

FTCN Replay: Strengthening the Signal: The Air Force's New Era in Spectrum Warfare

In a momentous development for the United States Air Force, the 950th Spectrum Warfare Group and the 17th Electronic Warfare Squadron were recently activated under the 350th Spectrum Warfare Wing at Robins Air Force Base, GA. On the latest episode of *From the Crows' Nest (FTCN)*, host Ken Miller sat down with Colonel Michael Middents and Lieutenant Colonel Ryan Cox and to discuss the significance of these new units, their missions, and the challenges of operating within the electromagnetic spectrum (EMS) warfare domain.

A Journey Through the EW Profession

Colonel Ryan Cox opened the discussion with a reflection on his career and its intersection with electronic warfare (EW):

"As far as electronic warfare is concerned, I typically look at it from a self-protect type perspective. In my case, it's about getting a bomb to a target," said Lieutenant Colonel Cox. His extensive background, including assignments at Minot Air Force Base and international diplomatic postings in Estonia and Germany, highlights the global nature of spectrum operations.

Similarly, Colonel Middents shared his journey, including his leadership roles at Global Strike Command and the Spectrum Warfare Wing:

"The Wing commander referred to me as a space monkey—tasked with standing up two organizations from scratch. The trust he placed in me to get this mission off the ground is something I'm incredibly grateful for."

Spectrum Warfare: The Critical Terrain

The electromagnetic spectrum is a contested and dynamic battlefield, where rapid advancements in technology create unique challenges. As Colonel Middents noted:

“The threat environment changes fast. Countermeasures and counter-countermeasures evolve at a pace unmatched by other domains. If we lose in the spectrum, we’re going to lose in combat, and we’re going to lose quickly.”

General Kelly, a former Air Combat Command leader, encapsulated the importance of spectrum warfare, as paraphrased by Colonel Middents:

“The electromagnetic spectrum is not a domain like air or cyber. It is the terrain through which all domains must traverse to achieve desired effects.”

Building the 950th and Its Mission

The activation of the 950th Spectrum Warfare Group is part of a larger effort to modernize and synchronize U.S. Air Force capabilities in the EMS. This group focuses on assessments to ensure operational effectiveness across multiple layers—from individual aircraft systems to large-scale force packages.

“Our mission is to verify the cumulative effectiveness of our forces in the electromagnetic spectrum,” explained Colonel Middents. The 17th Electronic Warfare Squadron plays a critical role by assessing training and combat operations to ensure warfighters are prepared for real-world missions.

Lieutenant Colonel Cox elaborated on the group’s mission:

“We’re here to give warfighters the confidence that when they turn on that black box, something worthwhile happens. It’s not just about flying sorties; it’s about ensuring those sorties are tactically effective.”

Innovating for Future Success

One of the most significant challenges facing spectrum warfare is the speed of change and the need for agility.

"We're building the airplane as we fly it," said Lieutenant Colonel Cox, acknowledging the iterative nature of standing up new organizations. Colonel Middents echoed this sentiment, emphasizing the importance of a debrief culture that allows for honest assessments and continuous improvement.

The units are also exploring the potential of virtual environments for training and testing:

"There are capabilities in the spectrum that you can't test in real life without vulnerabilities being exposed," Colonel Middents explained. *"The virtual world allows us to push boundaries safely and effectively."*

Looking Ahead

The activation of these units marks a significant step forward in ensuring U.S. superiority in the electromagnetic spectrum. As Lieutenant Colonel Cox summarized:

"The vision is clear: dominate the spectrum to enable our forces and deny the enemy. The stakes couldn't be higher, and the work we're doing here ensures we're ready for the challenges ahead."

For the full discussion, tune in to this special episode of *From the Crows' Nest*, where the conversation dives deeper into the strategies shaping the future of EMS warfare.

Interested in taking a deeper dive into EW technology? Visit [here](#) to access the new 6-episode FTCN Chief Technology Officer (CTO) Series. Season 1 of is powered by L3Harris. Episodes 1 and 2 are now available.