

FTCN Replay: What Overhauls Are Needed to Improve EW Innovation?

In this episode of our podcast, I had the privilege of welcoming back Bryan Clark, Senior Fellow and Director for the Center for Defense Concepts and Technology at the Hudson Institute. Bryan, who has recently been featured in the media discussing a range of defense topics from drone technology to acquisition reform, joined us to explore the current state of defense innovation and the barriers that prevent faster advancements within the Department of Defense (DOD).

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Cracks in the Wall of DOD Innovation

Bryan began by sharing his observations on the state of innovation within the DOD. He noted that despite a growing recognition of the need for change, progress has been slow, and the DOD is still grappling with entrenched processes that stifle rapid advancements. “I think we’re starting to see some cracks form in the wall that’s been preventing faster innovation on the part of DOD,” Bryan remarked, “but those green shoots need to be encouraged and sustained going forward.”

This observation set the stage for a deeper discussion on the structural issues within the DOD that make innovation such a challenge. One of the most significant issues Bryan highlighted is the flawed foundation of the current acquisition system, which, he argued, is designed to set programs up for failure.

The Current System: Setting Programs Up to Fail

The conversation shifted to Bryan’s recent testimony before

the House Oversight and Accountability Committee, where he discussed wasteful spending and inefficiencies within the DOD. Bryan provided a comprehensive overview of how the existing system sets major programs up for failure, particularly through the Joint Capabilities Integration and Development System (JCIDS).

At its core, JCIDS and similar processes push military personnel to create highly ambitious performance requirements based on predictions about future needs. These requirements often aim for the best possible outcomes, assuming that the US military must overmatch its adversaries to succeed. However, Bryan pointed out that this approach creates significant problems for program managers and the acquisition world.

“Performance is usually dictated initially by the requirements process,” Bryan explained. “Once those requirements are set, they become difficult to change, locking program managers into a situation where performance is fixed, and they have to constantly adjust cost and schedule to try to meet these ambitious goals.” This rigid framework leads to programs that are delayed, over budget, and often unable to deliver the intended capabilities.

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A New Iron Triangle for Defense Acquisition

Recognizing these challenges, Bryan has proposed a new approach to defense acquisition that shifts the focus from rigid requirements to adaptability and relevance. He introduced the concept of a “new iron triangle,” which centers around relevant capability, operational concept, and relevant scale, with the budget as a central, shaping factor rather than a fixed point.

“The old model, where cost, schedule, and performance were the focus, was built in a time when the US had a dominant military and could afford to take decades to develop new systems,”

Bryan explained. "Today, we don't have that luxury. The move-countermove competition with our adversaries happens in years, if not months, so adaptability must be baked into the process."

This new triangle emphasizes the need for programs that can deliver relevant capabilities quickly, at a scale that makes them useful on the battlefield, and with operational concepts that can adapt to changing environments. "Instead of setting long-term, fixed requirements, we need to focus on what can be delivered now and in the near future," Bryan asserted.

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Overcoming Bureaucratic Resistance

Despite the potential benefits, Bryan recognized that expanding these adaptive acquisition approaches across the DOD would likely encounter resistance. Bureaucratic habits and established processes are difficult to change, and there is often reluctance to move away from the perceived safety of traditional methods.

"To make this work, there needs to be a push from leadership to move more programs out of the traditional requirements process and into these new pathways," Bryan stated. "It's going to take a concerted effort to break free of the old ways of doing things and to embrace a more flexible, adaptive approach to capability development."

One of the key challenges, Bryan noted, is that even when alternative approaches are available, they are often underutilized. He cited the difficulties faced by the Defense Innovation Unit (DIU) in pursuing the Replicator initiative, which aims to develop and field new capabilities quickly using a DevOps approach. "It takes leadership direction to push programs into these alternative approaches and to ensure that they're not just an afterthought," Bryan argued.

Learning from Current Conflicts

The ongoing conflict in Ukraine has underscored the need for adaptability in military capabilities, and Bryan highlighted how this conflict serves as a stark reminder of the rapidly changing nature of warfare. He pointed out that the war has demonstrated both the importance of having relevant capabilities at scale and the need for innovative operational concepts to employ those capabilities effectively.

“We’ve seen in Ukraine how quickly the environment can change and how important it is to have capabilities that are adaptable and can be fielded in large numbers,” Bryan observed. “This is exactly why the new iron triangle is so important—it ensures that we’re not just developing capabilities for a predicted future but for the reality of today’s battlefield.”

The Challenge of Innovation and Encouraging Change in NATO

Finally, a notable obstacle for European NATO members is their focus on supporting national champion industries, which may not always align with the most innovative technological solutions. Unlike the US, Europe lacks a robust startup ecosystem in the defense sector, which further hinders their ability to adapt to new acquisition models. This challenge is not unique to Europe; Japan faces similar issues due to the limited presence of startups in its defense industry.

As a result, European countries struggle to shift towards a defense capability development model that leverages commercially developed technology or private funding. Clark noted that the traditional approach within the European defense community often limits the rapid integration of new technologies, posing a challenge to keeping pace with evolving threats.

The US has explored the possibility of sharing technologies with NATO allies to bridge this gap. However, European countries are understandably keen on fostering their own defense industries rather than relying on US-built systems. Companies like Thales, Rheinmetall, and HENSOLDT are central

to this strategy, driving Europe's focus on domestic innovation.

Conclusion: A Path Forward for Defense Acquisition

The insights shared by Bryan Clark highlight the evolving landscape of defense acquisition and the challenges that lie ahead. As NATO and the broader defense community grapple with the need for rapid innovation, the integration of advanced technologies, and the cultivation of the right talent, it is clear that a multifaceted approach is required.

Ultimately, the success of new innovation efforts will depend on the ability to adapt and evolve in response to emerging threats, ensuring that NATO and its allies remain at the forefront of defense capability development.

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