Welcome to this edition of The Explorer, which marks the 15th—Crystal—anniversary of the JALLC.

The pace of change today is increasingly fast and any new organization has to establish and prove itself quickly. We have done that, contributing to the Alliance’s transformation and achievements.

In this edition, you will find some of the highlights of our first 15 years, as well as our plans for the future. This time, the usual information on our news and recent projects is towards the back of the magazine and we begin with a range of articles from our current staff on the work of the JALLC and the lives of its people. There are articles on our work with academia, leadership, resilience, projecting stability, and many more.

I am particularly pleased that we have been able to showcase the personalities, talents, and varied backgrounds of our staff. As I made clear when I took up the role of Commander, I strongly relate to the motto often used by US Forces—Mission First, People Always. So we have articles on the way that sport brings us together, on how working in the JALLC changed one of our team’s approach to NATO, on returning to the JALLC as a civilian, on being a project manager, on an office motorbike outing, and on the wonderful postcard collection of the Commander’s personal assistant.

Reflecting on the past 15 years, I am proud of the flexibility and adaptability that the JALLC has always shown; and looking to the future I can see that we will need to continue to adapt. In this respect, the JALLC will focus on its contribution to making NATO’s Lessons Learned Process as effective as possible while continuing its joint analysis efforts, delivering reports that meet the needs of our customers and exceed their expectations. In addition, we are already planning the next iteration of the NATO Lessons Learned Conference which will be held next year and looks set to follow a new and exciting format. Lots to look forward to.

Another exciting development is that, in conjunction with the 15th Anniversary we have decided to introduce a new shield that reflects the JALLC’s developing role. I am delighted to invite you to turn to the section on our Anniversary to see the new shield and what it stands for.

I would like to thank the staff of the JALLC past and present for their contributions over the past 15 years and look forward to what we will achieve in the next. Finally, I would like to thank our Host Nation, Portugal, and the Portuguese Air Force for their continued support to the JALLC’s mission.

Mário Barreto
Brigadier General, Portuguese Air Force
<table>
<thead>
<tr>
<th><strong>15th Anniversary</strong></th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>New JALLC Shield</td>
<td>2</td>
</tr>
<tr>
<td>15 Years of Joint Analysis and Support for Lessons Learned</td>
<td>4</td>
</tr>
<tr>
<td>15th Anniversary Book</td>
<td>5</td>
</tr>
<tr>
<td>JALLC: The Movie</td>
<td>6</td>
</tr>
<tr>
<td><strong>Our Mission</strong></td>
<td>7</td>
</tr>
<tr>
<td>The JALLC and Academia</td>
<td>8</td>
</tr>
<tr>
<td>Enabling Adaptive Leaders through a Lessons Learned Programme</td>
<td>10</td>
</tr>
<tr>
<td>The Search for a Strategic Lesson: Is it a Unicorn?</td>
<td>14</td>
</tr>
<tr>
<td>So you want to be a Project Manager?</td>
<td>20</td>
</tr>
<tr>
<td>The Concept of Crisis</td>
<td>22</td>
</tr>
<tr>
<td>Roosevelt-Style Resilience</td>
<td>26</td>
</tr>
<tr>
<td>How Many Shades of Data?</td>
<td>28</td>
</tr>
<tr>
<td>NATO’s Approach to Projecting Stability</td>
<td>30</td>
</tr>
<tr>
<td>Strategic Communications - Talking the Talk</td>
<td>32</td>
</tr>
<tr>
<td>JALLC Project Manager; Leadership or Management</td>
<td>35</td>
</tr>
<tr>
<td>Digital Badging - Who needs it? We do!</td>
<td>36</td>
</tr>
<tr>
<td>Three Years with the JAGUARS</td>
<td>38</td>
</tr>
<tr>
<td>The NATO Lessons Learned Staff Officers Course</td>
<td>40</td>
</tr>
<tr>
<td>Past, Present, Future - An Agency in Constant Transformation</td>
<td>42</td>
</tr>
<tr>
<td><strong>Our People</strong></td>
<td>43</td>
</tr>
<tr>
<td>Sport; Breaking Down Barriers</td>
<td>44</td>
</tr>
<tr>
<td>A Window on the World</td>
<td>46</td>
</tr>
<tr>
<td>The JALLC’s Easy Riders</td>
<td>48</td>
</tr>
<tr>
<td>Back to the JALLC</td>
<td>50</td>
</tr>
<tr>
<td>We couldn’t do it without them: The US Navy Reserve</td>
<td>52</td>
</tr>
<tr>
<td>How the JALLC Changed my approach to NATO</td>
<td>53</td>
</tr>
<tr>
<td>From Intern to Analyst - Living the Dream</td>
<td>54</td>
</tr>
<tr>
<td><strong>JALLC News and Projects</strong></td>
<td>55</td>
</tr>
</tbody>
</table>
15th Anniversary
The JALLC’s Shield was developed 15 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 from a maritime based organization to a joint service organization. The NATO compass featured in the middle of the arms.

In conjunction with the 15th Anniversary, the JALLC’s Shield has been redesigned to make sure that it represented the role of the JALLC and its relationship with the rest of NATO as well as possible.

The new shield is below (right) and is shown below next to the old shield (left) and its design explained opposite.

It will be used from 20 September on new publications and will replace the old Shield as stock is renewed.
For the creation of the new JALLC Shield, five principles were followed:

- NATO’s visual identity 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 Joint Warfare Centre and the Joint Force Training Centre.

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.

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

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 white colour represents peace, associated with the sense of security of the Shield.
15 Years of Joint Analysis and Support for Lessons Learned

On 06 December, 2002, a ceremony was held in Lisbon, Portugal, to mark the opening of the Joint Analysis and Lessons Learned Centre, 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 plate marking the opening was unveiled by Dr Paulo Portas, the Portuguese Minister of Defence, and Vice Admiral Roberto Cesaretti, the Deputy Chief of Staff SHAPE, and Vice Admiral Duncan Miller, Chief of Staff SACLANT, representing NATO.

Fifteen years on, we are marking the Crystal Anniversary of the JALLC. We now have over 60 staff—permanent, temporary, and contractors—from many NATO and Partner nations, including a partnership for peace colleague from Azerbaijan. The corridors and meeting rooms echo to the sound of English and French, of course, but also to a total of 16 other languages as people compare meanings and nuances, and work to craft exactly the right phrases to convey what are often complex and technical points. The members of staff learn from each other and are a great example of the whole being more than the sum of the parts.

Over the 15 years, the JALLC has produced about 200 reports on issues that cut across NATO commands and have contributed to the Alliance’s transformation. The JALLC has provided training in lessons analysis and use and has supported NATO exercises and has developed and supported the NATO Lessons Learned Portal. The JALLC has hosted 13 NATO Lessons Learned Conferences, which have become essential events for those who want to be at the cutting edge of NATO’s Lessons Learned Capability. The most recent conference had 275 delegates representing all NATO Nations and many other countries and organizations.

The JALLC has become a thought leader and knowledge custodian in NATO, a champion for innovation, improvement, and transformation and a unique capability within the Alliance, providing solutions to enduring NATO-wide problems that require a joint approach to their solution.

From its reports to lessons learned to training and exercises, the work of the JALLC has made a difference and has helped to ensure that NATO’s mission is fulfilled in the best possible way.

As George Santayana said, “Those who cannot remember the past are condemned to repeat it.” The JALLC’s role in helping us to remember and learn from the past is an important one.

At our celebration on 20 September 2017, we will look back on what has been achieved but most importantly will look forward to the challenges and opportunities of the next 15 years and a continuing—indeed, enhanced—role in NATO’s transformation.
The book was produced with input not only from the JALLC’s staff, but also from the Joint Warfare Centre, JALLC Alumni, and the US Navy Reserve which provides support to the JALLC on a regular basis.

Commenting on the book the Commander said: “This publication represents the heart and soul of the JALLC and has been an excellent opportunity to reflect on the past at a time when the JALLC is looking to its future. I hope that everyone who reads ‘15 Years of the JALLC’ will enjoy the informative sections explaining what the JALLC does and how it does it, as well as the trip down memory lane.”
For the 15th Anniversary, the JALLC is producing, with the assistance of the Joint Warfare Centre, a short informative film about the JALLC and what the JALLC does.

As stated on the website of NATO’s STRATCOM Centre of Excellence, the Strasbourg I Kehl Summit declaration states that, “...it is Increasingly important that the Alliance communicates in an appropriate, timely, accurate and responsive manner on its evolving roles, objectives and missions. Strategic communications are an integral part of our efforts to achieve the Alliance’s political and military objectives.”

Today’s information environment, characterized by a 24/7 news cycle, the rise of social networking sites, and the interconnectedness of audiences in and beyond NATO Nations' territory, directly affects how NATO actions are perceived by key audiences. That perception is always relevant to, and can have a direct effect on the success of NATO operations and policies. NATO must use various channels, including the traditional media, internet-based media, and public engagement, to build awareness, understanding, and support for its decisions and operations. This requires a coherent institutional approach, coordination of effort with NATO nations and between all relevant actors, and consistency with agreed NATO policies, procedures and principles.

NATO Strategic Communications is the coordinated and appropriate use of NATO communications activities and capabilities in support of Alliance policies, operations and activities, and in order to advance NATO’s aims. These activities and capabilities include Public Diplomacy which encompasses among other things: NATO civilian communications and outreach efforts responsible for promoting awareness of and building understanding and support for NATO’s policies, operations and activities, in complement to the national efforts of Allies, and Public Affairs which involves NATO civilian engagement through the media to inform the public of NATO policies, operations, and activities in a timely, accurate, responsive, and proactive manner.

Taking this into consideration the JALLC decided to produce this short film that would celebrate the 15th Anniversary of the JALLC and explain exactly what the JALLC does for NATO and the Nations. The idea came from the 10th Anniversary video which is available on the JALLC’s You Tube Channel. Once again the JALLC has asked its sister organization the Joint Warfare Centre to help us put something together that we hope is entertaining and informative. The film will be launched in conjunction with the 15th Anniversary celebrations in September 2017.
Our Mission
The JALLC and Academia

COL Henrique José Pereira dos Santos, PRT A, Chief of Staff JALLC

The JALLC is the focal point for NATO’s collection of best practice resources. Having had this capability over the past 15 years, this Centre has become specialized in two major areas of work, as stated in its own mission: 1) joint analysis of operations, training, exercises and experimentation, which covers complex problems that are relevant across more than one unit; and lessons learned, which covers the sharing of lessons and the facilitation of the development of lessons learned capabilities.

These two main areas of work have resulted in nearly 200 analysis projects, constituting one of the main contributions to NATO’s overall transformation process over the past decade. In order to undertake this considerable body of work—creating a major capacity for innovation, studying complex problems, and proposing original and creative solutions—we rely on strong intellects and team work. This leads us to what is the biggest strength of this Centre, which is our people, with their mix of abilities and backgrounds and their skill in working together so that the results are more than the sum of the parts.

However, internal capabilities can never be sufficient on their own. No matter how strong, they can always be reinforced and enhanced by external support from those whose expertise, experience, and interest can add value to JALLC’s projects. The importance of cooperation with external entities, such as universities, industry, think tanks, companies, major enterprises, international organizations, Non-Governmental Organizations, and others is obvious. So long as we keep in mind the need to preserve information security where necessary, such collaboration not only brings advantages to both parties, but also opens up a vast range of opportunities for all the players involved.

Recent activities, such as the JALLC–Royal United Services Institute (RUSI) workshop, which took place in London on 27 May 2017, and the visit of the Universidade Lusíada to the JALLC on 07 April 2017, provide evidence and learning about the way that this kind of cooperation can work and bring benefits for all. RUSI, as the oldest think tank in the world regarding defence and security matters, provided interesting insights on some of the ongoing projects being undertaken by the JALLC. The visit from University was an excellent opportunity for the students and teachers to learn more about the JALLC and the kind of opportunities that might be open to them in the future within NATO.

Of course, this concept is not something new. The same idea was expressed by SACT General Denis Mercier, on several occasions, such as during a visit to Silicon Valley, when he referred to:

"...the need to continue to find innovation and the importance of working together [with Stanford University and other organizations] to find innovative solutions to challenges today and in the future."

In general, the problems that the JALLC most commonly provides analysis for are strongly related to issues of concern at a high level of command, and are those with an impact in the long term. Our focus is different from the more routine subjects and problems that are normally handled by an individual organization or unit’s staff. We consider complex

1MC 0500/2; NATO International Peacetime Establishments; 29 January 2013.

environments with a multiplicity of variables and actors, which require a professional approach, new ideas and out-of-the-box solutions.

The world of academia takes the same approach. All students at university level develop theses, essays, projects, and research papers in different disciplines and covering many topics of interest. Students learn to apply research techniques to deal with the complexity of the questions for which they have to find an answer. The similarities of the research process used by academia and the JALLC are considerable. Terms such as research questions, data collection, surveys, questionnaires, and proposals are part of the jargon used by both JALLC analysts and university researchers.

Given the high value and cost of human resources such as expertise, innovation, experience, and training in dealing with multifaceted challenges, making the most of the common ground between the JALLC’s work and the analysis of complex issues in high-level education research papers is a possible way of obtaining greater synergy and increasing the overall response capability. With flexibility and the smart use of resources, we should be able to use our joint high-value resources for the mutual benefit of NATO and our universities.

For the JALLC, the benefits would centre round the added value gained from theory, most obviously in joint operations, cyber defence, command and control, intelligence, sustainability, and civil–military cooperation. Knowledge and research in defence, security, strategic studies, and international relations, would all be of interest.

There would be particular advantages in working with military and defence-related universities. Most military researchers attending military universities have a very rich background of previous experience, part of it in NATO operations. Most of these personnel are security cleared for their previous responsibilities or assignments. This would allow classified information to be handled, under specific regulation, by an outsourced capability, increasing the total capability available and allowing synergies to be realised.

For academia, such cooperation would have the advantage of ensuring that their work is not exclusively theoretical but has a link to real world problems, so that any practical applications are realised. The valuable resources of time, money, effort, and brains should as far as possible be used in ways that have useful results. Undertaking projects in common would also have the advantage of linking military professionals and researchers with military organizations; some may then work in or together with those organizations on future assignments, increasing the opportunities available to them.

Now let’s get to work. How do we make the most of this valuable link? In the same way that an effort has recently been made to increase cooperation with think tanks, a JALLC objective, following SACT guidance, is to increase cooperation with academia in general and with military and defence universities and institutes in particular. This can be done through protocols, partnerships, working visits, courses, seminars, workshops, and internships, but always needs the engagement of key leaders in the participating organizations. From the JALLC perspective, all staff members are looking forward to accepting this challenge.
In today’s uncertain and unstable world it is, more than ever, critically important that our military leaders and commanders have the ability to adapt rapidly to any situation they might face, whether working in their HQs on a complex staff issue or on the battlefield fighting an agile and capable enemy. Adaptability has been, and always will be, an essential attribute for every (successful) military leader and commander.

But what makes one leader more adaptable than another? To a certain degree, all humans are born with an innate ability to adapt—some more than others (survival of the fittest/most adaptable comes to mind)—but our military leaders will need a lot more than this baseline natural human ability to adapt in order to be successful in coping with the multitude and magnitude of challenges they will face both on and off the battlefield, now and in the future.

So, how can we prepare our leaders effectively for these challenges and increase their adaptability? One answer to this is through experience and education. People learn both from hard-earned personal experiences of succeeding and failing in certain situations, and from experiences gained from learning about the successes and mistakes of others. In this article, I will discuss some of the potential opportunities we have to educate both our current and our future military leaders. I will also focus on how an effectively run Lessons Learned (LL) Programme can be key to enhancing the adaptability of our leaders, by offering an increased opportunity to learn more quickly from the successes and mistakes of others.

Mindset, Leadership Engagement, and Stakeholder Involvement

Within NATO, it is accepted that there are six Lines of Development that constitute a nation or organization’s LL capability. These are: Mindset; Process; Personnel and Training; Technology; Standards; and Dissemination and Retrieval. In this article, I will focus solely on the first of these lines of development—Mindset—and what I perceive to be its particularly close relationship with, and importance to, Leadership Engagement and Stakeholder Involvement.

I believe that the three most critical non-materiel success factors for any effective military Lessons Learned capability are: Mindset; Leadership Engagement; and Stakeholder Involvement. If leaders and commanders don’t have an LL Mindset, they will fail to engage effectively in their organization’s LL process, which will in turn negatively affect the Mindset of their staff and therefore have a direct and negative impact on Stakeholder Involvement. In other words, I believe that Mindset, Leadership Engagement, and Stakeholder Involvement are inextricably linked.
What is the problem?

Based on my 30+ years of military service, and observing and working for, and alongside, many military leaders and commanders throughout my career, I assert that not many leaders and commanders that I have met have had a true LL Mindset. This is perhaps unsurprising, given the increasingly busy and complex working environment and the many pressing and high priority calls on leaders and commanders’ time. Due to full and often overbooked daily schedules, many leaders and commanders find it extremely challenging to devote even a small amount of time to Lessons or their organization’s LL process. This means that Lessons drop off both their priority list and—as the inevitable consequence—that of their staff. A leader that shows little or no interest in LL or the LL process in his organization/HQs should not be surprised to find that his staff make little or no time for Lessons and do not understand the value of a functioning LL process!

Some leaders and commanders are fortunate in that their HQs and organizations have very engaged and proactive Lessons Learned Staff Officers (LLSOs) and staff, who can perform parts of the Lessons function with no or minimal direction and guidance. But these LLSOs are fighting an uphill and often losing battle, especially when it comes to turning Lessons Identified into Lessons Learned, when they do not have the support from, or engagement of, their leader or commander.

What do we do about it?

So… how do we help our leaders to understand the importance of an effective LL Programme, not as an add-on, but as core to their ability to do their day job? How can we make sure that they understand the critical role that Lessons play in the development of military capability—so that they have the right LL Mindset?

We need to take a closer look at where our investment would reap the highest reward. This demands effort in the short to medium-term, orientated towards, and of benefit to, our current leaders and commanders, as well as effort that will be of benefit in the longer term, focused on our future leaders and commanders who are just arriving at our military training centres and academies. There is a huge opportunity to educate our future leaders and commanders early in their careers and inculcate in them the importance of a functioning and effective LL Programme.

What can we do to change the Mindset of our current and future leaders and commanders so that they are more receptive to, and place more emphasis on, Lessons and the LL process? What will change their LL Mindset and keep it changed for the duration of their military careers?

We need to educate our leaders and commanders, current and future, about the importance of LL and the requirement for an effective and functioning LL Process. Leaders with an LL Mindset will engage more frequently and keenly with their LLSOs and other HQs/unit staff. As a result, Leadership Engagement will increase, which will in turn change the Mindset of the staff within the organization, leading to increased Stakeholder Involvement and buy in to the LL process. With their leaders’ backing, LLSOs will feel more empowered and, perhaps more importantly, know that they are being held to account by their commanders who will understand the importance of LL and the true value of a functioning and effective LL process in transforming their organization’s capabilities.²

What Education and Training?

Any education and training that can be provided on LL and the LL process is a good start, but a specific tailor-made education programme that focuses on the LL process, structure, and tools would help leaders fully understand what an LL capability is, and the benefits that a functioning and effective LL process offer. It would also help a leader better understand:

²In systems analysis, this is known as a positive feedback loop, so that with a relatively small input you get a large output.
where LL staff are best placed within an organization; why an LL staff should comprise experienced military officers and perhaps, if appropriate, experienced civilian personnel (for continuity and corporate knowledge); why LL staff need good analytical capabilities; and the critical importance of Information Assurance in any LL process. Any education and training should also include the use of specific examples or case studies, to highlight the value that an effective LL capability will bring to the leader and the organization—this will ensure that the leader knows that they will get something tangible in return for their investment.

JALLC Support to Development of LL Capabilities and Sharing of LL in NATO

So, how does the JALLC contribute to ensuring adaptive leaders? As every organization, the JALLC has very limited resources but makes best use of them by deploying a small, usually two or three-person, JALLC Advisory and Training Team (JATT) to conduct an outreach engagement programme. The JATT deploys to NATO operations and exercises, NATO Command Structure HQs and entities, NATO Force Structure HQs, as well as Allied and Partner nations in order to deliver training, advice, and mentoring aimed at developing and enhancing the LL capabilities of organizations and individuals. This training includes advice to, and mentoring of, junior leaders, future leaders, and LLSOs as well as education in the structure, process, and tools used as part of the NATO LL Process. A key part of the JATT training focuses on the importance of Mindset, Leadership Engagement, and Stakeholder Involvement, and their importance in underpinning the entire NATO LL Process.

The JALLC also participates in Academics, Key Leader Training, and Battle Staff Training events for several NATO exercises each year, delivering training on the NATO LL Process and providing feedback and lessons to key leaders and exercise training audiences, derived from the observation and analysis that JALLC staff have conducted in previous exercise-related studies. The JALLC delivers three one-week long NATO LLSO courses each year to prepare NATO, Allied and Partner nation LLSOs to manage and execute an organizational LL capability using NATO LL-related processes, training, tools, and information-sharing techniques. Additionally, the JALLC recently established the LL Office(r) of Prime Responsibility (OPR) Course—a distance learning course on the Unclassified NATO LL Portal—that delivers a baseline level of knowledge to those NATO, Allied, and Partner staff officers who register and complete the online training package. A staff officer who completes the two-day online course will gain a basic knowledge of, and be able to contribute effectively to, their HQs/organizations and the wider-NATO LL Processes.

---

3 Analysis allows the discovery of the root cause(s) of an observed problem or success, enabling an appropriate remedial action to be identified to correct the problem or sustain success. Analysis is, therefore, a fundamental and critically important part of the NATO LL Process.

4 Information Assurance is the practice of assuring information and managing risks related to the use, processing, storage, and transmission of information or data, and the systems and processes used for those purposes. A JALLC Report (JALLC; The Lessons Learned Process and Lessons Sharing in NATO and Nations; 18 November 2010) found that Information Assurance is a critical success factor for an LL process.

5 As of June 2017, 877 NATO and Partner personnel have registered for the online LL OPR Course and 590 personnel have completed the course.
More widely, the JALLC supports the exchange of LL in NATO by hosting and actively managing the NATO LL Portal, which is NATO’s key tool for sharing LL-related information. The NATO LL Portal contains an ever increasing number of Communities of Interest\(^6\) that facilitate the rapid sharing of information and best practice among subject matter experts. The JALLC also conducts analyst training for its new staff arrivals twice each year to teach them the techniques and tools that they will need during their tour as Military and Civilian Analysts at the JALLC. This course is open to external NATO, Allied, and Partner nation participants on a space available basis. Finally, the JALLC runs an increasingly popular NATO Lessons Learned Conference every year.

**What More Could we Do to Prepare our Future Leaders and Commanders?**

What more could we do to better prepare our future military leaders and commanders to be more adaptable in any situation they might face on or off the battlefield? We should start education about, and training in, the LL process earlier in an officer's or Non Commissioned Officer's career; and, perhaps more importantly, we should make it relevant and interesting. We should include several LL case studies as part of a LL module during basic officer/soldier training to highlight, right from the outset of any military career, the importance and benefits of a functioning LL process and the sharing of Lessons. This would sow the seed and make our younger generation much more receptive to the idea that Lessons and a functioning LL process are important and vital contributors to making them a better and more adaptive leader and commander in the future.

Such initial LL training elements could be built on at different stages throughout a military career, such as during professional through-life development training and at promotion courses. Staff and War Colleges tend to include modules on LL already, but these could be reviewed and expanded to ensure that there is the right focus on the importance of Mindset, Leadership Engagement, and Stakeholder Involvement. Specifically within NATO, initiatives to help prepare current and future leaders and commanders could include the addition of dedicated LL sessions in NATO School Oberammergau courses, NATO Defence College courses and modules, as well as at the STEADFAST PYRAMID and PINNACLE series of exercises.

**Conclusion**

At the beginning of this article I posed a question—What makes one leader more adaptable than another? Of course, there is no simple or single definitive answer to this question, but I have aimed to highlight the importance of a functioning and effective LL Programme in preparing leaders to be more adaptable, and thus more prepared to face a multitude of complex challenges in the future. This article proposes that Mindset, specifically an LL Mindset, has a particularly close relationship with, and importance for, Leadership Engagement and Stakeholder Involvement. These three elements are the most critical non-materiel success factors for any effective military LL capability, and as such should form the core of all future military LL education and training programmes.

\(^6\) Communities of Interest are located on both the NATO LL Portals and include communities and activities such as Graduated Readiness Forces (Land) HQs, NATO Counter-Impromptued Explosive Device, Civilian Casualties, and NATO Geospatial. As of June 2017, there are 21 active Communities of Interest on the NATO LL Portal, with three more under development.
The Search for a Strategic Lesson Learned: Is it a Unicorn?

John Redmayne, NIC GBR, Principal Operational Research Analyst

The JALLC has been operational for 15 years and, although it could be argued that the creation of the JALLC was the start of a formal NATO lessons learned capability, NATO has had informal lessons learned processes for at least 35 years, and—most likely—since its formation in 1949. Military lessons learned processes certainly have had some spectacular successes and some examples are presented herein. However, as the complexity and uniqueness—i.e. the circumstances will almost certainly not occur again—of an issue or problem increase, formal lessons learned processes may not be so successful.

This article examines the case for whether an actual lesson learned as defined by NATO LL Policy and Directives can exist at the strategic and grand strategic levels. The arguments and evidence presented reach the overall conclusion that such a strategic lesson learned does not—and cannot—exist. Strategic issues, by their very nature, are unique, whereas lessons processes work best when the same or similar circumstances and context are likely to be encountered again in the future. Indeed, the research conducted in support of this article would suggest that having formal lessons learned processes at the strategic and grand strategic levels may hinder organizational learning. One reason for this is that the formal NATO lessons learned process requires a standard template for lessons, and such a template does not support all the granularity, subtlety, and nuance needed to extract true actionable knowledge from (extremely) complex strategic issues. Attempts to do so may result in platitudes that cannot be couched in terms of measurable and feasible actions.

But organizational learning through experience is possible at the strategic and grand strategic levels in NATO. Historical review combined with objective and insightful analysis provide knowledge and understanding which can be used by both military and civilian actors in NATO to support informed decision making in new and emerging situations. A way of presenting such knowledge and understanding is in well-written and informative analysis reports, and ensuring their sharing and dissemination becomes a wider knowledge management issue than a more simplistic lessons learned process.

Learning lessons in an organizational context expresses the concept that discernible organizational change has occurred through the completion of actions that have been deliberately designed to address a problem—or to propagate a good practice—that has been experienced. Therefore, there must be a direct causal relationship between the actions and the resolution of the issue, be it a problem or a good practice. At the strategic level, does NATO demonstrate the characteristics of an organization learning from experience?

In the first instance, we should establish what NATO is. Officially, NATO is a political and military Alliance of 29 sovereign member nations. So it would seem to be necessary in examining whether NATO is a learning organization to determine whether its member Nations (the Allies) are learning from experience, which is beyond the intent or scope of this article. Consequently, we should consider NATO as the organizational structure that supports the political and military alliance. The complication is that there are many elements to

---

1 For a good definition of a lesson learned, see Nick Milton’s The Lessons Learned Handbook: “A lesson learned is a change in personal or organizational behavior, as a result of learning from experience.”
NATO’s organizational structure. To many, the NATO HQ International Staff (IS) and International Military Staff (IMS) that provide the secretariat to the various NATO Committees in Brussels would be NATO. Military and NATO international civilian staff working within the NATO Command Structure (NCS) would almost certainly consider the NCS to be NATO. Without entering into a detailed discussion regarding all the different moving parts of NATO, there are: NATO Agencies (e.g. the NATO Communications and Information Agency); the Science and Technology Organization; the NATO Standardization Office; Education and Training facilities; the NATO Force Structure; and NATO accredited Centres of Excellence. NATO is a very complex organization, and this very complexity makes it difficult to identify precisely when, where, why, how, what, and by whom learning (if any) has been done.

Notwithstanding the complications in a precise definition of what exactly NATO is, has NATO demonstrated the characteristics of a learning organization at the strategic level? Certainly, NATO has changed significantly over the last 25 years. Although outside observers may criticize the organization for its perceived glacial rate of change, for a large and complex international organization that is based on the principle of consensus, NATO has shown remarkable agility in its ability to adapt. Since the end of the Cold War, many far reaching and fundamental changes have occurred. The most obvious example to the casual observer has been the increase in the number of member Nations, from 16 to 29. Another evident example is NATO’s involvement in operations: prior to 1990, the number of NATO and NATO-led operations was precisely zero, whereas now it is around 40. There are many other examples of change: overarching Strategic Concepts in 1991, 1999, and, most recently, 2010; reorganization and restructuring of NATO HQ IS and the NCS, and the rationalization of agencies; the development of the NATO Crisis Response System and its associated operations planning process to incorporate a comprehensive approach; the changes in the approach to the defence planning process from a threat-based approach to a capabilities-based one; the development of cyber defence, theatre ballistic missile defence, and organic intelligence, surveillance, and reconnaissance (ISR) capabilities, etc. Viewed through the lens of: “Has NATO changed at the strategic level?” the answer would have to be a resounding: “Yes.”

So NATO has changed significantly at the strategic and grand strategic levels, but has NATO learned from experience? DiMaggio and Powell in 1983 wrote a seminal paper on organizational isomorphism, to explain how and why organizations become similar to one another. Although it is recognized that NATO is a sui generis body, and therefore isomorphism is a contradictory term in the context of NATO, the three mechanisms described by DiMaggio and Powell are worthy of consideration. They are: coercive, which stems from changes in the environment such as new regulations; mimetic, which is copying the behaviour of a competitor whose performance is perceived as superior; and normative, which is the influence of professional norms such as staff education, training, and experience on an organization’s behaviour. If we accept these mechanisms explain change in organizational behaviour, it would seem that most of the changes in NATO outlined above would be explained by the coercive mechanism—i.e. changes in the security environment have demanded an appropriate response. Consequently, the role and contribution of learning from experience, i.e. a formal lessons learned process, has to be addressed.

In a military context, an example of how effective a lessons learned process can be is the lessons that were drawn from Operation GALVANIC, the US amphibious assault on Tarawa in November 1943. The operation was plagued with problems—including logistic, effective joint maritime and air coordination, and equipment failures—with the result that around 1000 US marines were killed and over 2000 more wounded out of a total force of around 12 000 2nd Marine Division marines. But three after-action and lessons reports were written in the immediate aftermath, and the lessons identified were implemented with such rapidity that, three months

---

2 Not an exhaustive list.
3 US Senator Richard G. Lugar remarked in 1993 that NATO would have to, “...go out of area or out of business”: did NATO learn from this?
4 See, for example, Webber 2009 Thinking NATO through Theoretically.
later, in February 1944, approximately 70 per cent fewer US service members were killed during the amphibious assault on the Kwajalein Atoll in the Marshall Islands, which were more heavily defended and the enemy positions better fortified than Tarawa.

Considering more recent NATO experience, there are many well-documented examples of success in learning from experience within the NATO context. Certainly, at the technical and tactical levels, lessons learned processes and programmes have had some spectacular successes. For example, the NATO doctrine for countering improvised explosive devices (C-IED) AJP-3.15 emphasizes the importance of lessons 32 times. The role of effective learning is highlighted, both in terms of defeating the device and of sharing information rapidly to prepare the force. NATO experience in Afghanistan has demonstrated the effectiveness of the lessons learned process that was put in place to support C-IED. Another example might be lessons learned in supporting doctrine development within NATO. The NATO LL Handbook provides an example of how the NATO Minewarfare Working Group used lessons from trials effectively to update sections of the relevant Allied Tactical Publication that had been open to different interpretations as the wording was ambiguous.

At a slightly more operational level, the success in NATO for lessons learned processes can be recognized. An example is the way that learning from experience was effectively incorporated into the International Security Assistance Force in Afghanistan’s (ISAF) determined and successful effort to minimize civilian casualties resulting from kinetic events. In this particular example, the analysis of the way that learning from experience was used showed the role of both the internal learning process within the NATO command, and the successful incorporation of recommendations from actors external to NATO, such as International Organizations, NGOs, and indigenous civil society organizations: an external learning process.

So, the contribution, potential and actual, of a formal lessons learned process to organizational learning has been demonstrated at the technical, tactical, and operational level within NATO. But, as argued above, it would seem that nearly all the organizational learning at the strategic and grand strategic level within NATO can be explained more by coercive mechanisms than by a formal lessons process. This article now explores potential reasons for this observation.

In early 2017, European Security published a very interesting article by Dr Heidi Hardt, from the Department of Political Science, School of Social Science, University of California, entitled *How NATO remembers: explaining institutional memory in NATO crisis management*. In this paper, Dr Hardt recognizes that institutional memory is a precondition for organizational learning and examines institutional memory in a NATO context, particularly with reference to staff turnover. Dr Hardt argues that, “NATO practitioners socially construct institutional memory through the use of three informal processes: interpersonal communications, private documentation and crisis simulations.” NATO HQ staff exhibit the normative mechanism for change in organizational behaviour by introducing newly arriving staff to such informal processes. Dr Hardt also introduces the assertion that staff, “...are receptive to such a norm because NATO’s existing formal learning processes disincentivize them from recording strategic lessons.” In the context of how NATO should be a learning organization, such an assertion is extremely interesting, as it would explain why a NATO Lessons Learned process has had much observable success at the tactical and operational levels, but little discernible success at the strategic level.

The very complexity of NATO itself with a myriad of policies, directives, doctrine publications, standards, etc. makes it challenging to identify the root cause(s) of observed problems and issues and develop appropriate remedial actions and action bodies. Indeed, with an organization such as NATO where many of the staff are rotational and on a three-year median tour, the staff may not have the requisite experience and knowledge to understand issues and how to address them. This complication would seem to reinforce Dr Hardt’s argument that NATO staffs construct institutional memory—and therefore learning—using informal processes rather than using the formal NATO Lessons Learned Process.

---

5 For example, there are over 100 documents related to NATO policy and directives regarding information assurance.
We will now state the following thesis: formal lessons learned processes work well when the same or similar situations (context and circumstances) are likely to be encountered again: the example given above of C-IED tactics, tools, and procedures is a good example because similar IEDs were likely to be encountered again by NATO forces. Therefore, lessons learned processes contribute to helping organizations solve puzzles and problems through learning from previous experience—we all have been in the situation of having an improved ability to solve new problems through using past experience. But given the complexity at the strategic level, and frequently at the operational level, are the same situations ever likely to be encountered again, i.e. is every situation sufficiently unique that a formal lessons learned process is not helpful?

One of the characteristics of having a formal process that collects lessons is a defined template to be used to collect and articulate lessons. NATO has adopted for at least the last 30 years the Observation–Discussion–Conclusion–Recommendation (ODCR) format; other formats are used by different organizations. Lessons are articulated in the template such that potential root causes are explored between what happened and what should have happened, a proximate root cause selected as a conclusion, and actions recommended addressing the root cause. The supporting analysis assumes causal relationships exist.

Most of the issues at a strategic level exhibit many, if not—in many cases—all, the characteristics of what we would term messes or wicked problems, as described by Horst Rittel and Melvin Webber. The complexities and subtleties of such issues mean that the unique circumstances and context of each and the array of possible solutions requiring actions by several actors cannot be adequately described and conveyed in an ODCR format as part of the formal NATO Lessons Learned Process. Simplistic lessons with an implied causal relationship between action and effect are not appropriate for strategic level issues. Additionally, there is evidence to suggest that such lessons have a tendency to become too specific to past operations: in a military context, learning the wrong lessons from the last war.

Another potential pitfall in attempting to address strategic level issues in the ODCR format is that doing so tends to lead to simple, and worthless, platitudes: NATO must do better; staffs need to be larger; more common funding for projects needs to be made available, etc.

The RAND Corporation recently published a research report on the theoretical backdrop and exploration into best practices across various fields to prescribe how the US Department of State could continue to develop a strong culture of learning and implement an enterprise-wide lessons-learned capability. The report cites a Harvard Business Review article written by the former CIA Director Leon Panetta and his former Chief of Staff Jeremy Bash, capturing management lessons learned from the hunt for Osama bin Laden.

---

6 See the NATO Research and Technology Organization (now the Science and Technology Organization) Systems Analysis and Studies Panel publication “NATO Guide for Judgement-Based Operational Analysis in Defence Decision Making” AC/323(SAS-087)TP/345 dated June 2012 for an excellent explanation of the differences between puzzles, problems, and messes.

7 See Nick Milton “The Lessons Learned Handbook”.


9 RAND Corporation; Enhancing Next-Generation Diplomacy through Best Practices in Lessons Learned.

acknowledges that Panetta’s article, “...aptly addresses one of the challenges the [US] Department of State faces: Every situation is Unique!” and also states that, “Panetta manages to extract five management lessons that a corporate vice-president for marketing and the director of a multi-billion dollar government agency can both apply.”

Examining Panetta’s article in the Harvard Business Review, these five lessons can be summarized as:

- Structure the team to achieve strategic goals.
- Challenge the working hypothesis.
- Know when to trust the professionals.
- Consider all possible outcomes and plan for them.
- Know when to take the long view.

Are these really strategic level lessons for senior military and civilian decision makers? In simple lessons terms, each of them seems a truism. However, Panetta’s article makes very interesting reading and contains knowledge that could assist the understanding of future situations to enable the taking of appropriate action. The knowledge is transferred in a very good story, not in formal strategic lessons.

We have delineated a challenge: a formal lessons learned process is not able to support adequately organizational learning and change for strategic level issues. Is there a means of mitigation? The solution is in detailed historical review and robust analysis, well documented in analysis reports; what in JALLC terminology would be called Joint Analysis Reports. Such analysis reports must contain sufficient contextual background and history to provide the knowledge and understanding that can be applied to future situations having similar, but unlikely to be the same, circumstances and characteristics. The principal challenge then becomes essentially one of effective knowledge management, ensuring that staff have ready access to such reports, to support more informal learning and institutional memory processes, as identified by Dr Hardt.

Consequently, the holistic solution for NATO to be a learning organization is the implementation of a dual approach: at the operational level and below, a formal lessons learned capability supported by appropriate structures, tools, and process; and at the strategic and grand strategic levels, meaningful, quality analysis with detailed contextual reports. The products of both approaches—lessons and reports—require effective information and knowledge management processes.

A final point, and one that will not be addressed in detail in this article, is that the willingness and responsibility to share information efficiently and effectively is a fundamental requirement to both the formal lessons learned approach and the more informal approach to institutional learning.

This article has identified that significant change has occurred within NATO at the strategic level, indeed that NATO has demonstrated considerable agility, but that much of the driving force for the change was due to external coercive factors. The role of a formal lessons learned process has been discussed, and the potential contribution to successful organizational learning and change, but principally when similar situations are likely to be encountered in the future.

Such similar situations are unlikely to occur for strategic level challenges, and therefore the detailed context and history of the situation becomes far more important. We conclude that such granularity cannot be conveyed within the constraints of the process and tools—with a defined template for lessons—as part of the formal NATO lessons learned capability. A strategic lesson learned is, in the end, a mythical creature, just like the unicorn, and exists only in the imagination.

Consequently for strategic level issues, detailed reports—telling a good story if possible—are an appropriate vehicle to support more informal approaches to learn from experience. Going forward, the JALLC, as a NATO entity with a defined mission that combines both analysis and lessons, must continue to produce high quality analysis reports addressing strategic level issues, in addition to supporting more formal, and maybe essentially at military tactical level, lessons processes. Indeed, the third and fourth editions of JALLC’s Joint Analysis Handbook describe joint analysis as, “...the analysis approach typically employed by NATO’s Joint Analysis and Lessons Learned Centre (JALLC) to support NATO’s joint operational and strategic level Lessons Learned processes.” This definition, first articulated a decade ago, encapsulates well the
contribution of Joint Analysis Reports to NATO as a learning organization. However, the description of joint analysis could be improved to reflect its important role in contributing to NATO’s operational and strategic level knowledge gained through experience. Such knowledge must be appropriately managed and disseminated to ensure that it is readily available to both military and civilian actors within NATO in order to support informed decision making in new and emerging situations.


D. Andersson, P. Eriksson; Inter-organizational Lessons Learned: Perspectives and Challenges; Swedish Defence Research Agency.

Center for Army Lessons Learned (CALL); Establishing a Lessons Learned Program: Observations, Insights, and Lessons; June 2011; Handbook


NATO AJP-3.15(B); Allied Joint Doctrine for Countering – Improvised Explosive Devices; 31 May 2012.


NATO JWC; Introduction to the NATO Lessons Learned Capability; 05 October 2009; The Three Swords Issue 16 Lessons Learned pp 38 – 45.


L. Panetta, J. Bash; The Former Head of the CIA on Managing the Hunt for Bin Laden; 02 May 2016; Harvard Business Review.


M. Webber; Thinking NATO through theoretically; Paper presented to the European Consortium for Political Research (ECPR) Joint Sessions, Lisbon; 14 – 19 April 2009.
So you want to be a Project Manager?
Distinguishing between traditional Military Leadership and Analysis Team Leadership

Once an officer is posted to the JALLC as a military analyst, he/she (or at least the vast majority of people) will have to face several new challenges that they have not been prepared to face through their previous military career.

First, they will have to learn the new skill of becoming an analyst; second, some of them will have to learn how to manage a project and its respective analysis team because they will be appointed Project Managers. And even though most OF-3/4 may have experience of managing and leading military units, they will understand soon enough that, in the context of the JALLC, Project Management and Analysis Team Leadership activities encompass a variety of skill sets and requirements that do not cleanly fall into the official procedures described for Military Leadership.

In its military context, Leadership has a very specific meaning, in which command and control is exercised through clear, hierarchical chains. As a military leader, you need to be able to influence others, usually your subordinates, to accomplish the mission by providing them with purpose, direction, and motivation through example. In the typical military environment, the military leader is the individual who has the highest rank, and as a result, experience and knowledge of the topics and tasks his/her team is responsible for.

As a military officer in the role of a Project Manager, this will often not be the case, with lower ranked officers on your team having more experience, expertise or skills on the analysis topics. For example, a Major (or a civilian analyst, as is projected in the JALLC Project Approach (JPA)), with formal analytical training, may be the most appropriate individual to be the analysis team leader or Project Manager, even though there is a Lieutenant Colonel or Colonel on the team.

Project Management deals not only with managing a project (as per the words themselves) but also with managing your team and helping you get the most out of, and leveraging the expertise which is present in, that team of analysts; and at the JALLC that is most probably a team of your peers.

Becoming a good Project Manager is not only about learning to fill out the right forms and submit them on time; it is also about the art of working with and managing people. It is important to note the use of the word managing and not manipulating. If you, as Project Manager, attempt to get things done by manipulation, it will be sensed by your team (just as you would sense someone trying to manipulate you) and will create resentment and problems.

1 In the context of this article we will refer to an Analysis Team Leader as a Project Manager.
2 On purpose, we will not refer to the specifics of the exercise of Command.
Another important challenge that a military or civilian analyst working as a Project Manager faces is that he/she needs to work internally with the individual members of his analysis team and simultaneously coordinate how his/her team works with other teams. For example, the Project Management Board is the team you must report to and you must gain its approval for the work you have done and its go ahead for the work you plan to do; the Project Director acts not only as your Division Head in an overall analysis in order to deliver the required product. And don’t forget other teams such as the Budget and Finance Branch, with whom you will coordinate the assigned project budget.

You will need to coordinate with all of these other teams and individuals to fully understand what they expect in order to produce your team’s final product and to stay within the boundaries for your task. All of these other people will have very busy and demanding schedules. Occasionally, some of their requirements will be outside your control, which can make coordinating with them challenging and sometimes frustrating. However, this is part of your Project Management responsibilities.

If all these challenges and responsibilities of being a Project Manager sound like a bit too much work, let me remind you that you’re also still an analyst within your analysis team! This often places great demands on your time because you will have to divide your time between actively leading your team and being engaged in the analysis itself. Sometimes this results in your being the member of the team with the least overall situational awareness of the status of the actual analysis: you may find yourself struggling to know as much about the project as the rest of your team. Because of this, it is important to recognize that topics such as enhancing team communication and team knowledge do not just mean including your team members in the communication and knowledge loops, but also yourself, since you may be the one who is most disconnected from the actual analysis-focused day-to-day efforts.

But not everything is bad… there is at least one common point between being a military leader and being a Project Manager—at the end of the day, you are responsible for your team’s work. And don’t you forget it!
The Concept of Crisis

LTC Ricardo Cristo, PRT A,
Military Analyst

The word *crisis* is used very broadly to apply to many activities and in many senses: people speak about an international crisis, a financial crisis, a cardiac crisis, a family crisis, a religious crisis, a political crisis, and a humanitarian crisis, among other examples. This constant use of the word makes it seem banal and corrupts its meaning.

The word *crisis* is used frequently in many NATO documents, but is not defined in them. For reasons of academic rigour, we should clarify the concept of crisis as used in such documents. The intention of this short article is to come up with a concept of crisis, while accepting that this concept will not necessarily be the only possible one.

A possible concept (definition) of crisis:

*a crisis is a disturbance in the normal flow of relations between two or more actors on the international scene on a subject considered fundamental to the national interests of one or both parties, with a high probability of the use force (so that there is a danger of war) to resolve it.*

Analysis and interpretation of this definition

This definition privileges the State as the main actor on the international scene. However, it takes into account other kinds of actors not related to the State (non-State actors).

A disturbance in the normal flow of relations could be as a result of interactions between the governments of two or more sovereign States in severe conflict, without reaching the state of war, but involving the perception of a high risk of war. It could also be as the result of a clash of wills between actors, resulting from a clash of interests, without direct recourse to military force, but with the threat of it in the background.

From the social science point of view, and especially from the point of view of international politics, the most abstract part of this definition lies in what identifies the crisis as the crux of a process marking the passage from peace to war or from war to peace, from dialogue to combat or even from life to death.

A crisis is a disruption in the balance between two or more actors. This could be seen as an ambiguous situation—not-war and not-peace—but it is not: it is already a cold war.

A crisis implies possible escalation to a hot war. Once that point of escalation is reached, however, the situation has moved beyond crisis. That is why *crisis* is so difficult to define.

The main difficulties in the conceptualization of *crisis* are: the variety of activities, actors, interests, and policies that can be involved; and the problem of determining when a crisis begins and ends.

This definition given verifies explicitly the existence of two fundamental elements that characterize crises:

- the threat of the use of armed force, with a high probability of its use; and
- a breakdown in the balance between actors.

The sequence of interactions is the product of the perturbation in the normal flow of relations. It makes the phenomenon of a crisis strongly dynamic, characterized by actions and reactions which are determined by and determinant of a negotiation process that has to be conducted as opportunities present themselves.

Because it is based on negotiation, a crisis normally develops slowly.\(^1\) However, the tension can become extreme,\(^2\) and that is why the process must be conducted by taking advantage of every opportunity. Each of the parties tries to obtain an advantage.

---

\(^1\) A crisis does not arise suddenly: it is usually the result of an existing conflict of interests which had previously been dealt with in a quiet way.

\(^2\) For example, a crisis may slowly evolve from a situation which contains a contradiction or a deep clash of interests; the situation can gradually worsen, or can change abruptly through an action by one of the actors that is unacceptable to the others.
through diplomatic means so that it can negotiate from a position of strength or a privileged position. Given the profound clash of interests, both parties will have the perception that there is a high probability of violent and armed confrontation (a hot war) to settle the dispute. Negotiations develop and efforts take place to avoid such extreme measures.

During the process of negotiations, time is a key factor, because an action taken by one actor usually needs a quick reaction from the others. A delay in reacting, or the absence of a reaction, can lead to an uncontrollable escalation in the situation. This is because negotiations unfold in an environment marked by uncertainty and unpredictability, and under considerable tension.4

This unpredictability and uncertainty give a dynamic character to the development of an international crisis. Negotiations are essential, sometimes lasting decades,5 with speedy responses to any change in circumstances to ward off the danger of escalation to a hot war.

Whatever the result of a crisis might be, that result means that there is no longer a crisis but something else. When a war does not take place, the crisis can be seen to have been well managed, in the game between capitulation and compromise. The underlying causes of the conflict have been removed or at least mitigated.

In this lies the central question of crisis management, which seeks to strike a balance between coercion and accommodation, between capitulation and compromise, and raises the following dilemma:

- Do I employ coercion with the aim of making my point of view prevail and safeguarding my interests, having in mind that I have to avoid war at all cost? or
- Do I settle for the purpose of establishing an agreement, a compromise, having in mind the minimization of possible losses to my interests? or
- Do I capitulate and subject myself to what is imposed on me?

Faced with this dilemma, and seeking a resolution, negotiation is always conducted under strong psychological pressure. The threat of military force is always present, and the fear of escalation and the danger of war are considerable.6

For the crisis to be managed successfully, however, one of the most important aspects to keep in mind is never to put the opponent in a situation where he has no way out, never to enter a dead end or close the door on negotiation, and above all never to humiliate an opponent.7

The difficult thing in this game of coercion and accommodation lies in knowing when to step back, not when to move forward.

---

3 The means used to handle the crisis are political. These means range from denunciation to the internationalization of the problem, from the suspension of commercial relations to a blockade, from the demonstration of force to its contained use. Also, in the course of a crisis, the contenders use the full range of instruments of force at their disposal—political, economic, psychological and military—with the only restriction being the active use of military means at a level deemed by at least one of the parties as an act of war.

4 Due to the negotiation process and the interests at stake, as well as the possibility of misunderstandings, there will be a fear of escalation, especially if nuclear weapons are in play.

5 The case of India and Pakistan’s dispute over the Kashmir region, which has been in existence since the foundation of the two nations in 1947, the dispute between the United Kingdom and Argentina over the Falkland/Malvinas islands since 1833 that led to a war in 1982, the dispute between Greece and Turkey over the Dodecanese islands in the Aegean Sea since 1970, and the dispute between Portugal and Spain over the so-called Questão de Olivença since 1801 are among many other such disputes around the globe.

6 Crisis management is a highly sensitive operation, because it is possible to bring about peace or war through each particular choice that is made.

7 In the final period of the Cuban missile crisis, President Kennedy demonstrated a clear understanding of this need and successfully engaged the American media to react moderately.
Means of action during the development of a crisis

The means used during a crisis are essentially political. Nevertheless, they are combined with other means—economic, psychological, and military. However, military means must be used with great care in a crisis to avoid escalation into war. An actor will use those means that are at his disposal, usually in a graduated form and at an intensity corresponding to the importance of the interests at stake. Such means include:

- formal statements by political leaders;
- manipulation of public opinion (national and international);
- use of distinguished persons to make statements in support of a position (national and international);
- use of pressure groups (usually indirectly and/or discreetly);
- exhaustive use of diplomatic channels, whether to win or secure support, to isolate opponents, or to make threats;
- propaganda and counter-propaganda;
- economic sanctions, which could be from a simple commercial boycott to a blockade; and
- displaying and brandishing the use of military means.

Particular use of military means during the development of a crisis

Military forces are only part of the background of a transition to a threatened war. The military leadership supports the political leadership, implementing the political decisions that have been taken. Military forces can make available a wide series of options to those managing the crisis, such as:

- increasing alertness and readiness of forces;
- cancellation of leave requests;
- mobilization of reservists;
- explanation and clarification actions (to the civilian population);
- developing and implementing military exercises;
- occupation of certain positions considered important;
- showing force (not only through exercises, but also with large military parades);
- projecting, deploying, and concentrating forces to key locations (e.g. near borders, to another country); and
- limited operational employment of military forces (e.g. reconnaissance operations, special operations infiltration, evacuation of non-combatants, hostage rescue, among others).

Whatever military action is decided on, it must be very well coordinated with the political action.

Moreover, the military leadership must be constantly informed and aware of the smallest change in the management of the crisis, not only to avoid miscalculations or misinterpretations, but also so that it can react to the actions of the adversary. This close connection must be ensured at all costs, since the scope for liberty of action is narrow. The danger of war is always around, and the military actions of one of the parties may inflame the other to violence.\(^8\)

\(^8\) For example, the simple deployment of a warship may have an impact on the international political chess board that a ship’s commander is not in a position to realize.
Summary of main points

Proposed definition of Crisis: *It is a disturbance in the normal flow of relations between two or more actors on the International scene, on a subject considered fundamental to the national interests of one or both parties with a high probability of the use of force (so that there is a danger of war) to resolve it.*

- A crisis is strongly dynamic and is characterized by actions and reactions, through which the parties try to avoid war itself (hot war) if possible.
- A crisis unfolds in an environment marked by uncertainty and unpredictability.
- A crisis is well managed if a solution can be found for all parties involved without recourse to a hot war.
- A crisis is successfully managed when the underlying causes of the conflict have been removed or at least mitigated.
- Throughout the crisis, the military can make available a wide range of operations and options.

Final Reflections

In the justified search for peace, many actors and institutions around the globe have been working to reduce tensions and stop aggression. That can in itself be seen as creating or increasing a sense of crisis. It might sometimes seem preferable to stop all the talking and take decisive action—some experts say: *give war a chance.* If such a conflict could evolve into a war under the nuclear spectre, however, that might mean no chance at all for humankind.
Theodore Roosevelt was the twenty-sixth President of the United States of America. He found himself suddenly assuming the role, after President McKinley was shot. His ability to adapt and overcome, the willingness he displayed to learn lessons along the way, and his insistence on implementing the lessons he learned created an abundance of growth for himself personally and for a young nation.

How does President Roosevelt’s sudden promotion and his well-known saying, “Do what you can, with what you have, where you are;” apply to NATO, and more specifically to the JALLC as we celebrate 15 years of achievements? Let’s find out.

Today, NATO’s working definition of resilience is the ability to resist and recover. The JALLC is a key implement for facilitating this ability. As we gather and analyse lessons, what we have, from both our near and far history, in the pursuit of recommended courses of action for our customers, what we can do, we are able to further develop our collective resistance to the mistakes of the past.

Twice a year, the prioritized analysis requirements list becomes JALLC’s programme of work. Through this effort, NATO decision makers shape the formation of our collective knowledge. JALLC products provide a functional foundation, from which recovery time may be shortened and resistance to repeating mistakes of the past may be strengthened.

How do we take JALLC products and employ them in a fruitful manner to increase our resilience?

We take a risk. We implement recommendations from JALLC products. Is that without danger? Of course not. However, this risk has been carefully constructed, calculated, and controlled by a team of senior military analysts, operational research analysts, editors, and subject matter experts. The depth and breadth of research, data, and analysis that goes...
into creating a JALLC product is enormous. This deep dive into the available data is part and parcel of the process. Thus, recommendations may be taken on by our customers with the understanding that the team providing the product has been through a rigorous process during which they prepare to defend how they came to their conclusions and why they suggested the recommended courses of action. Furthermore, conclusions and recommendations must be substantiated by the analysis and references within the document. If you are going to provide a suggested course of action, you must be able to demonstrate why it should be taken and defend your recommendations with facts.

NATO strives to learn from its collective history. All nations endeavour to put their best foot forward for the good of all. We want the fire of risk to be a controlled burn to allow weeds to die while encouraging and providing for the abundant growth of the crop we need. Therefore, we need the JALLC. We must provide and sustain the conditions for the JALLC to flourish. The analysis and recommendations provided by the JALLC team in conjunction with their customers should be strongly considered and, more frequently than not, taken on board and implemented. Taking this action is a controlled, calculated risk, intended to improve our collective welfare. After all, who does not want to make where we are a better place to be?

“Risk is like fire: If controlled it will help you; if uncontrolled it will rise up and destroy you.”

Theodore Roosevelt
How Many Shades of Data?
Clovis Autin, NIC FRA, 
Senior Operational Research Analyst

“I’ve heard this sentence so many times from an old Greek fellow when I used to conduct courses for Operational Analysts. It was his way of saying that you should never give up trying to find another way to look at your data. He was so passionate about the topic that he could not stop speaking about it.

Nowadays you can find data everywhere for almost everything. The Internet is an endless source of information, but with a lot of noise. Millions of pieces of data are generated every day through all the smart devices connected to the network.

But how big is the internet?
It seems a very busy place. According to the website Internet Live Stats, every second there are 7653 tweets, 45 678 GB of Internet traffic, 60 926 Google searches and around 2.5 billion emails sent, with a rough estimate of 67 per cent being spam. With the median length of tweet being 60 characters, a total of about 459 000 characters per second are being generated by Twitter users.

“If you torture the data long enough, it will confess to anything.”
Twitter and the Bible

I found an estimate that there are approximately 3.5 million characters contained in the Bible, which mean that Twitter users generate a book of the equivalent size to the Bible in less than eight seconds. We can all agree that this is purely a quantitative approach. I am sure we can’t compare qualitatively the content of the Bible with the thousands of tweets generated during these eight seconds.

Looking at the qualitative aspects of these two data sets, on one hand the Bible, and on the other hand the equivalent tweets to generate the same amount of characters, will definitely close any debate on the content. As an example, the most popular hashtags found online at the time of this article (19 June 2017) were #panamapapers, #tattoo, #dealer, #blackpink and #fathersday. Those contain nothing to compare with the occurrence of the terms Wisdom, Holiness, Knowledge and Love in every chapter of the Bible.

Quantity is one thing but qualitative data gives the analysts from the JALLC the opportunity of answering the How and Why questions. Quantitative data gives more indications about trends and enables the analysts to answer many types of questions.

Acquiring Knowledge

As a learning organization, the JALLC needs to acquire knowledge in order to help with the transformation of NATO. Coming back to the Bible, Solomon wrote Proverbs for the young and simple but also for the mature and wise. In particular, this proverb reflects the role of the JALLC: “A wise man will hear, and will increase learning; and a man of understanding shall attain to wise counsels” (King James Version).

This proverb defines the rule for increasing learning and attaining unto wise counsels. You need to listen with your ears rather than speak with your mouth. This is quite difficult for the young and simple, because they have a tendency not to listen, or because they are impatient, or because they are foolish.

For older people, listening can also be quite hard, as they can value their own experience too highly. And of course, they can be foolish too. This is why the analysts from the JALLC try to be good listeners, especially when they interview subject matter experts. Interviews are the most efficient way to acquire knowledge about a subject. This data collection method is quite demanding and requires not only discipline but also wisdom.

So don’t forget the importance of qualitative analysis and that JALLC’s analysts are ready to torture the data as much as they can.
NATO’s Approach to Projecting Stability: Bounded by purpose and realities on the ground

Dr. Henrik Heidenkamp, NIC DEU, Research Analyst

The 2016 Annual Report of NATO’s Secretary General Jens Stoltenberg identifies, “...the ability to project stability and strengthen security beyond NATO’s borders,”¹ as a key element of the Alliance’s efforts to provide for the security of its member states. The report outlines that this ability, “...involves a range of activities including providing training and support to countries such as Iraq and Afghanistan, conducting or contributing to missions on land, at sea and in the air, and cultivating relationships with partners around the world.”²

The JALLC has been engaged in numerous events aimed at facilitating NATO’s Projecting Stability agenda³ and recently issued a JALLC Research Paper on Consultation, Command, and Control (C3) arrangements within the context of Projecting Stability efforts.⁴ Against this background, this article offers a number of considerations for the advancement of the Projecting Stability agenda.

At the conceptual level, Projecting Stability should be viewed as a principle whose realization presents a key objective for NATO in terms of its collective defence, crisis management, and cooperative security. The top-level articulation of this objective can be considered as indicative of the Alliance’s goal to transition from an often ad-hoc approach to defence capacity building to one that is by design.⁵ In addition, it arguably reflects the Alliance’s aspiration to prepare potential future operating environments better by improving its situational awareness, regional expertise, permanent representation, and cooperation with key stakeholders.

As such, the operationalization of Projecting Stability should be considered a function of both political and military instruments, with a strong relevance attributed to support for governance and oversight structures and processes, as well as the training of partner forces. NATO’s efforts should not be limited to supporting partners’ stability (i.e. their ability to withstand shock) but should include efforts to enhance their resilience (i.e. their ability to recover quickly). In this sense, NATO Secretary General Stoltenberg concluded: “In the long run, training local forces is more effective than deploying large numbers of our own forces in combat operations.”⁶

The implementation of NATO’s approach to Projecting Stability appears to be fundamentally dependent on effective direction and guidance by Nations regarding where, when, and in what form NATO seeks to project stability. Answers to these highly political questions should be given and subsequent activities should be conducted against a coherent employment of a comprehensive approach. While NATO is only one of many actors relevant to this comprehensive approach and will often contribute in a supporting rather than a leading role, the cultivation of partnerships is imperative, as stressed by the 2016 NATO Secretary General Annual Report.⁷

¹ NATO; The Secretary General’s Annual Report 2016; page 48.
² Ibid.
³ e.g. Projecting Stability in an Unstable World Workshop, Bologna University, 10–11 May 2017.
⁵ See Projecting Stability: Charting NATO’s Future; Speech by NATO Secretary General Jens Stoltenberg to the Atlantic Council, Washington, DC; 06 April 2016.
⁶ Press Conference by NATO Secretary General Jens Stoltenberg, following the Meeting of the North Atlantic Council at the Level of Heads of State and Government on Projecting Stability; July 9, 2016.
⁷ See NATO; The Secretary General’s Annual Report 2016; pages 62–79.
Furthermore, the often unique characteristics of realities on the ground suggest that any specific efforts to Project Stability must be tailored to the distinct requirements in the target state/region and designed to incorporate buy-in from relevant local/regional stakeholders. In this respect, the availability to NATO of regional expertise and close cooperation between the NCS and NATO Force Structure entities, NATO Nations and Non-NATO Entities (especially Non-Governmental Organizations) is crucial.

This need for a consistent multi-layered Projecting Stability framework with fluidity as a foundational asset in terms of local/regional requirements demands both a high degree of organizational adaptability and individual matrixes for success. As a cross-policy effort, the implementation of NATO’s approach to Projecting Stability should therefore be bounded both by its purpose and by realities on the ground.

The examples cited by NATO’s Secretary General in his 2016 Annual Report\(^8\) highlight that NATO holds a significant track record of achievements that define and scope its contribution to the broader International Community’s efforts to Project Stability. Four elements of NATO’s Unique Selling Point (USP) for Projecting Stability may be identified:

- the level of coherence in activity that an organization such as NATO can provide;
- the different political label that a NATO engagement offers compared to a national/bilateral engagement;
- the capability NATO (especially the NCS) has to coordinate national contributions/efforts; and
- the ability to attract more resources than most Nations could do unilaterally.

Finally, it should be noted that the implementation of NATO’s approach to Projecting Stability is an inherently value-driven task, as pointed out by Secretary General Stoltenberg: “Giving due attention to issues such as protection of civilians, children in armed conflict, and gender perspectives in NATO’s operations and missions illustrates the Alliance’s commitment to upholding international humanitarian law, while, at the same time, making Allies more resilient and effective.”\(^9\)

---

\(^8\) Ibid; pages 48–79.
\(^9\) Ibid; page 58.
Nowadays, in any NATO operation, exercise or HQ ceremony, we have to consider the news media coverage. In most cases, it is not an option; it is a battlefield characteristic. The military tend not to appreciate the presence of journalists during their activities, not only for reasons of Operational Security, but also because of the criticism media reports tend to convey about military activities. Military planners are very much aware that one should not fight the scenario. We must adjust and overtake. Therefore the new mantra is: "We’ve got to have Strategic Communications."

Some people may think that Strategic Communications (StratCom) is a new thing in the Public Relations environment. They see it as a new discipline that introduces a different (more active) posture, with modernized products—something like Public Affairs on steroids. That’s not the case! StratCom is the natural evolution of the communication orchestra, which has become too big and now needs a maestro.

Sun Tzu once said: "A strategy without a tactic is the slowest way to victory. A tactic without a strategy is the noise before defeat."

The same principle applies to communication. Humans are a social species. We need to communicate in order to survive. One cannot live in a society without having some sort of communication with the surrounding people. In today’s world, if you don’t communicate ... you die! Our institutions have exactly the same constraints. An organization without flexible communications will not evolve and, like the dinosaurs, it will become extinct sooner rather than later.

This is when StratCom comes into play.
StratCom is the decision-making and vertical coordination mechanism to communicate what an organization wishes to say, in order to achieve its ultimate objective (the end state). However, in StratCom, the term Communications should be understood in its broadest sense. Actions (or the lack of them) are also forms of communication. In the StratCom business, one must not only talk the talk, one must also walk the walk!

StratCom is a function, not a capability. In NATO, the prime communication capabilities are: Public Diplomacy (PD), Public Affairs (PA) and Psychological Operations (PSYOPS). Although the normal arena of coordination for StratCom is PD, PA and PSYOPS, other capabilities may also engage in communication, such as Civil–Military Cooperation, Key Leaders Engagement, Protocol, etc. These should also be brought into the orchestra, whenever a communication requirement is identified.

Each capability will have its own formatted messaging, with diverse messages tailored for different target audiences. As in an orchestra, what the violin plays in isolation is very different from what the trumpet plays. What StratCom does is to make sure that they all play their different pieces of the music, in tune, so that the melody is harmonious.

At the operational and tactical levels, there is another communication function, with the task of coordinating the activities of the communication practitioners within the Theatre of Operations. That function is Information Operations (INFOPS). The difference between StratCom and INFOPS is that the first acts vertically, coordinating capabilities of all the structures in NATO, whereas the second acts at the horizontal level, coordinating the work of all the communication practitioners for a specific NATO Operation.

In fact, some StratCom initiatives may not even be traditional communication actions; they could be a visit, a lesson, a Key Leader Engagement or a social event targeting the right audience, at the right time, in the right place.

First, one must define the strategic objectives to be achieved; then there is the need to select the right audiences and the desired effects. This should be thoroughly studied, in order to maximize the communication effort and avoid wasting vital resources for the
Our Mission

Alliance. The message should be tailored to the audience and the audiences should be relevant for our objectives.

Lastly one must identify the proper communication tools for each audience, and master their use. Failure to do so may result in the public perception that NATO is pointless (literally!). Planning is the first step towards the answer; but it is not the whole solution, because, as Mike Tyson (the famous boxer) said: “– Everybody has a plan … until he is punched in the face!”

It’s adaptability that clears the way for success. StratCom is based on a dialogue (not a monologue), both internally and externally. It seeks to gain synergies using the various communication practitioners. Feedback on our communication activities is paramount. StratCom is the empowered maestro who can stop the music, review it with the author, and come back to the orchestra to produce an excellent symphony.

What about the JALLC? Does it have a StratCom approach to its activities?

During 2016, the JALLC published nine analytical studies; reviewed the Joint Analysis Handbook; in cooperation with the NATO Command and Control Centre of Excellence and NATO’s Joint Warfare Centre, the JALLC published the NATO Force Structure (NFS) Joint Task Force (JTF) HQ Handbook; we’ve conducted one course on Joint Analysis and three courses for Lessons Learned Officers; managed the NATO Lessons Learned Portal, making its 1363 documents available for 2075 registered users; conducted ten Lessons Learned outreach activities in NATO and Partner countries; supported six NATO exercises; hosted 22 visits to the Centre; published numerous Factsheets, flyers, brochures, etc.; issued two newsletters (The Explorer); populated our webpage with information about the Centre’s activities; and conducted two high-visibility events – the Assumption of Command Ceremony and the 2016 NATO Lessons Learned Conference.

This was quite a busy schedule for such a small NATO Command Structure Unit, with only 69 staff members. However, the general feeling was that the JALLC’s mission and tasks were still not particularly well known among its stakeholders, and that the population of the Host Nation was generally not aware of the JALLC’s existence.

Something had to be done in order to promote awareness of the JALLC among its audiences and, simultaneously, support the Alliance’s overall communication efforts. The solution was to develop a plan that could provide guidance to the staff and create synergies in their multitude of contacts The JALLC has recently released its StratCom Framework 2017-19. It’s a living document that sets out the JALLC Commander’s mandate as well as his objectives; the Centre’s narrative, selected audiences; key messages; the platform to be used; and desired effects. It has been developed in conjunction with the broader rebranding efforts of the Centre, and the engagement of the JALLC in spreading the messages of the Centre and NATO, both through conventional means and social media platforms.

We now have the strategy defined, the operational guidance, and have selected the tactics; let’s communicate because, as Dr Paul Watzlawick, the communications theorist, used to say:

“One cannot not communicate!”

Pointless NATO image

All of the cartoons in this articles are the author’s own work.
Leading a JALLC project is a challenge and an honour. However the reader might reasonably ask whether all JALLC Staff Officers are ready to be good Project Managers upon arrival?

Staff Officers arrive on a rotational basis. They have different backgrounds, experiences and skills. Once here, their knowledge and skills are enhanced by courses that provide preparation for project management, particularly the JALLC’s own Analyst Training Course and the Alternative Analysis course at the NATO School in Oberammergau. Additionally the Staff Officers Lessons Learned Course in the Swedish Armed Forces International Centre provides specific analytical skills. This training provides the basis for success, initially as a military analyst on one of the analysis projects and later, after getting used to the work and the mindset needed, in the fascinating role of the linchpin of a project, as the project manager.

Once the project mandate is issued, the project manager knows the initial Joint Analysis Requirement, who the Customer is, how the team is to be made up and who the Project Director, Operational Research Analyst, and Editor will be. He/she (he, in the rest of this article) has the authority to proceed. The timeline and the expected deliverables are the most important aspects to take into consideration at this stage.

Some of the many factors that have an impact on the evolution and success of a project, relate to the role of Project Manager. Leadership skills and personality are very important. Is the Project Manager dominant, influencing, steady, or cautious? How will he make best use of the team’s previous experience, its expertise in information technology and the behavioural characteristics of its members? How will he handle the multinational context and varied national backgrounds?

The ABC of project management in the JALLC is the JALLC Project Approach, a methodology built in-house but derived from academia and industry and adapted from the PRINCE 2® methodology in a way that simplifies administration and governance.

The Project Manager has two key tasks: one is to follow the administrative steps described in the relevant standard operating procedure and project timelines; the other is to focus the team on the root causes of the complex and enduring NATO-wide issue that will be the subject of the research and on producing clear conclusions and recommendations.

For the first, we need the commitment of the project team, Project Manager and Project Director. For the second, we need to follow correct analytical techniques, innovate, and motivate. The project manager needs leadership skills to build the team, mediate any difficulties and maximize co-operation and synergies. He needs effective techniques to manage timelines and performance, reduce risks and provide the necessary information so that the Project Management Board can carry out its governance role.

Interaction with the Customer and stakeholders is not an administrative task only. The Project Manager as a principal partner has to manage expectations and provide confidence to the command group Networking with subject matter experts and others is fundamental. During the data collection period, the Project Manager needs to coordinate the team, and dictate the do’s and don’ts, because the team represents the JALLC leadership and image to the world outside.

More leadership ability is required in this ambiguous arena than in areas where discipline and rules prevail. Equally, good administrative skills are needed to produce the deliverables and achieve the required results, thus showing what the JALLC’s unique set of skills can produce and contributing to NATO’s organizational change. Clearly, then, the role is not one of either leadership or management, but of both.
Digital Badging - Who needs it? We do!

Stefan Olaru, NIC ROU,
Research Analyst

Have you ever found the experience of applying for a job or describing what you have done a bit frustrating, because you are not able to provide the detail that would really demonstrate what you can do? Me too.

Almost three years ago, I identified a job opportunity at the JALLC and applied for a research analyst position. Filling in the application form, I realized that there was not space to include everything about my relevant studies, experience, knowledge, skills, qualifications, and achievements. I could only put in part of the information, hoping that what I thought was relevant would also be relevant from the JALLC’s perspective. I was not confident that I would have the opportunity to get all of the rest of the information across during an interview either! This challenge is faced by a very large number of individuals who look to advertise themselves and by many organizations that look to employ the right people.

For centuries, schools, universities, and other training organizations have provided diplomas and course certificates as a way of recognizing the knowledge and skills developed by their students and trainees. While these have traditionally been well received by individuals and employing organizations, nowadays they seem to be of little practical value in helping individuals to promote their credentials and achievements to potential employers, friends, and colleagues.

This is especially true in the current education and work market, in which specialties are described in a very detailed way. For example, nowadays it is no longer clear what your knowledge and skills are if your CV mentions analyst, but it is very clear if it refers to analyst – social network analysis – egocentric analysis using EgoNet software and then describes what that means, with reliable evidence. It is very difficult to include all the necessary details in a reasonable CV/résumé. Now, however, there is a new solution: the digital badge.
Digital badges are digital tokens awarded to certify that an individual has accomplished a course, a project, or a relevant experience at a certain standard, or has acquired certain skills. They appear as icons that can be shared online on social media, via email, or embedded in a personal website.

Digital badges can be credibly verified because they contain metadata on who earned the badge, who awarded it, when it was issued, validity (if applicable), training content, the level of effort invested in earning the badge, and the knowledge, skills, and proficiencies that the earner has demonstrated.

Digital badges are hosted on online platforms such as Acclaim, Badge OS, Hastac, and Mozilla1 that provide the awarding entity with models, standards, and requirements for the badge, the individuals with secure storage, access, and sharing functionalities, and employing organizations with a credible source in which to verify the standards achieved.

Although only at its beginnings, digital badging may lead to:

“...fundamental change in the way society recognizes learning and achievement—shifting from a traditional books-and-lecture pedagogy to a model with multiple knowledge streams, including new media, collaboration, interest-based learning, and project-based learning.”2

Digital badges will facilitate recognition of deep specialization and support lifelong learning. Recently I graduated from the NATO Concept Development and Experimentation Course provided by the NATO School Oberammergau (NSO). Although I was provided with a paper certificate, I was pleasantly surprised also to be awarded a digital badge. The Figure (left) shows the details of my badge, available in my account in the Acclaim platform. The blue words provide links to more details on the subjects while the skills fields provide details that would be useful for applications.

I found out that NSO is conducting a pilot project on Digital Badging for some of its courses. The NSO uses the Acclaim platform and, "...joins other institutions and companies such as Microsoft, Oracle, University of Utah, Capella University and IBM in offering digital badges to graduates in recognition of their résumé-worthy achievements."3

Could Digital Badging also be applied in the JALLC? Most probably the answer is YES, for three reasons. First, JALLC currently provides four training opportunities: three courses provided by JALLC instructors—the JALLC Analyst Course; the Lessons Learned Staff Officer Course; and the Lessons Learned Officer of Primary Responsibility Online Course; and on-request tailored training. Second, on-the-job training is also part of individual development and the JALLC provides robust project training through the JALLC Project Approach and its associated lessons learned process. Finally, digital badging does not apply only to students but also to skills and achievements as instructors, in developing new concepts, and so on.

Implementing a Digital Badging concept in the JALLC will be beneficial both for individuals who would earn badges that credibly prove their skills and achievements and for the organization which would be keeping up with a trend, identifying STRATCOM opportunities and enforcing the value of non-accredited training. Of course, several constraints have to be considered, such as costs (although they are minimal), personal data protection (although the earner is the only one deciding to share a badge and with whom), security issues (for example, is there a risk in putting together several digital badges showing the skills of a person), and the burden to the JALLC mission (from the additional tasks that would have to be performed).

As a learning organization, it is sensible for the JALLC to wait for the NSO’s conclusions following their pilot project and then to consider the implementation of the Digital Badging concept. In the meantime, I will most probably link some digital badges to my digital signature for the future.

---

1 More platforms may be consulted at http://www.badgealliance.org/badge-issuing-platforms/
2 Things You Should Know about Badges available at https://library.educause.edu/resources/2012/6/7-things-you-should-know-about-badges.
Three Years with the JAGUARS

Producing the NATO Force Structure Joint Task Force Headquarters Handbook

LTC Robert Magyar, HUN A Military Analyst

Following more than 20 years in the Hungarian Defence Forces, I joined the JALLC for my first tour of NATO duty as a Military Analyst in 2014. After some time in the JALLC’s classroom and on-the-job training, I became a member and later the project manager of JALLC analysis teams. A combined military and civilian analysis team conducted extensive data collection during the TRIDENT JAGUAR (TRJR) series of exercises, working together with Joint Operational HQs and other NATO entities in 2015 and 2016.

This was because, at the Lisbon Summit in 2010, the NATO Heads of State and Government had agreed a framework for a new NCS, designed to be leaner and more affordable. In addition to its traditional use of the NCS, NATO now relies on the NFS HQs to provide its full Deployable Joint Command and Control Capabilities and thereby to meet the Alliance’s declared level of ambition. The NFS HQs need to be used as JTF HQs to command Smaller Joint Operations (Land Heavy).

In order to train, exercise and certify the Graduated Readiness Forces (Land) (GRF(L)) HQs—the JAGUARS—for the JTF HQ role, NATO developed the TRJR series of exercises. In TRJR14, NATO Rapid Deployable Corps (NRDC) Spain and Naval Striking and Support Forces NATO (STRIKFORNATO) were the first NFS HQs to be successfully certified. TRJR15 exercised NRDC-Italy and the Allied Rapid Reaction Corps, and TRJR16 exercised NRDC-Turkey. TRJR17 exercised 1st German Netherland Corps and the Rapid Reaction Corps – France. All JAGUARS successfully met the requirements and were certified as Deployable Joint Operational HQs, available to Supreme Allied Commander Europe for a one-, or two-year, stand-by period, in accordance with NATO’s Long Term Rotation Plan.
The JALLC was tasked to analyse the processes, capabilities, and structures of the GRF(L) HQs as they were used in their JTF HQs during TRJR14 and TRJR15. Through two Joint Analysis Reports, the JALLC project teams: identified lessons to improve the ability of GRF(L) HQs to perform the role of an NFS Integrated Model JTF HQ; supported the JWC in improving the delivery of JTF HQ training; and provided valuable insights for the continued development of the NFS JTF HQ concept.

After the JALLC’s analysis of the TRJR14 and TRJR15 exercises, it was requested to contribute to the production of the first edition of the NFS JTF HQ Handbook in 2016. The Handbook combines observations from the three TRJR exercises between 2014 and 2016 with insights and analysis from subject matter experts at the JWC, JALLC, and NATO’s Command and Control Centre of Excellence, who worked together with the NCS and NFS HQs.

The two Joint Analysis Reports and the Handbook will be used to support the revision of the Bi-Strategic Conceptual Framework for Alliance Operations and the Allied Command Operations Directive 80-98, Generating Joint Command and Control Capability from the NATO Force Structure.

The Handbook remains a living document and will be updated to reflect recent and new NFS JTF HQ experiences during the TRJR exercises. It will therefore continue to support the development of the NFS JTF HQ concept.
One of the JALLC’s longest running efforts is to train the Lessons Learned community (both NATO and non-NATO) to a set of standards and good practices. The main vehicle for this training is the Lessons Learned Staff Officers Course (LLSOC), now run three times a year. By the end of 2017, the JALLC will have conducted 30 iterations of the LLSOC, training between 20 and 40 students per course. Although NATO is chock full of courses and training opportunities, the LLSOC carries with it a number of characteristics that make it unique and attractive to students (and potential instructors) from all over NATO and from Partner nations.

First of these characteristics is the fact that the course is run at the Swedish Armed Forces International Centre (SWEDINT), about 30 kilometres north of Stockholm. Why in the world would the JALLC—situated in sunny Lisbon—make 30+ students trek to the Great White North for a course? The answer is twofold: first, the facilities and the administrative support provided by SWEDINT are second to none; and, second, the relationship with a NATO Partner nation such as Sweden only serves to enhance NATO’s network of Lessons Learned stakeholders and practitioners. There is arguably a third reason as to why the JALLC, and the instructors in particular, prefer the use of SWEDINT facilities for the LLSOC: we like to give homework. In the LLSOC, JALLC instructors have designed a course that is challenging both in theory and in content. And, as it turns out, being in the Middle of Nowhere, Sweden, ensures the ideal balance of minimum distractions and maximum study time!

Another characteristic making the LLSOC unique in NATO is the course content. The objectives of the course aim to teach a Lessons Learned Staff Officer many things including the NATO Lessons Learned Process and capability; techniques for identifying, analysing, and capturing lessons; and the individual’s potential role in their respective organizations. In order to cover these key concepts in a brief five days, the JALLC instructors have designed a set of classroom lectures, complemented by individual work and hinging on intensive syndicate work. Students learn to look at a basic observation and use different analysis approaches in order to turn that observation into a mature Lesson Identified. In this vein, a single scenario is used that offers students an observation-rich set of data. The scenario?—The 1996 climbing disaster on Mount Everest that resulted in the deaths of eight people.

What in the world—you may well ask—does climbing Everest have to do with lessons in NATO?
Well... nothing really.

But, by providing a non-NATO, non-military scenario to the students, we can ensure that everyone starts on a level playing field. Just imagine, if the course used scenarios that dealt with logistics or aircraft maintenance, we would undoubtedly have an expert in the room who would get little value out of the associated exercises. By using something outside of the students’ comfort zones, the instructors are able to push the students to think in new and creative ways in order to fully understand complex problems, identify root causes, and make actionable recommendations.

Finally, the JALLC prides itself on an enduring characteristic of the course—it’s pretty hard. The LLSOC has undergone many changes over the past eight years, but it maintains its reputation as mentally stimulating and challenging, not only for students, but for instructors as well. In fact, a prerequisite for being an instructor or syndicate leader is that you first take the course as a student.

On a personal note, I first attended the LLSOC as a student in 2015, and, since then, I have been an instructor four times. I can honestly say that no two times have been the same. Students continue to ask new, tough questions and instigate valuable and thoughtful discussions. I learn new things with every iteration of the course, and that fact—that the course continues to offer new discoveries and insights—is, I believe, a testament to its nature as a true catalyst for learning.
Remember this? This is how we used to communicate across NATO commands—and until more recently than you might think. From 1995 onwards, however, communications no longer carried only phone, radio, and telegraphic signals: data was also included. The Communication and Information Systems (CIS) sections of each HQ took on responsibility for information technology and every command started to get equipped with interconnected computers able to exchange emails, not only internally but with other HQs, in a fraction of the time taken by teletype.

Central coordination was needed to avoid problems of interoperability between the different systems. The solution was the standardization of the underlying infrastructure of both networks and systems. In 1997, this task fell naturally to the body responsible for the operation and support of communication and information systems on both sides of the Atlantic and for all NATO Operational deployments: the NATO CIS Operating Systems Agency.

In 2004, after the North Atlantic Council endorsed a recommendation to integrate all NATO’s fragmented CIS service provision into one centralized organization, separating customers from Suppliers, the NATO CIS Services Agency (NCSA) was born. By 2010, the NCSA supported all major and minor HQs directly, including the JALLC, and handover—takeover operations between the local CIS and NCIA Support Element Monsanto began.

The 2010 NATO Lisbon summit resulted in a major reorganization of the NCS and all its Agencies, and the NCIA was established, merging four agencies including the NCSA. The Nations asked the NCIA to obtain an immediate 20 per cent saving in IT costs, through synergies from the merger and the IT manpower. The NCIA sector Lisbon reduced from about 120 to 20 people. The NCIA achieved what was asked through the local element—the Customer Supporting Unit (CSU) Lisbon—creating synergies and streamlining processes and procedures, while maintaining the level of IT services to the JALLC throughout.

At the 2010 summit, another important decision was taken: to move the NATO Communication and Information Systems School (NCISS) from Latina, Italy, to Portugal. On 23 May 2017, the first stone was laid in the Oeiras compound for what will be known as the NCIA Academy. In parallel, the Agency has been planning a complete modernization of the whole NATO IT infrastructure, from beginning to end: the IT modernization project. The two will come together in Portugal in 2018-19 and are intended to happen without any interruption of the service provision to local customers. This challenge will keep CSU Lisbon busy for some time to come!
Our People
I’ve always enjoyed doing sports. As a child, my mother made sure I had an active after-school life with arts and sports playing a big role. Indeed, I’ve been lucky enough to grow up in a family of athletes: my mother participated in various sports and was the first woman to hang-glide solo in Great Britain; my father has a long and illustrious career as a racing car driver and also competed in the two-man bob-sleigh and luge at the Olympic level. So I’m more than familiar with the athlete’s mentality to life; perfect practise makes perfect, never give up, and if you always do what you’ve always done, you’ll always get what you’ve always got.

Although my parents perhaps gently attempted to steer me in the general direction of the family sport of car racing, I favoured single horse power. For most of my teenage years, when not in school, I was to be found either riding horses or reading about riding horses. Fast forward 20 years or so and, when not working, I’m still usually to be found following equestrian pursuits. As we equestrians say: “it’s not just a sport, it’s a passion.”

But equestrian pursuits are not my only pastime. Finishing university in 1998, as I set out on my first career as a corporate lawyer, I decided that I wasn’t going to be one of those lawyers who sat at their desk all day, so I joined a gym. That would be the start of a 12-year career with the international sports training programme Les Mills that would play such a strong role in my personal development and indeed my life’s path that it has become an integral part of who I am. To make a long story short(er), I soon went from being an avid follower of the classes at my local gym to a fully qualified instructor with my own following of loyal gym-goers. I’d teach five hours a week, after work and on the weekends, and I loved it; it’s what kept me sane in the otherwise stressful world of corporate law, working for one of the world’s top five law firms. And I still teach today!

Now, there is one thing about sport that I learned as a child growing up and continue to enjoy every day as an adult, and that is that sport brings people together. Sport has the ability to transcend the boundaries of nationality, race, religion, age, gender—in fact, almost anything that might divide people in other circumstances. And it’s this ability to break down barriers that I love most about sport.

For example, I compete in equestrian sports on a regular basis: at eventing to be precise, the equestrian equivalent of a triathlon. Horse and rider must complete a dressage test (a few minutes of very disciplined dancing with the horse), a gruelling cross country course (several kilometres long with over 30 jumping efforts including fixed obstacles and jumping in and out of water), and a show jumping course (10–12 knock-down brightly coloured
The cross country phase (pictured left) is the most dangerous phase of eventing with horses and riders taking fixed fences at full speed over rough terrain. Things don’t always go as planned, but you do it all for the days that it does. Big thanks to all my coaches and my support teams over the years.

I compete here in Portugal with my Portuguese-bred (French/Irish cross) horse, Zitta da Lapa (see pictures) and have been thoroughly welcomed into the Portuguese equestrian community from the first day as one of their own: if you ride, no matter where you come from, what you do, who you are, you are one of the family. For me, this even included being welcomed at the Portuguese Military Academy where I have the privilege of training and competing with their eventing team.

Another example from my own life is when I moved here to Portugal just over six years ago. One of the first things I did was to go to the local gym and sign up. It didn’t take long for me to make friends and even start teaching again which all offered me a fantastic opportunity to get to know the country, the culture, the language, and the people through sports.

And this is something I have seen to be true all over the world and for all sports. If you do a sport then, wherever you go, you have an instant group of friends that love the same thing you do.

But it’s not just the equestrian community where I see sport working its magic every day: here on the Air Force Base where the JALLC is housed in Lisbon, I’m lucky enough to be allowed to teach my aerobics and fitness classes in the gym. I offer free classes to anyone who wants to show up and it has led to a loyal following of my NATO colleagues and Portuguese Air Force officers getting together two or three times a week to share an hour of exercising and having fun together. I see with my own eyes how this simple act of doing sport together really brings people together.

I’m proud to say that my father, aged 64, is still racing cars—albeit in the veteran classes, although I sometimes think he forgets that—and I hope with all my heart that I will still be competing at his age: I fully intend to be, that’s for sure.

Did you know, Hiroshi Hoketsu from Japan was 71 when he competed at the 2012 London Olympic Games; he was an equestrian. And Her Majesty Queen Elizabeth II is still an avid over-90 rider. There is hope for me yet!
One of the first impressions that visitors to the JALLC have is of the friendly, colourful, and quirky room that is the control centre and support system for Tina Kosswig, the Personal Assistant to the Commander. Tina has been with the JALLC from the very beginning—indeed, even before the beginning. In 1998, she was working as a civilian for the Navy in her home country of Germany. Tina typed a letter for her boss about the idea of a new organization to take on the work of the Permanent Maritime Analysis Team, which was to be based in Lisbon. As her then boyfriend—now husband—was Portuguese, this seemed an opportunity not to be missed. She kept her eyes open for any sign of the JALLC’s birth, and her tongue occupied in asking everyone of influence who visited her boss about what was happening and whether she could work there. Eventually, her persistence paid off and Tina has been here ever since.

Her dreams of a new life in Portugal, full of interest and sunshine, were somewhat dashed when she saw her accommodation in the JALLC building. For reasons of security, her room did not have a window on the world. What was to be done? Tina decided from the start that some pictures would brighten things up and give her something pleasant to look at. As soon as the JALLC staff began to travel abroad for their research, or went home on leave, she asked them to send her a postcard of where they had been. Visitors who see the growing collection offered to send postcards when they got home. One thing led to another, and this is the result.

All of JALLC’s Commanders have sent her postcards. Former members of staff continue to remember Tina when they go on holiday or see a card that reminds them of her bubbly personality. One young man from Sweden sent her his very first postcard—shown opposite.

There are cards from across Europe and the US, from Afghanistan and from Vietnam. There is even a beer mat with a stamp on it.

The cards give Tina huge pleasure. They show that the senders have thought about her, chosen an appropriate card, added a personal message, gone to the trouble of acquiring a stamp and found a post box. Often the senders have said, “I sent you a card but it will never arrive. The post from here is so unreliable.” But they always turn up, even if they take some time. As Tina says, the cards may not cost much, but to her they are priceless.

For her birthday a few years ago, the staff on the first floor got together to present Tina with a picture of the view from the building, set in a window frame complete with blind. And last year, they went to the trouble of getting permission to take another photograph from the derelict restaurant nearby to act as a second window.
A sample of postcards from Tina's priceless collection which always draws the attention of visitors and brightens anyone's day when they step into her office. If you want to send Tina a postcard, mail to: T. Kosswig, JALLC, Avenida Tenente Martins, Monsanto, 1500-589, Lisboa, Portugal.
The JALLC’s Easy Riders

LTC Fernando Maçana, PRT A, Military Analyst

Working at JALLC does not only mean following a Battle Rhythm from nine to five. Working at JALLC is also the pleasure of cultural sharing and partnership among the members of the Nations represented in at the JALLC.

All through the year, there are several events which are good opportunities for JALLC members to gather and share their interests and hobbies. These team-building events are great fun and help us to get to know each other so that we can work even better together.

One such event is the JALLC’s motorbike ride, when the members can share their love of motorbikes and the pleasure of riding their steel horses through the magnificent landscape of Portugal. The motorbike ride is also open to family and friends and there is always a cultural location included.

For this ride, the plan was to leave the JALLC facilities and head south across the 25 de Abril bridge on the way to Azeitão, Serra da Arrábida, Setúbal and back to Lisbon.

On 21 May 2016, at around 08:30, the riders started to convene next to the Comando Aéreo main gate for the departure at 09:00. As planned, the six motorbikes and eight riders crossed the Tejo River and headed south. After a short stop on the other bank of the river for refueling and coffee, the ride continued to Azeitão where we made a second stop to visit the José Maria da Fonseca farm and wine cellars.

José Maria da Fonseca is the oldest table wine company in Portugal. Founded in 1834, it is now owned by the 7th generation of the family and sells its wines on all continents. Among its best known brands are Periquita and Lancers. The visit began in the Museum Room with a brief explanation of the company’s history. After a walk through the garden, we visited the Wineries: the Adega da Mata, where the Periquita wine is made, the Adega dos Teares...
Novos, where the Brotherhood of the Periquita is held annually, and the Teares Velhos Winery, where the oldest Moscatels of Setúbal are kept, some of which are more than 100 years old. At the end, we had the opportunity to taste some of the brands produced by José Maria da Fonseca—without going too far, of course, since wine and two wheels is not a good combination.

After the cultural visit to the cellars, the group headed for Serra da Arrábida, where we went down next to the sea to the beautiful Portinho da Arrábida and then up to the top of the mountain to enjoy the magnificent views.

The Serra da Arrábida is a 500 metre high mountain, located on the northern shore of the Sado River estuary in the Setúbal peninsula. The two sides of this mountain are very different. On the northern slope, there are vines, orchards, and olive trees, with some ancient brushwood and pines. The south slope falls to the ocean in a steep 500 metre drop. The white colour of the limestone layers and the Atlantic blue are very attractive.

From the top, we were able to admire the views over Setúbal on the northern bank of the Sado River, Troia on the southern side and the Portuguese coastline for several kilometres. After a short stop for some photos, the group headed to Setúbal, which is one of the main cities in Portugal. At the beginning of the 20th century, Setúbal was an important fishing centre in Portugal, especially for sardines. None of the many companies from that time are still in business today, so the income from tourism has become very important to revitalize the local economy. A large colony of dolphins lives in the bay of the Sado River, and several companies offer boat trips to see them. On the opposite shore to Setúbal is the peninsula of Tróia with its great fish restaurants. If you visit Setúbal, you must have a meal in one of them. Of course our group was no exception and we entered one of the restaurants near the river to eat the unmissable fish.

After lunch, the group headed back to Lisbon to finish the JALLC’s motorbike ride. We had a wonderful meal in our stomachs, a big smile on our faces, amazing memories to share and remember in our hearts and a huge will to repeat the experience every year.

The group separated on arrival in Lisbon, but all its members were already looking forward to the next JALLC Motorbike Ride.

Hope to see you all there.
"We have a vacancy for an A2 Research Analyst at the JALLC and wondered whether you would be interested?"

This is an extract from an email sent by the Human Resources Office, HQ SACT. I opened the email at 0700hrs on 11 November 2016 and, by 0701hrs, had responded with an emphatic: “YES.”

I had previously served at the JALLC during the period 2009–2012 as a Military Research Analyst. At that time, I was serving as a Lieutenant Commander in the British Royal Navy. It was with some apprehension that I joined the JALLC in 2009. I must admit, I had never previously heard of the JALLC and, as a military logistics officer, I had kicked many tyres and counted lots of blankets but had certainly never been posted as a research analyst. I joined JALLC in September 2009 direct from Joint Force Command (JFC) Naples where I had been posted as the Commanding Officer of the UK Support Unit. Within just a few short weeks, my In Tray had changed from (often failed) attempts to persuade intransigent Italian landlords to conduct much-needed repairs on properties rented by the UK military, to sitting in DCOM ISAF’s office discussing the main facets of stabilization and reconstruction efforts in Afghanistan! Some might say that there should be a study to assess the reconstruction efforts required in and around the new JFC HQ site near Naples but that’s perhaps a separate JALLC research project!

During my time in the JALLC as a military analyst, I worked in various roles, either as the project manager or as a team member, on four projects: Military Contribution to Stabilization and Reconstruction; ISAF Command and Control (C2); OP ALTHEA C2 Structures; and Media Monitoring and Analysis in NATO. Additionally, I assisted in the development of the JPA; a process to improve the methodology of project management.
At that time, I was one of just two British military staff on the JALLC PE and I count myself exceptionally lucky and privileged to have had the opportunity to be posted there. The organization is small (circa 50 personnel) but, to my mind, it punches above its weight. It is brimming with highly gifted and motivated personnel—both military and civilian—and the outputs resonate throughout NATO and beyond. The job was both professionally rewarding and demanding in equal measure. I departed the JALLC in August 2012 to take up a nine-month op tour in Bahrain before being assigned, once again, to JFC Naples. At that point, I had served almost 30 years in the military and looked back upon my time in the JALLC as the stand-out posting in my career.

Wind the clock forward to 11 November 2016 and the receipt of the email from HQ SACT. At this juncture, I was serving within the Joint Logistics Support Group, JFC Naples. This was to be my final posting in the military, and I had plans to retire to Portugal (I may have forgotten to mention that my wife is Brazilian).

I had previously applied for a vacant NATO civilian post at the JALLC. Although I reached the interview stage, I was not selected for that one. However, when another vacancy arose, the currency of my previous interview was still extant; therefore, completely out-of-the-blue, I received the email seeking my availability. By early January 2017, I received a firm job offer from the JALLC and, on 06 March 2017, I joined the JALLC as a NATO civilian.

The transition from military to civilian life has been relatively painless. This has been largely down to the goodwill and flexibility afforded to me by my line managers at JFC Naples and by my Career Manager (it was either that or everyone was just happy to see me leave the Navy early!).

And so I rejoined the JALLC as a civilian and picked up where I left off five years earlier. For sure, things have changed. I now have to make the daily decision on what shirt to wear as, in my former life, combats were the uniform of the day (every day!)

Personalities have come and gone and the vast majority of the military personnel have rotated out, but the feel and the energy that resonates through every corner of the JALLC is still as I remember. As an ex-military logistics officer, I have now been assigned to a project associated with the development of NATO’s future logistics concept … it is a funny old world indeed! By coincidence, I was serving at the JALLC when it celebrated its 10th Anniversary. I am delighted to be here for its 15th and, if I am extremely lucky, I hope I am here for its 20th Anniversary.
We couldn’t do it without them: The US Navy Reserve

The United States Navy has had Reserve units dedicated to the support of ACT since its creation in 2003.

Located throughout the eastern United States (there are two in Norfolk VA, and one in Washington DC, Newport RI, Atlanta GA, and Chicago IL), these six Reserve units consist of 221 Navy Reservists of all ranks with a variety of military and civilian backgrounds. Since 2003, Reservists have supported NATO symposia and conferences, ISAF training events, NATO exercises, and multiple other missions.

The need for additional support for the JALLC was first recognized for the NATO Lessons Learned Conference (NLLC), and the Reservists were called upon to help take notes during the panels in order to produce the NLLC Report. Later, this agreement was expanded to provide support on a more regular basis. Over the years the relationship between the US Navy Reserve and the JALLC has further developed into a joint programme that sees Reservists being selected on the basis of their experience and skills (both military and civilian) to assist the JALLC.

Over the years, the level of support has increased to an almost constant stream of reservists providing all kinds of editorial and administrative support, but mainly assisting the JALLC’s Editor.

US Navy Reservists have assisted with the JALLC-hosted NATO Lessons Learned Conferences, report and factsheet editing, website content, and numerous other projects. It is a flexible resource, doing whatever is needed when it is needed. In addition, agreements have been made to allow the JALLC to make use of the Reservists’ Drill Weekends in order to have some work done remotely in the US via email.

The Reservists come at no cost to the JALLC, ACT, or NATO: all costs are paid for by the US Navy. It is a mutually beneficial relationship which allows the Reservists to complete their mandatory active duty days, provides much-needed support to the Editor’s office, and develops the relationship between ACT and the JALLC.

The JALLC would like to take this opportunity to say a huge thank you to all US Navy reservists that have assisted in the JALLC over the years and to the US Navy for providing us with this very much needed support.
I have been working at the JALLC since July 2016. After a year of working here, I can see some basic factors that make our analytical work here efficient and productive. During the analytical process, it is essential to follow what we call the ABC rule, which means:

**Assume nothing,**

**Believe no one,** and

**Check everything.**

This rule is particularly important because we work in an international environment in the JALLC. We can not only have different views on things but also different ways of expressing them. That’s why confirming any information is one of the keys to good communication.

As an officer who has been on different NATO missions, I can see how the experience I gained there is of use here at the JALLC. Having taken part in NATO action makes it easier for me to see that, although NATO fulfils its role overall, there are still improvements that can be made. Analysis of current Alliance proceedings is crucial to make sure that the planning of future operations is modernized and improved. The JALLC Analyst Training Course, for example, is an opportunity to share with more and more representatives of NATO members what we have learned through joint analysis.

My experience on NATO operations also makes me aware of how important our work is: the theory that is developed here comes out as—we hope, more effective—practice in the field. Thanks to gathering the Lessons of the past, it is easier to plan future operations. Thanks to our analysis, it is easier to make operations better.

In my view, the presence of the representatives of NATO members in the JALLC is beneficial and creates an opportunity for every country represented to contribute to NATO’s development. We all work together to make every one of our countries safer.

As well as the professional contacts, I very much value the friendships I have made here. We meet together with our families for joint dinners, and for dancing, sailing or sightseeing in beautiful Portugal. I am sure that these personal contacts will continue to be useful and supportive as we move on in our careers.
As cheesy as it may sound, coming back to the JALLC as a Research Analyst is a dream come true. When I was offered the position, I didn’t hesitate. I finished my job at the European Parliament, packed my things and flew to Lisbon. Here is why:

To begin with, since I finished my Master’s on International Security and Strategic Studies, I knew that I wanted to become an analyst. That is the reason that brought me here as an intern in the first place. I chose to apply to the JALLC because I was convinced that here I would acquire the knowledge and skills to reach that objective. The fact that I am back as an analyst proves that I wasn’t wrong.

Secondly, for many young professionals in Europe like me, internships are often the only way to gain the necessary experience that would allow you to work for an international organization such as NATO. Your only motivation is to do a good job so you can show your supervisors that you are a reliable person. After four internships and two years changing countries every six months, being here means that I chose the right path, and I am grateful to all my colleagues and the organization for their trust and support.

Finally, let’s not forget where the JALLC is located. Having the chance of coming back to Lisbon is wonderful news in any regard. I fully enjoyed the city and the country during my first stay here. Its people, gastronomy, weather, and culture are truly amazing and, for a Spaniard like me, the closest you can feel to being home while living abroad. Basically, moving back from cloudy Brussels wasn’t a hard decision.

To conclude, being at the JALLC is a great opportunity for me, and I will do my best to continue to learn from this great group of professionals and to contribute to the mission of the organization.

ACT Internship Programme

The JALLC offers two internships under ACT’s Internship Programme. Both internships cover a broad spectrum of activities conducted at the JALLC and offer interns an opportunity to gain insight into the transformational side of NATO. The ACT Internship Programme is part of ACT’s broader communication strategy to promote HQ SACT and ACT activities and to provide the NATO Nations’ best and brightest students with opportunities to participate in a dynamic and strategic military–civilian cooperative environment at HQ SACT or the JALLC. Interns gain an understanding of how ACT leads the transformation of the Alliance, by helping NATO Nations and partners to improve their military effectiveness and increase interoperability by combining new concepts, capabilities and doctrine with advanced research and technology.

In particular, interns at the JALLC will gain experience in research and analysis techniques, improve their verbal and written communication skills, work with a range of people from different countries, cultures and career backgrounds, and take away an understanding of NATO’s Lessons Learned Process and how joint analysis contributes to that and to NATO’s transformation in general.
On 05 April 2017, Professor Trevor Taylor of the Royal United Services Institute (RUSI) talked to the JALLC and participants from the Portuguese defence community about the United States’ Third Offset Strategy and its prospects. Professor Taylor gave a fascinating talk about the changing threats that NATO is seeking to counter, the kind of missions and operations that are likely in the future, and the need for a step-change in capability through innovation.

Professor Taylor suggested that the necessary step-change in capability will happen if the defence community can adapt existing technologies and thinking for new purposes, make connections between existing technologies and thinking, and take advantage of the huge proportion of total global research and development spending that is undertaken by commercial companies for civil purposes. During the lecture he stated:

"Innovation is not just about technology: it is also about thinking and behaviours. Innovation will only come if we are more ready to tolerate failure."

The seminar forms part of the RUSI–JALLC partnership framework agreed in May 2016. The partnership means that the JALLC can benefit from the latest cutting-edge RUSI defence research and analysis findings and best practice in contemporary strategic level topics.

A group of students studying International Relations at the Universidade Lusíada and their professors visited the JALLC on 07 April 2017. The aim was to ensure that the students were aware of the NATO presence in Portugal and knew what the JALLC is and what it does.

The JALLC’s Chief of Staff COL Henrique José Pereira dos Santos welcomed the students to the JALLC. He gave a short presentation on its history, where it fits into the NATO structure, its mission, and its work on joint analysis, lessons learned, and training.

This was followed by a presentation from Ms Jodie Lazell, the Editor at the JALLC, who explained how the JALLC analyses complex, recurring, cross-command problems and supports NATO’s Lessons Learned process. Ms Lazell set out the JALLC Project Approach, based on PRINCE 2® methodology, which takes a project from the identification of the requirement by the customer through to final product and the evaluation of the process.
Supreme Allied Commander Transformation visits JALLC

On 20 June 2017, the JALLC received a visit from SACT, General Denis Mercier, who shared his vision of the future for the Centre with the JALLC’s staff. During this working visit, the JALLC’s activities were presented to General Mercier and he, in turn, explained how he sees the JALLC operating in the future as NATO’s lead agent for Lessons Learned.

SACT then addressed the JALLC staff members, and expressed his satisfaction with the high quality of the work of the Centre, both in its analysis reports and elsewhere. He stressed that it will be essential to have an entity in NATO with a focus on Lessons Learned to support the NCS now and in the future, and that the JALLC will be at the centre of those efforts. Looking to the near future, he explained that the JALLC’s work will need to be focused largely on the NATO Lessons Learned Process, emphasizing that the Nations need to be brought more into that process and that the NATO Lessons Learned Portal, currently managed and maintained by the JALLC, must be used more efficiently.

At the end of his visit, General Denis Mercier was interviewed by a Portuguese TV channel (SIC). During the interview, he explained how Allied Command Transformation is helping to tailor the way in which NATO will operate in the future.
Visit from Major General Giovanni Fantuzzi

On 12 April 2017, the JALLC received a visit from Major General Giovanni Fantuzzi, the Deputy Commander of the Italian Joint Operations HQ in Rome. The purpose of the Major General’s visit was to gain an understanding how the JALLC contributes to NATO’s Lessons Learned Process.

Major General Fantuzzi had an Office Call with Brigadier General Mário Barreto, the Commander of the JALLC, followed by a tailored briefing, during which the activities of the JALLC were presented and he was able to ask technical questions to the JALLC’s Division Heads further deepening his understanding of what the JALLC does and how NATO’s Lessons Learned Process works in practice.

JALLC member’s art exhibition at the Ministry of Defence

The staff of the JALLC have many talents and enjoy taking part in and contributing to the cultural life of Lisbon and Portugal. On 30 May 2017, an art exhibition at the Ministry of National Defence in Lisbon showcased photographs by LTC Jacek Ulinski (Polish Army) and paintings by his wife Kasia Wrona.

The exhibition was opened at a ceremony hosted by the Secretary General of the Ministry of National Defence Sr Gustavo André Esteves Alves Madeira. The ceremony was attended by the Polish Ambassador in Portugal HE Jacek Junosza Kisielewski, the Commander of the JALLC Brigadier General Mário Barreto, JALLC representatives, artists, members of the Portuguese Ministry of Defence, art lovers, and invited guests.

The exhibition focused on the world of nature, with over 40 close-up photographs of flowers and insects in varied forms and shapes and large paintings inspired by the elements of Earth. It was entitled “The light of Portugal”, and depicted the artists’ love of playing with the unique Portuguese light and capturing the minute details of its ever-changing nature.
Montenegro as the twenty-ninth member of NATO

On the afternoon of 07 June 2017, the JALLC staff members gathered simultaneously with staff across all major NCS HQs to recognize the accession of Montenegro as the twenty-ninth member Nation of NATO.

During the ceremony, which saw the JALLC’s Commander place the flag of Montenegro alongside the flags of the other NATO Nations, he said a few words to mark the occasion. In particular, the Commander noted that this event represented the culmination of many years of effort on the part of Montenegro to become a full NATO member.

Montenegro’s accession demonstrates the common goal of a more peaceful and prosperous Europe, increasing security, and stability throughout the whole Euro-Atlantic area.

The JALLC congratulates Montenegro on its accession to NATO and welcomes it into the Alliance.

Visit from STRIKFORNATO Chief of Staff

On 07 June 2017, the JALLC received a visit from STRIKFORNATO’s Chief of Staff, Brigadier General Karsten Heckl (USA Marine Corps).

Brigadier General Heckl had an office call with the JALLC’s Commander, and discussed, among other things, the relationship between the JALLC and STRIKFORNATO.

This meeting of the two NATO HQs based in Portugal is always an important opportunity to coordinate and communicate and discuss relevant issues relating to both HQs.
Enhancing Intelligence Capabilities

In June 2016, NATO Heads of State and Government highlighted in their Warsaw Summit Declaration the importance of comprehensive intelligence arrangements and Joint Intelligence, Surveillance, and Reconnaissance (JISR) capabilities for NATO's timely and informed political and military decision making.

As head of Allied Command Operations (ACO), responsible for overall command of NATO military operations and the provision of advice to NATO’s Military Committee and the North Atlantic Council, Supreme Allied Commander Europe (SACEUR) has a distinct requirement for Situational Awareness. The ability of ACO's strategic level HQ, SHAPE, to provide SACEUR with timely and effective Indications and Warning (I&W) and JISR capabilities to enable this is of particular importance.

In order to support SHAPE’s continuous efforts to enhance SACEUR’s Situational Awareness, the JALLC was tasked by Supreme Allied Commander Transformation (SACT) to assess the future development of the I&W and JISR capability at SHAPE.

The project team reviewed relevant documentation, conducted interviews with identified stakeholders, and participated in a number of relevant conferences and workshops to generate an evidence-based analysis of SHAPE’s I&W and JISR capability. Based on the project team’s findings and conclusions, the JALLC was then able to make recommendations on the way ahead for SHAPE’s approach to enhance SACEUR’s Situational Awareness.
The recently published Lessons on Interoperability with Partners during Crisis Management is in response to a requirement in the Interoperability Platform Roadmap on Crisis Management and Interoperability for 2016/17 as endorsed by the Defence Ministers at their meeting in Interoperability Platform format during the 2016 Warsaw Summit.

Information sharing is key to the success of a NATO-led mission, operation, or exercise. There is therefore a need for efficient and effective systems that allow operational Partners to work together. The lessons found have been grouped into the three dimensions of interoperability as set out in the NATO Interoperability Policy: technical, procedural, and human.

The conclusions reached by the team include the need to improve interoperability within and among the Alliance and Partners and the need for clear and simple Partnership structures. The project team found as many as 29 active Partner-related interoperability platforms, initiatives, committees and groups.
Acknowledgements

Our extended thanks go to the United States Navy Reservists for their contributions to this publication as well as their editorial assistance, but also for their continued support to the JALLC over the years which is always greatly appreciated.

The JALLC would further like to thank all of its staff, past and present, for their overall contribution to the success of the Centre over the past 15 years.

For more information on the JALLC, please see our website at www.jallc.nato.int or refer to the contact details on the back cover of this publication.

The articles presented in this publication express the opinion of the author and do not necessarily represent the position of the JALLC and/or any other body within NATO or the Alliance itself.

Editorial Team:
Ms Jodie Lazell (Editor)
Mrs Elizabeth Hunter (Contracted Deputy Editor)