FTCN Replay: From Iran to the Pacific, US Spectrum Gaps Are Coming Into Focus

The current military operation against Iran and China's sweeping military modernization program dominated the latest episode of **From the Crow's Nest**, hosted by AOC's Director of Advocacy & Outreach **Ken Miller**. Miller spoke with two guests: **Col. (Ret.) Jeff Fischer**, author and CEO of Fischer Aerospace, and **Dean Cheng**, Non-Resident Senior Fellow at the Potomac Institute for Policy Studies and Non-Resident Fellow at the George Washington University Space Policy Institute. Together, they painted a picture of a United States still catching up on spectrum warfare, even as adversaries have made it the cornerstone of their war-fighting doctrine.

Friendly Fire and Spectrum Gaps in Iran

Three days into the US campaign against Iran (at the time of the episode's recording), US Central Command acknowledged that three F-15E aircraft were lost to friendly fire – a development Fischer said points directly to an EMSO breakdown.

"A significant portion of why that happens is an EMSO failure," Fischer said. "There was a misidentification of aircraft. IFF [Identification Friend or Foe] systems were perhaps not working correctly."

Fischer said the video evidence suggests the F-15 crews received no warning from their radar warning receivers, indicating the aircraft were likely not being tracked or illuminated by an enemy radar. That, he argued, makes the CENTCOM friendly-fire explanation more plausible than Iranian claims of a shoot-down. He dismissed concerns about adversary hijacking of coalition IFF systems as geographically

implausible given the engagement occurred a good distance from the Iranian border inside Kuwait.

Fischer also weighed in on why the strikes took place during daylight hours – an unusual choice for US operations. He argued that actionable intelligence on the Iranian leadership's daily movement patterns may have driven planners to accept the operational risk of daytime attacks in order to guarantee they hit their targets.

On the broader lesson, Fischer returned to a theme he has long championed: that the electromagnetic spectrum is the connective tissue of modern warfare, regardless of domain.

"As more and more systems go wireless, as more and more systems rely on the spectrum," he said, "you better accept the argument that it is the glue that holds all the domains together. And today's episode shows you the glue ain't good."

China's Military Prioritizes Information Dominance

In the second half of the episode, Miller turned to Cheng to discuss the People's Liberation Army's ongoing modernization push. Cheng explained that the PLA has been studying US combat operations since the 1991 Gulf War, and the central lesson they drew is that future wars will be decided in the information domain.

"Their lessons from 1990, the first Gulf War, the Balkan War, our invasion of Afghanistan, and our invasion of Iraq led them to realize that future wars are going to be driven by the ability to dominate the information space," he said.

The PLA restructured itself in 2015 and again in 2024, creating four services – ground, naval, air, and rocket forces – alongside four functional branches that include a Cyber Space Force and an Information Support Force. Cheng said those last two are directly responsible for China's EMSO and cyber activities at the operational and tactical level.

He described China's goal as achieving what the PLA calls "intelligentization" by 2027, including the integration of artificial intelligence so that machines can process battlefield data and pass the most critical information to human commanders. Weapons themselves will become sensors, and AI will manage the flood of data in near real-time.

Title 10 vs. Title 50: A Structural Disadvantage

Cheng pointed to a structural gap that gives China an inherent advantage. In the US, military operations (Title 10) and intelligence activities (Title 50) are legally separated – a division that creates friction when integrating electromagnetic warfare with signals intelligence and cyber. For the PLA, no such wall exists.

"Integrated network and electronic warfare has been, in a sense, baked in. It is part of the genetic structure of the PLA in a way that we are definitely still trying to wrap our heads around," Cheng said.

Cheng recommended a large-scale national mobilization exercise – similar to the "Nifty Nugget" exercise of the 1970s – to surface unknown gaps in spectrum planning. He argued that until the US actually rehearses wartime spectrum management, it won't know what it doesn't know.

Indo-Pacific Alliances: Don't Think Like Europeans

On the question of Indo-Pacific partnerships, Cheng cautioned against applying a NATO framework to a region with no history of multilateral balancing alliances. Asian nations, he said, are accustomed to negotiating bilaterally with China, not forging coalitions against it.

He also flagged that the rare earth metals supply chain remains a vulnerability even if the US secures mining access elsewhere. The processing facilities that convert ore into usable materials are overwhelmingly located in China, meaning

a shift in sourcing alone won’t eliminate the dependency.

Cheng closed with a warning about fixating on 2027 as a deadline for Chinese military action against Taiwan. He argued that canceling or de-prioritizing programs that could reach initial operating capability in 2028 or 2029 would be shortsighted — and potentially dangerous if China’s timeline turns out to be longer than assumed.

“We’ve made 2027 into a deadline in our minds,” he said. “I’m seriously not at all convinced that the Chinese have made 2027 somehow the year that we reunify with Taiwan.”