

FTCN Replay: EW in the Arctic from AOC Europe 2024

Ken Miller's Journey and Insights

In a recent episode of our podcast, we detoured from our usual format to bring you insights from two conferences I and AOC Senior Analyst Matt Thompson attended in May 2024. First, my travels took me to AOC Europe 2024. This article highlights some of the conversations and interviews I had during AOC Europe, held in Oslo, Norway.

The theme for AOC Europe 2024 was "Alliances and Collaborations in Multi-Domain Electromagnetic Warfare Operations." This theme reflects the critical importance of partnerships and collaboration in modern military operations, especially in the context of electromagnetic warfare (EW).

Key Interviews and Insights

Lieutenant Colonel Eric Bamford: Geopolitical Shifts and Strategic Collaboration

My first interview was with Lieutenant Colonel Eric Bamford from the Royal Norwegian Air Force, also an AOC board member representing International Region One. His role was pivotal in shaping the conference's theme and agenda. He emphasized the strategic significance of the Nordic region, particularly in light of recent geopolitical shifts.

"The geopolitical change in this region over the last two years, from Russia's full assault on Ukraine to Sweden and Finland joining NATO, has redefined our strategic landscape." –Lieutenant Colonel Eric Bamford

Bamford highlighted the region's unique challenges and opportunities, such as the Northern Passage's ice breaking and the shortest route for missile attacks across the North Pole. These factors underscore the importance of alliances and

collaborations in this geographically and strategically critical area.

Commander Gunnar Marcusson: The Arctic as an Operational Space

Next, I spoke with Commander Gunnar Marcusson, head of the EW branch of the Swedish Armed Forces. He shared insights on EMSO in the Arctic region, a topic gaining increased attention due to its strategic importance.

“We now have to operate together in the Arctic, a region traditionally less familiar to NATO forces. This collaboration is crucial for understanding and effectively utilizing the electromagnetic spectrum in this unique environment.” –Commander Gunnar Markusson

Marcusson emphasized the importance of raising awareness and knowledge about EW in the Arctic, noting that the region’s climate and atmospheric conditions significantly impact radio wave propagation.

Colonel Josh Koslov, US Air Force: Data as a Weapon in Electromagnetic Warfare

Colonel Josh Koslov, Commander of the US Air Force 350th Spectrum Warfare Wing, discussed the critical role of data in modern electromagnetic warfare.

“The future of electromagnetic warfare hinges on the data from our platforms. To create combat capability quickly, we must focus on data manipulation and sharing across multiple systems and allies.” –Colonel Josh Koslov

Koslov highlighted the challenges of managing classified data and the need for innovative solutions to merge and access critical information efficiently. His wing’s collaboration with over 40 nations exemplifies the importance of international partnerships in achieving spectrum superiority.

Air Commodore Blythe Crawford: Innovation and Human-Machine

Teaming

Air Commodore Blythe, Crawford, Royal Air Force, UK, shared his thoughts on the rapid innovation cycles in modern warfare and the importance of human-machine teaming.

“We need to be more innovative in developing capabilities quickly. Controlling the electromagnetic spectrum is crucial for gaining a decisive edge in peer-on-peer conflicts.” –Air Commodore Blythe Crawford

Crawford stressed the need to optimize decision-making through data exploitation and collaboration with non-traditional defense suppliers, such as those in FinTech and Formula 1, to enhance big data analytics and AI tools.

Directed Energy and EMSO: Bridging the Gap

While in Europe, my colleague [Matt Thompson attended the Directed Energy S&T Conference in Colorado Springs](#). He provided valuable insights into the state of directed energy research and its relevance to EMSO.

“There’s a lot of excitement but also frustration in the directed energy community. Despite long-term R&D efforts, these technologies struggle to gain the necessary traction and funding.” –Matt Thompson

Thompson highlighted the potential of directed energy in space operations and the need for greater collaboration and visibility within the defense community. He noted that the EMSO community’s engagement with directed energy could accelerate the deployment of these advanced technologies.

Conclusion

The insights from AOC Europe 2024 and the Directed Energy S&T Conference underline the critical importance of alliances, collaboration, and innovation in modern warfare. As we navigate the complexities of electromagnetic and directed

energy warfare, the role of partnerships and rapid technological advancement cannot be overstated.

For a deeper dive into these topics, including full interviews and additional content, visit AOC's LinkedIn page and look for #FTCN or #AOCEurope2024.

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