reach all the planned destinations.

The training also covered survival skills, theoretical lessons and practical activities regarding safe and technical rules for moving in mountainous and hostile environments with a military unit, and historical information about the military fortifications in this area, such as the “Croce” or “Piccolo San Bernardo” pass.

The exercise was well resourced, culminating with a visit to the Monte Bianco glacier (3536 m) using the very modern Skyway cable car. Of course, the numerous training activities improved the participants’ physical condition and individual skills to cope with challenging mountain terrain, but what really stood out was the positive spirit present throughout the exercise. The ethos of teamwork prevailed at all times - and significantly contributed to the capability of the groups. The opportunity to conduct alpine training, in this harsh environment, was embraced by all personnel and provided the basis for them not only to improve physically and professionally, but also to create and strengthen relationships amongst the multinational members of the NRDC-ITA.

The main aim of the exercise was to test military skills in a mountainous environment, but it also consolidated the *esprit de corps* and the harmony of NRDC staff. It is unsurprising that the training had a strong bonding effect on the multinational personnel when you consider the activities undertaken in the mountains were not just physical or technical in nature, but included something that was almost spiritual. This inner teaching improved

our self-awareness as we faced difficulties in this beautiful but unforgiving natural environment.

The “Eagle Adventure 2022” exercise was a precious moment spent together for the NRDC-ITA personnel that were able to take part, forming constructive relationships in order to build up cooperative teams, and improve fitness and self-confidence.

It was also highlighted how the Alpine Troops, through the sacrifice that unites all in difficulty, can find the spirit of body in themselves, in those mountains and through great professionalism, to bring peace and security. Each year the exercise offers moments to share and nurture harmony among the participants and the environment—moments such as the unexpected interaction with a group of civilian hikers, near Lake Arpy, who spontaneously started to sing alpine songs when they saw our group marching up the mountain as a military unit. These songs are part of the Italian mountain tradition and represent a special bond between the Alpine Troops and civil society, telling the story of our homeland and its soldiers from the time of the great wars to the present day.

During the whole period, the logistical and technical support provided by “Comando Truppe Alpine”, “Centro Addestramento Alpino” and the “Monte Bianco” Barracks was crucial and greatly appreciated. All the personnel and the military instructors contributed fully to the success of this exercise, gaining profound experience of the wonderful mountain environment.



Cyberspace risks and challenges to NATO / EU and the main issues to conduct cyberspace operations at the operational level

Cyberspace is the only manmade domain. In this domain, scores of things are extremely interconnected: it consists of the Internet, interdependent networks, the Internet of Things (IoT), and an innumerable quantity of related devices covering a myriad of different purposes. It offers the capability of remote actions such as assistance, maintenance, control, decision making, problem solving etc. All of this spells out why the possibility of attacking through a new kind of threat may arrive at any time from any part of the world. An attack can take place within routers, provider's routers, personal computers, laptops, servers, printers, cameras, mobile devices, etc. The potential area for attack grows every day and, although cyber warfare is currently limited to information networks and network-attached systems, the situation could develop unpredictably. Thus, new technologies such as Quantum Computing¹, Blockchains², Artificial Intelligence, Big Data³, Human Assisted Machine Learning and 5/6G will change our way of thinking not only about cyber defence, but also our approach to human life.



To effectively react to these new threats, passive measures of defence (e.g. firewalls, intrusion detection systems, antivirus, antimalware, etc.) are important, but they must be complemented by active measures, such as: intelligence, network monitoring, red vs blue team assessment, threat hunting, adapting procedures to the threat, and lessons learned. It is necessary to adopt "in depth" defence, which is defence using layered and

Lieutenant Colonel
ITA Army
Giuliano MAURIZI



¹ Quantum Computing has the potential of solving problems that modern computers cannot.

² Blockchain could change the world as it can get rid of all the inefficiencies of centralized systems.

³ Big Data will quickly bring innovative new products.



overlapping technologies to monitor, detect and defend networks and all their end-points. At the same time it is necessary to analyse the techniques and tactics used by adversaries, develop signatures and indicators of compromise that match the patterns that are unique to a particular attack. An attacker wants to gain access, remain in the system and execute his/her malicious code. Digital forensics is effective and helps a lot but it is time consuming; the solution comes with smart information triage to effectively guide defence.

These complex topics, with the associated risks particularly to NATO and the EU, and the main challenges that need to be faced when conducting operations in or through cyberspace were discussed during the NATO Rapid Deployable Corps Italy (NRDC-ITA) International Cyber Seminar held online on 15th June 2022. The event saw the participation of academics, and military and civilian personnel working in the cyber domain and it stimulated some important discussions driven by real events from the current conflict in Ukraine used as case studies.

In accordance with the seminar agenda, Mr. Mario Beccia - Deputy Chief Information Officer for cybersecurity at NATO HQ - presented cyberspace domain challenges in the context of modern warfare; OF5 Julien Mermillon - Head Operational Planning at NATO SHAPE Cyber Operations Centre (CyOC) - discussed the challenges for planning and managing cyberspace operations at operational level; OF4 Fabio Biondi - Cyber Ops Researcher at the NATO Cyberspace Centre of Excellence - addressed the common patterns detected within the adversary's cyberspace operations; and Professor Stefano Zanero - Polytechnic of Milan - presented a speech about cyberspace war through a series of retrospectives.

In the light of this fruitful event, it is worth recapping a few points to identify some takeaways and pave the way for the next edition.

First of all, the seminar addressed the role of industry in the modern era. It was highlighted that although cyberspace is not fully owned, managed and governed by anyone, a large number of commercial entities have a primary role in it, with governments barely having loose control over them. The accelerated pace seen in the current conflict in Ukraine, where part of the targeting has been done with an Uber-like application for smartphones - that when compared to conventional systems and tools, although rudimentary, seems significantly quicker - stresses how the combination of the precision of new technologies (e.g. drones or smartphone applications) together with intelligence offer the possibility to exploit new capabilities and opportunities, generating a game changer in the military field that could also challenge the Alliance's security.

Another interesting topic was the unceasing development seen in sub-threshold activities. Sub-threshold activities are actions/operations in cyberspace that make it possible to achieve a perpetrator's goal without triggering any armed response from the State/victim. However, although such activities are engineered to stay below the threshold of an armed conflict, they are considered to be "the noise" of cyberspace activities. Additionally, not only has there been a huge increase in the number of such activities, but also the frontier of such operations is always being pushed further.

A third point worth mentioning is the critical importance that conducting Defensive Cyberspace Operations (DCO) retains, although NATO is working around the clock to develop its capabilities in the conduct of Offensive



Cyberspace Operations (OCO). At present, DCOs are no longer pure defence of own networks but require, without doubt, a profound analysis of Mission Vital Infrastructure (MVI) and their dependencies on cyberspace. What seems to be an already well-addressed capacity - the conduct of DCOs - actually comes with some difficulties due to the disproportionate ratio between the high demand for cyber assets and the low-density/availability of resources; moreover, this is exacerbated by the challenges encountered by operational commands that own the physical battlespace but not the virtual one.

The cyber domain is definitely a domain of war. It is used by State and non-State actors to conduct cyber-attacks in the context of military operations. So, when considering the growing importance of cyberspace, with reference to cyberwarfare, we need to change our mind and start thinking of "operations security" rather than "communications security". Modern military forces rely heavily on enabling systems for logistics and C2: the integration of continuously developing technology will increase the importance of cyberspace and its associated risks.

In the short term, OCO will also be integrated into joint operations, requiring the development of new TTPs which will constitute alternate and modern means for all Commanders.

The current war on Europe's eastern flank offers on-the-ground proof that cyber "assaults" will be increasingly part of future armed conflicts. In fact, Moscow increased its reconnaissance of potential Ukrainian targets for cyber-attacks a year before the 24th February invasion. In this time, Russia had already placed malware on Kyiv's financial sector, energy infrastructure and governmental functions to pressure Ukraine to fall in line. Even before the first Russian tank entered Ukraine, hackers launched "WhisperGate" malware against around 70 Ukrainian government sites, followed by a Distributed Denial of Service (DDoS) campaign that disrupted banks, radio stations and websites. Moscow was then suspected of being behind the "Hermetic Wiper" virus that knocked out some 300 Information Technology (IT) systems in Ukraine, while hackers targeted the VIASAT satellite operator to deactivate thousands of internet modems, including military communications. This brings us to an important observation: we all know that cyber-attacks have more echo in peace time (their effects cannot be compared to kinetic ones) and that they are more suited to

sabotage, espionage and information warfare; however, we must not forget that the impacts of cyber-attacks are often not revealed until months or years after they are deployed. It took nearly two years before the public learned about the Stuxnet computer virus that allegedly destroyed around 1,000 of Iran's nuclear centrifuges, used to refine uranium for use in atomic weapons.

The fourth topic to be pointed out is the fact that NATO must continue to educate staff at all levels of command on the capability and availability of cyber assets. A robust coordination and de-confliction mechanism is critical to the effective employment of cyber capabilities. To this end, NATO operational Commanders are requested to develop and manage relationships not just with national cyber capability providers, but also with host nations and global private sector partners. Even if the cyber domain is considered the 4th domain of war, digitalization involves both military and civilian infrastructures, pushing not only nations but also organizations to develop their own cyber security strategies. This underscores the need to expand partnerships with industry, academia and allies' research centres to benefit from their unique insights as part of enhancing overall resilience.

The final but no less important point is the fact that the insider threat continues to be a real challenge. To this regard, it is paramount to provide our troops with a good level of cyber awareness, making them aware of the risk of using modern technologies, especially mobile phones. Education, specialization and training will continue to play a significant role for all of us.

IN CONCLUSION NATO has to speed up the process to integrate OCO into its operations but, at the same time, it has to keep the experience already acquired in the conduct of Defensive ones. Preparation for conducting cyber operations requires appropriate doctrine, training, cyber warriors and cyber weapons development. The cyber aspects must be exercised thoroughly and more resources must be spent in order to be ready to offer a more resilient posture and flexibility at the same time. The need to understand the process and the technique used by an attacker remains a challenge since the attacker's imagination is the only limit on an attack. Finally, the Alliance should also consider speeding up its procurement method, especially in the Communication Information System (CIS) sector, which remains slow with respect to the development of technology. From the approval of new Capability Packages (CP) with CIS projects to the implementation of those projects, it can take 2-3 years; this means that when the technology is set up and ready to be used, it is already legacy and not fit at all for purpose.

Exercise Eagle Mercurius 2022 NRDC-ITA's leaders relive the WWII Allied way to Rome

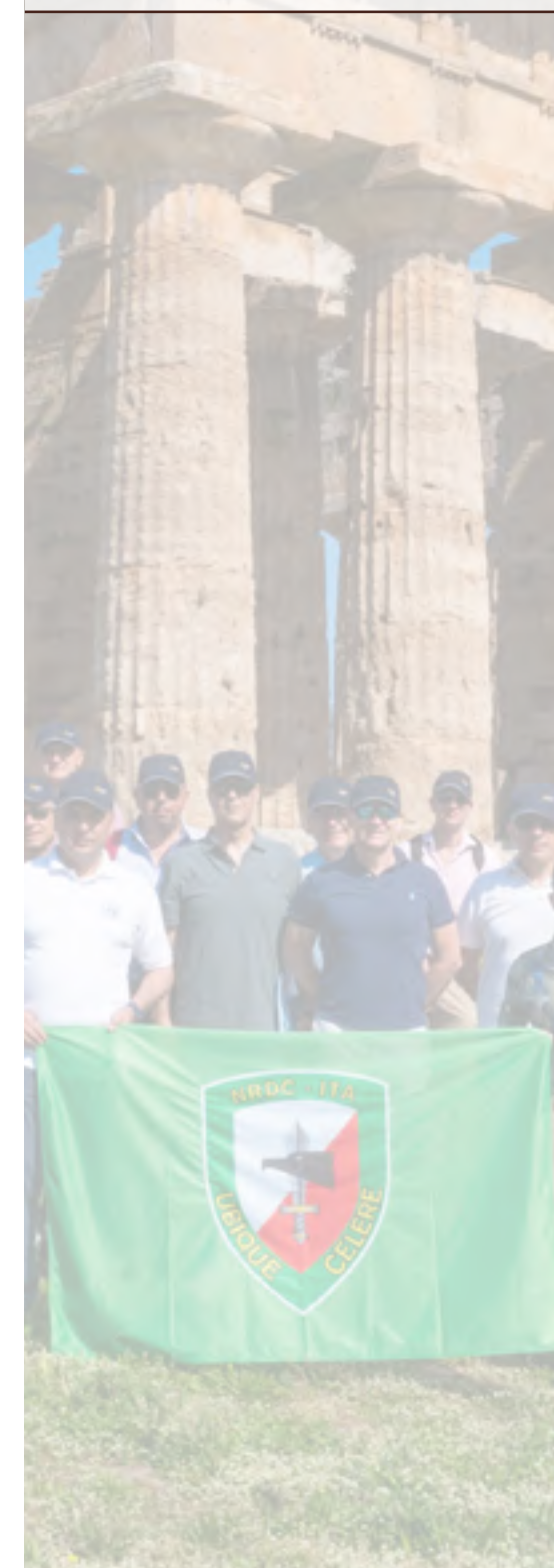
As a human endeavor, war is emotionally charged and therefore especially difficult to replicate through theoretical formulations. The human variables in any war are impossible to isolate or quantify precisely. Yet soldiers who are charged with the conduct of war must continually strive to prepare themselves to wage it successfully. Multiple methods of preparation exist. Direct personal experience may be the best guide, but knowledge gained from experience is usually limited in scope and often in short supply. Theory can be a substitute for experience, but it is far from satisfactory because its application is not always practical or realistic. Military history, by contrast, is not nearly as clear-cut as theory but can be far more illustrative of the complexities engendered by human factors in war.



Carefully integrated into training, the study of military history can provide, vicariously, the experience of war that is needed to further the professional education of both soldiers and civilians. One of the most effective ways to enlist military history in the cause of professional military education is to study the operations of opposing forces in actual campaigns. Campaigns of all historical periods contain valuable learning opportunities. Changes in technology and doctrine may render some insights obsolete, yet those same changes may also reveal new or timeless insights. Indeed, some lessons from history may seem particularly timeless because they spring either from universal operational principles or from universal human characteristics.

Military professionals who aspire to higher leadership positions and a true mastery of the art of war must absorb and internalize these lessons. They must understand the principles of war so often illustrated at the tactical and operational levels of war, and they must develop the capacity to think and comprehend in multidimensional, multifaceted, and strategic contexts, appreciating both principles and circumstances. Their ability to critically

Major
ITA Army
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analyze complex situations and make timely, well-reasoned decisions must become second nature in times of crisis.

Just as the study of military history provides valuable and applicable lessons, so too can it provide the means to best solidify these lessons in the minds of students. Historical case studies of specific campaigns, battles, or significant events are particularly effective at driving these lessons home. Critical analysis applied by the exercise audience to establish cause and effect, and analyze the results, is paramount. In simpler terms, the soldier or civilian must find out what happened, establish why and how events occurred as they did, and decide what these cause and effect relationships mean to them as military professionals today. It is the immediacy of this last element – the answer to the question: “so what?” – that makes this approach to analysis so productive. Such analysis is not simply about gleaning lessons; it is about gaining true insight and a deeper understanding of how and why war happens the way it does, thus preparing for the future.

A significant component of a detailed case study is an evaluation of the

environment in which the action took place and an analysis of how that operational environment shaped the contest or event. Good maps are essential for such analysis, but even the best maps are poor substitutes for firsthand knowledge of the area of operations. Thus, a visit to the actual sites associated with the campaign, battle, or event – if they are not too changed – provides the ideal impetus for analyzing the effects of the operational environment on the action studied. If a detailed historical case study encourages the identification of universal military insights, then a visit to the actual site is the ultimate means of reinforcing these insights in the minds of students. When systematic historical study is combined with visiting the relevant sites of action, for the purpose of professional military education, it is known as a staff ride.

Staff rides are experiential learning exercises that facilitate the study of war and associated historic events. Through staff rides, students come to understand that war is the highly complex and chaotic interaction of human beings and their machines, clashing in a dynamic environment. In this complicated arena, humans wage war for the

attainment of military and political ends, making decisions and acting upon them according to their training, experience, intellect, and idiosyncratic personalities. These facets of war remain timeless.

Yet war as a whole, as an inherently human phenomenon, continues to evolve. In the twenty-first century, wars are not fought solely on a terrestrial battlefield; they are fought in multidimensional, multifaceted operational environments. War is no longer characterized strictly in terms of discrete, joint, or combined campaigns taking place on land, sea, or in the air. Battles also take place in the virtual realm of cyberspace. The military term “key terrain” is no longer used solely in the geographical sense. Public opinion becomes a key terrain in the execution of counterinsurgency and information operations. Satellites orbiting the earth and routers and servers in information networks are a key terrain in battles for information dominance across the electro-magnetic spectrum and in cyberspace. Just as humans continue to evolve, the technology we use to fight wars evolves, and thus war itself changes. “So too are the methods used in the historical study of warfare evolving and changing.

In this context, NRDC Italy conducts annual staff rides as a specific, powerful tool that allows today’s leaders to gain insight and wisdom from the past for present-day application. In the process of absorbing those gains, leaders exercise and improve their critical thinking skills, essential creativity, and decision-making capabilities.

In the spirit of that evolution, the execution phase of the “Eagle Mercurius¹ 2022” Exercise was conducted from 21 to 27 May 2022 in Italy. The exercise focused on a historical analysis of the Allied campaign to break German defensive lines and free Italy, taking Rome. The political and strategic scene for “Italy’s war” was introduced and contextualized. After this, all the relevant aspects of this were analyzed in depth in time sequence, such as: the Allied Operation Avalanche in Salerno (also known as the “Salerno D Day@”, including consolidating the beachhead and the German counterattack); the Naples battle at long last and the after-

battle events; Operation Shingle (VI USA Corps landing in Anzio); the Allied “way to Rome” including the 1st to the 4th battles of Cassino and the consequent breaching of the German Gustav and Hitler defensive lines. The decision taken by the opposing Commanders, both Allied and German, were assessed and discussed, also taking into consideration the human factors, political influences and the very different aspects of interaction with the local population and support. Allied and Axis Order of Battles, mainly land, were compared and related to modern multi-domain operations, conflicts and crisis. All the relevant aspects were then discussed in thematic working groups, consolidated, after-action reviewed and finally presented as a unique outcome to NRDC Italy leaders.

Finally, a staff ride experience provides examples of leadership, tactics, operations, strategy, communications, use of the physical terrain and, perhaps

most importantly, the psychology of people in combat and other crises. The examination of these factors and choices, as well as their outcomes, is just as applicable today as it was in the past. Those aspects, combined with personal research and reconnaissance, offer an invaluable opportunity for the professional development of leaders by enhancing their understanding of the effective use of military force in multi-domain operations, in present and future wars or crises. That is why staff rides have become an integral part of leadership development and team building in our HQ and why NRDC Italy conducts such activities.

The next staff ride is planned for May 2023: NRDC’s Italy Exercise Eagle Mercurius 2023 will be conducted in Crete (Greece) and focus on the Axis airborne invasion of the island during World War II, the so-called Operation Merkure.

¹ Eagle Mercurius is the exercise name series NRDC Italy gave to Staff Ride Exercises.



Internship for University Students 2022

Universities supporting NRDC-ITA's efforts to increase situational awareness and understanding of crisis areas



In the context of established cooperation with the academic world, especially some universities, under a ‘Memorandum of Cooperation’, NRDC-ITA organised and hosted an internship for university students. This activity was suspended due to pandemic restrictions but it is usually organised yearly. The 2022 internship was divided into two phases:

- a ‘remote phase’ (19th April to 13th May) which was held at the students’ respective universities. Under the direction of NRDC-ITA, tutor professors were assigned to follow the students work but with constant support from NRDC-ITA organisers and designated tutors;
- a ‘residential phase’ (16th to 27th May) which took place in the “Ugo Mara” Barracks in *ad-hoc* training rooms with the students followed by NRDC-ITA staff.

The internship falls within the NRDC-ITA Commander’s intent to inform, disseminate and spread knowledge and information about current issues and topics of critical importance for NRDC-ITA and NATO (LoD 3 ‘Focus to the South’ / 3.1 ‘Provide Awareness’).

Lieutenant Colonel
ITA Army
Marco FELICISSIMO



The overall aim of the 2022 internship was to develop knowledge and understading of a potential crisis area - the Sahel region. In particular, for the students, the main training objectives were to:

- develop an understanding of NATO’s comprehensive approach to crisis response;
- develop an understating of the PMESII system (Political, Military, Economic, Social, Infrastructure and Information domains) used to analyse a potential crisis area;
- acquire capabilities to carry out focused open source research and scenario analysis;
- develop or re-inforce critical thinking and analytical skills.

From NRDC-ITA’s perspective, the internship provided the staff with a study period on the Sahel while consolidating interaction with academic institutions. It was a training opportunity not only for the students but also for the staff because it allowed the analysts to update the current picture of political, economic and social domains for which NRDC-ITA does not possess permanent expertise. By definition, for the participants, this activity is ‘training on the job’, enriching their curricula and providing an opportunity to give study credits to the students if the universities decided to do so, and most of them did.

The internship involved lectures, practical research work and presentations focused on a crisis area, the Sahel region, characterised by complexity, asymmetries and the presence of hybrid threats. The analysis of the Sahel region was carried out through a multidimensional/ comprehensive approach using the PMESII domains to achieve a holistic understanding of the dynamics and interactions of the different area-related systems and their linked subsystems (System of Systems Analysis – SOSA).

The universities were very selective and sent high profile students. Additionally, the activity specifications only allowed senior students with a bachelor’s degree/ undergraduate degree (studying for a master’s degree) to participate in the internship and this proved to be the right choice because it resulted in high quality product content given that the students were more experienced. This requirement will be confirmed in the 2023 internship specifications, along with the requirement for proficiency in English.

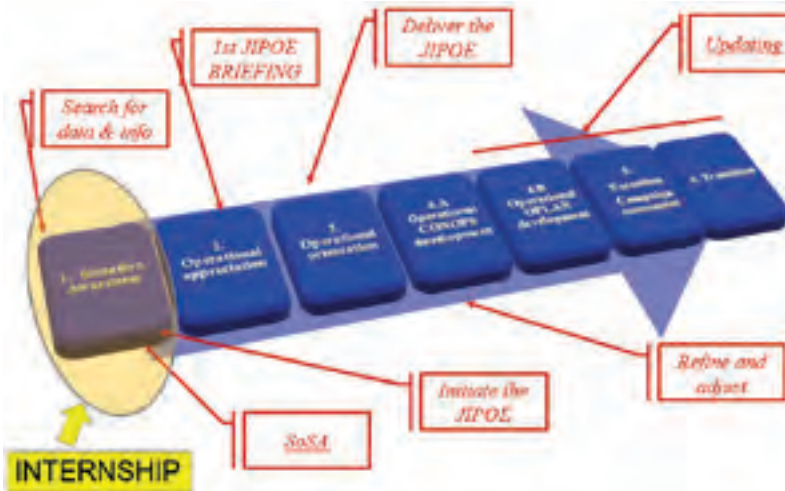


The 31 participants¹, divided into four syndicates followed by NRD-ITA tutors, analysed the political, economic and social domains of four Sahel countries (Mauritania, Mali, Niger, Chad) and developed a System of Systems Analysis – SoSA for each country. In addition, one student from the University of Turin focused his

P, E & S SYSTEMS					
Syndicate	COUNTRY	POLITICAL	ECONOMIC	SOCIAL	TOTAL
ALPHA	MAURITANIA	2	3	2	7
BRAVO	MALI	3	2	2	7
CHARLIE	NIGER	3	3	2	8
DELTA	CHAD	3	3	2	8
TOTAL		11	11	8	30

+ 1 student from UNITO: focus on Sahel Transport Network

Internship Organisation



Internship Context, the NATO Crisis Response Planning

¹ 8 University of Parma, 7 University of the Sacred Heart (Milan), 6 LUISS Guido Carli University (Rome), 4 LIUC Carlo Cattaneo University (Castellanza, VA), 2 University of Udine, 2 Italian Institute of Criminology (Vibo Valentia), 1 University of Turin, 1 LIMEC (Milan).



analysis on the Infrastructure domain/Sahel transport network. The internship was contextualised in the first phase of the Crisis Response Planning process during which situational awareness about the crisis area has to be developed or improved.

The final results were presented to NRDC-ITA staff on 27th May 2022, the last day of the internship. For this specific activity, for training purposes, the interns were given strict time frames to present the results of their work to get used to speaking to an international audience in a concise and 'straight to the point' manner.

#WEARENATO

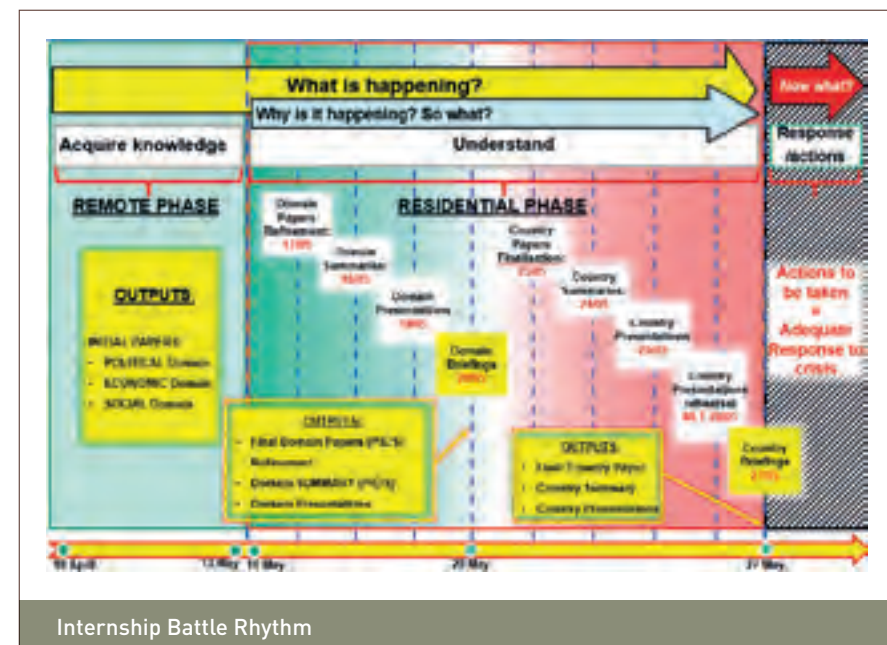
the students, after an initial warm-up phase, fitted in perfectly and responded outstandingly to the tasks. Also, the interns language skills were outstanding, with some of them at native speaker level. All the internship products (presentations, final papers and summaries) were shared with the staff to increase knowledge and awareness about the Sahel region.

At the end of the residential phase, the participants were given a feedback form to be filled in. Overall, the feedback was

very positive and most students spoke enthusiastically about their experience when they returned to their universities. Following the activity, J2 KD had to fill in evaluation reports for each student using online university platforms. Depending on their study plans, for participating in the internship the students received between 4 and 8 university credits – this decision was up to the universities.

Overall, organising the internship was challenging, especially because of the necessary coordination with the universities before and after the activity but it was absolutely worth it both in terms of visibility for NRDC-ITA and of the learning experience for the staff and students. The internship was a three-way learning experience because the interns learned from the staff, from one another and the staff learned from the participants. Based on the feedback from students, the internship was a truly empowering experience because at their respective universities they do most of their activities individually and they are not used to working in a team. During the internship they experienced teamwork and the importance of team spirit as well as presenting work results to a large international audience.

We look forward to hosting the 2023 internship, which will focus on North Africa and will be organised in the same format as 2022 but with a few adjustments to improve some organisational aspects.



The students demonstrated a very high level of commitment and motivation and the final products were of very high quality. Especially during the residential phase, the internship battle rhythm was very intense but

African Lion 2022: One Step Forward to Improve Jointness and Interoperability with AFRICOM



African Lion–what a perfect name for the largest United States Africa Command (USAFRICOM) joint annual multinational exercise.

The African Lion exercise was hosted concurrently by Ghana, Morocco, Senegal, and Tunisia. This year over 7,500 participants from 28 nations and NATO trained together in a variety of disciplines with a focus on enhancing the readiness of US and partner-nation forces.

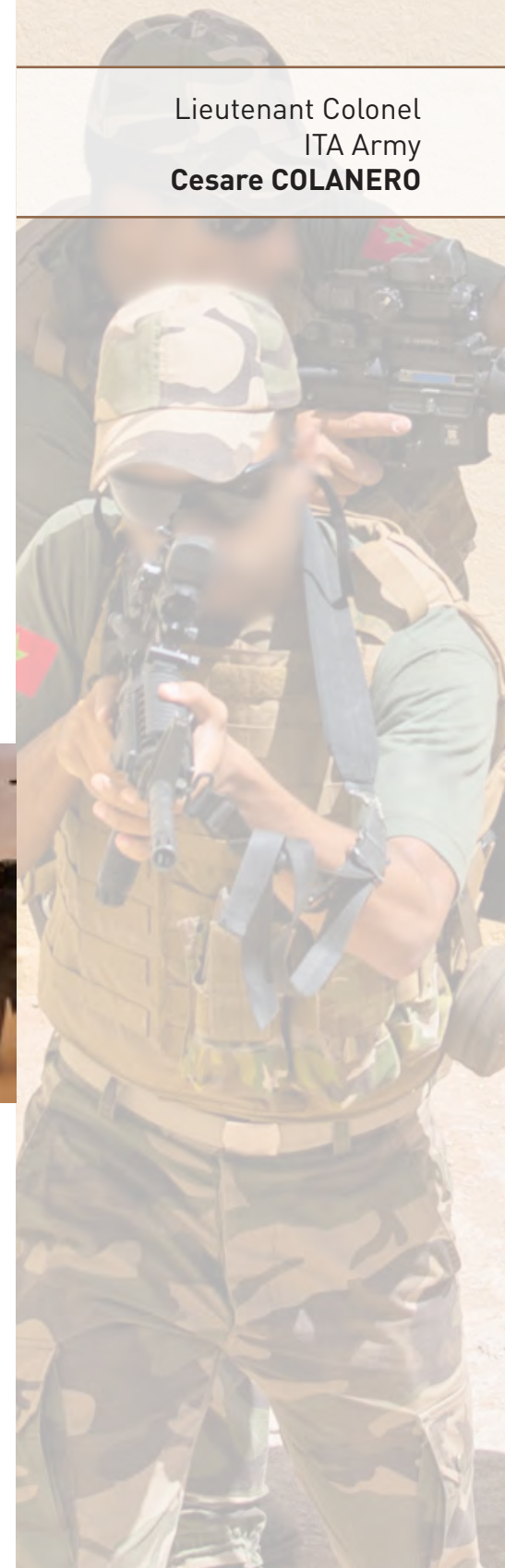
This effort also involved strengthening US and NATO shared defence capabilities to counter transnational threats and violent extremist organizations, which is a common goal for African partner nations.

The exercise provided an excellent opportunity to conduct realistic, dynamic and collaborative readiness training in an austere environment at the intersection of four Geographic Combatant Commands, and strategic maritime commercial trading routes.



The Kingdom of Morocco is the westernmost country in the Maghreb region of North Africa. It is washed by the Mediterranean Sea to the north and the Atlantic Ocean to the west, and has land borders with Algeria to the east, and the disputed territory of Western Sahara to the south. Morocco spans an area of 446,300 km² with a population of roughly 37 million. Its official and predominant religion is Islam, and the official languages are Arabic and Berber; the Moroccan dialect of Arabic and French are also widely spoken. Moroccan identity and culture are a vibrant mix of Berber, Arab, and European cultures and every day, at the end of the exercise, maybe after a short run on the Agadir promenade, all the participants could enjoy the active north African lifestyle and cultures, the amazing food and an awesome sunset.

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ITA Army
Cesare COLANERO





Morocco, which participates in over 100 military exercises around the world, has hosted African Lion for 18 years. This 18th edition of the African Lion exercise, organized by the Royal Armed Forces (FAR) and the US Armed Forces, was attended by representatives of 18 partner countries, in addition to military observers from some thirty African and international countries.

The planning phase of the exercise involved different events conducted in Morocco. In preparation for African Lion 2022, the academic cycle of training for the exercise was launched just before the execution phase for the benefit of the Royal Armed Forces and multinational personnel. The academic cycle focused on the conduct of operational manoeuvres, the method of joint operational planning, legal aspects, public information, medical planning, cybersecurity and evaluation techniques for a joint exercise.

Although, the main part of the exercise was in the Kingdom of

Morocco, the execution phase was conducted from 12th June to 2nd July 2022 in four countries: Morocco, Ghana, Senegal and Tunisia. Moreover, militaries from Brazil, Chad (for the first time with seven people), France, the Netherlands and the United Kingdom joined US and Host Nation troops.

US participants came from all service components, including the Reserves and National Guard. NRDC-ITA took part, for the second time this year, in the exercise with a total of 32 military personnel.

The majority of the Command Post Exercise took place in the Southern Zone Headquarters (SZHQ), located in Agadir. In addition, the Combined Joint Task Force (CJTF) Headquarters, the primary training audience and the Joint Exercise Control Group operated from the Southern Zone.

NRDC-ITA has many reasons to take part in an exercise like this. First of all because multinational exercises are the most concrete

and visible expression of NATO's capabilities and commitment to fulfil its core tasks. Exercises like African Lion 22 offer the opportunity to display NRDC-ITA's commitment, readiness and effectiveness to take on any tactical or operational role and, also, constitute an important factor of cohesion.

NRDC-ITA has established mechanisms to sustain and enhance cooperation with higher and sister HQs, its Troop Contributing Nations, NATO agencies, subordinate and affiliated units, International Organizations (IOs), and Non-Governmental Organizations (NGOs). In particular, the partnership established with the United States Army Southern European Task Force Africa (USASETAF-AF) has enhanced jointness and interoperability, while developing a comprehensive approach and interagency mind-set for the benefit of broader security.

In the framework of partnerships and cooperation with NATO and non-NATO actors, NRDC-ITA

continues to invest in mutual training support. This training has the purpose, as LTG. John C. THOMPSON III (LANDCOM former Commander) said "to make efficient use of time, resources and expertise through shared experience and the achievement of common training purposes, thus achieving maximum combat readiness and fostering cohesiveness, adaptability and interoperability".

In this context, the HQ will continue to intensify its linkage with higher and sister HQs, to foster relationships with its Troop Contributing Nations and it always explores new opportunities with IOs and NGOs. Partnerships and cooperation improve mutual understanding, situational awareness and interoperability, but also contribute to identifying lessons and best practices and to improving doctrines and procedures.

NATO's ability to provide Collective Defence and to project stability is only possible through a robust ability to anticipate, detect, and respond to crises as they develop. NRDC-ITA has expertise on the



threats emerging from the NATO Strategic Direction South (NSD-S) due to its geographical location and maintaining close collaboration mechanisms dedicated to information sharing and situation awareness.

During the transition to its NFS JTF HQ role, NRDC-ITA has to improve its capability to exercise Command and Control (C2) at Operational level, refining concepts and procedures.

To achieve this, NRDC-ITA personnel were located in Agadir, specifically in the Southern Zone Headquarters (SZHQ): 24 of them in the CJTF Headquarters with different rules (J2, J3, J4/JLSG, J6, J7, JENG, JFIRES, INFOOPS, AOCC and MP), 6 were employed to support the EXCON by contributing to Main Event List/Main Incident List (MEL/MIL) control and execution and the final two were responsible for coordination and logistic issues.



¹ Headquarters Allied Land Command. "Land Domain Principals for Mutual Training Support" paper. 3 September 2019.



These demanding appointments gave our personnel a privileged opportunity to observe US organization and, at the same time, to demonstrate the excellent flexibility and adaptability of NRDC-ITA.

The Battle Rhythm was based on a 4 day-cycle for the Training Audience of the CJTF HQ. During Execution, activities were focused on phase II (DEFEND), transition to Phase III and conducting Phase III (DETER).

The exercise was executed in four phases: Deployment, JRSOI, Execution and Redeployment. It culminated in a Distinguished Visitors (DV) Day demonstration, consisting of combined joint live fire including a global strike, close air support, artillery, airborne operations and ground tactical operations. The participation of NRDC-ITA's leadership in DV day - with the DCOM, the DCOS Plans and the ACOS J2 - was greatly appreciated by the US.

By participating in the exercise, NRDC-ITA achieved the planned training objectives and demonstrated its commitment and capabilities. This professionalism was recognised by the USASETAF-AF Command Group, which expressed real appreciation for the support that the NATO cousins (as USASETAF-AF Chief of Staff defined NRDC-ITA personnel) ensured once again this year and as was also highlighted by the LANDCOM Commander. In particular, LTG. Roger L. CLOUTIER Jr, who most recently served as COM LANDCOM and previously as Commander of United States Army Southern European Task Force Africa, underlined how the cooperation between NRDC-ITA and USASETAF-AF is paramount to implementing mutual training support, to reaching common training objectives, to improving professional knowledge and to enhancing Allied expertise. He also asked NRDC-ITA personnel to increase their

participation in future exercises and to strengthen links with US Commands.

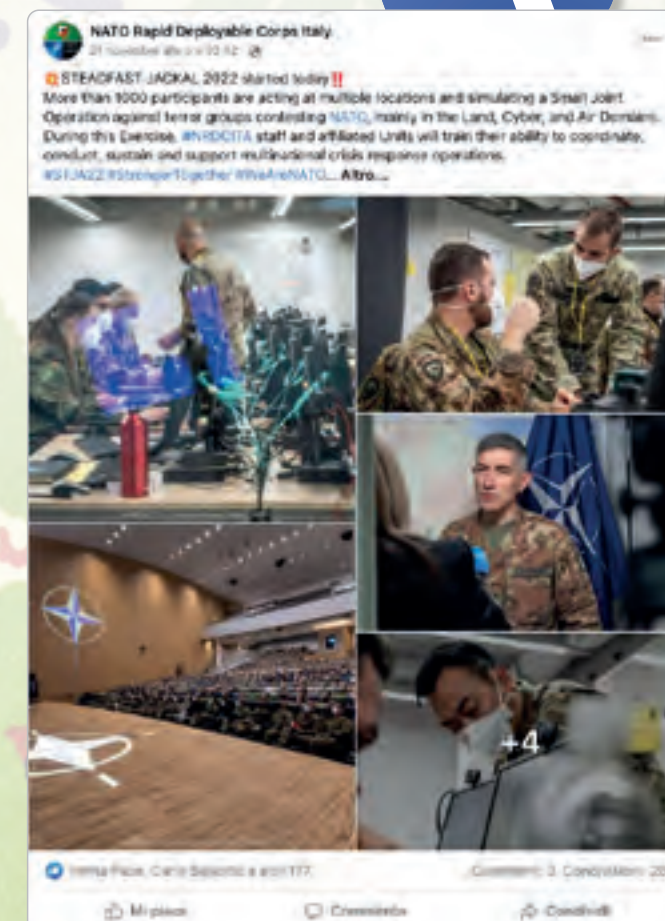
The enthusiasm showed and expressed by the US and by COM LANDCOM provides clear evidence of the success achieved in these 2 years of participation, especially if we consider that for the first time a NATO Headquarters was able to attend the event.

Moreover, given the common interest in training as a CJTF HQ and in the Multi-Domain Operations environment, it is highly desirable that our HQ repeat its participation in the African Lion series over the few next years. At the same time the USASETAF-AF Command expressed its desire to take part in future NRDC-ITA exercises, starting from Steadfast Jackal 2022.

To conclude, participation in the African Lion series exercise created the opportunity to demonstrate NRDC-ITA values and capabilities and, once more, to adhere to our motto "UBIQUE CELERE"—everywhere rapidly.



► NRDC-ITA on the WEB



JCO development for Steadfast Jackal 2022

After the extensive Crisis Response Planning (CRP) conducted by the J5-led Joint Operations Planning Group (JOPG), the Operational Plan (OPLAN) was handed over to the Joint Operation Refining Group (JORG), which encompasses all the HQ Subject Matter Experts (SMEs) along with the Component Commands (CC) representatives, including Land Tactical Element (LTE), and is led by the J3 branch. At the beginning of the development of the Joint Coordination Order (JCO), an official OPLAN handover brief was conducted with Deputy Chief of Staff (DCOS) Plans and DCOS Operations, where the Commander's guidance – such as impartiality, security, protection of civilians and more – was stressed. Therefore, it was then time to translate the broad OPLAN for Operation “Agile Support” into a detailed, well synchronized and executable coordination order for phase 1 – “Deployment”.



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ITA Army
Pietro BELLOMO



To enable this refinement process, JORG was split into functional areas (one for each Joint function) in order to review the tasks allocated to components and Joint Enablers and ensure a synchronized maneuver across the five domains (land, air, maritime, cyber and space) within the assigned JOA. In particular, JORG developed a single directed Course of Action (COA) according to the COM's specific Direction and Guidance (D&G), which was war-gamed and the results were again presented to COM for further D&G. After three weeks of intensive planning and refining, JCO 001 was signed by COM along with more than 20 annexes and appendixes, including a detailed Synchronization Matrix, Key Leaders Engagement Matrix, and Targets List to achieve both lethal and non-lethal effects. It provides all the necessary details, coordination and directions to execute Operation Agile Support, however it still leaves enough freedom of action and mission command for the components and enablers, restricting CC only when necessary.

The JCO development phase also provided an important training opportunity for Vittorio Veneto (VV) DIV integration as an LTE into JTF HQ, an effort which builds on the experience from the STJA21 exercise. In this regard, multiple sessions at HQ branches were held in order to produce a solid “Integrated Embedded” model, which differentiates between the tactical (LTE) and operational (NRDC-ITA) levels. Once processes had agreed between the Joint and Tactical levels at HQ and approved by COS, another round of conferences was conducted with VV DIV in order to finalize HQ structure, in accordance with integrated embedded model principles. The latter was later tested and refined during various vignettes.

At the end of October, just before the deployment to the Joint Warfare Center (JWC) for the execution phase (III B) of Steadfast Jackal 22 (STJA22), the HQ along with LTE, CC representatives and JWC mentors, conducted Battle Staff Training (BST). Its aim was to conduct all necessary training activities in order to set the conditions for the STJA 22 exercise execution phase. BST was also an opportunity to start developing the operational staff work, such as FRAGOs and others as well as the JORG initiated process to prepare JCO 002A for the following phase – “Enable to Secure” – of the campaign. During the BST there were also many lectures provided by HQ and JWC staff in order to prepare the Training Audience (TA) for the execution phase. JWC observations shared during BST were particularly valuable, as they highlighted the challenges and lessons learned from previous rotations in the JWC.

After one year of preparations and extensive work on the SOIs/SOPs, seminars, dossiers, BST and other events in order to enable effective execution during the STJA22 exercise, NRDC-ITA and the supporting HQs are ready to conduct a Joint Evaluation (JOINTEVAL) and prove their readiness for the JTF role next year.

The 33rd “Ambrosiano” is mobilized to test its logistical projection capacity

The 33rd “Ambrosiano” Regiment successfully tested its operational readiness conducting specific infantry training at the Foce Reno shooting range.



An intense training operation called “Jackal 2022” involved the women and men of the Solbiate Olona based 33rd “Ambrosiano” Tactical and Logistic Support Regiment for two weeks in the province of Ravenna. The main goal of “Jackal 2022” was to consolidate the training levels of the various 33rd Regiment units and to test the heavy asset deployment capability and procedures of the Support Battalion Companies, which are regularly tasked with deploying and guaranteeing the business continuity of the Italian-led NATO Rapid Deployment Corps.

During the exercise, the Regiment showed its combat power and logistics by exploiting the various assets of the Logistics Company, the Engineer Company and the Sustainability Company, with the end state being to design-build-operate a reinforced, autonomous Battalion Command Post on the ground. Configured as a Command and Control Task Force (C2TF), the forward base simulated full logistical support for NRDC-ITA (HQ) by supporting a command post at Division level. In addition, the C2TF guaranteed the exercise direction for firing activities at a platoon level, which were carried out by the “CELERE” 3rd Bersaglieri Company during the simulation of a counterattack.

Lieutenant
ITA Army
Luca DI CICCIO



In forty-eight hours, the Regiment delivered a fully effective, off-the grid operating base involving about 200 soldiers and various vehicles and heavy assets, including shelters, bathrooms, showers, a field kitchen, and numerous inflatable tents with high HSE awareness.

On the orders of Colonel Enrico Ubaldo Gabrielli, the women and men of the 33rd Ambrosiano Regiment quickly deployed personnel, vehicles and assets using a range of wheeled vehicles, set up the operating base and tested the entire tactical capability frame to manage the entire exercise effectively.

As already mentioned, the counterattack simulation set the stage for testing the firing capabilities of the “CELERE” 3rd Bersaglieri Company, which used light multirole vehicles, heavy machine guns and sharpshooters. The broad purpose of the exercise was to test the different level Commanders’ leadership and the capabilities of

their units. Moreover, the exercise exploited the potential of the available assets in a training context of increasing intensity and complexity.

The Regiment staff were also able to become more familiar with personal and heavy weapons, thanks to shooting ranges that operated day and night. Various weapon systems were tested, including some sharpshooter rifles such as the Sako and the ARX200 rifle. Further activities were also carried out in order to boost combat power capability, such as individual combat training, CBRN defense and IED threats. Finally, the Engineer Company performed a hand grenade firing range exercise and trained its own personnel in activities specific to their function, such as the blasting of explosives.

The activity was necessary to confirm the Unit’s readiness and speed and it came after an extremely busy period for





the Regiment, especially because it had been involved, several times in the last two years, in supporting the civilian population with the “Strade Sicure” homeland security operation and all the operations dealing with the COVID-19 pandemic.

For years, the Regiment has conducted similar activities to those at the Foce Reno shooting range in order to consolidate personnel training done and foster team building. This is particular important given their inclusion in a complex international context and potential future commitments, which could involve the Support Brigade and the NRDC-ITA HQ, where they are required to fulfill the role of a Very High Readiness Joint Task Force (VJTF) in 2023 as part of the NATO Response Force (NRF) readiness shift.



Our warm welcome to the Newcomers and their families

The first ever “*Newcomers Families’ Orientation day*” was held at the Ugo Mara Barracks on Tuesday, 27 September, a day for providing information on services and opportunities for cultural, sports and recreational initiatives available to military and civilian personnel serving at the NRDC-ITA HQ and the dependent commands and units.



Designed with newly-assigned people in mind, the event actually proved to be a superb opportunity for the whole community to learn more about the many activities/clubs/societies overseen by the *Morale and Welfare Office*. Indeed, over 300 people took part, crowding onto the flag-raising plaza to go to the many stands that had been set up so people could get information from and discuss options with representatives of the nine NRDC-ITA sports clubs, which all took the opportunity to allow people to try their sports and sign-up new members.

The *Morale and Welfare Office* at NRDC-ITA HQ is almost unique in Italy and offers fundamental support for military personnel and their families both in and outside of work. At the same time, it plays a critical role in strengthening and preserving the cohesion of such a heterogeneous and diverse community. The Office thrives not only on the work of the people who are specifically assigned there, but also and particularly on the invaluable contribution made by those who voluntarily take on a wide range of services and responsibilities for the benefit of everyone, starting with those who have recently arrived here.

Sixteen stands were set up on the main plaza of the Ugo Mara Barracks, including those for the Public Affairs Office, the Army Military HQ in Milan, the PX for the barracks, the nursery school, NRDC-ITA Spouses International Club (NISIC), the Eagle Music band, MWA Benefit, the Family Support Centre (FSC) and the sports clubs for cycling, golf, running, sailing, scuba diving, shooting, skiing/snowboarding, swimming and tennis. The cafeteria staff, as always in such events, did not fail to delight participants with pizza, focaccia and other snacks prepared for the occasion.

Major
ITA Army
Silvio BRESCIA



All speed ahead for Halloween!

The scariest night of the year only for those who dare! For the first time since 2017, the NRDC-ITA community has been able to celebrate Halloween, which really fits with the multinational nature of the community, especially as it is a much loved festivity in many English-speaking countries, filled with monsters, spells, magic, mysteries and much more. The initiative, with free admission, brought an entire venue near the Ugo Mara Barracks to life on the night of Friday 28 October. Multiple entertainment options were available.



The party kicked off at 6 p.m. in a lovely atmosphere for both young and old, with shows by a magician, a fortune teller, an illusionist and even pirates. There was also tarot and astrology reading, a selfie photo set, music, balloon games, children's make-up, board games, a special area for younger children and plenty of opportunities to enjoy the party all together, with many delicacies and themed dishes.

The desire for such an event was clear from the enormous number of people who signed up, far exceeding expectations, forcing the *Morale and Welfare Office* to review arrangements and the spaces for the event in order to cater for everyone.

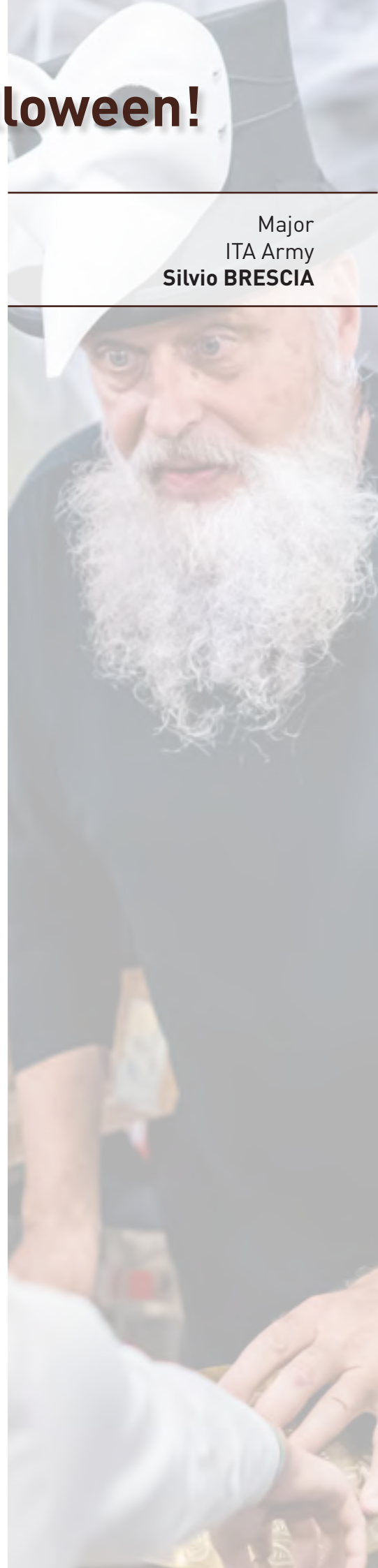
It was a festive opportunity to spend some light-hearted time with family, friends and colleagues, a chance to reinforce our spirit of togetherness before tackling the challenging training exercises that face our community before the holiday season.

Heartfelt thanks go to those who, despite not being part of the *Morale and Welfare Office*, gave their time and ideas to make the evening a success.

In essence ... a frightening success!

Mission accomplished and see you next year.

Major
ITA Army
Silvio BRESCIA



“A zero barrier event organised by NRDC-ITA Scuba Diving Club.”

NRDC-ITA and HSA together for a zero barrier event to promote people with disabilities integration in social sport activities.

On the weekend from 23rd to 25th September 2022, the NRDC-ITA Scuba Diving Club in collaboration with Handicapped Scuba Association (HSA) International, with the special participation of representatives from the Italian Military Paralympic Group, successfully ran a promotional event called “NATO Zero Barrier”, designed to give disabled people a chance to experience and enjoy scuba diving.



The Scuba Diving club, like all NRDC-ITA sport clubs, tries to provide opportunities for integration and cohesion among NRDC-ITA personnel and family members, although it does this specifically through activities and team building events related to scuba diving and the underwater environment. The Club is open to all members, family members and friends of NRDC-ITA that want to continue – or start – exploring the underwater environment. Every year many one-day and weekend events are held in the sea and in local lakes. A portion of these events are organized in support of HSA.

The collaboration with HSA allows the club to achieve a twofold objective: (i) to bring club members together behind a common purpose, developing solidarity and unity, and (ii) to help disseminate positive social values through promoting an important social cause. This long, highly valued collaboration was central to NRDC-ITA receiving, at the European Diving Show (EUDI) held in Bologna (Bologna province) in 2021, the ambitious “Premio SIRENA”, which recognized the NRDC-ITA Scuba Diving Club for its generosity in supporting HSA and its social cause.

The highly anticipated NATO Zero Barrier event is the culmination of well-established collaboration between the NRDC-ITA Scuba Diving Club and HSA that goes back to 2016, when club members first helped put on HSA activities.

Major
ITA Army
Mauro NURISSO



Handicapped Scuba Association (HSA) International is an international organization that primarily seeks to promote, develop and provide scuba diving courses for kids and adults with physical and mental disabilities, and to support instructors looking to train for adaptive and assisted scuba diving. The HSA short motto is to enhance the quality of life of people with disabilities by enabling them to enjoy recreational scuba diving in an underwater environment.

The importance of the event was highlighted by the involvement of Lieutenant Colonel Gianfranco PAGLIA (Italian Military Gold Medal) and Mr. Giorgio PORPIGLIA (former Italian Navy NCO) in both the practical and formal portions of the event. Both these men gave heart-warming speeches, praising the event, raising awareness about the quality of life for disabled people and actively taking part in the underwater experience.

The event started on 23rd September in Solbiate Olona (Varese province), when 9 members of the club who were already certified as scuba divers finished the HSA “Dive Buddy Course”, which has both theoretical and practical modules, to receive the special certification that allows the participants to help HSA instructors accompany disabled people underwater. The “Dive Buddy Course” is the first step to effectively prepare instructors to directly help people with disabilities to experience the underwater environment, giving physical support and sharing emotions.

On 24th September, at the Ugo Mara Barracks, home base for NRDC-ITA HQ, the doors were opened to the disabled participants and disabled associations for a formal gathering that included the Commander of NRDC-ITA Lieutenant General Lorenzo D’ADDARIO. 17 disabled people took part in the activities led by the Scuba Diving Club, along with a representative of the Italian Military Paralympic Group, an HSA representative and representatives from 4 other associations that are very active in supporting the disabled community namely:

- “ANGLAT” from La Spezia (La Spezia province) with the President Mr. Emanuele VALENZA;
- “AVID” from Varese (Varese province) with the President Cav. Uff. Battista VENTURINI;
- “POLHA” Varese (Varese province) with the President Dr. Daniela COLONNAPRESTI;
- “PAD – Cuffie colorate” with the President Mr. Silvano TRUPIA.

After a warm introduction by the Commander of NRDC-ITA, the Scuba Diving Club President, Maj. Mauro NURISSO, addressed all

the participants in the opening speech. Every representative had to opportunity to share their gratitude for the event and tell everyone about their experiences and needs in supporting the disabled community. The last of these speeches was by the HSA President, Mr. Aldo TORTI, who explained HSA’s mission and its main initiatives to support people with disabilities. The formal meeting ended with a finger lunch and photos.

In the afternoon, the introduction to the water took place in the swimming pool at Solbiate Olona (Varese province) where the participants, supported by NRDC-ITA Scuba Club members and HSA personnel, spent time in the water using scuba equipment. For most of them it was the first time... and you can imagine how they felt! They were so enthusiastic! The activity went on all afternoon, until the evening.

To close the weekend event, on 25th September, a few disabled participants, Scuba Diving Club members and HSA personnel went to Lake Aorta to do some practical activities. This marked the end of the NATO Zero Barrier event, with Dive buddy certification being awarded to the Scuba Diving Club personnel that did the course.

The event was definitely a complete success, with all the organizations and participants involved expressing their appreciation. For the NRDC-ITA Scuba Diving Club this event was another demonstration of its capability to pursue cohesion and integration in the NRDC-ITA Community and strengthen ties to external organizations.



The NISIC Association

Our outpost in promoting friendship and solidarity

Dear reader, I would like to introduce you to NISIC, in case you don't know about us. We are a "voluntary association recognized within the morale and welfare program of NRDC ITA", the association of spouses accompanying military personnel stationed at NRDC ITA.

Our mission is to build community, group, team. A team able to run cultural, social and charitable activities as well as to promote meetings, friendship and solidarity. A team capable of being a second family—the one that is created when our first family is far away.

After a national or international transfer there is always a period of adaptation, sometimes more hectic than desirable, with needs to which the family has to adapt. Stress can quickly build up at home and at work and joining NISIC may not seem like a necessary priority. Wrong, when all this happens there is nothing better than taking a break and meeting other people who have just gone through the same experience, getting advice that solves a problem, making new friends, having your children play together or just having the time to have a good coffee, as happens in one of the activities scheduled by the association. NISIC is not an organization of ladies who are bored; quite the opposite, it is a community of people who help each other, support each other and make each day of their community better. It fosters good relationships, mutual understanding and knowledge of other cultures and ways of seeing the world. These are just some of the benefits that can be gained by becoming a member of this great project.

With the end of COVID restrictions we got down to work to get daily activities back to normality, as before, and many activities were organized covering different fields. We encouraged language courses, so that no language barrier can separate us; we enjoyed cultural visits to Palazzo Cusani, the Duomo of Milan, Stresa, Lake Maggiore and museums such as the Novecento, the Campari and the Museo delle Illusioni. Gastronomy is culture as well so we also learned to make pastry and fresh pasta from the hands of a real Italian mamma and, because we do not neglect *mens sana in corpore sano*, there were also walks in the Olona area. We have also shared coffee and stories from NISIC members who have enriched each one of us with their backgrounds.

During the last year we supported various disadvantaged associations and communities with different needs within the territory through monetary or material support, taking part in the Milano Relay Marathon and in the Lions Chef charity cooking contest, as well as raising money to give to various projects for associations such as Caritas of Busto Arsizio, the Eleonora Cocchia association, Progetto Pollicino, the Triade Autism association, Solidarietà e Servizi Cooperativa Sociale and the VIVI Down association.

Finally, I would like to emphasize that the support given to the above-mentioned associations would not have been possible without the collaboration of the entire NRDC ITA community. All of them have supported our initiatives and projects, financially, by buying lottery tickets and with a smile in response to our proposals.

I hope to see you soon.

NISIC Co-President
Ana DELGADO



20th Anniversary of the Support Brigade to (HQ) NRDC-ITA

The Ugo MARA Barracks (UMB) rise on a large stretch of land where a shooting range once stood on an extensive moorland covered with a forest of locust trees (robinia). On 23 February 1913, with official document no. 617 from the Minister of War, the area became the “V Squadriglia HQ”, an Italian Air Squadron of Nieuport monoplanes commanded by Lieutenant Leopoldo De Rada. The other aircraft pilots were Lieutenants Giulio Palma di Cesnola, Filippo di Santa Rosa and the future Italian aviation-flying ace Francesco Baracca!



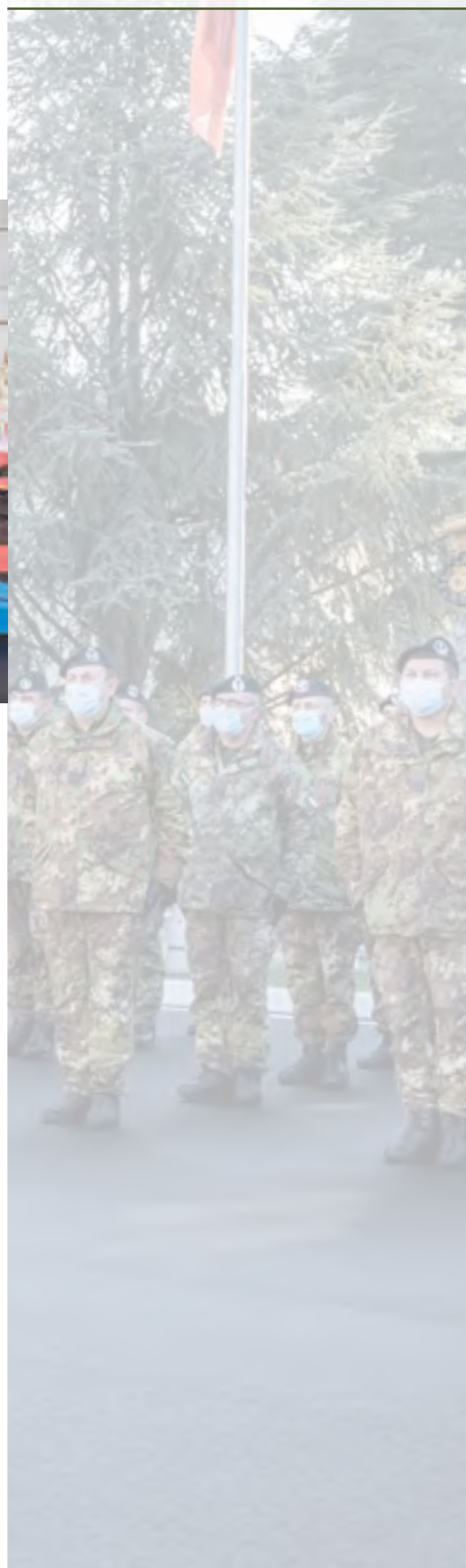
During WWI, the future UMB was used as an Austro-Hungarian prisoner-of-war camp, and then as a war cemetery until 1967, when the cemetery was transferred to Padua.

The UMB hosted several Army Units from 1976 to 2002: 67th Armored Battalion “Montelungo”; 10th Bersaglieri Battalion “Bezzecca”; 4th Tank Battalion “G.M. Passalacqua”; 67th Armored Infantry Regiment “Legnano”; and the 33rd Logistical Regiment “Ambrosiano”.

In 2000, Italy decided to provide the Alliance with a new Rapid Deployable Corps. The Corps HQ initiated the process to reach Full Operational Capability in January 2001 at the Ugo Mara Barracks. From 1 October 2001 the Signal Brigade with Brigadier General Giovanni Fantasia as first Commanding Officer, with the 1st Signal Regiment (in Milan) and the 33rd Logistical Regiment “Ambrosiano” (at the UMB) as subordinate units, started supporting this process providing security, communications, logistics and real life. The Signal Brigade proved to be crucial in this process and in December 2002 the NATO Rapid Deployable Corps (NRDC-Italy) achieved Full Operational Capability.

In the following years, the Signal Brigade (renamed Support Brigade to (HQ) NRDC-ITA from 2007), supported NRDC-ITA either at the base or deployed on exercises and operations. This contribution was particularly important when NRDC-ITA took over command responsibility in Afghanistan for ISAF VIII (“International Security Assistance Force” 2005 – 2006) as well as in 2013/14 during ISAF XXI.

Warrant officer
ITA Army
Francesco Paolo D’AGOSTINO

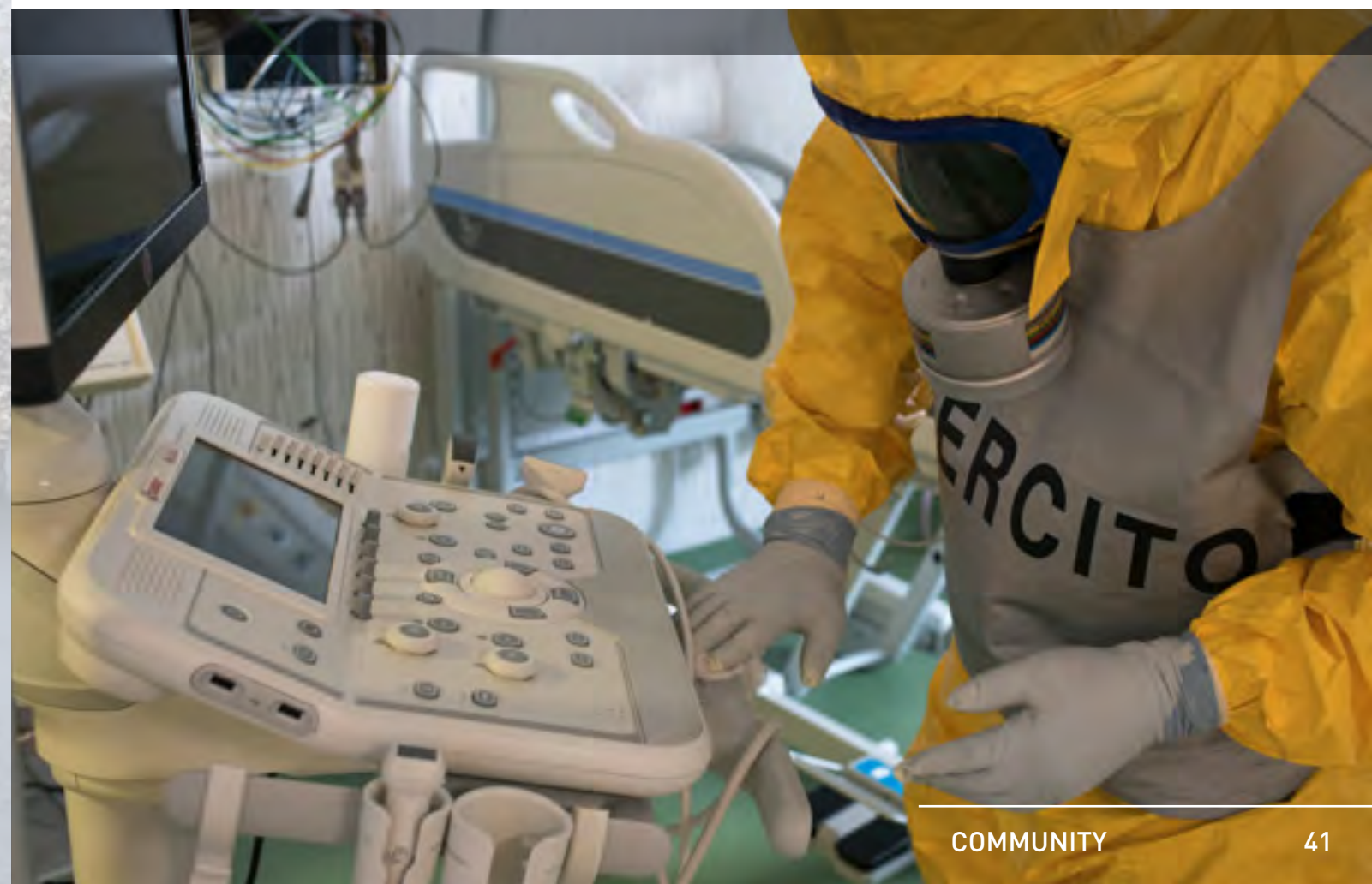


Recently, the Support Brigade coordinated the use of specific, high value assets from its subordinate units to assist the civilian authorities during the SARS-COV2 pandemic, with activities ranging from transporting coffins to medical equipment and vaccination delivery, as well as setting up and manning swab testing and vaccination centers.

The coat of arms of the Signal Brigade is a gladius with an eagle head enclosed on a half red and white French shield. The gladius - an ancient roman sword - represents the WWII “CELERE” Divisions, while the

eagle head represents the great capability to deploy everywhere (UBIQUE).The twentieth anniversary of the Support Brigade was held during the pandemic on 2 December 2021 at UMB, celebrating it with a solemn flag-raising ceremony.

Like the locust trees that stood on the ground where the Ugo Mara Barrack was born, in just 20 years the Support Brigade has demonstrated a “resistance to adverse conditions, abundant and fragrant flowering and growth rate”.



Santa Barbara 4.0

In a scenario where the Internet of Things (IoT) is vital, the connection between intelligent devices (meant as “devices with the capacity of collecting, elaborating and exchanging data in a safe and secure way”) becomes even more relevant to improve and maximize the surrounding reality. It is in this context where the trio Energy-Data-Security becomes a remarkable analysis tool with huge potential.

Installations facilitate the ability to mobilize, deploy, and sustain forces in support of Commanders. The strategic importance of installations in the execution of the National Security Strategy through multi-domain power projection will continue to be a critical dimension of the military element of national power. The challenge is establishing the necessary conditions to ensure that installations will be fully capable of supporting their increasingly critical role.

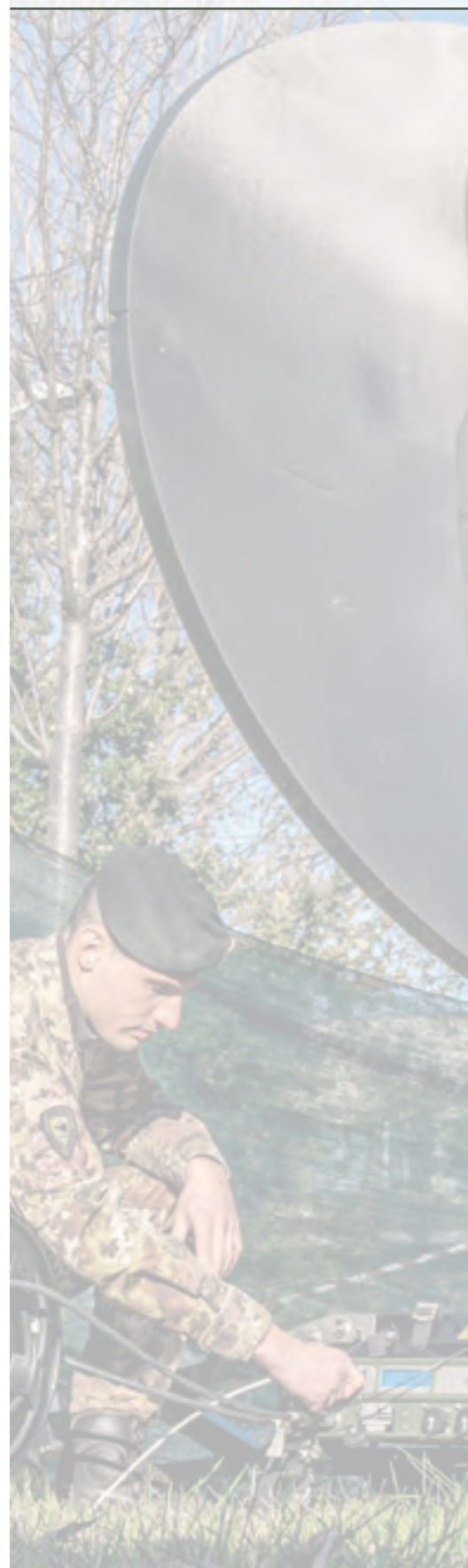
Currently, the Army does not have a comprehensive capabilities development effort underway to ensure the survivability and resilience of installations in emerging operational environments.

Moreover, an awareness that the innovations of the 4th industrial revolution and modern technological needs must be part of defense gave birth to the “Santa Barbara 4.0” project.

On this basis, making the Santa Barbara Barracks a test bed for the realization of an efficient Smart District model, which is integrated into a sustainable urban context and with specific attention on Energy Efficiency, Data Integrity and Information Security, is the goal set by the 1st Signal Regiment.



Captain
ITA Army
Giuseppe DEVASTATO



On June 8th, 2022, in the Officers' Club of the Santa Barbara Barracks, the “Santa Barbara 4.0” conference marked a milestone for the aforementioned project. The 1st Signal Regiment opened the doors to two new players in the project: Industry and University. This kick-off meeting was sponsored by Regione Lombardia, Comune di Milano, Ordine degli Ingegneri della Provincia di Milano and Ass. Italiana di Elettrotecnica Elettronica Automazione Informatica e Tele-comunicazioni. Leading academic, industrial and government stakeholders took part in this meeting to discuss how a barracks can be part of a smart district model. In addition to the Energy Department of the Politecnico di Milano University, as far as industry is concerned, the following companies were involved: A2A Smart City, Motorola Solutions, Cisco, Wireless for Business and Vodafone. The conference included a number of other notable speakers, including people from the NATO Energy Security Centre of Excellence and the Gianni & Origoni legal practice, particularly the Cybersecurity and Privacy Law divisions.

Speakers offered comprehensive, far-sighted and practical solutions that are applicable to the chosen test bed in order to evaluate their feasibility, share experiences and enhance future projects.

As of September 2022, to optimize time and maximize available resources, the 1st Signal Regiment officially invited a new member to join the project: “Alta Scuola Politecnica”. This move was designed to create synergistic cooperation between the internal work team specifically designated to this project by the Regiment and some of the best students from Politecnico di Milano (Energy and Architecture Departments) and Politecnico of Torino (Structural, Construction and Geotechnical Engineering Departments).

The “Santa Barbara 4.0” project aims to improve the following aspects:

- Common Operational Picture (COP) and Situational Awareness (SA);
- Surveillance and security of critical infrastructures;
- Personnel quality of life;
- Energy security and efficiency;
- Automation applications for the integrated management of installations^[KB1];

^[KB1] The meaning is not 100% clear to me. An alternative understanding could be: “Automation applied to the integrated management of installations².”

- Cyber security and resilience;
- Mobility management;
- Waste cycle efficiency and sustainability;
- Digital twin and 3D library for masterplan development and infrastructural management.

In other words, installations, as capability-based platforms, provide the foundations for soldier and unit readiness and resilience. Soldiers live, train, and work on installations, which provide the services that support them whether at home or abroad. Soldiers forge their culture on installations. Connected into constellations, installations provide enterprise-wide resilience and flexibility. Installations are a visible marker for the transformation to an information-age organization, leveraging new technologies to support modern equipment.

Two months have passed and several meetings, conferences and site inspections have been carried out and now, at last, the project is starting to have its own structure. The aim is to create, by June 2023, a whole infrastructure that includes several technologies and innovations, such as:

- Net architecture based on “LoRaWAN” sensors;
- Cybersecurity infrastructure based on a by-design approach;
- Video surveillance and video analysis;
- Smart parking;
- Smart bins;
- E-Mobility;
- District heating;
- Solar panels and adaptative lights;
- Premises automation;
- Premises digital twin;
- Control room.

Ultimately, the 1st Signal Regiment hopes such applications can supply more and newer approaches to ensure the sustainable development of a Smart District that is repeatable in other areas of the Public Administration. It is also hoping to create a technologically advanced environment that meets the internal needs of the Regiment, and digital and ecological transition guidelines. For this, it is working in partnership with local communities to improve defense, generate efficiencies, and create a living and working environment that is safe, secure, and sustainable.



Quantum Key Distribution for Military Communications

The 1st Signal Regiment is looking for new IT solutions from the POLIQL Project.



Quantum computing has introduced numerous changes in the world of cryptography. The main such change is Quantum Key Distribution and its application to cryptography.

In the coming decades, the development of quantum computers, which have exponentially higher computing capacity than current computers, could threaten the security of military communications. As a matter of fact, quantum computers will be able to break the mathematical problems on which current public key encryption is based (public key cryptography is vital to online security and is used in a variety of everyday systems, from banking to mobile applications).

Public key encryption algorithms rely, for their security, on mathematical problems that are very complicated to solve in one direction, but very easy in the other.

Quantum Key Distribution (QKD) is a method for solving the problem of distributing secret keys between two nodes over an insecure channel (e.g. because it can be intercepted), instead of public key encryption.

Captain
ITA Army
Giuseppe DEVASTATO



The way QKD solves this problem is by using quantum communication. It is based on the fact that any attempt by an opponent to intercept the communication would inevitably introduce disturbances that can be detected, according to the laws of quantum mechanics.

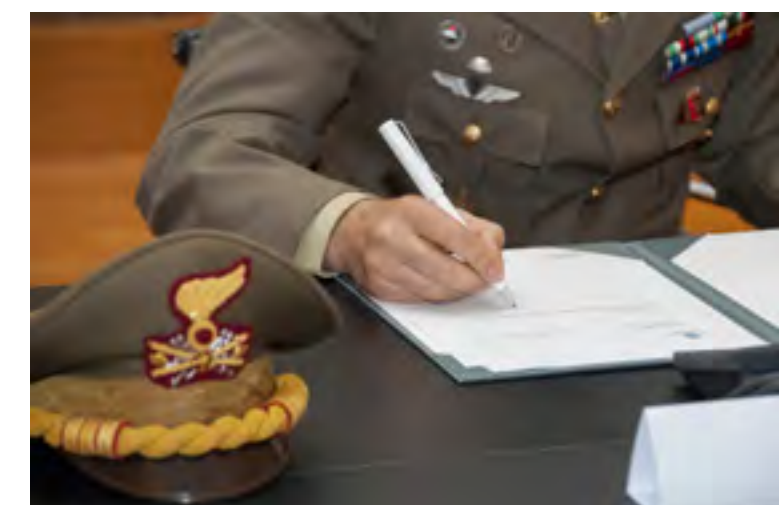
The basic requirements for creating a QKD system between two nodes A and B are:

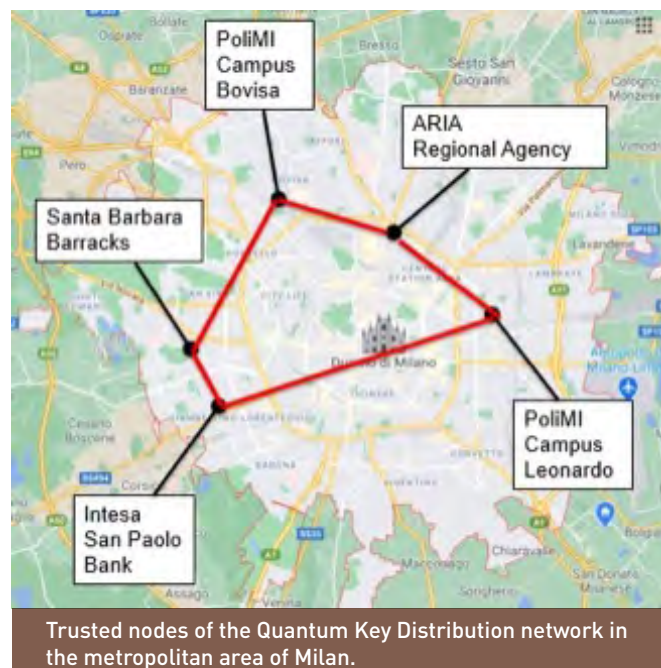
- a shared key exchange protocol (e.g. BB84, E91 and some others);
- a quantum channel (usually optical fiber where photons are used as “messengers”);
- the control hardware and software to implement the protocol.

QKD coding is based on the ability to transmit photons, called q-bits, whose associated information is linked to the state of some properties, like polarization. QKD transmission makes it possible to transmit an encryption key through an optical channel in an unconditionally secure way since, according to the “Heisenberg uncertainty principle”, if a photon were intercepted the receiver would notice it because its quantum properties are perturbed. Therefore, a quantum channel creates certainty of the non-interception of the key. This exchanged key, called public, is secure and can therefore be used to secure subsequent communications using classic encryption systems. Today, through fiber optic networks, we are able to send billions of photons divided into packets. In a communication governed by quantum transmission, an object that associates some information with a

photon immediately reveals if something has gone wrong, if some information has been copied or intercepted. In particular, Quantum Key Distribution, exploiting the properties of light at the quantum level, allows the presence of attacks and violations of the communication channel to be detected in real time, thus guaranteeing transmission security.

In this context, the Italian Army is looking for new solutions, like QKD, to respond to the new challenges posed by quantum computers, endorsing NRDC-ITA through the 1st Signal Regiment to take part in an ambitious project run by the Politecnico di Milano University called POLIQL (*POLitecnico di Milano Quantum Infrastructure*), to build a QKD infrastructure with metropolitan distribution in Milan so QKD can actually be used in different domains (public, banking, defense, business).





On 7 June 2022, the POLIQU Project (*POLitecnico di Milano Quantum Infrastructure*) was formally launched by the signing of a collaboration agreement between the Lombardy Regional Administration, the “Politecnico di Milano” University and institutional partners, including the Italian Army, which was represented by the Commander of the 1st Signal Regiment, Colonel Valerio Golino. Thanks to the agreement, 1st Signal Regiment IT technicians will be able to start all the operating activities for the creation of a Quantum Key Distribution network in the Milan metropolitan area.

The project is made up by 5 *trusted nodes*, one of which is at the Santa Barbara Barracks where the 1st Signal Regiment is based. In accordance with the current schedule, the node will be operational by the first trimester of 2023.

Moreover, last September, the Commander of the 1st Signal Regiment and its IT technicians took part in a three-day academic session at the electronic engineering laboratory of the “Politecnico di Milano” University held by Professor Mario Martinelli, professor of Optical Communications and leader of the research team for the QKD project. The professor showed a prototype QKD network made up of a point-to-point connection inside the laboratory. In the coming months, the Quantum Key Distribution network in the Milan metropolitan area will allow the military team to interface the current Key Management System (KMS) with quantum transmitters in order to test the interoperability of a QKD asset with the Italian Army’s cryptographic equipment so as to keep communications secure in the very near future of the quantum era.

The 1st Signal Regiment is holding many meetings with industrial stakeholders to understand cutting-edge QKD technology, including engagement with international brands such as CISCO Photonics, TIM-Telsy, Thales and LEONARDO.

All these activities help the 1st Signal Regiment develop the competences and skills needed in new MDO scenarios where technology looks ever more like the real game changer.

Tactical and Logistical Support Regiment to (HQ) NRDC-ITA becomes the 33rd Regiment “Ambrosiano”

A ceremony took place on June 1st, 2022, at the “Ugo Mara” barracks in Solbiate Olona to formalize the name change from the Tactical and Logistic Support Regiment to the Italian-led NATO Rapid Deployment Corps (NRDC-ITA), to the 33rd Tactical and Logistic Support Regiment “Ambrosiano”, as ordered by the Army General Staff.

In the presence of Brigadier General Uberto Incisa di Camerana, the (HQ) NRDC-ITA Support Brigade Commander, of the women and men currently serving in the Regiment, of several veterans today enlisted in the Italian National “Autieri” Association and of former Support Regiment Commanders, the Unit finalized the process of resuming the ethical and historical legacy of the 33rd Regiment “Ambrosiano”, a process that began on October 27th, 2006 when the Unit received the War Flag of this renowned logistics unit of the Italian Army.



The 33rd Regiment “Ambrosiano” can trace its roots back to the 3rd Logistic Maneuvering Battalion, established in Milan in 1983 and subsequently denominated as the 33rd Logistic Maneuvering Battalion “Ambrosiano”, a leading unit of the 3rd Army Corps.

The history of the 33rd Unit, albeit concise, is full of remarkable events that have bought prestige to the entire Italian Army. During those years and under other names, the Regiment deployed its personnel, vehicles and assets in various operations outside Italy, such as operation “Pellicano” in Albania in 1991, operation “Ibis” in Somalia in 1992-1993, two operations in Bosnia and Kosovo in 1999-2000 and two tours in Afghanistan in 2005-2006 and in 2012-2013. Moreover, the Regiment made its mark by being deployed in some major homeland security operations, namely “Forza Paris”, “Vespri

Lieutenant
ITA Army
Luca DI CICCIO



Col. Gabrielli with the former Commanders of the 33rd "Ambrosiano" Regiment.

Siciliani" and the still ongoing operation "Strade Sicure", mainly located in Lombardy.

When Piedmont was struck by flooding in 1994, the Regiment was awarded the Italian Red Cross Bronze Medal for its extraordinary efforts to rescue the local population. During the recent change at the helm of the NRDC-Italy Command, the Regimental War Flag was decorated with a Silver Cross of Merit of the Army for the extensive assistance provided to the local community during the unprecedented times of the Covid-19 pandemic.

In this context, it is worth recalling the enormous impact of operation "Fidelium", which involved transporting coffins from Bergamo to other Northern Italian cities, and of operation "Mercurius", which ensured the procurement and delivery of critical health

and safety medical equipment to combat Covid-19. In this light, it is also worth recalling some remarkable design-build-operate projects, such as the swab testing facility outside the "Ugo Mara" base and the vaccination hubs in Milan Parco Trenno, Varese Schiranna and Rancio Valcuvia. Thanks to the outstanding results achieved, the 33rd Regiment "Ambrosiano" received widespread praise and approval from health institutions and local communities.

Currently, the 33rd Regiment "Ambrosiano" provides NRDC-ITA with the capabilities for various activities, such as asset supply chain management, deployment of field command posts and ordinary operations management. In addition, the 33rd Regiment "Ambrosiano" is able to provide NRDC-ITA with an appropriate security framework when on base and on an operation.

In respectful memory of those who served the Regiment in the past, during the ceremony a laurel wreath was placed at the war memorial and a Holy Mass was celebrated in the church of the barracks.

During the ceremony, Colonel Enrico Ubaldo Gabrielli, the 33rd Regiment "Ambrosiano" Commander and one of the main promoters of the name change, recalled how the "Ambrosiano" denomination keeps alive the military unit's traditions and highlighted the ceaseless service to local communities. Finally, Colonel Enrico Ubaldo Gabrielli emphasized how the 33rd Regiment's attitude is unique and how investing in it adds value to being in the military.

The role of the Command Senior Enlisted Leader and his focus on the professional development

On 19th May I had the great honor of being appointed as Command Senior Enlisted Leader of NATO RAPID DEPLOYABLE CORPS - ITALY.

After only few months in my role, let me make clear that my first editorial must focus on the importance of NCOs and their professional development.

The NCO corps is a trusted leader in the profession of arms. Such people are extremely important and experts in all the domains. They provide sound advice for the chain of command and they guarantee efficiency and cohesion with our subordinates. The NCO community is historically and widely recognized as the "backbone" of the Armed Forces, therefore they must continue to operate and transform effectively to meet today's and tomorrow's challenges and ensure NATO readiness and responsiveness standards as an interoperable force.

Warrant officer (1st class)
ITA Army
Stefano GENCO



The NCO corps is also the link with the chain of command at every echelon. Looking at the international situation, NCOs must assure resiliency and sustain the joint effort, from planning to execution of our tasks, always ensuring that the command excels in meeting the Commander's vision and in achieving the mission as never before.

Simply put, NCO leaders are the key enablers for Mission Command, which exploits the human element, emphasizing trust, force of will, initiative, judgment, and creativity. Through an understanding of the Commander's intent, they empower agile and adaptive leaders in the conduct of unified land operations.



As the ancient Latin saying goes, “Do ut Des” (I give to you so that you can give to me), Commanders must empower the NCO community through trust and clarity in Direction & Guidance. Once this goal has been achieved, NCOs must build cohesive teams that are highly trained, disciplined and fit so they are ready to fight and win.

I recently went to the Land Component Command Conference held in Istanbul from 23-25 October past. As further support for what I indicated above, during the symposium SACEUR and COM LANDCOM highlighted, now even more than in the past, the importance of empowering NCOs. The role of NCOs is more essential than ever for success on the modern battlefield. Through effective training – focusing on training as you fight – we have to prepare our forces to defend the Alliance.

According to AD 075-015, NCO Professional Development Programs, the professional development of non-commissioned officers is critical for healthy Commands and the success of NATO as a whole. All members of the military services must continue a life-long learning process by constantly improving their own skill sets and learning new ones. By seeking opportunities for self-development, conducting extensive professional reading, expanding their knowledge base, and applying critical and creative thinking, all military service members can further enhance their expertise.

Professional military education is at the heart of strengthening the NCO corps. For many of our NCOs, NRDC-ITA provides a unique opportunity to improve their professional development. The NATO Force Structure HQ, responsible for a 360° approach, gives a lot of opportunities to improve skills, capabilities and even personal relationships, especially those oriented to the international environment.

In addition, NRDC-ITA offers several opportunities to work with different Sister HQs and partner Nations (Africa Lion 22 and 23 are the perfect venue for this) to improve our knowledge, particularly the interoperability that can be achieved throughout the sequential and progressive development of skills, knowledge and attitude in order to sustain a corps of dedicated, professional and committed enlisted leaders.

The many training opportunities available in the NATO community provide another great advantage of working in a NATO structure. Excellent examples of this are the NATO School in Oberammergau and the NATO CIS School in OEIRAS, which offer a wide variety of courses and truly are key enablers for better preparing us and providing quality outputs for HQ.

Additionally, we are closing in on the most important phase of the Steadfast Jackal 22 exercise: our certification as a Joint HQ. Next year we'll start our recalibration to a Warfighting Corps and, at the same time, we will continue to constantly monitor our eastern flank and the south. These opportunities also require a professional, well prepared NCO corps. Everyone should exploit this unique chance to study, learn and then practice. Making mistakes in good faith, when committing ourselves and going even beyond our limits, won't be a source of shame but an opportunity to assess, understand and prevent similar mistakes in the future.

Starting from this year, in LANDCOM CREVALs, a team will be dedicated to verifying the employment and training of the NCO corps.

Professional development is also a personal responsibility. Self-development is also paramount. Such individual effort will be beneficial first of all to ourselves and subsequently to our organization. My advice is to always try to improve. The most significant constraint is our behavior. A positive approach can also allow us to solve problems and create a better working environment. We do have to trust first of all in our capacity and use this period at NRDC-ITA as a unique opportunity.

A good soldier has to be trained and fit. We must always maintain our deployable capabilities and proper skills. Physical training and individual military training are essential to maintain our military status.

We all benefit from our predecessors and are thankful for how their reputation has facilitated our progress in employment opportunities. By understanding and educating each other, we are fully capable of ensuring our forces will be ready to contribute to the defense and deterrence of Euro Atlantic. Non Commissioned Officers support the chain of command together, while also guaranteeing efficiency and cohesion with our subordinates.

Moreover, if you have a weak NCO corps, then you will have a weak military institution so it is essential that all NCOs are well trained and educated.

In conclusion, if NATO is going to be an adaptable and innovative organizational force with soldiers skilled in their specific fields of expertise, proficient in warrior skills and with language and cultural knowledge, it must become a creed for all NCOs that they have to be prepared, flexible, open minded and able to adjust to a changing society.

Religious sites adorned by art and nature for a reflective trip in Varese province

BEAUTIES AROUND US is the newest section of our magazine, stimulating the community based at the NATO HQ in Solbiate to learn more about the local area and explore its historical and artistic heritage.

The section provides ideas for planning a day out in the Varese area, enjoying nature, art and entertainment. Periodically, key attractions around the Ugo Mara barracks will be highlighted, including monuments, historic buildings, medieval castles, churches, museums, gardens, streets, squares and so on.

This is a wonderful heritage that is EVERYWHERE around us, to be admired and appreciated SLOWLY (NOT RAPIDLY).

For this winter edition of ER, our focus is on a swiftly expanding tourist segment: religious tourism. Such a getaway not only provides an opportunity to visit some sacred places, but also to explore recreational and cultural aspects, interspersed with moments of reflection. Religious tourism is very much a journey of inner seeking and enrichment, which can be an invaluable experience for anyone who chooses a slower, more reflective type of tourism.

Varese province truly boasts a wealth of religious art. Monasteries, abbeys, shrines - many of them dedicated to the Virgin Mary - are not only places of prayer but also sites of such beauty they can leave you breathless. Sacro Monte is undoubtedly the most famous site, with its 14 chapels and shrine dedicated to Mary, along with the Santa Caterina del Sasso hermitage.

Lieutenant Colonel
ITA Army
Gianluca GRECO





Santa Caterina del Sasso hermitage

Located on a sheer cliff rising out of the lake, the Santa Caterina del Sasso hermitage is definitely one of the most striking views on Lake Maggiore.

A large flight of 80 steps rises from the shoreline. Another flight of steps - 268 this time - descends from the plaza above. A visit to one of the most fascinating historical places on Lake Maggiore is definitely worth the effort: the Santa Caterina del Sasso Monastery, or Hermitage of Santa Caterina del Sasso Ballaro. There is an alternative as well: a lift that takes you there from the parking lot.

Tradition holds the hermitage was founded by a rich local merchant, Alberto Besozzi. During a violent storm, he sought the protection of St. Catherine of Egypt and then found himself on a rock jutting out over the water. In the wake of this incident, he chose to retire to this stretch of the lake to live as a hermit. In 1195, he is said to have built a chapel as a sign of thanksgiving for the grace he received from the saint—the chapel is still visible at the back of the church. It did not take long for two other churches to be built – San Nicola and Santa Maria Nova – with confirmed evidence of their existence from as far back as the 14th century. In the earliest period, the Dominicans occupied the site, but later it was used by friars from Sant’Ambrogio ad Nemus in Milan (1314 to 1645) and then the Carmelites (until 1770). In the early 18th-century, the site witnessed a rather striking

miracle: five massive boulders smashed down on the church, but were caught in the vault of a chapel and caused no serious damage—although they did remain there for nearly two centuries, until 1910.

It seems like these unstable rocks (or *ballerini*, to us an Italian option) should be the origin of the name of the hermitage - Santa Caterina del Sasso Ballaro - although the less prosaic version links it to an etymological derivation of the nearby town of Ballarate. Since 1970, the hermitage has been owned by the Province of Varese. From 1986 to 1996 it was run by a Dominican community, but it has now passed into the hands of the Benedictine Oblates.



To enter the Santa Caterina del Sasso hermitage, one goes through a portico with four rounded arches, in Renaissance style. The current building has a quite unique structure, resulting from the fusion of three originally distinct chapels built in different periods. Pictorial cycles adorn the interiors and

exteriors of the church, covering a period from the 14th to the 19th centuries. The easy blending of nature and art in such a beautiful natural setting makes this seem like a balcony deliberately constructed above the Borromean bay, Stresa and the islands.

On entering the hermitage, one first comes to the southern Convent (14th-17th centuries) with interesting frescoes in the fireplace room, then the small Convent (13th century) decorated, just below the first floor windows, with a long 17th-century fresco inspired by *Danse Macabre* (also called the Dance of Death), and finally the church, which includes the chapel of Santa Caterina.

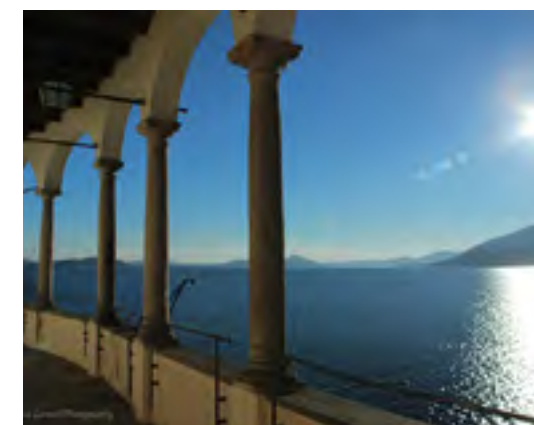
The wall of the sottoportico is adorned with another important cycle of 16th-century frescoes depicting St. Lucy, St. Magdalene and St. Catherine, and an equal number of saints, including Peter of Verona and Nicholas of Bari. Inside the church, it is worth seeing the mandorla of Christ blessing, flanked by the four symbols of the Evangelists (John, Matthew, Luke and Mark) that dominate the church altar from above, flanked by two enthroned Doctors of the Church. The images seem to represent spreading the Word of God. Recent restoration work on the walls of the same chapel has uncovered remnants of another 14th-century fresco cycle, with an especially splendid fragment of a Crucifixion.

In a clear change of style, the presbytery is pure baroque (1610-1612) with frescoes by De Advocatis, including a “Mystical Marriage” of Santa Caterina and, on either side of the altar, the figures of Blessed

Giuliana da Busto and Blessed Caterina da Pallanza. The Chapter House contains the Deposition, another important figurative record in the hermitage. The vivid colours and energy in the painting really exalt the facial features, making this a uniquely interesting work in the Varese area, probably dating from the mid-14th century.

The ground floor has a refectory, while the friars’ cells are on the first floor. Finally, the innermost courtyard opens onto a small church flanked by a 14th-century bell tower. Built in the 14th century, it rises 15 metres, including the spire and cross, and has a rectangular base.

Faith and the beauty of the places in which faith is nurtured are values that all are entitled to. This is why the Santa Caterina del Sasso hermitage, one of the most historically rich and sacred religious building in our area, is handicap equipped. Remarkably, despite being magically perched on a cliff overhanging Verbano, the hermitage can be reached by anyone using routes that are sustainable because they respect the environment and above all people, especially older pilgrims and the disabled. For those with mobility issues, a lift is conveniently located at the entrance plaza for Cascine del Quiquio above, taking only a few minutes to cover the 51 m.



For those looking to enjoy the walk to the hermitage, one can use the steps that also leave from the plaza and feast in some sumptuous views of Lake Maggiore.



Sacro Monte - Varese

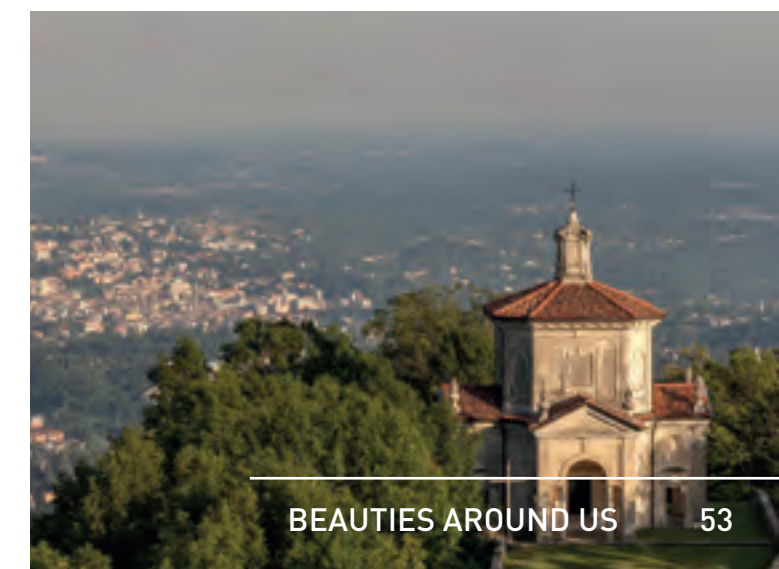
Another wonderfully evocative place that seems to have been purpose-built to let people breathe tranquillity is Sacro Monte, or the sacred mountain.

Sacro Monte is a true historical and artistic highlight of the Varese area, recognised as a UNESCO World Heritage Site in July 2003.

Long a favoured destination for visits and pilgrimages, the complex includes the Via Sacra, an ascending cobblestone pilgrims’ trail adorned with 14 chapels that are all different, but seamlessly integrated into the surroundings and each dedicated to a mystery of the rosary represented inside by sculptural groups and frescoes.

The highlight of the Via Sacra is the Shrine of Santa Maria del Monte, which houses, on the high altar, the 15th Mystery of the Rosary: the coronation of Our Lady.

Here, behind Varese on the slopes of Mount Velate, tradition holds that St. Ambrose defeated the heretical Arians (4th cent.) and built a chapel with an altar dedicated to the Virgin Mary, Our Lady of Victory. This is thought to be the origin of the modern-day shrine and first appears in a document from 922.





Archaeological ruins point to an early religious building from the 5th/6th centuries that was altered in the late Middle Ages (9th-10th centuries) and during the Romanesque period (12th century). A more substantial renovation was ordered by Galeazzo Maria Sforza, Duke of Milan (1472-1476), clearly visible inside, and then further modifications were made in the baroque period.

It was the Capuchin Father Giovan Battista Aguggiari who came up with the idea in the early 17th century of setting up a trail based on the Mysteries of the Rosary, with fifteen chapels. He received the backing of Cardinal Federico Borromeo, who gave precise instructions regarding the decoration of the chapels.

The project was entrusted to Varese architect Giuseppe Bernasconi. By 1623, fourteen stations had been built, with much of the decoration completed. After a brief plague-enforced pause (1630-1632), work was completed in the late 17th and early 18th centuries.

In 1983, Monsignor Pasquale Macchi, former secretary to Pope Paul VI, commissioned Renato Gottuso to paint the Escape to Egypt on the side of the third chapel.

Sacro Monte still has an active village and this often captivates visitors with its characteristic shady alleys and steep steps, lantern-lit underpasses, and numerous art nouveau villas.

For those who are interested, the small town has three museums: the Museum of Baroffio and the Shrine of Sacro Monte, the Crypt of the Shrine, and the Lodovico Pogliaghi House Museum.

BAROFF MUSEUM and CRYPT

These are an excellent stop for people looking to explore the history of Santa Maria del Monte through the beauty of Romanesque sculptures, precious miniatures and Sforza altarpieces, and those who appreciate Baron Baroffio's donations, which include paintings from the 15th to the 18th centuries plus a section on more contemporary sacred art.

The Crypt was opened to the public in 2015 following long, painstaking restoration, but it is now a must-see for young and old alike. It is the oldest sacred site on Varese's Sacro Monte, an utterly delightful treasure chest of faith and art, with votive frescoes, scratch-work and archaeological traces that show the profound Christianity of this place.

LODOVICO POGLIAGHI HOUSE MUSEUM

Visitors who come here are treated not simply to a museum, but to an actual studio home in which a great eclectic artist of the 20th century retired and worked for decades, creating a unique collection that culminates in a life-size plaster cast of the doorway of the Cathedral in Milan. Many pathways wander through the hamlet of Santa Maria del Monte above Varese and into the Campo dei Fiori Regional Park overlooking the Varese hills and the Po Valley.

OPENING HOURS

• SANTA CATERINA DEL SASSO HERMITAGE

LOW SEASON - 15 October to 15 December and 7 January to 15 March

Mondays to Fridays: 1:30 p.m. to 6:00 p.m. (last entry 5:30 p.m.)

Saturdays, Sundays and midweek holidays:

9:30 a.m. to 7:30 p.m. (last entry 7 p.m.)

HIGH SEASON - 16 March to 14 October and 16 December to 6 January

Every day from 9:30 a.m. to 7:30 p.m. (last entry 7 p.m.)

• SANTA MARIA DEL MONTE SHRINE

Opening hours - **standard time**

7:30 a.m. to 12 noon and 2 p.m. to 5:30 p.m.

Opening hours - **daylight saving time**

7 a.m. to 12 noon and 2 p.m. to 6 p.m.

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