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Reimagining Defense Strategy

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This event continued a conversation begun at CNA's September 16, 2021, National Security Seminar, titled "Planning for Tomorrow's Threats: Overcoming Obstacles to Organize, Adapt, and Innovate." In this event, we heard insights on defense strategy from Christian Brose, Chief Strategy Officer of Anduril Industries, a defense technology company. Mr. Brose shared his perspective as a former staff director of the Senate Armed Services Committee under Chairman John McCain. He is also the author of *The Kill Chain: Defending America in the Future of High-Tech Warfare*. Dr. Carter Malkasian, from CNA, moderated the discussion. Dr. Malkasian previously served as Special Assistant for Strategy to the Chairman of the Joint Chiefs of Staff. The event was recorded and is available [online](#).

Central arguments of *The Kill Chain*

Dr. Malkasian and Mr. Brose started off with a discussion about the title of *The Kill Chain* and its central arguments. In Brose's view, the logic of a kill chain demonstrates the actual purpose of military power and the ability to generate deterrence: that is, convincing an opponent of their inability to secure objectives by disrupting their capacity to sense, decide, and act. In the book, Brose argues that the US defense enterprise model needs to overcome its preoccupation with legacy platforms and start worrying about command and control (C2); intelligence, surveillance, and reconnaissance (ISR); enabling technologies such as autonomy; and the ability to strike the opponent over a long range. The term *kill chain* is not new; in fact, kill chains and OODA (observe-orient-decide-act) loops have long-standing currency among defense practitioners.

Mr. Brose argued that "this is fundamentally ***not*** how the US defense enterprise conceives of, builds, buys, evaluates, assesses military power." He likened this dysfunction to a similar phenomenon in baseball exposed in Michael Lewis' *Moneyball* (2004): "For over a century baseball was asking the wrong questions: it measured value in terms of buying players, and looked for value in measures like batting average and number of homeruns." However, "the goal isn't to buy players," Brose noted, "It's to buy wins, and to buy wins, you have to buy runs, and to buy runs, you need to get on base, and you can get on base a lot of ways." In his mind, *Moneyball* is really about an old paradigm that asked the wrong questions and led to a fundamental misallocation of resources, and the creation of a new paradigm that looked at players in the context of their contribution to the actual desired outcome—winning games.

Brose thinks the defense enterprise needs a similar paradigm shift, such that it begins thinking about "winning" the kill chain rather than accumulating platforms. The enterprise should therefore place a premium on integrating military systems that improve human understanding, decision-making, and action to enable more efficient, autonomous, and larger scale operations. This new paradigm should constitute the criteria for evaluating emerging technologies such as artificial intelligence (AI), robotics, and autonomy. Although those technologies will be important for the "right" side of the kill chain (i.e., the so-called lethality and kinetic effects from fires), their potential implications for everything to the "left" of those effects (i.e., the sensing and decision-making prior to fire) will be more crucial in outcompeting an adversary.

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How should the enterprise design an optimized future force?

"The current US force consists of a relatively small number of large, very expensive, very exquisite, heavily manned, hard-to-replace systems. [A successful future force design will be] made up of larger and larger numbers of relatively smaller, lower cost, and more attritable, more autonomous, and more intelligent military systems."—Christian Brose

Brose suggests that we should contrast the attributes of the force that *we have* with those of the force that *we need*. For decades, the status quo force design described above was effective given a certain set of assumptions: that the US force would be able to effectively hide and evade detection, penetrate an adversary's space to project power, enjoy military overmatch against any competitor, and operate from sanctuary across a wide variety of domains (e.g., forward bases, space, logistics, information). He argues that those assumptions are being overturned by conscious strategies of competitors and the march of technology over the past 25 years. This reality will further complicate the US ability to take the initiative and to "control" the time and tempo of operations, as in much-discussed *fait accompli* scenarios.

The enterprise therefore requires a new set of assumptions to build the future force. The fundamental architecture of the more distributed, numerous, and autonomous force that Brose envisions will be based on systems thinking: "systems of systems, families of systems, networks of systems."

Which technologies do we need for the future force?

"Bring data and understanding to where people are, rather than having to bring human beings to data, which we do all the time."—Christian Brose

Brose posits that, more than investing in any single buzzword technological application as a panacea, the defense enterprise needs to invest in a wide variety of technologies that—when properly integrated—grant units of the future force greater mission autonomy. Though closing gaps in fires and lethality with our adversaries is important, he thinks the far more pressing problem is making sense of the world at a pace that is relevant to closing the kill chain in great power competition—a task that Brose thinks the enterprise, under the current paradigm, is ill equipped to carry out without a herculean and unsustainable scale of manpower and resources. Brose's paradigm for the future argues for integrated technologies that enable a finite number of human decision-makers to offload the legion tasks of generating insight from data to automated processes and unmanned systems. Otherwise, Brose offered, "All this focus on fires and lethality is going to be interesting but irrelevant."

Implications for future defense strategy and warfighting concepts

"The US thought a lot about the Fulda Gap, but we never fought in the Fulda Gap. But we did fight in places like Korea and had a giant crisis in Cuba."—Carter Malkasian

In conjuring lessons from the Cold War, Dr. Malkasian raised the specter of the enterprise's propensity to focus on narrow scenarios in specific places and "overfit" the force design to those scenarios at the expense of a wider mission set and grand strategy. Brose thinks it is correct to focus on China as the

priority pacing threat but agrees that the services and enterprise at large are overly preoccupied with specific scenarios. Responding to these scenarios correctly generates robust deterrence in the minds of our adversaries, but overemphasis on these conflict scenarios can leave the force ill prepared to engage in quotidian but "very sporty" great power competition over the marathon term. The kill chain is still relevant in the competition space outside of armed conflict, and therefore so are the military dimensions of sense-making and C2 capabilities.

> *"So many strategy documents fail because they don't actually make choices, they don't actually define priorities . . . so there's an impression left that everything is important, and when everything is important, nothing is important, and no one is held accountable." —Christian Brose*

Brose also gave three pieces of advice to the writers and implementers of the new National Defense Strategy (NDS): (1) prioritize, (2) address dominance, and (3) be specific about implementation. For Brose, prioritization is the essence of strategy, and he thinks the 2018 NDS made progress on that front: "It defined priorities, it made choices." Next, writers need to address the decline of US dominance and conventional deterrence vis-à-vis peer adversaries. Finally, the new document needs to specify investments and divestments that lead to implementation—the area in which the Department of Defense often fails to "drive strategy down" into programs, capabilities, budgets, and postures. This will be especially crucial in fielding advanced capabilities, particularly in an uncertain fiscal environment, and will require circumventing the timeless parochial reflex to "circle the wagons" around legacy programs. Brose further cautioned the enterprise against equating presence with deterrence; in his mind, the madcap pursuit of presence as an end in itself has led to diminished levels of readiness, has failed to hoodwink adversaries, and has therefore undermined the credibility of deterrence.

The fundamental challenge

> *"We have a system, a defense enterprise—what John McCain used to call the military-industrial-congressional complex—that we have made almost impervious to disruption . . . and it's partly by design . . . . We've consciously set up a system not to surprise us, for better or for worse, which means we always get what we want, even when what we want is wrong." —Christian Brose*

Brose concluded his remarks with a stark picture of the world: an era of disruption in which adversaries have hacked the American way of war, commercial technology is "laps" ahead of the defense enterprise, and modern capabilities are not arriving on timelines relevant to competition. Brose takes aim at the military-industrial-congressional complex as a primary impediment to its own evolution. The main problem, Brose asserts, resides with the bottleneck of process integration that occurs at very senior levels of military and civilian decision-making (service chiefs, secretaries, and members of Congress). These officials have neither the time nor the expertise required to routinely authorize modernization programs that would unlock the necessary level of disruption at scale without what Brose only somewhat-jokingly referred to as "acts of bureaucratic heroism and accident." Congress is often unwilling to divest legacy programs that deliver near-term electoral dividends when the services cannot clearly communicate how new platforms will deliver advantaged deterrence on a relevant timeline. For Brose, the way we conceive of and buy modern capabilities will require a change to incentives, and this change should be implemented at a constant, incremental pace—rather than counting on a massive raft of reforms in a single fiscal year.