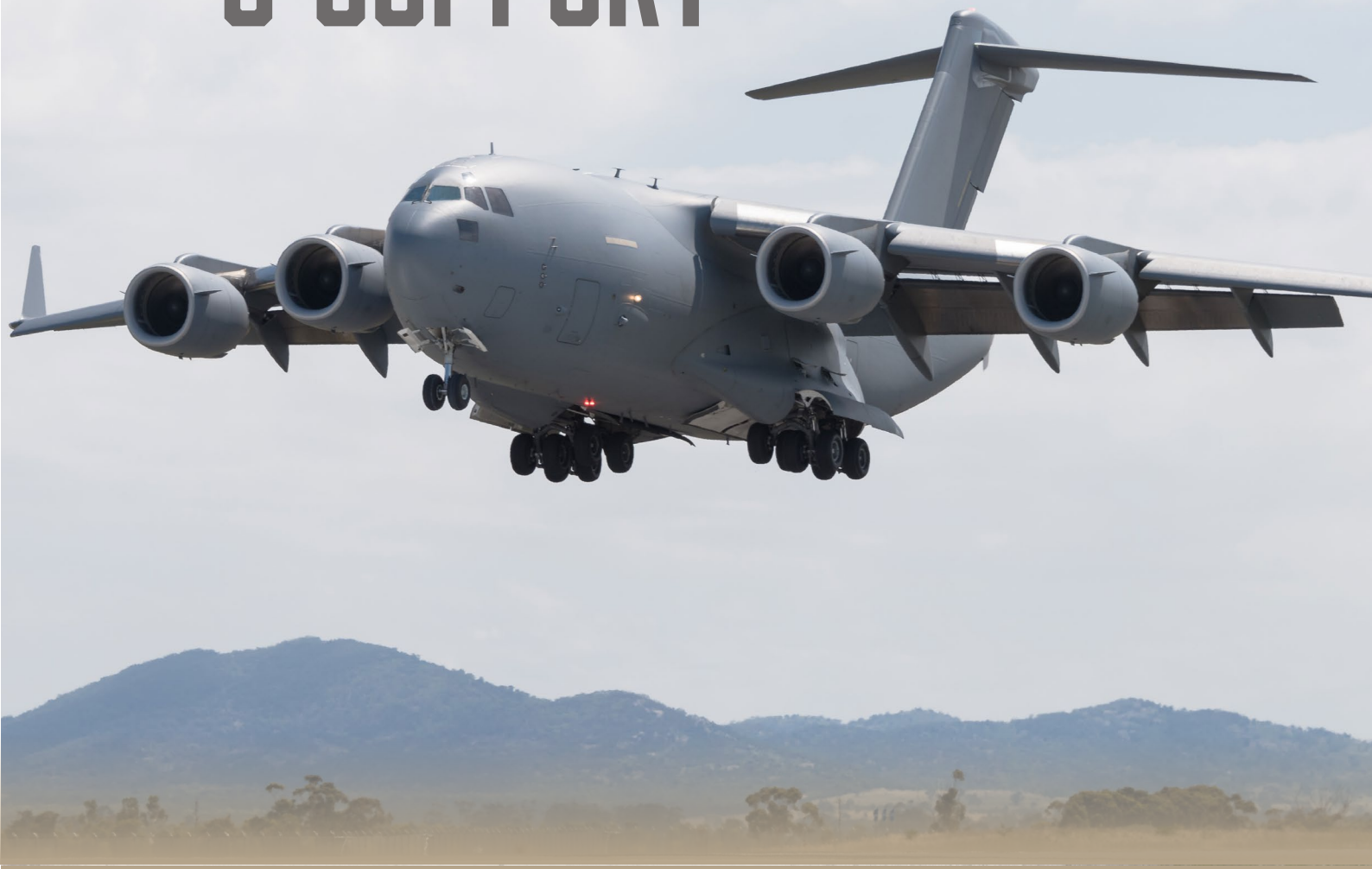
DEFENSE LOGISTICS & SUPPORT



HOW AI IS TRANSFORMING DEFENSE LOGISTICS

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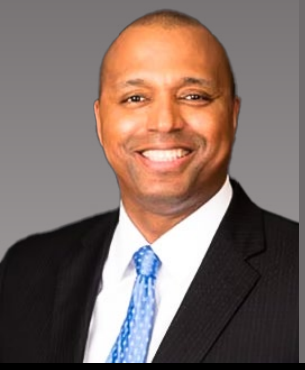

In Conversation with Dr. Todd McAllister, Director of Global Supply Chain & Logistics and Associate Professor of Logistics at the National Defense University, Eisenhower School.

Bio: "Dr. Todd McAllister is currently serving as the Director for Global Supply Chain & Logistics Strategy at National Defense University, Eisenhower School. Todd was a career Marine Corps logistician with over 24 years' experience across the entire logistics enterprise. While on active duty, he served in numerous assignments at the tactical, operational, and strategic level. Todd earned his Doctorate in Consumer Science with an emphasis in Supply Chain Management technologies from Florida State University. Additionally, he has earned military and executive credentials from Harvard Business School, Defense Acquisition University, and Marine Corps University."

Integrating AI into defense logistics can revolutionize supply chain management, optimize resource allocation and improve decision-making. However, amidst the global race to implement AI solutions in supply chain processes, it's critical to develop a well-rounded approach that addresses challenges and concerns that come with applying these tools.

Dr. Todd McAllister is Director of Global Supply Chain & Logistics at the National Defense University (NDU) and is playing a critical role in developing the next generation of leaders who will apply AI skills to their work in defense logistics. On October 30, Dr. McAllister will be at IDGA's Defense Logistics & Support Summit to present on the AI revolution and its impact on defense logistics efficiency. Before the event, Dr. McAllister sat down with IDGA to discuss the challenges of AI implementation, the skills required for future defense logistics leaders, and more.

To hear Dr. McAllister's full presentation, register for the Defense Logistics & Support Summit today. This two-day event from October 29-30 in Arlington, Virginia, will feature discussions that encompass the cutting-edge technology shaping the future of defense logistics and procurement to support the warfighter, including the use of data analytics for prediction & maintenance, unmanned delivery, and more.

HOW WOULD YOU DESCRIBE THE CURRENT ROLE AI IS PLAYING IN DEFENSE LOGISTICS?

We are seeing AI playing an increasingly significant role across the entire ecosystem of defense logistics. It's integral to everything we do. A key aspect to consider is how we implement AI tools compared to how our competitors are advancing their AI capabilities. It's very much a race, and this competitive aspect drives a lot of our strategic thinking.

For instance, AI can help us maintain weapon systems more effectively than our current methods, such as performance-based logistics or contractor logistics support. AI also has the potential to enhance many processes, like proposal writing, by making it faster and more efficient than traditional methods.

Another interesting application is using AI for red teaming, where we simulate enemy actions to improve our strategies. Overall, AI's role in defense logistics is expansive, and how we prioritize its implementation will shape our future capabilities.

WHAT ARE SOME OF THE CHALLENGES OF IMPLEMENTING AI OR PREDICTIVE ANALYTICS SOLUTIONS IN DEFENSE LOGISTICS? HOW DO YOU OVERCOME THOSE CHALLENGES?

Well, right off the bat, one of the biggest challenges is cultural resistance and acceptance. Whether it's AI or any new technology, there's always a degree of hesitation. Decision-makers within organizations play a crucial role here. Different leaders may view the same system in vastly different ways—one might see it as transformational and revolutionary, while another might see it as just a good management tool.

Another significant challenge is infrastructure. For example, with AI applications like driverless trucks, we face the issue of updating or creating new infrastructure. Our transportation infrastructure, established since the Eisenhower era, requires significant changes to support these advancements, which is both a cultural and technical hurdle.

Additionally, there's the matter of data quality. AI systems rely heavily on the data fed into them. Ensuring the reliability of information that AI provides is crucial. AI can be a powerful decision support tool, but it must be based on accurate and reliable data to help commanders and leaders make better and faster decisions than our competitors.

Overcoming these challenges involves separating the hype from reality regarding AI's current and future capabilities. It's about understanding the practical applications and limitations of AI and working on improving data quality, infrastructure, and cultural acceptance to truly leverage AI in defense logistics.

WHAT SKILLS AND TRAINING DO YOU BELIEVE ARE ESSENTIAL FOR THE WORKFORCE TO EFFECTIVELY LEVERAGE AI IN DEFENSE LOGISTICS?

When we talk about leveraging AI in defense logistics, it's crucial to consider both soft and hard skills. First and foremost, understanding harmony within logistics systems is essential. Logistics is almost an art form, involving a complex orchestration of various elements. Every node in the chain has human involvement, with their own ambitions and responsibilities. So, a key soft skill is the ability to maintain harmony and coordination within this complex system.

Critical analysis and problem-solving are also vital. Decision-makers need to evaluate the pros and cons of any system they plan to implement, and without strong critical analysis skills, the implementation of AI can become complicated. Many ERP systems, for example, have failed due to a lack of proper critical analysis during their implementation.

Discipline is another important soft skill. It's about having the discipline to keep biases aside and follow the evidence wherever it leads. This ensures that decisions based on AI recommendations are grounded in reality and not skewed by personal preferences.

As for hard skills, predicting the specific technical skills needed 5 to 10 years from now is challenging due to the rapid evolution of AI. However, there's a noticeable trend towards low or no-code systems, which allow a broader range of people to use AI tools without needing extensive programming knowledge. This trend suggests that the future workforce will need to be adaptable, creative, and disciplined in applying these tools to their specific contexts.

Overall, while technical skills are important, the enduring skills will be those related to creativity, critical thinking, and effective communication. Leaders who can integrate social-emotional intelligence with AI capabilities will be best positioned to harness the full potential of AI in defense logistics.

WHAT ROLE DOES THE NATIONAL DEFENSE UNIVERSITY PLAY IN PREPARING FUTURE LEADERS TO HARNESS THE POTENTIAL OF AI IN LOGISTICS?

At the National Defense University, our goal is to get ahead of the curve. We focus on examining our current policies, research methodologies, and leadership practices to see how they can be adapted to incorporate AI effectively. We're essentially looking at a new form of leadership that complements AI.

We aim to understand what's out there, what's coming, and how we can adopt and transfer these advancements to our future leaders. At NDU, we have not only our military and agency personnel but also participants from the private sector and around 60 to 80 different countries. This diverse group helps us understand how AI will affect our partners and friends worldwide.

WHAT ARE YOU HOPING ATTENDEES OF YOUR SESSION AT THE DEFENSE LOGISTICS SUMMIT WILL WALK AWAY HAVING GAINED?

Right off the bat I want attendees to understand that strategy is still crucial. AI is not going to replace strategy or problem-solving; it will assist in ways we've never seen before, but we still need a clear strategy for implementing AI. Our competitors have a strategy for AI, and we need one too. Strategic thinking and leadership remain essential.

Additionally, we need to focus on critical analysis and forward-thinking. It's vital to consider how we are shaping the education of the next generation—those in K-12 education who will soon join the workforce and take part in the new AI-driven economy.

In essence, I want attendees to understand that while AI brings incredible advancements, the fundamentals of strategic thinking, problem-solving, and critical analysis are more important than ever. We must continue to develop these skills in ourselves and foster them in the next generation to effectively leverage AI in defense logistics.

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DEFENSE LOGISTICS & SUPPORT

October 29-30, 2024 // Sheraton Pentagon City, Arlington, VA

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US Department of Defense

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