

# Congressional Keynote

TUESDAY, 19 AUGUST | 1400 – 1415 | GRANBY BALLROOMS ABCD



## Hon. Bobby Scott

*Congressman, VA-03*

Congressman Robert C. “Bobby” Scott has represented Virginia’s third congressional district in the U.S. House of Representatives since 1993. Prior to his service in Congress, he served in the Virginia House of Delegates from 1978 to 1983 and in the Senate of Virginia from 1983 to 1993.

During his tenure in the Virginia General Assembly, Congressman Scott successfully sponsored laws critical to Virginians in education, employment, health care, social services, economic development, crime prevention and consumer protection. His successes in the state legislature included laws that increased Virginia’s minimum wage, created the Governor’s Employment and Training Council and improved health care benefits for women, infants and children.

Congressman Scott has the distinction of being the first African-American elected to Congress from the Commonwealth of Virginia since Reconstruction and only the second African-American elected to Congress in Virginia’s history. Having a maternal grandfather of Filipino ancestry also gives him the distinction of being the first American with Filipino ancestry to serve as a voting member of Congress.

Congressman Scott currently serves as the Chairman of the Committee on Education and Labor. In this capacity, he is

advancing an agenda that focuses on improving equity in education, freeing students from the burdens of crippling debt, protecting and expanding access to affordable health care, ensuring workers have a safe workplace where they can earn a living wage free from discrimination, and guaranteeing that seniors have a secure and dignified retirement.

From 2015-2018, he served as the ranking member of what was then called the Committee on Education and the Workforce and developed a strong record of working across the aisle to pass critical legislation. In 2015, he was one of the four primary authors of the Every Student Succeeds Act, which reauthorized the Elementary and Secondary Education Act for the first time in 13 years and replaced the No Child Left Behind Act. Additionally, in 2017, he worked to secure passage of legislation to reform and update our nation’s career and technical education system, as well as the juvenile justice system in 2018, which were both signed into law by President Donald Trump. The latter legislation, the Juvenile Justice Reform Act, contained core tenets of Congressman Scott’s Youth Prison Reduction through Opportunities, Mentoring, Intervention, Support, and Education (Youth PROMISE) Act, which he had introduced in every Congress since 2007.

# Industry Keynote

TUESDAY, 19 AUGUST | 0900 – 0930 | GRANBY BALLROOMS ABCD



## Jennifer Riley, Ph.D.

*Director, RDT&E, Design Interactive, LLC*

Dr. Jennifer Riley is the Director of Research, Development, Test, and Evaluation (RDT&E) at Design Interactive, LLC. She brings 25+ years of experience in human factors, cognitive engineering, and human-systems integration,

with a focus on systems that support situation awareness, decision-making, and optimized human performance.

Her work in cognitive skills training, performance augmentation, and human performance assessment has required extensive application of domain and cognitive task analysis, sensory task analysis, functional task analysis, and technology effectiveness evaluation. She has conducted numerous system and process evaluations across domains including power systems, oil and gas, and military command and control to identify key design and training issues impacting affective, behavioral, and cognitive aspects of performance.

In her current role, she serves as a scientific advisor for the division and leads Design Interactive’s four research portfolios: Automated Performance Assessment, Digital Twins, eXtended

Reality (XR) Solutions, and Human Systems Integration. She also leads cross-portfolio research, ensuring enabling technologies can be effectively integrated into internal and external training and operational systems.

Dr. Riley’s recent projects include applying AI and machine learning to auto-generate training content for the Environmental Protection Agency and developing conversational AI tools to train critical decision-making skills for compliance officers. She has led research on the psychological effects of augmented reality interfaces for medical training in Tactical Combat Casualty Care (TC3), designed innovative technologies to extract 2D data from video and images and translate the data into 3D virtual game-based assets, developed an AR-based multimodal mobile application to aid individuals with cognitive and functional limitations in independent navigation, and created novel cognitive skills training for human performance augmentation.

Dr. Riley is an experienced research manager who has led



projects for the U.S. Army Research Laboratory, the U.S. Army Research Institute, the Office of Naval Research, the Department of Homeland Security, the Department of Transportation, the Federal Law Enforcement Training Center, the Office of the Secretary of Defense, and NASA Johnson Space Center. Prior to joining Design Interactive, she was a Principal Research Associate at SA Technologies, Inc., where she managed research and development programs for the Department of Defense and the Department of Homeland Security. Her work there included investigations of automation effects on situation awareness and decision-making, the efficacy of adaptive automation in complex operations, and studies of space crew situation awareness and autonomy.

Beyond her research, Dr. Riley provides consulting services to schools in the Madison County School District, developing and delivering workshops on technology integration in the classroom

and leveraging emerging technologies to support student achievement and increase parent engagement.

Dr. Riley earned graduate degrees in Industrial Engineering and Psychology, as well as an undergraduate degree in Chemical Engineering, from Mississippi State University. She is a past Executive Council Member and past Chair of Internal Affairs for the Human Factors and Ergonomics Society. She is a member of the National Training and Simulation Association. She has a passion for community activism and is a member of Delta Sigma Theta Sorority, Incorporated, a service – based organization that focuses on social action and public service to the community. She resides in Madison, Mississippi, with her husband, Mr. Dominick Riley, a recently retired U.S. Postal Inspector and former attaché to the U.S. Embassy in Kingston, Jamaica. They have three daughters: Marissa, Courtni, and Makenna.

## NTSA Leadership



**VADM Sean S. Buck, USN (Ret.)**

*President, National Training and Simulation Association*

Vice Admiral Sean S. Buck, a native of Indianapolis, Indiana, graduated from the U.S. Naval Academy in 1983 and retired from naval service after 40+ years of commissioned service. His active-duty career culminated as the 63rd Superintendent of the U.S. Naval Academy, our nation's premier leadership development institution where he gained invaluable and in-depth knowledge and experience running an institution of higher education. Having commanded six times in the military, he has tremendous applied-leadership experience at the highest levels of military and government as well as specialization in strategy and policy development and international affairs. On June 3rd, 2024, VADM Buck embarked on his current position as the President of the National Training and Simulation Association (NTSA), a non-profit affiliate of the National Defense Industry Association (NDIA). In his role, he leads a team of 15 full time staff and over 300 volunteers that represent and advocate for its membership of technology companies involved with cutting edge innovation and research in the modeling and simulation space for training systems. VADM Buck's operational naval service was as a Naval Flight Officer in the Maritime Patrol and Reconnaissance naval aviation community accumulating over 4000 flight hours and command-level leadership at the Squadron, Air Wing, and three higher-level organizations culminating with command of the US FOURTH Fleet. Ashore, he had over a decade of service in the Pentagon on multiple tours of duty with the Navy Staff as well as the Joint Chiefs of Staff. During these tours he specialized in strategy and policy development, international affairs, as well as personnel

management. Additionally, he leveraged unique opportunities in his career by earning designation as a member of the Navy's Space Cadre while serving at the National Reconnaissance Office and gained tremendous experience within collegiate sports by serving both as a Division I athlete (Tennis) as well as a member of the NCAA's Division I Board of Directors and a member of the Executive Committee of the American Athletic Conference. VADM Buck's academic credentials include: a Master of Arts in Security Policy Studies from The George Washington University; completed studies at the College of Naval Command and Staff, U.S. Naval War College; the Armed Forces Staff College; a year-long fellowship with the Massachusetts Institute of Technology's Seminar XXI Foreign Politics, International Relations, and the National Interest program; Executive Certificate Programs at both the Harvard Kennedy School and Harvard Graduate School of Education; and a special assignment as a Senior Fellow on the Chief of Naval Operations Strategic Studies Group-an innovation think tank for the Navy, tasked with solving the service's most vexing problem sets. Additionally, he serves on the Advisory Board of Academy Securities and its Geopolitical Intelligence Group, the Advisory Board for Synergist Technology, the Military Advisory Board for First Command Financial Services, as a Trustee to the US Naval Academy's Athletic and Scholarship Program, and as a member of the Leadership Committee for the US National Naval Museum Development Foundation. To date, he has also been engaged as a keynote speaker for the U.S. Department of Agriculture and Babson College's E-Tower Young Entrepreneurs Conference.



## Debbie Langelier, CEM

*Senior Vice President, National Training and Simulation Association*

Debbie Langelier, CEM is the Senior Vice President of the National Training and Simulation Association (NTSA), a nonprofit organization based in Arlington, VA. In her role, she oversees the management of all NTSA staff and operations, including membership, marketing, certification, and events. Langelier has been instrumental in initiating and maintaining a high-level security program for both NTSA and I/ITSEC, the organization's flagship event. Her passion for industry, combined with an unwavering focus on client satisfaction, enables her to lead with innovative solutions and unmatched expertise across every project she manages.

Joining NTSA in 2004, Langelier initially served as the Director of Exhibits & Sponsorships before advancing to the role of Assistant Vice President. In her initial role, she was credited with driving a growth rate of more than 30 percent, managing exhibits, sponsorships, and marketing for six key events, including the Interservice/Industry Training, Simulation, and Education Conference (I/ITSEC), the largest training and simulation event in the world. Her strategic approach to marketing has established NTSA with a strong year-round digital presence, positioning the organization for continued success and growth in the future.

Langelier's event career began in 1989 as a General Service Contractor, where she quickly advanced through the ranks,

gaining invaluable hands-on experience and mastering every facet of event organization. Specializing in comprehensive solutions for conferences, trade shows, corporate events, and private functions, she earned a reputation for excellence and a keen attention to detail. Her work laid the foundation for her expertise in the events industry, where she has become a trusted leader and advisor.

As a Certified Exhibit Manager with over 30 years of experience in the industry, Langelier's background in customer service, creative services, and association sales management gives her a deep understanding of the nonprofit sector and the trade show industry. She believes strongly in the power of connecting people and values the role of events in fostering important relationships and collaborations.

As Senior Vice President at NTSA, Langelier continues to advocate for the use of advanced simulation technologies—such as artificial intelligence, virtual reality, and serious gaming—to support training, education, and analysis within national security markets. NTSA, an affiliate of the National Defense Industrial Association (NDIA), supports these efforts, representing a membership of over 80,000 individuals and nearly 1,600 corporate members, all while ensuring the defense industrial base remains at the forefront of innovation and technological advancement.

## Speakers

### ACCELERATE & INNOVATE PANEL

MONDAY, 18 AUGUST | 1315 – 1415 | GRANBY BALLROOMS ABCD



## VADM Sean Buck, USN (Ret.)

*President, NTSA | Moderator*

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## Bob Kleinhample, USA (Ret.)

*CEO & President, PioneerSim*

Bob Kleinhample is the president of RCK Simulations, LLC, a consulting company supporting the growth of business in the defense modeling, simulation and training (MS&T) community. Kleinhample focuses on establishing and executing strategic growth plans for his clients achieving their respective growth desires in the MS&T market.

Bob draws on his more than 30 years of experience in business development and the design, development and delivery of innovative MS&T capabilities across all the military services. He has authored numerous technical articles on these topics.

Kleinhample started RCK Simulations, LLC in 2023 after a successful 16 year career at SAIC culminating as Vice President of Innovation for Immersive Technologies, as well growing the business for Improbable U.S. Defense and National Security.

Kleinhample is a veteran of the U.S. Army and served for 20 years before retiring and joining SAIC. He served in numerous positions and roles in the 7th Infantry Division, 17th Field Artillery Brigade, the 25th Infantry Division, and the U.S. Army Futures Center. Kleinhample's military career culminated in the establishment of the Army's first persistently available distributed simulation experimentation environment, called the Battle Lab Collaborative Simulation Environment (BLCSE).

Bob is an active member of the training and simulation community and is currently the Director of the National Training and



Simulation Association (NTSA) Next Big Thing Committee and the NTSA Top Under 40 Committee. Bob was also the chair of the 2020 Interservice/Industry, Training, Simulation and Education Conference (I/ITSEC).

Kleinhample earned his bachelor's degree in engineering management from the U.S. Military Academy and his Master of Engineering in operations research from Old Dominion University.



### **Jay Pitman**

*Vice President and General Manager; Training, Logistics and Simulation, Lockheed Martin Rotary and Mission Systems*

Jay Pitman is the vice president and general manager for Lockheed Martin's Training, Logistics and Simulation line of business. In this capacity, he is responsible for the execution and strategic growth of Lockheed Martin's mission readiness and sustainment programs with more than 4,500 employees around the globe.

Most recently, Pitman served as vice president and general manager of Air Dominance and Strike Weapons for Lockheed Martin Missiles and Fire Control. He was responsible for leading the line of business team to drive efficiencies and manage overall operations through strategy, execution, profit and loss, as well as growth for a broad portfolio of programs in air dominance weapons, hypersonic strike and strike systems/cruise missiles franchises.

Previously, Pitman served as vice president, Lower Tier Integrated Air and Missile Defense (IAMD), in which he was responsible for a variety of short- and medium-range IAMD solutions to defend against incoming threats to include ground-based air defense. Prior to that role, Pitman served as vice president of PAC-3 programs. In this capacity, he was responsible for establishing the strategy, direction and execution oversight for the full product life cycle of the global PAC-3 family of missiles. This included the PAC-3 Missile Segment Enhancement – the world's most advanced air defense missile with more than 15 partner nations.

Throughout his nearly 25 years with Lockheed Martin, Pitman has held key positions in program management, mergers and acquisitions, business integration management, and business strategy and development.

Pitman graduated from State University of New York at Oswego with a bachelor's degree in education and a master's of business administration. He is also a graduate of the Lockheed Martin Executive Assessment and Development (LEAD) program.



### **Brian Vogt**

*M&S Section Head, NATO HQ SACT*

Brian Vogt is the M&S Section Head at NATO Allied Command for Transformation and the NATO Next Generation M&S Programme Director. He has over 20 years of modeling and simulation experience. He has served as the capability developer for the US Army's Synthetic Environment Core program, created and led the Early Synthetic Prototyping effort for the US Army's Capabilities and Integration Center, and supported NATO Allied Command Transformation operational experimentation and modeling and simulation program. He holds a Master of Science degree in Modeling, Virtual Environments, and Simulation from the Naval Postgraduate School.

## **WARGAMING AT THE CROSSROADS PANEL**

**MONDAY, 18 AUGUST | 1415 – 1545 | GRANBY BALLROOMS ABCD**



### **Luke DeVore**

*Managing Partner, Voltron Group | Moderator*

Luke DeVore is the Managing Partner of The Voltron Group, a technology and business development consultancy founded in 2024. Luke began his career as a Marine Corps artillery officer and was first introduced to modeling and simulation while deployed on the 26th Marine Expeditionary Unit (26 MEU) using Deployable Virtual Training Environment (DVTE) and then as a civilian supporting the DVTE program at the II MEF Simulation Center aboard Camp Lejeune, NC. After his time there, Luke worked as the Senior Vice President of Business Development at a small business where he became familiar with the various RDT&E funding mechanisms including OTAs, BAAs, SBIRs as well as traditional contracts across the DoD and Federal market.



### **Sebastian Bae**

*Senior Game Designer and Research Scientist, Center for Naval Analysis*

Sebastian J. Bae, a Senior Game Designer at the Center for Naval Analyses (CNA), works in wargaming, allies & partners, emerging technologies, and the future of warfare. He also serves as an adjunct assistant professor and teaches a graduate course on game design at the Center for Security Studies at Georgetown University. He is also the faculty advisor to the Georgetown University Wargaming Society, the co-chair of the Military Operations

Research Society Wargaming Community of Practice, and a former Fellow at the Brute Krulak Center for Innovation and Creativity. Previously, he served six years in the Marine Corps infantry, leaving as a sergeant. He deployed to Iraq in 2009. He has also designed Littoral Commander: Indo-Pacific, an educational wargame exploring future tactical warfare in the Indo-Pacific region, commercially published by the Dietz Foundation.



### **Chad Bates, Ph.D.**

*Wargaming Solution Architect, BAE Systems, Inc.*

Dr. Chad Bates has spent the last 20 years focusing on wargaming and modeling & simulation issues within the US Army and the DoD. While working at US Army War College and US Army Cyber Command, he has spent the last 8 years focusing on strategic and cyber wargaming and M&S solutions. After retiring from a 30-year military career in the US Army, he is now the Wargaming Solutions Architect for BAE Systems and an Adjunct Professor at George Mason University.



### **Stephen Nelson**

*Simulation Officer, U.S. Army Futures and Concepts Center*

Stephen Nelson has served in the United States Army at both tactical and strategic levels. Recently, he worked at NATO's Supreme Allied Command Transformation as the Program Director for NATO's Next Generation Modeling and Simulation (M&S). He is currently employed at the U.S. Army Futures and Concepts Center, where he focuses on gathering requirements to inform the Army's Next Generation Constructive and writing the Army's Modeling and Simulation Strategy. His professional and personal interest in wargaming is the subject of his NATO Professional

Doctorate. Steve has completed three combat deployments to Afghanistan. He is collaborating with several stakeholders to establish an organisation that will address force design, national security matters, and strategic foresight, with plans for its launch in 2026.



### **Capt Nathan Tidwell, USMC**

*Modeling & Simulation Officer, Brute Krulak Center of Innovation & Future Warfare, Marine Corps University (MCU)*

Capt Nathan Tidwell began his Marine Corps career serving as a platoon commander at 3d Light Armored Reconnaissance Battalion. After his second deployment to the Pacific, Capt Tidwell received orders to Naval Postgraduate School (NPS) to pursue an MS in Modeling, Virtual Environments and Simulations (MOVES). Capt Tidwell's research at NPS focused on artificial intelligence for wargaming, specifically leveraging reinforcement

learning and multi-model approaches to develop combat simulation agents. In addition to his MS in MOVES, Capt Tidwell holds a BS in Systems Engineering from the United States Naval Academy.

Capt Tidwell currently serves as a Modeling & Simulation Officer for the Brute Krulak Center of Innovation & Future Warfare at Marine Corps University (MCU), supervising the development and employment of modeling and simulation technology in support of educational wargaming and working with government and commercial digital wargame developers on wargame requirements specific to MCU needs.

## **THE SIMULATION CENTURY PANEL**

**TUESDAY, 19 AUGUST | 0930 – 1100 | GRANBY BALLROOMS ABCD**



### **Richard Boyd**

*CEO, UltiSim, Inc.*

Richard is the CEO of UltiSim Inc. He has worked with machine learning since 2009 and was founder and CEO of a machine learning company called Tanjo Inc from 2014 until 2023, when it was acquired by UltiSim. Over the last thirty years Richard has led or helped create some of the most innovative game technology companies in the industry. He has served as a game technology consultant for a wide variety of industries including energy, healthcare, education and motion pictures. At Aerospace giant Lockheed Martin he created and led a group of

innovative engineers and designers across all mission areas called Virtual World Labs. Richard joined Lockheed Martin in 2007 with the acquisition of 3Dsolve, a North Carolina based computer game technology firm where he was founder and CEO. Richard served for a decade on the executive management team of Virtus Corporation where he helped create several pioneering computer gaming companies including Red Storm Entertainment, with author Tom Clancy; iRock Entertainment with Ozzy Osbourne; and Timeline Computer Entertainment, with author Michael Crichton.

Richard has moderated the Simulation Century Event at MODSIM World for 14 years.





## Adam Leslie

*Director, ASPI USA; President, Real Spy Comics*

Adam Leslie is the Director of the Australian Strategic Policy Institute Washington DC office. Adam has more than 30 years' experience spanning national security, defence and diplomacy and has expertise in strategy, national security innovation, intelligence, technology and social entrepreneurship.



## Robin Lobb

*Vice President, Membership, International Association for Intelligence Education (IAFIE)*

Robin Lobb is president of Zeroes & Ones Inc (Zoinc). He has served on numerous boards of directors and lectured at several universities and colleges over 30 years, including teaching in the research analyst and big data graduate programs at Georgian College. He currently serves as chair of the program advisory committees for the graduate programs in big data, AI and mobile app development. Work includes consulting on the Urban Flashpoints project at the CIA and lectures on the future of intelligence as it relates to big data, AI and quantum computing. He has been working on membership development at IAFIE since 2022.

## TEACHING A NEW DOG OLD TRICKS PANEL

TUESDAY, 19 AUGUST | 1530 – 1700 | GRANBY BALLROOMS ABCD



## Benjmain Bell, Ph.D.

*VP Advanced Capabilities, Potawatomi Business Development Corporation, Federal Group | Moderator*

Benjamin Bell is the VP, Advanced Capabilities for the Potawatomi Business Development Corporation - Federal Group, a Tribal 8(a) corporation with 14 subsidiaries and 43 Joint Ventures. He leads initiatives to help Government and industry partners create and apply emerging techniques in AI to improve training, assessment, and readiness. He has led multiple companies and launched two startups in the defense sector. His research has focused on AI-enabled performance assessment, and automated content and training creation. Dr. Bell holds a Ph.D. in Artificial Intelligence, Masters degrees in Human Factors and Computer Science, and is a graduate of the University of Pennsylvania.



## Jamieson Gump, Ph.D.

*Senior Technical Advisor for Modeling, Simulation and Analysis (EPA), Department of the Air Force (CMSO, AFRL & PEO C3BM)*

Dr. Jim Gump, is the Senior Technical Advisor (STA) for Enterprise Modeling, Simulation and Analysis (MS&A) at the Air Force Research Laboratory (AFRL). He is charged with advancing the initial capabilities of the AFRL's MS&A capabilities to drive multi-domain analysis in support of the development of transformational warfighting capabilities. The STA also serves as a senior advisor to Air and Space Force-wide, multi-disciplinary teams to develop and deliver enterprise-wide solutions for complex MS&A challenges via his support to the CMSO.

Prior to his current assignment he supported both JHU APL and the MITRE Corporation where he worked in the National Leadership Command Capability (NLCC) area. The NLCC includes senior leader and Nuclear C3 capabilities fully integrated to support our national leaders. In addition, extensive development work on the nation's premier NC3 simulation environment.

Prior to these assignments he co-founded Paradigm Technologies Inc, a successful engineering firm, considered an industry leader in modeling and simulation and C4ISR systems. While managing PTI for 20 years supported the full range of Air Force and Joint M&S programs. He gained extensive DoD acquisition expertise while supporting a wide range of Air Force systems from ACAT I to III programs. He is also an experienced military intelligence officer having served nearly 20 years in the army reserves.

Dr. Gump has a recent (2017) PhD in Systems Engineering from GWU, MS in Engineering Mgmt and a BS in Electrical engineering.



## James Pharmer, Ph.D.

*Chief Scientist, Naval Air Warfare Center Training Systems Division*

Dr. Jim Pharmer is the Chief Scientist for the Training Systems Research, Development Test and Evaluation Department (GT5E) and the Head of the Experimental and Applied Human Performance and Training Research and Development Division (GT55) at the NAWCTSD in Orlando, Florida. Over his 20+ years at NAWCTSD, his work has focused on delivering effective training products and human performance solutions to the fleet. He has held roles as a supervisor, a laboratory lead, and as principal investigator for multiple large training and human performance science

and technology programs. Dr. Pharmer's research interests have centered on developing human systems integration (HSI) processes and tools for factoring capabilities and limitations of human operators, maintainers, and support personnel into the systems engineering process. During his career, he has supported surface ship and aviation acquisition programs as a key member on HSI Integrated Product Teams and leads a number of HSI working groups for developing consistent Navy and Joint HSI policy and guidance. Jim holds a MS in Engineering Psychology from Florida Institute of Technology and a PhD in Applied Experimental Human Factors from University of Central Florida.

## FUTURE VISIONS IN MEDICAL SIMULATION PANEL

WEDNESDAY, 20 AUGUST | 0915 – 1015 | GRANBY BALLROOMS ABCD



### Frank Karluk

*Account Executive, DLH Corporation | Moderator*

Frank serves as DLH's Medical Simulation Account Executive focusing on building the DLH portfolio in the simulation and training practices. Frank has over 30 years' experience in the medical field in multiple areas to include advancing patient care on the battlefield, direct patient care in the hospital setting, instruction, and curriculum development. Twenty-one of these years were in service to the United States Army with various assignments that included combat operations in the Helmand Province of Afghanistan. During this deployment he served as the Non-Commissioned Officer in Charge of an Army MEDEVAC detachment that was tasked to directly support the Special Operations Command during high-risk kinetic operations involving active warfare, including lethal force. He and his unit were the first Army MEDEVAC unit to conduct in-flight blood resuscitation and he is credited with being the first flight paramedic to perform an emergency escharotomy in flight under the remote direction of a trauma surgeon. He maintains active licensure and certifications and is currently a faculty member at The George Washington University. Mr. Karluk has been invited to speak at international conferences and has been a spokesperson within the Medical/Chemical, Biological, Radiological, Nuclear, and high yield Explosives (CBRNE) community before the Joint Chiefs, and other high level governmental leadership post 9/11. He holds a master's degree in emergency and disaster management and graduated with high honors. He continues to share his experiences in the development of future medical simulation and training efforts and has been cited in multiple efforts that have expanded the abilities of a multidisciplinary practitioner community that includes medical providers both inside and outside the military. Most recently he managed the over \$190M efforts within the Defense Health Agency, Medical Simulation portfolio, and designed and implemented curriculum within the U.S. Department of State, Special Agent training that was based on recent lessons learned during worldwide deployments into austere locations of conflict.



### JoAnn Archer

*Deputy Director RDT&E, Design Interactive, LLC*

JoAnn is the Deputy Director of Research, Development, Test, and Evaluation, and the eXtended Reality (XR) Solutions Portfolio Manager at Design Interactive. With over 17 years of experience in systems engineering and program management within high-tech environments, she brings a strategic and visionary approach to innovation.

JoAnn has successfully led numerous Department of Defense (DoD), government, and commercially funded projects, ensuring the successful development and deployment of cutting-edge XR and AI-driven immersive training, operational, and sustainment solutions. Her work is grounded in applied research and data analytics, driving the creation of adaptive technologies that remain at the forefront of innovation. JoAnn's expertise in systems engineering ensures that immersive training tools, operational job aids, performance measurement systems, and decision-support solutions are meticulously designed, developed, tested, and transitioned to meet the specific needs of users, tasks, and operational contexts.

A notable achievement includes leading a cross-functional team in the development, testing, and evaluation of AUGMED® Mobile—an adaptive and accessible XR-based TCCC training tool available as a mobile application. This solution is currently being transitioned across the DoD and is also available in the commercial sector.

Prior to joining Design Interactive, JoAnn served as a lead engineer at NASA, where she held various roles in operations and requirements development and management across multiple programs.

An engineer by training and an educator at heart, JoAnn is passionate about delivering optimal human performance solutions across the learn–practice–execute continuum, providing a competitive edge for end users.





## Cheryl Lockhart

*Senior Military Advisor, SimX VR*

Cheryl Lockhart, Col, USAF (Ret.), serves as Senior Military Advisor for SimX, Inc. After a distinguished 32-year career, Cheryl retired in 2023, having held key positions in Aeromedical Evacuation (AE), Critical Care Air Transport (CCATT), ICU, and Trauma Care both in the U.S. and in deployed environments. She earned her Doctor of Nursing Practice (DNP) from SUNY Buffalo and holds multiple certifications in the nursing, simulation and immersive technology fields. A passionate advocate for Virtual Reality in education, Cheryl frequently presents on its integration into military medical training. Her final role before retirement was Chief Nurse Executive for the 6th Medical Group at MacDill Air Force Base, Florida.



## Madison Quinn

*Research Lead, Engineering & Computer Simulations, Inc.*

Madison is the Research Lead at Engineering & Computer Simulations, Inc. in Orlando, FL. She has supported all applied research projects in support of military training research for the past five years. Ms. Quinn is responsible for conducting scientific literature reviews, designing usability study survey instruments, administering surveys, conducting interviews, and supporting data collections through quantitative and qualitative analyses. Most recently, Ms. Quinn has supported research on combat medicine training prototypes and assessments and has experience with immersive and innovative technologies used for training, such as Virtual Reality (VR), Augmented Reality (AR), Mixed Reality (MR), haptic gloves, and haptic-based weapons. Ms. Quinn holds a Bachelor of Arts in Psychology with a minor in Theatre from Southern Illinois University Edwardsville and a Master of Science in Industrial / Organizational Psychology from Bellevue University. Currently, she is pursuing a Doctor of Philosophy in General Psychology with an emphasis on Industrial and Organizational Psychology from Grand Canyon University.



## CMSgt Adam Reading, USAF (Ret.)

*Director of Simulation Sales, North American Rescue*

Adam is a seasoned leader in emergency medical services, tactical training, and military healthcare education, with over three decades of experience spanning the U.S. Navy, Army Reserve, and Air Force. Currently serving as Director of Simulation Sales at North American Rescue, he has played a pivotal role in advancing high-fidelity simulation technologies for military medical training. His career includes key leadership roles at CAE Healthcare and Innovative Tactical Training Solutions, where he specialized in military clinical education and business development. A licensed paramedic and certified instructor in multiple trauma and hazardous materials disciplines, Adam has also contributed to international conferences and publications, sharing his expertise in combat casualty care and simulation-based training.

Throughout his distinguished military and civilian career, Adam has demonstrated a deep commitment to improving emergency response and medical readiness. He has instructed a wide array of military medical courses and served in critical roles such as Superintendent of the 932d Medical Squadron at Scott AFB and the 182d Airlift Wing Medical Group. His accolades include the Meritorious Service Medal and recognition as Senior Non-Commissioned Officer of the Year. Beyond his operational achievements, Adam has been an active contributor to professional organizations and editorial boards, including the Journal of Special Operations Medicine. His dedication to excellence in training, leadership, and innovation continues to shape the future of tactical medicine and emergency management.

## PEERING OVER THE HORIZON PANEL

WEDNESDAY, 20 AUGUST | 1430 – 1600 | GRANBY BALLROOMS ABCD



## Claire Hughes

*Portfolio Manager, Design Interactive, LLC | Moderator*

Senior Research Associate and the Human-Systems Integration Portfolio Manager at Design Interactive, LLC, with over a decade of experience in Human Factors Engineering and Human-Systems Integration. Claire specializes in project management, end-user evaluations, and research analysis for training and operational systems, and has successfully led cross-functional teams through the full lifecycle of research, development, test, and evaluation initiatives, resulting in user-centered solutions that empower end-users. Claire manages multiple research studies exploring the impact of augmented and extended reality (AR/XR) on the human sensory system and drives the design and delivery of innovative technologies across the DoD and VA. Her expertise extends to cognitive ergonomics, usability testing, and instructional design, enabling her to optimize learning processes and enhance user experiences through evidence-based principles and learner

feedback. In addition to her technical expertise, Claire is actively involved in advancing the defense industry through her support of Women in Defense. She is the conference chair for MODSIM World 2025 and a member of the I/ITSEC program committee. Her ability to align strategic objectives with operational execution and deliver impactful, scalable solutions underscores her commitment to innovation and excellence in the defense and technology sectors.



### **Chris Binion**

*Director of Digital Innovation, Thermo Fisher Scientific*

Chris Binion is the Director of Digital Innovation at Thermo Fisher Scientific, a global leader in serving science with over 125,000 employees supporting customers in research, healthcare, biotech, and applied markets. In his role, Chris helps drive enterprise-wide transformation by identifying and scaling digital innovation that makes science faster, more connected, and more impactful.

Before his work in the life sciences industry, Chris served with the International Train and Assist Mission – Police (ITAM-Police), where he learned how to apply operational excellence and digital tools to accelerate mission outcomes and achieve ambitious goals under pressure. That experience laid the foundation for his 13-year career at Thermo Fisher Scientific, where he has used those same principles to optimize processes, solve problems at scale, and build high-performing teams that deliver measurable results. Today, Chris focuses on digital strategy and scaling the systems, tools, and approaches he’s developed over the years to drive innovation across complex global organizations.



### **Sean Danowski**

*CEO, MergePlot*

Sean is the President of Merge Plot, a Veteran-owned small business specializing in human-machine teaming, digital twins, and robotics. He is a former U.S. Navy F/A-18 pilot and TOPGUN instructor with 2,700 hours of tactical jet aircraft time and two combat deployments. Previously, he led Fraser Optics, a manufacturer of precision electro-optic devices for the US Department of Defense, and owned businesses that manufactured building materials. Sean is an active contract Gulfstream G-550 pilot. He received an MBA from the Wharton School at the University of Pennsylvania, and a BA in Economics and Political Science from the University of Michigan.



### **Joseph Marr, Ph.D.**

*Lead Data Scientist, Newport News Shipbuilding*

Joseph Marr is currently the Chief Data Scientist at Newport News Shipbuilding where he also leads the data science team. At Newport News Shipbuilding, his team develops predictive models and artificial intelligence systems to optimize supply chain operations, material flow, manufacturing and assembly operations, as well as providing insights into quality initiatives and safety analysis.

He has a Ph.D. in Chemical Engineering from MIT and a Ph.D. in Computational Science and Informatics from George Mason University. In addition to data science, his research interests include artificial intelligence, large language models, mathematical optimization, numerical analysis, novel algorithmic approaches to hard problems, and other topics in applied mathematics.



### **Chris Mulberry**

*Senior Solutions Architect, Industry Solutions, Unity Technologies*

Chris Mulberry is a Senior Solutions Architect on the Industry Solutions team at Unity Technologies. He helps to research, implement, and deliver connected workforce solutions and works closely with users to learn how Unity services can help resolve production bottlenecks across asset design, site operations, and maintenance training applications. Chris’s background includes 5 years of extensive field application engineering experience, with notable solution work for global enterprises such as Tesla, Honda, Lockheed Martin, Boeing, UPS, ESRI,

Rockwell Automation, and others.



# Conference Leadership



## Claire Hughes | Conference Chair

*Portfolio Manager, Design Interactive, LLC*

Senior Research Associate and the Human-Systems Integration Portfolio Manager at Design Interactive, LLC, with over a decade of experience in Human Factors Engineering and Human-Systems Integration. Claire specializes in project management, end-user evaluations, and research analysis for training and operational systems, and has successfully led cross-functional teams through the full lifecycle of research, development, test, and evaluation initiatives, resulting in user-centered solutions that empower end-users. Claire manages multiple research studies exploring the impact of augmented and extended reality (AR/XR) on the human sensory system and drives the design and delivery of innovative technologies across the DoD and VA. Her expertise extends to cognitive ergonomics, usability testing, and instructional design, enabling her to optimize learning processes and enhance user experiences through evidence-based principles and learner feedback. In addition to her technical expertise, Claire is actively involved in advancing the defense industry through her support of Women in Defense. She is the conference chair for MODSIM World 2025 and a member of the I/ITSEC program committee. Her ability to align strategic objectives with operational execution and deliver impactful, scalable solutions underscores her commitment to innovation and excellence in the defense and technology sectors.



## Vance Souders | Deputy Conference Chair

*Founder, Plas.md; Senior Manager, Digital Innovation, Thermo Fisher Scientific*

Vance Souders has over 23 years of software engineering, design, and leadership experience focused on creating cutting-edge immersive experiences. He has played a critical role or spearheaded the development of over 40 innovative projects, driving value across various verticals, including health care, defense, and education. He has led diverse teams composed of on-site and remote engineers, artists, designers, clinicians, and scientists across multiple time zones.



## Angelica Jasper, Ph.D. | Program Chair

*Senior User Experience Researcher, John Deere*

Dr. Angelica Jasper is a Senior User Experience Researcher at John Deere within the Intelligent Solutions Group. She operates at the forefront of intuitive usability and cutting-edge product innovation, driving solutions that enhance human performance across automated, autonomous, and XR technologies. As the lead UX researcher for all Guidance products at John Deere, she provides strategic, evidence-based leadership that shapes the future of automation and autonomy in precision agriculture. Previously, Dr. Jasper served as the Human Engineering Technical Lead for Virtual and Augmented Reality at Boeing Defense, Space & Security, with her past work including the development of XR tools for the Air Force, Space Force, and Navy. She remains active in academic and professional communities publishing and reviewing research, with a specialization in cybersickness within simulated environments. Dr. Jasper earned her Ph.D. in Human-Computer Interaction (Industrial and Manufacturing Systems Engineering) at Iowa State University.



## Connor Parsey | Deputy Program Chair

*Science and Technology Manager, U.S. Army DEVCOM SC STTC*

Connor Parsey is a Science and Technology Manager for the U.S. Army DEVCOM at the Simulation and Training Technology Center (STTC) in Orlando. Mr. Parsey manages medical simulation research and development projects aimed to advance simulation technology, increase training effectiveness, improve haptic fidelity, and ultimately impact the warfighter. His research interests include dynamic wounds, human tissue characterization, synthetic tissue surrogates, virtual and augmented reality simulations, 3D printing, bioprinting, and medical haptics. He has a BS in Mechanical Engineering and a MS in Mechanical Engineering from the University of Central Florida.

# Track Chair

## DEFENSE



### Frank Karluk | Chair

*Account Executive, DLH Corporation*

Frank serves as DLH's Medical Simulation Account Executive focusing on building the DLH portfolio in the simulation and training practices. Frank has over 30 years' experience in the medical field in multiple areas to include advancing patient care on the battlefield, direct patient care in the hospital setting, instruction, and curriculum development. Twenty-one of these years were in service to the United States Army with various assignments that included combat operations in the Helmand Province of Afghanistan. During this deployment he served as the Non-Commissioned

Officer in Charge of an Army MEDEVAC detachment that was tasked to directly support the Special Operations Command during high-risk kinetic operations involving active warfare, including lethal force. He and his unit were the first Army MEDEVAC unit to conduct in-flight blood resuscitation and he is credited with being the first flight paramedic to perform an emergency escharotomy in flight under the remote direction of a trauma surgeon. He maintains active licensure and certifications and is currently a faculty member at The George Washington University. Mr. Karluk has been invited to speak at international conferences and has been a spokesperson within the Medical/Chemical, Biological, Radiological, Nuclear, and high yield Explosives (CBRNE) community before the Joint Chiefs, and other high level governmental leadership post 9/11. He holds a master's degree in emergency and disaster management and graduated with high honors. He continues to share his experiences in the development of future medical simulation and training efforts and has been cited in multiple efforts that have expanded the abilities of a multidisciplinary practitioner community that includes medical providers both inside and outside the military. Most recently he managed the over \$190M efforts within the Defense Health Agency, Medical Simulation portfolio, and designed and implemented curriculum within the U.S. Department of State, Special Agent training that was based on recent lessons learned during worldwide deployments into austere locations of conflict.



### Radhakishan Shetty | Deputy Chair

*Principal Software Developer, Janus Research*

Principal Software Developer with 20 years of software engineering experience and interests in Augmented Reality, Machine Learning and Educational systems. Currently the Principal Investigator for the NIST PSIAP-2022 Wildland Urban Interface Mitigation Framework grant. Technical Lead on the Strikewerx Advanced Training Concepts Challenge B-52 Communications Trainer.

## INDUSTRY



### Matthew Pittard | Chair

*Systems Engineer, BAE Systems, Inc.*

As a result of the Modeling and Simulation Congressional Caucus Leadership Summit of 2025, NTSA launched a working group focused on Artificial Intelligence (AI). The modeling, simulation and training community has been integrating AI into the technologies that support national security, infrastructure, healthcare and education. It is critical that the application of AI supports rather than hinders national progress and security. Our Congressional representatives and our Caucus Members continue to seek the most appropriate application of legislation to

encourage innovation while also establishing guardrails to protect our nation from the inappropriate use of AI and related technologies. This working group is focused on educating our lawmakers on these technologies, and on proposing the most effective ways that Congress can support the integration and application of these technologies. This group continues to provide white papers and educational opportunities on Capitol Hill to educate Members on proposed areas for legislative action.



### Andrew Hollis | Deputy Chair

*Special Projects Lead, Emerging Technology Support, LLC*

Andrew Hollis has been involved in the evolution of training over the last almost two decades from the ground up. Starting as a graphic artist on an award-winning training supplement for the aging boats in the United States Coast Guard, Andrew is currently the lead developer of an immersive VR sim. During his career, he has worn nearly every hat that can be worn when it comes to training development, as well as being a role player for live training and as an instructor on the podium. He holds an MFA in Game Development and has earned the call sign of 'Wizard' from his US Marine colleagues as the man behind the curtain crafting and operating their immersive sim. He mostly chooses

to use Military Grade Dungeon Master as his title after being introduced by a Colonel to a General with said title. He is passionate about harnessing the learning experiences that can be crafted by gamification, and he works to ensure that the fun factor goes where needed. This is Andrew's first time as a committee member for a conference, and he is looking forward to taking the next big step with everyone.





### **Jodie Mangor | Deputy Chair**

*Director of Grants and Research, SimX, Inc.*

Jodie Mangor is the Director of Grants and Research at SimX, Inc., where she leads scientific grant development for emerging technology initiatives and platform innovation. A seasoned proposal strategist with a background in biomedical sciences and federal funding, she collaborates closely with academic partners and subject matter experts to advance high-impact research in the field of medical simulation. Her prior roles span strategic partnerships and proposal leadership across multiple organizations, contributing to over \$800M in awarded funding.

## **TRAINING & EDUCATION**



### **Madison Quinn | Chair**

*Research Lead, Engineering & Computer Simulations, Inc.*

Madison is the Research Lead at Engineering & Computer Simulations, Inc. in Orlando, FL. She has supported all applied research projects in support of military training research for the past five years. Ms. Quinn is responsible for conducting scientific literature reviews, designing usability study survey instruments, administering surveys, conducting interviews, and supporting data collections through quantitative and qualitative analyses. Most recently, Ms. Quinn has supported research on combat medicine training prototypes and assessments and has experience with immersive and innovative technologies used for training, such as Virtual Reality (VR), Augmented Reality (AR), Mixed Reality (MR), haptic gloves, and haptic-based weapons. Ms. Quinn holds a Bachelor of Arts in Psychology with a minor in Theatre from Southern Illinois University Edwardsville and a Master of Science in Industrial / Organizational Psychology from Bellevue University. Currently, she is pursuing a Doctor of Philosophy in General Psychology with an emphasis on Industrial and Organizational Psychology from Grand Canyon University.



### **Kevin F. Hulme, Ph.D., CMSP | Deputy Chair**

*Program Manager, The Stephen Still Institute for Sustainable Transportation and Logistics (SSISTL)*

Kevin F. Hulme received his Ph.D. from the University at Buffalo, specializing in multidisciplinary analysis and optimization of complex systems. Currently, he serves as the Program Manager for The Stephen Still Institute for Sustainable Transportation and Logistics, and provides oversight for its Motion Simulation Laboratory. Dr. Hulme's current areas of focus include applied modeling and simulation (M&S), simulation science, transportation and vehicle M&S, game-based approaches in engineering education, human factors, and advanced air mobility. Dr. Hulme is a Certified Modeling and Simulation Professional (CMSP).



### **D'An Knowles Ball, Ph.D. | Deputy Chair**

*Research Associate, Design Interactive, LLC.*

D'An Knowles Ball, Ph.D. is a researcher at Design Interactive (Orlando, FL) with expertise in human-systems integration, digital user experience, instructional systems, and human-centered design. With a goal towards digital transformation, she leads multi-agency research efforts in usability training and simulation support as well as product development. Dr. Ball specializes in XR design research and AI strategy development with a focus on HCI-based methods, learning transfer, and accessibility. She has worked collaboratively with clients and cross-functional teams across industry, government, academia, and start-up sectors for over a decade.

## Special Event Chair



### Luke DeVore | Chair

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*Managing Partner, The Voltron Group*

Luke DeVore is the Managing Partner of The Voltron Group, a technology and business development consultancy founded in 2024. Luke began his career as a Marine Corps artillery officer and was first introduced to modeling and simulation while deployed on the 26th Marine Expeditionary Unit (26 MEU) using Deployable Virtual Training Environment (DVTE) and then as a civilian supporting the DVTE program at the II MEF Simulation Center aboard Camp Lejeune, NC. After his time there, Luke worked as the Senior Vice President of Business Development at a small business where he became familiar with the various RDT&E funding mechanisms including OTAs, BAAs, SBIRs as well as traditional contracts across the DoD and Federal market.

## STEM Chair



### Jessica Johnson, Ph.D.

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*Research Assistant Professor, Director for STEM and Educational Partnerships, Virginia Modeling Analysis & Simulation Center, Old Dominion University*

Dr. Jessica Johnson is a Research Assistant Professor and Learning Engineer for the Virginia Digital Maritime Center and Director for STEM and Educational Partnerships at the Office of Enterprise Research and Innovation (OERI) a research enterprise of Old Dominion University. She has expertise in both cognitive and learning sciences, coupled with a background in human-factors psychology for use in field applications of multi-modal learning and training systems. Her applied research encompasses the intersection of cognitive and knowledge engineering, aiming to inform the design and evaluation of immersive learning environments that optimize cognitive, performance and training outcomes. She also advocates and leads Science, Technology, Engineering, Arts, and Mathematics (STEAM) outreach efforts in multiple capacities across K-12 pipelines.

