FTCN Replay: How Adaptation Defines Modern Military Competition

The grinding stalemate in Ukraine holds a lesson that goes beyond drones and AI, according to Bryan Clark, Senior Fellow and Director of the Center for Defense Concepts and Technology at the Hudson Institute.

Clark, who joined **From the Crows' Nest** host and AOC Director of Advocacy & Outreach Ken Miller for a recent episode, argues that Ukraine's ability to hold off a far larger Russian force comes down to one factor: the speed of adaptation.

"The Ukrainians have been able to adapt faster than their Russian counterparts," Clark said. "Now both sides are essentially in an adaptation competition."

That insight forms the backbone of a new Hudson Institute report, **The Quick and the Dead: How Adaptation in Contact Drives Military Advantage**, which Clark co-authored with Dan Patt and Ian Crone.

Why Wonder Weapons Won't Save Us

Technology proliferation has fundamentally changed the nature of military competition, Clark says. The precision strike capabilities the US once monopolized are now widely available – built from the same commercial components powering civilian telecommunications, computing, and satellite industries.

"Everybody has access to the precision strike capabilities that the US used to have a corner on the market on," he said.

The implications are significant. Because adversaries can access the same underlying technology, decisive military victories are increasingly hard to achieve. Clark pointed to

ongoing US operations against Iran as an example. Despite thousands of strikes, Iran retained the ability to threaten the Strait of Hormuz using low-cost uncrewed systems and digital precision tools.

“There is no wonder weapon that’s going to get us out of the current competition that we’re in,” Clark said. “Adaptation really is the central competition.”

Adaptation Requires Contact

The report’s title phrase — “adaptation in contact” — is deliberate. Clark argues that meaningful adaptation can only happen through real interaction with a thinking opponent, whether in combat or in gray zone operations short of war.

China’s gray zone activities in the Indo-Pacific, for instance, generate data about how the US and its partners respond to pressure. Clark says the US should be doing the same — using every interaction to gather intelligence on adversary behavior and to shape how opponents perceive American capabilities.

“We need to think of all of these interactions as opportunities to better understand the opponent,” he said, “and also to shape the opponent’s behavior.”

He noted that China’s military modernization is largely built around countering how the US fought in Desert Storm — mass precision strikes guided by satellite intelligence. If the US begins operating differently and more unpredictably, it could undermine Chinese confidence and potentially deter aggression against Taiwan.

Tearing Down Institutional Barriers

The report identifies three institutional barriers slowing US adaptation: the gap between warfighters and those who equip them, the wall between military operations and intelligence authorities, and a budgeting process built around predicting

future needs rather than solving current problems.

Clark argues the Pentagon’s Cold War-era acquisition and requirements processes were designed for decades-long development cycles — appropriate when the goal was fielding the next-generation nuclear weapon or stealth platform. That model doesn’t fit today’s environment, where commercial technology can be harvested and fielded rapidly.

“We’ve shifted now to this idea of near-term operational problems,” he said. “Instead of looking and analyzing the need, analyze the solutions against the problems you currently have.”

He also called for breaking down barriers between battlefield signals intelligence and the capability development process and praised recent congressional moves giving portfolio acquisition executives more flexibility to shift funding without returning to Congress for approval.

Investing in the Right Infrastructure

If adaptation is the central competition, Clark says the US needs to invest accordingly — not in stockpiling next-generation weapons, but in the digital infrastructure that enables faster learning and faster fielding.

That means virtual environments for concept development, automated software deployment pipelines borrowed from the commercial tech industry, and virtualized test and evaluation that can instrument deployed units in the field rather than waiting for physical range testing.

“Until we can virtualize more of the test and evaluation process,” he said, “we are not going to be able to get a force that’s able to adapt quickly.”

Clark draws a deliberate parallel to the 19th century, when Union forces gained decisive advantages by leveraging civilian

railroad and telegraph infrastructure for military coordination. Today’s equivalent, he argues, is the commercial software, AI and virtual environment ecosystem the US already leads in globally – if the Pentagon is willing to use it.