DIGITAL DISCOVERY WITHIN THE AIR FORCE ENTERPRISE MODELING, SIMULATION AND ANALYSIS ECOSYSTEM

Sean Litton

Air Force Office of Strategic Development Planning and Experimentation
1864 Fourth St Bldg 15
Wright-Patterson AFB, OH 45433, USA

ABSTRACT

The Air Force has put significant effort into defining, creating, and building a Modeling, Simulation and Analysis (MS&A) ecosystem to support acquisition, training, and operations related to current and future warfighting capabilities for the DoD. The MS&A ecosystem includes the foundational data architecture required to support advanced MS&A capabilities to ensure acquisition tradespace decisions are aligned to the Air Force Digital Campaign, and it is leveraging model-based systems engineering (MBSE) and digital engineering activities to enable an efficient and effective environment for greatly improving the overall acquisition lifecycle. The MBSE and MS&A tools are aligned and integrated into a collaborative environment, quickly becoming the way forward for Air Force capability in a digitally connected domain. The presentation will cover the overall ecosystem and the digital connectivity within and across the environment. Additionally, specific examples of recent work will be included to understand the application and implication of using the MS&A ecosystem to make better decisions. Examples will include the capability development process framework, the inclusion/interface of MSBE activities within the ecosystem, and the use of the Air Force's Advanced Framework for Simulation, Integration, and Modeling (AFSIM).

AUTHOR BIOGRAPHIES

SEAN LITTON serves as the Deputy for Air Force Enterprise Modeling and Simulation for the Strategic Planning, Development and Experimentation (SDPE) division at Wright Patterson Air Force Base (WPAFB). He also serves as the Deputy Director for the Department of the Air Force Chief Modeling and Simulation Officer (CMSO) liaison office at WPAFB. Mr. Litton has worked in the DoD for over 20 years in the areas of test and evaluation, research and engineering, and modeling and simulation. Mr. Litton has served in the capacity of system engineer, test engineer, program manager, and senior engineer. Mr. Litton holds a BS in applied physics, an MS in mechanical engineering, and is continuing to pursue a PhD in Systems Engineering.