NATO COMMAND & CONTROL CENTRE OF EXCELLENCE

SEMINAR: C2 ON THE MOVE

CHANGING WORLD, INCREASING COOPERATION, ADAPTIVE C2
RADM BEKKERING

TOWARDS ORGANIC JOINTNESS
PROF. LINDENFRENCH

THE JTF HQ CONCEPT
COL ANNICCHIARICO

STRATEGIC & OPERATIONAL LEVEL INTERACTION
COL CUZZELLI

INSIGHTS ON THE JTF( L) HQ
BRIG GEN MONTENEGRO
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THE NATO C2COE
The NATO C2COE was established as a result of the reorganisation of the NATO Command Structure during the 2002 Prague Summit. The Concept of Operations for the NATO C2COE was endorsed by Headquarters Supreme Allied Commander Transformation early 2006. In June 2007 the Memorandum Of Understanding with NATO and Nations was signed. The Centre passed NATO accreditation in April 2008. The NATO C2COE is a multinational establishment hosted by the Netherlands with members from nine different sponsoring nations.

OUR MISSION
The NATO C2COE’s mission is to support NATO, Nations and international institutions/organisations by providing Subject Matter Expertise on all aspects of the Command and Control (C2) process with a focus on the operational environment. The NATO C2COE continually reflects on our position within NATO to ensure we are providing the Alliance with the most relevant contributions in the field of C2. We find ourselves in a fast-paced and dynamic environment with new focus areas and challenges. Thus, the Centre constantly strives to improve C2 principles and techniques. We are contemplating specialisation in specific C2 domains and serving the Alliance by championing new initiatives within the field of C2.

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The 2015 NATO C2COE Seminar “C2 on the Move” was planned and coordinated by the staff of the NATO C2COE, situated at the Kromhout Barracks in Utrecht, the Netherlands.

This year, the seminar was hosted by the Netherlands, and was held at the Naval Base Den Helder – Rijkszee - from the 24th until 26th of March 2015. The building where the seminar was held, the ‘Admiraliteit’, provided a warm welcome to the seminar attendees, and the NATO C2COE would like to convey her special thanks for everyone’s hospitality at the Naval Base.

The welcome and hospitality was extended by Rear Admiral Ben Bekkering, Deputy Commander of the Royal Netherlands Navy (RNLN), who gave the seminar’s welcoming address. He started his briefing by saying that our (meaning the Dutch), ability to adapt and interact with the waters that surround us, has become an integral part of Dutch culture and expertise, driven by necessity, since half the country is below sea level. It is a constant joint operation that requires all services in order to keep the water out, yet we also use the seas to our advantage.

This type of ‘jointness’ is perhaps something we can take away for the future of Command and Control (C2).
AIM SEMINAR
The aim of the two and a half day seminar was to explore the different C2 perspectives in light of the Joint Task Force Headquarters (JTF HQ) concept, and to identify useful takeaways. The overall aim of the NATO C2COE seminars is to offer an environment for discussion and to enhance overall awareness of topics related to C2. The seminar’s value is mainly educational and informative, but it also provides a forum to widen or renew personal and official social networks.

The 2015 NATO C2COE focus is on ‘NATO being on the move’, and the seminar title was intended to illustrate the defence community’s heightened sense of readiness due to global developments, its higher level of awareness of current threats, and to identify a new kind of flexibility and the adaptations required for effective 21st century C2. “Big war may be coming” according to the academic community’s representative on the topic, professor Dr. Lindley-French. Quite the confrontational opening statement from the first speaker on the topic, but it got all seminar attendees alert and listening.

The seminar speakers provided the audience with different perspectives on and experiences with the JTF HQ concept and C2. The briefings include relevant slides from the accompanying powerpoint presentations, and are structured in such a way that the reader can experience the briefing as if he or she were there themselves.

In consultation with the individual briefers, and in light of NATO’s classification rules, some briefings have been redacted for publication purposes.

REVIEW DOCUMENT
This Seminar Review Document consist of briefings from the academic community, Supreme Headquarters Allied Powers Europe (SHAPE), and from the Office of Primary Interest of the Comprehensive Crisis and Operations Management Centre (OPI CCOMC).

Also included, are briefings from representatives from Joint Force Command Brunssum (JFCBS), Joint Force Command Naples (JFCNP), and from the NATO Rapid Deployable Corps Spain (NRDC-SP), Naval Striking and Support Forces NATO (STRIKFORNATO/ SFN), the Allied Rapid Reaction Corps (ARRC), Air Command (AIRCOM), the Netherlands Maritime Force (NL MARFOR), and from representatives of the United States of America 12th Combat Aviation Brigade (12 CAVN BEU).

Lastly, the briefings given by representatives from the Joint Analysis and Lessons Learned Centre (JALLC), the Joint Warfare Centre (JWC), and the NATO C2COE are included.

Most briefings are followed by identified Key Takeaways. These takeaways indicate clearly that we need to provoke innovative ideas, identify challenges and discuss solutions. NATO’s future requires that we also reflect on long forgotten C2 concepts that have existed for years. We have to improve C2 in light of the higher readiness requirements. In short: we need to remodel C2 within the Alliance: genuine C2 is on the move.

Wishing all a pleasant read,

Captain Gerrit Nijenhuis
Director NATO C2COE
RADM (NLD N) Bekkering joined the Royal Netherlands Navy in 1979. After following a promising career path, he took over command of the Standing NATO Maritime Group 1 (SNMG1) in January 2012, starting his term with supporting Operation Active Endeavour and overseeing its NATO Rapid Force (NRF) task certification during exercise Joint Warrior 12. In June 2012 he joined the international counter piracy effort and assumed command of NATO’s Task Force 508. His term was characterised by a decrease in piracy related events and not a single successful pirate attack.

He received the NATO Meritorious Medal for his efforts to combat the remaining threat of the disrupted yet enduring pirate groups, by engaging the support of the local population.

In March 2013 he was promoted to Rear Admiral and assumed the position of RNLN Deputy Commander in September 2014.

Where you are standing right now, the Den Helder Naval Base, was completely covered in water about a century ago. The ability to adapt to and in a joint effort to keep the water out. Conversely, we depend on our waters for trade, creating economic advance, influencing water ex-

~ I cannot vouch for the historic correctness of the following, but a Russian diplomat once mentioned that the Netherlands was the only country that when confronted with a need for land, did not invade another country but created more land instead. ~
interconnection there are many (new) risks and threats, such as organised crime, natural disasters, interstate issues (Ukraine), intrastate issues (IS), instability of (maritime) borders, refugees trying to reach Europe over sea, an increase in claims on limited natural resources (e.g. increase in Exclusive Economic Zone (EEZ) claims due to unestablished EEZ boundaries).

However, where we intervene – for example to counter piracy in the Gulf of Aden –, we influence how crime and conflict interact, causing it to move with the tides as it where. A side effect of hybrid warfare is that conflict and circle of crime will start to reinforce each other elsewhere. A classic conflict can move inwards and when a crisis erupts, we have to be able to act quickly. We have, however, been fighting wars of choice, without an actual national existential threat. This warranted a lengthier political decision making process. Nowadays, however, the threat is felt more deeply by civilians and a shift can be identified: a shift from the right hand side to the left, from stability operations to forward deployment prevention and deterrence, and, when needed, protection. Changing security developments worldwide result in the requirement to enhance readiness and reaction time. NATO initiatives like VJTF and the JTF HQ concept enhance the operational capabilities and readiness of NATO. In relation to the intensity of a conflict it provides the following graph:

The yellow/red line shows the intensity during a conflict, from low during prevention to high during intervention, and then low again during stabilisation. The green line shows presence: a large presence during prevention, containment and intervention, and a declining presence during stabilisation and normalisation. To the right you can see the confrontation and exclusiveness, a very costly, long-term effect. Maritime forces are depicted on the left: there is inclusiveness, crisis prevention, and cost effectiveness, and political responsiveness. Not only are we combined, but we are also joint with airforce and army enablers on board. An excellent example is the EU operation ATALANTA (counter piracy). Not only is this operation COMBINED, it is also JOINT. It is an example of sea-based C2 and a Forward Deployed JHQ, with an advantage of a low footprint and unbound by borders or Host Nation Support (HNS). These efforts also effects on land as
we work together with other operations and organisations. This is called 3D (Defence, Diplomacy, Development) from the sea or Upstream Prevention. Within NATO it is known as the Comprehensive Approach (CA).

Participation is necessary in order to realise a permanent high readiness battalion sized force available to whatever organisation needs it. For the Dutch, working together and therefore a willingness to seek mutually beneficial solutions, comes naturally. A recent example is the intensive cooperation with the Swedish during Operation ATALANTA, whereby a staff embarked on HNLMS JOHAN DE WITT, as well as a combined boat group and helicopter detachment. On a more structural level, the Netherlands and Belgian navies have integrated personnel, and material logistics of frigates and mine hunters. This increases efficiency. Looking at creating operational effectiveness, we consider the United Kingdom (UK) and its amphibious force. The UK and the Netherlands Marine Corps together formed the UK/NL Amphibious Force. Although this is an example of a nicely integrated force, ready to deploy together, there is a flip coin to cooperation. It is important to realise that when you start cooperation, there is an inherent obligation to be able to rely on each other when the shots are called.

C2 is not just about systems, structures, doctrines, information, policies and processes. It is most of all about people, the human factor of C2, the subordinate versus the boss, leadership and Mission Command (a C2 philosophy).

The key element that will help NATO is that we have people who are flexible, have the stamina and equipment, and are able to exploit them. The Netherlands has a strong industrial base and our co-efficiency is illustrated by, for example, our LCF frigate that has a German co-designed and built in system. The triple helix between the knowledge centres, the navy and the industry, provides the arena where new industry can be developed.

Trust and cooperation between the defence community and the industry takes time, but has culminated in a joint sea demonstration of our LCF class frigates. As we are slowly leaving the stability arena and move toward a deter and protect arena, we need to allow the experts to do what they do best. Quite another thing is getting the mind-sets of the different nations in line. Although my Chinese counterpart did not believe that I followed Rules of Engagement given by 28 nations during my posting in Somalia, if we work together with a shared mindset, it can work. It will work.
Part of the NATO C2COE Seminar, was a guided tour of the Joint Logistic Support Ship HNLMS Karel Doorman, currently the newest and largest operational vessel of the Royal Netherlands Navy. She is equipped with facilities such as helicopter decks, roomy cargo areas and an array of logistic equipment, to be used for the transport of emergency aid goods. The Captain gave a welcoming speech, and there was mixer for the seminar attendees.
Biography

Professor Dr. Julian Lindley-French is a leading strategic analyst, author, advisor and commentator. Currently, he is Senior Fellow at the Institute of Statecraft in London, Director of Europa Analytica in the Netherlands, Distinguished Visiting Research Fellow at the National Defense University in Washington, as well as a Fellow of the Canadian Defence and Foreign Affairs Institute.

In September 2011 Lindley-French co-authored a major report, Strategic Communications and National Strategy, for Chatham House together with Professor Paul Cornish. The Oxford Handbook of War (Oxford University Press) is regarded as a definitive compendium on the subject.

His “Little Britain? Twenty-First Century Strategic Challenges for a Middling European Power”, considers the strategy and policy options faced by Britain and its armed forces in the early twenty-first century. His most recent book was published this July: “NATO: The Enduring Alliance” (Routhledge).

Big war may be coming...

We have already seen the fastest eclipse of liberal power; a truly dangerous thing. Everything I see as a historian and strategist tells me that war may be inevitable if we do not together face twenty-first century reality.

Command and Control (C2) is at the epicentre of our fundamental dilemma to create a credible force to make the world a safer place. Now I may be a chauvinist, but in my opinion, a strong NATO is at the core of a strong West.

All current Western assumptions about security and defence will be blown away over the next decade. It will all change fundamentally, and ultimately, that change is political. We have to get out of the 1990’s peacetime mind-set. However, I see no change in politics to make the necessary investments in defence. As Western Allies, we cannot afford to do what we did in WWII; trade space for time. The nature of the challenges we face
demand a level of ambition that we simply do not have yet. That is our challenge. We need more forces, not more acronyms. In February 1934, at the height of appeasement, a radical decision was taken by the British: a just-in-case plan in the event Hitler triggered war. Had they not done that, we would not have won the war. That decision was made based on leadership. We need to be politically grown-up about the future we face. It takes leadership, and I hope our leaders will wake up.

Since the dawn of modern Jointness, at the Battle of Amiens in August 1918, effective C2 across forces and resources has been vital. Delivering the right force package, in the right place, at the right time both nationally and multinationally has challenged commanders for a century. Today, the delivery of influence and effect not only involves the generation and command of complex coalitions, but demands a force singularity through deep Organic Jointness in which mind-set is as important as capability. Moreover, genuine results demand effective engagement with a range of partners, Allied and non-Allied, military and civilian. Therefore, effective C2 on the move is the future of NATO. This in turn demands a NATO that becomes THE pre-eminent force: a strategic hub of influence, effect and innovation.

In order to prevail in a 21st century conflict, NATO forces will need to act effectively across and within seven domains: air, sea, land, cyber, space, information and knowledge. These seven domains must reflect forces that are able to operate across and within all domains. There needs to be a broad understanding of where the utility of force fits into national and international policy. This requires a broader community than simple C2. So forget the idea of neat and tidy C2. he most one can hope to get is 'adapted' C2 capable of incorporating strong civilian influence.

C2 is also at the core of strategic realignment and 'combined' and 'joint' means taking what we have, and though innovation and experimentation, squeezing as much effect out of it as we can. This brings me to my core message. New forms of C2 and interoperability must be formed in order to generate the future force that we need. Radical choices will have to be made, particularly by the smaller European countries. The strategic reality of geopolitics does not lie China believes that this is its moment and currently they must be respected as a major strategic power in the region. Russia is exploring how to best exploit our weakness. Conversely, the United States of America (USA) is spending less and less on defence. The USA cannot guarantee worldwide effectiveness, since its troops are already stretched thin. There is a growing interoperability gap across the Atlantic, which will undermine C2. Challenging US
power could be done to effect by creating several crises on different fronts at one and the same time. In light of that, we Europeans live in a rough neighbourhood indeed, and we need to be aware of that.

Furthermore, however ‘joint’ we are as an Alliance, no single European country is big or strong enough to deal with the many challenges we collectively face. We have to do it together. That is the tipping point we are at right now. We require a far greater deepening of Combinedness and Jointness as an effective deterrent, because if conventional forces fail, our other option is quite unthinkable: going nuclear. However, we lack the will, the cohesion, the culture and frankly the mutual trust which genuine combined and joint operations need to be effective. If the NRF Combined Joint Statement of Requirement (CJSOR) 2011-2018 is only filled up to 27%, the Alliance’s first response will fail.

With the US downsizing, the question is what kind of force they can bring across the ocean. We need Organic Jointness. To that end, we do not need more NATO exercises to test what we already know. We need a development programme that moves towards NATO Force 2020, aimed at creating a deep joint force built on C2 as part of a REFORGER 21 concept designed to recreate robust interoperability at the high-end of the conflict spectrum. We can then test what does not work, learn from mistakes, import lessons learned from campaigns and operations, and effectively shared that information across the C2 community. C2 is thus about rebuilding Combinedness and Jointness, but infused with a new level of strategic ambition and radicalism. This is the only way to bridge the current gaps.

Innovation is the necessary change-agent if we are to adapt to the challenges we face. For example, on D-Day in June 1944 the Germans believed that the Allies needed to have a port to invade Normandy. In fact the Allies brought their own; two portable harbours known as Mulberries. This illustrates the importance of innovation. It should, however, not be a discussion about architectural nitpicking, nor should it be about which forces do the heavy lifting and which ones do the less heavy bits. We need to share the risk at the point of contact with danger. If we do not, bigger powers will start to act privately, ignoring NATO. That would be a shame, because we spent 60 years learning and applying C2, Combinedness and Jointness through NATO.

Some 70 years ago, some 156,000 troops crossed the ocean in a massive combined operation that laid the foundation for the NATO of today. This was a defining moment in the West, and a tipping point in our strategy. Now, for me as an Oxford historian the study of history is vital to understand strategy. The history of C2, and combined and joint operations is the story of NATO. These lessons from the past will help present a new vision of Jointness in which Allied combined and Joint Operations effectively merge into an Organic Jointness where there is a singularity of force and mind-set.

Organic Jointness, a force that thinks and acts as one - much like the US Marines Corps in which air, sea and land are fused - is the radical step we need to take if we are to realise NATO Forces 2020. We need a remodelling of C2, in order to move towards that future force that realises the Combined & Joint C2 21st Century NATO Standard. Otherwise the weak seams left behind, will be exactly the seams that our enemies will rip apart. Indeed, given the wide spectrum of
future missions, we will need to be able to respond quickly and decisively. However, today our politicians see only as much threat as they think they can afford and are focused to too great an extent on the shape of Europe and neither its security nor the influence collectively Europeans must exert on the world. We need political jointness to give military jointness direction. However, unrealistic calls for a European super-state and by extension a European Army, prevents and is likely to continue to prevent progress in creating a deep joint European force. That is why NATO must remain the necessary centre of political gravity for the security and defence of the Euro-Atlantic community. If we do not act we will undoubtedly contribute to a more dangerous world.

KEY TAKEAWAYS:

- BE RADICAL & AMBITIOUS
- AVOID MORE ACRONYMS
- REALISE JOINT (POLITICAL) MINDSET
- BUILD ON KNOWLEDGE & STOP TESTING WHAT WE ALREADY KNOW WORKS
- REALISE ORGANIC COMBINED & JOINT C2 NATO STANDARD
- JOINTNESS NEEDS TO BE ORGANIC
- PERMANENTLY EMBED JOINTNESS IN ORGANIZATIONAL STRUCTURE OF NFS HQ IN THE ROLE OF A JTF HQ

- NO SINGLE EUROPEAN COUNTRY IS BIG ENOUGH TO TAKE ON THE CHALLENGES WE FACE
- REALISE UNITY OF EFFORT & PURPOSE
- USE HISTORY & INNOVATION FOR FUTURE C2 CHALLENGES
- APPLY ROBUST POLITICAL LEADERSHIP & WILLINGNESS TO INVEST IN, AND USE MILITARY CAPABILITIES
- SINGULARITY OF FORCE & MIND-SET & OF MILITARY CULTURE
- RAP, VJTF, NRF, & HRFs AS FORCE SYNERGIZERS
- INVENT NEW FORMS OF FORCE GENERATION, INTEROPERABILITY, EFFECTIVENESS, AND C2
- CREATE DEVELOPMENT PROGRAMME FOR NATO FORCE 2020
- HEED THE GROWING INTEROPERABILITY GAP ACROSS THE ATLANTIC
THE JTF HQ CONCEPT

Colonel Ciro Annicchiarico SHAPE Deputy Assistant Chief of Staff J7

Biography

Col (ITA A) Annicchiarico was commissioned into the infantry upon graduation from the Military Academy in 1987. His early military career was spent on Regimental duty with the 82nd Mechanized Infantry Battalion, during which he commanded at both platoon and company level.

Col Annicchiarico has occupied a multitude of staff appointments at tactical and operational level. A successful graduate, Col Annicchiarico’s education includes the Junior Division of the Italian Army Staff College as well as the Italian Army Senior Staff College and the obtainment of a double degree in the spheres of Strategic and Political Science. Operational duty has taken Col Annicchiarico from the Balkan mountain ranges to the dunes of Iraq. As Current Operations Staff Officer in MNB and the Public Affairs Officer in MND-SE in Bosnia, ACOS Support in the Italian JTFHQ in Iraq, COS in Sector West in Lebanon for two mandates.

In September 2011 Col Annicchiarico was appointed Deployable Forces Evaluation Branch Head at SHAPE Operational Preparation Directorate. He was responsible for NRF and JHQs evaluations. Since December 2012 he has been the SHAPE Deputy Assistant Chief of Staff J7 (DACOS J7).

With this briefing, I would like to provide you with a framework of the JTF HQ concept: a little on its origins, the lesson learned so far, its current status, observed deficiencies and the way ahead. The JTF HQ was endorsed in 2013 as part of the Conceptual Framework of Alliance Operations, which was agreed by Member States after long discussions. As for its origins: when at the Lisbon Summit in 2010 the decision was made to significantly reduce the NATO Command Structure, one Joint Forces Command HQ (Lisbon) and three Component Commands (CC) previously responsible for providing the deployable body to the joint HQ in case of operations, were discontinued.

Considering this reduction, we faced quite a challenge to adhere to the politically unchanged Level of Ambition: 2 Major Joint Operations (MJO) and 6 Small Joint Operations (SJO). Therefore, there was a need for a generic JTF model that could be tailored to specific missions. The challenge was to create a deployable body capable of providing full C2 for an operation up to a MJO for

~ A concept is just a concept ~
up to one year. The C2 deployable elements would have to be provided by the remaining joint HQs: JFCNP and JFCBS.

We considered a variety of options, ranging from a static JFC HQ location to a fully deployed JFC HQ. The solution we came up with was a progressive scalable model, providing options for responsive C2 progressive deployment of four so-called "capability blocks", each of which have operational functions that can be tailored to a specific mission. Starting with the Operational Liaison and Reconnaissance Team (OLRT), the Forward Coordination Element (FCE), the Initial Command Element (ICE), and finally the JTF HQ. All these elements would have to contain the operational functions required for the specific mission and environment.

The JTF HQ operational functions to be achieved are:

- Understanding of the operational and information environment
- Establish early influence in theatre
- Shape the environment and set the conditions for rapid C2 of the operation
- Support a seamless transition of C2 capabilities from HQ JFC home location into theatre
- Ensure that C2 arrangements can be tailored to the demands of the mission and situation

Another important principle behind the JTF HQ concept was that JTF HQ readiness and deployment had to be synchronised with the NATO decision-making process. On the other hand, the idea was to create a JTF HQ concept that was flexible enough to allow the commander to tailor the C2 arrangements to the mission requirements and to the available resources. This means that in theory the JTF HQ concept should not limit the freedom and authority of the commander. It should allow him to decide how to organise and structure the C2 of an operation to achieve unity of effort and unity of purpose. In practice, however, the commander’s freedom is always limited to some extent due to national interests, politics, etc. These limitations are taken into account in the JTF HQ conceptual procedure, and its connection with the decision making process at the political level. The OLRT capability block can only be deployed once we have received the NAC Initiating Directive.
(NIC) and the FCE deployment requires an Activation for Pre-deployment (ACTPRED). Likewise, the C2 element can only be deployed when we have the NAC Activation Order (ACTORD), which triggers the transfer of initial forces to SACEUR.

The model is supposed to cover all types of operations, from a SJO to a MJO, with a full spectrum of C2 capabilities for all types of missions, and to be in line with NATO concepts, standards and procedures. In order to gain situational awareness, the OLRT is responsible for liaison and coordination with (potential) stakeholders in Theatre: such as destination support, destination authorities, international organisations, non-governmental organisations (NGO), etc. The FCE explores al engagement opportunities and sets the conditions for deployment in order to establish future C2 in Theatre. The ICE is the minimum set of joint functions and capabilities that allow the operational commander to exercise C2 from the Theatre. Its functions are supported by a considerable reach-back in the JTF home location. The ICE becomes JTF HQ when COM deploys.

It is, therefore, important to keep in mind that a concept is just a concept. The JTF HQ concept can be found in the Conceptual Framework for Allied Operations (CFAO), and each capability block is described in the JTF HQ Standard Operating Procedures (SOP). This should be the focus for future revision of the JTF HQ concept. Considering sustainability, in the CFAO several aspects such as Joint Logistics Support Group (JLSG), Force Protection (FP), Real Life Support (RLS), Communication & Information Systems (CIS), Infrastructure, and Strategic Lift are mentioned. However, these aspects are only mentioned, they are not examined further. The SHAPE and JLSG working groups are still working on these concepts. Currently, it is up to JFCS and JFCNP to provide the core staff element for the JLSG. In order to realise this, we opted for the solution to have either force

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**Lessons**

- **C2 Capacity**
- **ACTORD**
- **ACTPRED**
- **NID**
- **OLRT** 12+
- **ICE** Initial C2 in theatre (high reach-back)
- **FCE** 20-40
- **JTFHQ** C2 in theatre (min reach-back)
- **RCE**
- **C2 assumed by follow-on forces**
generated staff positions inside the JF CBS and JF CNP Peacetime Establishment (PE), or given to some affiliate nation.

For FP, RLS, Strategic Lift and CIS issues, discussions are ongoing and possible solutions have been identified in order to make more effective and responsive the deployment of forces and HQs.

To be honest, we have had only few exercises where the capability building blocks were tested. Taken in isolation, the building blocks have shown promising results, but for the JTF HQ concept we are struggling in some functional areas. Individually, the capability blocks can manage all aspects of an operation, but the transition from one block to another has not been tested yet, nor have we tested what would happen when we skip a block. Capability block transition is critical in light of how knowledge, C2 of the operation and information are transferred from block to block. Something awaiting tests is the concept against the simultaneous political decision-making process (the strategic level versus the operational level).

With regard to C2, we have also identified some deficiencies in the CFAO. For example when looking at the ICE, C2 is used without distinction between command and control. Is command executed where the commander is situated? The ICE does not become JTF HQ until the capabilities and functions are deployed, and not before the commander (physical presence) is deployed. Many concepts in my opinion, including the concept of reach-back, should be better defined. Moreover, the critical aspects of C2 (by whom and from where in each phase of the operation) have to be considered carefully in order to make the JTF HQ effective, and this will depend heavily on the political process (e.g. when are the NIC, the ACTPRED and the ACTORD issued by the NAC).

The current JTF HQ concept, is something different than it was in the beginning. After 4 years as evaluators of joint efforts, what is our way ahead? The concept remains valid, but some adjustments are necessary. Since our nations require an agreed strategic concept, we need to work harder on the procedures, on the SOPs, on possible solutions. This means more testing, more joint and combined deployment exercises. We need to test our joint capability to react immediately: joint responsiveness, readiness, and deployment. Even if it is much more expensive than in the past, this is the direction we really need to take. Future testing exercises need to be different. The execution phase needs to be sooner, and transitions and interaction (e.g. interaction between the ICE director and the commander) need to be tested. We need more models, depending on the mission/operation/area of operations, etc. These models should be included in the SOPs and not within the concept, because this will only frustrate the political decision making process. The best way to mature the concept is exercise it.

Personally, my hope is that soon we will start revising the many documents we already have. In the meantime, we wait for the Readiness Action Plan (RAP) completion. We need input and ideas from this NATO C2COE seminar and from the JALLC, to make this JTF HQ concept more effective,
more tailored and really flexible in order to preserve commanders’ authority to decide. Everything depends heavily on the political decision making process. To that effect, it makes sense to engage more on a political and military strategic level in the testing exercises. As suggested by Professor Dr. Lindley-French, a group of retired politicians could be engaged to act as military agents/liaison as it were, creating a more effective lobby at the political level.

KEY TAKEAWAYS:
- EXERCISE, EXERCISE, EXERCISE
- INCLUDE POLITICAL (STRATEGIC) ELEMENT AND EXPERIENCE IN NATO EXERCISES
- IMPROVE SUSTAINABILITY
- TEST JOINT/COMBINED CAPABILITY
- TEST STRATEGIC-OPERATIONAL INTERACTION
ACO STRATEGIC DECISION MAKING & INTERACTION WITH THE OPERATIONAL LEVEL

Colonel (OF-5) Giorgio Cuzzelli,
Italian Army, Coordinator Comprehensive Crisis & Operations Management
Centre Supreme Headquarters Allied Powers Europe

Biography

Col (ITA A) Cuzzelli was appointed as Coordinator of the newly-established Comprehensive Crisis & Operations Management Centre (CCOMC) in SHAPE, Mons, Belgium, in July 2012.

Previously he served for two years as the Director, Joint Operations Centre (JOC), of Allied Joint Forces Command Naples in Italy.

As an Alpine Infantry junior officer in the '80s and '90s Col. Cuzzelli served for fifteen years with the Italian Contingent of NATO’s Allied Command Europe Mobile Force (Land) (AMF-L) in a variety of command and junior staff positions at home and abroad.

As a senior staff officer he served with the Army General Staff, Planning Division in Rome, dealing with multinational issues and international affairs.

During his career he commanded an Antitank Company with the AMF(L), a Warrant Officers (WO) Cadet Battalion and an Initial Entry Training (IET) Regiment on home stations and a Regional OMLT in Afghanistan.

In addition to Afghanistan, he served for one year in Bosnia-Herzegovina with SFOR, and three years in the United States as an Embassy Attaché.

Col Cuzzelli holds a Bachelor's Degree in Management & Organisation and a Master's Degree in International Studies. He is a graduate of the Italian Army Junior and Senior Staff Courses, the Joint Senior Staff Course and the Italian National War College. His qualifications also embrace reconnaissance and CBRN defence.

~ Execution of the operation is just one part of the picture ~
Operational Deliverables: integrated processes

NATO
Crisis Management Process (NCMP)
SHAPE Comprehensive Crisis & Operations Management Process (SHAPE CCOMP)
NATO HQ
CRIP PCU
SACEUR Strategic Assessment (SSA)
Military Response Options (MROs)
SPD CONOPS OPLAN
Periodic Mission Review (PMR)
SHAPE
Crisis Identification
Estimation
Options
Response Direction
NATO COMMAND & CONTROL CENTRE OF EXCELLENCE
SEMINAR REVIEW DOCUMENT #21

Start of Formal Phase (NAC Political Decision)

Warning Order (WINGO)
Strategic Planning Directive (SPD)
Concept of Ops (CONOPS)
Op CONOPS CJ/SOR
Op OPLAN
Periodic Mission Review (PMR)

Battle Rhythm Synchronization

06
BRIEFING SUMMARY:

Col Cuzzelli gave a very enthusiastic and informative presentation about the strategic - military level decision making process and the relation between the Strategic and the Operational level. It illustrated clearly how complex this decision-making process actually is, and underlined the importance of understanding that NATO is a political organisation. NATO does not have its own military force. Individual nations provide military forces for a specific timeframe in order to execute a mission. Furthermore, the Alliance of 28 member states needs to reach a consensus in order to launch a NATO military operation. SACEUR is in charge of the military part to plan, and execute the operation.

SACEUR’s CORE TASKS:

- To deliver timely, comprehensive, strategic-level military advice to the Political Level of the Alliance
- To deliver timely Direction and Guidance to Subordinate Headquarters across Allied Command Operations

SACEUR’s ENABLERS:

- SHAPE’s Comprehensive Crisis & Operations Management (CCOM) Process
- the CCOM Community

The CCOM process is to identify crises, make risk assessments and initiate a NAC Initiation Directive (NID) to the subordinated HQs, so they can start planning for the execution of an operation. The CCOM process is tailored after NATO’s Crisis Management Process (NCMP), in order to deliver a decision advantage.

From a C2 point of view it is important to understand the complexities and mechanisms involved in all the processes between the Strategic (political) and the Operational level, down to the Tactical level. The outcome of all these processes is paramount for the C2 structure and synchronisation of the battle rhythm for all levels involved.

The world is changing, as are the NRF and VJTF concepts. This will require a higher readiness of designated forces, and commitment from NATO nations.

CDR (NOR N) Rune Knudsen
NATO C2COE

KEY TAKEAWAYS:

- LARGER CONTRIBUTION FROM NATO NATIONS
- COMMIT DESIGNATED FORCES ON HIGHER READINESS
- NATO = POLITICAL
- REALISE A WELL INFORMED SACEUR
- HAVE MECHANISM FOR READY & RAPID RESPONSE TO POLITICAL DECISIONS
- JTF = ENABLER CCOMC STRATEGIC/POLITICAL PROCESS
- TEST REAL TIME MISSION SYNCHRONISATION & INTEGRATION BETWEEN OPCOM & SACEUR FOR A NO-WARNING CRISIS
- FINE-TUNE OPCOM TO NATO CRISIS MANAGEMENT PROCESS
- REALISE OPERATIONAL DELIVERABLES
- REALISE CROSS-FUNCTIONALITY BETWEEN SACEUR/ CRISIS ACTION TEAM AND OPCOM
JOINT C2 DEPLOYABILITY ON THE MOVE, THE JTF HQ CONCEPT CHANGING CONFLICT ENVIRONMENTS

Lieutenant Colonel Paul van Campen Military Assistant to Deputy Chief of Staff Joint Force Command Brunssum

Biography

Lt Col (NLD AF) Van Campen has been deployed for KFOR 1 within G3 Ops ARCC from 1997-1999, and as Commander of the Schoolbataljon Zuid from 1999-2003. He was Deputy SNR in ISAF III/6 during the first transition from Enduring Freedom to ISAF in 2003. From 2003-2006 he also helped develop the CJEX for General Staff Course as Deputy IDL.

Until 2008 he served at the Operational Requirements Division Land, The Hague (DOBBP), after which he became part of the Permanent Delegation of the Kingdom of the Netherlands as Deputy Defence Plans and Policy.

His current position is that of MA to DCOS Plans MG Hans van Griensven, as a Subject Matter Expert (SME) on Hybrid Warfare and Brussels’ political стрategic arena.

Building on the briefings by previous seminar speakers on the JTF HQ Concept, my briefing will give you a Joint Force Command Brunssum (JFCBS) point of view on the NATO concept, in light of changing conflict environments. It starts with the awareness that the NATO environment has constraints, and NATO needs to stay on a moral high ground. Even though the economic positions of its’ Allies make investments in deterrence difficult, NATO should start acting. NATO’s biggest challenge yet, will be to stay alert and focussed, and (to be able to) act at the right time. Fortunately, Article 3 of the Washington Treaty allows for preparatory and deterring activities.

However, the effects of deterrence are difficult to measure in relation to the costs to achieve effective deterrence. It is quite difficult to convince governments to invest in hardly measurable assurance and deterrence measures. The 28 Allies decision-making process will have to be proactive and
based on assessments, predictions, sound military judgement and trust in other agencies. The decision-making process should not depend on facts alone, since clear-cut facts may not be available. This decision-making challenge is essential for effectiveness. I think we are in the process of realising that the facts we want will not always correspond with the everyday decisions we have to make.

NATO today reflects 22 years of focus on Non-Article 5 Crisis Response Operations. We are used to choosing the conflict, but in the future the conflict will choose us. An Article 5 Crisis Response will require a new paradigm, reflecting differences in geopolitics of the adversary, the nature of the threat and NATO’s response, and in the framework of the Comprehensive Approach (CA). In 2015, political guidance will have to be more specific about Crisis Response and Collective Defence. The new political guidance needs to detail the strategic environment, and use cyberspace. After the strategic shock of 9/11, for C2 we fell back on experiences from previous operations, but C2 is on the move. Military strategic policy is on the move. The new reaction paradigm will require NATO to make decisions within mere days. This also causes a paradigm shift at the military level because it requires us to re-shape our mind-set to a much quicker response capability. The current NATO Crisis Response System and Crisis Response Measures need to be revised because right now they simply will not work. In a few days, a decision will be made on NATO assurance measures.

To deploy or not to deploy, that remains the question. However, the requirement to deploy will be dictated by the operation itself. For example, with Operation Unified Protector Libya, C2 remained with JFCNP because of air dominancy in an SJO. JFCBS has developed the JTF HQ concept as a generic model, in line with SHAPE’s
CFAO in a cross-divisional deployment action of the designated commander to tailor the C2 structure to a specific mission.

JFC Brunssum started the JTF HQ implementation with EX STEADFAST JAZZ in 2013. Our Roadmap illustrates that Full Operational Capability (FOC) will be achieved during NRF Certification Exercise TRIDENT JUNCTURE 2015. Over the last two years the supporting Joint Logistic Support Group concept (JLSG) has proven to be effective in managing the huge logistical challenges of operations In and Out of Area.

JTF HQ is a fine concept, but the proof of the pudding is in the eating. This means we have to test it first. In light of the JFCBS Roadmap 2016, there was some discussion about whether a JFC is at the tactical or at the operational level. I adhere to what Prof. Lindley-French said, mainly that commanders, both component and joint force commanders, need to work together. Otherwise the result is a recipe for disaster. The decisions we have to make have everything to do with C2 relations. I hope that these C2 relations will be at the heart of the discussion at SHAPE’s top level and at the level of our leadership, and that the Keep It Simple Stupid (KISS) principle will be taken into account.

We have to be proactive, not reactive, that is our mission. However, there are a lot of question marks. Will we use the VJTF as one of the vehicles as a possible assurance measure? We also have the possibility of a C2 hub with regional coordination through the Multinational Corps North-East (MNC NE). Should we work on a new NRF concept? Will the NATO Force Integration Units (NFIUs) operate under the umbrella of MNC NE, and how do the Contingency Plans (COPs) fit in? Conclusion: C2 needs to stay on the move.

I believe that the NATO C2COE has already given us some answers and has proven to be very active in this area. It will be interesting seeing to what extent the NATO C2COE will have a prominent role in all these developments.
KEY TAKEAWAYS:

• ADJUST NATO’s CRP TO CURRENT SITUATION IN ACCORDANCE WITH JTF HQ CONCEPT CAPABILITY BLOCKS.

• FULL DEPLOYMENT OF JTF HQ IS NOT CONCEPT RELATED BUT DEPENDS ON THE CHARACTER/MINDSET OF THE ACTING COMMANDER.

• CHOICE OF HQ DEPLOYMENT VERSUS IN SITU DEPENDS ON THE JFC HQ AND MISSION

• SHIFT FROM THREE-PILLAR TO A TWO-PILLAR STRUCTURE (BETTER COORDINATION AND EFFECTIVENESS)

• SHIFT FROM “COORDINATING” TO “DE-CONFLICT AND JOINT INTEGRATING”

• (FURTHER) DEVELOP C2 STRUCTURE/COORDINATION OF NFIUs AND RAP
At present we experience new threats, from an asymmetrical threat in North Africa to a newly revived threat from the East. This means possible confrontations on different fronts: in a nutshell a return to Cold War scenarios in combination with turmoil in the South. This briefing will provide you with a short recap on JFCNP (its history, structure, mission and core tasks) and JFCNP as a war-fighting HQ (in situ Naples or deployed in theatre). Subsequently, I will go into operational art and campaign synchronisation, and examine current developments in light of the JFCNP 2015 vision.

The JFCNP dates back to the Allied Force Southern Europe (AFSOUTH), founded in 1951. Originally, AFSOUTH was one of two major NATO commands in the Mediterranean area. The present HQ location in Lago Patria was inaugurated in 2012 when our HQ left its former quarters in Bangoli, a Naples suburb.

Biography

Lt Col (NLD MC) Eijkelboom LL.M joined The Royal Netherlands Marine Corps in 1984. Initially he served as a Troop Commander as part of the Counter Terrorist Unit in the Netherlands, specialising in Hostage Release Operations. Thereafter, he served as the 2IC of the 12th Company, 1st Marine Battalion. In 1992, he left active duty and started a civil career, working as a Lawyer and as the CEO of several companies that were involved in heavy transport (shipping) and logistics, services, waste management industry and also the manufacture of heavy construction equipment and machinery. In 2007, he resumed active duty in the Royal Netherlands Marine Corps and after a deployment to Afghanistan he was assigned to the NLDISS as an Intelligence Officer. Since then, Eijkelboom has been deployed several times to Afghanistan and the Horn of Africa as an Intelligence Officer. More recently, he worked for the Directorate of Operations in the Dutch Ministry of Defence (MOD NLD) as Deputy Head of National Operations.

Lt Col Eijkelboom has a Master degree in Dutch and International Law from the University of Rotterdam, a background in International Relations, Politics and World Safety Issues, and has a background in Advanced Management. Presently Lt Col Eijkelboom is a Staff Officer Operations (J35) at JFCNP.
JFC Naples is to prepare for, plan and conduct military operations in order to preserve peace, security and territorial integrity of Alliance member states and freedom of the seas and economic lifelines throughout SACEUR's Area of Responsibility and beyond. Although the core tasks of our Alliance within the present Operating Environment remain Collective Defence, Crisis Management and Cooperative Security, we are adapting to an evolving military environment. This new environment, illustrated by an increase in hybrid warfare, integrates the threat of using military force along with political, social, economic, informational, or other non-military measures. JFCNP has successfully achieved NATO Response Force (NRF) certification and will lead the NRF throughout 2015. We will refine our ability to command and control the NRF and build operational depth across the HQ.

During the initial phase of an operation, the two JFC HQs (Naples and Brunssum) have the task to act as JTF HQ. They are prepared to deploy up to 500 persons and to command a task force from a pre-selected position in the forward area. When taking a closer look at our HQ as a warfighting HQ, the crux is in the transition from the current three-pillar Peacetime Establishment structure (Operations, Plans and Support), to a two-pillar Crisis Establishment structure (Operations and Support). JFCNP is not the only HQ to transform its structure from three to two branches.

The focus from a JFCNP perspective is on Major Joint Operations (MJOs) and the C2 constructs for such a MJO and even a MJO+. As the scale of an operation expands to a MJO(+) in-Theatre level, the Very High Readiness Joint Task Force (VJTF), reinforcing elements of the NRF and Follow-on Forces will be...
incorporated into the architecture of the Major Alliance Operations, involving the single service commands as component commands. JFCNP has the ability, infrastructure and capacity to conduct such a MJO (+) with all subordinate Component Commands and assigned forces “in situ” from Naples. There are pros and cons with respect to conducting C2 “in situ Naples” or deployed “in Theatre”. The choice to conduct C2 either in “situ Naples” or “in Theatre” is up to the higher Command and will be tailored to the operation.

With regard to operational art and campaign synchronisation we can show a lot of organograms, but what is really interesting are the mechanisms in place to execute C2, the workflow and the decision-making processes. This is where campaign synchronisation comes in. Campaign synchronisation is the coordination and prioritisation of all effects of a Joint Force in order to maximise the efficiency and synergy of all activities in time and space in accordance with the Operation Plan (OPLAN). It needs to ensure that all efforts are coordinated towards meeting the JFC’s objectives and intent. It is the commander’s tool to achieve the desired end state.

This process includes coordination of all efforts within and between the different joint functions. Long-term planning is conducted by the Joint Operational Planning Group (JOPG), with the OPLAN (J5) as output of this process. Medium term planning cycles are concluded by a JCB (Joint Coordination Board), providing campaign synchronisation with an Execution Order or a Joint Coordination Order (JCO) as output.

The ability to make the right decision in a timely and considered manner is key to the success of the JF HQ and will ensure that any actions deemed necessary can be executed in sufficient time to have the intended joint integrated effect. Execution superiority, which is the ability of Joint Forces to execute integrated lethal and non-lethal actions to
achieve the intended effects, is the ultimate goal of the JF COM’s Decision Process.

The “Monitor, Assess, Plan and Direct Cycle” (inner ring of picture) sets out a logical progression of the JF COM’s Decision Process. It shows an overview of the links between the JF HQ elements and staff activity, with the sequential steps of the cycle shown in the inner ring. Principal elements within this Decision Process are the JCB and Assessment Board (AB), whose activities must be embedded within the JF HQ Battle Rhythm. The Battle Rhythm is an essential mechanism for maximising concurrent activity and aiding synchronisation.

The AB provides periodic assessments of both the operations and campaign progress with respect to JTF HQ COM and SACEUR’s plans. It provides assessment to Commander of each Decisive Condition/Point, each Line of Operation and with recommendations for COM direction and guidance. The AB will capture COM direction and guidance for JCB action.

The JCB addresses the operational shortfalls identified by the AB and its is a platform for the synchronisation of the operation, and issuing directions and guidance as necessary in order to best execute the campaign and to review and approve Plans and types of Orders. It will review the Synchronisation Matrixes, (re-)prioritise assets if necessary and provide direction on any adjustments to be made to the OPLAN. The main outputs of the JCB are campaign synchronisation and provide direction and guidance as needed (JCO, FRAGOs, CONOPS, Branch plans etc.). In order to make campaign synchronisation work, the JCB works with all functional sub-working groups and boards. Again, the battle rhythm is key for making this complex cycle work.

In June 2014, the Defence Ministers discussed the strategic implications of the Ukraine situation. This resulted in the
Readiness Action Plan (RAP), comprising of both Assurance and Adaptation Measures. The Very High Readiness Joint Task Force (VJTF) is one of the outcomes of the RAP. It is a land centric Brigade sized Joint Task Force with a very high readiness. Enhancing Notice To Move times is one thing, but the real challenge lies in facilitating the rapid deployment of the VJTF. In the past we had procedures in place with Host Nation Support, but now we need to re-do much of that, do more contingency planning in order to facilitate a timely and rapid deployment. As a result of that we see new entities arriving in Theatre, such as the NFIUs (NATO Force Integrating Units). One of their roles will be to support and facilitate the RSOM (Reception Staging Onward Movement) of the VJTF. The set-up of numerous NFIUs has been initiated and they will become operational within the near future. Currently, in the first phase the NFIU will be placed directly under the JTF HQ, but in the future it is expected that they will fall under the Multinational Division Southeast (MND SE) for the NFIUs in Southern Europe or the Multinational Corps North-East (MNC NE) for the NFIUs in North Eastern Europe.

Looking at issues from Naples Vision 2015, we are returning to a reality where large-scale conflicts will be put back into our minds. For decades Major Joint Operations (+) on a Battle Field with linear war fighting against a powerful adversary has not been trained and exercised sufficiently. In such a highly dynamic and kinetic environment Battle Space Management (BM) is essential. We still have expertise, but several questions/issues arise, such as:

- What are the respective responsibilities for BM?
- On what level should joint actions be coordinated (JFC or component-to-component)?
- And what is the role of the JTF HQ with regard to the planning requirement?

Leading a MJO (+)

Battlespace Can Become Very Crowded
• Who arbitrates when conflicting interests prevail and what are the priorities? How can the coordination between military and non-military actors (CIMIC) best be facilitated?
• During a MJO(+) the Battle Space can become very crowded. This requires management skills, and this again is related to C2. The JFC responsibilities are the following: issue direction and guidance to component commanders, approve their OPLAN and coordinate their operations.

Designate the Airspace Control Authority (ACA) and appoint the Air Defence Commander (ADC).
• Establish the objectives & targeting priorities (lethal & non-lethal)
• Determine and adjust the Area Of Operations (AOO) allocated to Component Commands and designate supported and supporting relationships as the campaign plan is developed.
• Synchronise operations and activities to achieve unity of effort with other military forces, local government officials, and NGOs in the Joint Operations Area (JOA).

The role of a JFC must become more proactive and should shift more from “coordination to deconflict” to “coordination to integrate”. Doctrine for BM is in place, but knowledge and expertise are scarce and these skills need to be developed and trained during major exercises.

KEY TAKEAWAYS:
• CHOICE OF HQ DEPLOYMENT VERSUS IN SITU DEPENDS ON THE OPERATION; TAILOR THE JFC HQ ACCORDINGLY
• SHIFT FROM THREE-PILLAR TO A TWO-PILLAR STRUCTURE (BETTER COORDINATION & EFFECTIVENESS)
• (FURTHER) DEVELOP C2 STRUCTURE/COORDINATION OF NFIU’s AND RAP
• UPGRADE BM SKILLS FOR MJO(+)
My briefing will focus on practical issues and the following document: the NATO Rapid Deployable Corps-Spain (NRDC-ESP) Insights as the first NATO Force Structure Joint Task Force Land HQ (NFS JTF (L) HQ). It is a lengthy document, but it is available on request. Once the preparation phase is finished and certification achieved, the purpose of the NRDC-ESP Insights on JTF (L) HQ document, is to gather and share again our main insights in this demanding role. It shows some remarkable results in light of the two-year plan and exercise. During this time, the NRDC-ESP leadership and staff worked incredibly hard to deal with all the challenges that the High-Readiness Land HQ’s (HRF (L) HQs) had to face. The necessary shift in mindset from tactical to operational level of command, from short to long, from land to joint, from being a tactical command within a Theatre of operations, to actually commanding land task forces in theatre, has been difficult. When established doctrine came up short, we fell back on our other very knowledgeable Joint HQs, or

Biography

Brig Gen (ESP A) Montenegro Alvarez de Tejera enrolled in the Spanish Army General Military Academy and the 269th Class of the Artillery Branch in 1976. He served in a great variety of command and staff deployments.

He has been awarded the Royal and Military Order of Saint Hermenegildo (Great Cross, Cross, Commendation and Plate), Great Cross and 9 Crosses for Military Merit, United Nations UNPROFOR Medal, NATO SFOR Medal Former Yugoslavia, NATO KFOR Medal, French Gold Medal of National Defense, Belgium Order of the Crown and Spanish Civil Protection Medal.

From May 2009 to June 2011 he was posted to the Emergency Military Unit, serving as Chief of Staff at the Headquarters located in the Torrejon Air Force Base in Madrid (Spain). Having been promoted to Brig Gen on 1st July 2011, he was assigned to the HQ NRDC-Eurocorps as Deputy Chief of Staff Operations (DCOS OPS). Simultaneously, he was the Spanish Senior National Representative in Strasbourg-Eurocorps.

At the beginning of August 2013, he was designated to HQ NRDC-ESP DCOS OPS in Betera (Valencia). Currently he is the Chief of Staff in HQ NRDC-ESP. In May 2015 he was promoted to Major General.
turned to our experience in previous operations, the framework nation, or simply applied common sense.

We faced several challenges and a lot of firsts. This was a first Graduated Readiness Force (GRF) for JTF (L) HQ, a first test for the JTF (L) HQ Integrated Model, and a first Supreme Allied Commander Transformation (SACT) as Officer Scheduling the Exercise. The integrated model illustrates that the force package is force generated which, no doubt, is the achilles heel of the NFS JTF (L) HQ concept. NRDC-ESP will deploy in operations with HQs and enablers without having been trained as such. Moreover, we operate with a different staff, which includes personnel from contributing nations, who themselves carry the responsibility of training their staff for the operation. Force generation will only take place after the initial Combined Joint Statement Of Requirements (CJSOR) is defined. This means that no collaborative planning takes place between the operational and tactical levels. Therefore, the NCS needs to support the planning process of the JTF HQ. AIRCOM and MARCOM should support the process by providing the required expertise to the Joint Operations Planning Group (JOPG) in order to fulfill the Component Commander’s (CCs) role in the Operations Planning Process (OPP). The NATO Special Operations HQ (NSHQ) has already established this support as a mitigation measure to fill the gap of the force-generated Special Operations Component Command (SOCC).

With regard to the JTF (L) HQ structure, NRDC-ESP JTF HQ decided to mirror as much as possible the HQ structure strongly recommended by SHAPE, which is the structure of the JFCs JTF HQ. There are some differences though, for example where elements are placed within the structure (e.g. Fire and Targeting (FIRE & TGT) and Military Engineers (MILENG)), and the fact that we need G7 and an INFO OPS (STRATCOM Advisor).

The C2 structure was somewhat more complicated. One issue that affects the Commander directly is the command relationship with other CCs. In light of the fact that this was an Article 5 Operation, AIRCOM operates simultaneously at the strategic (BMD) and at the operational level. Our solution was to pass everything on to the JFACC, and they coordinated with AIRCOM. We found that pivotal within the C2 concept as part of the NATO military structures is...
the supporting-supported relationship. For each operation, SACEUR needs to be informed as soon as possible, to avoid misunderstandings and provide the required Theatre and joint capabilities for the planning and execution of the operation. This supporting role should be robust enough to assure the JTF Commander’s successful mission accomplishment. For the Operational Design for the Operations Plan (OPLAN), it is important to underline the need to master the Tools for Operations Planning Functional Area Service (TOPFAS) and collaborative planning. Who is liaising with whom, is something that needs to be established from the very beginning. For example, the CCOMC was not involved in our JTF HQ exercise, and it is important to establish what they want to receive and how they are going to receive situational awareness information. Fortunately, I understand that the CCOMC will be part of Ex TR-JR15. In general, the liaison structure depends heavily on NRDC-ESP's role (as a Corps, LCC or JTF) and the specific circumstances of its mission. Since campaign synchronisation has already been covered by the JFCNP, I will briefly mention the importance of the Crisis Action Team (CAT) within the CJOC and the delineation of responsibilities between G33 Joint Operations Centre (CJOC), G35, and G5. Campaign synchronisation focuses on and is accomplished by the Joint Coordination Board (JCB), whilst the CJOC focuses on short-term execution, and the G5 Plans Element on the long-term planning process. The delineation of responsibilities must be very well understood from the very beginning; otherwise campaign synchronisation will suffer. In addition to what has already been said about the Commander’s Decision Cycle, I mention that at operational level it needs to be 7 days.

With regard to the Joint Assessment, we need plenty of well-educated staff officers for these assessments. The primary purpose of an Operations Assessment in the NFS JTF HQ executing a SJO (both operational and tactical levels of command) is to increase the effectiveness of the execution of military operations. The three levels of assessment are managed in the integrated model: the Tactical Assessment focuses on the achievement of the Tactical Objectives; the Operational Assessment reviews the effects leading towards Decision Conditions (DC) inside a specific line of operations, and the Campaign Assessment considers all Effects and Objectives specified in the operational level military plan (campaign), supporting the Strategic Assessment.

When working at the operational level, the Joint Intelligence Centre (JIC) is focussed on intelligence at the operational level, not at the tactical level. The JIC provides
the Commander with a comprehensive, holistic and collective picture and understanding of the operational environment including the Political, Military, Economic, Social, Infrastructure and Information (PMESII) domains, potential threats, and associated risks. The integrated NFS JTF (L) HQ model requires conducting both land-tactical and the joint-operational levels of intelligence and information. The task forces and brigades need intelligence at the tactical level (practical and daily). To mitigate this challenge, the JIC created a dedicated intelligence fusion element called Tactical Intelligence Fusion Element (TIFE), exclusively focused on tactical intelligence and an integral part of the HQ.

As for targeting, the transition of responsibilities from LCC to JTF HQ is huge, and therefore we need to train the Command Group and the DCOS OPS, for which we need to use different targeting tools. In relation to the Joint Coordination Cycle (JCC), we had hundreds of kinetic targets, which means we could not wait for a week. We decided to take the targeting process out of the cycle, and instead we realised a joint targeting coordination working group twice a day. Another targeting problem in an exercise is the security, because the targeting database is NATO SECRET. We decided to work with a sanitised database to be able to exercise with a full targeting process.

In the integrated model, targeting integration with regard to the tactical and operational spheres, does not present a major dilemma. The responsibility of nominating targets from the tactical perspective remains with the subordinate and supporting CCs. As for land tactical nominations, the tactical land subordinate units have minimal ability to nominate targets for the Joint Targeting Cycle. The NFS JTF (L) HQ - Fires & TGT branch with other NFS JTF (L) HQ branches - nominate the targets to be included in the Joint Prioritised Target List (JPTL), in order to achieve the operational effects. Concerns on whether the targets should be considered land or joint were minimal.

Cyber-Defence is paramount, especially in an Article 5 Operation. The NFS JTF (L) HQ certification process was the first time that a cyber-related effect was linked to a decisive condition identified in the OPP. The identification of a cyber effect during the OPP and the use of this effect to drive proactive (versus reactive) actions by the JTF, allows for the successful conduct of operations in a cyber-contested environment. It should be considered as a best practice.

We need to protect and defend our assets, networks, and they key infrastructure of the nation where we deploy. Network protection is a combination of force protection measures together with specific technical measures. This includes G3 because to receive a cyber attack is the same as receiving any other attack. We need to manage the consequences of a cyber attack.

A Cyber-Defence Task Force should be included in the task organisation of an NFS JTF (L) HQ. It must be present in
the planning process from the very beginning as part of the operational design. From an operational point of view, a Cyber Prioritised Assets List (CPAL) has to be identified during the planning process with the aim to allocate resources to protect them. Identifying cyber dependencies and feasible alternatives limits cyber exposure. In accordance with the current NATO Rules of Engagement, we cannot attack a cyber attack origin by electronic means. A good solution is to include the cyber attack origin in the targeting list. However, operations that take place in a heavy cyber environment go beyond the capabilities a HQ can provide.

In order to realise all the previously described tasks, we designed a Deployed CJOC. This is more consistent than the previous LCC TOC, and it implements the LL from the ISAF IJC and the Ex HIREX 13 as IOC for JTF HQ. Within the CJOC both the Coordination, Assessment, and Planning (CAP) and CAT are crucial. Our decision cycle (JCC) cannot be done in one week. Repetition of the cycle is necessary by returning to the JCBWG (nowadays the JCBIO). When we were briefing the commander in the morning on situational awareness, this SAB focused on the operational level in Theatre (SAB-COM). This is because you cannot provide the commander all the tactical level information. It is simply too much information, and he will be totally lost. The solution was a second SAB in the morning; this was a land situational awareness briefing at the tactical level (SAB-DCOS OPS).

In our model we have a STRATCOM pillar. The definition of STRATCOM, as approved by NATO, is linked to information capabilities: Public Diplomacy, Public Affairs (PA), Military Public Affairs, Information Operations (Info Ops), Psychological Operations (PSYOPS) and Engagement. This is a major part of our effort. It is unclear what the final STRATCOM structure and doctrine will be. When asked, the SACEUR’s STRATCOM advisor gave different answers than for example the DCOS OPS. Furthermore, we
need to take advantage of the social networks. We need to be able to use the social networks in order to be able to influence the target audiences. It was practiced during TRJR14, but (further) training and education within the HQ under the direction of STRATCOM advisor is necessary.

The Comprehensive Approach (CA) is also essential. Participation by multiple civil actors, and the proper resourcing and integration of civilian SMEs in the HQ during all preparation phases, and during real operations, is paramount. Early identification of the required types of SMEs is essential. Such expert personnel should, as much as possible, be tailored to the mission and integrated well before deployment. The development of a central repository of SMEs allows the selection of the most appropriate experts at every stage of an exercise/operation and is crucial to reach the desired effects.

For this integrated model, when looking at logistics, there is a lack of doctrine. This still needs to be developed. What is paramount is the Host Nation Support (HNS) planning. The HNS planning must be part of the beginning of the operation, actually even before we start thinking concept operations. Furthermore, there is a lack of doctrine for the JLSG, especially with regard to the tasks, the relations, and the delineation of responsibilities of between the support division of a JTF (L) HQ and the JLSG HQ. What we are proud of is that we were the first JTF HQ. NRDC-ESP HQ has evolved from a pure land environment at the tactical level, to a joint land-heavy environment by acquiring new capabilities and by expanding some extant capabilities. Although expertise from different services is absolutely paramount in order to make capabilities joint, others can be achieved by a deep change of mind-set. However, the operation cannot evolve into a multi-service campaign. The operation cannot mislay its “land jointness,” its land-heavy environment. Otherwise, the training and employment of any HRF (L) HQ must be redefined well in advance in order to ensure success of the operation.

We tested this integrated model and we realised that we can command in a theatre operations and at the same time commanding task forces in the land component. The NFS JTF (L) HQ integrated model NRDC-ESP vision on the execution of a SJO (L), allows all related OPS concerns to be mitigated during the planning and execution phases of any operation: an OPLAN for the operation at operational-theatre level, a Joint Coordination Order (JCO) for every phase or change of the situation at operational level, and OPORD for the tactical level followed by the appropriate FRAGOs.

Another thing that is very important is the special touch of the COM, a COM JTF who will have C2 over all subordinate forces. What is interesting is that everybody talks about the VJTF, but nobody talks about the JTF HQ anymore. We will see what will happen because at the political level they would very much like to convey to the world that NATO has the capability to deploy a VJTF within 2 days.
KEY TAKEAWAYS:

• NATO C2 SUPPORTING-SUPPORTED RELATIONSHIP IS PIVOTAL
• REALISE ROBUST SUPPORTING ROLES
• INCLUDE CYBER-DEFENCE TASK FORCE IN NFS JTF (L) HQ TASK ORGANISATION
• REALISE GOOD UNDERSTANDING OF DELINEATION OF RESPONSIBILITIES FROM THE ONSET
• ESTABLISH FROM THE ONSET WHO IS LIAISING WITH WHOM
• HNS PLANNING MUST START AT THE ONSET OF THE OPERATION
• NFS JTF (L) HQ CONCEPT ACHILLES HEEL: FORCE PACKAGE IS FORCE GENERATED IN THE INTEGRATED MODEL
• NCS, AIRCOM & MARCOM NEED TO PROVIDE EXPERTISE TO THE JOPG IN ORDER TO SUPPORT THE JTF HQ OPP
• AIRCOM C2 THROUGH JFAC
• MASTER TOOLS FOR TOPFAS & COLLABORATIVE PLANNING FOR EFFECTIVE OPLAN
• ENSURE PLENTY WELL-EDUCATED STAFF OFFICERS FOR JOINT ASSESSMENTS
• USE SOCIAL NETWORKS TO INFLUENCE TARGET AUDIENCES
• DEVELOP JLSG DOCTRINE (DELINEATION BETWEEN JTF (L) HQ SUPPORT DIVISION AND JLSG HQ).
Today, I think, we mean to talk about changes in C2, rather than of ‘C2 on the move’. My briefing is intended to give you an overview of the Maritime Expeditionary Operations concept, how this concept is delivered by a Joint HQ Maritime/Expeditionary (JHQ M/E), and on STRIKFORNATO’s (SFN) recent certification as a 3* JHQ M/E during Ex TRIDENT JAGUAR 2014. I purposely do not cover a lot of the information that General Montenegro (COS NRDC-ESP) has already covered in his briefing, since I agree with most of it and most of the Lessons Identified (LI) and Lessons Learned (LL) are identical. Instead, I will try to illustrate what is unique about the SFN, starting with a little bit of doctrine. The definition of C2 according to the Allied Joint Doctrine (AJP-01(D)) “encompasses the exercise of authority and direction by a commander over assigned and attached
forces in the accomplishment of the mission.” We have to remember that we are only there to support the “one” joint commander.

Today, we talk about the mechanisms by which we provide this joint commander with the information to make the necessary decisions, and how we then deliver those decisions. We cannot overlook the fact that in today’s world of advanced communications and networks, developing and understanding the networks required to coordinate these missions is critically important and a fundamental part of C2 arrangements. This doctrine and definition belittles the complexity of C2 in a modern warfare environment.

What we did to become a joint HQ also starts with NATO Doctrine. NATO is very good at adopting US doctrine as NATO doctrine. Trying to get the US into NATO and to understand how NATO functions is a challenge. They are a big organisation and NATO is not their highest priority. The doctrine is not massively different, but you will find that the US Navy guys talk a slightly different language than we do in NATO. The challenge is to get everybody to read the same thing at the same time with the same view and comprehension. My job at SFN is to work with the US and to confront them with the coalition bit of the operation; remind them that this is an Alliance.

Now SFN is a small organisation, but we pride ourselves in what we refer to as

**CORE BUSINESS:**

- Robustness
- Responsiveness
- Resilience
- Innovation
- Agility
- Adaptation
- Flexibility
institutional agility. We are a small core staff of maritime and expeditionary experts that can quickly expand, via augmentation, and fight at the operational and tactical levels. Agility is the power to move quickly and easily; to think and draw conclusions quickly in order to make sound decisions. My own SFN commander has several functions (including commander of the US 6th fleet), and as a result he is in Naples most of the time and he reports directly to SACEUR. Primarily, we exist to integrate US Navy Striking and Amphibious power into the wider Alliance.

With the exception of our JHQ M/E role, SFN has successfully operated in all of our core roles, and a few others. We are very proud of our 3 operational ribbons on our flag for service as the core staff (consisting of 60% of the team) for the Allied Joint Task Force Operation UNIFIED PROTECTOR in Libya (2011), as the backbone of the International Security Assistance Force (ISAF) XI rotation in Afghanistan (2007), and in our previous life as STRIKFOR-SOUTH we were in charge of all NATO carrier forces during Operation ALLIED FORCE (1998). SFN’s current core and supporting roles are:

- We are part of the NRF rotation at the 2-star level as a Joint Force Maritime Component Commander (JFMCC). This role does not solely rely on US capabilities, as the required assets are force-generated for each rotation.
- We support an MJO, and can serve as the Expanded Task Force (ETF) JFMCC by commanding multiple carrier strike and expeditionary groups. This is commanded at 3-star level by COM SFN who is dual-hatted as COM US 6th Fleet.
- Our newest role is that of JHQ for a Maritime Expeditionary Operation (MEO) – our certification for this role was during TRJR14.
- We also offer extensive staff experience and training in a supporting role to other NATO HQs and the wider Alliance.

I do not pretend that we can do what a normal Land Corps HQ can do. We are there to deliver maritime expeditionary operations (MEO). MEOs comprise NATO’s ability to project maritime forces at up to strategic distance that can deliver decisive joint effects from the sea on land, at sea, in the air, space and cyberspace, with little or no HNS. This immediate response capability is built on rapidly deployable and interoperable maritime forces including sea-based strike, initial entry and amphibious assets, sustained by embedded logistics and communications. It provides an agile and flexible Allied response across the full range of the crisis spectrum. The current definition of MEO is found in AD 080-098 Implementation Directive – Generating Joint Command and Control from the NFS.

We made use of the JTF HQ C2 model and amended it accordingly. We command and operate from a ship so we do not do the staged move, whereas the JFC model does. Furthermore, the SFN is not part of the NATO Command Structure (NCS). The FCE is different because we command...
from sea, but we need a footprint on land. It is there to maintain the liaison element that we need. The model is adapted purely for our HQ. The JHQ M/E is designed to support the Commander’s (COM) decision-making process and provide him with all the means necessary to conduct an operation up to a SJO. Thus, in accordance with strategic-level direction and guidance, the JHQ is to: analyse and assess situations to determine the required actions in support of the desired effects; adjust actions as necessary; plan and synchronise operations for a comprehensive environment; exercise operational level joint command and control over subordinate commands.

One of the challenges we encountered was that very few people had actual proper joint experience. There needs to be cross-pollination with other HQs, and we need to use each other’s expertise. The challenges we encountered during TRJR14 were the following:

- **New personnel/lack of experience** – a lot of our team had changed over since our last exercise – the corporate memory had all but disappeared. With the changeover of staff and a new type of mission, we had a significant lack of experience particularly in operational level training and the NATO planning process.

- **New Location** – we were still dealing with churn resulting from the move from Naples to Lisbon.

- **New and undefined role** – what was a JHQ M/E? We were writing the doctrine and defining the capability whilst planning and preparing for the exercise and certification.

- **New Mission** – our mission had changed and we now needed to be prepared to operate across the full range of potential alliance missions and be capable of commanding an expanded task force. We also needed to prepare
to undertake command of a SJO as a JHQ, within NATO’s traditional AOR or even at strategic distance.

- **Training Restrictions** – we had to overcome NATO process training restrictions imposed on us, in particular trying to exercise a JHQ M/E at strategic distance with a scenario that did not quite meet our requirements.

- **Achieve a common ground** – clearly we had to achieve a common ground early on, particularly with our staff training, processes and procedures, so that we could focus our attention on operating as a JHQ M/E.

- **Realistic Exercise** – we needed our exercise to be as realistic as possible so that we could fully test the JHQ M/E Concept.

- **Compromise** – in the end we had to compromise and consequently dilute our ambition on the exercise.

Our plan was simple and focused on 5 key areas: build the team, prove component capability, define the task, gap analysis, and develop a campaign plan.

Very early in the planning process, we identified the OPLAN Phase that we wished to test. This helped in particular to shape staff effort during the detailed Main Event and Main Incident scripting. We carried out a detailed Gap Analysis to focus on what we needed to operate as a JHQ M/E. We found that we had a number of gaps, particularly in our knowledge, manpower, resources and experience. TRJR14 was a success, but the LL and experience are limited. The exercises need to be expanded and done again.

We could not have done it without looking at lessons that others had identified and learned. We tried to learn and implement them early to avoid having to identify them ourselves. Quite simply, without the support we received from JFCBS, JFCNP and the Single Service Components in providing SMEs to all of our training activities, we would not have delivered.

The lessons process is a good one within NATO, but it is a little laborious. What I found is there are lots of NATO lessons identified out there, but
are they learned? Not in my opinion. We have a huge repository of lessons sitting there and you can read them until you are blue in the face. Making change in NATO HQs is one of our biggest challenges. It is usually up to the commander who forces change in my opinion. I have seen change but there are still some bits and pieces that need to be involved.

With regard to C2 on the move: people are trying to define an absolute. We want a pure solution to any problem, but there are no C2 absolutes. I'm not trying to push the C2 issue aside, but in my experience C2 has been different every time. The JFCs can be different from each other. There are very good practices that we need to carry forward, but we do not need to find absolutes. The one HQ does not need to be similar to another HQ. There can be subtle differences. We need that flexibility. Learn the lessons and apply them where applicable.

**Learning in Exercises, Improving for Operations**

**ETEE organisation in SFN**
- Briefings during Academics
- Email address for SOF
- COP transmission of Grids
- ROE process and permissions
- OLRT Task Matrix Tracker
- Operational Investigation Processes
- OCE role should not lie with TA
- ACP availability for Execution
- Collaborative planning tools

**BST structure and format**
- Maintaining CRP knowledge
- Modification to Target Lists
- PSYOPS staff & POTF relationship
- Planning tools to assist JOPG
- Connectivity between JHQ and RC
- Challenge training 2 x PTA
- Identifying EXCON manning
- Training on Target database

**TOPFAS management capability**
- Organization of J5 to CRP Planning
- Availability of JTS enabled CRB
- Attending CRP briefing rehearsals
- Restricted planning space
- USS Mount Whitney in processing
- Deliver data in a series of drops
- Deliver data in a series of drops
- Review JHQ M/E Doctrine
- Production of ROE & role play

**TOPFAS expertise in SFN**
- Optimum JOPG Model for SFN
- MAOC operate with the JFAC
- Integration of PA Group in SFN
- Integration of Augmentees in SFN
- Practicing exercise classification
- Deliver data in a series of drops
- SFN FCE structure for Operations
- CBRN warn and report software
- Initiating Force Protection

**Availability of Command Platform**
- Requirement for a live ATO feed
- TOPFAS collaborative training
- Continuity of augmentee support
- Procedure and process for B & WG
- Enduring requirement for J7 in SFN
- CIS Planning timelines for ACP
- CIS survey of alternate JOC
- Joint Critical Assets Submission

**Development of JHQ M/E Doctrine**
- Sharing the Target Database
- Managing Group Information
- Review B & WG seating plans
- Academics focus on JHQ M/E
- ACP in the CJSO
- CULAD with Regional expertise

**Staff enhancing the FCE**
- Speed up release process
- Planning to achieve sea control
- Ashore Logistics Coordinator
- Dedicated JTS for LEGAD
- TOPFAS Staff discipline
- Run KLT earlier in the EPP
- Real-time COP in the SFN JOC

**Permanent CIS fit on the ACP**
- Pre-defined assembly of OPTs
- Role of the J5/S ROE Staff Officer
- CIMIC Investigation process
- Printer and paper conservation
- Exercise support from CCOMC
- Include Response Cells in BST
- Integrating IO, PSYOPS, and targeting
- PSYOPS reach-back capability

**Provision of COP in SFN JOC**
- C2 for TBMD Cell in SFN structure
- Matching ROE profile of STARTEX
- Non-native English contributions
- Claims process and planning
- Legal Documents on TOPFAS
- CCOMC future participation
- Commit RC Leaders early in EPP
- Configure Response cells early

**KEY TAKEAWAYS:**

- THERE ARE NO C2 ABSOLUTES
- ALLOW FOR DIFFERENCES IN JFC HQS & FLEXIBILITY
- APPLY INSTITUTIONAL AGILITY
- AWARENESS THAT SFN CAN BE ACTIVATED WITHOUT AN NID
  (SFN IS NOT PART OF THE NCS)
- PROVIDE PEOPLE WITH ACTUAL JOINT EXPERIENCE (CROSS-POLLINATE WITH OTHER HQS THROUGH SMEs)
- INCLUDE AUGMENTEES AT EARLY STAGE WITH ALREADY DEVELOPED SOIs
- REPEAT AND EXPAND EXERCISES
- ACTUALLY LEARN THE LESSONS IDENTIFIED
**Biography**

Col (DEU A) Frank Düwel started out at the German Command and Staff College in Hamburg in 1994, after which he was part of the German/Netherlands Corps for G3 operations from 1996-1998. He followed a Staff Course at the Canadian Forces College in 1998 and has academic qualifications in electrical engineering.

He served as an assistant branch chief and subsequently as executive assistant to the Deputy Chief of Staff at the Ministry of Defence (MOD), as part of the Army Staff from 2001-2003.

After serving as a commanding officer, DS and as MA to the DCOM in HQ Kosovo Force (HQKFOR), COL Düwel was appointed Branch Head for SHAPE FORCE GENERATION at ACO. Currently, he is ACOS G3 at ARRC HQ, as of January 2014.

I represent the ARRC, but I am also a German Officer, so unlike my British counterpart, alas you will have to endure no joke at the beginning of my presentation. The aim of this briefing is to show you the C2 challenges of a NATO Force Structure (NFS) Land HQ. The ARRC is always a bit special. It is not just about working towards certification as a JTF. The ARRC was the first multinational NATO Reaction Corps, as of 1992, and currently there are 16 nations serving in the ARRC. It has a special organisational structure compared to the other Corps. Since a one star Commander is in charge of each section, this sometimes creates challenges for ARRC’s COS. We now have a structure of 9 pillars in our HQ. Quite unusual for an NRDC, we also have a small logistical staff responsible for Reception, Staging and Onward Movement (RSOM). This is the core staff for the Joint Logistic Support Group (JLSG), and this is a big advantage. One of the challenges that we have during operations is that G35, G2 and G5 are in different staff divisions, which requires a lot of coordination and synchronisation.

~ Sometimes a small footprint is the solution of the day. ~
All challenges and questions are the same, but sometimes the answers are different. Recognising the challenges of the new roles, and based on experiences from past joint operations, we had to change our C2 concept, both conceptually and hardware-wise. We needed to be in line with the JTF concept developed by the JFC, especially with regard to the FCE and ICE parts.

In addition to that, our COM wants to be ready for all different scenarios as a JTF, this includes disaster relief. Sometimes a small footprint is the solution of the day. We want to be fast and easily deployable (e.g. for the flood in Pakistan, EU mission in Congo, etc.). We started developing this C2 holistic concept by first developing some necessary C2 principles:

- **Agility**
  - Role: JTF HQ, LCC or Corps HQ
  - Environments: NATO, JEF, CJEF or UK only
- **Flexibility**
  - JTF HQs scalable to missions and political restrictions on Capability Packages (CPs)
  - Modular
  - Pre-designed
- **Responsiveness**
  - More rapid effect
  - Command within a couple of days/months
- **Resilience**
  - War-fighting against a near peer enemy
  - Cyber threat
- **Reachback**
  - Development of Permanent HQ concept
  - Resources
  - Challenges with regard to Battle Rhythm and bandwidth

We figured that the main challenge to become a JTF HQ was a different and more flexible mind-set. For example, some branches had difficulty with recognising the need to stay behind. The different Corps need to learn from each other. There are differences between the Corps, but many of the challenges and problems are the same. Most of the personnel have tactical level experience and therefore this is

![ARCC scalable JTF HQ concept](image-url)
their comfort zone. At the operational level, the in-theatre mind-set is different, and this needs to be trained. This is the challenge and several exercises are necessary to alter this mind-set.

Overall the ARRC C2 development programme is not only looking at the scalable JTF HQ concept, but also looking at its future roles. For every role you have fresh staff officers, and this poses another challenge. The main focus of the ARRC’s C2 Development Programme is on their challenge from changing their role between a JTF HQ, LCC and a traditional Corps. We need to focus more on the Corps capabilities. A Corps HQ will become more and more important again in light of recent developments at the political level, but I feel we have lost a lot of capabilities in that respect. Because of these roles, they heavily depend on augmentation from other services and SME support. The role as a LCC is manageable because the ARRC also has this responsibility when acting as a JTF HQ. Coming from a JTF HQ and going back again to warfighting will be a challenge because by then you will be thinking at an operational level. This requires resilience.

The ARRC uses the same scalable JTF HQ concept as other NATO Rapid Reaction Corps. This concept will be tested in exercise TRJR15. Their main JTF HQ challenge in becoming Joint is the ability to think at the operational level but simultaneously commanding at the tactical level. Switching from Main light and Main medium will require flexibility in the level of command. Not all operations will require a 3-star commander. The ARRC therefore needs to “see up and down” the chain of command at the same time. Another challenge is switching from Mission Secret as illustrated by the ISAF C2 concept. So, for the ARRC the JTF HQ challenge of becoming joint was accepted by adjusting our establishments. The challenge
of thinking at the operational level, but also being able to command the tactical level was resolved by establishing a so-called SJO ‘tactical commander’ within the authority matrix, within the Joint Common Operating Picture. It is useful to have a 1-star who can decide within the timeframe of the current operation (96-hours) and make decisions on behalf of the Commander. Normally, these decisions would be made by the DCOS OPS, but G3 is not part of DCOS OPS in our structure. The 96-hours is not covered by CJOC but by G3, so we had to expand G3 planning capability and capacity within the JTF HQ.

Furthermore, there will be a heavy dependence on Reachback, and this concept needs to be tested. For the OLRT and the FCE, it is not so much Reachback but more a ‘Reachforward’. These are more the footprints with a reach-out towards the OLRT and FCE. This is different for the ICE, where at a certain point the Reachback will be decentralised. This will be a challenge for the bandwidth, but we will find out if this works. For us, the C2 concept needs to be adaptable to different roles. It is nice to have a concept, but you have to test it. Only after testing will all the issues become clear. Moreover, I am a bit concerned with the lack of core capabilities we are facing in the different Corps and HQs. There are still some aspects for this JTF HQ concept that have not been thought through. What is the role of the JFC in the concept? Will it be assisting or commanding multiple JTFs in SJOs and/or MJOs? These are interesting times to say the least.

Reachback

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<td>‘Reachforward’</td>
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Branches

- OPSCEN
- RFI/IM

SA
RFIs

OLRT

FCE

CJOC
RFIs

COP

Full Reachback

Branches

- OPSCEN
- RFI/IM

- CJOC

- RFI/IM

Full Reachback
KEY TAKEAWAYS:

- THE ROLE AS A JTF HQ (SJO(L)) REQUIRES A DIFFERENT MIND-SET:
  - HQ AT JOINT AND THEATRE LEVEL
  - BUT REQUIRE CURRENT OPERATIONS FOCUS
  - CHANGES TO THE HQ’S PE
  - RELATIVELY SIMPLE TO STEP DOWN TO LCC
  - CHALLENGING TO GO TO CORPS LEVEL AGAIN

- FLEXIBILITY AND AGILITY:
  - C2 CONCEPT WHICH IS ADAPTABLE TO DIFFERENT ROLES
  - THE ROLE MAY CHANGE EVEN AFTER DEPLOYING
  - REINVENT IN CORPS HIGH INTENSITY WARFIGHTING
  - RESOURCING WITH FP AND CIS FORCE ELEMENTS IN PLACE

- JOINT MEMBERSHIP OF YOUR PE
- THE COMMANDER MUST LOOK UP AND OUT
- DEVELOPMENT OF A "CURRENT OPS" CONCEPT
- CIS AND EQUIPMENT
- DEPLOYABILITY AND FLEXIBILITY
- THE MIND-SET CHALLENGES FOR THE DIFFERENT ROLES
- THE LACK OF CORPS ROLE CAPABILITIES
The topic of today is Air Land Integration (ALI). ALI is the focused orchestration and application of the full range of Air and Land capabilities within a Joint force to realise and enhance effects. ALI considers all elements in a given battle space regardless of the Component to which they belong, operating together to achieve a common aim. With regard to AIRCOM’s view on the JTF HQ concept, I cannot tell you much since it has not been tested yet. This year AIRCOM will step up to the operational level, and will conduct exercises in January from which we will draw lessons. AIRCOM’s mission is to deliver Air and Space Power for the Alliance. Its vision is to be a ready, responsive and focused team executing precise, agile, scalable Air &Space power for

Lt Col (NLD AF) Bode is an Air Battle Management Officer and he has been in the Dutch Air Force for over thirty-eight years. Lt Col Bode is currently Staff Officer of the Operational Assessment Branch of the NATO C2COE. He was selected for this position due to his broad experience on Command and Control, the Operational Planning Process and his service within various NATO HQs.

His motto is: Life is short, hit it hard.

~ I know about 30% is land and 70% is water ... but remember, we are all 100% encompassed by air. As an air guy you are always in between. ~
the Alliance – today and tomorrow. AIRCOM’s role is to advise SACEUR and NATO on all Air and Space issues and forces. During peacetime, AIRCOM is responsible for Integrated Air and Missile Defence (IAMD) Operations within SACEUR’s AOR. Part of our job is air policing when you go from a Joint Operation Area (JOA), you can compare it to safeguarding the roads with a police car. The static ACCE will stay behind after a mission and do the air policing. We can do both tasks at the same time, in the same area.

In crisis, AIRCOM’s role is to provide Joint Forces Air Component (JFAC) OPCON of air forces provided by the Nations. Its characteristics are that it is strategic, operational and tactical in nature and that air power has a global reach or staging area. This is what makes us unique; we have an enormous reach. We have little to no footprint in the AOR (except with regard to the effect); we can fly in and out. We can go from highly kinetic to non-kinetic to supporting OPS, and both high readiness and complexity are part of our permanent C2 structure. Taking into account the way that HQ plans, we have seen that the non-kinetic element has become more and more important. All of this is quite complex though, and though we have an asymmetric advantage we are also quite technology dependent, we are not cheap and resources are scarce. On top of that, we are always weather dependent.

Our first priority is to accomplish our mission by forming the JFAC, a JFAC structure tailored to the situation and the intensity of the conflict. The Ballistic Missile Defence (BMD) is AIRCOM’s real 24/7 mission. It will not be given to a JFAC, not even if that JFAC is AIRCOM itself. The BMD mission will always remain with AIRCOM, with the 4* commander. We coordinate with and learn from a national American JFAC (non-NATO).

You can see that AIRCOM is an ‘aid level’ HQ. We have a core JFAC and they represent all the JFAC functions. This requires personnel, and this creates tension because
capacity and manpower is needed. In light of sustainability, the rule of thumb is: for one SORTIES you need one person. In case of an article 5 MJO or when exercising for such an event, we need a lot of manpower. The manpower will come from national air HQs, national entities, and from the other JFACs. Using manpower from the other JFACs means that they lose capability to deploy in an SJO or be part of the support for the SFN. Furthermore, these augmentees need to be ready and trained. This issue has been topic of discussion during the Air Chiefs Conference, and all the Air Chiefs have promised that they will free up manpower and deliver people. So far I have not seen them deliver.

The US provides most if not all of the so-called targeteers/weaponeers. There is a lack of trained and combat ready targeteers provided by the other nations.

Going from AIRCOM to the JFAC requires a change in structure and our cycle is somewhat different from that of the JFC or the LCC. However, the NATO/AIRCOM/NCS JFAC will not deploy. The ACLE are the ones who will deploy. Air Tasking Order (ATO) are the people who run the mission on the ground 24/7, and they will come from the deployable AOCCs. For the ATO Cycle we work in advance with a 72-hour cycle. This makes it somewhat inflexible, however, in light of mission planning, rendezvous etc., these are planned within a 48-hour cycle.

I recall that whenever Brunssum would ask us for air superiority, my former CEO would instantly develop a rash. This is because air superiority can only be realised for a certain period of time, over a certain geographic location. We do, however, need to realise some form of air superiority in support of maritime and land. The organic air assets do not come from one single nation; it is a coalition of the willing.
First we need to shape the battlefield by using the (marine/land) assets already present. On a daily basis the air-land relationship is level, but when we go operational we become part of the supportive structure: part of the interrelationship. From LL we deduce that the land component needs the air support the most, the maritime usually hold their own.

The guys from the Air Operation Coordination Centre (AOCC) are an embedded nucleus of air guys within the NRDCs, within the army corps. You can say that the AOCCs are the blue guys in a green environment. But we cannot do it all

### What we Offer to the Joint Level

**ACCE:**
- Supports the Joint level, sent to the HQ JFC
- May be split into ‘Main’ and ‘Forward’ elements
- Tailored ACCE dependent on scenario, Director ACCE ideally OF-6
- ACCE team varies from 5 – 25 pers
- Director ACCE empowered to speak on COM JFAC’s behalf

![Diagram](image)

*An example of a JFAC/ACCE/JTF HQ Command Relationship*

### What we Offer to the CC Level

**ALE:**
- Supports the Component level, sent to the LCC, MCC and SOCC
- Tailored ALE dependent on scenario, Chief ALE ideally OF-4
- ALE team varies from 2 – 5 pers *per component*
- Chief ALE empowered to speak on COM JFAC’s behalf

![Diagram](image)

*An example of a JFAC/ALE/LCC/AOCC Command Relationship*
ourselves. Between Air and the AOCC's we have a mentoring and assessment role. AIRCOM would like to see that we support each other more, because this will realise less friction. With this I mean more support from the different COMs. However, there are so many exercises that it is almost impossible to please everybody.

The Air Liaison Element (ALE) and the ACCE are not embedded planners. The traditional ALE is not part of the HQ structure. The ones sent will be speaking on behalf of their commander. The feedback we received was that we need Air planners for the JOPG to help with planning. We need Air Subject Matter Experts (SMEs). We send an ALE horizontally and an ACCE vertically as it were, and these gentlemen will speak on behalf of their AIRCOM commander.

In light of the ACCE/ALE, the following considerations need to be taken into account. The COM JFAC will need to determine the appropriate rank/officer to act as Director ACCE. The ACCE Director’s latitude to represent the COM JFAC will vary according to COM JFAC needs, and the ACCE staff should be sized appropriately incorporating sufficient qualified expertise to best represent the COM JFAC and the JFAC at the JTF level working groups and boards. Furthermore, RLS should be provided by the JTF HQ in accordance with ATP-3.3.2. The information as to the size of the ACCE staff and necessary support requirements should be forwarded to the JTF HQ as soon as possible. Consideration needs to be given to the possibility of a “split” ACCE staff if there is to be a JTF HQ Forward and a JTF HQ Main. The RLS requirements will need to be forwarded as soon as possible. Going from AIRCOM to a JFAC, the battle rhythm differs. The daily ACCE battle rhythm will be determined by the JTF HQ battle rhythm.

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**Air Liaison - SJOs**

**What We Will Guarantee:**

We will stand up a suitably sized JFAC to support the element which is acting as a JTF HQ for a SJO (Land or Maritime Heavy)
We will send a suitably sized ACCE with a Director of a suitable rank

During Peacetime and the initial stages of a SJO(L), the AOCC staff will provide Operational level Air advice with ‘Reach Back’ support available from HQ AIRCOM

**COM JFAC Letter of Authority**

As early as practicable, during the SJO(L), an ACCE will be sent to the JTF HQ enabling the AOCC staff to revert to their traditional Tactical level role / support the ACCE
In order to feed information back to the COM JFAC and his staff, the ACCE will report back via phone or via written daily reports that will be posted on the ACCE wire if possible.

The AOCC is the empowered voice of AIRCOM, but the AOCC, the ALE and the ACCE are at different levels. The AOCC is with the NRDC, the ACCE is in Brunssum or in Naples, and the ALE is somewhere in between with the ARRC or with NRDC.

“ALI is the focused orchestration and application of the full range of Air and Land capabilities within a Joint force to realize and enhance effects. ALI considers all elements in a given battlespace regardless of the Component to which they belong, operating together to achieve a common aim”
C2 SEMINAR NETHERLANDS MARITIME FORCE

Commodore Rob Kramer Royal Netherlands Navy

Biography

CDRE (NLD N) Kramer joined the Royal Netherlands Navy as a midshipman in 1982. He completed his academic education in 1988 with a business administration course at the University of Groningen.

Amongst other positions, he served in NATO-operation Sharp Guard, as a Netherlands’ Liaison Officer to United Kingdom, and as part of the United Nations World Food Program. After completion of the Netherlands Defense Staff Course and a short period at the Ministry of Defence’s operational planning department, he was appointed as Commander Sea Training Command from April 2010 until April 2013.

Serving as Head Maritime Headquarters Admiraalty Benelux for one year, he was promoted to commodore and assumed command of the Netherlands Maritime Force in March 2014.

The focus of my briefing today, is to take you down to the C2 at the operational level and actually mostly at the tactical level within the Navy, but first a bit of history. NLMARFOR was formed in July 2005, and reached full operational capability in July 2008. They are a deployable operational staff for C2 for world-wide joint and combined maritime operations, with the ability to act as maritime lead nation “up to brigade level.” NLMARFOR has no ambitions to become or act as a NATO MCC.

A basic principle for NLMARFOR is the Modular (scalable) Task Group concept. Depending on the mission, the staff, and maritime and amphibious elements – including air assets – will be integrated in one Task Group.

Maritime expeditionary operations cover two main areas:

1. Maritime operations at sea: Sea Control, Sea Denial, for example Maritime Interdictions operations
2. Naval Power from the Sea: Project power from the sea to execute, influence and support operations ashore.

~ Being a marine-navy team is a different way of doing business ~
RNLN Assets are limited though. Individual units need training at unit level, maintenance or are deployed for missions. On one end, we have seen a reduction in absolute numbers of available assets, at the other end, we are confronted with more instability and an increase in missions. Although there has been a shift towards introducing more and more capable C2 and amphibious assets, keeping up with a fully-trained C2 element has proven to be a continuous struggle. Before 2005, the main focus of the Maritime Staff From the Sea covered the full spectrum of Amphibious Operations. Bringing together Fleet, Marines and air elements, requires the most complex C2 structure. The development of C2 capabilities in the amphibious theatre is a continuous challenge.

When NLMARFOR acts as an Amphibious Task Group (ATG) their staff consist of 60, plus augmentation. The ATG is divided into a Landing Force and a Maritime Component with various assets. In addition, the force package includes Joint Enablers, such as helicopters and different support elements. Deployed, the NLMARFOR ATG manning is 2000+ and the ATG is sustainable for 30 days.

There are various ways of organising an ATG. In NLMARFOR, the Commander Amphibious Task Force (CATF) is responsible for preparation of the overall plan, but during planning, the CATF and the Commander Landing Force (CLF) are co-equals, regardless of rank. While traditional CATF/CLF organisations have separate ATF and LF commanders with separate staffs, NLMARFOR Maritime Battle Staff re-organised and trialled a one-commander ATG concept with one integrated staff. First green and blue work together, and at the point of active operations the execution splits the green
green and blue, allowing experts to do the job they trained for. This so-called zipper approach has shown advantages, but at the end of the day, it all comes down to the relationship between the commanders. C2 is all about relationships.

In the NLMARFOR ATG concept, various duties will be delegated to subordinate commanders, staff members and/or coordinators, but the overall coordinating authority remains with the CATG. In principal, the staff works from one location, in most cases from a ship. It could be, that a Tactical Headquarter (TAC HQ) is sent ashore to coordinate the battle or execution of the operation from nearby. This TAC HQ would be led by DCATG, whereby CATG authorises DCATG to have TACON over the involved units. The CATG stays TACOM at all times. The units that are not involved remain under C2 of CATG. NLMARFOR bases their C2 concept on Mission Command and our ambition is to become a Maritime brigade-level HQ.

I was in Norfolk in December 2014, and I was asked to present my view on the amount of exercises that we do. There seems to be an increase in small national exercises. That, in my opinion is the wrong way to go. We need to have several large NATO exercises a year with politicians involved, especially in the amphibious environment. Being a marine-navy team is a different way of doing business. Realise that it took 10 years to be able to say that we are somewhat integrated now (blue with green).
Exercise Bold Alligator 2014 was a stepping-stone in the preparations for NRF 16. This exercise gave NLMARFOR many LL:

- The staff structure should be based on clear command relations
- The staff structure should be balanced; manning that takes into account planning and execution
- Liaison officers are important. Send your best officers, because in the end they represent you
- Personnel augmentation is needed. They should have the right qualifications, be timely available and they need pre-deployment staff induction
- Staff work should be based on the “KISS” principle
- The diversity in C5I outfit shows the importance of standardisation, compatibility and making timely arrangements.

We have become very good at endless planning processes. It has become an art: an operational art. This is troubling.

- We have become very good at planning; endless planning processes. It has become an art; an operational art. This is troubling. We need to focus more on the action, on the real execution phase, whether we have enough manpower. We need to invest at all times in the real personal command relationships. Even in the preparation phase of an exercise I felt it was extremely important to simply have a beer together, get to know each other. Who are we? Where do we come from? What do we expect from other exercise and how are we going to deal with each other? I would like to remind you of the danger of losing the battle because we are less and less connected. It seems like everybody is inventing his or her own network. NATO already has NSWAN. We are getting more diffuse than we used to be. Just talk to each other. The real success in C2 is:

~ Our ambition level needed to be lowered to a realistic level

~

do not overshoot. We should realise two large NATO exercises a year and no more, and combine forces to realise it. Pull our efforts together and let’s get it done.
MISSION COMMAND AS APPLIED BY
US ARMY - AVIATION PERSPECTIVE

Lieutenant Colonel John Cochran & Major Michael Shaw
US 12th Combat Aviation Brigade

Biography

MAJ (USA A) Shaw received his commission from the Santa Clara University and holds a Bachelor of Arts Degree with a major in History and a Masters of Human Resource Management and Leadership Education.

He was commissioned as a Second Lieutenant in the Aviation Branch. MAJ Shaw’s first assignment out of flight school was as an AH-64D attack platoon leader in 2nd Squadron. His Squadron then conducted a unit move to Illesheim Germany. He later deployed as platoon leader to Afghanistan as part of OEF VI. After serving in a variety deployments, he attended the Maneuver Captains Career Course, and Ft Leavenworth for Intermediate Level Education. MAJ Shaw deployed to Kuwait in support of Operation Spartan Shield and then to Baghdad, Iraq in support of Operation Inherent Resolve.

His awards and decorations include the Bronze Star Medal (1 OLC), Meritorious Service Medal, Air Medal (Numeral 3), Army Commendation Medal, Army Achievement Medal (2 OLC) and the Master Army Aviator Badge.

Biography

LTC (USA A) Cochran received his commission from the University of California, Los Angeles, and as a Second Lieutenant in the Aviation Branch, attending flight school at Ft Rucker, Alabama.

His first assignment out of flight school was as an AH-64 Scout Platoon Leader in 3rd Squadron, 6th Cavalry Regiment at Camp Humphrey, Korea, after which he served in several positions at Fort Bragg, North Carolina.

After attending the Armor Captains Career Course, LT Cochran was assigned to 21st Cavalry Brigade at Fort Hood, TX were he joined 6th Squadron, 6th Cavalry at Ft Hood, and was Headquarters Troop Commander during UFTP and the unit move to Illesheim, Germany.

After serving in a variety of command and staff deployments, LTC Cochran was assigned as the XO and then S3 of 4th Battalion, 4th Aviation Regiment (ARB) at Fort Hood where he completed his second tour in Iraq. He then was assigned to Headquarters Department of the Army, G-3/5/7 Aviation Directorate where he served as the Executive Officer and the Deputy Director of Army Transformation and Futures.
We only just returned from Iraq. We were told that we had 16 hours to get there, and within 16 hours we were on the ground, ready to execute operations. This, I feel, is pertinent to the conversation today, also with regard to the briefing by the representative from ARRC. We experienced the creation of an ad hoc task force, and we saw it grow, but my formation was the only manoeuvre formation within that task force. That environment created some interesting challenges for us. We, the Combat Aviation Brigade, work on all NATO levels: strategic, operational and tactical. When something happens, a particular tactical decision made by the aviator in the helicopter can have an immediate strategic, operational or tactical implication; from CNN to the Senior Commander in charge. That impact provides an interesting perspective in light of many issues addressed here today. From my perspective many of the issues discussed today centre around few fundamental questions that are applicable at every echelon, from strategic to tactical employment. Within the Alliance, in the conduct of Unified Land Operations (ULO) set in a coalition, joint environment how do we; train and resource our formations? How do we create processes and systems that effectively manage information that facilitate Mission Command at every echelon? How do we create a Common Operating Picture (COP) across the Alliance that enables commanders to make timely and informed decisions? How do we create interoperability down to the lowest levels of employment? How do we mitigate the “right now, real time” information requirements placed on lower level HQs by higher level HQs that often burden and consume valuable commander and staff energy at the tactical level?

The US Army Operation Concept is explained in the Army Doctrine Publication (ADP) 3-0, ULO, and is a result of the significant operational experience gathered over the last three decades. This US Army operating concept for unified land operations describes how the Army seizes, retains, and exploits the initiative to gain and maintain a position of relative advantage over the enemy in sustained land operations. This is accomplished through a simultaneous combination of offensive, defensive, and stability operations in order to prevent or deter conflict, prevail in war, and create the conditions for favourable conflict resolution.

One of the topics discussed today; Mission Statement: Rapidly deploy a Corps HQ within the Alliance that is made up of many different nations with differing

![Diagram of COP (Common Operating Picture)](image)
resourcing and capabilities? I find myself pondering the question: Could NATO actually do that as we sit here today? Right now, I believe it would be a tremendous challenge. I would argue that we (the Alliance) are no longer trained and resourced to conduct major unified land operations. Over the last several decades our respective nations defence priorities/capabilities have shifted from a “Cold War” strategy into 13 years of COIN Operations, compounded by declining defence budgets and military end strength. As we look to overcome these training and resourcing challenges and re-establish our capability to conduct major unified land operations, I think its vital that we look outside of our individual land components and develop a strategy that facilitates the integration and interoperability of an agile, flexible and adept coalition, joint capability within the Alliance down to the lowest level. The successful conduct of major unified land operations goes far beyond the employment of the land based fighting force; the true combat multipliers on the battlefield are the enablers that facilitate strategic, operational and tactical overmatch of one’s adversaries. These critical enablers (all the necessary pieces and components) are mostly within the ‘joint’ element. We have to be able to deploy and employ those joint systems in order to get the greatest effect on the battlefield. Within the Alliance the problem set is incredibly complex, resource intensive, and I believe this is what we are struggling with down to the lowest tactical formation.

I don’t mean to sound like a bumper sticker, but I am going to sound like one: for us the centre of gravity is Mission Command (MC). It is a philosophy that strikes at the heart of the tactical level and all the way up to the strategic level. As an environment becomes more complex, the reliance on your subordinates to execute the mission is something that becomes absolutely paramount. The MC approach and philosophy helps commanders counter the uncertainty of operations by reducing the amount of certainty needed to act. Through leadership, commanders build teams. They develop and maintain mutual trust and a shared understanding throughout the
force and with unified action partners. In exercising MC, commanders are guided by six principles:

- Build cohesive teams through mutual trust
- Create shared understanding
- Provide a clear commander’s intent
- Exercise disciplined initiative
- Use good solid mission orders
- Accept prudent risk

These MC principles, assist commanders and staff in balancing the Art of Command with the Science of Control. This is why the U.S. Army executes MC in unified operations according to this concept instead of centralised C2.

The last few decades, commanders and civilians leaders have become hungry for real-time information. This often makes the entire process more complicated, introducing technical challenges for MC. There is simply too much information in relation to our ability to synthesise it. In my opinion, through technology we have created an insatiable appetite for ‘real time, right now’ information at every level of command. If you think about it, this goes against our foundational principle of mission command C2. Operational and Strategic leaders and policy makers have access to so much unrefined/unsynthesised information so fast (almost real time) that it creates challenges at the tactical level to meet the information requirements generated by this massive influx of real time data.

For example, I have experienced situations when real time unrefined/unsynthesised information such as full motion video generated at the tactical level generates almost immediate information requirements from the strategic and operational level. These “right now” information requirements levied on the tactical command pulls critical command and staffs focuses away from the current fight. I offer you this; not just from observation, but personal experience; during my recent deployment in support of Operation Inherent Resolve I did not

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**Figure 1. Spectrum of Conflict**

![Spectrum of Conflict Diagram](image-url)
have the bandwidth nor did I have the equipment to meet the level of expectation levied on my formation by my higher HQs. I have witnessed battalion level who quickly become burdened with answering immediate requests for information on extremely unrealistic timelines from Strategic and Operational level HQs, when their true focus needs to be monitoring what is actually happening on the battlefield.

The Common Operating Picture (COP) is an efficient way to inform the commander and mitigate the risks, but relying on a COP not only introduces specific technical requirements but introduces challenges with software, shareability, and “universal distribution” for products and systems from which are not similar nor compatible. A base technological challenge for example, the bandwidth is insufficient for units in the field to communicate with each other, then the COP is not established or works so slow that information is delayed, not transmitted, omitted or has to take the form of another process or system. When looking at the COP, you can see that we (strategic/operational/tactical) all work in these domains, and at every single level we talk about COP, and we create information sharing processes. Unfortunately, we are teaching and creating processes and systems that subsequently start to dictate the way we fight and the shared understanding and COP required to inform the commander at every level doesn’t exist because we have no true interoperability. The true importance, in my opinion, of the COP is that it informs the commander and it mitigates Risk to Mission and Risk to Force. Operational Risk needs to be defined at every level and applied with MC as the application methodology so as to inform and enable the subordinate commander.

We need to create processes and systems that manage information at the appropriate levels and not become slaves to the information flow. Information overload creates analysis paralysis and ultimately impacts efficient tactical, operational and strategic operations.

Interoperability is a foundational requirement critical to way we fight in the combined, joint, coalition environment, but to be honest as we stand here today it is extremely dysfunctional across coalitions, alliances, and even within our own services and components. Case in point; we all have different real-time communication packages /systems that we work with. When talking about combined operations this becomes even more convoluted. Across the Alliance and even within our own services we use different radios, network architectures, COMSEC etc. in our operations across all domains. This lack of interoperability impacts directly at the tactical level and thus creates confusion and inefficiencies at the operational and strategic level making
shared understanding and the creation of a COP almost impossible to achieve. In my world of Air to Ground integration at the Company, Platoon and Squad level in a Joint, Coalition Environment, the inability to conduct basic secure communications between Aircraft and the Soldier on the ground creates a tremendous level of Operational Risk. Here today there is a lot of discussion on the creation of JTFs across the Alliance, I believe that it critical that you ask the question: how do you overcome that? Because at my level it poses a significant problem when I cannot talk to the guys on the ground, this is analogous to the communication and technical interoperability challenges the Alliance faces at every level of command and control.

At all levels, but especially at the tactical level, we need the basic communication building blocks. What about low technology solutions to C2 communications? What about simply texting messages as they do in some coalition partners we are working with today? Are we ready for that? Are we making things too complex? We are spending a tremendous amount of time, money and effort on high-tech solution sets, when the current reality is that we are struggling to fix the foundational challenges of point to point communication interoperability at the lowest tactical level. It is my belief that we need to prioritise and synchronise efforts that focus on the basics, and use that foundation to create an environment that combines those building blocks with flexibility. We do not have that foundation in my opinion: not from a doctrine standpoint, not from an organisational standpoint, a resources standpoint, from a CIS standpoint. However, currently our whole system is built upon this deficient foundation.

The future of unified land operations will become more complicated. In order to avoid analysis paralysis, mind-sets needs to be changed and MC needs to be applied at every level of an operation. Technology needs to be applied as an enabler but only when suitable, feasible and acceptable, because as history has shown when Ad Hoc technological solutions are employed across all domains with out adequate resourcing, synchronisation and strategy they often do more harm than good. I believe that the key to building a strong operational foundation rooted in the fundamentals of MC must begin answering the basic question of how do we get the right information to the commander in order for decisions to made, resulting in the success of an operation. There are a lot of challenges, but now is the time to discuss them.

KEY TAKEAWAYS:
MOST OF THE ENABLERS FOR SUCCESSFUL UNIFIED LAND OPS FALL WITHIN THE JOINT ELEMENT
• APPLY MC PHILOSOPHY & PRINCIPLES FROM TACTICAL UP TO STRATEGIC LEVEL
• BE AWARE OF INCREASED SUBORDINATE RELIANCE IN MORE COMPLEX ENVIRONMENT
• REALISE PROCESSES TO DEAL WITH INFORMATION OVERLOAD
• DON'T LET EXISTING PROCESSES & SYSTEMS DICTATE THE WAY WE FIGHT
• REALISE GENUINE COMBINED AND JOINT INTEROPERABILITY FOR INFORMATION EXCHANGE AT ALL LEVELS, BUT ESPECIALLY AT THE TACTICAL LEVEL
• REALISE LOW TECHNOLOGY FLEXIBLE SOLUTIONS TO C2 COMMUNICATIONS ISSUES
• PREVENT ANALYSIS PARALYSIS
• CHANGE TO MC MIND-SET
• RE-EDUCATE OFFICERS TO THINK INDEPENDENTLY, CREATIVELY & BE FLEXIBLE
THE JOINT TASK FORCE HEADQUARTERS
CONCEPT: ADVICE FROM
OBSERVATIONS AND ANALYSIS

Mr. Marvin Thordsen Senior Civilian Analyst
NATO Joint Analysis & Lessons Learned Centre (JALLC)

Biography

Mr. Thordsen is a career analyst, researcher and training specialist (sea, air, and land environments). His training is in Applied Behavioural Sciences (ABS) with specialisation including distributed / collaborative organisations, Critical Decision Making, Cognitive Engineering / Human Factors, Training and Advanced Team Decision Making. He has 30 years experience conducting real-world data collection and analysis, the majority of which is military focused.

Prior to NATO, he worked on a variety of major projects for the U.S. military covering a range of topics such as: the U.S.S. Vincennes shoot-down of an Iranian Airbus; the cognitive demands and resultant requirements of the landing signal officers (LSO) aboard aircraft carriers; and mission rehearsal training. Over the last 11 years, he has been engaged in over 30 NATO and/or alliance exercises and real-world operations/incidents. Currently he works at the NATO Joint Analysis and Lessons Learned Centre (JALLC) in Lisbon, Portugal as a Senior Analyst.

Now I am going to try and put a different spin on what we have heard so far during this seminar because I am a behavioural scientist. My experiences with the JTF HQ concept were gained through observations during training exercises. There are some practical C2 challenges to identify, as well as recommendations associated with the JTF HQ concept, and how certain elements such as military liaisons and the integration of command, reports and returns, and successfully integrating augmentees achieve unity of command and unity of effort.

What is interesting is when we compare the traditional C2 Structure and the Integrated C2 Structure, where a Single Service (SS) component or a NFS HQ serves in the role of a JTF HQ. By not using JFC HQ Brunssum or Naples (under the traditional NRF C2 Structure), the Integrated model requires that a SS or NFS organisation perform the joint-operational functions, which can be quite challenging due to the SS HQ’s tendency, training and experience to think and act on a tactical level to gravitate to its comfort zone. In addition, when a JTF
“goes tactical” a secondary effect can result - the strategic level (SHAPE) begins to take a more operational focus. Ultimately, an organisation adopting this integrated C2 model, has to make the shift to “thinking Joint” and “thinking Operational” during their preparation. There are some things that can help a HQ embrace joint and the operational mind-sets, but it isn’t easy. Mechanisms need to be put in place to assure it addresses the full range of functions it is expected to perform, (including high and low-tactical, SS as well as joint and operational). The options available, range from compartmentalisation of cells/branches (divvying up the various tasks) to “dual-hatting” of key individuals to the “recruitment” of additional personnel through augmentation, reachback, etc. This illustrates that the nature and manning of your HQ requires conscious consideration.

A further complication (under the integrated model) is that the JTF HQ must also assume the roles and functions of the component command and reach “down” to directly provide C2 for the assigned forces – that is, providing both a “High” and a “Low” functions and C2. Looking at C2 under the NRF model, this delineation between high-tactical and low-tactical is important. There is an interface between the tactical and the operational, but also an interface going down to the lower-tactical level. And at this lower-tactical level there is the combined multinational component. Additionally, in a scenario where a Land Force HQ is serving as the JTF HQ, special consideration must be given to coordination and support relationships between the subordinate maritime and air components.

Another critical aspect of the JTF HQ concept is the role of military liaison officers, and how they serve as the primary mechanism for achieving integration of command and a common mind-set. If you, however, send the right person, the (added) value that you get in return is so much greater.
Liaisons play a critical role, but tend to be the most neglected aspect within the JTF HQ C2 Structure. The challenge becomes more convoluted when implemented the concept whilst using the integrated construct. When these liaisons, provided from the CC to the JTF HQ, are implemented properly, a great amount of stress is placed on their time and effort. This illustrates the necessity to adequately resource these positions with a requisite number of personnel who have the proper expertise. Liaisons support joint coordination and they have the potential to be incredibly beneficial when performing in their role as a conduit for commanders and CC perspectives to the JTF HQ. This inherently ensures tactical to operational level interface. Additionally, managing the role of these liaisons will be the responsibility of the SS HQ operating as a JTF HQ. This will maximise their potential and benefit to the HQ. The Liaisons’ fundamental function is to be the conduit between their own commander and the operations commander.

The challenge here stems from the traditional CC’s reciprocal exchange of LNOs, and the fact that JTF HQ only receives LNOs from CC, but does not provide them. This may take some additional consideration within the Integrated Model, where an SS HQ serving as the JTF HQ may be inclined to provide an LNO to the CC in order to facilitate Integration of Command and fill any perceived coordination and
situational awareness gaps. The JTF HQ also has an important role in providing liaison officers to support external engagement with non-NATO organisations. These efforts are initiated in-theatre as part of the OLRT and FCE. These elements provide early in-theatre engagement focusing on strategic level information and coordination activities. The roles and authorities of these liaison elements will be different between an Article 5 and Non-Article 5 Response Operation. In a Non-Article 5, liaison is done directly with key players in theatre, whereas in an Article 5 Operation, engagement is primarily conducted through the host nation and national liaisons.

There are some challenges. The demand placed on liaisons by the JTF HQ battle rhythm is high. Looking at the charts you can imagine people getting overwhelmed. Encircled in red are the people at the lower level. You can pick any words you want, but those guys are going to get worn out. Furthermore, there are some challenges associated with

Without an LCC, these liaison exchange requirements will fall to the JTF HQ
augmentation of JTF HQ personnel and the issues associated with integrating them into organisational procedures. Furthermore, Reach-back is not a static thing; it is dynamic and needs to be well thought-out. We also identified a situational awareness gap when the Joint Coordination Board Working Group (JCBWG) goes operational. It will be unreachable for two days when travelling to the AOP, and you cannot expect them to start working immediately upon arrival. The assumption is that at some point C2 will move/flow to the front, but when exactly? Moreover, any time there is a hand-over / take-over, there is a vulnerability gap. Another challenge is the expansion as we include more and more personnel within the JTF structure.

In conclusion, it is important to understanding the complexities and challenges associated with practical planning elements and the employment of key C2 enablers when determining structural C2 requirements. Unfortunately, the elements of the JTF HQ C2 structure are often overlooked and underestimated. C2 is a very complex and dynamic process.

KEY TAKEAWAYS:

• THE INTEGRATED C2 MODEL REQUIRES SHIFT IN MIND-SET TO JOINT & OPERATIONAL THINKING
• REALISE HQ MECHANISM TO REALISE OTHER FUNCTIONS THROUGH ADDITIONAL COMPARTMENTALISATION
• A JTF (L) HQ REQUIRES SPECIAL CONSIDERATION FOR SUPPORT RELATIONSHIPS BETWEEN SUBORDINATE MARITIME & AIR COMPONENTS
• USE MILITARY LIAISON OFFICERS TO REALISE COMMON MIND-SET & INTEGRATION OF COMMAND
• ADEQUATELY RESOURCE LIAISON POSITIONS WITH PROPER EXPERTISE
• C2 IS A DYNAMIC PROCESS
JTF HQ - C2 ON THE MOVE  
OBSERVATIONS AND SUGGESTIONS FROM THE ODE  

Commander Bertrand Poliquen  
Joint Warfare Centre JCID Doctrine & Lessons Learned  

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Biography  
Cdr (FRA N) Pouliquen joined the French Naval Academy in 1994. In 1997, he was first assigned as a safety officer on board the support ship Jules Verne. He then joined the silent service in 1998, being appointed as the third engineer of SSN Emeraude for one year. His tour included active participation to the Kosovo war. He graduated from Military Nuclear Engineering School in Cherbourg in 1999. After serving in several positions, such as chief engineer on board SSN Saphir, he was logistics officer at the French naval base of La Réunion Island in the Indian Ocean from 2007-2009.

He was called back to Paris to serve in the Navy Human Resources Directorate. During this period he attended the Joint War College in Paris and worked as a career manager. Cdr Pouliquen was awarded the French Légion d’Honneur in 2011.

He joined the JWC in the summer 2014, where he is now in charge of the Doctrine and Lessons Learned Branch.

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I am from the JWC where I’m in charge of the Lessons Learned and Doctrine Branch. First of all, I would like to thank the C2COE for its warm welcome and for the added value of the JWC acting as Officer Directing Joint Operational level exercises. I will focus on two interpretations of ‘C2 on the move’: firstly, the evolutions of C2’s concept and doctrine and secondly, the challenges of physical deployment for a JTF HQ.

At the end of the day it is up to the Commander to choose the appropriate C2 arrangements, as long as they respect the principles of unity, continuity, clarity and integration of command.

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The aim of this briefing is to try to give you the added value of the JWC acting as Officer Directing Joint Operational level exercises. I will focus on giving the JWC the opportunity to provide you with advice and observations from a joint trainer’s perspective. As you already know, the JTF HQ is a young concept, first tested during an exercise in 2012. It continues to be a subject of much discussion.
important supporting functions for C2 (information, logistics and legal support domains).

The following observations are mainly based on what we observed during three major exercises we hosted in 2014, as well as in the recent planning phase of Exercise Trident Jaguar 2015 (TRJR15). Most observations are extracted from our LL Database and the official exercise reports. I want to point out that while the observations are pertinent to how the exercise played out, exercises differ from reality. For example, C2 with subordinate commands in exercises are often played with Response Cells (RCs) which are sometimes insufficiently manned, and this can hamper the quality of training and of the lessons we identify.

A JTF HQ is complex, so a robust preparation for deployment is needed and must include individual and collective training. One of the most important parts of preparation should be staff training in the decision-making cycle and usually there is a need to enhance the staff knowledge of this cycle. In particular, every staff member has to get a clear understanding of the main inputs and outputs expected from the Boards and Working Groups in which he will be involved, and has to understand how these feed into and interact with the overall Battle Rhythm (BR) to aid the COM’s decision-making process. During the preparation phase you also shape the key engine parts, and even if the HQ COM should stay focused on long-term issues, he will rely heavily on the Combined Joint Operations Centre (CJOCC).

Conducting frequent JOC activation training prior to the start of the exercise (STARTEX) or prior to deployment is instrumental in preparing the CJOCC to operate, and also plays a significant part in the preparedness of its staff. NRDC-ESP included a Coordination, Assessment and Planning element (CAP) inside the CJOC. This consisted of LNOs from subordinate commands and HN, thus building a team able to quickly support the production of fragmentary orders (FRAGOs) and Assessments. Being located in the CJOC, it had very good Situational Awareness (SA), and was able to support FRAGO production in a timely manner while maintaining a direct link to subordinate TF and HN. It was also able to turn rapidly into a CAT (Crisis Action Team) when required. Moreover, sitting together as a cell seemed to be very valuable regarding cross-coordination and sharing of information.

Once the staff is trained, you will start to plan for the operation, so I would like to provide you some advice on the Joint Operations Planning Group (JOPG). For us, the JOPG’s main quality is its capacity to act as a team, which is why it must be led through the COM’s strong involvement, and it must be able to deliver cross-functional activities. The ARRC uses the following mechanism. Instead of a classical planning process, having a G5 lead over a multidisciplinary group, COM ARRC has a more inclusive design at his disposal. In addition to the staff level classic Planning Group (IPG), he also uses a Principal Planning Group (PPG) with participation (at OF5+ level) of all Branch Heads, DCOS and sometimes the COS.
The coordination between PPG and IPG is managed by ACOS G5. The benefits are that:

- The direction and guidance from the PPG allow the IPG staff to narrow their focus and provide the opportunity for them to conduct a deeper level of analysis.
- The entire chain of command is involved which avoids a last minute DCOS or ACOS remark that questions the entire process and conclusions.
- The COM is permanently aware so he can always control his planners.
- It ensures the participation of nearly the entire HQ in the planning process.

However, while this proves effective in the ARRC HQ and seems to fit its organisational structure and culture, this approach may not work in other HQs, especially since successful coordination is to a large degree dependent upon the G5, who serves as the critical link between the PPG and IPG.

The initial stages of physical deployment of a JTF HQ require some improvement, and the JWC has several observations on the doctrinal construct starting with the OLRT up to JTF HQ. The OLRT’s primary task is to understand the environment of the future operations and this was really achieved in an excellent manner during exercises Trident Juncture 2014 (TRJE14) and TRJR15. Its focus should be more on liaison than on reconnaissance, and daily contact with its HQ allowed for joint, comprehensive operational-level information sharing. For the Forward Coordinating Element (FCE), we found that it should be led by a senior officer with perfect understanding of the needs and requirements of the JTF HQ.
Furthermore, it should include the Civil Military Co-operation Liaison (CIMIC) team in order to best support the COM with civil assessment reports. The CIMIC head should not be deployed as FCE director during the whole campaign, as he may need to remain available for his numerous meetings with HN authorities and other civilian entities. For the Initial Command Element (ICE), it is important to realise that it is based on the concept of forward command, when the Commander chooses to be deployed. The CFAO needs refining since it does not describe in sufficient detail the transitions between OLRT/FCE/ICE and deployed JTF HQ.

C2 is about finding the right BR, and this requires synchronisation between the CCs BR and the JTF HQ BR. We observed that BRs are often too dense and compressed for the staff to conduct proper and timely analysis. To preserve precious manpower, individual participation in Boards and WGs has to be carefully planned. The innovative introduction of a Joint Coordination Executive Working Group (JCEWG) in TRJR14, provided a forum for the key JTF HQ players to meet and provide Direction and Guidance (D&G) to assist and drive the Decision-Making Cycle. In Exercise Trident Lance 2014 (TRLE14), COM LANDCOM also initiated a Commander’s Shared Visualisation (CSV) meeting via VTC with his subordinate commanders. The CSV proved to be a very effective decision-making tool under the condition that it is coordinated with staff production.

In day-to-day business, a JTF HQ will also be challenged by the delivery of joint effects. A MJO in particular requires a shift in mind-set from the very specific targeting requirements of a Crisis Response Operation to developing target sets for large spectrum operations. For example, Air-Land Operations require the coordination of Close Air Support (CAS), Interdiction, and Deep Strikes, and recent Non-Article 5 operations and exercises have not offered the opportunity to develop expertise in coordinating these fires, especially interdiction.
Therefore, we must use our exercises to update doctrine and to re-develop the necessary skills and experience in Joint Fires/ISR/Targeting coordination. Currently, we would encourage the NATO HQs to make full use of the new Joint Targeting Interoperability Curriculum (JTIC) offered at the NATO school for their targeting personnel. Joint synchronisation must be at its highest level, because if it is not, the risk is that the JTF HQ will find itself caught in the J3 horizon (limited to short term focus). To avoid this, there has to be a clear understanding of the overall C2 structure and especially of the interrelationships between supported-supporting commands. An enhanced effects resulting from this understanding, is for example the successful integration of lethal and non-lethal targeting by SFN in TRJR14, combining the classic Information Operations Board with the Joint Targeting Coordination Board, creating one single ‘Integrated Effects Board.’

Furthermore, information exchange needs to be constant, timely and relevant between superior and subordinated HQs, as well as civilian partners. We need to pursue the best coordination to cover future plans, current plans and fast-track planning and decision-making. This is why Liaison Elements (LEs) between stakeholders of a joint operation are so important. The LE needs to have full home HQ, organisational and nation support, access to documentation and tools (e.g. NS, MS, other networks), and understand its liaison role at the hosting HQ or organisation. Moreover, the LE must have access to the commander to accomplish his mission, which requires experience and credibility.

I would also like to propose a slightly different approach when dealing with a JFC in an SJO. We have spent a lot of time talking about physically deploying the JTF HQ, but operating from a static JFC HQ could make more sense in some cases. First of all, the usual staff tools might not be available in a deployed location, especially regarding CIS support, which could be limited and harder to implement. Secondly, you should always position your key players where
they are the most effective: in this case, if the COM is deployed, his social network will be more difficult to interact with and this could hamper his action. In fact, a DCOM with a small and agile Forward Element could be enough to conduct the daily operations from a forward location, while enabling the COM at the rear to focus on operational and strategic issues, e.g. negotiating with the political level additional resources and ROE, or preparing for follow-on forces.

With regard to MJOs, C2 of the follow-on forces must be carefully planned and practiced from the time they reach the JOA to the TOA to the SSC. Secondly, there is a need to clarify C2 relationships between two JTF HQs commanding adjacent forces. Though the AJP-3 describes the supporting/supported relationship within a JTF structure, it does not do so with regard to two JFCs that are simultaneously working towards one common strategic aim. In order to, for example, fight concurrent SJOs, the designation of supported-supporting relationships by the strategic HQ should be considered and AJP-3.0 should be revised accordingly.

There were also challenges with regard to the Integrated Model, such as ongoing manning issues, both in exercises and in the real world. The CFAO currently depicts the Integration of a LCC into the JTF C2 structure of a SJO(L) with representation of other CCs (MCC, JFAC, SOCC) in support. But when SACEUR designates an NFS HQ to assume the role as JTF HQ become instrumental to the planning process. In the Integrated Model, the roles and responsibilities also need clarification. First, the roles of the HQ organic functions versus liaison element reinforcement can be confusing. Lessons identified from TRJR14 illustrate that existing doctrine should make it clearer that the AOCC will stay focused on Tactical Level Air Operations in support of land operations, whereas the ACC liaison element is responsible for coordinating Joint Ops at the Operational Level. Furthermore, there is a doctrinal need to clarify C2 relationships and supported-supporting roles because defining AIRCOM, MARCOM, LANDCOM as supporting a JTF HQ lacks clarity as the supporting relationship is not a formal command relationship as described in NATO Doctrine. The Command relationships, the liaison exchange and the coordination can then be ambiguous. So we recommend that these issues be addressed during the next updates of the relative AJPs.

Finally, there can be a tendency for a NFS HQ to focus on the tactical level, since it is its usual core business.
One way to preclude this, is that a DCOS could focus on the tactical level, while the remainder of the HQ is dealing with the Joint Operational matters.

To ensure C2, especially when deployed, you'll need multiple support, one of which is the key area of Information. In order to be effective in the information domain, you must use the right management process, good tools and a common understanding, and resilience. This starts with dealing with the complexity of the information domain. The STRATCOM advisor takes the lead and makes sure STRATCOM strategy is incorporated into planning and execution processes. Success is measured by effective synchronisation of media inputs, social media interaction, J2 reports, STRATCOM messaging, info/ops coordination, and PsyOps activities. A STRATCOM handbook is now available.

The effective management of information requires a solid foundation through the appointment of an experienced, dedicated officer to lead Information Knowledge Management (IKM). Apart from continuity, a timeline for issuing post-meeting minutes and a record of decisions, must be enforced so that users across the HQ get information on time. Once you have these processes right, you need to have a look at the tools required to implement them. Information for C2 relies on adequate tools and it is sometimes challenging to set them, especially for a deployed joint and combined HQ. The assumption we usually make is that we speak the same language, but this is not always the case. Assuming a common language is realised, technical interoperability is required (see annual CWIX test) and this also encompasses the standardisation of software (e.g. the NATO Common Operational Picture (NCOP)). Finally, there is a permanent CIS challenge to find the right means of communication with non-NATO partners. Since the IO/NGO community will not have access to NATO Secret/Mission Secret, they will use the internet instead, and the JTF HQ must prepare and proactively communicate using the internet, at least until the FMN project is fully developed.

Logistic support is also extremely important for a deployed JTF HQ and its forces, and it has many C2 consequences.
Since the dissolution of the Deployable Joint Staff Elements (DJSEs), from Madrid and Heidelberg who had a core staff with experience especially in leader positions, the Joint Logistic Support Group (JLSG) construct is struggling to reach optimum performance. Our advice is to balance the most senior expertise between the J4 and the JLSG when it is set up. Moreover, a fully-manned JLSG requires about 70 augmentees and they must be trained as early as possible.

To conclude my briefing on the C2 challenges a JTF HQ faces, my advice from the observations collected in exercises falls into two categories:

- human power: choose the right person for the right task, and
- the tools this person uses and especially the documents and doctrine he refers to.

At the end of the day, it is up to the commander to choose the appropriate C2 arrangements, to support a particular contingency or mission specific situation. C2 arrangements should always respect the principles of unity, continuity, clarity and integration of command.

**KEY TAKEAWAYS:**

- **FREQUENT JOC ACTIVATION TRAINING PRIOR TO STARTEX**
- **OLRT SHOULD FOCUS MORE ON LIASON THAN ON RECONNAISSANCE**
- **PROVIDE SENIOR OFFICER (WITH UNDERSTANDING OF JTF HQ REQUIREMENTS) TO LEAD THE FCE**
- **INCLUDE CIMIC TEAM TO SUPPORT COM IN THE FCE**
- **UPDATE DOCTRINE & REFINE CFAO (TRANSITIONS BETWEEN OLRT/FCE/ICE & DEPLOYED JTF HQ)**
- **MJOs REQUIRE A SHIFT IN MIND-SET**
- **CLARIFY C2 STRUCTURE & INTER-RELATIONSHIPS BETWEEN SUPPORTED/SUPPORTING COMMANDS FOR JTF HQ & IN CASE OF 2 JTF HQs WORKING ADJACENT ON ONE COMMON STRATEGIC AIM**
- **GIVE LES FULL SUPPORT & ACCESS (COM, DOCUMENTS, TOOLS, ETC.)**
- **CONSIDER STATIC JFC HQ IN CASE OF JTF FOR A SJO**
FROM INDIVIDUAL INITIATIVES TO A COLLECTIVE MOVE AHEAD?!

Lieutenant Colonel Jelle Bode & Lieutenant Colonel Rob Arts
NATO Command & Control Centre of Excellence

Biography

Lt Col (NLD A) Arts is a Joint Analyst and Operations Planner with broad international experience. He held several junior officer positions in the Netherlands and Germany. In January 2003 he finished his maroon beret training, followed by three terms Air Assault Brigade. He was introduced to the wonderful world of Air Forces when he assumed a position at the European Air Group in High Wycombe, and stayed in England when he became a Team Leader Plans J5 (as well as OPLE and OLRT head or member) ARRC. He was also involved in ARRC’s transformation from LCC to JTF HQ. During his career he has completed missions in Cambodia, Lebanon, Rwanda/Congo, Syria, Iraq and Afghanistan.

Lt Col Arts is currently Branch Head of the Analysis & Concepts Branch of the NATO C2COE.

He has three passions in life: 1. his family, consisting of wife and two lovely daughters, 2. NATO C2 on the Move and 3. Vitesse Arnhem Football Club.

Biography

Lt Col (NLD AF) Bode is an Air Battle Management Officer and he has been in the Dutch Air Force for over thirty-eight years.

LTCOL Bode is currently Staff Officer of the Operational Assessment Branch of the NATO C2COE. He was selected for this position due to his broad experience on Command and Control, the Operational Planning Process and his service within various NATO HQs.

His motto is: life is short, hit it hard.
With our briefing, we will make an effort to bring some consistency and give you an overview of our observations so far with regard to the Joint Task Force Headquarters (JTF HQ), and with regard to NATO’s deployable capability. Another aspect we’d like to make clear is what we, the NATO C2COE, can do for you. It is what we like to call consultation. How can we help you? At the end of the presentation, we will check whether you, the audience, think that the question mark or the exclamation mark is correct at the end of the title of this briefing.

First of all, the NATO C2COE’s main level of interest is the operational level. Our main focus areas are the C2 structures and processes, information and knowledge management, human factors (including leadership), and C2 policy and doctrine. Of course overlap always exists with the strategic and the tactical level, since all levels at some point affect the other.

For example, at the strategic level the NATO C2COE takes an active part in meetings of the ACT Concept Development & Experimentation Working Group (CD&E WG). Other examples are last week’s working groups in Vienna on the Strategic Foresight Analysis and Framework for Future Alliance Operations.

Furthermore, the development of Federated Mission Networking (FMN) and the Mission Partner Environment (MPE) are very important future interoperability
of NATO forces.

At the tactical level we observe, analyse and advise in several operations, and take part in some national exercises with international effects.

We have a supporting role for SHAPE J7 in the evaluation of activities as C2 Subject Matter Experts (SMEs), and we support the JWC in their training team. We also participate in the so-called Concept Integration Experimentation Coordination Cell (CIECC). This is where analysts from different organisations work together looking at different concepts, concepts development and attempt to combine their efforts finding conclusions and recommendations for improvement. Taken together with our seminars and workshops, the presence of the NATO C2COE at a broad range of related activities, contributes to the comprehensiveness of our shared knowledge.

What we need to be aware of, is that operations are commander driven. So much depends on the character of the commander. The bottom line is that every commanding officer wants to be the one to give the orders. They all want to be in charge, and rightly so, since they are also the ones accountable. This is why operations planning and exercises are essential. Operations planning is an art, and it is necessary to test and experiment during exercises where we look at the commanders’ engagement with his planning staff (JOPG and SMEs), commander-subordinate relationships, the different dynamics, interoperability, and interplay.

The NATO C2COE’s main observation concerning the JTF HQ concept for (NCS and NFS) Single Service HQs for a SJO, is that the concept definitely needs to be developed further. C2 in practice is not doctrine (yet), and opinions differ on whether the concept is sufficiently expounded in the CFAO and in Allied Doctrine. There are on-going discussions on whether the JTF HQ operates at the operational or at the tactical level. Furthermore, what applies to NATO, does not automatically apply to all its members. These are only some of the issues. The key takeaway here is that the concept requires further development because a tested, formalised and advertised concept improves interoperability amongst NATO nations and HQs.
Guidance in several C2 issues related to the JTF HQ Concept (for a SJO) is still required. Fortunately, more and more we see a coordinated effort as opposed to individual efforts.

The NATO C2COE also identified several challenges and possible solutions to increase NATO's Joint Command & Control Deployable Capabilities (JC2C(D)) through improved interoperability. Questions with regard to operational jointness are to what extent JFC BS and JFC NP set the standards in terms of unity of approach and perception, and who provides Operational-Level expertise (reach back) support to NFS and NCS CCs acting as a JTF HQ, if any? There is an ambition to be truly joint versus the JTF HQ being integrated. Unless you have certain capabilities or expertise, you can never be joint; maybe integrated, but not fully joint. This will require improvements in the NCS/NFS inter-service mutual support system, for exercises as well as operations. Who fills the gaps? What exactly is the national responsibility? First you need to look at your (functional) capabilities, and understand what capabilities you lack for that specific mission. Exercises, such as the TRIDENT series, are essential vehicles to test the C2 concepts, but they are limited in scope. There will always be ambiguity in the C2 exercise observations. We found, for
example, that HICON is often underestimated during exercises, and there is a risk of learning false lessons due to the artificiality of C2 scenarios in exercises.

The evolution of C2 structures is continuous. It is definitely a work in progress. However, we must avoid reinventing the wheel. The observations with regard to C2 in practice are that there is a lack of incorporation of Lessons Identified. Command and Control requires interoperability in order to realise cooperation and generation of capabilities. Furthermore, there are still confusion and various on-going discussions with regard to the Supported-Supporting-Interrelationship versus OPCON-TACON in the different phases.

In order to meet the required level of jointness of a certain mission, a NFS HQ must understand what exactly the required functional capabilities for that specific mission are, especially the capabilities typically mastered by other services. They should also understand that joint expertise may be very scarce, and the question should be asked if that specific capabilities is really need to achieve the aspired jointness. As a bonus, the aforementioned understanding of other services’ capabilities will also improve the quality of SS HQs in their traditional roles, since they will be in a better position to take joint effects into account whilst planning and coordination with other CC’s.
Other observations of C2 in practice were that there is a limited understanding of the specific available C2 options. This hampers efficient development of C2 structures. In order to enable C2, the exchange of planning a liaison capacity needs to be realised. It is also important to realise that the different C2 structures and mechanisms may have both advantages and disadvantages.

The shift from NATO need-to-know towards need-to-share is another important development. What are we allowed to share, what do we choose to share and how do we share the information? This requires interplay between authority, a certain need and the relevant method and means. The only thing that matters is that the right information reaches the right person at the right time, irrespective of where it came from. Nevertheless, as iterated by Lt Gen Yakovleff (Vice COS SHAPE), “there is no historical evidence of a correlation between the amount of information available and the quality of the commander’s decision.”

In line with the careful trend to cooperate with partner bodies, the NATO C2COE can contribute to the process of increasing interoperability and efficiency by using the results of each other’s efforts and coordination of concept development activities. We are already involved in exercises, analyses and working groups. Together with other NATO entities we have identified additional ways to have added value, even to a degree that we are constrained by our limited resources. Sharing our knowledge by providing C2-related briefings and advice, by analysing concepts or by supporting training and courses (e.g., NATO School Oberammergau), however, will always be our core business as far as relevance for the “customer” is evident.
This chapter provides information and statistics on the seminar as well as information about the participants and their feedback.

Participant information and feedback was collected in two ways. Initially through the registration form which was available on the NATO C2COE website and secondly by means of evaluations form at the end of the seminar. The initial registration form provided background information on the participants; their opinion of the seminar; suggestions for future improvements to seminars; and how they came to know about this seminar.

The overall number of participants was 84, of which 54 turned in their evaluations (64%). Most of the statistics are based on this percentage. The pie charts that are included, show seminar attendance, the rating given to the seminar, and whether attendees would appreciate more participant involvement (e.g. panel discussion, more room for Q&A, etc.).

**Attendance & Assessment**

**Facts**

**Seminar title:** C2 ON THE MOVE

**Date:** 24th - 26th March 2015

**Location:** Den Helder Naval Base, the Netherlands

**Working language:** English

**Dress code:** Service dress
Civilian attire: jacket & tie or equivalent for women

**Registration:** Online at www.c2coe.org

**Organised by:** NATO C2COE

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Overall Assessment

The seminar attendees were asked to give their opinion on how they rated the seminar in general and how useful they considered it to be. The statistics on the overall assessment of the seminar, indicate that 83% rated the seminar either excellent or good. 89% of the respondents indicated that they considered the seminar useful, and 100% gave the administration of the seminar a thumbs up.

Seminar Participation Involvement

94% of respondents indicated that they would be interested in attending future NATO C2-COE seminars. Most respondents also indicated that more participant involvement during the seminar would be appreciated.
NATO C2COE SEMINAR STAFF

Seminar Moderator
Lt Col (DEU AF) Achim Müller

Seminar Officer of Primary Responsibility
Lt Col (NLD N) Frank Gubbels

Seminar Deputy Officer of Primary Responsibility
Lt Col (EST A) Riho Tammistu

Support Staff
Mrs. (NLD) Josephine Hendriks

Support Staff
Mrs. (NLD) Lidy Heijne
C2 in Emerging Warfare - What is the Challenge for NATO

SEMINAR TOPICS:
Federated Mission Networking
Urbanisation
Enemy of the Future
Red Teaming

5-7 July 2016 Norfolk, VA
United States of America

In close cooperation with
Combined Joint Operations from the Sea COE (CJOSCOE).

(NOTE: organisation of the seminar (details) is in its preliminary phase, and is subject to change.)

Interested in our future seminars, or additional information? Please feel free to contact our centre members or visit www.c2coe.org.
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<td>Second in command</td>
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<td>3D</td>
<td>Defence, Diplomacy, Development</td>
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On behalf of the entire NATO C2COE, we would like to thank all briefers, participants, and supporting staff for the success of the “C2 on the Move” Seminar and the realisation of this Seminar Review Document.