

EXCLUSIVE

# NATO CAPABILITY DEVELOPMENT & INTEROPERABILITY

LIEUTENANT GENERAL JEFFREY G. LOFGREN



United States Air Force Lieutenant General Jeffrey Lofgren is the Deputy Chief of Staff for Capability Development, Headquarters Allied Command Transformation, Norfolk, VA. He acts as the Allied Command Transformation's Director for NATO Capability Development providing guidance, direction and coordination to a Directorate consisting of 26 Branches that are functionally grouped to focus on NATO Defence Planning, Capability Engineering and Innovation, Command and Control, Deployability and Sustainability capabilities. Lieutenant General Lofgren supports the Commander with emphasis on improving Alliance interoperability in order to enhance NATO's operational capabilities to meet its current and future requirements.

Interview by Inci Kucukaksoy, JWC PAO

**General, thank you for giving us this exclusive interview for The Three Swords Magazine. How does Capability Development (CAPDEV) drive NATO's Transformation?**

— As SACT very often expresses in his speeches, the question more important than "What is Transformation?" is "What do we transform?" Capabilities, with all aspects of DOTMLPFI [*Doctrine, Organization, Training, Material, Leadership, Personnel, Facilities, Interoperability: Ed.*], is what we transform. Thus, Capability Development drives NATO's Transformation with improvement in all these areas

(Doctrine, Operations, Training, Leadership, Policy, Interoperability, to name a few). Starting from overall defence planning to developing concepts, experimenting, and eventually defining the requirement for the capabilities we need today and in the future. This naturally requires a strong engagement with the industry. What we do in CAPDEV is work with nations through the NATO Defence Planning Process (NDPP) and with the operators to define the concepts and requirements for NATO. From there we work with industry to identify solutions. We then use experiments, exercises,



A mid-term vision for joint capability integration in support of NATO's operational level exercises and doctrine, including experimentation and analysis, is the key focus throughout the discussions of the JWC/ACT Capability Integration Workshops in Stavanger. Photograph shows Brigadier General Watkins addressing the workshop participants, 2 June 2016. Photograph by: CPO Vincent Micheletti, French Navy.



like those at Joint Warfare Centre, and other venues, to test and develop these capabilities across DOTMLPFI. A key component to Capability Development in NATO is addressing interoperability in operations today and in the **future** (e.g. Afghanistan Mission Network, AMN, and Federated Mission Networking, FMN)—achieving interoperability is a continuous and coordinated effort and must focus on implementation. Use of exercises like those run in JWC, JFTC and specific exercises like CWIX and STEADFAST COBALT, which focus on interoperability, provide us feedback on when implementation is or is not working.

**What are your current priorities and which require the greatest attention?**

— My current priorities are to refine and get approved the future concepts for command and control (C2), sustainability and logistics and address the shortfalls identified in the NDPP. This starts with first getting everyone focused on the future and realizing the actions we take today are impacting the future. So, thinking *now* about what we want in the *future* will shape the way we think about capabilities today. It is hard sometimes to focus on the fu-

ture with the challenges of today, but investing now in the future is what is going to keep our edge. For me this is a lot about the transition from the Industrial Age to the Information Age way of doing things. Information and understanding of the security environment is critical. Leaders and decision makers are overwhelmed both at the strategic level and tactical level. Threats are working in the seams just below the threshold of military action. Hybrid warfare is a good example of this complexity. Therefore, as we think about the future, we need to have capabilities that can handle this big data and make sense of it. We will be more contested and therefore must be able to use a federated and decentralized approach to how we deal with the threat in the future. These are just a few of the areas I am focused on to help the team drive the change.

At the top of the list is educating and telling stakeholders across the Alliance that we need to focus on this new security environment differently. So, right now, it is about building understanding and consensus of the problem and of potential solutions. Things like big data scare people and they don't understand it, artificial intelligence, cognitive

computing, and federated clouds are thought to be science fiction but they exist today—they are real today. Early adopters will gain the edge and therefore NATO needs to take this step.

**What is your assessment of the security environment looking from today's standpoint?**

— The use of hybrid strategies by nation states and decentralized, social media-enforced terrorist groups are going to challenge the awareness and responsiveness of the Alliance. In this security environment the connections across the planet are real and effect how we prepare for the future.

**There is a sharp focus on NATO's military adaptation. According to the Deputy Secretary General, strengthening and modernizing NATO's deterrence posture for the 21<sup>st</sup> century is the most important challenge to be met between now and Warsaw Summit. Would you agree? What implications do you foresee this to have on CAPDEV?**

— We have done a lot to posture the Alliance since the last Summit with the Readiness Action Plan (RAP). However, the work is not done and the next step is to provide coherence





## "Embrace change; be proactive and ambitious as that is how we have maintained our warfighting edge."

PHOTO: MASS COMMUNICATION SPECIALIST 1<sup>ST</sup> CLASS DANIELLE BRANDT, UNITED STATES NAVY, NATO

and sustainability in what we do. For CAPDEV, we need to take into account the changes to the posture regarding repositioning, RSOM [*Reception, Staging and Onward Movement: Ed.*], enhanced forward presence and what that means for NATO C2, logistics and training. All this has increased the importance on interoperability implementation. The next step will be to pursue new methods and approaches to interoperability driven by industry. Adapting the military is natural and always occurring in NATO. How we guide this adaptation should be through the use of our concepts and vision for the future, which we must get the stakeholders to understand and support.

**One of the key events in the run-up to the Warsaw Summit was the 2015 Chiefs of Transformation Conference where you were one of the panel moderators, together with General Denis Mercier. What were some of the outcomes of this event which will receive further attention at the Warsaw Summit?**

— From the Chiefs of Transformation Conference we discussed several key initiatives that were refined by the expertise in the conference. These included cyber as a domain and how we will move forward on that declaration. We identified multinational and framework nation

linkages that are feeding into the Summit and we expect that the framework nation concept will expand to include partners. The complexity of the security environment challenge was recognized as an information challenge and the Summit will provide further guidance on how we need to adapt the Alliance to provide increased situational awareness.

**How would you say warfare is changing based on the unconventional nature of future threats, such as cyber threats and other forms of hybrid warfare?**

— We are being challenged by a greater number of actors, but more importantly they are able to operate just below the military threshold and therefore gain an advantage before tripping that formal military line. Cyber threats and hybrid threats act in this gray space yet set conditions for military action and decreases our reaction time. This drives a need for greater situational awareness utilizing all sorts of information (open source, social media and classical intelligence). Being able to sort through this information and find that critical bit of information is becoming increasingly more difficult, driving less reaction time. Training our people to operate in this environment is a key role Joint Warfare Centre plays.

**In your role, you continuously assess the strategic environment and threats and present your best military advice to strengthen the Alliance. Our focus in JWC is on preparing NATO forces for a wide spectrum of operational challenges, blending conventional, hybrid and terrorist modes of warfare into our scenarios. If we are expected to maintain a competitive edge over the future threats, would you agree that Capability Development processes, such as Experimentation, Concept Development and Doctrine, need to be better integrated into NATO training?**

— Absolutely; we need to expand our efforts in exercises for several reasons. First money requires us to be more creative in how we develop capabilities as we don't have the money to do individual events for each concept, doctrine or experiment. Second, we have figured out how to achieve the objectives of the capability development effort without impacting the training objectives in an unacceptable way. Furthermore, we need the operators' input to improve and ensure capabilities are actually delivering what the operator requires.

**Is the integration of emerging capabilities into JWC exercises a priority for you? And, picking up on that, how do you see JWC's**





SNMG1-Exercise COLD RESPONSE-Battle station in Ops room on board ESPS Alvaro de Bazan, 4 March 2016. PHOTO BY WO C.ARTIGUES (HQ MARCOM).



The Coalition Warrior eXploration, eXperimentation, eXamination eXercise (CWIX) is an annual NATO Military Committee approved event designed to bring about continuous improvement in interoperability for the Alliance. JWC is a key contributor to CWIX, and takes part in both Modelling & Simulation (M&S) Focus Area (FA) and Federated Mission Networking (FMN) FA. JWC also contributes with a Focus Area leader for the Mobile & Cloud Computing FA, as well as an analyst within the FMN FA.

JWC's CWIX 2016 video can be viewed at <https://www.youtube.com/watch?v=Ay-JmSC5MQc>

**role in operationalizing CAPDEV outputs?**

— Yes, from an Alliance perspective the declaration of initial operational capability for the Ballistic Missile Defence capability through exercise play is one of the high priorities within NATO delivered through exercises. Further, JWC has an important role to play in providing venues for determining lessons identified and then operationalizing changes into doctrine. The validation of those doctrine proposals within exercises is an important role the Joint Warfare Centre can play.

**How do you see the relationship between SACT's Transformation/development-based Focus Areas with those in SACEUR's SAGE?**

— I see these as complementary not at odds with each other as some would like to portray. SACEUR's Annual Guidance on Education, Training, Exercises and Evaluation (SAGE) is focused on achieving a capability for today and the Focus Areas are designed to set a vision and concept for the future; take stock of what we have today and figure out how best to get us to that future. SACEUR wants to be able to execute his mission today, but also tomorrow, and the Focus Areas are linking the two. Areas where we have shortfalls—the Focus Areas can help solve that for SACEUR. The Focus Areas are also about capabilities, not just material things, so new ways of operating, new doctrine are all part of this effort. Again, I see these as

complementary guidance that are aligned in their aim.

**Would you agree that by addressing unconventional conflicts and challenges to NATO's collective security, we are laying the groundwork for more structured engagement with the civil environment?**

— Definitely; the complex security environment demands we have a more Comprehensive Approach to our collective security and since collective security is one of our three core tasks it only makes sense we establish greater connections with other organizations such as the UN, EU, non-governmental organizations and others to address these challenges. I would also offer that the new security environment is blending the three core tasks. We see that hybrid actions can start out as a cooperative security challenge and rapidly evolve to crisis or even Collective Defence situations.

**Is this why there is now a stronger-than-ever focus on interagency partnerships; not only with EU and UN but with experts from Nations, academia and industry as well?**

— Yes, there is a clear appreciation that in today's complex environment NATO must partner. It is due to the realization that the global interrelationships between factors such as economics, politics, societal changes, environmental changes to name a few are interrelated

and therefore demands that NATO widen it's partner basis to meet its core tasks. It is only through this network of partners that we will be able to provide our collective security.

**Amongst all these transformational advances and innovative ideas and concepts in NATO, are there areas that remain unchanged?**

— What will remain is the core strength of the Alliance and that is our people. We have dedicated people with a common set of core values who come together with the same aim. So, investing in those people is the key to our success. That is what Joint Warfare Centre does so well. Investing in our people to train them to take on the changes of the world and provide for our security.

**General, what is your message to NATO's Transformation community?**

— Embrace change; be proactive and ambitious as that is how we have maintained our warfighting edge. To do this we have to work together as a team to achieve our aims, we need to demand excellence, have a positive "can do" attitude to solving problems and focus on the mission. We are shaping the future now by the decisions and actions we take today. Our credibility depends on our efforts to ensure we have the capabilities needed to meet the challenges of the future. ✦