On March 3, AOC hosted the final session of its AOC Discussions | EMSO Leadership series by welcoming Air Chief Marshal (ACM) Sir Stuart Peach, Chairman of the NATO Military Committee, NATO Headquarters. In this role, he is both NATO and the United Kingdom’s most senior military officer. ACM Peach has a distinguished military career and a long, close relationship with AOC as he was the recipient of our highest honor, the AOC Gold Medal, in 2013. His sweeping remarks touched on several recurring themes throughout this leadership series, including how to better understand electronic warfare (EW) requirements and the need to improve EW capabilities. He set a path for NATO to be the convening authority on EW across the 30 members of the alliance.

ACM Peach’s central theme was the continuing need for interoperability. Interoperability implies the ability to work together despite differences in doctrine, language, and structure. Two weeks ago, Vice Admiral Jeffery Trussler discussed how interoperability from a military technology perspective should lead to “interchangeability.” Today, NATO faces the most complex and unpredictable security situation in its history. The aggressive actions of both state and non-state actors, in combination with rapid advances in technology across commercial and military sectors, are challenging NATO in ways it has never seen before and across all warfighting domains. While a great deal of attention is rightfully focused on Russia and China, and ACM Peach provided an account of recent aggressions by both countries, they are not the only threats. The emerging threats of today, emanating from both state and non-state actors, are not classically military. Still, they nonetheless extend into the realm of EW and, more broadly, electromagnetic spectrum operations (EMSO).

A vital attribute of the EW threat facing NATO is that EW technology itself has a low cost of entry and represents asymmetrical capabilities, and can cripple a nation’s military ambitions due to its inherent ease of acquisition and efficient use. EW is evolving rapidly due to underlying low-cost commercial technologies such as antenna designs, microwave transceivers, and high gain amplifiers. This democratization of EW technology allows for access, fielding, and integration into almost any military system. NATO is closely monitoring and actively responding to this new reality. It is now indisputable that military advantage is dependent on EMS Superiority. The EMS empowers us to communicate with confidence, navigate with certainty and engage with accuracy.
In answering this challenge, NATO is evolving its “deter and defend” strategy for warfare across all domains in the digital age. As such, EW should gain priority in all of NATO’s planning and actions. Central to this effort is improving EMS coordination. While the use of EW in military operations traces back more than 100 years, the congestion and complexity of the EMS today demands a new approach. Access to the EMS is paramount, not just in the radio frequency (RF) spectrum but the entire spectrum. As connectivity around the world increases exponentially, the EMS as a resource is becoming scarce and access is being denied, thus challenging the ability to maneuver in the EMS. Spectrum awareness from a military perspective is increasingly important in today’s digital age to preclude degradation and interference of systems. ACM Peach challenged the audience to understand better how the EMS as a commodity is being used and exploited across the commercial and military sectors.

ACM Peach highlighted several recent successes in NATO’s pursuit of EMS Superiority, including the completion of a significant upgrade to its Airborne Warning and Control System (AWACS), acquisition of nearly $1 billion of satellite capacity, development and fielding of its Alliance Ground Surveillance (AGS) fleet, and an investment of $1.5 billion in new technologies for cybersecurity and Intelligence, Surveillance and Reconnaissance (ISR) capabilities. Furthermore, NATO is also investing in state-of-the-art EW training equipment. Training is essential for understanding EMS operations, but it must be conducted in a realistic electromagnetic operating environment. Therefore, he strongly supports incorporating EW in more NATO-led exercises such as Trident Junction, United Vision, NEMO – a six-day naval EW exercise. He stated, “We need to make exercise environments tough and challenging like during the Cold War.”

Finally, ACM Peach noted the importance of building EW awareness with leaders at both the political and military levels, developing new policies, and acquiring new capabilities while working closely with industry, academia, and non-traditional partners to improve NATO’s strategic commands. The focus should be on integrating EW rather than carving EW out as something special. NATO’s efforts on EW are paying dividends, especially in response to Russian aggressions, but the work to make EW a high priority is not finished. Innovation and cooperation must continue, and NATO is in a strong position to lead on this front.

* AOC Advocacy would like to thank RVJ Institute for contributing to this report. *