



## **AOC President “Powder” Carlson Speaks on Achieving Spectrum Dominance**

On Tuesday, January 25, the Potomac Officers Club hosted in partnership with Booz Allen Hamilton (BAH) a virtual panel discussion on “Achieving Spectrum Dominance in the Digital Battlespace.” The forum featured keynote speaker Ms. Ellen Purdy, Director, Emerging Capabilities & Prototyping Initiatives & Analysis (OUSD(R&E)) and an expert panel, including AOC President Glenn “Powder” Carlson. Other panelists included Ms. Melinda Tourangeau, Executive Director, RVJ Institute, and Mr. David Tremper, Director of EW, OUSD(A&S)A/Platforms and Weapons. The moderator was Dr. Charles Johnson-Bey, Senior Vice President of BAH.

Ms. Purdy began by discussing the continuum of spectrum access as it pertains to Department of Defense (DOD) research and development (R&D) initiatives. For far too long, DOD has taken spectrum access for granted based upon a static and inefficient model of spectrum allocation and aggregation. Today DOD is moving away from this and toward a concept of Dynamic Spectrum Access. Electromagnetic Spectrum (EMS) Superiority in Multi-Domain Operations (MDO) requires access to spectrum when and wherever needed and the ability to move large sets of data through the battlespace network. She focused on three attributes of future spectrum access: (1) resilient, (2) cognitive, and (3) disciplined.

Additionally, Ms. Purdy highlighted that legacy DOD spectrum-dependent systems are sub-optimized for today’s complex EMS environments and inadequate to counter emerging threats from peer competitors. A vital impetus to turning the corner is the recently released DOD EMS Superiority Strategy and the forthcoming Implementation Plan and Roadmap (IP/RM). She focused on the first three goals as the driving force behind DOD EMS modernization efforts. Key DOD infrastructure upgrades include Joint Operational Training Infrastructure and spectrally agile and efficient test range infrastructure.

### **EMS Superiority Strategy Goals**

1. Develop Superior Capabilities
2. Evolve to an Agile, Fully Integrated EMS Infrastructure
3. Pursue Total Force EMS Readiness
4. Secure Enduring Partnerships for EMS Advantage
5. Establish Effective EMS Governance

During the panel discussion, AOC President “Powder Carlson” focused on the imperative of collaborating with the commercial sector to address key challenges of developing resilient systems and delivering capabilities down-range, especially related to electromagnetic protection (EP). For MDO to succeed, everything comes down to communications. All the panelists agreed that vulnerabilities in the EMS cut across commercial and defense sectors, and it is necessary to draw from each other’s experiences. Mr. Tremper also highlighted that all players, government, defense, and industry need to improve communication and coordination across radar, communications, and EW Systems development, acquisition, and operational employment. This shared challenge is highlighted in lessons throughout history, and we need to learn (or re-learn) these lessons to sustain modernization efforts.

Powder closed by emphasizing the critical role that AOC plays in advocacy and education to address the above challenges and opportunities. He highlighted the vibrant STEM program that AOC is building to guide the next generation of leaders in EMSO-related disciplines.