

HOW THE AIR FORCE'S AGILE ACQUISITION PROCESS IS IMPACTING NGAD



AGILE ACQUISITION IN NGAD

This May, IDGA will host the second Air Dominance Summit at the Paris Hotel in Las Vegas, Nevada. The event will welcome over 200 senior U.S. and international leaders from the fighter aircraft community, all of whom are tirelessly committed to securing air supremacy in an evolving and contested threat landscape.

In order to preview this year's Air Dominance Summit, IDGA is spotlighting a panel that will be discussing the Air Force's acquisition process and its impact on air dominance efforts. During the conversation with three members of the US Air Force, we discussed agile acquisition, what challenges arise in the acquisition process, and much more. If you want to hear more from these speakers and other top minds in the fighter aircraft space, be sure to <u>register for the Air</u> <u>Dominance Summit today</u>.

MEET THE SPEAKERS:



Colonel Timothy M. Helfrich, Senior Materiel Leader (SML), Advanced Aircraft Division, Air Force Life Cycle

Aircraft Division, Air Force Life Cycle Management Center, Air Force Materiel Command, *US Air Force*



US Air Force



Colonel Glendon C. Whelan, Chief Next-Gen Air Dominance System Management Office, *US Air Force*

WHAT IS AGILE ACQUISITION AND HOW DOES IT COMPARE TO TRADITIONAL AND RAPID ACQUISITION?

Colonel Helfrich: Agile acquisition represents a departure from both traditional and rapid acquisition methodologies. To understand what agile acquisition is, I'm going to start by emphasizing what it is not. It's not traditional acquisition, where rigid timelines, extensive processes, and an abundance of documents dictate the proceedings. Even if we tailor traditional acquisitions, the process remains cumbersome, relying on predefined requirements that limit adaptability. Likewise, it's not rapid acquisition prioritizes speed in decision-making, it often neglects considerations for adaptability, maintenance, and the long-term evolution of capabilities.

So, what sets agile acquisition apart? It's a strategic approach that grants flexibility in decision-making based on the best available information. The key is not delaying decisions but setting up an approach to make well-informed decisions precisely when the right information is on the table.

In agile acquisition there are three critical areas that necessitate continuous evaluation and, if required, pivoting. First, there's technology. Staying abreast of relevant technologies and assessing their maturation at the right time is imperative. This could mean adjusting our strategy, even pivoting away from cutting-edge technologies if needed. Second, we consider the evolving threat landscape. Integrating intelligence to assess if our planned capabilities align with the current threat is paramount. Adjustments are made to ensure we stay ahead of evolving threats. Lastly, external factors within the U.S. government, such as funding changes or shifts in priorities, must be factored in. We need flexibility in our strategy to assess funding sufficiency and make necessary adjustments.

To support informed decision-making, we must have a plan to gather the right information. Telemetering the system and building in times to reflect on technology, threat intelligence, and the external environment are crucial aspects of this approach.

In a collaborative spirit, I'm always keen to hear perspectives from our partners like Colonel Whelan and Lt Colonel Cummings. Their insights are invaluable in shaping a strategy that truly meets the needs of the warfighter. Agile acquisition is not a solo endeavor; it's about a collective effort to deliver warwinning technologies on a threat-relevant timeline.

Colonel Whelan: I want to dive deeper into the challenges us career operators, like Lt Colonel Cummings and myself, face when navigating the world of agile acquisition. It's like stepping into new territory for us. We're not accustomed to living in this domain, so understanding everything that Tim (Colonel Helfrich) is working with becomes crucial. Agile acquisitions come with their own set of intricacies, and for someone not exposed to it, learning the nuances and becoming part of the system can be quite challenging.

What I find particularly tough is providing information that is truly usable in agile acquisitions. It's on us, as operators, to grasp enough of it, translating our operational needs effectively to ensure the final product aligns with what we want. The responsibility falls on our shoulders to come up with realistic, achievable requirements that are well-defined and actionable. If we don't give them quality input, the entire agility aspect of the system is compromised. So, being careful about what we provide and tailoring our input to their system is crucial for success.

Lt Colonel Cummings: Something interesting that has changed in our approach is how we started our program without a clear idea of what we wanted. Defining requirements in a rigid document and throwing it over to the program office wouldn't have worked for us.

So, we adopted an approach centered around creating attributes instead. These attributes act as our requirements, but they're not set in stone. We adjust them over time based on what becomes possible as we gain more insights. It's a dynamic way to make decisions throughout the program. One example is in maneuvering capability and range. We initially had a highcapability airframe requirement, but as we delved deeper into the problem, we realized we needed to adjust. By relaxing the requirement and focusing on attributes like structural weight reduction, more fuel capacity, and increased range, we achieved a higher-value outcome.

I'd suggest considering the attributes approach for making continuous decisions throughout a program. It aligns well with the relationship between requirements owners, operators like myself, acquirers, and program offices. It's all about adapting based on evolving information and priorities to ensure the success of the program.





WHAT CHALLENGES ARISE WHEN MANAGING THE ACQUISITION PROCESS OF AN AIR FIGHTER PROGRAM SUCH AS NGAD?

Colonel Whelan: Dealing with the acquisition process for a high-stakes program like NGAD, there's a considerable learning curve, especially for folks in my office. It's about understanding the intricate work the acquisition team is doing, everything they're building, and making sure it aligns with what we, as operators, need. Team effort is key here; we strive for a consistent and solid message when we talk about NGAD.

Now, for a program like ours, living significantly in the acquisitions world, I've had to dive deep into understanding their part of the Air Force. It's not just about throwing out requirements and expecting them to run with it. There's a lot of refinement, clarification, and tweaking as we go along. Striking that balance between making sure everyone's on the same page while maintaining stability in meeting our operational needs is no small feat.

I won't claim to have earned my acquisitions badge, but I've had to get a good grip on what they do. It's about dealing with that steep learning curve to deliver the right message and speak intelligently about what's happening, especially given how acquisition-heavy the process is right now. It's not a matter of whether the program will meet the market; everyone's confident about that. It's more about figuring out the "how" – how are we going to get there, and what challenges do we need to tackle along the way? So much of it is deeply rooted in acquisitions, and navigating these complexities is a crucial part of the game. **Colonel Helfrich:** Similarly, in the Agile Development Office, we recognize the importance of comprehending the operators' problems and their mission set. Colonel Whelan's team, for instance, takes our engineers to explore legacy aircraft ground systems or witness the challenges of stealth restoration firsthand.

This two-way street of learning is crucial. Our partnership allows us to delve into the operators' world, seeing their challenges, and gaining insights into their needs. Lt Colonel Cumming's team supports us in these endeavors, enabling us to learn about the operators' problems and ensuring that the capabilities we deliver address these challenges. It's a dedicated effort from our engineers to understand the issues at hand, paving the way for effective problem-solving and ensuring that the capabilities we provide don't inadvertently cause future problems. This collaborative approach is vital for the success of the NGAD program.

HOW IMPORTANT IS COLLABORATION BETWEEN DEPARTMENTS AND TEAMS IN THE AIR FORCE FOR THE SUCCESS OF AGILE ACQUISITION?

Lt Colonel Cummings: Collaboration between offices and departments within the Air Force is absolutely crucial for the success of Agile acquisition, especially considering the unique challenges faced by operators like myself. As operators, we're essentially transients in the world of acquisitions, temporarily diving into this realm and gaining enough understanding just to head back to our primary roles.

The success we've experienced with the approach in these programs has underscored the importance of closely tying operators and requirements. This collaboration has been instrumental in achieving our objectives, possibly prompting us to rethink how we value the placement of individuals based on their backgrounds. The relationship with our Agile Development Office (Acquisition and Developmental Operations) partners has played a pivotal role in our accomplishments, facilitating successful timeline adherence and even surpassing expectations in some instances. The collaboration ensures a more seamless and effective integration of operator insights into the acquisition process.

Colonel Helfrich: This question actually touches on a crucial point for me. The success of agile acquisition, in my opinion, is not an isolated achievement but rather a means to a more significant end. The true measure of success lies in putting the right capabilities in the hands of the operators. For us, success is not merely about the acquisition process; it's about achieving a common vision and sight picture with all teams involved. This shared understanding is not always prevalent

in acquisition program offices, but it's what allows us to drive towards a common goal even when we have disagreements. The ultimate aim is to equip operators with the capabilities they need to deter and, if necessary, defeat our peer adversaries. This common vision is what aligns our efforts and ensures that, despite any challenges, we are consistently moving in the same direction—towards providing tangible capability to the operators.

WHAT DO YOU HOPE THE AUDIENCE AT AIR DOMINANCE SUMMIT WALKS AWAY FROM YOUR PANEL HAVING LEARNED?

Colonel Whelan: For the audience attending our discussion on Agile acquisition, I hope the operational folks in the room understand the importance of active participation from day one. It's not enough to simply wish for outcomes; you need to be clear about your requirements, ensuring they are achievable, well-defined, and continuously working with the acquisitions team. I want them to realize the significance of their role in providing clear and realistic requirements, understanding that their active involvement is crucial for success. The days of just wishing for something without active participation are behind us; it's a team effort, and everyone plays a vital role.

Colonel Helfrich: I want attendees to walk away from our discussion excited about what can sometimes be perceived as mundane—the requirements and acquisition process. I want them to understand that the authorities and processes we utilize are not exclusive; anyone can execute like this. The key is focusing on delivering capability and getting it into the hands of the operator. I want people to feel empowered to work collaboratively, bring in the right people, and row together to accomplish great things.

Lt Colonel Cummings: Adding to what my colleagues mentioned, I want to emphasize the importance of the relationship with industry. As a favorite senior leader of mine says, "Militaries don't go to war; nations go to war." This implies that our relationship with industry is crucial for enhancing warfighter capability rapidly, as well as making it repeatable, and scalable. I hope the audience recognizes the key takeaway that building strong relationships with industry partners is integral to achieving our objectives. It's not just about us; it's a team sport that extends beyond military boundaries.



May 14-15, 2024 Paris Hotel, Las Vegas, NV United States

For more about the latest efforts for American air superiority, register for the Air Dominance Summit today. This twoday event will build on last year's conversations and bring together over 200 senior U.S. and international leaders from the fighter aircraft community. During this year's conference, we will examine the direction of contemporary and future combat airpower delivery, drawing on 4th/5th and 6th generation fighter programs, including NGAD, FCAS and GCAP, and how the U.S. and her allies can continue to build and maintain air dominance for the future fight.

Find out more in the 2024 agenda.



May 14-15, 2024 Paris Hotel, Las Vegas, NV, **United States**

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Dr. Raymond D. O'Toole, Jr. Acting Director, Operational Test and Evaluation Office of the Secretary of Defense



Major General Donald K. Carpenter Director, Lightning Sustainment Center, F-35 Joint Strike Fighter Program Office **US Air Force**

Air Commodore

James Beck

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Programmes (desig.)

Royal Air Force



Major General Michael T. Rawls Commander, Air Force Operational Test and **Evaluation Center US Air Force**

Colonel Joerg Rauber

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Major General David G. Shoemaker Director of Operations, Air Combat Command, Joint **Base Langley-Eustis US Air Force**



Brigadier General Ryan Messer Director of Plans, Deputy Chief of Staff, Plans and Programs, Headquarters **US Air Force**



Colonel Ryan T. Hayde Commander, 505th Command and Control Wing (CCW) **US Air Force**



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