



AOC POST-EVENT REPORT AOC Discussions | EMSO Leadership General Charles Q. Brown, Jr.

We must disrupt their kill chains while insuring the resiliency and effectiveness of our own. This is fighting and maneuvering in the electromagnetic spectrum to stay ahead of our adversaries.”

On January 27, AOC hosted the third session of its AOC Discussions series with General Charles Q. Brown, Chief of Staff, U.S. Air Force (CSAF). General Brown set the stage for his discussion by relating a vignette about how Azerbaijan secured information superiority by pushing out daily releases of armed Unmanned Aerial System (UAS) precision strike footage. This had impacted the morale of troops on both sides, the general public, and established the impression of certainty that Azerbaijan would win.

The above example serves to show how vital information operations has become in 21st Century military operations. It is of utmost importance that the U.S. and its coalition partners do not let adversaries complete their kill chains. We must disrupt, deter, and win in the competition phase of conflict using electromagnetic spectrum operations (EMSO). If we must enter the conflict phase, it signals that we have failed at our EMSO mission. According to General Brown, “The Air Force is committed to providing electromagnetic superior forces to achieve victory in all domains of competition and conflict.”

From his position as CSAF, General Brown relayed how he sees the importance of the electromagnetic spectrum, how that ties into information operations, and where we need to make some serious changes to get to where we need to be.

First, the threat is compelling us to rethink the future of warfare and our dependence on the EMS. New threats are evolving and for too long the U.S. has been focused on non-peer adversaries in a permissive environment. Unfortunately, for years our peer adversaries have watched the U.S. exploit the EMS and have, in return, developed new kinetic and non-kinetic capabilities to restrict our ability to maneuver in the spectrum.

General Brown discussed how China’s People’s Liberation Army uses Legal Warfare, Media Warfare, and Psychological Warfare to extend their influence and gain an advantage. He cited a recent commentary in War on the Rocks, by Marcus Clay, that, in part, stated, “The ‘flexibility, controllability, and pervasiveness of such attacks’ enable warfighters to consolidate their exquisite capabilities to attack the enemy’s ‘center of gravity’ and destroy key nodes of

enemy operation systems to paralyze their combat capabilities.” The U.S. is not deterring its adversaries like it needs to be doing. According to General Brown, “The PLA and Russian forces have invaded the U.S. without a declaration of war.” They are using influence operations and misinformation to change the narrative. Simply put, the U.S. has lost the advantage in the EMS.

Second, in today’s software-defined world, we face a more dynamic threat characterized by rapid technology and diffusion. Suppose we do not accelerate and keep pace with the needed changes. In that case, our adversaries will continue to develop EMS capabilities to gain advantages on the battlefield, and we will fall behind. If we keep the status quo and continue to change incrementally, we will simply lose the future fight. In his recent directive to the USAF, **“Accelerate Change or Lose,”** General Brown stated, “The Air Force must work differently with other Department of Defense stakeholders, Congress, and both traditional and emerging industry partners to streamline processes and incentivize intelligent risk-taking. Most importantly, we must empower our incredible Airmen to solve any problem. We must place value in multi-capable and adaptable team builders and courageous problem solvers that demonstrate value in diversity of thought, ingenuity, and initiative.” General Brown quoted British industrialist Josiah Stamp, “It is easy to dodge our responsibilities, but we cannot dodge the consequences of dodging our responsibilities.”

To ensure that the U.S. can project, achieve, and maintain an advantage in the EMS, the USAF, under General Brown’s leadership, must address a two-pronged problem: Technology and Strategy. For technology, the U.S. has been operating many of the same systems for 25 or more years. The current emphasis on evolutionary change is no longer sufficient. We need to move away from a platform-centric mindset and toward a capability-centric perspective. This starts by focusing on networks and datalinks, especially pertaining to open systems architecture and cognitive electronic warfare. General Brown disavowed the “EVERY sensor to EVERY shooter” ethos in preference of “the RIGHT sensor to the RIGHT shooter to the RIGHT decision-maker.” The USAF is making progress, but it needs to move faster.

General Brown highlighted some recent steps taken by the USAF to improve its ability to conduct EMSO. Following its E.W. Enterprise Capability Collaboration Team (ECCT) two years ago, the USAF has established a new A5L office for EMS Superiority within the A5/7 Futures DCS. USAF is preparing to stand up its new Spectrum Warfare Wing under the Air Force Warfare Center (AFWC). Additionally, in October 2020, the USAF moved its electromagnetic spectrum management office from Air Combat Command (ACC) to the Headquarters Air Force (HAF) staff, within the Cyberspace Operations and Warfighter Communications Directorate and beneath the deputy chief of staff for intelligence, surveillance, reconnaissance, and cyber effects operations, or A2/6. AOC Advocacy wrote about this key development in our **November newsletter**.

In his closing statement, General Brown reiterated his focus on what he termed the “Digital Trilogy” of digital engineering, open systems, architecture, and agile software. “We need modular design, easy and adaptable upgrades, and modifications.” To achieve this goal requires increased experimentation and prototyping, which in turn requires the assumption of risk. Someone has to go first. If not the U.S., it will be our adversaries.

Questions for the Way Ahead

1. What is the USAF pathway to advancing EMS Superiority if the service maintains the separation from an advocacy perspective between spectrum management and EW?
2. Is there a plan to find a better “home” for the operational aspects of USAF EW, currently under A5L, and formerly a requirements office, within HAF? If so, what becomes of the mission of A5L?

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