

# Transforming the United States Air Force: Adapting Organizational Structure and Distributed Airpower for Great Power Competition

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*DISCLAIMER: The opinions expressed in this essay are those of the author and do not necessarily reflect the official policy or position of the Department of Defense or any other U.S. Government agencies.*

The United States Air Force (USAF) finds itself at a pivotal moment in its history as it strives to maintain strategic dominance in an increasingly contested global security environment. To counter the threats posed by near-peer adversaries such as China and Russia, the USAF is undergoing a bold transformation, adopting a new organizational construct that includes In-Place Combat Wings, Deployable Combat Wings, and Combat Generation Wings. This strategic overhaul represents more than just an operational adjustment; it is an essential evolution to preserve air superiority, a cornerstone of national defense and global power projection.<sup>1</sup>

This is not the first instance of structural reform in the USAF's history. Over time, the Air Force has continually adjusted its organization and strategy to respond to shifting threats, technological advancements, and geopolitical challenges. However, navigating today's complex bureaucratic landscape demands more than adaptation. It requires a strategic restructure to streamline processes, enhance agility, and ensure relevance. Bureaucratic processes, though vital to governance, often hinder responsiveness. Thus, realigning the USAF's structure to thrive in this environment is critical to maintaining it operational and institutional resilience.<sup>2</sup>

China and Russia are leveraging advanced anti-access/area denial (A2/AD) systems and multi-domain strategies to undermine U.S. operational flexibility and air superiority.<sup>3</sup> In response, the USAF is decentralizing command through distributed control, enabling commanders to adapt dynamically to rapidly changing threats. By embedding Air Staff (A-Staff) structures within each wing, the USAF aims to enhance readiness, operational flexibility, and mission effectiveness. This transformation is closely aligned with Agile Combat Employment (ACE) principles, enabling dispersed operations that complicate adversary targeting and increase survivability in contested environments.<sup>4</sup>

While this vision is forward-thinking and transformative, it faces significant challenges. Outdated technology, hierarchical processes, and cultural inertia hinder operational agility. Training

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<sup>1</sup> Secretary of the Air Force Public Affairs, "USAF Units of Action: Combat Wings, Air Base Wings, Institutional Wings Defined" September 17, 2024. <https://www.af.mil/News/Article-Display/Article/3908057/usaf-units-of-action-combat-wings-air-base-wings-institutional-wings-defined/>

<sup>2</sup> Secretary of the Air Force Public Affairs, "Air Force Realigns to Ensure Readiness Future Competitiveness," Air Force, September 9, 2024, <https://www.af.mil/News/Article-Display/Article/3900024/air-force-realigns-to-ensure-readiness-future-competitiveness/>

<sup>3</sup> Conor M. Savoy, "Global Development in an Era of Great Power Competition," *CSIS Briefs*, March 24 2022, <https://www.csis.org/analysis/global-development-era-great-power-competition>

<sup>4</sup> "Air Force Doctrine Note 1-21: Agile Combat Employment", *Curtis E. Lemay Center*, August 23, 2022, <https://www.csis.org/analysis/global-development-era-great-power-competition>

programs and funding constraints exacerbate the difficulty of preparing personnel for the complexities of distributed control. This essay explores these challenges and proposes actionable strategies to effectively organize, train, and equip wing commanders and A-Staff personnel for distributed airpower operations in the era of great power competition.

### **Equipping Commanders and A-Staffs for Distributed Control**

To maintain strategic dominance in an increasingly contested global environment, the USAF must adopt a transformative strategy built upon four core pillars: developing people to generate readiness, advancing capabilities to project power, strengthening partnerships to expand strategic depth, and institutionalizing agility to adapt and innovate. These pillars collectively ensure the USAF remains prepared to deter and, if necessary, prevail against near-peer adversaries such as China and Russia.<sup>5</sup> This comprehensive approach addresses the multifaceted challenges of modern warfare, positioning the USAF to anticipate and counter emerging threats effectively.<sup>6</sup>

The first pillar, developing people to generate readiness, emphasizes the critical importance of cultivating a skilled and adaptable workforce capable of meeting complex operational demands. In today's contested environments, readiness extends beyond traditional combat preparation and includes the ability to operate effectively under degraded conditions, such as during cyberattacks, electronic warfare (EW), and hybrid operations. The USAF must institutionalize scenario-based training that replicates high-threat environments, emphasizing decentralized decision-making and mission command principles. Such training ensures commanders and A-Staff personnel can act autonomously while remaining aligned with strategic objectives. Standardizing these programs across In-Place Combat Wings, Deployable Combat Wings, and Combat Generation Wings prepares personnel to fulfill their roles in diverse and rapidly evolving operational contexts, creating a force that is resilient and adaptive.<sup>7</sup>

The second pillar, advancing capabilities to project power, focuses on maintaining technological superiority and enhancing operational effectiveness. The USAF must accelerate the deployment of advanced Command and Control (C2) systems, such as the Advanced Battle Management System (ABMS), which provides real-time situational awareness and AI-driven decision support.<sup>8</sup> These systems must be interoperable with allied forces and resilient to adversarial disruptions,

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<sup>5</sup> Jim Garamone, "General Say Deterring Two 'Near Peer' Competitors Is Complex," *U.S. Department of Defense News*, August 17, 2023, <https://www.defense.gov/News/News-Stories/Article/Article/3496656/general-says-deterring-two-near-peer-competitors-is-complex/>

<sup>6</sup> Secretary of the Air Force Public Affairs, "US Air Force Transitioning from A-10s to Cutting-edge Upgrades in Korea," *Air Force: Article Display*, November 12, 2024, <https://www.af.mil/News/Article-Display/Article/3962041/us-air-force-transitioning-from-a-10s-to-cutting-edge-upgrades-in-korea/>

<sup>7</sup> Secretary of the Air Force Public Affairs, "Air Force, Space Force announce sweeping changes to maintain superiority amid Great Power Competition," *Air Force: Article Display*, February 12, 2024, <https://www.af.mil/News/Article-Display/Article/3674442/air-force-space-force-announce-sweeping-changes-to-maintain-superiority-amid-gr/>

<sup>8</sup> Joe Danielwicz, "Understanding Advance Battle Management System," *Air Force Life Cycle Management Center*, May 31, 2024, <https://www.af.lcmc.af.mil/NEWS/Article-Display/Article/3792745/understanding-advanced-battle-management-system-abms-podcast/>

ensuring continuity in contested environments. Enhancing intelligence, surveillance, and reconnaissance (ISR) capabilities through AI-powered sensors and long-endurance drones supports power projection by enabling rapid, informed decision-making. Furthermore, investments in emerging technologies, such as hypersonic weapons and advanced space systems, ensure the USAF maintains a competitive edge against adversaries like China, whose J-20 stealth fighter “Mighty Dragon” and A2/AD systems pose significant challenges to U.S. air superiority.<sup>9</sup>

The third pillar, strengthening partnerships to expand strategic depth, highlights the importance of alliances, joint operations, and multi-national collaboration in achieving operational success. Partnerships with allied nations and regional organizations, such as NATO, enhance operational reach and deterrence by pooling resources, sharing intelligence, and aligning strategic objectives. Collaborative training exercises and interoperability initiatives ensure coalition forces can operate seamlessly in distributed environments, amplifying their collective effectiveness.<sup>10</sup> For example, partnerships in the Indo-Pacific counterbalance China’s regional ambitions, while NATO cooperation strengthens deterrence against Russian aggression. Industry partnerships are equally vital, accelerating the development of next-generation technologies in artificial intelligence, cybersecurity, and space operations. Strengthening these relationships bolsters the USAF’s ability to sustain operations globally, ensuring it remains a formidable force in the face of great power competition.<sup>11</sup>

The fourth pillar, institutionalizing agility to adapt and innovate, ensures the USAF can respond rapidly to emerging challenges and capitalize on opportunities faster than its adversaries. Agility requires embedding a culture of continuous learning and innovation within the USAF, enabling it to pivot quickly in response to changing conditions.<sup>12</sup> This involves streamlining bureaucratic processes to reduce decision-making timelines and fostering a mindset that embraces experimentation and calculated risk-taking. ACE principles, which emphasize dispersed and flexible operations, must be integrated across all levels of the USAF to ensure it can maintain operational effectiveness in contested environments. Additionally, investments in innovation hubs and partnerships with the private sector accelerate the development of transformative technologies, such as quantum computing and autonomous systems, which can redefine the future battlespace.<sup>13</sup>

By focusing on developing people to generate readiness, advancing capabilities to project power, strengthening partnerships to expand strategic depth, and institutionalizing agility to adapt and

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<sup>9</sup> Fabian Lucas Romero Meraner, “China’s Anti-Access/Area-Denial Strategy,” *The Defence Horizon Journal*, February 9, 2023, <https://tdhj.org/blog/post/china-a2ad-strategy/>

<sup>10</sup> Ian Vega-Cerezo, “Strengthening Bonds: Joint Initiative Enhances ROK-US Interoperability” *U.S. Army*, September 4, 2024, [https://www.army.mil/article/279420/strengthening\\_bondsjoint\\_initiative\\_enhances\\_rok\\_us\\_interoperability](https://www.army.mil/article/279420/strengthening_bondsjoint_initiative_enhances_rok_us_interoperability)

<sup>11</sup> “Relations with Partners in the Indo-Pacific Region” *North Atlantic Treaty Organization*, October 24, 2024, [https://www.nato.int/cps/en/natohq/topics\\_183254.htm](https://www.nato.int/cps/en/natohq/topics_183254.htm)

<sup>12</sup> Mark A. Welsh, “USAF Strategic Master Plan,” *Air Force*, May 2025, [https://www.af.mil/Portals/1/documents/Force%20Management/Strategic\\_Master\\_Plan.pdf](https://www.af.mil/Portals/1/documents/Force%20Management/Strategic_Master_Plan.pdf)

<sup>13</sup> “The Rise in Dual-Use Technologies: A Paradigm Shift,” *Information Technology & Innovation Foundation*, October 23, 2024, <https://starburst.aero/news/the-rise-in-dual-use-technologies/>

innovate, the USAF ensures its ability to maintain strategic dominance. These four pillars provide a robust framework for addressing the challenges of modern warfare, enabling the USAF to anticipate changes, innovate at speed, and sustain operational superiority across global domains. Through this cohesive strategy, the USAF secures its role as a decisive force in future conflicts, ensuring the United States remains prepared to deter and, if necessary, prevail against any adversary.<sup>14</sup>

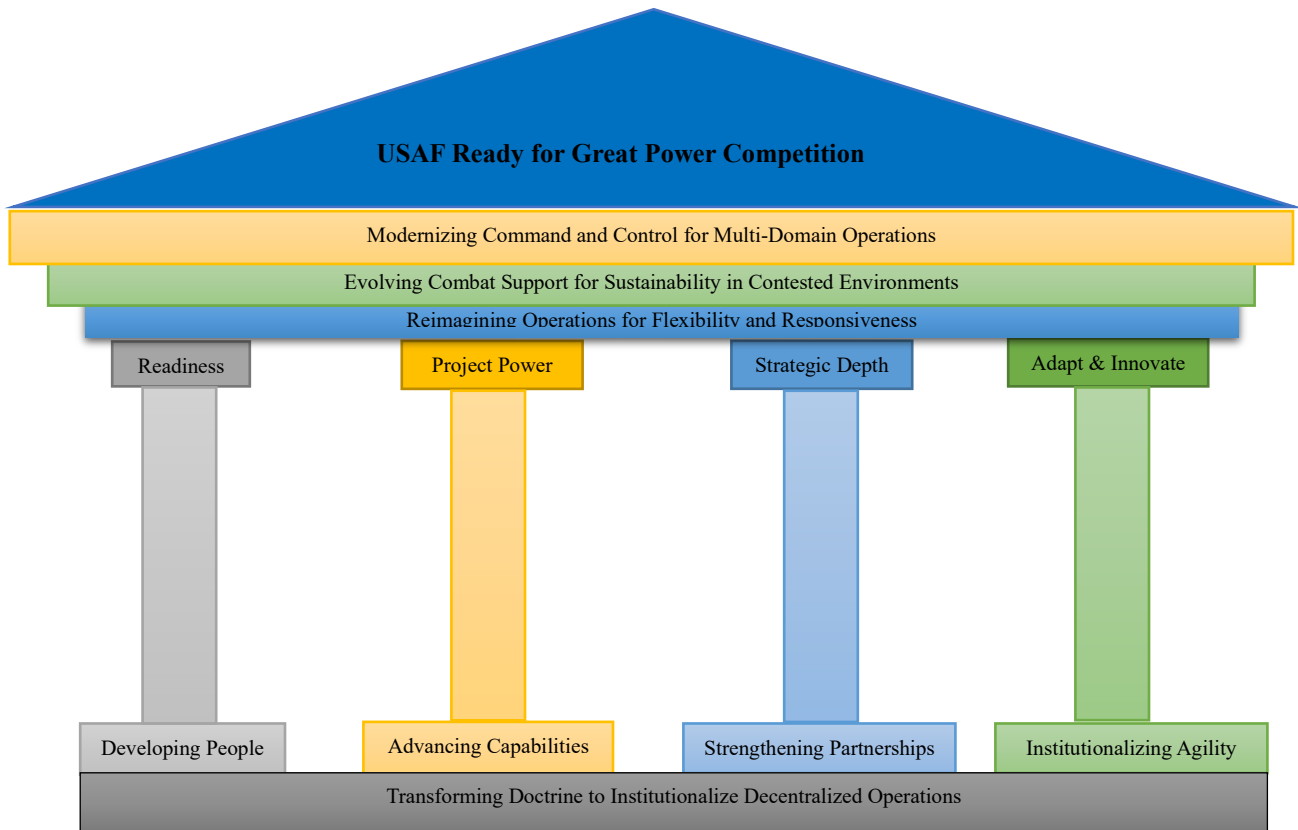


Figure 1: The Four Basic Pillars for Distributed Control. Source: MSgt Langius

### Transforming the USAF: Key Strategic Changes for Distributed Control

Training for commanders and their A-staff for In-Place Combat Wings must emphasize readiness for multidomain treats and sustained defensive operations in contested environments. Commanders should focus on mastering strategies for operational continuity under duress, including resilience against cyber and electronic warfare. A-staff must be trained in employing decentralized command structures and integrating Joint All-Domain Command and Control (JADC2) systems to ensure seamless multi-domain coordination. Exercises should simulate

<sup>14</sup> Department of the Air Force, “FY25 Posture Statement,” *Presentation to the Committees and Subcommittees of the United States Senate and the House of Representatives*, [https://www.af.mil/Portals/1/documents/2024SAF/FY25\\_Posture\\_Statement.pdf](https://www.af.mil/Portals/1/documents/2024SAF/FY25_Posture_Statement.pdf)

sustained attacks, enabling leadership teams to manage base recovery, maintain communication, and operate effectively even under degraded conditions.<sup>15</sup>

For Deployable Combat Wings, training must prioritize agility, adaptability, and rapid global deployment capabilities. Commanders and A-staff should focus on ACE, emphasizing operational from dispersed and austere locations. Training scenarios should replicate logistical challenges, contested supply chains, and communication disruptions to prepare for real-world contingencies. Commanders must develop the ability to plan and execute rapid relocations, while A-staff focus on managing adaptive supply systems and maintaining secure, flexible C2 structures that integrate with JADC2 and allied networks.

Combat Generation Wings require training that supports the sustainment of high operational tempos through efficient maintenance and logistics. Commanders must develop expertise in overseeing predictive maintenance systems and optimizing resource allocation under constrained conditions. A-staff training should focus on managing robust, adaptable supply chains that ensure continuity in contested environments. These wings need to integrate advance C2 systems and maintain resilience against cyber threats to ensure uninterrupted operational capabilities.

### **Transforming Doctrine to Institutionalize Decentralized Operations**

To institutionalize decentralized operations, the USAF must update the Air Force Doctrine Publication 3-0 (AFDP 3-0) to explicitly incorporate decentralized decision-making, ACE, and multi-domain integration. Additionally, these principles should be embedded into foundational guidance such as Air Force Doctrine Publication 1 (AFDP-1) to ensure consistency and alignment across all levels of USAF operations.

Decentralized decision-making allows commanders to respond swiftly and independently within the framework of strategic intent, minimizing delays caused by hierarchical approval process. This approach is particularly crucial in contested environments where threats evolve rapidly, requiring immediate and adaptive responses. For A-staff, adopting these principles supports synchronized planning and execution across air, space, cyber, and ground domains, enhancing overall operational coherence in multi-domain operations.

ACE further underscores the importance of operating from dispersed and flexible locations, necessitating targeted training for commanders and their A-staff. Training in these concepts ensures operational continuity under contested conditions, as demonstrated by recent exercises such as Red Flag. Without clear doctrinal guidance, commanders may lack the authority or confidence to adapt dynamically, leading to missed opportunities and inefficiencies.

By embedding decentralized operations, ACE, and multi-domain integration into AFDP 3-0 and AFDP-1, the Air Force equips its leaders and staffs with the conceptual and operational tools

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<sup>15</sup> Matthew S. Stalford, "The Air Force's Dual Approach: Adopting and Integrating with Air Force Doctrine," *Air University: Wild Blue Yonder*, October 12, 2023. <https://www.airuniversity.af.edu/Wild-Blue-Yonder/Articles/Article-Display/Article/3528963/the-air-forces-dual-approach-adopting-and-integrating-with-air-force-doctrine/>

needed to maintain agility, resilience, and mission effectiveness in complex and contested environments. These updates will reinforce the USAF's capacity to adapt to future operational challenges and maintain its strategic edge.

### **Reimagining Operations for Flexibility and Responsiveness**

To ensure effectiveness in contested environments, the USAF must reimagine operational processes to prioritize flexibility and responsiveness, aligning with the demands of distributed control. Adversaries' advanced A2/AD strategies necessitate capabilities such as dispersed basing, rapid mobility, and modular mission planning.<sup>16</sup>

These operational reforms are particularly critical for commanders and their A-staff, who are central to mission planning and execution. For commanders, streamlined operational processes ensure they can make timely, autonomous decisions aligned with strategic intent, especially when communication with higher headquarters is disrupted. A-staffs must be structured and trained to manage resources, synchronize multi-domain operations, and implement decentralized workflows effectively. Clear delineation of authorities within A-staffs will enhance their ability to execute tasks specific to each type of wing mission, ensuring alignment with operational goals while retaining the flexibility to respond to evolving threats.<sup>17</sup>

**In-Place Combat Wings:** A-staffs should emphasize continuity of operations, with authorities structured to prioritize base defense, multi-domain integration, and operational resilience. The focus should be on managing sustained operations in contested environments, including rapid repair of infrastructure and mitigation of cyber and electronic warfare threats. Decentralized decision-making must enable swift responses to local threats without requiring constant higher-level approval.

**Deployable Combat Wings:** A-staff authorities should prioritize agility and rapid adaptability. They must be empowered to oversee logistics for dispersed and austere operations, with significant autonomy to reallocate resources and execute ACE concepts. Coordination with allied and joint forces should be streamlined, enabling the rapid integration of C2 systems and multi-domain assets during deployment.

**Combat Generation Wings:** A-staffs must focus on sustaining high operational tempos through predictive maintenance and adaptive logistics. Their authorities should be aligned with ensuring uninterrupted supply chains and resource allocation, even in contested environments. These A-

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<sup>16</sup> Alex Vershinin, "The Challenge of Dis-Integrating A2/AD Zone: How Emerging Technologies Are Shifting the Balance Back to the Defense," *National Defense University Press: News Article View*, March 31, 2020, <https://ndupress.ndu.edu/Media/News/News-Article-View/Article/2106488/the-challenge-of-dis-integrating-a2ad-zone-how-emerging-technologies-are-shifti/>

<sup>17</sup> Kathleen H. Hicks, "Securing Defense Critical Supply Chains," *Media Defense Agency*, February 2022, 4-23.

staffs must have robust coordination capabilities to ensure alignment with both operational wings and higher command structures, supporting effective force generation.

Streamlined operational processes, combined with well-structured A-staff authorities and training, are essential for countering the complexities of modern warfare. Operational flexibility must remain at the core of the USAF's transformation, empowering commanders and their A-staffs to ensure mission success in future contested environments.<sup>18</sup>

### **Evolving Combat Support for Sustainability in Contested Environments**

To sustain operations in austere and contested environments, the USAF must fundamentally evolve its combat support frameworks, focusing on resilience and adaptability to maintain operational continuity against near-peer adversaries. The necessity of these reforms was highlighted during Operation Inherent Resolve in Syria, where delays in resupplying forward-operating airbases exposed critical gaps in combat support processes, jeopardizing mission success. Adopting distributed logistics packages, inspired by the U.S. Army's Combat Support Brigades, offers a model for ensuring operational continuity even in highly contested environments. These packages must be modular, scalable, and integrated into ACE principles, enabling adaptive resupply and resource distribution.<sup>19</sup>

To implement these changes effectively, it is essential to define clear and robust command relationships between units of action, the service component commander, and the functional air component commanders. Units of action, such as wings or squadrons, require delegated authority to manage immediate combat support needs within their operational zones, allowing for rapid decision-making. The service component commander must ensure that overarching logistical frameworks and policies align with theater-wide objectives, maintaining integration across joint and allied forces. Meanwhile, functional air component commanders must coordinate combat support efforts across multiple operations, ensuring that resources and logistics are prioritized and allocated efficiently to meet dynamic mission demands.<sup>20</sup>

By establishing these command relationships, the USAF can enable seamless coordination between tactical units and strategic leadership, ensuring that distributed combat support systems are resilient, responsive, and aligned with mission objectives. These reforms are vital for maintaining the agility and sustainability required for distributed control, ensuring the success of operations in increasingly hostile and contested regions.

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<sup>18</sup>Tom Banger, "Coming to a Theater Near You: Evolving Air Combat to Counter Anti-access and Area-Denial," *Air & Space Power Journal*, July 2025, 3-9.

<sup>19</sup>Joel Wuthnow, Arthur S. Ding, Philip C. Saunders, "The Players Beyond Borders: Chinese Military Operations in Regional and Global Context, *National Defense University Press, D.C.*, 2012, 183-185.

<sup>20</sup>Ibid.

## Modernizing Command and Control for Multi-Domain Operations

Modernizing C2 systems are the cornerstone of the USAF's transition to distributed control. Effective C2 enables real-time situational awareness, secure communication, and seamless integration across air, space, and cyber domains.<sup>21</sup> The rapid advancements in adversaries' ability to disrupt U.S. C2 networks, particularly by China and Russia, underscore the urgency of modernization. The deployment of the ABMS is essential for providing integrated, real-time data that supports decision-making across all domains. This system must be interoperable with existing platforms and resilient enough to function in dynamic and contested environments.<sup>22</sup>

Additionally, distributed C2 nodes must be established to decentralize decision-making and mitigate risks posed by cyberattacks and electronic warfare. These nodes ensure operational continuity even when primary systems are compromised. Resilient communication networks are critical for enabling joint and coalition operations, which are increasingly vital for multi-domain effectiveness. The challenges faced during the 2021 Afghanistan withdrawal, where outdated C2 systems hindered coordination between air and ground units, demonstrate the operational consequences of failing to modernize.<sup>23</sup> By implementing advanced and distributed C2 capabilities, the USAF can provide commanders with the tools needed to make rapid and informed decisions in complex and contested environments.<sup>24</sup>

## Building a Future-Ready USAF

The USAF is undergoing a historic and comprehensive transformation to sustain its strategic dominance in an increasingly contested global security environment. Anchored in the principles of distributed control and supported by the establishment of In-Place Combat Wings, Deployable Combat Wings, and Combat Generation Wings, this initiative redefines the USAF's organizational structure and strategy to address the demands of modern multi-domain warfare. To ensure success, the USAF must address comprehensive changes across four critical pillars: developing people to generate readiness, advancing capabilities to project power, strengthening partnerships to expand strategic depth, and institutionalizing agility to adapt and innovate. These pillars provide the foundation for building a flexible, resilient, and technologically superior force capable of addressing the challenges posed by near-peer adversaries.

A central component of this transformation is developing people to generate readiness, which emphasizes cultivating a skilled and adaptable workforce. By institutionalizing scenario-based

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<sup>21</sup> "Streamlining C2 Operations for the U.S. Air Force," Booz Allen, <https://www.boozallen.com/insights/defense/c2-command-and-control/modernize-c2-technologies.html>

<sup>22</sup> Jeffrey Valenzia, "ABMS Will Deliver the Decision Advantage," *MacDill Air Force Base: Airman Magazine*, <https://www.macdill.af.mil/News/Features/Display/Article/2647112/valenzia-abms-will-deliver-the-decision-advantage/>

<sup>23</sup> "Instability in Afghanistan," *Global Conflict Tracker*, July 1, 2024, <https://www.cfr.org/global-conflict-tracker/conflict/war-afghanistan>

<sup>24</sup> David L. Norquist, "DOD Command, Control, and Communications (C3) Modernization Strategy," *DOD: News & Publications*, September 2020, <https://dodcio.defense.gov/Portals/0/Documents/DoD-C3-Strategy.pdf>



training and embedding mission command principles, the USAF ensures that commanders and A-Staff personnel can operate autonomously and effectively in degraded, contested environments. This focus on readiness creates a resilient force and capable of executing distributed control with precision and efficiency.

Equally critical is advancing capabilities to project power, which requires deploying advanced technologies and systems to maintain superiority in air, space, and cyber domains. The ABMS, AI-driven ISR platforms, and emerging technologies such as hypersonic weapons ensure that the USAF can counter A2/AD strategies and sustain its operational edge. These innovations are vital for enabling informed and rapid decision-making in complex environments.

The transformation also relies on strengthening partnerships to expand strategic depth, recognizing the importance of alliances, joint operations, and industry collaboration. The USAF enhances its operational reach and deterrence capabilities by fostering interoperability with allied forces and engaging in collaborative training exercises. Partnerships in regions like the Indo-Pacific and NATO are instrumental in countering regional threats and advancing shared security objectives, while industry collaborations accelerate the development of cutting-edge technologies.<sup>25</sup>

Finally, institutionalizing agility to adapt and innovate ensures that the USAF remains responsive to emerging challenges and can maintain its competitive edge. ACE principles, streamlined processes, and a culture of innovation enable the USAF to adapt dynamically to evolving threats.<sup>26</sup>

To support these pillars, the USAF must also address its organizational structures, combat support frameworks, and C2 systems. Modernizing C2 systems, establishing distributed decision-making nodes, and adopting predictive maintenance technologies ensure operational continuity and sustainability in contested environments.<sup>27</sup>

Through this transformation, the USAF positions itself to meet the challenges of great power competition with unparalleled readiness, technological superiority, and strategic depth. By aligning its doctrine, operations, combat support, and C2 systems with the principles of distributed control, the USAF ensures its ability to anticipate, adapt, and prevail in future conflicts.<sup>28</sup> This cohesive and forward-looking approach reaffirms the USAF's role as a decisive force, ready to deter and, if necessary, defeat any adversary, safeguarding national and global security in an era of intensifying competition.

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<sup>25</sup> Regina Karp and Richard W. Maass, "Alliances and Partnerships in a Complex and Challenging Security Environment," *NATO Allied Command Transformation*, 2024, <https://www.act.nato.int/wp-content/uploads/2024/06/NATO-AC24-Compendium.pdf>

<sup>26</sup> Shaun Waterman, "Funding Allied Innovation: To Boost Tech Innovation, NATO Follows Path Blazed by Air Force," *CSIS*, November 7, 2024, <https://www.airandspaceforces.com/tech-innovation-nato-air-force/>

<sup>27</sup> AFC Pamphlet 71-20-9, "Army Futures Command Concept for Command-and-Control 2028: Pursuing Decision Dominance," *US Army Publishing*, 2021, 30-37.

<sup>28</sup> Benjamin Jensen, Christopher Koeltzow, Allen Agnes, and Eric Williams, "Cockpit or Command Center? C2 Options for Collaborative Combat Aircraft," *CSIS*, October 29, 2024, <https://www.csis.org/analysis/cockpit-or-command-center-c2-options-collaborative-combat-aircraft>

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