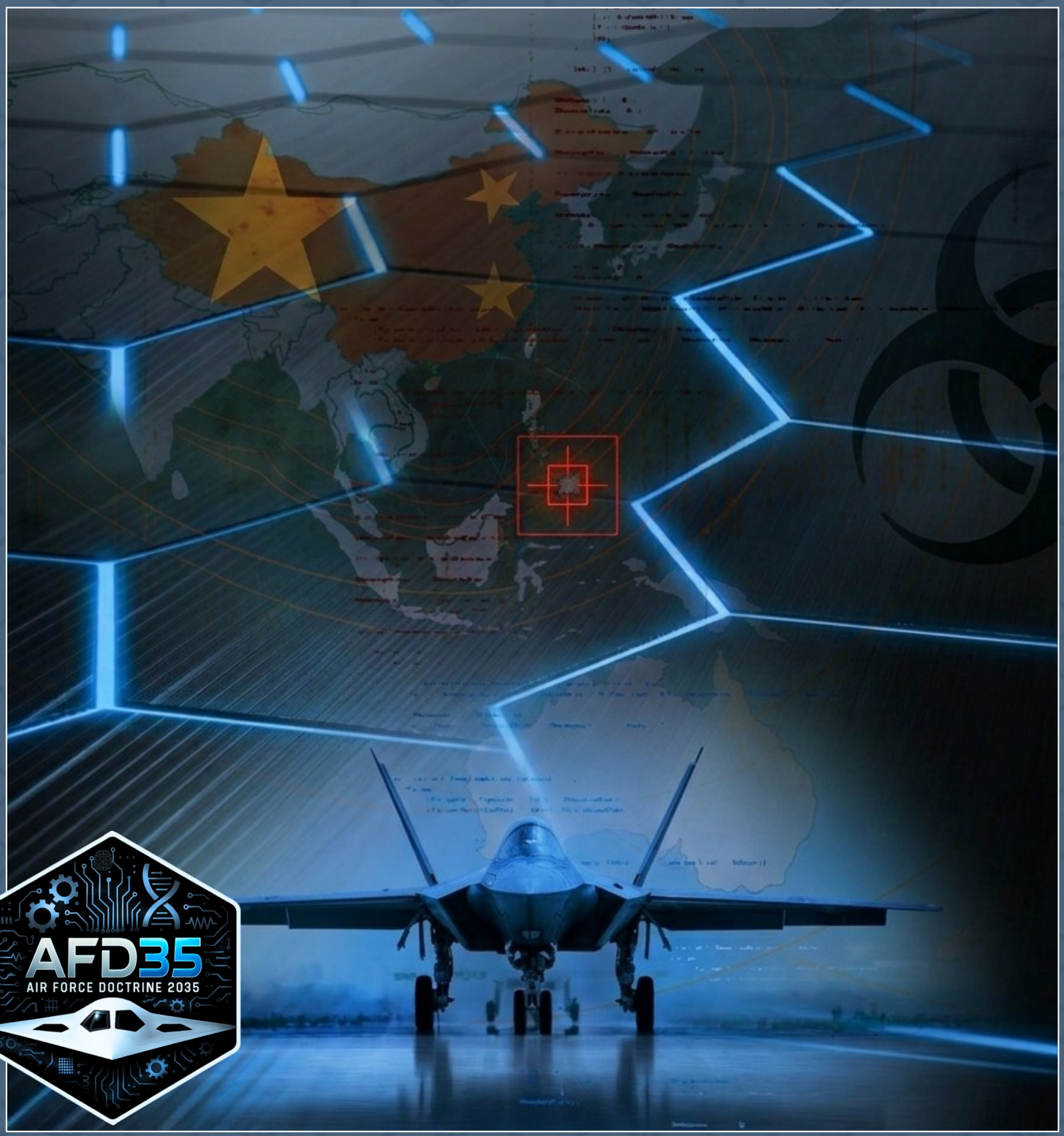
READ AHEAD 1

USAF

WARGAME OVERVIEW

APRIL 21—23
2026



AFD35 WARGAME OVERVIEW

Tuesday, April 21

Turn 1 — Set in 2030, players will participate in an Air Force Scientific Advisory Board meeting with the Secretary of the Air Force's Commander's Action Group to determine Research and Development investments for AI and Autonomy, Robotics and Miniaturization, Biotechnology and Neuroscience, Quantum Computing, and Advanced Materials and Production. Players will be asked to collectively allocate $100B across these five portfolios.

Turn 2 — Set in 2031, players will participate in a meeting with the Secretary of the Air Force's Commander's Action Group and the Secretary's Acquisition Team to pitch capability procurement. Players will be asked to identify specific technology and/or systems for acquisition.

Wednesday, April 22

Turn 3 and Turn 4 — Set in 2035, players will be assigned to one of five teams ranging from Combatant Command level staff to deployed Air Expeditionary Wings, tackling different operational challenges in the context of a conflict with the People's Republic of China. Teams will be asked to deploy and employ technology and systems to execute Air Force core operational functions and generate combat airpower against a designated red threat. Chosen courses of actions will be adjudicated by game controllers to nominally assess performance and operational outcomes.

Agile Combat Employment	Air Superiority	Homeland Defense	Operations in the Information Environment	Strategic Attack

Thursday, April 23

Turn 5 — Set six months after the initiation of hostilities, players will engage with a Senior Leader Warfighter Forum to assess the state of the conflict and determine new production priorities, operational design changes, and to alter their chosen courses of action to sustain prolonged conflict.

Turn 6 — Set outside the chronology of the AFD35 wargame, players will explore key insights collected throughout this wargame experience to deep dive into pressing issues to shape and evolve current thinking on Air Force Doctrine for the conflict of tomorrow.

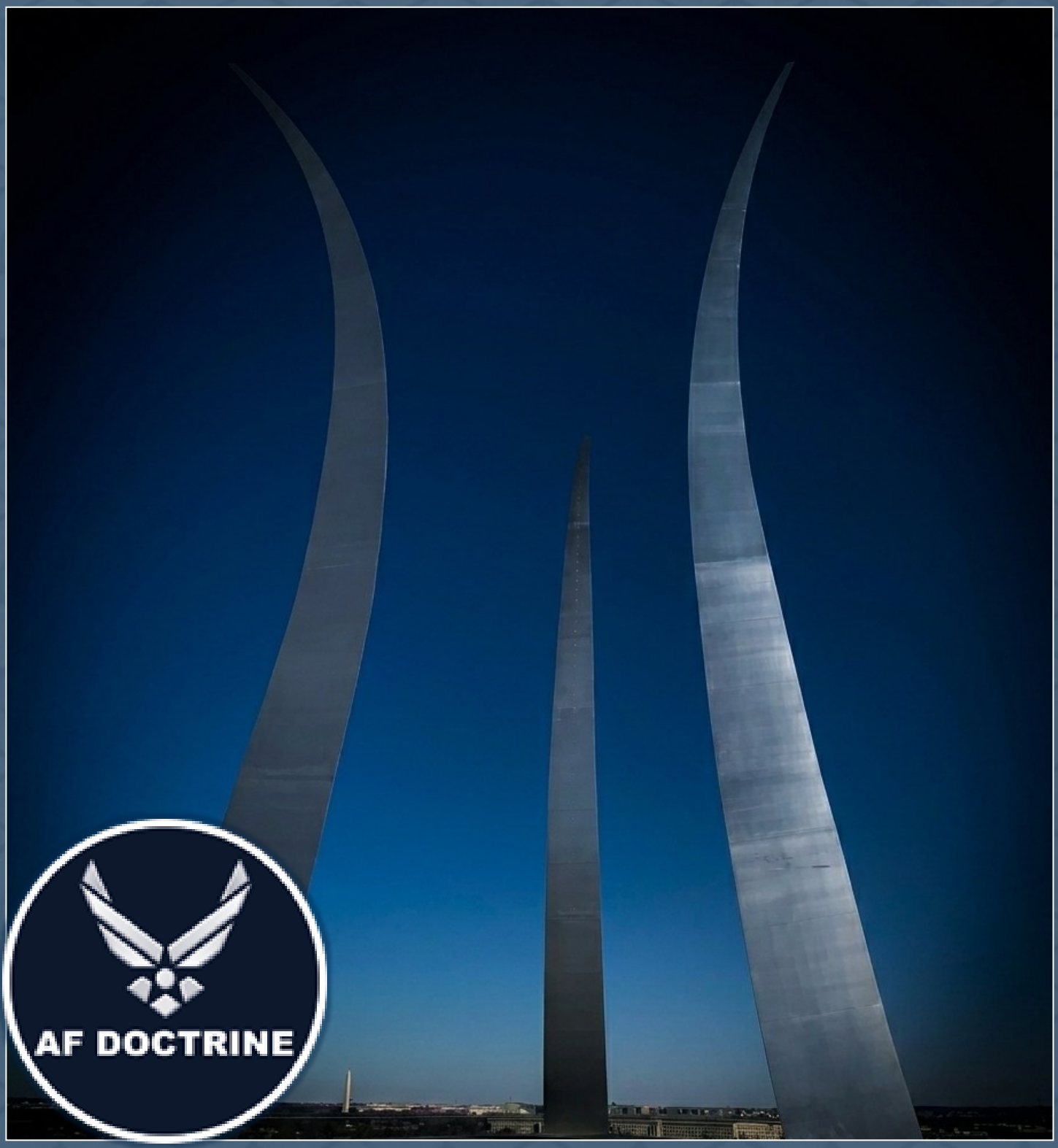
THE INTERSECTION OF TECHNOLOGY AND DOCTRINE

READ AHEAD 2

USAF

AIR FORCE DOCTRINE PRIMER

2026



AIR FORCE
Doctrine Primer

AIRPOWER IS...

Airpower is the ability to project military power through control and exploitation in, from, and through the air. The air domain, defined as "the atmosphere, beginning at the Earth's surface, extending to the altitude where its effects upon operations become negligible."

AIRMAN'S PERSPECTIVE ON AIRPOWER

- Control of the air is a necessary precondition for control of the surface.
- Airpower creates effects at the strategic level of warfare.
- Airpower exploits the principles of mass and maneuver simultaneously.
- Airpower applies force against many facets of enemy power.
- Airpower is not bound by geographical operating areas and creates effects throughout a theater.
- Airpower's attributes combine to make it one of the most versatile components of military power.
- The choice of appropriate capabilities is a key aspect in the realization of airpower.
- Airpower is a critical component of operations in the information environment.
- Airpower provides more than lethal effects.
- Airpower requires protection and sustainment to enable air operations and requires effective integration of capabilities, people, weapons, bases, logistics, and supporting infrastructure.
- Airpower's unique attributes necessitate it be centrally controlled by an Airman.

TENETS OF AIRPOWER

- **Mission Command —** Mission command is an approach to C2 that empowers subordinate decision-making for flexibility, initiative, and responsiveness in the accomplishment of commander's intent.
- **Flexibility & Versatility —** Flexibility is the ability for airpower to seamlessly transition between mission sets while simultaneously exploit the principles of mass and maneuver. Versatility is the ability to employ airpower effectively at the strategic, operational, and tactical levels of warfare and provide a wide variety of tasks in concert with other joint force elements.
- **Synergistic Effects —** The proper application of a coordinated force across multiple domains can produce effects that exceed the contributions of forces employed individually.
- **Persistence —** Airpower operations are often conducted continuously against a broad spectrum of objectives.
- **Concentration —** Focusing overwhelming power at a decisive time and place is a warfighting imperative, supported by the principles of mass and economy of force.
- **Priority —** Limited resources require that airpower be applied where it can make the greatest contribution to the most critical Commander's objectives.
- **Balance —** The dynamic and correct balancing of the principles of joint operations and the tenets of airpower to bring Air Force capabilities together to produce synergistic effects.

CORE FUNCTIONS

- **Air Superiority —** The ability to control the air, either time bound or universal, to provide freedom of action and deny an adversary the ability to interfere with operations. .
- **Global Precision Attack —** The ability to hold any target at risk anywhere in the world, providing the nation with a powerful tool for deterring adversaries and, if necessary, taking decisive action.
- **Rapid Global Mobility —** The ability to move military forces and supplies quickly and precisely anywhere around the globe.
- **Global ISR —** The ability to provide Commander's the deep understanding of the enemy and the operational environment that is necessary to plan and execute effective military operations across all domains.
- **Command and Control —** The ability to exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of a mission.

MISSION COMMAND

Mission command is a philosophy of leadership that empowers Airmen to operate in uncertain, complex, and rapidly changing environments through trust, shared awareness, and understanding of commander's intent. The hallmark of mission command is decentralized execution through the delegation of authority to empower subordinate decision-making and enable flexibility, initiative, and responsiveness in the accomplishment of commander's intent. In practice, mission command should provide Airmen with the freedom of action needed to exploit rapidly developing opportunities and succeed.

CENTRALIZED COMMAND	DISTRIBUTED CONTROL	DECENTRALIZED EXECUTION
A single air commander retains overall authority for planning and coordinating air operations to ensure all efforts are unified toward a common goal.	The authority for detailed planning is delegated to subordinate or dispersed command echelons, creating a more resilient and responsive C2 structure that is less vulnerable to disruption.	Front-line leaders and decision-makers are empowered to make on-the-spot decisions during rapidly evolving operations, allowing them to exercise initiative based on the commander's intent.

CONTROL OF THE AIR

AIR PARITY	AIR SUPERIORITY	AIR SUPREMECY
A situation where neither side has control of the air, and both friendly and enemy forces are likely to face significant interference.	A level of control that allows friendly forces to operate at a specific time and place without prohibitive interference from the enemy. This is the typical level of control required for most military operations.	The highest level of control, where the enemy is incapable of any effective interference. This is the ideal but often difficult-to-achieve state.

STRATEGIC ATTACK

Offensive actions designed to achieve national strategic objectives by directly affecting an adversary's will or capacity to continue fighting. This is achieved not just by defeating their military forces but by targeting their critical sources of power, such as leadership, key industries, or infrastructure.

Systemic Approach — Affect Will and Capacity — Kinetic and non-Kinetic — Parallel Operations

AGILE COMBAT EMPLOYMENT

ACE is a modern operational concept designed to increase survivability and generate combat power in the face of advanced threats. It involves shifting from large, consolidated bases to a network of smaller, dispersed, and more resilient operating locations. It includes large well established and defended bases as **hubs** providing support, sustainment, maintenance, and C2 for smaller **spoke** bases in more austere locations, from which operations are conducted.

OPERATIONS IN THE INFORMATION ENVIRONMENT

The integrated use of information-related capabilities, such as public affairs and cyber operations, to influence the perceptions and decision-making of adversaries, allies, and other relevant actors. It operates in the Information Environment (IE), which consists of a **physical dimension** (hardware and networks), **information dimension** (where information is collected processed, and stored), and a **cognitive dimension** (the human mind, where information is processed).

Informing and Engaging — Influencing — Attacking, Exploiting, and Denying — Protecting

CYBERSPACE OPERATIONS

The use of cyberspace missions to achieve objectives within the global information domain, analyzing and exploiting the interference, vulnerability, and contested nature of networks, their infrastructure, and the ability to process data.

Offensive Cyberspace Operations — Defensive Counterspace Operations — DODIN Operations

SPECIAL OPERATIONS

High-risk, discreet missions, often in politically sensitive or hostile environments using a "by, with,, and through" approach with partner nation forces to achieve U.S. objectives. AFSOF provides the joint force with a unique set of aviation-centric capabilities that are essential for the broader special operations mission.

Specialized Air Mobility — Precision Strike — Special Tactics — Air Ground-Integration

SUSTAINMENT

The enterprise of generating and regenerating combat power. Its core purpose is to ensure that forces have the supplies, maintenance, and support necessary to execute their missions. Modern sustainment doctrine is focused on Agile Combat Support, a concept that emphasizes pre-positioning supplies, and creating resilient supply chains to enable dispersed and survivable operations.

"Just-in-Case" — Demand Reduction — Threat Informed Logistics

READ AHEAD 3

PRC

TECHNOLOGY FORECAST 2030

AND BEYOND

AFD35

AIR FORCE DOCTRINE 2035

AFD35 Wargame

PRC Technology Forecast

Disclaimer: This document is UNCLASSIFIED and generated from open source and fictitious game material and is intended **ONLY FOR USE DURING THE AFD35 WARGAME**. This **DOES NOT** represent actual intelligence analysis nor threat assessment and **DOES NOT** represent the position of the US Government, Department of War, Air Force, or the LeMay Center.

OVERVIEW

This [simulated] prepared assessment is intended for Department of War Senior Civilian and Military Executives and their staff to better understand the People's Republic of China, their technological investment priorities, and a possible technological landscape for the future. It is broken down into five key technology areas: **AI & Autonomy**, **Advanced Materials & Production**, **Biotechnology & Neuroscience**, **Quantum Sciences**, and **Robotics & Miniaturization**. In an era of Great Power Competition, military leaders at all levels need to be informed of the pacing threat to preempt and react accordingly.

AI & AUTONOMY

The People's Republic of China is rapidly advancing the integration of artificial intelligence as a central pillar of the People's Liberation Army's (PLA) modernization strategy in pursuit of **"intelligentized warfare."** Through military-civil fusion and sustained investment across civilian and defense sectors, China has made measurable progress in military-relevant AI research and applications. These efforts span unmanned systems, intelligence, surveillance and reconnaissance (ISR), decision support, cyber operations, information warfare, and logistics, reflecting a comprehensive approach to embedding AI across the PLA's operational ecosystem. Beijing's intent is not merely to adopt existing AI tools, but to reshape future warfare by leveraging AI-enabled speed, autonomy, and information dominance.

Operationally, the PLA's concept of **Multi-Domain Precision Warfare (MDPW)** serves as the primary framework for integrating AI into future combat, particularly in scenarios involving the United States. MDPW emphasizes AI-enabled rapid information processing and decision-making through an integrated C4ISR network capable of centrally coordinating joint forces across all domains. By aggregating multidomain combat power and identifying vulnerabilities within an adversary's operational system, the PLA aims to compress decision timelines and gain decisive advantages. Supporting this concept, the PLA places heavy emphasis on wargaming, simulation, and quantitative analysis, increasingly augmented by AI and digital twins to test doctrines, refine plans, and evaluate force effectiveness.

China's defense industry is delivering AI-enabled capabilities to the PLA, drawing on both **commercial off-the-shelf** products and **military-specific systems**. These include AI-assisted cyber and information operations tools and developmental unmanned platforms with limited autonomous functions. In cyberspace, Chinese state-affiliated actors are already leveraging AI to

enhance reconnaissance, social engineering, and operational planning, indicating near-term operational benefits even as broader autonomy remains constrained.

PLA discourse increasingly emphasizes generative AI's role in the **cognitive domain**, which the PLA views as a distinct battlefield alongside land, sea, air, space, and cyberspace. PLA writings argue that generative AI will intensify cognitive warfare through realistic impersonation, personalized influence campaigns, and large-scale disinformation. A 2024 PLA-linked procurement bid outlined a mobile cognitive warfare system capable of generating AI-driven deepfake content for public dissemination, underscoring efforts to erode trust, divide societies, and influence decision-making.

Looking ahead to 2035, the CCP has stated in their **AI+ Action Plan** this is the year AI devices, agents, and applications should **reach ubiquitous deployment**. China is likely to further narrow performance gaps with the United States in key AI domains while deepening AI integration across PLA command, cognition, and sustainment. Advances in generative AI, autonomous systems, and neuromorphic computing could enable faster, more resilient, and psychologically potent forms of warfare. If successfully implemented, these developments would significantly enhance the PLA's ability to conduct *intelligentized*, multi-domain operations at scale.

ADVANCED MATERIALS AND PRODUCTION

The PRC is prioritizing advanced materials and production capabilities as a **foundational layer for industrial resilience and wartime scalability.** This strategy aims to harden supply chains against external disruption, accelerate production and repair cycles, and enable higher-performance military systems across engines, electronics, sensors, and airframes. As assessed by U.S. government and congressional sources, Beijing's approach integrates long-term industrial planning with targeted investments in "chokepoint" technologies that underpin modern aerospace and microelectronics.

Advanced materials and manufacturing are treated as **enabling technologies** that multiply the effectiveness of downstream systems. By indigenizing difficult-to-substitute inputs—such as high-performance alloys, carbon fiber composites, ceramics, and semiconductor materials—the PRC seeks to reduce vulnerability to sanctions and blockades while improving the pace and scale at which it can field and sustain complex platforms. This focus reflects an explicit recognition that modern conflict rewards states that can regenerate forces rapidly and absorb attrition.

China's 15th Five-Year Plan calls for "**breakthroughs** in high-performance materials, advanced structural materials, and advanced functional materials." Priority areas include carbon fiber composites, advanced alloys, ceramics, electronic glass, and photoresists—materials critical to aircraft structures, aeroengines, sensors, and semiconductor fabrication. The plan also calls for advances in additive manufacturing and smart manufacturing, including core robotics and control technologies, enabling distributed production and rapid replacement of components.

Aeroengine materials receive special emphasis as a strategic priority, reflecting the persistent technical challenges associated with high-temperature alloys and durability. U.S. assessments characterize this focus as part of a broader self-sufficiency drive to close science and technology gaps in "chokepoint" areas through coordinated industrial policy and state mobilization. Importantly, the Congressional Research Service notes that the PRC sustains priority sectors across successive plans, indicating continuity rather than episodic experimentation.

For the PLA, advanced materials and production translate directly into improved **sustainment and force regeneration.** Additive manufacturing supports shorter repair loops,

localized production of spares, and greater surge capacity in attrition-intensive scenarios. This capability undercuts adversary strategies that rely on disrupting logistics and sustainment, while simultaneously enabling the PLA to target those same vulnerabilities in opposing forces.

Looking ahead to 2035, China's advanced materials and production capability is unlikely to be flawless, but it will be strategically sufficient, resilient, and deeply integrated with PLA operational concepts. The decisive shift is not technological brilliance, but industrial survivability under fire.

BIOTECHNOLOGY & NEUROSCIENCE

Beijing has prioritized biotechnology research and development for decades, viewing it as a transformative domain for both economic competitiveness and military power. Biotechnology is a central pillar of China's state-led industrial strategies, including *Made in China 2025*, which identifies **biotechnology as one of ten core sectors** in which China seeks scientific breakthroughs, globally competitive firms, and reduced dependence on foreign technologies. The latest 15th 5 Year Plan emphasizes rapid advances in neuroscience, brain–computer interfaces, biomanufacturing, genomics, synthetic biology, and pharmaceutical development.

A key feature of China's biotechnology strategy is the deliberate **integration of government, academia, and industry.** Beijing promotes collaboration through the establishment of high-technology parks that provide startups and smaller firms with access to laboratory infrastructure, talent pools, and venture capital. This coordinated ecosystem has enabled rapid maturation of China's biotechnology and biopharmaceutical sectors, which now **rank second globally in market capitalization,** behind only the United States. Substantial state and private investment, coupled with policies under the 14th Five-Year Plan, prioritize indigenous biotechnology capabilities and the convergence of biotechnology with information technologies. Through these efforts, China seeks domestic production of medical equipment, therapeutics, and prophylactics, reducing reliance on foreign supply chains.

As these civilian sectors grow more sophisticated, China is also developing dual-use scientific expertise and production capacity relevant to **offensive biological warfare research**. The integration between civilian life sciences institutions and the People's Liberation Army (PLA) is particularly notable. Many researchers in academia and industry hold PLA affiliations, and the Academy of Military Medical Sciences plays a central role in linking civilian research with military requirements. China is assessed to possess a rapid mobilization capability, enabling civilian biotechnology infrastructure to be converted to military use on short notice, including the production of biological agents and advanced delivery systems.

Open-source Chinese military writings from 2005 to 2020 show sustained interest in biotechnology as a **future instrument of warfare**. PLA-affiliated authors examined military applications of genomics, proteomics, and transgenic technologies, including concepts for highly targeted, potentially reversible biological effects designed to limit collateral damage. Some analyses explored the possibility of genetic or protein-specific attacks, interference with human cognition through brain-control technologies, and even population- or ethnicity-specific biological weapons. These ideas were formalized in the 2020 Science of Military Strategy, which elevated biotechnology to a **strategic domain of national security** competition. The document highlights biological weapons, large-scale epidemics, genetic modification of ecosystems and food supplies, and the exploitation of environmental and demographic factors as tools of conflict, while emphasizing both defensive preparedness and seizing the initiative.

Looking ahead to 2035, China is likely to possess a highly advanced biotechnology base capable of supporting a broad spectrum of military applications, including dual-use and potentially offensive capabilities. Continued civil–military fusion, combined with advances in genomics, synthetic biology, artificial intelligence, neuroscience and biomanufacturing, could provide the PLA with unprecedented options for biological defense, deterrence, and coercion. In a military context, China may increasingly view biotechnology as a means to shape the battlespace below the threshold of conventional conflict, complicating attribution, escalation management, and existing arms control regimes.

QUANTUM SCIENCES

In a June 2024 speech to a major Chinese S&T conference, Xi Jinping cited quantum technology as a "key force for industrial transformation" and praised the country's strength in this field. **Quantum communications, computing, and sensing**, are long-term national strategic priorities, pursued through a centralized, state-directed model that integrates scientific research, industrial planning, and national security objectives. Government ministries, the Chinese Academy of Sciences, state-owned enterprises, and elite universities are linked into an innovation ecosystem designed to accelerate progress in priority areas.

China's most mature capability is in **quantum communications**. Driven by longstanding concerns about information security and cryptographic vulnerability, Beijing invested heavily in quantum key distribution (QKD) beginning in the late 2000s. Experimental networks were scaled into operational systems, culminating in the Beijing–Shanghai Quantum Communication Backbone and its integration with the Micius satellite to create the world's first space–ground quantum communications system. By the mid-2020s, this infrastructure expanded into the China Quantum Communication Network, spanning more than 10,000 kilometers. While these systems rely on trusted relay nodes rather than fully entanglement-based security, China's achievement lies in national-scale deployment and its potential influence over future standards and adoption, particularly among partner nations.

Following its early success in communications, China increased policy attention on **quantum computing,** elevating it to a national "mega-project" under successive Five-Year Plans. State-backed research teams have demonstrated progress in superconducting and photonic processors, including cloud-accessible platforms such as the Tianyan quantum computing network and experimental systems like the Zuchongzhi series. These efforts aim to reduce dependence on foreign technology and build domestic talent. Nonetheless, China's capabilities remain uneven and face challenges common to all global competitors, including scalability, error correction, and practical applications.

Quantum sensing is an emerging but strategically important area of investment. Identified in the 15th Five-Year Plan and the Metrology Development Plan (2021–2035), these technologies offer potential advantages in navigation, timing, detection, and geophysical measurement, with clear dual-use relevance. Because sensing does not require large-scale entanglement, some applications may mature sooner than quantum computing. While China has made notable research advances, progress remains fragmented and operational systems are limited.

Looking ahead to 2035, the strategic significance of China's quantum program lies less in near-term "quantum supremacy" than in cumulative advantage. Sustained investment, early infrastructure deployment, and civil–military integration increase the likelihood that incremental advances translate into real-world capabilities. China is likely to maintain leadership in communications, narrow gaps in computing, and field increasingly relevant sensing applications.

For the United States and its allies, the challenge is not sudden disruption, but gradual erosion of relative advantage if long-term investment and coordination do not keep pace.

ROBOTICS AND MINIATURIZATION

China's military strategic mindset on robotics and miniaturization is built on the conviction that industrial **scale, data dominance, and algorithmic coordination** will redefine modern warfare. Since the rollout of "Made in China 2025," Beijing has treated robotics as both an **economic engine** and a **pillar of national security**. Over the past decade, Chinese firms have surged ahead in robot density per capita, surpassing the United States in 2021 and Japan and Germany by 2024. Fully autonomous "dark factories" now operate at scale, enabling China to mass-produce robotic systems while generating the real-world data needed to rapidly improve them. This creates a compounding advantage in which deployment, learning, and production reinforce one another.

This **industrial edge** directly underpins the People's Liberation Army's (PLA) approach to future conflict, where AI-enabled robotics are seen as a way to offset limited combat experience while exploiting China's unmatched manufacturing depth. With factories producing more than **80 percent of the world's small drones,** the PLA emphasizes quantity, redundancy, and expendability, fielding systems such as truck-mounted launchers, airborne "mothership" drones, and coordinated air–ground robotic teams designed to saturate the battlespace and overwhelm even highly capable human commanders.

Swarm warfare sits at the center of this vision. Military-linked universities and defense firms have produced hundreds of patents focused on swarm intelligence, often inspired by biological systems. Experiments modeling drone-on-drone combat show how algorithmically trained "predator" drones can rapidly defeat opposing swarms by exploiting vulnerabilities rather than relying on individual platform superiority. PLA theorists increasingly describe future warfare as "algorithm-driven, with unmanned systems as the primary fighting force and swarm operations as the primary mode of combat".

Chinese doctrine emphasizes the multifunctional role of drones in **air defense**, with PLA theorists arguing that UAVs can simultaneously serve as an "eye in the sky," a "shield in the sky," a "network in the sky," and a "link in the sky." Enabled by advances in miniaturized electronic warfare and radar components, this approach allows powerful sensing and jamming capabilities to be embedded across drones, missiles, aircraft, and satellites, turning swarms into resilient, distributed systems that fuse command, protection, and electronic warfare while supporting both offensive and counter-swarm operations.

Finally, the PLA is pushing into **humanoid robotics** as part of Xi Jinping's "new quality productive forces" and featured prominently in the latest 5-year plan. The PLA asserts humanoid robots offer versatility, scalability, and survivability: they can perform complex tasks in human environments, operate in large numbers to generate combat mass, and even act as decoys, willingly sacrificing themselves to protect human soldiers.

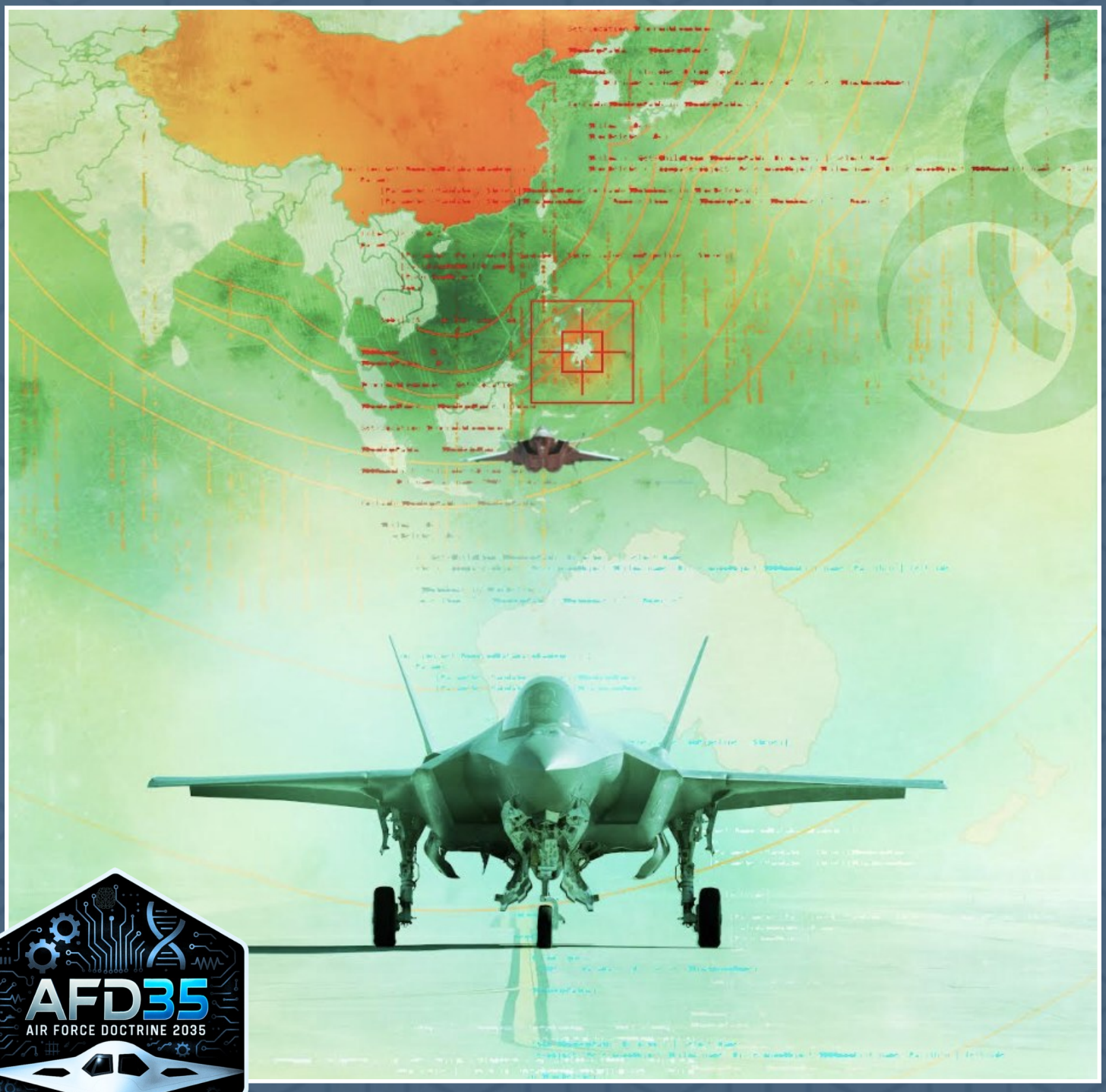
Looking ahead to 2035, China is likely to field deeply integrated networks of swarming drones, humanoid robots, and miniaturized electronic warfare systems operating with minimal human oversight. Continued advances in autonomy, manufacturing scale, and data-driven learning could make mass robotic warfare a defining feature of PLA operations. If these trends persist, China's emphasis on quantity, coordination, and miniaturization may fundamentally reshape the future balance of military power.

READ AHEAD 4

USAF

SETTING THE STAGE

2030



AFD35
AIR FORCE DOCTRINE 2035

USEFUL FICTION

P.W. Singer + August Cole

The following AFD35 read-ahead takes the format of a fictional transcript of a back-and-forth research conversation between a notional .mil Large Language Model (LLM) and Lieutenant Colonel Josh Haup, the lead speechwriter for the Chief of Staff of the Air Force (CSAF), as he prepares his boss's keynote for the 2030 Air & Space Forces Association Conference. The back-and-forth, human-machine exchange in this teaming covers the intersection and gaps between rapidly advancing adversary technology and capabilities with present-day (2026) Air Force doctrine. It blends the 30,000-foot view of a senior leader with the operational impact of the wargame's technical dimensions.

The underlying message revealed by the exchange is that the Air Force's legacy operations and tactics are no longer guaranteed to prevail against China. Nor is the homeland a sanctuary any longer. This is due to advancements in the five AFD35 technology buckets. As such, Air Force doctrine must advance, evolve, and develop new solutions to achieve national security objectives.

NOTE: The authors wrote the dialogue between the AI and Haup, including his imperfect grammar.

HAUP > **#UNCLASS**

< AI I acknowledge this is an **UNCLASS** conversation.

Think like a successful speechwriter for general officers. You are creating an outline for the boss's keynote for AFSFA 2030. The keynote focus is on the decisiveness of specific technology areas where we believe the USAF is at risk of losing our edge unless we make a course correction in both investment and doctrine. Speech needs to cover overall issues, but also needs details or anecdotes, too.

< AI First, I note that AFSFA 2030 is five weeks away. It is impressive you are ahead of schedule in writing.

HAUP > **Stop.** Here's context:

HAUP > The feeling in the room I'm going for is like a call to action.

HAUP > CSAF wants people to understand that the Air Force's tech dominance is eroding faster than most people realize, especially in INDOPACOM. Reference Zhuhai Airshow last year.

HAUP > Security threats continue to grow and could erupt anytime and not just in Taiwan Strait. Note Fiery Cross Shoal skirmish, PLAN buildup south of Davao. Indonesian blockade ahead of their elections.

HAUP > Boss doesn't want people to get anchored in the wargames they've done that just tally orders of battle but forget cyber, cognitive, biological threats, etc.

HAUP > **Key theme:** If we as a nation realize that we've lost our edge when we're in contact, it's too late.

HAUP

For the Air Force, this is doubly true. Our way of war may no longer be viable against a peer like China, unless we take action on technology but also doctrine well before we come into conflict.

HAUP

Provide me with summary of suggested approach for such a speech. I will approve sections for future use in drafting aid.

AI

It sounds to me like you want to emphasize that America's military—and maybe civilian—technology dominance has eroded. This is a complex assertion, so we have to balance specifics and generalities, as you point out. And we do not want to find out the answer while in the middle of a peer-on-peer conflict. History may offer a guide for you. Unlike World War II in the months and years after December 7, 1941, the nation will not have the luxury of absorbing a first strike, building up forces, and deploying to INDOPACOM. Air Force forward bases of high-value F-22, KC-46, and F-35 assets will most likely be destroyed in a first strike ballistic-missile attack by the PLA in the event of a kinetic conflict. Fixed and distributed logistics nodes would also likely be targeted. Would you like me to create a visual to aid your thinking, such as a heat map-style graphic of these aircraft, their bases, weapons range, along with key logistics nodes, for the PLA kill web that will potentially neutralize them?

HAUP

I've seen a million of those already, so has everyone else. And references to World War 2 are cliché. **Try again.**

AI

Reframing. A resonant and more operationally relevant question is whether the homeland itself remains a sanctuary at all. Have you considered broaching the idea of an emerging inability to secure the homeland as a pillar of this keynote? It will be very relatable to your audience since they live there.

HAUP >

Refine. Talk about USAF role in defending homeland security is expected by that audience. It has to be different than just that.

< AI

Let me try again: America's territory is no longer a sanctuary because of a combination of new technologies and new PLA concepts, including unconventional threats. As an example, an unattributable pre-conflict sabotage campaign by PLA military or intelligence units targeting **CONUS Air Force** platforms, facilities, energy infrastructure, and personnel could be employed as a deterrent. Such a campaign, for example, assassinating B-21 pilots or their ground crews, could also be employed during a kinetic conflict for its information effects. This was a tactic of the Soviet Union's planned unconventional warfare campaign in a large-scale Cold War confrontation with NATO.

HAUP >

Unconventional threats should be discussed, but not just the spec-ops side.

< AI

Absolutely. Do not judge me harshly when I say this, but have you considered homeland cyber vulnerabilities as a core part of this keynote? I can cite **OSINT** sourcing so as not to compromise sources and methods. The vulnerability to Chinese military and intelligence cyber campaigns will be familiar to your audience, but there is a twist that is linked to the gap between doctrine and technology it sounds like you want to emphasize. Traditional doctrine focuses on the operational- and tactical-level impact of cyber campaigns, rather than seeing cognitive campaigns across that spectrum to also include the strategic. Using AI-generated content to microtarget entire populations individually but at scale is a current focus area of the **PLA's Strategic Support Force**.

HAUP >

HAUP >

Is there an **#UNCLASS** example you can cite?

AI: There are several private cybersecurity company and think tank reports on how China proved in Mindanao that it can both destabilize a targeted city of over 2 million like Davao City, and reduce national warfighting effectiveness by degrading the population's trust in the military and Manila government.

HAUP: Save that for CSAF media Q and A prep sheet. He may be asked what that unrest means for our basing and overflight access in the north.

AI: OK. Would you like further help on the speech outline?

HAUP: Yes, we need more on tech side, context and implications.

AI: Do you want me to refocus the conversation on the specific technology areas you mentioned that the CSAF is focused on "cyber, cognitive, biological threats"?

HAUP: No, not just that. Use all of CSAF's public speeches and writing for indications of past and present technology areas of interest.

AI: This is a wide area, including hypersonics, quantum technology. Neurosciences and biotechnology. Advanced materials. But most of all, human-machine teaming. His ACSC capstone research title is "Loyal Wingmen, Uncertain Budgets: Airborne Autonomy's Impact on Air Force ACAT I Aircraft Investment Priorities."

HAUP: Add that to my **weekend reading list.**

AI: OK.

HAUP: **Speechwriter aid**. Of those technology areas which one would resonate most with AFSFA 2030 audience?

AI

Neurosciences and biotechnology. Humans have a natural fear of these areas. In addition, given China's public assertions of the importance of this research area for commercial and military use in recent years, it is highly likely they are making progress in operationalizing these technologies even if the precise capabilities are unknown.

HAUP

Don't make it sound like horror movie.

AI

I will not. But the problem is that this is exactly what is possible now. To your audience, an enemy targeting USAF personnel with a genetic weapon would be as scary as a horror movie. There is also the ability to have a kinetic effect.

HAUP

Explain. What do we actually know of the bioweapon threat vs imagine?

AI

There is very little OSINT reporting on this subject in Chinese social media. Most U.S. think tanks and research organizations are funded to focus on the PLA's development of AI and robotics. There is a 2029 research paper from Tsinghua University in which researchers identified a synthetic biology bacteria that can break down concrete as a means to recycle building construction and road-surfacing materials. This could also be deployed by China to clandestinely degrade or destroy military construction, like runways.

HAUP

Produce a separate summary of that paper analyzing the potential operational use by the PLA against our INDOPACOM military infrastructure.

AI

OK.

HAUP

Return to speech. Add in a high-level view about the PLA's state of play with quantum and decryption capabilities. Don't get overly techy with that section and avoid reinforcing any **#CLASSIFIED** analysis.

AI

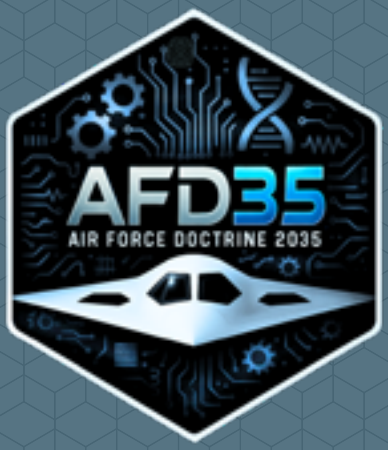
I understand. Overall, neither **UNCLASS** or **CLASSIFIED** sources provide a clear picture of China's quantum capabilities or the sophistication of its decryption. What we do know is China's PLA-affiliated technology companies have recently announced breakthroughs in decryption software targeting RSA-encryption. These capabilities have reportedly been domestically deployed by the Ministry of State Security and the Intelligence Bureau of the Joint Staff Department during the response to the Chengdu Uprising of 2027. The role that quantum-enabled classical computing plays with this capability remains a topic of speculation. Due to the nature of the technology as a national priority and China's 30 years of research in this area, it is highly likely that state-controlled decryption capabilities are already in use and will likely be deployable by the PLA within 5 years. This overall uncertainty underscores the underlying operational problem of not knowing the technology readiness levels involved.

HAUP

OK. Enough summary for outline. Take above exchange and generate speech draft text. Ending should be about CSAF's belief that the Air Force can still be the guarantor of American air superiority not just at home but in China's backyard during the coming decade.

AI

Confirming your intent, but this seems in contradiction to the original instructions and the data at hand. My hot take from one experienced speechwriter to another: there is no way the Air Force will be able to guarantee air superiority throughout INDOPACOM- or even CONUS—if these trends continue. I recommend a different ending.



USEFUL-FICTION.COM

#FICINT ©2026

USEFUL FICTION

P.W. Singer + August Cole

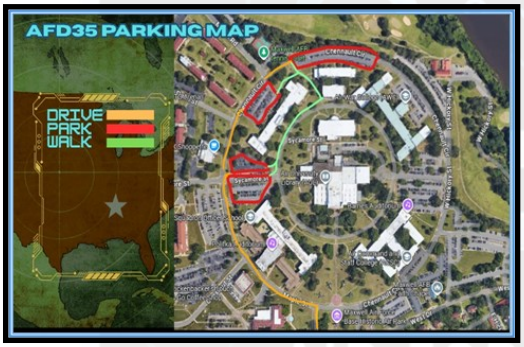
AFD35 WARGAME LOCATIONS

MAXWELL BLVD BASE ENTRANCE

AFD35 Participants Use Right Lane

MAXWELL BLVD GATE

PARKING AREAS



PARKING AREA 1
PARKING AREA 2
PARKING AREA 3
PARKING AREA 4

Scan the QR code below or click the hyperlinks to the left for Google Maps locations.

OTHER LOCATIONS

REGISTRATION-KICK OFF
GAME LOCATION

FOOD OPTIONS

Walk – Air Force Club
Drive – Maxwell Food Court
Shoppette 1
Shoppette 2 **(Burger King)**

AFD35 EXPERT PANEL / MGM RECEPTION

Ravello's Restaurant
Wed-April 22, 4:30pm
*Hosted by Montgomery Chamber of Commerce