



THE EXPLORER Special Edition

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From the Commander's Desk



Welcome to this edition, my first, of The Explorer; the JALLC's annual publication covering our activities, ideas, and news.

This is a special edition of The Explorer as it marks the 20th anniversary of this organization; a moment to pause and reflect on the JALLC's history, what it has achieved, how it has evolved, and the people who make it what it is.

As such, the first half of this magazine is dedicated to the JALLC's Anniversary and I hope you enjoy reading about the JALLC's past and present in the 14-page feature covering everything from the very first days of the JALLC to the change of crest and our

long and illustrious line of Commanders, of which I am now one.

I'm very proud to have assumed command of the JALLC and you can read more about what my expectations and plans are in the interview on page 21. We also have interesting articles on recent JALLC activities. These include a piece on the ground-breaking work being carried out by our outreach and engagement team working together with our Data Analysis Team to ensure Lessons Learned data can be properly exploited across NATO. We have a summary of some of the JALLC's recent Analysis reports on topics such as the Resolute Support Mission and Standing Naval Forces as well as the JALLC's recent work on Lessons Learned from NATO's response to the situation in and around Ukraine, as mentioned by Supreme Allied Commander Transformation on the next page. We have an interesting opinion piece from the JALLC's current Interns on the recent Madrid Summit; a great opportunity to hear from our potential future leaders and what they think about the current situation.

You can also read some very personal articles from the JALLC's staff (present and past) as they find their own ways to celebrate 20 years of the JALLC and their time working here in this special HQ.

I do hope you enjoy reading this magazine as much as we have enjoyed putting it together.

Happy reading.

Fernando Artilheiro
Commodore, PRT N
Commander JALLC

From Supreme Allied Commander Transformation

Crises of the 21st century will be increasingly unpredictable and non-linear. The COVID-19 pandemic and the start of the largest war in Europe since the Second World War, with all the associated ripple effects from these events, indicate this is already true. The rise of great power competition, combined with the pervasive threats of international terrorism, climate change and new challenges associated with societal resilience, cognitive dimension (data, decision-making, freedom of action), and the wider stakeholders in the Cyber/Space Domains are increasing the complexity of the security environment.

To understand better, decide faster, and be stronger together, we need to critically look at and learn from the past. In this context, over the past twenty years, the Joint Analysis and Lessons Learned Centre (JALLC) has been NATO's lead agent for monitoring and supervising the NATO Lessons Learned Process, whereby Lessons and Best Practices are captured, analyzed, and used to transform NATO.



On behalf of your friends and colleagues of HQ Supreme Allied Commander Transformation in Norfolk, I would like to wish all JALLC staff, past and present, a happy day celebrating 20 years of incredible service to NATO. From your start in 2002, you have provided expert analysis on NATO Missions ranging from Maritime Operations such as Operation OCEAN SHIELD and the NATO Training Mission in Iraq. Of note, the rapid production of the Military Strategic Lessons from NATO's Involvement in Afghanistan received, quite rightly, wide and strong praise. I have no doubt that this will be the same for the excellent first work you have just completed from the ongoing President Putin's war in Ukraine. This shows concretely that your work is needed now more than ever.

For that we thank you, congratulate you on your achievements to date, and look forward to your future success.

Philippe Lavigne
General, FRA F
Supreme Allied Commander Transformation

20 YEARS of the JALLC



It's been 20 years since the JALLC first opened its doors. In this feature article we take a look at the JALLC's past, its present, and a brief glimpse at its future.



The JALLC Family Picture 2022

It's not every day a Command turns 20 years old. We take a moment to reflect on the past 20 years and how much the JALLC has evolved, as well as taking a sneak peek at things to come.

On 06 December, 2002, a ceremony was held in Lisbon, Portugal, to mark the opening of the JALLC, which was taking over the role of the Permanent Maritime Analysis Team based in Northwood, UK. In an indication of how the change was seen as important for both NATO and Portugal, the plaque marking the opening was unveiled by Dr Paulo Portas, the Portuguese Minister of Defence, Vice Admiral Roberto Cesaretti, the Deputy Chief of Staff SHAPE, and Vice Admiral Duncan Miller, Chief of Staff SACLANT, representing NATO.

The JALLC's Mission, as it is today and as set out in its terms of reference, is to support Alliance-wide implementation and sustainment of NATO's Lessons Learned policy through monitoring and supervising the NATO Lessons Learned Process within the NATO Command Structure and other NATO bodies.

It is the lead agent for ensuring the value of NATO's Lessons is understood, accomplished through Active Content Management (ACM) of the NATO Lessons Learned Portal, JALLC Analysis (as an integral part of the NATO Lessons Learned Process), and outreach to Allies and Partners.

The JALLC supports warfare development and warfighting, improving NATO's ability to operate and adapt, through training, advising and assessment activities enabling the establishment and sustainment of effective Lessons Learned Capabilities across NATO.

Our Mission

Although the JALLC was originally conceived to primarily analyse exercises, changes to the NATO environment and growing NATO involvement in operations resulted in the JALLC's activities shifting to analysis of operations and major NATO Response Force exercises. As the Alliance's focus has shifted, so too has the focus of the JALLC.



Signing the founding documents of the JALLC in the Monsanto Mess Hall. Lisbon, 2002.

Unveiling the plaque commemorating the opening of the JALLC which still hangs in the JALLC's lobby today, now next to a plaque commemorating the 10th and 15th anniversaries, soon to be joined by a plaque to commemorate the 20th anniversary.



These days...: We do what we do

These days the JALLC is involved in a wide range of activities which include different types of analysis, promoting Lessons Learned capability, managing the NATO Lessons Learned Portal (NLLP) and its content, and providing analysis and Lessons Learned support to exercises and operations.

The JALLC also provides training opportunities in a multitude of related and relevant areas such as, the JALLC Analyst Training Course, the NATO Lessons Learned Staff Officer's Course, and tailored training provided to NATO entities, Nations, and partners as part of the JALLC's outreach programme provided by its JALLC Advisory and Training Team (JATT).

The JATT is also responsible for assessing and advising on the implementation of the NATO Lessons Learned Capability and helps to ensure a consistent and robust capability and establishing and maintaining Lessons Learned relationships with Allies and Partner Nations.

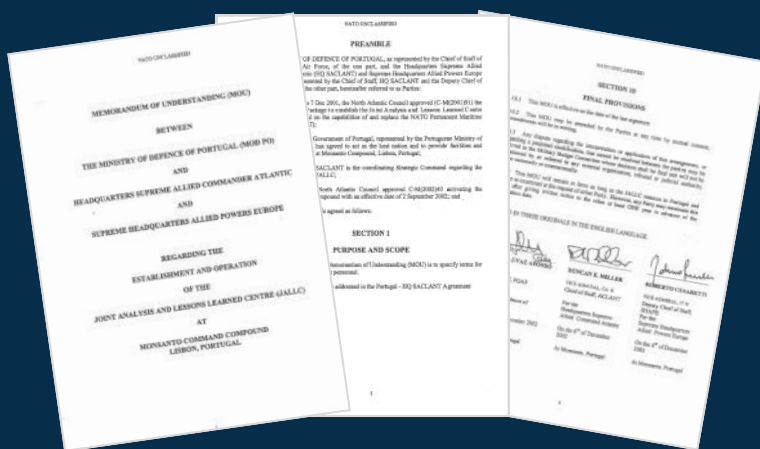
" We do not need to reinvent NATO. But we do need to ask how we can make our Alliance stronger and more effective."

NATO Secretary General Jens Stoltenberg at the German Institute for Global and Area Studies, June 2020

Our History

The precursor body to the JALLC was the Permanent Maritime Analysis Team (PAT) based at Northwood, UK, which conducted operational analysis of NATO maritime exercises using a staff predominantly composed of naval officers. The PAT, suitably augmented, formed the core of the team tasked with analysis of the NATO Implementation Force (IFOR) and Stabilization Force (SFOR) operations in the Former Yugoslavia. The final report by the IFOR Joint Analysis Team recognized the lack of a standing NATO joint analysis capability, which led to the formation of a NATO Working Group tasked to develop the concept for a JALLC.

The operational requirement for the JALLC was approved by the Military Committee (MC) in June 1997. The JALLC implementation concept, which also recommended that the JALLC be located in Portugal, was approved by the MC on 07 December 2001. The JALLC was activated on 02 September 2002, was formally opened on 06 December 2002 and declared full operational capability on 28 March 2006.



The 2002 Memorandum of Understanding between Portugal and NATO regarding the JALLC.

The JALLC also provides support to NATO's Lessons Learned community in many ways, including through organizing the NATO Lesson Learned Conference, which covers topical themes and draws participants from across NATO, Partner Nations, and other organizations.



Since its first iteration in 2003, the NATO Lessons Learned Conference is the key event in the calendar of the NATO Lessons Learned Community. Attended by representatives from NATO, Partner Nations, and other organizations, it provides a unique forum for presentation, discussion, and sharing of Lessons Learned related topics. The format of the Conference has evolved to keep up with the needs of the Alliance and has been held in live, full virtual and hybrid formats over the years.



JALLC output

The type, quantity, and quality of the JALLC's output has evolved over the years along with the JALLC's Mission and Activities. These days the JALLC's analysis teams are experts at reporting their analysis findings. JALLC analysis products, whether joint analysis reports or NLLP Active Content Management data visualization, are aimed at being user friendly, to the point, and actionable. You can find out more about JALLC reporting by visiting the Products page [on our website](#).

The JALLC has produced over 200 Joint Analysis reports since its inception on a wide variety of topics, from Ballistic Missile Defence to Joint Logistics Support, from Cultural Property Protection to Counter– and Anti-Corruption. These full reports are

Why 20 September?

There are a few significant dates in the history of the JALLC but traditionally the JALLC's anniversary is always celebrated in September to commemorate its activation.



June 1997: Military Committee approves the operational requirement for the JALLC



December 2001: Military Committee approves the JALLC Implementation Concept



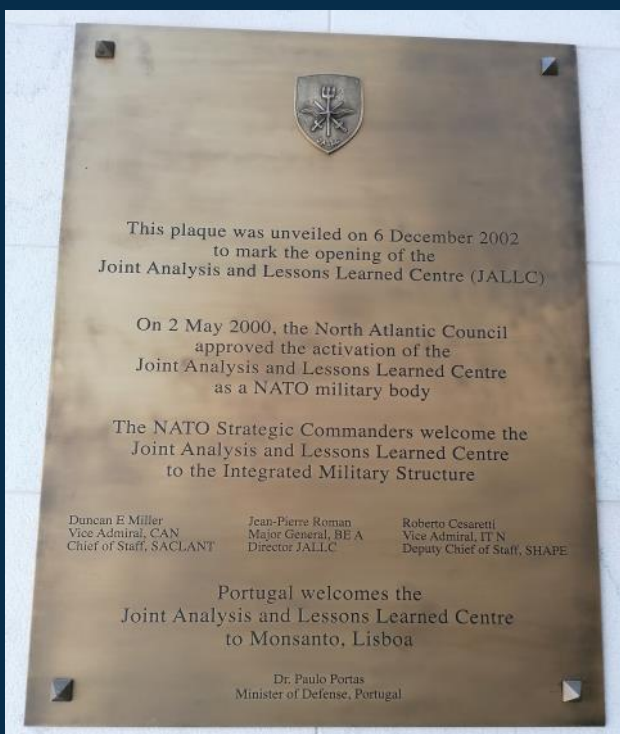
September 2002: The JALLC is activated



December 2002: The JALLC is formally opened



March 2006: The JALLC is declared at Full Operational Capability



The plaque in the JALLC's Lobby actually commemorates the day the JALLC was formally opened and not the day it was activated.

all available on the JALLC's NATO Secret Information Portal page.

For unclassified summaries of these reports, you can download a copy of the factsheet [from the JALLC's website](#).

The JALLC's analysts produce a number of NLLP ACM products, which typically take the form of a report summarizing NLLP content and identifying trends related to a specified topic of interest, sometimes with NLLP data visualizations. These products ultimately aim to inform on the status and progress of NLLP items through the NATO LL Process and facilitate the re-use and exploitation of LL information within the NLLP.

The JALLC has also produced two key handbooks for NATO covering Lessons Learned and Analysis. The NATO Lessons Learned Handbook, now in its fourth edition, was recently updated and you can read more about it in this magazine or [on our website](#). The Joint Analysis Handbook has been the cornerstone for JALLC Analysis—and a key reference document for analysts in NATO—for years. It is currently undergoing a major overhaul to bring it in line with the latest thinking and techniques relating to JALLC Analysis.



The NATO Lessons Learned Handbook and the JALLC's Joint Analysis Handbook are key reference documents for NATO and regularly updated by the JALLC to make sure they reflect the latest thinking and techniques.

The JALLC's Staff

You'll often hear the JALLC's Editor remind staff not to use a picture of the JALLC building to represent the JALLC; and she's right: the JALLC is not a building, but the combined knowledge, skills, and effort of the people who work in it: from the Commander to the cleaning staff, from the analysts to the Interns. The JALLC is a small organization by NATO standards with a permanent staff of just 50. That means that, for the JALLC to be able to meet expectations in terms of output and quality, every single member of staff plays a key role.

To say that the JALLC has a diverse staff, would be an understatement. It's not just the multitude of nationalities that contributes to this diversity, but also the various military and civilian backgrounds, the levels of experience, and cultural differences. The best bit about all of this diversity? Well, it's the fabulous culinary delights that the JALLC Staff bring to share on National days, birthdays, any day really. From Turkish sweets to Polish sausage, British sponge

cakes to Hungarian goulash. A fantastic mix of cuisines and culture is what really brings the staff together. We must not forget to mention the fabulous traditional Portuguese Churrasco (barbeque) that our Host Nation colleagues are legendary for.

The majority of the JALLC's staff are military which means that, in general, every three years, they rotate in and out of posts. While it is always a bit sad to see colleagues move on, it does mean that the JALLC's staff is regularly *re-freshed*, bringing new perspectives and new ideas into the organization. To balance this continuous renewal of staff, the JALLC's civilian staff do not rotate. These permanent staff provide continuity and maintain the JALLC's corporate memory as it were. It's this combination of a continuous supply of new military staff working with the permanent civilian staff that keeps the JALLC well-balanced.



Tina and Paulo have been with the JALLC since the doors opened in 2002 and are affectionately known as the "JALLC Dinosaurs." Tina is the Commander's assistant and has worked with all of the JALLC's Directors and Commanders. Paulo is the backbone of the JALLC's Communications and Information Services and has been helping for two decades to ensure the digital side of the JALLC keeps running.



The British Tea Party which celebrate all things great about Commonwealth Cuisine.



One of the legendary annual Portuguese Sardine parties that take place in June to celebrate St Anthony's Day, the Patron Saint of Lisbon.



The most recent JALLC change of command ceremony took place in June this year and saw outgoing commander Brigadier-General Bogdan Cernat (ROU A) hand over the command of the JALLC to Commodore Fernando Artilheiro (PRT N).

Commander JALLC

In its two decades of operation, the JALLC has had nine directors and commanders. These directors and commanders, from five different Nations, each brought their own unique perspectives and experiences to the JALLC and reflect the multinational and multicultural spirit of the Alliance. In this article, we reflect on the JALLC's leadership over the years.

There is no doubt that any commander (or director in the case of the JALLC) brings their own brand of leadership to the unit they assume command of. In the NATO context this is perhaps even more noticeable than in a national context as NATO entities are staffed jointly: both in the sense that all services are represented as well as the fact that they are multinational. It's one of those unique aspects that makes NATO the diverse and multi-everything organization that it is. However, irrespective of service, nationality, and expertise, the personal—human—element of a Commander and the way they choose to command the entity will inevitably influence the way the organization functions and delivers. The nine Directors and Commanders of the JALLC have had a huge influence on its evolution, making it the exceptional HQ it is today.

"Leadership and learning are indispensable to each other"

John F. Kennedy, 35th President of the United States of America

Our Leadership



2002 Major General Jean-Pierre Roman, from the Belgian Army, was the first Director, overseeing the opening of the JALLC in 2002. Having operated an evacuation operation during the Rwandan genocide, General Roman played a key role in the JALLC's establishment, setting the guidelines for the future development of our HQ.



2004 Following the first Change of Command Ceremony in the JALLC's history, Major General Mehmet Çetin, assumed the role of Director in 2004. He oversaw the transition from initial to full operational capability on 28 March 2006, establishing the JALLC as a productive and crucial organization within NATO. He also oversaw the launch of the NATO Lessons Learned Database, now better known as the NATO Lessons Learned Portal.



2007 A Brigadier General in the Danish Army, Jørgen Hansen-Nord led the JALLC from 2007 to 2010. While he formally took office as Director of JALLC, he became its first Commander in 2009.



(Above) Hanging in the JALLC's Lobby is a board commemorating the JALLC's directors and commanders since 2002.

(Below) The second board in the JALLC's Lobby displays the current Commander and Chief of Staff.



Our Leadership



2010 Brigadier General **Peter Sonneby**, Danish Air Force, succeeded his predecessor in 2010, marking the first time a Change of Command Ceremony did not result in a change of nationality of the Commander. He was also the first Commander to travel to Afghanistan, in the context of the International Security Assistance Force (ISAF). During his tenure, the JALLC celebrated its tenth anniversary.



2013 Brigadier General **Mircea Mîndrescu**, of the Romanian Army, took over the command of the JALLC in 2013, the first NATO command Romania has held since joining the Alliance in 2004. He was also the first, and only so far, Colonel to lead the JALLC, receiving his promotion to BGEN during his tenure.



2016 Brigadier General **Mário Barreto**, of the Portuguese Air Force, served at the JALLC from 2016 to 2018. An F-16 fighter pilot and former commander of the Beja Air Force Base, under his command the JALLC was the first command in the NATO command structure where the top two positions, COM and COS, were occupied by officers of the same nationality.



Although the JALLC's Commander has changed over the years, the Change of Command ceremony has not. Steeped in tradition, the time-honoured ceremony formalizes the transfer of responsibility and authority of command between one military commander to another.

Our Leadership

2018 **Brigadier General António Nascimento**, Portuguese Air Force, served as Commander from 2018 to 2019, the shortest mandate of any Commander. He previously served as Section Head of the Lessons Learned Section at SHAPE, meaning he already had considerable experience in the field of Lessons Learned before taking command.

2019 **Brigadier General Bogdan Cernat**, Romanian Army, served as the JALLC's Commander between 2019 and 2022. He successfully oversaw one of the most challenging times in the JALLC's 20 years of operation, with the COVID-19 Pandemic and an overhaul of the way NATO does Lessons Learned and a major upgrade of the NATO Lessons Learned Portal.

2022 **Commodore Fernando Artilheiro** of the Portuguese Navy is the first Navy Commander of the JALLC. He assumes command of the JALLC in its twentieth year of operation as the JALLC's third Portuguese Commander and the ninth Commander overall. He will lead the JALLC for the next three years.



Through military history, during peace and conflict, the Colours mark the location of the Commander and serve as a symbol of leadership and morale and are a source of great pride for those in the unit.

Above: Pictures from various Change of Command ceremonies from over the years.

A Modern Crest for a Modern Organization

In 2018 the JALLC updated its Crest to bring it in line with the rest of Allied Command Transformation. Here we take a look at why the Crest was changed and how the current heraldry represents the JALLC, and what it does today.

The JALLC's Shield was developed 20 years ago when the JALLC first became operational. The JALLC was part of the transformational side of NATO and, therefore, placed within Allied Command Transformation (ACT) under the command of HQ Supreme Allied Commander Transformation (SACT). As a Bi-Strategic entity, the shape and colour of the shield was chosen to represent the affiliation with SHAPE, i.e. green and gold, which had the effect of setting it apart from its superior command and its sister organizations, the Joint Warfare Centre (JWC) and the Joint Force Training Centre (JFTC), that all have NATO blue as their chosen Crest colour. The crossed swords, wings, and trident, which make up the arms on the shield, were chosen to represent the services that would work in the JALLC, marking the change f



The JALLC's Crest from 2002 to 2017

from a maritime based organization to a joint service organization. The NATO compass featured in the middle of the arms.

Five years ago and in conjunction with the 15th Anniversary, the JALLC's Shield was updated to ensure it represented the evolved role of the JALLC and its relationship with the rest of NATO 15 years on.

The new Crest has been in use since September 2017 and is incorporated in the JALLC's new Military Logo which was adopted last year as part of the NATO-wide rebranding that saw the whole Alliance move towards more unified branding.



Joint Analysis
& Lessons
Learned
Centre

JALLC

The JALLC's Crest from 2017 to the present day



The JALLC's Crest is used in many ways to represent the organization and its principles. Here the JALLC's Crest is incorporated in a traditional arraiolos woven rug which welcomes staff and visitors in the JALLC's lobby.

Symbolism and Meaning: Heraldry



The outline represents protection, giving the Shield its sense of security.

The white colour represents peace, associated with the sense of security of the Shield.



The compass, set against a NATO dark blue background, bringing the JALLC in line with the visual identity of NATO, is more prominently displayed and better represents the Alliance.



The two wings are symmetrical to show the balance between the two main JALLC mission areas: Joint Analysis and Lessons Learned.

The wings can be seen as an open book, portraying the written products produced by the JALLC and reinforcing knowledge sharing.



Each wing is divided in four parts which portray the domains of Land, Sea, Air/Space, and Cyber. They also represent the Grand Strategic, Strategic–Military, Operational, and Tactical levels.

The new JALLC Shield was created based on these five principles:

- NATO's visual identity and brand guidelines must be respected and reinforced.
- The JALLC deals in knowledge; it does not conduct military operations.
- The shape of the former JALLC Shield remains as a link with the history of the Centre.
- The Shield must have strong symbolic meaning and remain easily readable even in small size.
- The Shield should line up visually with those of the JALLC's two sister centres – the JWC and the JFTC.

The owl was carefully selected as a symbol of knowledge, drawn as a stylized image and in harmony with the NATO compass. The owl is in a dominant position on the shield, representing its strength, but placed below the NATO compass to signify subordination to the Alliance. The owl is flying with spread wings representing symmetry and balance while moving forwards.

In 2021, NATO underwent an organization-wide rebranding which saw all of the NATO entity



Crests be incorporated into a single military logo that was applied across NATO. Each entity retains its unique identity in their logo, as you can see from the JALLC's logo here.

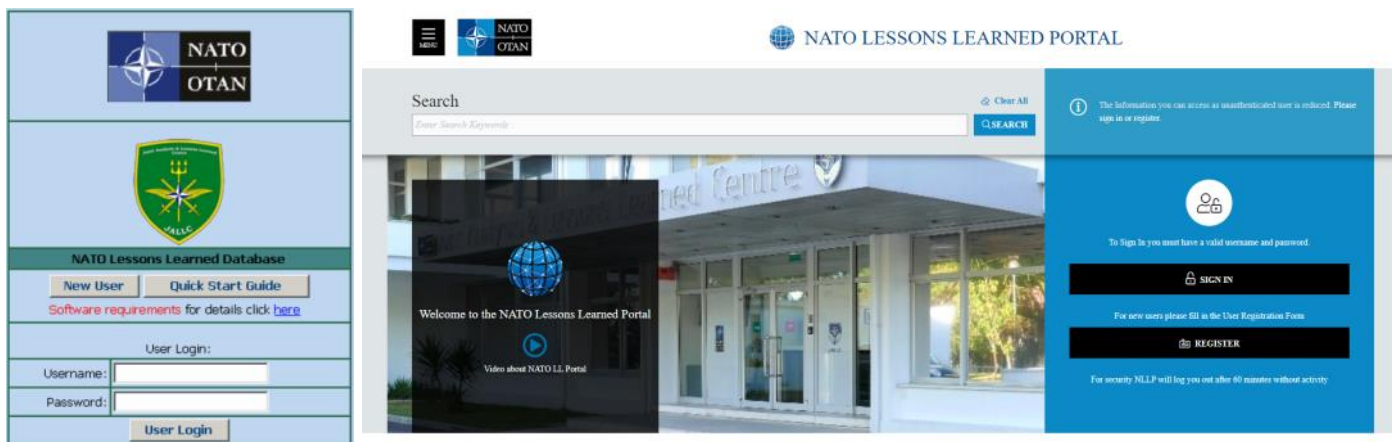
THE NATO LESSONS LEARNED PORTAL: 2003-2022

NATO has always prided itself on being a learning organization; improving over time by capturing hard-won knowledge and applying it efficiently and effectively, transforming to meet the needs of the Allies. Much of this transformation is based on results from application of the NATO Lessons Learned Capability; its structure, process, and tools.

Connecting the right people by gathering them through the Lessons Learned Community, following the right process, using the appropriate tools, ensures that Lessons from all over NATO and from all NATO activities are captured, analysed, learned, and shared. It is this last requirement in particular—the right tool—that would lead to the development of the NATO Lessons Learned Database (NLLDb) that would later become the NATO Lessons Learned Portal (NLLP) we know today.

The Need to Share

The need to share observations, lessons, and best practices was identified early on within NATO as being key to a successful Lesson Learned Capability. As such, an IT tool would need to be developed and made available to the NATO Lessons Learned Community. This tool would need to be easy to use and facilitate the NATO Lessons Learned Process.



Left, the original login page for the NATO Lessons Learned Database in 2005, the forerunner NATO Lessons Learned Portal. Right, the 2022 login page of the NATO Lessons Learned Portal.

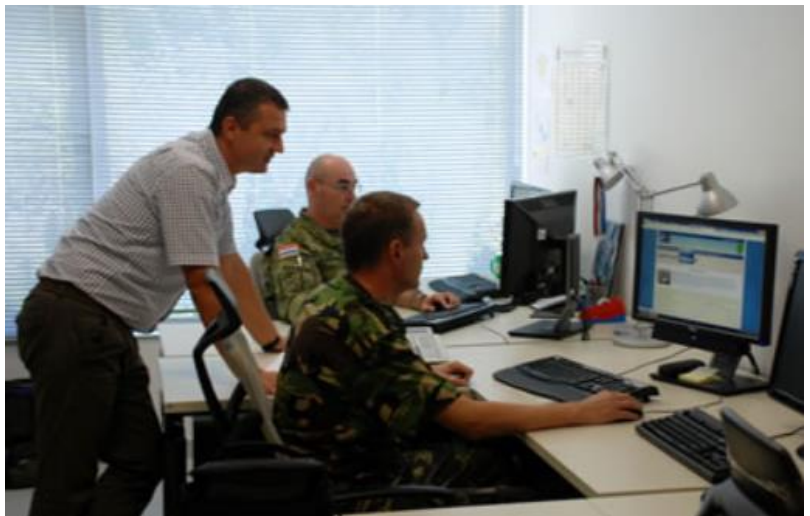
In 2003, initial development began on a Lessons management tool, inspired by the Lessons Learned Database of the PAT, the JALLC's precursor body. With the JALLC in the lead, this first tool became the NATO Lessons Learned Database, designed to address the needs of NATO Lessons Learned Community. Launched in 2005, it was initially only made available on NATO's classified computer network, limiting its scope. However, by the following year, in 2006, an unclassified version was launched and made available via the internet.

The NLLDb was then available to all NATO Lessons Learned Community members—mostly Lessons Learned Staff Officers—who needed to request access through the JALLC, as the database manager. This was initially granted on a need-to-know basis. By 2010, access was also being granted to Lessons Learned Community representatives from NATO Partner Nations, widening the scope of the NLLDb.

As the use of the NLLDb evolved, certain users, such as Lessons Learned Staff Officers from NATO's Joint Force Commands, SHAPE and HQ SACT, were granted access to more areas of the NLLDb which would allow them to better perform their roles.

Evolution The NLLDb evolved over the years, and by 2010 it became apparent that it was simply no longer powerful enough to meet the ever-growing Lessons Learned needs of the Alliance. In 2010, the JALLC developed and launched a prototype of the current NLLP which was well-received. This much more powerful tool was updated again in 2013, and the most recent version of the NATO Lessons Learned Portal was launched last year in 2021. This version has been developed to take user feedback into consideration and is considered the most user-friendly and powerful version of the NLLP to date.

But, the story doesn't stop here. Work is already being undertaken by the JALLC to collect user requirements and to test various available digital tools, platforms, etc., in order to develop the New NATO Lessons Learned Toolset. This iteration of the NLLP is intended to be ever-more user-friendly, automated, and powerful, to continue to provide NATO with the power of Lessons Learned for its Transformation, Warfare Development and Warfighting Capabilities.



Many of the JALLC's staff over the years have worked on the various iterations of the NLLP. Here staff members in 2017 work on improvements to the background information provided in the NLLP.

Training and Education

Although you don't have to be an expert to use the NLLP, and there is plenty of guidance in the Portal itself, the JALLC's NLLP team developed a tailored course for Local NATO Lessons Learned Portal Managers. A recent edition of the course was held from 17 to 19 May at the NATO Communications & Information (NCI)

Academy's facilities in Oeiras (Portugal). The aim was to provide NATO personnel assigned as Local NLLP Managers with the required knowledge and technical skills to effectively and efficiently support the execution of the NATO Lessons Learned Process in their organizations across the Alliance, ultimately improving NATO's overall Lessons Learned Capability. This important step forward in providing education and training will ensure that the NLLP is used to its maximum potential now, and in the future.



NATO Lessons Learned Portal Managers attend the course provided by the JALLC at the NCI Academy's facilities in Oeiras (Portugal).

It wouldn't be a proper birthday without best wishes from the family. In the case of the JALLC, that's our NATO family: HQ Supreme Allied Command Transformation, the Joint Warfare Centre, the Joint Force Training Centre, and STRIKFORNATO.

On behalf of all the staff at STRIKFORNATO, we wish our friends and colleagues at JALLC a Happy Birthday on their 20th anniversary! We look forward to continue working together in the future.



On behalf of your friends and colleagues of HQ Supreme Allied Command Transformation in Norfolk, I would like to wish all JALLC staff, past and present, a happy day celebrating 20 years of incredible service to NATO.

For all your achievement achievements to date, we thank you and look forward to your future success.



HAPPY BIRTHDAY

Dear JALLC Team,

I wish a heartfelt Happy Birthday to all of you on your 20th anniversary, which will be celebrated on 20 September. The Joint Warfare Centre has always had a very close relationship with the JALLC and helped making NATO's lessons learned process as effective as possible through exercises and warfare development.

Your forward-thinking organization - a key pillar of the JLLs - every day contributes to NATO's operational- and strategic-level knowledge gained through experience.

I know that our cooperation will continue to expand in the years to come and make NATO better.

Congratulations on this special day to you!

Major General Piotr Malinowski
Polish Army
Commander Joint
Warfare Centre



Dear Friends at the Joint Analysis and Lessons Learned Centre,
Please, accept my wholehearted congratulations on the anniversary of your Centre and words of highest recognition and appreciation for the superb work for the Alliance that you have been doing for the last twenty years.

Our cohesion in safeguarding peace and stability of our nations is the core of the Alliance and a source of its strength. Thus I would like to thank you for your dedication and professionalism that continuously contribute to accomplishment of allied efforts, to include training and exercises conducted by the NATO Joint Force Training Centre.

On behalf of the JFTC staff, I wish all JALLC members satisfaction and pride of the achievements the Centre has gained throughout the years, many successful activities in the future and all the best for the upcoming years.

Happy birthday JALLC!

MGEN Norbert Wagner

JFTC Commander



HAPPY BIRTHDAY

The NATO Maritime Geospatial, Meteorological and Oceanographic Centre of Excellence Director and Staff would like to extend their warmest congratulations on the twentieth anniversary of the Joint Analysis and Lessons Learned Centre and to thank you for all your support and cooperation over the past years.

We are looking forward to continue to work with the JALLC in the future, contributing to the transformation of the Alliance, enabling the establishment and sustainment of effective Analysis and Lessons Learned capabilities across NATO.

With the Best Wishes

César Correia

Captain

MGEOMETOC COE

Director



The staff of The Joint Analysis and Lessons Learned Centre wish their HQ a very happy birthday.



Meet COM JALLC Commodore Fernando Artilheiro

On 21 June 2022, the JALLC changed its Commander for the ninth time. We catch up with Commodore Fernando Artilheiro, the JALLC's newly appointed Commander, to find out a little bit more about the man behind the uniform and his expectations for his time at the JALLC.

The JALLC's Commander (COM) obviously has a special role to play in the organization. However, each JALLC Commander also brings something special to that role: their experience, their opinions, their personalities. Commodore Fernando Artilheiro, the JALLC's latest Commander, took some time out of his day to have a chat about first impressions, what the JALLC has to offer, and... hydrography.

First impressions matter, and the Commodore's first impressions have been positive. *"I must admit that my first real encounter with the JALLC was*

two years ago, when I visited in the context of my previous command at the Maritime Geospatial, Meteorological and Oceanographic (MGEOMETOC) Centre of Excellence (CoE)." This relatively new and highly specialized CoE was established in Portugal in 2020 and is focussed on enhancing the transformation efforts in the field of Maritime GEOMETOC for the benefit of the Alliance. Commodore Artilheiro was the head of the team stood up to establish the CoE and was its first director.

Based on his background and previous experiences, the new

COM JALLC is no stranger to either Analysis or Lessons Learned. As a weathered ocean scientist in the field of hydrography, the Commodore understands the concept of ODCR (Observation, Discussion, Conclusions, and Recommendations) and the MGEOMETOC CoE conducted Lessons Learned as an important part of their activities, making use of the NATO Lessons Learned Portal.

Nevertheless, the Commander also knows the value of a good team: *"I know that I have an excellent team here of military and civilian experts. The JALLC*



Moments from the change of command ceremony held on 21 June 2022. Previous page: Commodore Fernando Artilheiro makes his first speech as Commander of the JALLC at the change of command ceremony. This page: Left: The JALLC's flag is handed to the Commander as a symbol of the assumption of command. Right: Commodore Fernando Artilheiro addresses the audience.

Curriculum Vitae

Born on 05 August 1965, Commodore Fernando Artilheiro joined the Portuguese Naval Academy in 1985, having completed his degree in Naval Military Sciences in 1990.

Following his promotion to Ensign, he served on board the frigate “NRP Comandante Sacadura Cabral” (1990-1991). In 1991/1992, he attended the Specialization Course on Hydrography (IHO Category A) at the School of Hydrography and Oceanography. Subsequently, from 1992 to 1994, he served as a surveyor in the Hydrographic Brigade n.º 2.

He attended the Hydrographic Engineer Course at the University of New Brunswick, Canada, where he completed his master's degree in Surveying Engineering (1994-1996) and has been a hydrographic engineer since 1997.

From 1997 to 1998 he was a crew officer on board the research ship “NRP Almeida Carvalho”. Afterwards, until 2002, he was the Deputy of the Head of the Hydrography Division of the Portuguese Hydrographic Institute. From July 2002 to March 2005 he assumed the command of the Hydrographic Brigade n.º 2, as well as the Hydrography Division, until September 2010.

In September 2010 he became the Deputy Technical Director of IHPT until September 2012, when he assumed the position of Technical Director of IHPT, a post which he held until May 2016.

From April 2016 to October 2017, he was the Deputy Director of the Training Directorate of the Navy, after which, in October 2017 he was appointed Director of the Portuguese Lighthouse Authority, a directorate that he led until October 2018.

From September 2019 to November 2020, he was the Commanding Officer of the fleet of Hydrographic Ships and the Naval Force for Hydrographic and Defence Cooperation Missions. During that period, in November 2019, he was nominated head of the team stood up to establish the NATO Maritime Geospatial, Meteorological and Oceanographic Centre of Excellence (MGEOMETOC CoE). Following the MGEOMETOC CoE being established, he took his place as its first director, from November 2020 and April 2022.

He attended the General Naval Warfare Course (2001), the Joint Staff Internship (2002) and the Flag Officer's Promotion Course (2019) at the Military University Institute in Portugal.

Most recently, he was promoted to the rank of Commodore of the Portuguese Navy on 22 February 2022 and assumed command as Commander JALLC on 21 June 2022.

Commodore Fernando Artilheiro has received several military commendations and was awarded Commander of the Military Order of Avis; four Distinguished Services Medals (silver); Military Merit Medal (2nd class); three Naval Cross Medals (1st class) and Exemplary Conduct Medal (gold).

ship is running at cruising speed, and I will properly observe and analyse how it works and then make conclusions on recommendations about what course to set.” Commenting on one of the JALLC’s most recent analysis products he noted, “I was impressed not only by the work that had been done, but also by the methodology applied, and the quality and readability of the product.”

The Commodore believes in establishing relationships in person. To this effect, some of his first actions have been to do just that. Speaking on his recent visit to HQ Supreme Allied Commander Transformation (HQ SACT) in Norfolk, Virginia, USA, he noted, *“I think it is important to establish a good, personal working relationship with those we know we are going to work with in the future.”* This goes for the JALLC staff as much as for the Command Group at HQ SACT. Commodore Artilheiro believes that taking time to get to know your colleagues ultimately leads to a better working environment and relationship. Leading by example, he spent his first weeks in the job inviting small groups of the JALLC’s staff to lunch to be able to get to know them better and on a more informal note.

Despite being new to the JALLC, the Commodore notes the importance of the JALLC and its work to NATO and the Nations. *“Our Analysis and Lessons Learned capabilities truly contribute to NATO Transformation.”* All of the JALLC’s activities contribute to the drive to ensure that the JALLC remains at the forefront of NATO’s Transformation and the Commander recognizes that: *“I know that the teams we have here know what they are doing; it will be my job to make sure that we do this in the most efficient and effective way to meet whatever the Alliance needs from us.”*

Looking forward

"I am looking forward to the next three years as the JALLC's Commander. I enjoy learning about new things and the challenge of a new assignment, and there is certainly much to learn and for me to contribute as well. I think that I can bring a different perspective, a fresh view, to the JALLC, the way it works, and its products."

When the Commander isn't commanding, he enjoys reading books, listening to music, and taking exercising. His wife and daughter, who are both in medicine, are very supportive. *"They are my safe harbour and have always been there for me. They enjoyed meeting the JALLC's staff at the recent change of command ceremony and look forward to getting to know the JALLC better as well."*

During the change of command ceremony, the Commander mentioned the fact that 21 June was also World Hydrography Day. A subject close to his heart as a Hydrographic Engineer and a naval officer. According to the Concise Oxford English Dictionary, *hydrography* is the science of surveying and charting bodies of water. Using multibeam echo sounders, hydrographic surveys are conducted in order to measure and describe the physical features

of bodies of water and the land areas adjacent to those bodies of water. By mapping out water depth, the shape of the seafloor and coastline, the location of possible obstructions, and physical features of water bodies, hydrography helps to keep our maritime transportation system moving safely and efficiently.

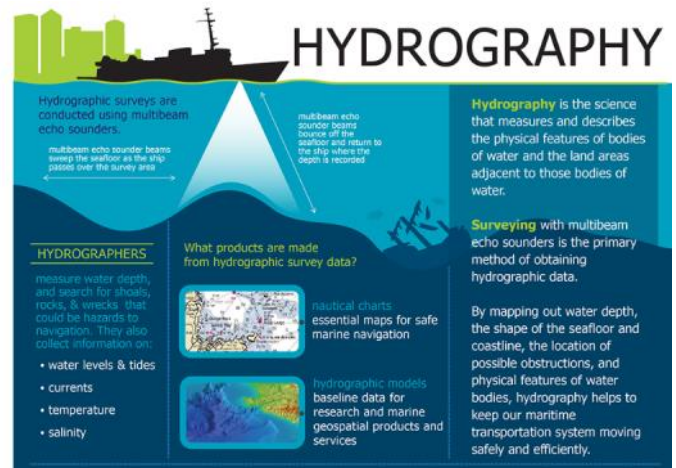


Image source: [Oceanservice.noaa.gov](https://oceanservice.noaa.gov). The US National Ocean Service website.

We wish the Commodore all the best as he takes the helm of the JALLC. We welcome him as our Commander and look forward to working with him.

June 21 was not only the day of the Change of Command, but appropriately also World Hydrography Day, celebrating the importance and relevance of hydrography world-wide



It has been a busy year as usual for the JALLC in terms of our Lessons Learned Activities. In this section we provide an overview of some of the highlights and focus in on the NATO Lessons Learned Conference 2022, the new edition of the NATO Lessons Learned Handbook, the latest on using data from the NATO Lessons Learned Portal (NLLP), and we take a look back at the history of the JALLC Advisory and Training Team as we celebrate 20 years of the JALLC.

LESSONS LEARNED ACTIVITIES



Lessons Learned Activities Overview

Since the last edition of The Explorer, the JALLC's Lessons Learned (LL) Management Division has been busy. Both during the (last) throws of the COVID-19 pandemic restrictions, into the post-COVID period, the various teams that make up the LL Management Division have been working hard to make sure it has been "business as usual".

The NATO LL Portal

The NLLP team has developed a tailored course for Local NLLP Managers. A recent edition of the course was held from 17 to 19 May at the NATO Communications & Information Academy's facilities in Oeiras (Portugal). The aim of the course was to provide NATO personnel assigned as Local NLLP Managers with the required knowledge and technical skills to effectively and efficiently support the execution of the NATO Lessons Learned Process in their organizations across the Alliance, ultimately improving NATO's overall Lessons Learned Capability. This important step forward in providing education and training will ensure that the NLLP is used to its maximum potential now, and in the future. In order to ensure that NATO is aware of Lessons concerning the situation in and around Ukraine, the NLLP now includes a Ukraine 2022 category, and weekly NLLP ACM reports are produced.

LL Data Analysis

Our Data Analysis Team has also developed new tools and training to support NLLP users in exploiting NLLP content. You can read more about it in the article in this section by Ms. Chiara Rylander, one of the JALLC's Senior Operational Research Analysts.

LL Events

Among other key LL events, the JALLC hosted the NATO LL Fall week in 2021 which was held in a hybrid format to accommodate the COVID-19 pandemic restrictions in place at the time.

It proved to be another fruitful iteration of this bi-annual coming together of the LL leadership in NATO, where topical issues and developments are discussed.

The JALLC also hosted the NATO LL Conference (NLLC) 2022 earlier this year. You can read a summary of the key takeaways from the event in this section.

The NLLC was held in a hybrid format—a lesson learned from the last iteration of the NLLC—and proved to be very successful, with the outcome contributing to the NATO LL Capability Improvement Roadmap 2021-2025.



LL Outreach and Training



Our JALLC Advisory and Training Team (JATT) have also been very busy, providing virtual outreach and training opportunities and, once COVID-19 pandemic restrictions were lifted, returning to their usual agenda of on-site visits to assess the implementation of the NATO LL Capability and provide training

and guidance on how to enhance LL efforts. In this section, and to mark the 20th anniversary of the JALLC, the JATT have taken a look back at its history: the origins and evolution of the JATT.

LL Other News

We're proud to announce the publication of the latest (the fourth) edition of the NATO LL Handbook. This key reference document for LL in NATO has been updated to reflect the latest changes to key NATO documents as well as the current practices relating to doing LL.



Exploiting NLLP Data

New Tools and Training

Ms. Chiara Rylander,
Senior Operational Research Analyst (SORA) at the JALLC

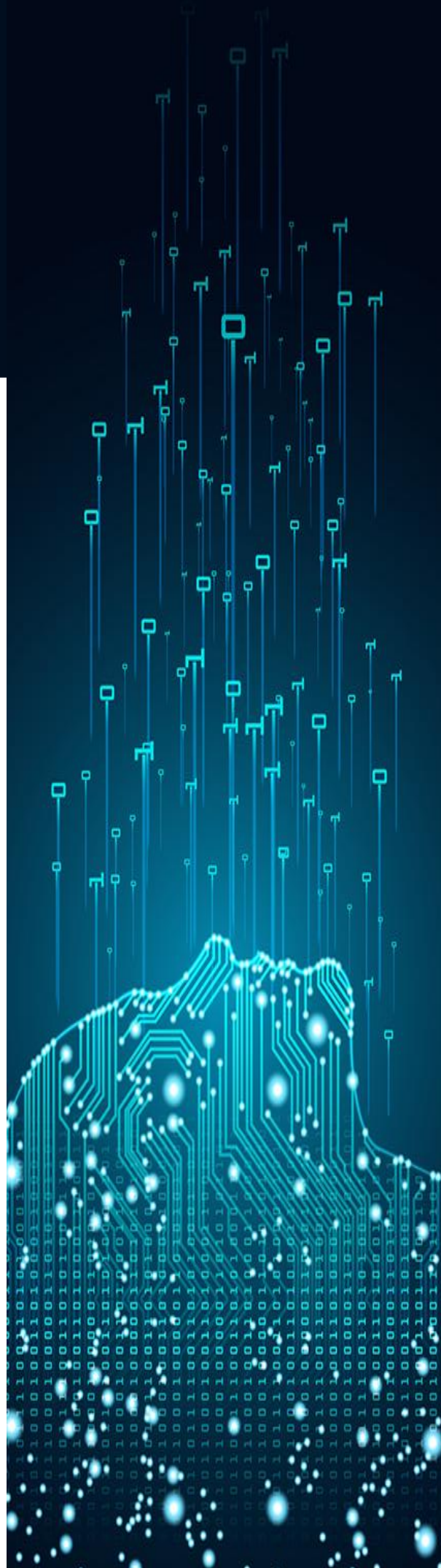


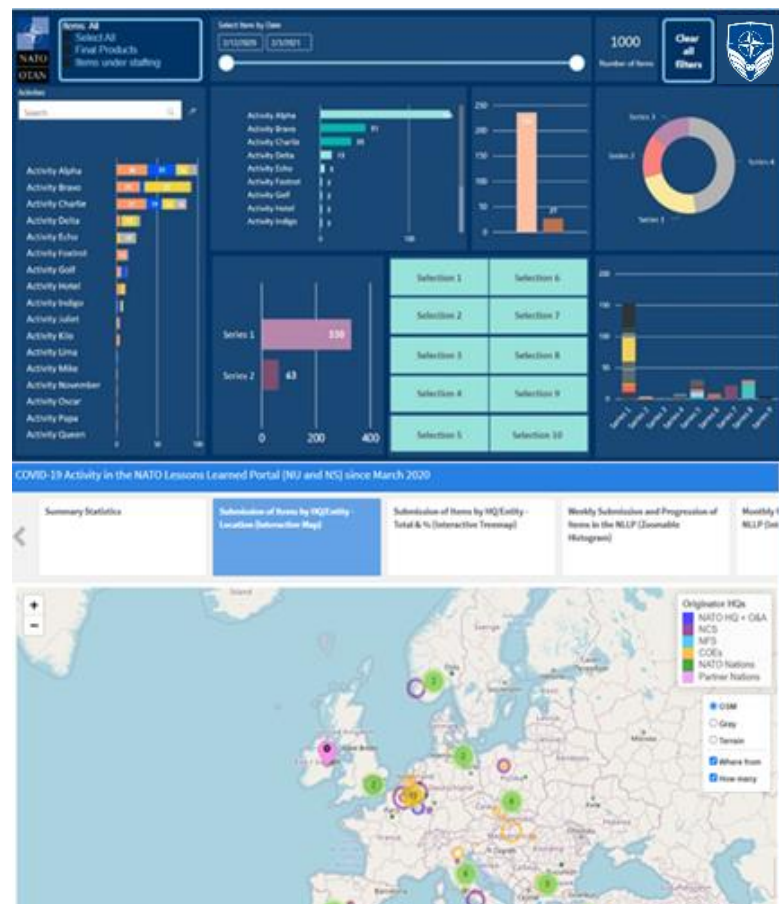
Ms. Chiara Rylander holds a Master of Science Degree in Operational Research from Lancaster University (UK), and has worked as an analyst within the Defence industry for over 10 years, leading analytical projects for customers in the UK Ministry of Defence, the private sector, and now NATO. She joined the JALLC in March 2020 as SORA in the Lessons Learned Management Division.

Did you know the NATO Lessons Learned Portal (NLLP) now contains more than 8000 items from over 100 Originators, including NATO entities and Allied and Partner Nations? Learning from previous experiences can save lives, time, and resources. The JALLC has developed new NLLP data visualizations and training sessions to support NLLP users in exploiting NLLP content, as well as monitoring and reporting on their HQ's NLLP activity.

One of the aims of JALLC's NLLP Active Content Management (ACM) activities is to facilitate the exploitation and re-use of Lessons Learned (LL) information in the NLLP. One way it does this is through developing NLLP data visualizations, including the existing NLLP dashboards found on the NLLP homepage. Recently, JALLC analysts have developed new storyboards (containing series of interactive visualizations) to show monthly submissions of items to the NLLP and their staffing through the NATO LL Process, as well as overall staffing by HQ and year. In addition, a tool has been developed to generate NLLP statistics required for NATO Command Structure (NCS) HQs' Annual LL Reports, as required in the Two Strategic Commands (Bi-SC) Directive 080-006: Lessons Learned. Users can produce an automated annex for their Annual LL Report with just a few clicks.

New training lectures have been developed covering the use of these NLLP data visualization tools and provide tips on exploiting and reporting on NLLP data. These lectures are now included in the LL Staff Office Course (LLSOC), LL Management Course (LLMC), Local NLLP Manager Course, as well as in tailored training material for NCS HQ engagements.



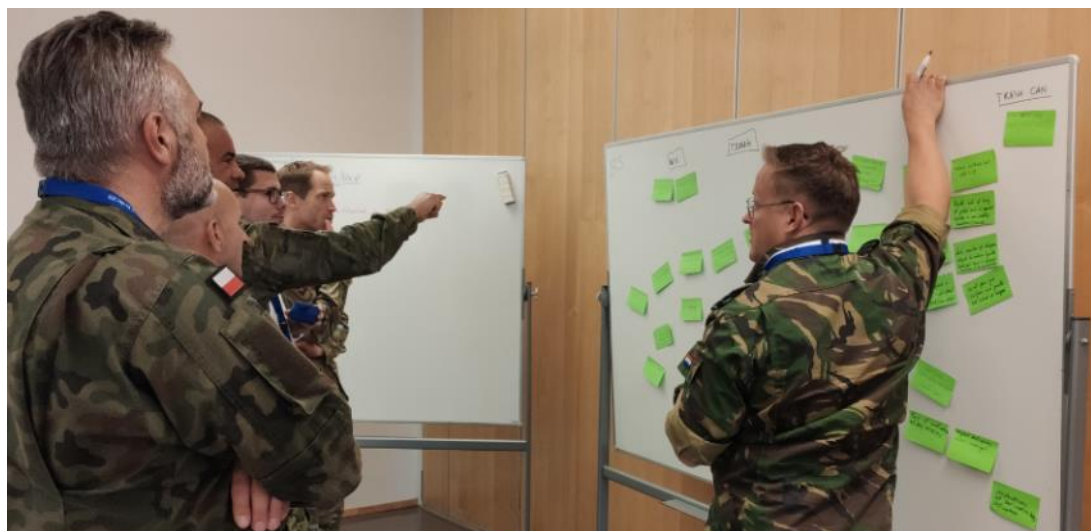


Above, some of the graphics the NLLP data visualization tools can produce to facilitate Lessons Learned data exploitation. These graphics can be generated from the NLLP.

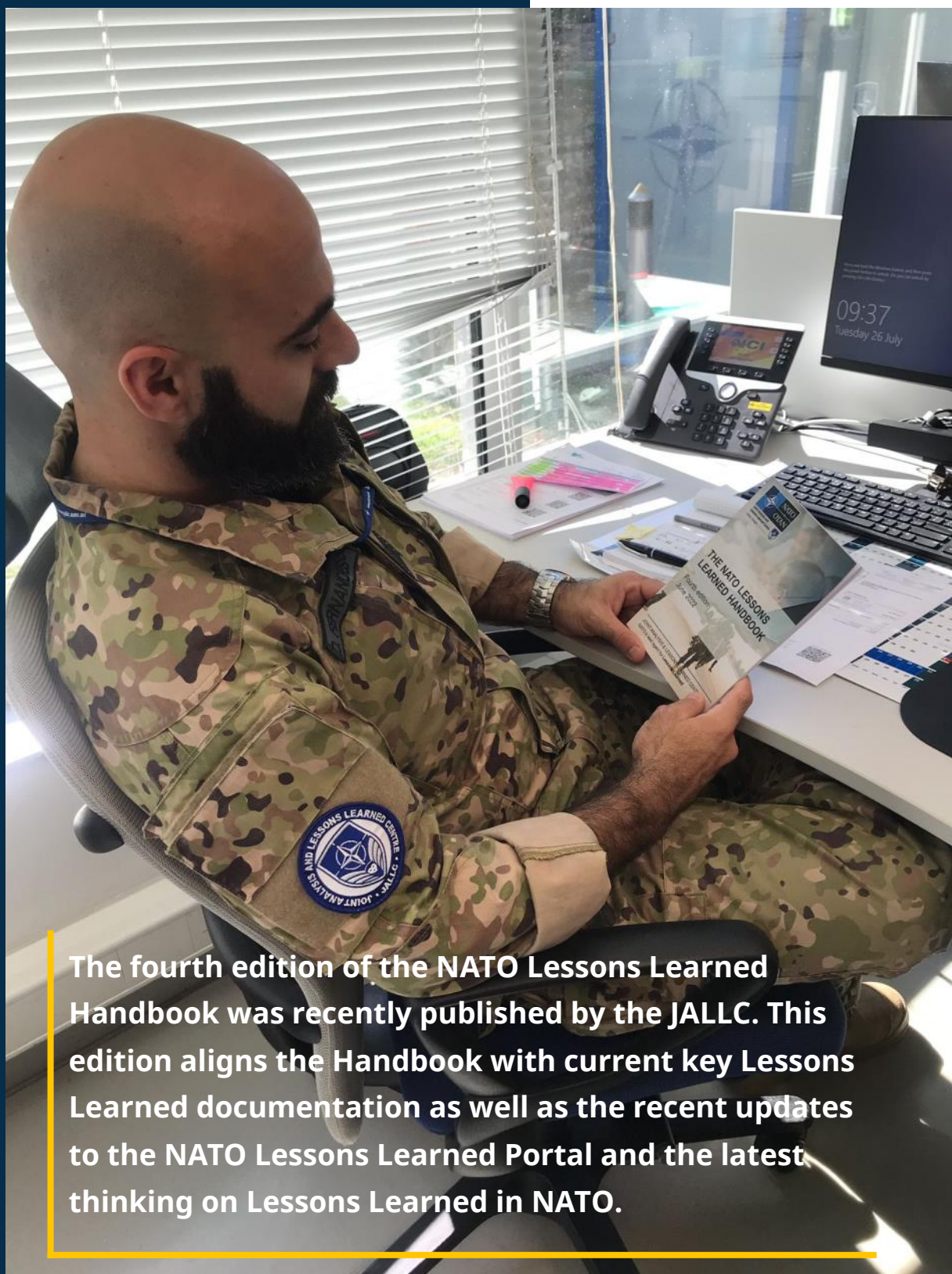
We hope that these new NLLP data visualization tools and training sessions will support NLLP users in exploiting, monitoring, and reporting on NLLP data, as well as increase the use of the NLLP. We're continuously developing new NLLP data visualizations and refining our training material. We welcome feedback from NLLP users on what visualizations and training they would like to see in future.

Sometimes, NLLP users may need to conduct a thorough search of the NLLP for LL information relating to a specific topic. In some situations, an NLLP ACM Request for Information (RFI) can be submitted to the JALLC to assist with this. If the RFI is accepted, JALLC analysts can deliver tailored analysis products that summarize and detect trends in NLLP content relating to the customer's specified topic of interest. Although some items in the NLLP are only visible to the Originating and Tasking Authorities, JALLC analysts have access to all NLLP items, allowing for a more comprehensive picture than an NLLP user may be able to obtain. Previous NLLP ACM products, found within the NLLP ACM area in the NLLP, have informed capability development, doctrine reviews, and discussions at national or NATO committees and working groups.

For more information on training opportunities to learn about exploiting NLLP data (via the LLSOC, LLMC, Local NLLP Manager Course or tailored training), check out the training section [on the JALLC's website](#). If you have any feedback on the NLLP data visualizations, or would like information on requesting NLLP ACM products, please contact us on analysis@jallc.nato.int.



JALLC Staff takes part in the LLSOC 2022



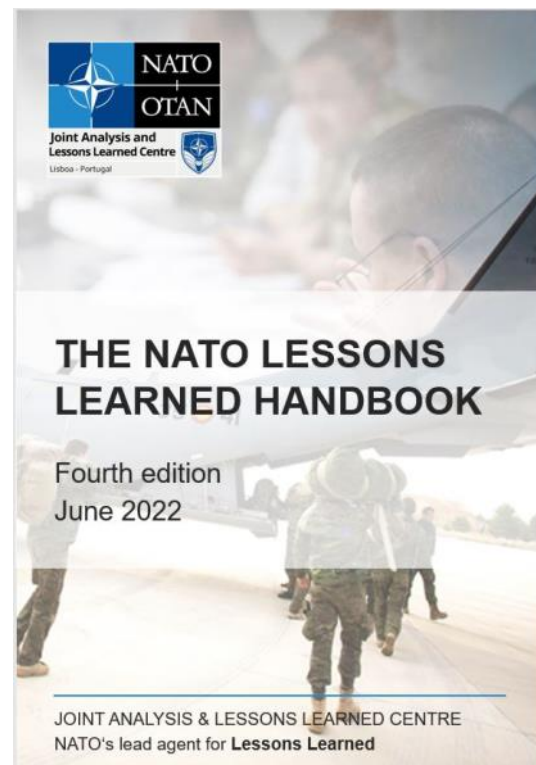
The fourth edition of the NATO Lessons Learned Handbook was recently published by the JALLC. This edition aligns the Handbook with current key Lessons Learned documentation as well as the recent updates to the NATO Lessons Learned Portal and the latest thinking on Lessons Learned in NATO.

NATO Lessons Learned HANDBOOK

Over the years, the JALLC has developed and published several books and guides on topics related to the JALLC's expertise. These books and guides, which provide comprehensive guidance for NATO and JALLC analysts, are regularly updated by the JALLC.

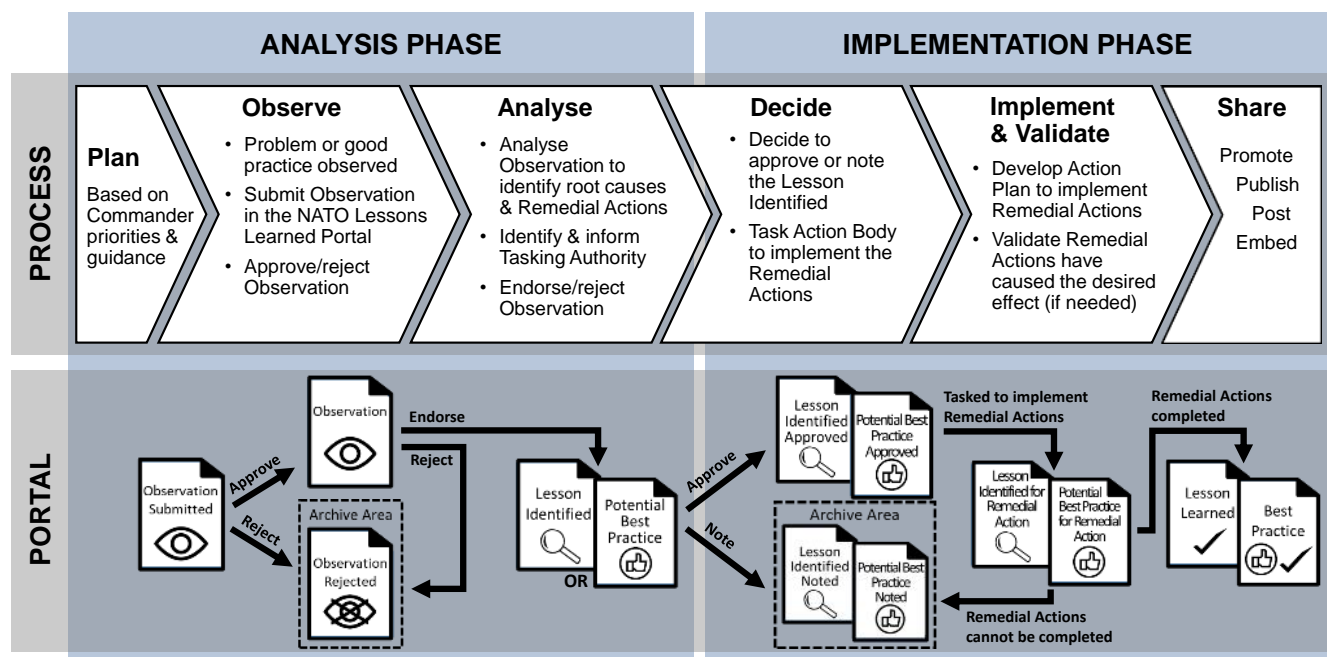
Although there are lots of changes to the layout and content of the most recent edition of the Handbook, the purpose remains the same: to guide and assist Lessons Learned practitioners to fulfil their role in supporting NATO to effectively learn from experience.

The NATO LL Handbook is an important read for all of us. It helps us to understand how we can implement the NATO LL Capability effectively in order to learn from experience and drive the transformation of the Alliance. It refers to the NATO Command Structure approach to LL, but its content is relevant to the broader Alliance as well as to NATO Partners and other organizations potentially interested in how NATO does LL.



Thanks to the Joint Warfare Centre for providing the JALLC with the images for the cover of the NATO LL Handbook

NATO LESSONS LEARNED PROCESS & PORTAL



One of the figures from NATO Lessons Learned Handbook that depicts the NATO Lessons Learned Process as it relates to the NATO Lessons Learned Portal

Topics covered in the Handbook include:

- What do we mean by Lessons Learned?
- An overview of the NATO Lessons Learned Capability;
- NATO Lessons Learned Process Analysis Phase;
- NATO Lessons Learned Process Implementation Phase; and
- NATO Lessons Learned Information Sharing.

You can download a copy of the NATO Lessons Learned Handbook by clicking on the picture of the cover of the book on this page (top right), or you can visit the JALLC's website and download a copy along with other useful Lessons Learned and JALLC Activity related information: www.jallc.nato.int.

NATO Lessons Learned Conference 2022

From 04 to 05 May, the JALLC hosted the NATO Lessons Learned Conference in a hybrid format, broadcasting live presentations and discussions from the studio in Lisbon to the online audience across NATO, its Partners, and beyond. This summary provides a brief summary of the event, more details are available in the First Impression Report and Final Conference Report, both downloadable from the NATO Lessons Learned Portal.

Overview

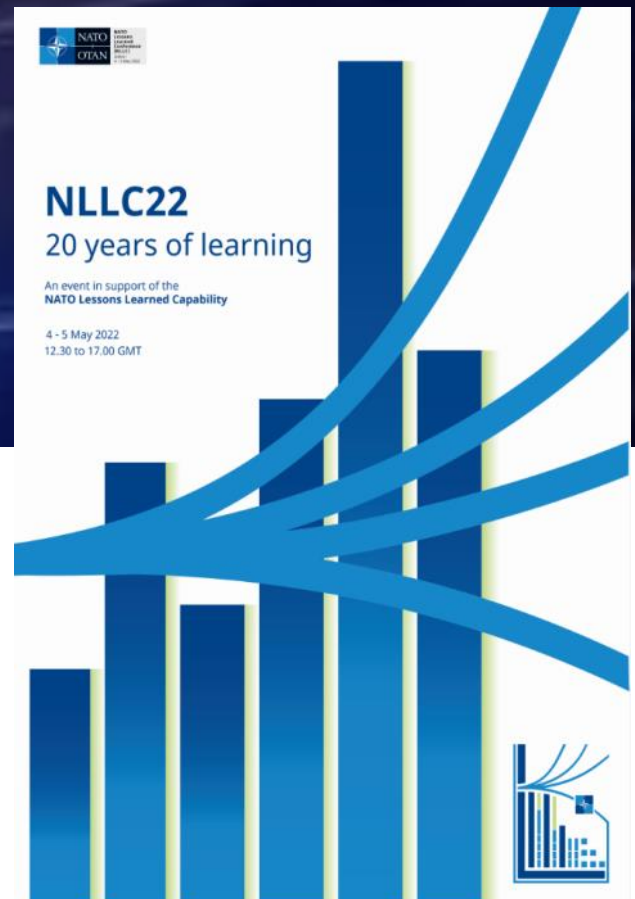
The 2022 edition of the NATO Lessons Learned (LL) Conference (NLLC22) was a huge success. The live-online hybrid format allowed participants from Allies and Partners to attend presentations and participate in discussions that focussed on the conference theme:

“A flashback of two decades of learning to gain insights for the next five years”

The theme was intended to draw lessons, best practices, experiences, and good ideas from the past 20 years of learning lessons in order to inform the further implementation of the NATO LL Capability Improvement Roadmap (2021-2025) aimed at ensuring a relevant and resourceful NATO LL Capability for the future.



Brigadier General Bogdan Cernat, Commander JALLC, addresses the NLLC22 audience.



The conference theme was broken down into four topics that were further addressed in panel format with Key Speakers for each panel setting the scene on the opening day of the conference, and the Panels presenting their key takeaways to the audience on the closing day.

On the next pages you can read more about each topic and the key takeaways:

- **LL in Support of the Warfare Development Agenda**
- **Innovation in Support of Lessons Learned**
- **Overcoming challenges in learning enduring lessons in Exercises**
- **Overcoming challenges in learning enduring lessons in Operations**

Deputy Supreme Allied Commander Transformation (DSACT), General Paolo Ruggiero opened the NLLC22 noting that it was an opportunity for the whole LL community to reflect on the past to build for the future. The JALLC's Commander, Brigadier General Bogdan Cernat, noted that in these challenging times, Lessons Learned are more relevant than ever and highlighted the importance of continued improvement of the NATO LL Capability to ensure that the Alliance is ready to face current and future threats.



Lessons Learned in support of the Warfare Development Agenda

The first Panel of the NLLC22 focused on how LL can support the Warfare Development Agenda (WDA). NATO faces persistent competition from multiple actors across multiple domains. The Alliance's WDA is a planning tool to implement the NATO Warfighting Capstone Concept; a North Star vision for NATO's future Military Instrument of Power that includes multi-domain operations, resilience, cognitive work, and much more.

Panel Key Speaker, Major General Guillermo Cavo, Deputy Chief of Staff Joint Force Development, first set the scene for this panel which was followed over the NLLC22 days by intensive and productive panel discussions, culminating in the Key Takeaways.

Key Takeaways:

Updating the NATO LL Policy may provide some ground for a strategic alignment and engagement from the LL perspective across NATO, with Allies, Partners, and other organizations in line with the Warfare Development Imperatives resulting in improved transfer of knowledge / lessons between Allies and NATO Entities.

There is a need to include feedback loops in each WDA Line of Delivery to generate checkpoints that will allow for the capture and sharing of observations, supporting any review and update of the WDA.

Careful consideration should be given to unlearning lessons already learned in the past or current Alliance operating environment, but which may not be applicable to the future operating environment as envisaged with the WDA.

Key Takeaways:

Innovation implies three elements: new technologies, processes, and mindset (as the main driver). But LL staff need to be trained with the right skills to ensure LL innovation is effective.

LL effectiveness is not only about quantity but also about quality and organizational changes leading to improvement.

Lessons coming from projects and use of new technologies within national (e.g. US experience with the next version of their LL system) and multinational collaboration networks (e.g. through the Science and Technology Organization), should be considered during the development of the New NATO LL Toolset.



Innovation in Support of Lessons Learned

The second NLLC22 Panel was aimed at gaining further understanding on how innovation can support Lessons Learned. Since the JALLC hosted the New Technologies Event in 2018, it has remained dedicated to understanding how new technologies can potentially make learning lessons easier and more efficient. The Key Speaker for the second Panel was Dr. Michael Street, Head Innovation and Data Sciences in NATO's Communications and Information Agency, who presented his perspective of how innovation can support and is supporting Lessons Learned in NATO. The panel worked with both online participants as well as those onsite to develop their Key Takeaways.



Lessons from Exercises: overcoming challenges and shortfalls

Key Takeaways:

The NATO LL Process does not always allow for the time needed to do LL during an exercise and to initiate the NATO LL Process for observations made.

Reviewing the key NATO Exercise planning and reporting documents may provide the opportunity to innovate, adapt and apply lessons, so that exercise design can ensure prioritization and collection of observations during an exercise.

Innovative ways to show that LL is an opportunity to improve the way NATO works, rather than an extra reporting burden, may serve to improve the quality of LL in exercise reporting.

The NLLC22 panel that looked at lessons from exercises, focussed on identifying the challenges and shortfalls from learning lessons before, during, and after an exercise and how they can be overcome as well as how lessons can be better used to improve exercise design. The main constraint identified relates to competing timelines and priorities between the Exercise Reporting Process and the NATO LL Process. Key Speaker Air Commodore Adrian Hill, Deputy Chief of Staff Support, HQ Allied Air Command, reminded the audience of why NATO conducts exercises, highlighting some known challenges and potential solutions to set the scene for the panel discussions that resulted in the Key Takeaways.

Key Takeaways:

This potential future reality of faster-paced, intense conflict, should perhaps result in the need to reconsider the way NATO LL Capability is employed in operations such as ensuring the continuous collection of observations throughout the duration of the operation and not only during after action reviews.

Providing LL training, advertising successful LL stories, standardization, and incorporating new technologies in LL tools appear suitable ways to overcome barriers to LL information sharing relating to mindset, interoperability, and technical issues.

In operations, a LL mindset and timely implementation of remedial actions are critical factors for the mission success.



Lessons from Operations: overcoming challenges and shortfalls




























The subjects discussed by this panel touched upon: the changing nature of NATO Operations, applying the NATO LL Process in operations, leadership and LL mind-set, and LL information sharing. Key Speaker Major General Boga Ribeiro noted that the last 20 years of NATO Operations focused on a wide variety of the lower end of conflict intensity core tasks and types of operations and that the immediate future for NATO will require preparation for more complex, wide, intense, and fast operational environments. The panel then prepared their Key Takeaways based on the discussion covering a range of related topics.

NLLC22 @ a Glance

317 registered participants

22 Entities

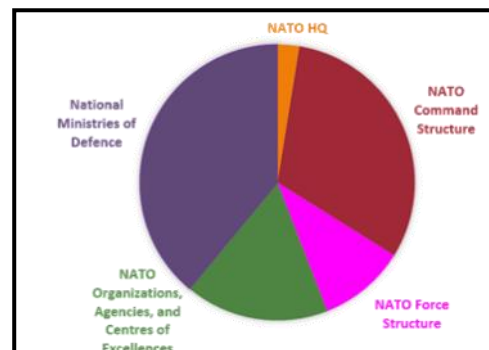
29 Nations

Albania	1	
Belgium	5	
Bulgaria	6	
Canada	9	
Croatia	4	
Czech Republic	17	
Denmark	2	
Estonia	1	
France	10	
Germany	16	
Greece	11	
Hungary	9	
Italy	25	
Latvia	4	
Lithuania	8	
Netherlands	9	
Norway	5	
Poland	16	
Portugal	23	
Romania	24	
Slovakia	2	
Slovenia	3	
Spain	25	
Türkiye	21	
United Kingdom	23	
United States	34	
Partner Nations	4	



What is the NLLC about?

Since 2003, the JALLC has hosted the annual NATO LL Conference, which has become an important event in NATO's LL calendar, bringing together participants from NATO and National entities,



developing a stronger NATO LL community. This event provides participants with the opportunity for the exchange of information within the NATO LL community and stimulates discussions on best and suitable practices for improving the current NATO LL Capability, enabling the continuous transformation of the Alliance. The NATO LL Conference is also an opportunity to engage with Partners and representatives from industry and academia to share insights on innovation and relevant new technologies. Conference recommendations are processed by the JALLC and fed into the NATO LL Process via the NLLP where they are monitored and actioned, contributing to the Alliance's Transformation.





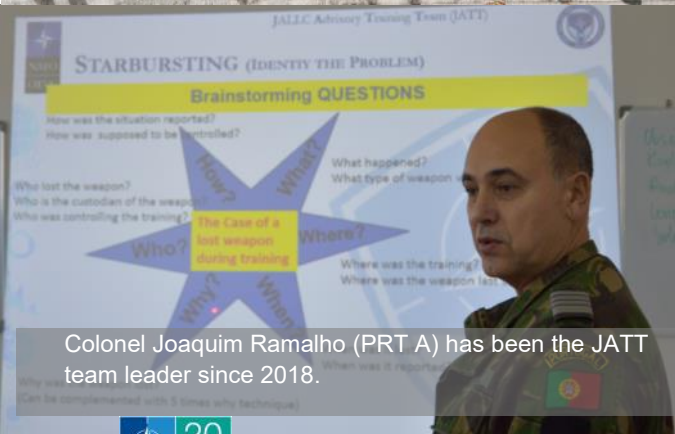
A HISTORY OF REACHING OUT



The JATT in Kabul to provide LL Training to Resolute Support Mission officials, March 2018.



The 2022 JATT includes old and new members that ensures the continuity of the training provided.



Colonel Joaquim Ramalho (PRT A) has been the JATT team leader since 2018.

Anyone familiar with the JALLC's activities knows that a big part of what we do is reaching out. Reaching out to the wider Lessons Learned (LL) community; not just within NATO, but beyond our borders to our partners. Why do we do this? Because in an international organization, LL only really works if we do it together. And that means cross-border, cross-domain, and cross-services.

The JALLC's Advisory and Training Team (JATT) was established in 2010 to facilitate LL implementation and provide on-site training and education. It has evolved and developed over the years into a sophisticated, highly-skilled, and dedicated team of JALLC staff members. We take some time to look back at the what the JATT has achieved for NATO over the years.

Early outreach activities conducted by the JALLC mostly focused on promoting the NATO LL Database (an earlier version of what is now the NATO LL Portal). However, these activities would quickly expand into other areas including training events at the Joint Force Commands and NATO HQ, as the need developed to enhance individual HQs' own Lessons capability. Part of these efforts included providing database support to the development of NATO's Defence Planning Process conducted at HQ SACT's Staff Element Europe at Liveoak on the Mons campus.

As the demand for LL training increased, in May 2009, the JALLC supported the pilot NATO LL Staff Officers Course (LLSOC), hosted by the Swedish Armed Forces International Centre, which to this day retains the directorship of the course. This highly popular course has trained hundreds of students from more than 40 nations (an average of 25% of each course's students represent Partner Nations) and is

responsible for a significant increase in appreciation and understanding of the value and importance of Lessons related activities within the military.

The course increased awareness both of the utility of the NATO LL Process and the JALLC itself, and as a result, the JALLC was increasingly requested to conduct briefings and trainings across the Alliance. This demand required the establishment of a mobile training unit that could provide training and mentoring in Lessons related activities, and a suite of media to promote Lessons management and JALLC analysis projects. This unit would become the JATT which was first established in 2010.

Originally intended to assist Member and Partner Nations as well as NATO Commands and Agencies, to establish and enhance their Lessons capabilities, the JATT advised on Lessons related processes, including NATO's own LL Process, Lessons related organization, and supporting tools. The JATT provided onsite training and mentoring activities and acted as a hub for the NATO LL Community.

The original team comprised of two members, but the demand for their support quickly became so great that the team was soon expanded to include a third member. The JATT members were civilian and military JALLC personnel from different backgrounds and nationalities ensuring the broadest possible scope and reach of the team.

Since 2010, the JATT has evolved into a crack team of instructors and experts that provide not only LL training but are also able to assess how HQs implement the NATO LL Capability and provide advice on how it can be done more effectively. Today, the principle of the LL training is to "Train the Trainers," so that Leadership, LL Staff Officers, and their LL Points of Contacts are able to implement, maintain, and sustain an organizational LL Process. Statistics have shown that the NATO LL Capability can degrade over time if staff are not reminded of the importance of the NATO LL Process and regularly practice it.

A hugely respected team across NATO and beyond, the JATT's current suite of LL training can include LL Point of Contact training, Key Leader briefings, training on LL in NATO Exercises and Operations, and much more. The aim of the modern JATT's efforts is to develop a strong information-sharing relationship with those it reaches out to.

You can read more about the JATT and LL training on the JALLC's website and requests for JATT support can be sent to jattpoc@jallc.nato.int. You can also [download](#) a copy of the relevant JALLC brochure which contains more information and details on not only the JATT but all of the JALLC's activities.



The early days of the JATT, from top to bottom: Students at the NATO LLSOC, Sweden; JATT Alumni en route to Kabul, Afghanistan to provide LL training; JATT Alumni with students during an outreach visit to Kazakhstan. The JATT provided its first course in Ukraine in 2018, with a very strong participation of over 40 students.

JALLC Analysis



Since the previous edition of The Explorer, the JALLC Lessons Learned Analysis Division has produced several impactful analysis projects for a wide variety of NATO customers. See what the team has been up to.

Joint Fires in NATO

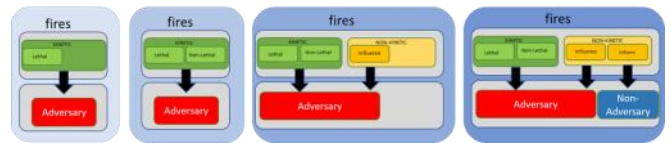
The JALLC published its report on *Joint Fires in NATO: Analysis of the relationships between Joint Fires, Joint Effects, and Joint Targeting* in May 2021. The report was the product of a six-month Joint Analysis Project intended for the Deputy Chief of Staff Strategic Employment at SHAPE.

Contemporary warfare is no longer confined to the traditional battlefield. Instead, it encompasses a wide range and often complex array of actions; everything ranging from the use of lethal force to strategic communications. These actions, known broadly speaking as fires in military terms,¹ are all aimed at, directly or indirectly, influencing either a potential adversary or other target audience.

In the NATO context, Joint Fires is a complex function which is intended to integrate all types of fires as efficiently and effectively as possible in order to produce the desired effect(s).²

The complex nature of Joint Fires as a multi-disciplinary function meant that extensive research was required to fully understand the scope and meaning of the diverse terminology used throughout NATO, its Allies, and Partners. Clear and standardized terminology is critical to all of NATO's activities and, as such the Project Team focussed on this area to identify how the

relevant terms were used and understood within the Alliance. Then the Project Team were able to distil and propose four basic interpretations of fires, which depend on how a person perceives the related terminology (see figure below).



The relationship between the key areas of Joint Fires, Joint Effects, and Joint Targeting (the process of carefully selecting targets in the context of a particular mission) was also analysed in order to understand how related current and future key documents might need to work together to ensure NATO has the best possible framework for an effective and efficient Joint Fires function for the Alliance.

The report highlights a number of challenges regarding the development of the Joint Fires function in the context of Joint Effects including relating to terminology and standardization and makes recommendations to improve the relationship between the functions. You can download a copy of the Joint Fires Factsheet [here](#) or visit the JALLC's website for more information.

¹ The JALLC notes that the term *fires* and specific related terms, such as *Joint Fires*, *Joint Effects*, and *Joint Targeting*, are more complex than presented here and recommend obtaining a copy of the corresponding JALLC report for those who wish to better understand this terminology.

² Ibid.

There are diverging views as to what encompasses the term Fires; the different perspectives include everything from traditional gun fire to strategic communications (picture source: Allied Land Command).



Building Integrity in Operations

In October 2021, the JALLC published a report on Building Integrity In Operations (BIIO). This project was requested by the Assistant Chief of Staff of SHAPE J9 in order to analyse the measures taken to date to tackle corruption and foster integrity within NATO Missions and Operations, in order to understand the context, synergies, gaps, and enduring challenges.

Corruption has a corrosive impact on peace and security, weakening the fabric of our societies, as well as undermining the operational effectiveness of the Alliance's missions and operations. Lessons from the NATO-led International Security Assistance Force (ISAF) have shown how endemic corruption made it more difficult for NATO to achieve its mission goals of enhancing security in the country. Recognizing corruption as a security threat, the Alliance's heads of state and government endorsed, at the 2016 Warsaw Summit, the NATO Building Integrity (BI) Policy. Since then, NATO has taken practical steps at the strategic and operational levels to tackle corruption and foster integrity across the Alliance. However, there remains less visibility over BI activities taking place at the tactical level, within Missions and Operations.

In the report, the Project Team concluded that some of the early lessons on the impact of corrup-

tion on ISAF contributed to strategic policy and structural improvements within NATO. However, there are still several challenges to overcome to begin translating these strategic level improvements into substantial changes at the tactical level.

Also, there are still many lessons to be learned, and there is room for improvement in current practices to tackle corruption in the area of operations and curtail its negative effects on the mission. NATO invests a great deal of effort in improving its internal processes aimed to tackle corruption and build up the integrity of its troops.

The Alliance's forces deployed to Missions and Operations also work on helping Host Nations tackle the corrosive effects of corruption, through training or helping set up biometric payroll systems to tackle the problem of ghost soldiers, to give one example. As such it is imperative to recognize that everyone involved in a mission or operation is responsible for BI and Counter- and Anti-Corruption (CAC) activities and not just selected staff members such as the procurement staff in the field

The report contains a number of recommendations which, taken together, can help advance the implementation of BI/CAC measures in NATO missions and operations. These include the revision of key NATO documents and the establishment of an impact-based monitoring and evaluation system for BIIO at the tactical level, integrated with operations assessment and mission reporting.

You can read more of the recommendations made in the [factsheet on this report](#).



Iraqi men demonstrate against corruption and poor services in Tahrir Square, central Baghdad, Iraq. Taken from the NATO website; attributed to Reuters.



Lessons from the CIMIC Role in NATO's COVID-19 Pandemic Response

The Civil-Military Cooperation (CIMIC) function was critical in facilitating NATO's response to the COVID-19 pandemic. From providing military airlifts, setting up field hospitals, sharing medical expertise, NATO CIMIC staff helped the civilian efforts in delivering aid to parts of the world most in need.

Such complex coordination falls under the NATO premise that CIMIC is *"A joint function comprising a set of capabilities integral to supporting the achievement of mission objectives and enabling NATO commands to participate effectively in a broad spectrum of civil-military interaction with diverse non-military actors."*

SHAPE J9 and the CIMIC staff at the military-strategic and operational levels continuously liaised with NATO's Euro-Atlantic Disaster Response Coordination Centre, national authorities, as well as with humanitarian and international organizations throughout the NATO response to the COVID-19 pandemic. These activities demonstrated the importance of CIMIC in reacting to current and future global emergencies. The JALLC was engaged to produce a report capturing first-hand accounts of CIMIC staff directly involved in the initial COVID-19 response, in order to capture the knowledge and expertise gained from this experience.

The JALLC Project Team identified two key take-aways. The first takeaway is that, during the initial response to the COVID-19 pandemic, CIMIC staff were reliant on ad hoc arrangements. The second asserts that, in order to be a successful civil-military liaison, you have to: *"make friends before*

you need them," highlighting the importance of civil-military interaction and familiarity prior to crisis response.



NATO's Euro-Atlantic Disaster Response Coordination Centre organizes the delivery of 30 ventilators from NATO's Pandemic Response Stockpile to Bosnia-Herzegovina, 24 January 2022.

The report, which was published in October 2021, presents three overarching conclusions on what could be improved in future NATO pandemic responses which cover cross-functional coordination between all CIMIC actors, training and education and improving/developing resources and tools to facilitate stronger civil-military partnerships and assist in the execution of the CIMIC staff role. You can read more about the project in the factsheet, which you can download from the JALLC's website [here](#).

The 2022 JALLC report on the NATO Standing Naval Forces notes that, "Benefits that Nations get from contributing ships include: enhanced interoperability between multinational ships, improved defence posture, and a demonstration of Alliance cohesion." Picture of the Standing Naval Force, courtesy of SHAPE.

NATO Standing Naval Forces

In March 2022, the JALLC published a report on the NATO Standing Naval Forces (SNF). This was the second study by the JALLC on the SNF, the first one being conducted in 2015 to evaluate the viability of the SNF. This second report was intended to better understand the identified shortfalls in force generation SNF as well as capture insights from the Nations as to what a future SNF should look like.

Much like the previous JALLC report on the SNF, this project was based on a survey sent out to representatives of all SNF contributing Nations. The 2015 survey was designed to capture the factors (positive and negative) that affect SNF contributions. Building on the findings from that project, the 2022 survey was designed to understand the extent of the impact that these factors have on SNF contributions and, by analysing the responses, determine the likely root causes of shortfalls in force generation of the SNF.

The key takeaway from this report is that Nations are willing to contribute ships, but are constrained by, inter alia: shrinking navies; aging ships; competing demands on national defence budgets; and naval personnel shortages. The report contains examples of some initiatives that can be undertaken by NATO to reinvigorate the SNF. However, there appears to be no single solution to address the SNF shortfalls and the report concludes that more innovative and alternate solutions may be required.

To find out more about this project, you can download the factsheet [here](#).

NATO's Response to the situation in and around Ukraine

In 2022, the JALLC, at the request of the Military Committee (MC), SHAPE, and HQ Supreme Allied Commander Transformation (HQ SACT), began work on analysing initial observations from NATO's response to the situation in and around Ukraine.

Although this work is ongoing, the first JALLC Analysis Report produced in the context of this project is already proving valuable to NATO decision makers. The work on this project will continue in 2022 with further analysis which will be published in a JALLC report later this year.



Train, Advise, and Assist Lessons from Resolute Support Mission

The Resolute Support Mission (RSM) was launched in 2015 with the intention of reaffirming NATO's crucial role in training, advising, and assisting the Afghan National Defence and Security Forces (ANDSF). As a military, yet non-combat mission, RSM aimed to provide security and stability, while creating the conditions for reconstruction and development of the country.

At the beginning of 2021, RSM consisted of around 10 000 troops from 36 NATO Allies and partners. The mission operated with one *hub* (Kabul/Bagram) and four *spokes* (Mazar-e-Sharif in the north, Herat in the west, Kandahar in the south, and Laghman in the east).

On 14 April 2021, recognizing that there was no military solution to the challenges Afghanistan faced, the Allies decided to start the withdrawal of RSM forces by 01 May 2021. In early September 2021, after six years of operation, and 18 years since the beginning of the NATO-led engagement in Afghanistan, RSM was officially terminated.

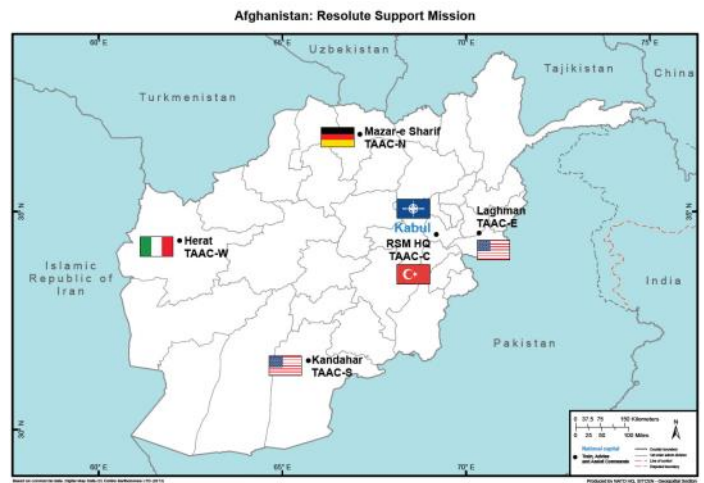
Within this context, at the request of SHAPE, the JALLC was tasked to produce an evidence based report identifying the key strategic and operational lessons from NATO's experience in training, advising and assisting the Afghan security forces and institutions since 2015.

The purpose of the report, which was published in March 2022, was to support the NATO strategic and operational level military HQs to learn from NATO's recent military experience in Afghanistan, with the identified RSM lessons benefitting the strategic and operational level military planning, conduct, and assessment of similar missions in the future.

The Project Team identified 12 lessons on topics such as Strategic Communications and the effect of the COVID-19 pandemic on RSM efforts and activities. The associated recommendations, together with the lessons identified will go on to support, not only future missions, but NATO's ongoing transformation.



US Soldiers oversee training of ANDSF recruits. Afghanistan, near Bagram Airbase, 2017. Picture courtesy of the US Army.



Last man standing: Major General Donahue, Commander of the US Army's 82nd Airborne Division, was the last to board the final flight (a C-17) out of Kabul Airport on 30 August 2021. Picture via Reuters.

You can read more about the findings from this report in the factsheet which can be downloaded from the JALLC's website [here](#) along with fact-sheets on other Afghanistan related JALLC projects from previous years.

JALLC ANALYSIS

To the Power of Three

In 2016, NATO's two Strategic Commands introduced the NATO Lessons Learned (LL) Optimization Action Plan which required the JALLC to: "...actively support the implementation and sustainment of the NATO LL Policy across NATO." The JALLC has since adapted its activities, including its analysis capability, which now offers three distinct types of JALLC Analysis to suit different requirements: Joint Analysis, Short Term Analysis, and NATO Lessons Learned Portal (NLLP) Content Analysis. In this article we take a closer look at these different types of JALLC Analysis.

Joint Analysis

Joint Analysis is the systematic and in-depth study of a complex issue involving multiple entities in order to identify enduring systemic improvements at the operational and strategic levels. JALLC Analysts use applied research and different types of analysis techniques to combine existing knowledge from inside and outside the organization in order to understand complex issues from different perspectives. The result of a Joint Analysis project is a knowledge product tailored to support specific decisions or staff work, and to capture and preserve knowledge as part of NATO's long-term organizational learning. A Joint Analysis project typically takes six to nine months to complete due to the depth and breadth of the research and analysis undertaken.

Since 2003, the JALLC has conducted over 200 Joint Analysis projects for customers from all over NATO, resulting in reports that contain actionable recommendations at the operational, military-strategic, and strategic levels. The JALLC's Joint Analysis projects have captured, preserved, and institutionalized knowledge on complex issues arising in nearly every major NATO operation, exercise or event since the JALLC was established in 2002. The JALLC's Joint Analysis products also support ongoing change initiatives and staff work in areas such as policy reviews, concept development, doctrine updates, exercise planning, and operational planning.

The JALLC is tasked by Supreme Allied Commander Transformation (SACT) to fulfil Joint Analysis Requirements for a variety of NATO (and NATO-affiliated) entities. HQ SACT regularly invites NATO (and NATO-affiliated) entities to submit their Joint Analysis Requirements for the JALLC's Programme of Work, and emergent Joint Analysis Requirements can also be submitted at any time. Finalized Joint Analysis products are delivered to the originator of the Joint Analysis Requirement and related stakeholders and also published in the NATO Secret side of the NLLP and NATO Information Portal sites, and, as appropriate, on the NATO Unclassified side of the NLLP. Report factsheets can be found on our website under JALLC Products. To learn more about how the JALLC approaches Joint Analysis projects or to submit a Joint Analysis Requirement for the JALLC's next Programme of Work, visit our website, or contact us at analysis@jallc.nato.int.



Ms. Jackie Eaton is the Principal Operational Research Analyst at the JALLC where she also began her NATO career as the Senior Operational Research Analyst in 2006. Between 2016 and 2018, she was the Science and Technology Advisor to the NATO Chief Scientist at NATO HQ, and has more than 15 years of NATO experience in a wide range of analysis in the context of defence, security and military operations.

Short Term Analysis

Short Term Analysis (STA) is the study of multiple sources of information/experience relating to a specific topic or activity in order to respond to priority LL information needs.

The JALLC is tasked with conducting STA when there is a need to know about issues with strategic implications in a timely manner in order to inform relevant stakeholders including NATO HQ and the Allies. STA is also employed when decision makers need LL information from a wider variety of sources than available in the NATO NLLP to support their work. In these circumstances, the JALLC produces reports which identify key issues and may include initial recommendations tailored to the needs of senior decision makers. The JALLC handles STA through direct observation, interviews, statistical analysis and documentary research.

STA projects usually last one to five months in order to provide a satisfying answer in a concise and timely manner appropriate to the situation.

NLLP Content Analysis

NLLP Content Analysis (NCA), part of NLLP Active Content Management (ACM), is the analysis of Lessons Learned information and trends in the NLLP in order to facilitate the reuse of LL information.

NCA is intended to support NATO and the Nations exploiting the Lessons Learned information contained in the NLLP. The results of NCA may identify the need for follow-on analysis such as STA or Joint Analysis.

NCA products typically take the form of routine reports that present an analysis of NLLP content and activity over a set reporting period, or ad-hoc reports that present a one-off summary of NLLP content relating to a specific topic of interest. Ad-hoc reports have previously been used to inform discussions at National and NATO committees, as well as capability development and doctrinal reviews. NCA may also include the development and use of NLLP data visualization tools, such as dashboards, some of which are made available to all NLLP users to support them in monitoring, reporting and exploiting LL information in the NLLP.

Did you know?

Access to NATO and the Nations: As a NATO body, the JALLC has access to relevant information from the NLLP, internal NATO repositories, NATO Operations, NATO Exercises, and the ability to reach out to NATO entities, the Nations, and Partner Nations in order to collect data and information that other entities cannot easily access. This enables the JALLC to quickly access relevant documentation and to identify and connect with appropriate experts.

Customer focus and understanding: The JALLC approaches every analysis as a unique requirement, working closely with its analysis customers to understand their needs and ensure those needs are met. The combination of military and civilian analysts, means that the JALLC's analysis project teams know NATO, know the military, and know how to professionally research and communicate complex issues to senior military and civilian decision makers. Making sure the information is delivered in well-written, clear, and concise products, on time.

Rigorous quality assurance: All JALLC Analysis and the resulting products are subject to a quality assurance process. Highly experienced and trained staff internally review all JALLC Analysis products for relevance, accuracy, and logical consistency. Additionally, whenever possible, JALLC Analysis products are sent for external review by relevant experts. This approach to quality ensures that JALLC Analysis products are useful and reliable references that remain valid in the long term.

Objectivity and independence: As part of the NATO Command Structure, the JALLC is well-placed to observe and analyse NATO-wide issues from an independent perspective—i.e. outside the scope of political or financial influences. The JALLC's evidence-based approach to analysis empowers customers and stakeholders to explore issues from multiple perspectives, to share knowledge and to build consensus.

JALLC Support to NATO EXERCISES



French Troops participate in Exercise Furious Hawk in 2019 © NATO

The JALLC has been providing Support to NATO's Exercises since its inception; publishing its first Exercise related report in 2003 covering Exercise NORTHERN LIGHT. 20 years on and the support the JALLC provides to key NATO Exercises remains as valuable as ever.

Group Captain Neil Cummins, head of the JALLC's Lessons Learned (LL) Analysis Division, which is also responsible for the JALLC's support to exercises activities, explains how the JALLC provides support to exercises these days, and how it contributes, not only to the exercise community, but to NATO's and the JALLC's broader activities.

Photos and exercise logos courtesy of the Joint Warfare Centre's (JWC) Public Affairs Office

Two decades of exercising

Stronger together



Group Captain Neil Cummins (GBR F) joined the British Royal Air Force in 1987, in what is now called the Cyberspace Branch. He has had numerous CIS related posts across operations, planning, policy and procurement. Prior to his appointment as the JALLC's Analysis Division Head in 2018, he spent four years as the J6 Management Branch Head at Joint Force Command Brunssum, where he was heavily involved in supporting the Resolute Support Mission.

NATO has been conducting exercises since 1951. These are key events that allow NATO and its forces to test and validate concepts, procedures, and systems across the organization and with Partner Nations in a wide variety of situations. Since its inception, the JALLC has played a key role in exercise Lessons Learned (LL) related activities, ensuring that valuable lessons and best practices are captured from exercises so that they can be analysed and potentially go on to transform the Alliance.



Below: Logos from NATO Exercises of the STEADFAST Series. Exercises are important tools through which the Alliance tests and validates its concepts, procedures, systems, and tactics. More broadly, they enable militaries and civilian organizations deployed in theatres of operation to test capabilities and practise working together efficiently in a demanding crisis situation. You can find out more about NATO Exercises [here](#).





General (Retired) Sir James Everard KCB CBE, the Lead Senior Mentor at the JWC's 2022 Senior Mentor Seminar.

The Evolution of Support to Exercises

Over the years, how the JALLC supports these exercises has evolved into what it is today: a small team of LL subject matter experts that are on hand to provide advice and guidance to

NATO Exercises that have been tasked in the JALLC's Programme of Work for LL support. Traditionally, the JALLC has provided its support in the form of training, advice, and guidance in the planning stages and execution of an exercise. This support ensures that NATO staff responsible for delivering the NATO LL

Capability during the exercise are fully prepared and capable of capturing potential lessons and best practices that then find their way into the Lessons Identified Action List and then into the NATO LL Process.

However, in recent years, as the capability of the Commands' own LL staff has improved, there has been less demand for this *traditional* LL support. Rather, the JALLC has been asked to provide more in depth LL Analysis support to exercises, often working with the NATO Senior Mentor, at key NATO exercises. These are usually Major Joint Operations Plus (MJO+) exercises, that are often multi-domain, NATO- and Partner Nation attended, and have a degree of complexity that requires extra LL Analysis support to ensure that strategic and higher operational level lessons and best practices are captured, in addition to the more tactical lessons that are more usually captured through the established NATO LL Process.

These strategic level lessons often need to be derived from a broad range of observations and potential lessons identified and best practices across multiple exercising HQs. The JALLC Support to Exercises team is ideally placed to identify these types of lessons and best practices as they observe the whole Exercise from an objective standpoint; not involved directly in any particular aspect of the Exercise or tied to any particular element. The team of three military analysts—which can be augmented as required—supported by one of the JALLC's Senior Operation Research Analysts, are able to synthesize the available data into meaningful and concise reports. These reports not only identify the

The JALLC and the Senior Mentor

potential lessons and best practices, but also, and where appropriate, set out recommendations and/or food for thought on how these lessons and best practices can be implemented.

This new type of support to exercises sees the JALLC working closely with the Senior Mentor to the exercise. The NATO Senior Mentor Programme is composed of former



US Marines hike in the snow during COLD RESPONSE 2022, the largest NATO Exercise of 2022. This is a bi-annual drill organized and hosted by the Norwegian Armed Forces

Flag or General Officers, recommended by their respective Chiefs of Defence to the Supreme Allied Commander Europe (SACEUR), to support NATO Commanders and Commands as they train and prepare for operations. At the NATO Senior Mentor Seminar 2022, which was held at the Joint Warfare Centre in June, Senior Mentor and a former Deputy SACEUR, General (Retired) Sir James Everard KCB CBE—who attended the JALLC’s NATO Lessons Learned Conference earlier this year—noted: *“The Senior Mentors have the experience, the access, and the time to support Allied Command Operations’ (ACO) commanders and their staffs during these challenging times – and do so extremely well.”*

Added Value

The JALLC team supporting the exercise can draw on this “*experience and access*” in various ways: from joining the Senior Mentor in key meetings allowing them to capture valuable data, to gaining insights from the Senior Mentors themselves on potential lessons or best practices identified during the exercise. The partnership results in the JALLC’s team being able to capture more and better data—at a senior level—which in turn results in better quality analysis and results. It’s not just a one way street however; the Senior Mentor has the benefit of being able to highlight areas of interest that may warrant further investigation by the JALLC’s team and can draw upon the JALLC team’s observations for his own analysis of the exercise.

The feedback from the JALLC’s new approach has been positive. The JALLC’s Short Term Analysis reports are well received, and lessons identified; best practices, and recommendations are being absorbed and taken forward where appropriate. These reports take between eight to ten weeks to produce and fall outside the scope of the regular exercise reporting process and its timelines, which allows the JALLC’s team to complete a thorough analysis of the data collected and produce a concise, useful report to the JALLC’s usual high standards. These reports have added value for NATO: they not only inform NATO of the potential lessons and best practices that can be taken forward, but they also provide a valuable source of information that JALLC analysts can draw on when conducting Joint Analysis tasks, serving the wider JALLC audience and so the Alliance.

Ultimately, we’re here to help. The JALLC’s Exercise Support Team is not evaluating whether Lessons Learned are “being done” at an exercise. We’re there to support those “doing Lessons Learned” and to ensure that NATO can learn as much as it possibly can from these events. The JALLC’s support to exercises will continue to evolve to meet the needs of the Alliance as it has done over the past two decades. But it seems that this more in depth style of analysis of Lessons Learned at exercises is a valuable capability for the Alliance today.

You can find out more about the JALLC’s Support to Exercises in previous editions of The Explorer and on the JALLC’s website [here](#).



Exercise participants to STEADFAST JUPITER 2021, to which the JALLC contributed, at the JWC in Stavanger, Norway.



SHAPE (then) Vice Chief of Staff Lieutenant General Brice Houdet, right, attends a briefing during Exercise STEADFAST BONUS 2020, to which the JALLC provided support, in Mons, Belgium. NATO Photo by SSgt Ross Fernie.

Explorer Features



THE EXPLORER Special Edition

2



In this section, JALLC staff members (past and present) take the floor and give us their opinions, stories, and news. From serious opinion pieces on the Madrid Summit, to meeting the JALLC's furry friends.

The opinions expressed in this section are those of the authors and do not reflect those of the JALLC, NATO, or any Nation or organization mentioned in context.

The feature articles in this edition of The Explorer include our usual thought-provoking opinion pieces, such as the article on the 2022 NATO Strategic Concept and on Environment, Climate Change, and NATO.

However, in this special anniversary edition we've also made some room for our past, present, and future. These feature articles include a "meta-editorial", wherein the JALLC's previous Editor explains the origins and rationale behind The Explorer; an article welcoming our newest Member Nations, by our Public Affairs Officer; a brief look at our Host Nation's history and rationale for joining the Alliance; a piece dedicated to Marco Almeida, recently nominated Military Member of the Year with a bright future ahead of him as he takes the next step in his career at NATO HQ; and, last but not least, an article on the JALLC's most pawssive members: our purr-fect resident cats.





Chuck back in 2005 when he joined the JALLC.



Tempus Fugit

An Interview with an Editor

No special JALLC Anniversary edition of The Explorer would be complete without a flashback on the history of the magazine. We were lucky enough to catch up with the JALLC's first Editor, Chuck Ridgway—the founder of The Explorer—on his travels through Europe to find out how this Magazine started and what was the thinking behind it.

Chuck was the JALLC Editor from 2005 until 2015. Prior to coming to JALLC he served for ten years as a nuclear trained surface warfare officer in the US Navy, then joined the US Navy Reserve in 2003. It was Navy Reserve orders that first brought him to the JALLC. Since leaving in 2015, he has continued his Navy Reserve career as an Africa Foreign Area Officer, retiring from the Navy after 29 total years of service in June of this year. In civilian employment, he has consulted with a number of international development NGOs and currently works with the UN Office of Drugs and Crime on a project to enhance maritime security in the Gulf of Aden.

I (the JALLC's current Editor) first met Chuck in 2012 when I was hired as a contractor to assist him with some editing work in the JALLC's (then) Production Branch. I was lucky enough to not only work *for* him as his assistant but also *with* him on several key JALLC Reports over the years until 2013 when he left the JALLC, and I took over as the JALLC's Editor. His legacy is a large one: everything from the JALLC Report Template in all its Microsoft Word Style glory, to Standard Operating Procedure 810 which is still the gold standard of writing and editing in NATO today. I also inherited this magazine; so it seemed no more than appropriate that I get his take on how it all came about.

How did The Explorer come to be?

CR Brigadier General Peter Sonneby, the JALLC's Commander (COM) from 2010 to 2014, had the original idea. He wanted something to highlight the many things the JALLC was working on that didn't fit into analysis reports. I have to admit, I didn't like the idea at first. I figured it would be difficult to come up with content, and that probably I'd have to create most of it. At the time we were publishing ten to twelve analysis reports a year and as the editor I was already swamped with that work and had little time for anything else. Adding what was essentially a Public Affairs task seemed like it was going to be too much. On top of that, we didn't have any appropriate publishing software. Adobe Suite was too expensive, so I had to use what software was available at the time: MS Publisher, which was not very sophisticated.

Is that why the early editions had very basic layouts?

CR In part. But some of that was also on purpose. I didn't like the idea, so I'll admit, I made an ugly layout (not that MS Publisher allowed much more) in the hopes people wouldn't like it and it wouldn't be repeated. That's why there is the clashing yellow-green title text over the (almost) NATO blue (I modified that colour slightly

to clash more with the green). The irony was the COM loved it! And eventually I grew to appreciate it too.

Why did The Explorer continue?

CR It served exactly the purpose BG Sonneby had intended. It was a useful way to document things the JALLC was doing, either during an analysis project—before the project itself had findings to share—or outside of our Joint Analysis activities, like the JALLC Advisory and Training Team (JALLC's mobile training team) or work on the NATO Lessons Learned Portal. It was also useful for sharing certain ideas, and subtle messaging, and not just externally but also to the JALLC staff. And since I drafted most of it, and always wrote the message "*From the Commander*" it gave me a chance to put my thoughts in there as well as someone who really had a unique perspective on the JALLC's activities and able to provide a "helicopter view" of what was going on.

Why didn't you include an Editorial in the early Explorers?

CR Because I wrote most of the content for The Explorer, I didn't really need an editorial: the editorializing was included in the articles; especially in the COM's foreword. But also because (at the time) it was just four pages. The idea was you could print it on A3, fold it, and take it

2011: Chuck (second from right on the back row) contributed to the early iterations of the JALLC Analyst Training Course which (then) included training on writing standards and how to use the JALLC report template: Chuck's area of expertise.



as a leave-behind during visits or put some in a stand at a conference or in the JALLC's entry way, similar to the Project Factsheets. There really wasn't room, and honestly I didn't have time, to create anything bigger or more in-depth. The idea really was to keep the JALLC staff and those involved in Lessons Learned and in our projects informed about what we were working on. But if you think we never got creative, check out Volume II, Issue 3 from June 2011, where we describe the JALLC's support to capturing data and lessons from the Libya operation (UNIFIED PROTECTOR).

How often was The Explorer published originally?

CR The idea was quarterly. But sometimes we missed that. Also, the report on the annual NATO Lessons Learned Conference report would be rolled up as a special six- or eight-page edition of The Explorer in October. Eventually we mostly published an edition of The Explorer when we felt we had enough content to fill up an issue and based on the general JALLC workload.

Where did the name "The Explorer" come from?

CR That's funny because I thought it would be obvious. We (the Production Branch back then: the Principal Operational Research Analyst (PORA), the Senior Operational Research Analyst, and our Branch Head) were brainstorming ideas for the name with the COM and someone, probably John Redmayne, the then-PORA, suggested it should somehow relate to the JALLC being located in Portugal. Someone, and I'm afraid I don't remember who, had just been linking our lessons learned work to the work of Dom Henrique (Prince Henry the Navigator) and his navigation "*centre of excellence*" in Sagres from where the voyages of discovery in the 15th Century were coordinated. Anytime one of the explorers returned from a voyage, they would stop at this centre, turn over their charts and logs, and report on their learning. This knowledge was then made available to the next explorer setting out. Given that the Padrão dos Descobrimentos is right in Lisbon and the strong links to discovery, exploration, and learning in the JALLC's Host Nation's history, it seemed natural to name the new newsletter in honour of that tradition. After trying out some variations of the word Discovery, we settled on The Explorer. As a maritime history buff myself, I loved it, and the name choice went some way towards softening my opposition to creating the new product.



These days, Chuck is still a busy man, albeit less chained to the editor's desk and more on the go in his role for the UN. Here he is aboard a transport ship in the port of Bosaso in Somalia.



A picture of the famous 25 April bridge and the Discoveries monument (which played a part in how The Explorer got its name, still hangs in the JALLC's hallways today.

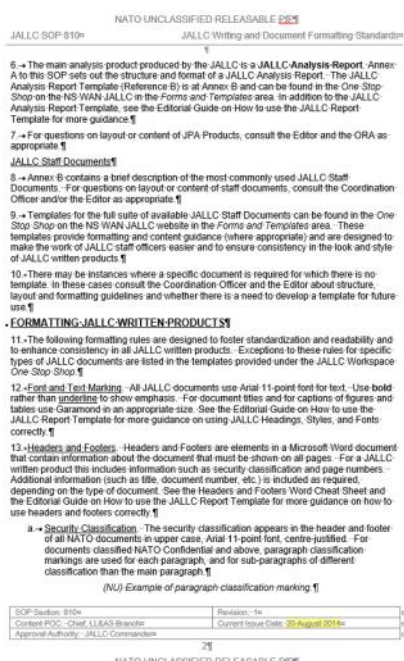
Changing the topic a bit away from The Explorer, we asked Chuck about the general history of editing in the JALLC and in particular about the JALLC's (in)famous Editorial Standards Standard Operating Procedure (SOP) 810 which in itself has gone on to provide the baseline for many different editorial guidelines in NATO. Chuck was the author of SOP 810, and we asked where the idea for Editorial Standards came from.

CR When I first arrived at the JALLC on Navy Reserve orders and worked on my first few documents, I needed some sort of reference to make decisions on style and layout. I quickly realized there was nothing like it, either at the JALLC or anywhere else in NATO. As a junior officer, I had always found it useful to have a written instruction or SOP to document processes I was responsible for. Quite honestly, it saves a lot of discussion if you can point to something that is signed by the COM or Chief of Staff (COS). There was usually enough work to do on a document. So I searched all around the NATO databases and came up with what references I could. The most useful thing I found was style guide by the Interna-

tional Staff Public Diplomacy Division (still available today in its current form), which made the Concise Oxford English Dictionary the official dictionary of NATO and answered questions like: should we use “among” or “amongst” (it’s among, by the way). Other useful reference were AAP-15, the (now terminated in favour of the new NATO Terms application) NATO acronym list and some internal instructions from the International Military Staff and SHAPE, although those largely referred to document processing and had little to do with formatting. I used non-NATO references too, like Strunk and White (a style guide in use in many American universities), the Associated Press Style Guide, and the Naval Institute Guide to Naval Writing. I settled on National Geographic as the reference for place names in English. I tried to include in SOP 810 some guidance on every style or layout question that came up when reviewing reports. In fact, it served just as much as a reference for me as an instruction for the rest of the JALLC’s staff. I’m glad to hear that SOP 810 is still in use and that others outside the JALLC find it useful too!

Any final words?

CR Yes. Congratulations on JALLC’s 20th birthday. I’m very proud that I was able to be a part of it for half of that time. And the JALLC can be very proud, not just for the learning it feeds into NATO on a continual basis but—and in my opinion this is extremely important—as a repository of historical information about the Alliance. No other body in NATO has had a permanent front row seat to so much of the Alliance’s activities and operations over the last two decades, or spent so much effort thinking critically about them. What was observed and learned is documented in our reports and on the NATO Lessons Learned Portal is of untold value to those in NATO facing today’s challenges.



The 2014 edition of SOP 810. SOP 810 has gone through various updates over time but is still the leading guidance on editorial standards in the JALLC and indeed beyond.



Stronger together

Welcoming Sweden and Finland as NATO's newest Member Nations

Finland and Sweden have both been long-standing and trusted Partners of NATO due to the shared values, joint membership in several International Organizations, and their strong and well-integrated militaries. Both countries pride themselves on their active neutrality in international affairs, with Sweden having avoided both conflicts or alliances since 1812, and Finland having been neutral since the end of the Second World War.



President Sauli Niinistö of Finland and Prime Minister Magdalena Andersson of Sweden met at the Madrid Summit on 28 June 2022 under the auspices of NATO Secretary General Jens Stoltenberg.



Plaque delivered in 2019 by the JALLC to the Swedish Armed Forces International Centre (SWEDINT) to celebrate 10 years of fruitful collaboration in the context of the Lessons Learned Staff Officer Course, one of the JALLC's key engagements.

Russia's unjustified invasion of a peaceful neighbour led to a historic shift in the public opinion of Sweden and Finland, tilting in favour of joining the Alliance. After thorough debates across their whole societies and with large parliamentary majorities supporting the decision, Finland and Sweden simultaneously handed their official letters of application to join NATO over to NATO Secretary General Jens Stoltenberg

on May 2022. NATO Heads of State and Government extended an invitation to Finland and Sweden to join the Alliance at the Madrid Summit on 29 June 2022. The accession protocols for both countries were signed on 05 July 2022 after completion of accession talks. The protocols must now be ratified by all Allies, according to their national procedures, with over a third of National Parliaments having already done so at the time of writing of this article.

The Secretary General said that NATO's door remains open to European democracies which are ready and willing to contribute to our shared security, and pointed out the importance of sovereign nations being able to choose their own security commitments. Furthermore, he pointed out the historic nature of this moment, and the augmented capabilities of NATO in light of this enlargement: *"With 32 nations around the table, we will be even stronger and our people will be even safer, as we face the biggest security crisis we have faced in decades."*

Since May 2009, the JALLC has organized and contributed to the Lessons Learned (LL) Staff Officer Course (LLSOC) in the Swedish Armed Forces International Centre (SWEDINT). The overall purpose of the LLSOC is to enable Lessons Learned Staff Officers to manage and execute an organizational LL process using NATO LL related processes, training, tools, and information sharing.

According to the JALLC Advisory and Training Team's (JATT) team leader¹, 13 years later, the highly popular course has trained over 1200 students from 40 countries, with many students coming from Partner Nations, and is responsible for a significant increase in appreciation and understanding of the value and importance of Lessons related activities within the military. You can read more on the JATT in the dedicated article on page 35.

The course increased awareness both of the utility of the NATO LL Process and the JALLC itself, leading to increasing request for further briefings and trainings to be held across the Alliance. In a way, the JATT was born out of the fruitful cooperation between the JALLC and SWEDINT.

The LLSOC has been NATO's premier course in training LL Staff Officers and points of contact these last 10 years. During this successful decade of training, the JALLC has managed the course curriculum and SWEDINT has hosted the course in Sweden. The course focuses on the implementation of the NATO's LL Capability, covering the NATO LL

Process, relevant analysis techniques, how Lessons Learned work in operations and during training and exercises, and LL Practitioner Information.

In 2022, the LLSOC received 49 students from 16 NATO Nations as well as Partners from Sweden, Switzerland, Ireland and Korea. The feedback from these students was that the course was well-received, as always, with an overwhelmingly positive student satisfaction. The students felt the content was well-presented with a good balance of briefs and practical exercises.

The JALLC and SWEDINT will, as usual, continue to refine and improve the course curriculum based on all of the student feedback.

¹ The JATT was stood up in 2010 to facilitate LL implementation and provide on-site training and education.



Lieutenant-Colonel Sonia Guerra is the JALLC's Public Affairs and Protocol Officer. She has been a PRT Air Force military officer since 1993, working for over ten years in the area of Public Affairs, first in the office of the Portuguese Air Force Chief of Staff, and later in the Ministry of National Defence.



Swedish SAAB JAS 39 Gripen fighter aircraft in refuelling position during NATO's Cold Response Exercise 2022.





NATO 2022 STRATEGIC CONCEPT

At the NATO Madrid Summit, held between 28 and 30 June 2022, NATO Nations and Partners discussed Global Peace and Security and adopted a new Strategic Concept; the first since 2010 and the eighth since 1949.

The Concept covers NATO's posture to the threats the Alliance currently faces, including those from near peers.

The Concept, [downloadable here](#), is intended to help NATO face the future. As such we asked the "future of NATO" their opinion on two aspects of the Strategic Concept: The China Aspect and the Russian Aspect.

Meet the latest interns to join the JALLC's Lessons Learned Analysis Division, Charlotte and Douglas, as they give us their take on these very topical issues.

The China Aspect



Mr. Douglas Peer is a graduate student at the University of Pittsburgh and a Military Intelligence Non Commissioned Officer in the US Army National Guard.

NATO's recognition of the People's Republic of China as a challenger to NATO's professed values and security at the 2022 Madrid Summit is an important step in the evolution of the Alliance's role in the emerging geopolitical environment, with the presence of Indo-Pacific partners indicating how NATO could transform into a more global organization. Many Nations have recognized China as the most significant long-term threat to the free, rules-based international order that NATO was founded to protect.

However, the 2022 Strategic Concept leaves much of NATO's China policy open to different interpretations; NATO Nations will need to flesh out a unified approach towards Beijing to confront these challenges.

China is the world's second largest economy, its largest exporter, and maintains a large international economic project known as the *Belt-and-Road*. China seeks to lead an alternative global system that promotes authoritarianism as a superior model for economic growth. China further seeks to set a precedent to reduce international criticism of its human rights abuses. If the liberal-democratic world does not collectively challenge Beijing's influence and disregard for human rights, it is possible that much of the global progress made in promoting human rights and civil liberties are rolled back.

While strategic competition with China would mostly be political and economic, China's eventual plan to obtain international hegemony may necessitate waging several successful military campaigns against its neighbours in the Indo-Pacific. China has territorial disputes with several of them, most prominently over the status of Taiwan and the South China Sea. China is therefore likely to focus on developing its naval, air, littoral, and ballistic missile capabilities, establishing more overseas military bases, and utilizing its prominent cyber warfare and espionage capabilities. The US has taken the lead on this issue, but has a global military commitment while many Indo-Pacific states have relatively small or under-developed military forces. These nations do

not have a clear collective defence understanding, which makes combatting Beijing's vast military and economic power a significant challenge.

I would argue that a unified and stern NATO approach to the challenges posed by Beijing adds significant legitimacy to the promotion of NATO's values on the global stage. China has not participated in a military conflict in over 40 years, while NATO Nations have a wealth of military experience and tested capabilities. NATO Nations could assist regional partners by facilitating joint military exercises, increased information sharing, and signing more bilateral defence agreements. This could serve as a strong deterrent and help stifle Beijing's aggressive military expansion.



NATO's Eastern Flank: stronger Defence and Deterrence - Map (July 2022). Updated monthly and available [here](#).



Ukrainian President Volodymyr Zelenskyy addressing the NATO Madrid Summit, 29 June 2022.

The Russian Aspect



Ms. Charlotte Yelamos is a PhD candidate at King's College London's Department of War Studies, specializing in military intelligence collection tactics.

In response to the Russian invasion of Ukraine, NATO now has reinforced its Balkan states and Eastern flank with a considerable number of troops under direct NATO command in addition to those already deployed following the 2014 illegal annexation of Crimea. Making such a large number of troops ready for rapid deployment is a deterrence strategy, meant

not to provoke conflict, but to *prevent* conflict and preserve peace. This level of action has not been seen since the Cold War and is a considerable adaptation within NATO's 2022 Strategic Concept. While this is a necessary move by NATO to ensure the safety of the Nations, it is also a bold one. This is a shift for NATO, employing escalation management that also involves a certain degree of uncertainty.

Echoing its experiences with the Russian invasion of Crimea in 2014, NATO and the Allies followed similar actions of sanctions and cuts on cooperative activity. However, learning from Crimea, NATO recognizes that Putin's logic seems to be that territorial gains are permanent, while sanctions are temporary. Sanctions have been imposed before, and Russia weathered through. Therefore, the added decision to increase troop numbers in the Baltics and Eastern flank is a re-emergence of NATO's Cold War deterrence strategy, and demonstrated that they will respond with force should Article 5 be triggered. NATO could not prevent the war in the Ukraine and cannot end it, but by signalling deterrence there is a possibility it may prevent the conflict's expansion, and hopefully prevent future conflicts from breaking out in the first place. NATO's actions also involve a level of risk not usually taken by the organization. The accession of former Warsaw pact countries represented a geopolitical risk, but it is a risk the Alliance took long ago. Russia fundamentally opposes NATO expansion. When NATO accepted the former Warsaw Pact countries, it expanded into what Russia believed to be *'their'* territory, at least ideologically, despite these sovereign states having achieved full independence from Russia. The Cold War concept of a Russian sphere of influence into surrounding territories is not lost to history, it is still very much alive in Putin's memory and goals for his legacy. The increase of a NATO presence in these countries may not be taken lightly by Putin, who takes a defensive stance to any opposition—however non-threatening—particularly in a region that used to be under Russian influence.

The Madrid Summit of 2022 recognized that the nature of conflict is shifting and requires NATO to take more risk in its actions of deterrence, bringing in a new, or rather *returned*, approach from NATO to ensure peace and security within the Euro-Atlantic area.

Environment, Climate Change, and NATO:

LUTTER
CONTRE LE
CHANGEMENT
CLIMATIQUE

COMBAT
CLIMATE
CHANGE

The security implications of climate change



Mr. Luigi Fiora was formerly an Intern for the Lessons Learned Management Division at the JALLC, and is currently contracted to provide editorial assistance. He sees climate change as the most challenging and transformational issue of our times, requiring a comprehensive and holistic approach.

“Some may ask if NATO, a military alliance, should be concerned with climate change. My answer is that yes, we should, for three reasons: because climate change makes the world more dangerous, because it makes it harder for our military forces to keep our people safe, and because we all have a responsibility to do more to combat climate change”



Virtual speech by NATO Secretary General Jens Stoltenberg at the University of Copenhagen, 28 September 2020. [You can read the full transcript here](#)

Over the past few years, the threat of climate change caused by human activity has occupied an ever-increasing space in public debate and international policy, with many of NATO's Members taking a leading role to lead humanity towards a greener and sustainable future. Specifically, all NATO member states have pledged to reach net zero carbon emissions by 2050 as part of the voluntary pledges under the [2015 Paris Agreement](#). Spurred by these actions, as well as by the increasing impact climate change has on global security, NATO has progressively shifted its approach to the issue, recognizing it as *"a threat multiplier that impacts Alliance security"* in the [June 2021 Brussels Summit](#).

At that Summit, Nations invited NATO Secretary General to formulate an ambitious and concrete plan to reduce greenhouse gas emissions by NATO political and military structures and facilities, and to study the feasibility of reaching net zero emissions by 2050.

In the [2022 Strategic Concept](#), NATO pledged to *"become the leading international organisation when it comes to understanding and adapting to the impact of climate change on security,"* notably by significantly reducing emissions from military activities and adopting the [Climate Change and Security Action Plan](#). In it, Climate Change is described as *"the defining challenge of our time,"* with security implications felt both on Allied home territory and in its neighbourhood, such as the Sahel, Maghreb, and Middle East.

Specifically, NATO is looking at which aspects of Climate Change have security implications directly impacting the Alliance. The most notable is the way it directly affects Allied security. Extreme weather events can lead to humanitarian disasters, regional tensions and violence. Droughts, floods, and other extremes make life increasingly more difficult for people around the world, fuelling conflict, driving migration, and exacerbating threats by [adding pressure on competition for natural resources like food, water and power](#). The melting of Arctic ice has, for instance, created a new theatre for geo-political competition. Furthermore, national militaries are increasingly tasked to rescue people from floods, wildfires, and ever stronger hurricanes.

NATO provides disaster relief support; focuses on environmental risks to military activities and security in general, including environmental factors that affect energy supplies; and is looking for ways to improve energy efficiency in the military through innovative technologies. Reducing fuel use would

enable economic savings, as well as make our military able to better function without the need for shipping cubic tons of fuel across the globe. Some of these measures have already been implemented, as shown by the integration of solar panels into combat gear by the Netherlands, or the promising advances of hydrogen fuel cells and batteries to



Portuguese soldiers and firefighters put out wildfires caused by intense heat and decreasing precipitations, June 2017.



NATO tests smart energy technologies in its efforts to reduce emissions. Capable Logistician exercise 2019.

generate, store and transport energy.



Multidisciplinary drifting Observatory for the Study of Arctic Climate, Alfred Wegener Institute, 2020 .

The 2022 Madrid Summit proved an extremely fruitful occasion for NATO's adaptation to climate change. On the first day of the Summit, NATO hosted its first-ever High-Level Dialogue on Climate Change and related security implications. The main issues debated were NATO's adaptation to climate change, including by mainstreaming climate considerations in intelligence analysis and assisting with development of a methodology for mapping the NATO enterprise's greenhouse gas emissions. The Dialogue, which brought together NATO Allies, Partners, and other stakeholders from

around the world, will, under NATO's leadership, become an annual platform for international consultations on climate change, address security impacts in a collaborative way, and exchange best practices.

It also saw the presentation of the Secretary General's Report on Climate Change and Security Impact Assessment, part of an ambitious Action Plan on Climate Change and Security that NATO Leaders adopted at the Brussels Summit in 2021. In the Assessment, NATO recognizes climate change as the *"overarching challenge of our time,"* that will *"measurably"* increase the risks to security and *"worsen as the world warms further."* It calls for a fundamental transformation of NATO's approach to defence and security and sets NATO as a leading international organization in understanding and adapting to climate change.

The Secretary General further announced the creation of NATO's [Climate Change and Security Centre of Excellence](#), to be established in Montréal, Canada. Furthermore, he announced the Allies' decision to reduce greenhouse gas emissions by at least 45% by 2030, down to net zero by 2050; as well as a new methodology for measuring NATO's emissions, both civilian and military, in order to help guide gas reduction efforts. *"This is vital,"* the Secretary General said at the Dialogue, *"because only what gets measured, can get cut."* The aim is to ensure that NATO maintains its operational effectiveness and readiness in a more environment-friendly way.

The report's assessment informed the decision to include climate change in the new Strategic Concept, recognizing it as a major security challenge for NATO in the decade to come.



Over the past decade, NATO has already shown its ability to anticipate and adapt to environmental challenges. For instance, [NATO's new HQ](#) in Brussels, inaugurated in 2018, underwent major design efforts making it [one of the best insulated buildings of the Continent, powered by geothermal energy and solar panels](#). Besides providing accommodation to over 4000 employees, the new HQ represents a path for a future, greener, Alliance.

Through the COVID-19 pandemic, NATO has shown it can play a key role in supporting National Government's response to natural disasters. NATO airplanes delivered hundreds of tons of critical supplies. As such, its adoption of the ambitious Climate Change and Security Action Plan is not surprising, as it is a natural conclusion to a process begun by national leaders within the United Nations Framework Convention on Climate Change

(UNFCCC). While the 2015 Paris Agreement does not require countries to factor military emissions into their action plans, NATO has shown its adaptability by starting to assume a more prominent role in the fight against Climate Change. Because only by planning in advance and planning well, can we win the fight for the future of all humanity.



Composite picture of graphic depictions of NATO HQ's most innovative, environmentally friendly features. You can see the whole video on [NATO HQ's Youtube channel](#).

SECGEN's position:

"NATO's core task is to keep us all safe. Climate change is making the world more unsafe. So to fulfil our main responsibility, NATO must help to curb climate change."

Speech at the University of Copenhagen, NATO Secretary General Jens Stoltenberg, 28 September 2020.

"From the High North to the Sahel, climate change is a crisis multiplier. More extreme weather devastates communities, and fuels tensions and conflicts. Climate change matters for our security, so it matters for NATO. That is why NATO is determined to set the gold standard on addressing the security implications of climate change. Here in Madrid, Leaders will endorse a new Strategic Concept, the Madrid Strategic Concept. It will state that climate change is a defining challenge of our time. For NATO, this means three things: Increasing our understanding, adapting our Alliance, and reducing our own emissions."

Introduction to the High-Level Dialogue on Climate Change and Security at the Madrid Summit, NATO Secretary General Jens Stoltenberg, 28 June 2022.



Pictured, from top to bottom:

Sand and dust storm approaches Mazar-e Sharif ISAF camp in Afghanistan. In the case of no visual flight conditions, the tactical options, including rescue operations, are severely limited. Human health is also affected (increasing the risk of infection) and there is interference with emerging solar installations.
Source: German Armed Forces

The B-52 engine replacement programme will reduce fuel burn and lower the overall environmental impact all while enhancing aircraft range and endurance. Pictured: A U.S. Air Force B-52 Stratofortress bomber lands at Andersen Air Force Base.
© U.S. Air Force photo by Tech. Sgt. Richard P. Ebensberger

Portugal and NATO: 1949-2022

"Portugal wishes to assert that she sees in the North Atlantic Pact, not only an instrument of defence and international cooperation, but also, for the reasons and for the aims which govern it, a precious instrument for peace"

Dr. José Caeiro da Matta, Speaking at the signing of the North Atlantic Treaty, Washington, D.C., 1949



Colonel Manuel Rosa has been the JALLC's Chief of Staff since 2021, having previously served at the NATO Defence College in Rome, and in the Portuguese Army since 1988. You can read more about him in [on the dedicated page on the JALLC's website](#).

Today, Portugal is known as a staunch supporter and Ally of NATO. Renowned for its maritime discoveries and conquests, Portugal is a truly "Atlantic" country, stretching from the Iberian Peninsula to its Atlantic possessions. Its pioneering spirit and maritime heritage, combined with its geographical location, made it an appealing candidate for the 1949 North Atlantic Treaty.

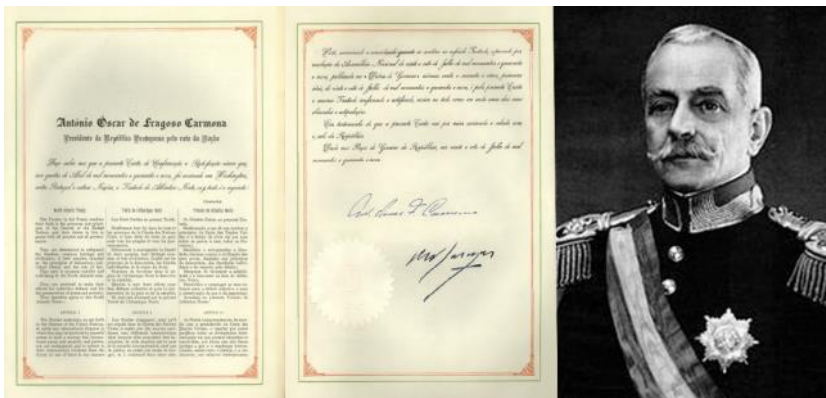
As Europe's westernmost mainland country, with a long and renowned history of discovery and exploration, Portugal has always had a key role in the geopolitics of the North Atlantic area. Portugal has also had a centuries-long military alliance with the United Kingdom, the oldest military alliance in the world. This history, combined with its progressive rapprochement with countries involved in the Second World War, made Portugal a very important strategic partner to ensure European Security.

The accession to NATO constituted a diplomatic victory for the regime in terms of its participation on the international stage. Joining the Alliance meant added prestige and the strengthening of Portugal's status as a whole; it also injected a degree of stability on the domestic front. More fundamentally, membership of the Alliance, albeit turned principally toward Central and Eastern Europe, increased the country's

security. And over time, it would also mean the development of Portugal's armed forces, which would benefit from changes in infrastructure, training,



NATO commemorative stamp issued by Portugal following the 1952 ninth session of the North Atlantic Council.



President António Óscar de Fragoso Carmona signed the Instrument of Accession for Portugal in Lisbon on 28 July 1949.

and the upgrading of its military personnel.

In 1952 the first key moment in the relationship between the Alliance and Portugal took place: the 1952 session of the North Atlantic Council took place in Lisbon. This was a crucial summit for the development of the Alliance, where several structural changes took place. Chiefly amongst these are the accession of Türkiye and Greece, representing the first expansion of the Alliance. Another

decision concerned the reorganization of NATO's civilian structure through the creation of a permanent body composed of national representatives, and the appointment of a Secretary General to support the Council in carrying out its increasing responsibilities.

Militarily, Portugal was crucial in establishing air bridges between the two sides of the Atlantic, thanks to its control of the Azores and Madeira islands, located roughly a third of the way between the Old and New World. In case of conflict, these would be crucial in ensuring the Alliance's freedom of navigation, resupplying maritime vessels and aircraft, and providing oversight to over 600 000 square miles of ocean.

The IBERLANT Command (also known as Allied Joint Force Command Lisbon from 1972 onwards) was inaugurated in 1967 and was the first NATO command in Portugal. In times of peace, the Command's role was basically to prepare plans and forces in case a war broke out. This involved conducting exercises, testing war procedures, and preparing forces to ensure they were ready for combat. Initially located in a villa near Sintra, it moved to its permanent Headquarters to Oeiras in 1971, where it would remain until deactivated in 2012, after 45 years of existence.

In 1971 the Iberian Atlantic Command (IBERLANT) moved to permanent headquarters in Oeiras



In its place, occupying the same Oeiras facilities, came the principal naval service command of NATO's Allied Command Operation: the Naval Striking and Support Forces NATO (STRIKFORNATO). This Command is tasked to deliver a rapidly deployable and scalable headquarters capable of planning and executing full spectrum joint maritime operations, primarily through the integration of U.S. naval and amphibious forces, in order to provide assurance, deterrence, and collective defence for the Alliance.

By then, Portugal was already hosting its second NATO body, our very own Joint Analysis and Lessons Learned Centre, which opened its Monsanto building in 2002.

Portugal has long played a crucial role in the Alliance of which it is a founding member. It is to date one of the few countries to host more than one NATO body, and has actively participated in all key NATO-wide operations to date, proving itself to be a strong and reliable partner in ensuring global peace and security.



In the Spotlight

Senior Airman Marco Almeida (PRT F) worked at the JALLC from 2019 to 2022, serving as Staff Assistant in the Support Branch.

During this period, the COVID-19 pandemic affected every aspect of our lives and our work. However, Marco shone through the dark times with his sense of humour and ability to see the positive in everything. He has been nominated for a special commendation from Allied Command Transformation (ACT): the Military Member of the Year.

In this article we find out why he deserves this award and hear in his own words about his time at the JALLC.

Introduction by Major João Rodrigues (PRT F), Head of the Support Branch at the JALLC.

The ACT Military Member of the Year (MMOY) Program was established to: *“recognize the most outstanding military members from all eligible enlisted/other ranks NATO personnel throughout ACT. Sustained superior performance, leadership, self-improvement and military appearance, among many others, are key facets of the best all-around MMOY, from ACT’s Command structure.”*

Candidates are selected from enlisted military from the whole ACT structure, including HQ SACT, NATO School Oberammergau, Joint Force Training Centre, Joint Warfare Centre Force, the Staff Element Europe, SACT’s Representative Europe, and the JALLC. For “our” Marco to be nominated was a big deal and as far as we were concerned: well-deserved.

Senior Airman (SrA – OR4) Marco Almeida enlisted in the Portuguese Air Force (PoAF) in 2016, graduating the Airman Course in October 2017, aged 21, specializing in Administration and Human

Resources. Despite his young age, SrA Almeida showed great aptitude for administrative management such as task prioritizing, workflow streamlining, situational analysis, and supporting leadership decision making. As such, he was selected to serve in the PoAF General Staff Headquarters – Human Resources



Marco with the Support Branch team (also known as the Machine Room) at the recent JALLC hike to celebrate the JALLC’s 20th Anniversary.

Directorate, where he remained until July 2019, responsible for the personal data management of over 15 000 staff comprising active, reserve, and retired PoAF personnel.

In 2019, following an entrance exam and selection board evaluation of his background, skills, personal character, and English language proficiency, SrA Marco Almeida successfully applied for the position of Staff Assistant (Clerk) at NATO's Joint Analysis and Lessons Learned Centre in Lisbon, Portugal, where he served until 2022 in the Support Branch, which ensures the day to day running of the HQ and without which, the JALLC simply would not function.

In 2022 he took up a civilian post working for the Portuguese Ministry of Foreign Affairs and works with the Portuguese Permanent Representative to NATO. We (the JALLC staff) are all very proud of "our" Marco and what he has achieved.

Marco himself can best tell you what it has been like working at the JALLC, studying hard to get his Bachelors degree, and making the next step in his career to work at NATO HQ in Brussels.



In his own words:

Marco Almeida; Personal Assistant to the Portuguese Permanent Representative to NATO.

"Work or Pleasure? *I could never decide how to define the JALLC, it was a mixture of both, from the long nights working at the Registry with David Peixoto when we were understaffed, to the late afternoon BBQs we had among peers. The JALLC is really a second home, and it will remain so for eternity.*

For me the Machine Room and the JALLC overall was a great career starter: I joined the Air Force at 20 years old and was posted at the JALLC when I was 23, for almost three years (two years and 11 months!). The JALLC showed me that I could aspire to more beyond the military life, it inspired me to spread my wings and study hard: I got my Bachelors degree, did a post-graduation course and am currently working on my Master's degree.

I no longer work at the JALLC, instead serving my country in another role, as a civilian for the Ministry of Foreign Affairs at NATO HQ with the Portuguese Representative to NATO. If it wasn't for the amazing people that worked with me and all those that passed by the Registry doors asking (and sometimes demanding) questions about everything and anything, I could have never made it where I am.



And, you are probably asking yourself, what is the Machine Room? Oh... it is a secret cult that only few (crazy) people can pass the membership exams of (including for example how many sweets you can bring to the JALLC kitchen...). Jokes aside, the Machine Room is what makes the JALLC work, and we are very proud of this gang.

Over the 20 years that the JALLC has existed, only a handful have stayed from the beginning (I'm looking at you, Tina and Paulo), but all of those who departed for new endeavors (like me) have left their mark at this Centre, and you can feel that from the first moment you get posted here.

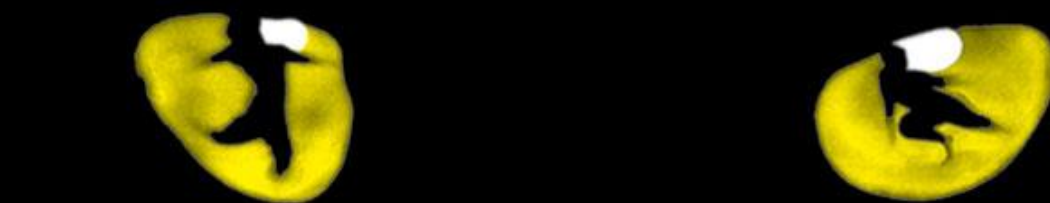
Then what about work? Yes, there's plenty of it, even too much for the little staff we have and the amount of assignments we get tasked to do. But work is work, and with the sheer amount of team-work that "JALLC-ians" have and learn to have, we can make just about anything happen. And it really contributes to this amazing atmosphere.

The JALLC will forever give me great "Saudade". But, we never know the future and whether I will come back. One thing I am sure of: if I were to come back I would be greeted with the same open arms I was met with the first time.



Part of what makes working at the JALLC special, is the sense of team spirit and family. Here Marco enjoys some downtime with colleagues outside the JALLC.





The C stands
for.....

CATS

Spend any time at the JALLC, and inevitably you will get mobbed and meowed at by the JALLCATS.



The JALLC's family includes its local furry feline gang that wait (not so) patiently every morning and at the end of the day for their beloved Tina, who knows them all and has been taking care of our colony since 2004. The Joint Analysis and Lessons Learned CATS have their own battle rhythm which sees them making their rounds along the JALLC windows to their favourite (i.e. those with treats) staff members for some attention.

Over the years, the ranks of the JALLCATS have steadily increased to include 13 permanent members, plus an extra six that have been adopted by staff and a few occasional temporary guests, doubtlessly attracted by the many perks available in our international working environment, such as free food, healthcare, and unlimited cuddles. Interviewed for the article, Tina said *"They are all good kitties, please feel free to get in touch with me if you'd like to adopt one, as other staff members have done in the past!"*



From the top:

Tina with one of her furry babies;

Milo, one of the JALLCATS to be adopted by a member of our staff, CDR Willem Vogel, admires a Portuguese Jacaranda from his new home with his foster sibling;

Brava, Jackson, Tom and Max enjoying a meal at the JALLC.

Taking care of the JALLCATS sometimes means patiently waiting for one to be "convinced" they need to go to the vet (to be sterilized usually).

Dear Readers,

What a privilege it has been and is to write for this excellent publication on the 20th Anniversary of the JALLC. I have thoroughly enjoyed taking the walk down the JALLC memory lane for you, and I hope you enjoyed reading about the JALLC's history, its culture, and its staff. Perhaps you found out something you didn't know about the JALLC, like why we changed our Crest and that we had JALLC directors before we had commanders.

Although I might be the current Editor and have been holding The Explorer's pen for nearly eight years now, it's godfather was my predecessor and editorial mentor: Chuck Ridgway. Chuck, a former US Navy reservist, left the JALLC in 2016 and currently works for the UN Office of Drugs and Crime. He has always remained a huge fan of Portugal and Lisbon, and returns every summer to enjoy the Portuguese weather, culture, and all it has to offer. On this occasion, the 20th Anniversary of the JALLC, it seemed only fitting that I catch up with him and make some "room" for my friend and colleague in this edition to discuss the "good old days" of the JALLC. In the interview on page 51, we found out how The Explorer got started and how the high Editorial standards of the JALLC were established.



Speaking of how The Explorer got started, this is the 22nd edition of The Explorer. It has gone through a few "versions" over the years, from a quarterly news letter, to the annual magazine it is today. We've had a few special editions over the years, including our 15th anniversary and NATO's 70th anniversary and the look and feel of the publication has changed a lot since the first copy came out in 2010.

I think the evolution of The Explorer reflects the evolution of the JALLC; we move with the times and the needs of the Alliance. We are a small HQ but we have a lot to offer; as this special edition of The Explorer shows.

I hope you enjoyed this special edition.

Jodie

The JALLC's Editor



From left to right: the very first edition of The Explorer in 2010. The 2016 look after I took over as Editor. The 15th Anniversary special edition already displaying the new Crest. The 2018 update of The Explorer's look. The special edition for NATO's 70th Anniversary. The 2021 edition of The Explorer after the NATO-wide rebranding.

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