

MONDAY, 2 DECEMBER • 1030 - 1200 • ROOM 330ABCD

CONGRESSIONAL M&S CAUCUS

STRONG ADVOCACY FOR TRAINING AND READINESS

MODERATOR

VICE ADMIRAL SEAN S. BUCK, USN (RET.)

President, National Training and Simulation Association (NTSA)

PANELISTS

CONGRESSMAN BOBBY SCOTT

3rd District, Virginia

CONGRESSMAN JACK BERGMAN

1st District, Michigan

CONGRESSMAN JOHN RUTHERFORD

5th District, Florida

CONGRESSMAN ERIC SORENSEN

17th District, Illinois

NTSA and the I/ITSEC Conference 2024 are excited to host the Modeling and Simulation Congressional Caucus Special Event. All attendees and exhibitors are invited to hear first hand from our leaders in Congress who are committed to the success of our industry.

It is a great opportunity for you to interact with Congressional Members on issues of importance to you or your organization and to impress upon them the priorities of the modeling, simulation and training industry. With defense budgets and other Government budgets constantly in flux, this forum provides you a voice to advocate for the value of simulation for training in support of national security and resiliency.



BOBBY SCOTT

Caucus Co-Chair 3rd District, Virginia

JACK BERGMAN

Caucus Co-Chair 1st District, Michigan

JOHN RUTHERFORD

Caucus Co-Chair 5th District, Florida

ERIC SORENSEN

Caucus Co-Chair 17th District. Illinois

ROBERT ADERHOLT

4th District, Alabama

DON BACON

2nd District, Nebraska

GUS BILIRAKIS

12th District, Florida

VERN BUCHANAN

16th District, Florida

KEN CALVERT

41st District, California

JACK ELLZEY

6th District, Texas

VIRGINIA FOXX

5th District, North Carolina

SCOTT FRANKLIN

18th District, Florida

BRETT GUTHRIE

2nd District, Kentucky

DOUG LAMBORN

5th District. Colorado

BILL POSEY

8th District, Florida

C.A. DUTCH

RUPPERSBERGER2nd District, Maryland

DARREN SOTO

9th District, Florida

MICHAEL TURNER

10th District, Ohio

JOE WILSON

2nd District, South Carolina

ROBERT J. WITTMAN

1st District, Virginia





TUESDAY, 3 DECEMBER • 1000 - 1130 • HYATT WINDERMERE BALLROOM

SENIOR LEADER PANEL

ASSURING DETERRENCE THROUGH INTEGRATED TRAINING AND READINESS — THE NEED IS NOW!

MODERATOR

VICE ADMIRAL SEAN S. BUCK, USN (RET.)

President, National Training and Simulation Association (NTSA)

PANELISTS

VICE ADMIRAL DANIEL L. CHEEVER. USN

Commander, Naval Air Forces/ Commander, Naval Air Force, U.S. Pacific Fleet

LIEUTENANT GENERAL BENJAMIN T. WATSON, USMC

Commanding General, Training and Education Command

THOMAS J. LAWHEAD, SES

Assistant Deputy Chief of Staff, Strategy, Integration and Requirements, U.S. Air Force

MAJOR GENERAL TIMOTHY A. SEJBA, USSF

Commander, Space Training and Readiness Command

BRIGADIER GENERAL DAVID ZINN, USA

Director of Training, Headquarters U.S. Army G-3/5/7, Former Commander 3rd Multi-Domain Task Force (MDTF)

BRIGADIER GENERAL RICKARD JOHANSSON

Commanding General 1. Division, Swedish Army



VADM BUCK, USN (RET.)



VADM CHEEVER, USN



LTGEN WATSON, USMC



MR. LAWHEAD, SES



MAJ GEN SEJBA, USSF



BG ZINN, USA



BG JOHANSSON

Global forces continue to be challenged by erratic budgets and complex threats. Services continue to prepare for a wide array of missions that range from disaster assistance to the return of great power competition. Additionally, Nations continue to deal with the opportunities and challenges of accelerating technology and cybersecurity. Our Senior Leader Panel will address current and future environments within the context of this year's conference theme Assuring Deterrence through Integrated Training and Readiness — The Need is Now!

The Senior Leader Panel will include senior representatives from U.S. Military Services, OSD, and International Allies. Following opening remarks, the audience will interact with the panel through a Q&A feature. Don't miss the opportunity to hear from national leaders on the way ahead.

TUESDAY, 3 DECEMBER • 1400 - 1445 • ROOM 330ABCD

A FIRESIDE CHAT WITH ADMIRAL CHRISTOPHER W. GRADY, VICE CHAIRMAN, JOINT CHIEFS OF STAFF

MODERATOR

VICE ADMIRAL SEAN S. BUCK, USN (RET.)

President, National Training and Simulation Association (NTSA)

A native of Newport, Rhode Island, Admiral Christopher W. Grady graduated from the University of Notre Dame in 1984 and received his commission through the Naval Reserve Officers Training Corps program. Grady is also a distinguished graduate of both Georgetown University, where he participated as a fellow in Foreign Service at the Edmund A. Walsh School of Foreign Service, and the National War College.

SPEAKER



ADMIRAL CHRISTOPHER
W. GRADY, USN
Vice Chairman,
Joint Chiefs of Staff

A career Surface Warfare Officer, Grady served aboard USS Moosbrugger (DD 980) as combat information center officer and antisubmarine warfare officer. As a department head, he served as weapons control officer and combat systems officer aboard USS Princeton (CG 59). He then commanded Mine Countermeasures Rotational Crew Echo aboard USS Chief (MCM 14), and later deployed to the Arabian Gulf in command of USS Ardent (MCM 12). Grady subsequently commanded USS Cole (DDG 67), deploying as part of NATO's Standing Naval Forces Mediterranean. In command of Destroyer Squadron 22, he deployed to the Arabian Gulf as sea combat commander for the Theodore Roosevelt Carrier Strike Group in support of Operations ENDURING FREEDOM and IRAQI FREEDOM.

Ashore, Grady served in the Joint Chiefs of Staff and then as naval aide to the Chief of Naval Operations, as the assistant branch head of the Europe and Eurasia Politico-Military Affairs Branch (OPNAV N524), as executive assistant to the Navy's Chief of Legislative Affairs, as the deputy executive secretary of the National Security Council in the White House, and as the executive assistant to the Chief of Naval Operations.

As a flag officer, he first served as Director of Maritime Operations, Commander, U.S. Pacific Fleet (N2/3/5/7), then subsequently commanded Carrier Strike Group 1/Carl Vinson Carrier Strike Group, where he deployed for nearly 10 months to the Western Pacific and the Arabian Gulf conducting combat operations in support of Operation INHERENT RESOLVE. He later served as Commander, Naval Surface Force Atlantic; Commander, U.S. 6th Fleet/Commander, Naval Striking and Support Forces NATO/Deputy Commander, U.S. Naval Forces Europe and U.S. Naval Forces Africa. From May 2018 until December 2021, he served as the Commander, U.S. Fleet Forces Command, and the Naval Component Commander to both U.S. Northern Command and U.S. Strategic Command, as the Joint Force Maritime Component Commander for U.S. Strategic Command and executed Task Force Atlantic in coordination with U.S. Naval Forces Europe.

Admiral Grady was sworn-in as the twelfth Vice Chairman of the Joint Chiefs of Staff, the nation's second highest-ranking military officer, on 20 December 2021. The admiral represents the Chairman of the Joint Chiefs of Staff on the Deputies Committee of the National Security Council and chairs the Joint Requirement Oversight Council (JROC) which is responsible for reviewing and establishing acquisition priorities for major weapon systems amongst the military branches. He also co-chairs the Deputy's Management Action Group (DMAG) and the Deputy's Workforce Council (DWC) with the deputy secretary of defense to address departmental budgetary priorities and serves as the senior member of the Nuclear Weapons Council, responsible for managing the atomic stockpile and coordinating nuclear weapon-related programs and budgets.

The admiral is currently the Navy's "Old Salt", its longest-serving surface warfare officer on active duty.



TUESDAY, 3 DECEMBER • 1500 - 1615 • ROOM 330ABCD

NAVAL AVIATION FLAG OFFICER PANEL

MODERATOR

REAR ADMIRAL KEITH HASH, USN

Commander, NAWCWD; Assistant Commander for Test and Evaluation. NAVAIR

PANELISTS

READ ADMIRAL DOUGLAS VERISSIMO, USN

Commander, Naval Air Force Atlantic

CAPTAIN ANDREW PETER MARINER, USN

Deputy Commander, NAWDC

DEREK GREER

Director, Integrated Battlespace Simulation and Test Department, Digital Analytics Infrastructure and Technology Advancement Group, NAWCAD







RADM VERISSIMO, USN



CAPT MARINER, USN



MR. GREER

The Navy has been called upon to deter or prevail in combat across a wide variety of locations and adversaries across the years. In the CNO's revised NAVPLAN it is clear the Navy will be expected to prevail in a new challenge, the High End Fight. This new fight will be marked with novel issues such as classified training via LVC vice out in the open, contested logistics on the other side of the world, stealth platforms with demanding maintenance regimens, and a peer adversary with home turf advantage, more assets, and an unimaginably hostile electro-magnetic spectrum. This panel represents the range of Naval Aviation Enterprise's leadership that will be responsible for solving these hard problems – from the tactics and training needed, to the engineering acumen employed, through the validation of developed systems, and into the deployment stage. Come hear how naval aviation is responding to its newest and most demanding directive.



TUESDAY, 3 DECEMBER • 1600 - 1730 • ROOM 310AB

GenAI: TRANSFORMING DEFENSE OPERATIONS

BRIDGING AI INNOVATION WITH DOD STRATEGY

MODERATOR JENNIFER ARNOLD

Omniverse Executive, NVIDIA

PANELISTS

CYNTHIA BEDELL

Director, Army Research Directorate, U.S. Army DEVCOM Army Research Laboratory

SHERI BACHSTEIN

President. The Weather Company

KAITIE PENRY

Director, Emerging Tech & Innovation, Office of Research & Innovation, Naval Postgraduate School











MS. BEDELL

MS. BACHSTEIN

MS. PENRY

This panel will explore the profound challenges and opportunities that Generative AI (GenAI) brings to our industry. This discussion will illuminate both the potential benefits and the hurdles that must be overcome to fully integrate GenAI. This includes:

GenAl Solutions: The panelists will share insights into current GenAl solutions being developed and implemented to enhance mission operations. These solutions range from advanced hardware infrastructure to sophisticated software applications designed to support and protect.

Barriers to Adoption: The panel will address several critical barriers to the adoption of GenAl within mission operations. First, these senior leaders will discuss technological challenges, focusing on the technical limitations and the need for robust infrastructure to support GenAl implementations. Second, the panel will examine logistical hurdles, exploring the complexities involved in deploying GenAI solutions across various sectors. Third, insights into cultural resistance will be provided, highlighting the barriers that may hinder the adoption of new technologies.

Recommendations for Accelerated Adoption: The panelists will delve into several key strategies for accelerating the integration of GenAl into mission operations. First, policy and funding recommendations will be discussed, highlighting necessary changes and allocations to support GenAl initiatives effectively. Second, the panel will explore strategies to enhance public-private collaboration, fostering a synergistic approach to technology development and implementation. Third, the discussion will cover innovation incentive ideas for incentivizing innovation.

By bringing together these senior leaders from the fields of AI, the public sector, and environmental intelligence, this panel aims to chart a course for the effective and accelerated adoption of GenAI. The insights and recommendations provided will be invaluable for policymakers, technologists, and strategists committed to maintaining a technological edge.



TUESDAY, 3 DECEMBER • 1630 - 1745 • ROOM 330ABCD

ARMY GENERAL OFFICER PANEL

MODERATOR

LIEUTENANT GENERAL MICHAEL WILLIAMSON, USA (RET.)

Chair, Army Science Board

PANELISTS

MAJOR GENERAL PATRICK L. GAYDON, USA

Commander, U.S. Army Test and Evaluation Command (ATEC)

BRIGADIER GENERAL CHRISTINE BEELER, USA

Program Executive Officer Simulation, Training and Instrumentation, U.S. Army PEO STRI

BRIGADIER GENERAL JEREMY WILSON, USA

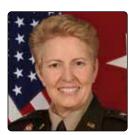
Deputy Commanding General, U.S. Army Combined Arms Center-Training (CAC-T)



LTG WILLIAMSON, USA (RET.)



MG GAYDON, USA



BG BEELER, USA



BG WILSON, USA

This panel brings together Senior Army leaders to provide operational concepts for the Army's simulation, testing, training, cyber, and instrumentation community. Panel members will provide insight and perspectives from their broad operational backgrounds to the challenges facing simulation, training, and instrumentation to meet the Army's modernization and transformation goals (Transformation in Contact). This panel provides an opportunity for I/ITSEC participants to engage with Army leaders involved with developing the models, training, and processes to sustain the global force in a digital world.



WEDNESDAY, 4 DECEMBER • 0830 - 1000 • ROOM 330ABCD

LEADERSHIP PERSPECTIVES ON DEVELOPMENT, EDUCATION AND TRAINING

A MULTI-SERVICE READINESS VIEW

MODERATOR

WENDY WALSH, ED.D. Chief Learning Officer, HQ Air Education and Training Command

PANELISTS

LIEUTENANT GENERAL ANDREA D. TULLOS, USAFPresident, Air University

LIEUTENANT GENERAL BENJAMIN T. WATSON, USMC (INVITED)

Commanding General, Training and Education Command

REAR ADMIRAL ROBERT NOWAKOWSKI, USN

Deputy Commander, Naval Education and Training Command



DR. WALSH



LT GEN TULLOS, USAF



LTGEN WATSON, USMC



RADM NOWAKOWSKI, USN

This panel will provide a multi-service commanders' perspective on military training and readiness. It will bring together the leaders from the training commands of the Army, Navy, Air Force, Marine Corps, and Space Force, providing insight into current and future strategies in military training. The panel will highlight the integration of cutting-edge technologies, innovations in simulation, virtual training environments, and the challenges and successes in preparing service members for modern combat and operational readiness. Attendees will gain valuable insights into the collaborative efforts and unique approaches each branch employs to ensure the highest standards of preparedness across the U.S. Armed Forces.



WEDNESDAY, 4 DECEMBER • 1030 - 1200 • ROOM 310AB

NAVY WARFIGHTING REQUIREMENTS AND CAPABILITIES

MODERATOR

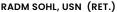
REAR ADMIRAL PAUL A. SOHL, USN (RET.) CEO, Florida High Tech Corridor

PANELIST

VICE ADMIRAL JAMES PITTS, USN

Deputy Chief of Naval Operations for Warfighting Requirements and Capabilities, N9, Office of the Chief of Naval Operations







VADM PITTS, USN

"The threats to our nation and our interests are real and growing. The strategic environment has changed; gone are the days of operating from a maritime sanctuary against competitors who cannot threaten us." – ADM Lisa Franchetti, USN, Chief of Naval Operations

These words from the CNO stress the urgency and importance of maintaining the world's premier naval force to deter aggression. This message is captured by the I/ITSEC 2024's theme: Assuring Deterrence Through Integrated Training and Readiness – The Need is Now!

Deterrence is not merely in raw capability, we must demonstrate the skill and the will to win the fight. Making sure that both lethality and readiness are maintained as part of our core training goals is critical to this ability. We must do this while maintaining a responsible plan for funding and acquiring these capabilities.

In this special event, VADM Pitts will discuss our Navy's requirements within key acquisition, research and technology and mission readiness domains that the I/ITSEC community can work together to address and to ensure that we remain postured to deter aggression and win the fight if necessary.



WEDNESDAY, 4 DECEMBER • 1030 - 1200 • ROOM 330ABCD

DEPARTMENT OF THE AIR FORCE PANEL

MODERATOR

BRIGADIER GENERAL GUY WALSH, USAF (RET.)

Executive Vice President and Chief Operating Officer, NDIA

PANELISTS

LIEUTENANT GENERAL ANDREA D. TULLOS, USAF

President, Air University

THOMAS J. LAWHEAD, SES

Assistant Deputy Chief of Staff, Strategy, Integration and Requirements, U.S. Air Force

LIEUTENANT GENERAL DAVID H. TABOR, USAF

Deputy Chief of Staff of Plans and Programs, Headquarters U.S. Air Force

BRIGADIER GENERAL TRAVOLIS A. SIMMONS, USAF

Director of Training and Readiness, Deputy Chief of Staff for Operations, Headquarters U.S. Air Force



BRIG GEN WALSH, USAF (RET.)



LT GEN TULLOS, USAF



MR. LAWHEAD, SES



LT GEN TABOR, USAF



BRIG GEN SIMMONS, USAF

This panel brings together Air Force leaders and organizations to address the Great Power Competition and the Operational Imperatives as it relates to the training community. The Air Force leaders will provide insight from their acquisition, research and technology, and mission readiness perspectives into employing Modeling & Simulation technology across the enterprise to meet readiness and lethality challenges. This panel provides an opportunity for I/ITSEC participants to engage with Air Force leaders involved with sustaining a global force in training technology across the enterprise to increase readiness and lethality in a digital world.



WEDNESDAY, 4 DECEMBER • 1030 - 1200 • ROOM 330EF

USMC GENERAL OFFICER PANEL

INSIGHTS AND PERSPECTIVES

MODERATOR

COLONEL MARCUS J. REYNOLDS, USMC

Program Manager, Training Systems (PM TRASYS) Marine Corps System Command



BRIGADIER GENERAL DAVID C. WALSH, USMC

Program Executive Officer, Air Anti-Submarine Warfare, Assaults and Special Mission Programs (PEO(A))

BRIGADIER GENERAL TAMARA CAMPBELL, USMC

Commander, Marine Corps Systems Command

BRIGADIER GENERAL ANTHONY HENDERSON, USMC

Commanding General, Training Command



COL REYNOLDS, USMC



BRIG GEN WALSH, USMC



BRIG GEN CAMPBELL, USMC



BRIG GEN HENDERSON, USMC

This panel brings together Senior Marine Corps leaders to provide operational concepts for the Marine Corps' simulation, training, and instrumentation community. The panel members will provide insights and perspectives from their broad operational backgrounds to the challenges facing simulation, training, and instrumentation to meet the emerging Marine Corps operational concepts. This panel provides an opportunity for I/ITSEC participants to engage with Marine Corps leaders involved with developing the models, training, and processes to sustain the Nation's premiere Force In Readiness.

WEDNESDAY, 4 DECEMBER • 1330 - 1500 • ROOM 330EF

INTEGRATED DEFENSE AGAINST COGNITIVE WARFARE

STRENGTHENING MINDS, FORTIFYING NATIONS, RESILIENCE IN THE FACE OF HYBRID THREATS

MODERATOR

SAE SCHATZ, PH.D. (US)Executive Director, Partnership for Peace Consortium, U.S.
Defense Civilian

PANELISTS

TODOR TAGAREV, PH.D. (BGR)Former Minister of Defense
Bulgaria (2013, 2023-2024)

HONORABLE CHRISTOPHER P. MAIER (US) (INVITED)

Assistant Secretary of Defense Special Operations and Low-Intensity Conflict

YEVGENIYA GABER, PH.D. (UKR)

Professor, Marshall Center Foreign Policy Advisor to the Prime Minister of Ukraine (2021); Deputy Director, Diplomatic Academy of Ukraine (2018-2021)

ALEKSANDRA NESIC, PH.D. (US)

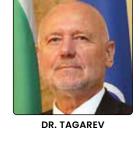
Chair, Europe and Eurasian Area Studies, Foreign Service Institute, U.S. Department of State

JEAN-MARC RICKLI, PH.D. (CHE)

Head of Global and Emerging Risks, Geneva Centre for Security Policy



DR. SCHATZ





HON. MAIER



DR. GABER



DR. NESIC



DR. RICKL

Cognitive Warfare manipulates how people think and perceive reality in order to undermine decision-making, erode trust, and destabilize societies.

As a form of Hybrid Warfare, it targets cognitive abilities by attacking perceptions, trust in processes, decision-making mechanisms, and the cohesiveness of our social organizations. Using information, cognitive science, digital tools, and potentially neuroscience, it influences thoughts, attitudes, and behaviors within the human-centric battlespace of beliefs, emotions, and ideologies.

Over the past five years, NATO's Concept Development Branch has explored this domain, proposing it as a formal dimension of warfare alongside Sea, Air, Land, Space, and Cyber. It has also been studied under other names by various nations and think tanks under the auspices of Hybrid Threats, Information Operations, and Liminal Warfare. By whatever title, these threats endanger stability, democracy, and the rules-based order.

Our response to Cognitive Warfare must be multifaceted, both in its design as well as its participants. This international panel will explore the foundations of Cognitive Warfare and present real-world examples from Ukraine and Bulgaria. Discussions will cover military considerations, such as operator training as well as the senior policymaker actions needed to facilitate an integrated, Whole of Society defense—both nationally and in cooperation with allies and partners.





WEDNESDAY, 4 DECEMBER • 1330 - 1500 • ROOM 310CD

INVESTING IN TECHNOLOGY THAT INCREASES TRAINING REALISM TO ENHANCE READINESS AND DETERRENCE

MODERATOR

COLONEL TIMOTHY RUSTAD, USA

Chief, Environmental Operations Division, Joint Staff J-7

PANELISTS

LIEUTENANT GENERAL DAGVIN ANDERSON, USAF

Director, Joint Staff J-7

BRIGADIER GENERAL RICHARD GOODMAN, USAF

Director, J-7 Training and Exercises U.S. INDOPACOM

BRIGADIER DAMIAN HILL

Director, General Joint Collective Training Branch (J-7), Joint Operations Command, Australia

MAJOR GENERAL DOMINQUE LUZEAUX

ACT Digital Transformation Champion and Special Advisor, Général de division - OF-7, FRA Army



COL RUSTAD, USA



LT GEN ANDERSON, USAF



BRIG GEN GOODMAN, USAF



BRIG HILL



MG LUZEAUX

The Joint M&S community is racing to innovate new technology within the synthetic training environment based on forecasted future threats. Collaboration across DoD, allies and partners, academia, and industry to address training gaps and ensure shared understanding is required in a shrinking globe where the actions of one have ripple effects around the world. This panel will drive discussion on ethical AI behavior within the DoD training apparatus, the importance of updated inter-service agreements, accessibility of authoritative data, and how AI/ML can revolutionize global training in the future. This group of participants has perspectives on policy, cross-domain limitations, and the importance of interoperability from a strategic viewpoint.



WEDNESDAY, 4 DECEMBER • 1530 - 1700 • ROOM 310AB

SUPPORTING THE FUTURE OF TRAINING AND EXPERIMENTATION INFRASTRUCTURE

THE TIME IS NOW!

MODERATOR

CHRIS DUNCAN

Director, 5th Gen, CAE

PANELISTS

BRIGADIER GENERAL TRAVOLIS SIMMONS, USAF

Director, USAF Training and Readiness, U.S. Air Force

CAPTAIN TIM JAMES, USN

Commanding Officer, NAWCTSD and NSA Orlando

COLONEL COREY KLOPSTEIN, USSF

Program Executive Officer, Operational Test and Training Infrastructure, Space Systems Command, U.S. Space Force

RON KETER

JLVC Modernization Lead, Joint Staff J-7





MR. DUNCAN



BRIG GEN SIMMONS, USAF



CAPT JAMES, USN



COL KLOPSTEIN, USSF



MR. KETER

As the U.S. postures for great power competition, each military service will require more robust experimentation and training environments to hone their Warfighter skills and future operational concepts for high-end combat. Interoperable test, experimentation, and training infrastructure will be pivotal to ensure Warfighter readiness for evolving threats. This panel featuring military and government speakers across the U.S. services and Joint Staff will examine present opportunities and roadblocks for supporting interoperable training and experimentation infrastructure.



WEDNESDAY, 4 DECEMBER • 1530 - 1700 • ROOM 330EF

CYBERSPACE – PERSPECTIVES ON CHALLENGES OF FUTURE MULTI-DOMAIN OPERATIONS PANEL

HIGHLIGHTING TRAINING AND READINESS CHALLENGES AND SOLUTIONS TO COMPETE ON FUTURE BATTLEFIELDS

MODERATOR

COLONEL CHAD BATES, PH.D., USA (RET.)

Senior Principal Research Scientist

PANELISTS

LIEUTENANT GENERAL STEPHEN FOGARTY, USA (RET.)

National Cyber Senior Executive Advisor, Booz Allen Hamilton

BRIGADIER GENERAL DAVID ZINN, USA

Director of Training, Headquarters U.S. Army G-3/5/7; Former Commander 3rd Multi-Domain Task Force (MDTF)

BRIGADIER GENERAL JOHN NIPP, USA

Commander, 184th Sustainment (Expeditionary)





DR. BATES, USA (RET.)



LTG FOGARTY, USA (RET.)



BG ZINN, USA



BG NIPP, USA

Panelists will discuss training and readiness aspects for our forces as they prepare for multidomain operations. They will provide global context and current state of near peer competition with China, Russia, and other threats. Discussion will focus on how to better incorporate cyber, electronic warfare, and information warfare into how our forces prepare for these battlefields, and how these challenges change how we train and prepare our forces.

WEDNESDAY, 4 DECEMBER • 1530 - 1700 • ROOM 330ABCD

UNCREWED & AUTONOMOUS SYSTEMS — TRENDS & CHALLENGES

MODERATOR

GREGORY KNAPP, SES (RET.)

CEO and President, Wilbur Engineering Consultants

PANELISTS

DANETTE ALLEN, PH.D., SES

Senior Leader of Autonomy, NASA

BRIGADIER GENERAL RICKARD JOHANSSON

Commanding General 1. Division, Swedish Army

ZACHARY JOHNS

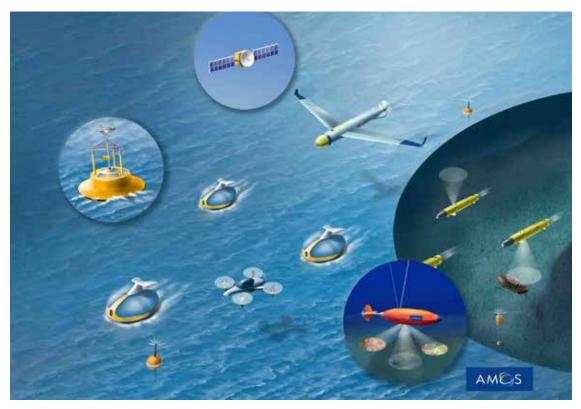
Chief Executive Officer, Hush Aerospace

JOHN MAGGIO

Vice President of Strategic Operations, London Bridge Trading Company

DUSTAN HELLWIG

Founder/Chief Strategy Officer, CTI - Chesapeake Technology International















MR. KNAPP

DR. ALLEN, SES

BG JOHANSSON

MR. JOHNS

MR. MAGGIO

MR. HELLWIG

Uncrewed & Autonomous Systems (UAS) has emerged as a powerful disruptive technology in the current battle space. The dramatic and rapid evolution of these systems challenges traditional operational paradigms and outpace training programs' relevance. The panelists will address critical UAS technology trends, Training and Readiness, manufacturing challenges, counter UAS operations, and future opportunities. Included in this panel discussion will be lessons learned and feedback from today's operations.

The panel consists of a world class training expert, a leading automation expert from NASA, an operational leader from Ukraine military, an industry leader and a U.S. veteran UAS operational pioneer. The broad experience of the panelists will provide a holistic landscape of trends and challenges of Uncrewed & Autonomous Systems.



THURSDAY, 5 DECEMBER • 0830 - 1000 • ROOM 330ABCD

GREAT POWER COMPETITION

USAF CHANGES - PART 1

MODERATOR

COLONEL C. MATT RYAN, USAF

Senior Materiel Leader, Advanced Training Capabilities Division, AFLCMC/WNR

PANELISTS

DENNIS L. D'ANGELO, SESExecutive Director, AFLCMC

DARRELL K. PHILLIPSON, SES

Director, Materials and Manufacturing Directorate, AFRL

COLONEL RICARDO JAIME, USAF

Deputy Director, AFMC Integrated Development Office (IDO)

COLONEL CARLOS QUINONES, USAF

Acting PEO for PEO Training, AFLCMC/WNS

RODNEY STEVENS

Deputy Program Executive Officer and Deputy Director for the Fighters and Advanced Aircraft Directorate



COL RYAN, USAF



MR. D'ANGELO, SES



MR. PHILLIPSON, SES



COL JAIME, USAF



COL QUINONES, USAF



MR. STEVENS

This panel will introduce the audience to changes within Air Force Materiel Command as part of the Air Force's Re-Optimizing for Great Power Competition Initiative, an initiative set forth by Secretary Kendall.

THURSDAY, 5 DECEMBER • 1030 - 1200 • ROOM 320H

ARMY SCIENCE BOARD INTRODUCTION AND HUMAN MACHINE INTERFACE STUDY PANEL

TO INTRODUCE I/ITSEC TO THE ARMY SCIENCE BOARD AND TO SHARE AN EXAMPLE OF A SUCCESSFUL STUDY

MODERATOR

LIEUTENANT GENERAL MICHAEL WILLIAMSON, USA (RET.)

Chair, Army Science Board

PANELISTS

LIEUTENANT GENERAL ROBERT LENNOX, USA (RET.)

Member, Army Science Board

COLONEL JASON L. WEST, USA

Director, Synthetic Training Environment, Cross Functional Team

GARRY LAMBERT, PH.D., SES

Operations Director, The Research and Analysis Center (TRAC) WSMR

COLONEL SCOTT SHAW, USA

Director, Maneuver Capabilities Development and Integration Directorate





COL WEST, USA



LTG WILLIAMSON, USA (RET.)



DR. LAMBERT, SES



LTG LENNOX, USA (RET.)



COL SHAW, USA

PURPOSE

ASB Chair introduces to I/ITSEC the ASB and its new study and subcommittee processes and highlights recent successes

- Then ASB Chair introduces HMI 2024 Study Member, LTG (Ret) Bob Lennox to discuss the ASB's HMI study
- Using the HMI 2024 study as an example, LTG (Ret) Lennox demonstrates how ASB study efforts
 have resulted in positive momentum in the modeling and simulation community specifically
 through a focused discussion on HMI Study's Task 2: Evaluate how HMI might be implemented
 across Armored and Light formations in the future (lethality, sustainability, deployability and
 protection)
- The panel discusses the ASB's work with TRAC, the Maneuver Center, and STE CFT on Task 2 and how improvements were made to STE CFT's model (with regards to autonomy and small formations). The panel will then demonstrate the model during the panel brief



MONDAY, 2 DECEMBER • 1415 - 1545 • ROOM 330ABCD

BLACK SWAN: THE SINGULARITY PARADOX

NAVIGATING THE UNINTENDED CONSEQUENCES OF TECHNOLOGY

MODERATOR MARRYAM CHAUDHRY President & Chief Executive Officer, XR-2 LEAD

CO-MODERATOR — SCENE NARRATOR

COLONEL RAYMOND COMPTON, USA (RET.) Fellow, LMI

PANELISTS

CINDY BEDELL, SESDirector, Army Research Directorate, U.S. Army DEVCOM, Army Research Laboratory

ROBERT SADOWSKI, PH.D.Army Chief Roboticist, Army Future Command (AFC)/ DEVCOM

JEREMY LANMAN, PH.D.APEO, Project Support, U.S. Army PEO STRI

MARWANE BAHBAZ Chief Technology Officer, U.S. Army PEO STRI





MS. CHAUDHRY



DR. SADOWSKI



COL COMPTON, USA (RET.)



DR. LANMAN



MS. BEDELL, SES



MR. BAHBAZ

Get ready to embark on a thrilling journey into a future shaped by unchecked technological advancements at I/ITSEC 2024. "The Singularity Paradox" invites you to explore a world where the boundaries between human and machine have blurred, leading to unintended consequences that present both incredible possibilities and profound challenges.

Step into an immersive experience that highlights the potential paradox of unbridled progress in artificial intelligence, robotics, and Extended Reality (XR). Our thought-provoking presentation will transport you to a city where holographic advertisements flicker through the air, autonomous vehicles navigate the streets, and XR displays create captivating digital illusions.

This session isn't about doom and gloom – it's a call to action and innovation. We'll examine how cutting-edge technologies, if left unchecked, could reshape our world in unexpected ways. More importantly, we'll explore how we can responsibly harness these advancements to create a brighter future.

Distinguished speakers will guide you through this odyssey of AI, Autonomy and Robotics, and XR and the Metaverse. Each presenter will not only address the challenges but also offer insights into how we can steer technological progress toward beneficial outcomes.

Join us for this eye-opening session that promises to challenge your perceptions, spark your imagination, and inspire innovative solutions. Together, we'll explore how to shape a future where technology enhances rather than overshadows our humanity. Don't miss this opportunity to be part of a crucial conversation that will help define the path forward in our rapidly evolving technological landscape.



MONDAY, 2 DECEMBER • 1430 - 1600 • ROOM 310CD

AMERICA'S SEED FUND: PLANTING SEEDS FOR SUCCESS UNDER THE SBIR/STTR PROGRAM

LEARN HOW TO STAY COMPLIANT UNDER POPULAR SMALL BUSINESS AWARD PROGRAMS

MODERATOR

KATELYN RIGLE

Small Business Liaison, Operations Audit Liaison Division, Defense Contract Audit Agency



MICHELE CURRERI

Financial Liaison Advisor (FLA), DCMA International Division-FMS Operations Audit Liaison Division, Defense Contract Audit Agency

JOHN HODAK

Small Business Innovation Research (SBIR) Coordinator, NAWCTSD

DUSTY LANG

Director, Small Business Innovation Research (SBIR) Program, DHS

MATTHEW WILLIS, PH.D.

Director, Small Business Innovation Research (SBIR) Program, Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology



MS. RIGLE



MS. CURRERI



MR. HODAK



MS. LANG



DR. WILLIS

Often referred to as "America's Seed Fund", the Small Business Innovative Research Program/ Small Business Technology Transfer Program awards over 5,000 contracts totaling well over \$4.5 billion. What does this mean for small businesses in terms of government compliance?

Join DCAA as we learn more about these programs and how your company may benefit from these types of contract awards. During this presentation, we will discuss DCAA's role, outline potential audits under these programs, communicate ways small businesses can prepare for audits, and provide resources available for small businesses. Stay after our presentation for a front row seat to an exclusive panel of leaders from Departments of Army, Navy, and Homeland Security SBIR/STTR programs as we discuss how the programs differ from agency to agency and upcoming opportunities under each program.



MONDAY, 2 DECEMBER • 1430 - 1600 • ROOM 310AB

CERTIFIED MODELING AND SIMULATION PROFESSIONAL 3.0

THE LATEST IN CMSP DEVELOPMENT AND DISTINCTION

MODERATOR

IVAR OSWALT, PH.D., CMSP MS&A Team Lead, The MIL Corporation (USA)

PANELISTS

JOHN NICOL, CMSP Chief Executive Officer, Corona Aerospace (CAN)

EDENILSON LOPES DE MEIRA, CMSP Senior Software Engineer, SIMTIES, ADGA Group Consultants, Inc. (CAN)









MR. NICOL, CMSP



MR. DE MEIRA, CMSP

CMSP is the only encompassing M&S professional certification in the U.S. It provides differentiation, community awareness, specialized networks, and membership benefits. Its Reinvention, begun in 2019, was unveiled in 2021 with CMSP 3.0. This version streamlines the processes, updates the examination, employs a Learning Management System, and is creating a vibrant community of practice!

All M&S practitioners seeking to enhance their credentials and to add a level of distinction to their qualifications – from Intern, Apprentice, Practitioner, and Master Levels – will find this Focus Event informative and valuable.

ATTENDEES WILL LEARN:

- The motivators behind starting CMSP, its evolution, and the current version.
- How CMSP provides value as a discrimination and mark of distinction.
- Personal narratives on why CMSP is valuable and applicable.

THE PURPOSE OF FOCUS EVENT:

- Describe the motivation behind the creation of CMSP, its evolution, and CMSP 3.0.
- Summarize the new levels of CMSP, the use of an LMS, the new examination, and describe the improved infrastructure that includes preparation materials.
- Finally, provide tangible advice on how interested individuals can start the process to achieve their certification.

THE FORMAT OF THIS FOCUS EVENT:

- This moderated panel session centers on international CMSP awardees and their stories of achievement. These CMSPs will provide a summary of their experience and answer questions from the audience.
- The panel will be moderated by an experienced M&S professional and CMSP holder who has moderated previous panel sessions and CMSP events.





MONDAY, 2 DECEMBER • 1430 - 1600 • ROOM 330GH

DIFFERENT MAKES US STRONGER: HOW TO BUILD DIVERSE THINKING FOR TODAY'S DEFENSE DOMINANCE

OUR SECRET WEAPON IN GREAT POWER COMPETITION

MODERATOR

KAREN FRAY

Architecture and Experimentation, Digital Capabilities, AFRL

MODERATOR Q&A SESSION

JEFFREY RAVER

VP/ESG Integration and DEI Initiatives, SAIC

PANELISTS

MARCY MULDROW SANDERS, DR.P.H.

Regional Engagement Principal, Florida; NSIN - National Security Innovation Network; Professor, Florida State University (Visiting Scholar)

JARET RIDDICK, PH.D.

Senior Fellow, CSET Georgetown University



MS. FRAY



MR. RAVER



DR. MILDROW SANDERS



DR. RIDDICK

Join us for an enlightening and thought-provoking discussion, moderated by Karen Fray, former Central Florida Women in Defense Chapter President and currently the Solutions and Services Transition Adoption Lead at the Air Force Research Lab (AFRL), as well as a National Security Fellow at Truman National Security Project/Class of 2024. This special event brings together distinguished speakers to discuss the critical impacts to be gained in the Modeling, Simulation, and Training (MS&T) industry, particularly concerning the National Security Field when diverse voices are at the table.

Marcy Muldrow Sanders, DrPH, MBA, is the Regional Engagement Principal (REP) for Florida with DIU NSIN. She is embedded in the FAMU-FSU College of Engineering as a Visiting Scholar Professor at Florida State University. A retired Navy Commander, Dr. Muldrow Sanders' warfare specialty was Anti-Submarine Warfare. Her experience extends to Navy program and policy development and implementation, and she possesses extensive expertise in programming, budgeting, and workforce development at both the Federal and State levels.

Jaret C. Riddick, Ph.D., a Senior Fellow at Georgetown University's Center for Security and Emerging Technology (CSET), will provide unique perspectives on how adversaries can exploit societal divisions and how unity, inclusivity, and diverse viewpoints in our training and readiness programs can effectively counter and deter these threats.

This panel will examine how harnessing and amplifying our nation's rich diversity—a potent national security asset—can dramatically enhance our strategic edge in the Great Power Competition. By cultivating an inclusive culture across our operational MS&T community, we unlock innovation, elevate problem-solving, and sharpen our adaptability to navigate complex DoD challenges.

Our diverse cognitive arsenal is the key to maintaining America's competitive advantage in an ever-evolving global landscape. The speakers will also address and highlight the importance of increasing the mentoring and sponsoring within the MS&T community for optimal outcomes toward sustainability and diverse growth.

Following the discussion, a Q&A session, hosted by Jeffrey Raver, VP/ESG Integration and DEI Initiatives at SAIC, will be encouraged to further engage participants in the conversation.

By the end of this session, participants will gain insights into how embracing diversity can bolster our deterrence capabilities and overall defense resilience. Don't miss out on this unique opportunity to engage in a conversation that can shape the future of National Security and the MS&T industry.



MONDAY, 2 DECEMBER • 1600 - 1730 • ROOM 330ABCD

2024 I/ITSEC FELLOWS PRESENTATION

BEING ELECTED A FELLOW IS THE HIGHEST HONOR BESTOWED BY THE NTSA ON BEHALF OF THE WORLD-WIDE MS&T COMMUNITY!



MODERATOR BRIAN HOLMES Chair, I/ITSEC Fellow Committee

2024 I/ITSEC FELLOW



WINSTON "WINK" BENNETT, PH.D.
SAIC | Mod and Sim Engineer
Senior Principal Support, DAF

Chief Modeling and Simulation

Office, HAF SAF/SAM

I/ITSEC is proud to announce Dr. Winston "Wink" Bennett has been selected as the 2024 I/ITSEC Fellow. This prestigious recognition is a testament to Dr. Bennett's outstanding contributions in the fields of Training, Education, and Modeling and Simulation which span four decades. His leadership has directly improved the quality of training of the Warfighter and has injected advancements into the field of Model and Simulation. His leadership has been instrumental in ensuring Air Force's success at Interservice/Industry Training, Simulation and Education Conference (I/ITSEC) both in committees, program work, panels, demonstrations, and STEM activities for many years. His leadership in the Simulation Interoperability Standards Organization (SISO) paved the way for Live Virtual Constructive simulations by helping to co-author and evolve the relevant standards. This work also helped to inform Air Combat Command and HQ Air Force, blended training requirements and alternatives. As part of his passion for learning and the development of the future STEM workforce, he established the Gaming Research Integration for Learning Lab® (GRILL®), inspiring students interested in modeling and simulation to pursue careers in M&S. Dr. Bennett's numerous accomplishments include serving as USAF Member at Large, then USAF representative, to the NATO modeling and simulation group; leading the creation and initial execution of the Science, Technology, and ops-centered investment portfolio for the 711th HPW Human Effectiveness Directorate, Readiness Product Line; and defining several visionary products and capabilities that have become foundational as ways to create and evaluate training and readiness investments and impacts. Wink was inducted into the National Center for Simulation - Modeling and Simulation Hall of Fame in 2022. He was also awarded the Thomas J Wells Senior Leadership Award, the Florida Governor's award for Modeling and Simulation, and over 30 other honors and awards.

WHAT YOU WILL LEARN FROM THE 2024 I/ITSEC FELLOW

Dr. Winston "Wink" Bennett's I/ITSEC Fellows paper and presentation focuses on his 39+ years of M&S and related experiences that have not only advanced science and practice, but impacted how the operational communities leverage innovative M&S technology and tools to improve proficiency and readiness. He will touch on the importance of building a strong requirements-driven foundation for creating, applying, and evaluating modeling and simulation innovations in real-world contexts. He'll also describe some of the hardest challenges the teams he has worked with have had to overcome, and what lessons can come from those efforts for the broader application of modeling and simulation innovations. He will also highlight some of the current and emerging trends from both the operational contexts the drive new requirements, as well as potential technology and tools that are coming along to advance both our science and our practices. Finally, he will discuss the implications of where we need to go, as a community, on the workforce we need for today and for the future.



TUESDAY, 3 DECEMBER • 1400 - 1530 • ROOM 310CD

JOINT & MULTI-NATIONAL CONSTRUCTIVE TRAINING EXERCISE

OVERCOMING THE TECHNICAL CHALLENGES FOR MULTI-DOMAIN OPERATIONS

MODERATOR

LIEUTENANT COLONEL BRIAN VARNS, USA U.S. Army PEO STRI

PANELISTS

COLONEL TIMOTHY RUSTAD, USA

Chief, Environmental Operations Division, Joint Staff J-7

COLONEL STEPHEN BANKS, USA

Branch Head, Modeling & Simulation, and Learning Technologies, NATO Allied Command Transformation

COLONEL MARK MADDEN, USA

7ATC-JMSC

ALEXANDER ACKERMAN KBSC



LTC VARNS, USA



COL RUSTAD, USA



COL BANKS, USA



COL MADDEN, USA



MR. ACKERMAN

The operational environment our joint and multi-national partners operate within is becoming more complex and congested requiring a persistent training environment to rapidly train and build coalitions to achieve objectives. The Army delivers theater specific Warfighter exercises (WFXs) for Corps and Divisions to conduct collective training, at scale, across multiple domains while also advancing and assessing Multinational Interoperability. The annual execution of multinational Warfighters lacks joint force participation and uses an industrial age planning and preparation process for each event.

Examine the challenges to support the requirements and overcome the technical difficulties to establish a persistent Mission Partnered Environment that incorporates joint and multi-national partners into future constructive exercises across all domains.



TUESDAY, 3 DECEMBER • 1600 - 1730 • ROOM 310CD

IMPLEMENTING LEARNING ENGINEERING IN MILITARY ENVIRONMENTS: AN OPERATIONAL & TACTICAL PERSPECTIVE

MODERATOR

WENDY WALSH, ED.D.Chief Learning Officer, HQ AETC

PANELISTS

LINDSEY FREDMAN

Director, Air Force Career Development Academy, ADC/2AF/AFCDA

BENJAMIN GOLDBERG, PH.D.

Senior Scientist, U.S. Army DEVCOM SC STTC

RALUCCA GERA, PH.D.

Professor of Mathematics Academic Associate Chair, Department of Applied Mathematics, Naval Postgraduate School

JENNIFER SINCLAIR

Deputy Commander and Chief Learning Officer, USCG Force Readiness Command



DR. WALSH



MS. FREDMAN



DR. GOLDBERG



DR. GERA



MS. SINCLAIR

PURPOSE:

Learning Engineering is defined as the iterative systematic application of evidence-based principles, scientific methods, and standardized practices from the learning sciences, education research, and systems thinking to produce effective learning outcomes. It functions as a sense making framework for institutional and operational learning and emphasizes a workforce-centered design approach. Learning engineering is enabled through interdisciplinary, mission-focused collaboration and measured by competency acquisition to actualize mission readiness.

OVERVIEW:

This session examines the balance and synergy between human-centered design and mission command, which involves the exploration of building trust and netcentric information flow within hierarchical, bureaucratic system. With this in mind, there will be a focus on sharing the progress made and/or planned to advance competency-based learning and evidence-based decision making. The panel is intended to represent the perspectives of the civilian joint service, highlighting convergence and divergence in force development approaches.



TUESDAY, 3 DECEMBER • 1600 - 1730 • ROOM 330GH

MAXIMIZING THE EMERGING WARGAMING CAPABILITIES

NELLER CENTER OVERVIEW

MODERATOR

LIEUTENANT COLONEL
WYNNDEE YOUNG, USMC
Program Manager Wargami

Program Manager, Wargaming Capability

PANELISTS

COLONEL CHARLES E. ANKLAM III, PH.D., USMC

Marine Corps Director, Wargaming Division, Marine Corps Warfighting Laboratory/ Futures Directorate Combat Development and Integration

CAPTAIN MICHAEL O'HARA, PH.D., USN

Naval Warfare Center

COLONEL TIM BARRICK, USMC (RET.)

Wargaming Director, Marine Corps University

LIEUTENANT COLONEL SCOTTY BLACK, USMC

Marine Corps Warfighting Laboratory

TYSON KACKLEY

Marine Corps System Command



LTCOL YOUNG, USMC



COL ANKLAM, USMC



CAPT O'HARA, USN



COL BARRICK, USMC (RET.)



LTCOL BLACK, USMC



MR. KACKLEY

Wargaming and analytics are integral to successful force design, force development, operational planning, education and training. Just south of Washington DC, the Neller Center is being completed to support all of these activites.

Join this event as the panel provides an overview and insight into the capabilities being developed and those planned at the Neller Center to support the Warfighter through wargaming, analytics and more!



WEDNESDAY, 4 DECEMBER • 0830 - 1000 • ROOM 330EF

DEPARTMENT OF THE AIR FORCE (DAF) — NONCOMMISSIONED OFFICER (NCO) PANEL

MODERATOR

CHIEF MASTER SERGEANT CHRISTOPHER S. COLE, USSF

Senior Enlisted Advisor, Chief Technology & Innovation Office (CTIO)

PANELISTS

CHIEF MASTER SERGEANT T. POWELL CRIDER, USAF

Senior Enlisted Advisor (ANG), Kelly Johnson Joint All Domain Innovation Center (KJJADIC)/ Joint Warfighting Experimentation Center (JWEC)

MASTER SERGEANT NATHAN J. GANSTER, USAF

Flight Chief, Airman
Development Analytics
HQ AETC/A9/Studies and
Analysis Squadron

MASTER SERGEANT SHANNON L. VAN ROEKEL, USAF

Operations Superintendent, HQ 2AF/DET 23







CMSGT CRIDER, USAF



MSGT GANSTER, USAF



MSGT VAN ROEKEL, USAF

PURPOSE:

To offer an enlisted perspective on M&S initiatives across the Department of the Air Force.

OVERVIEW:

This session will offer a practical perspective to discuss how the DAF is leveraging M&S to improve operations, and highlight unique emerging trends seen in the field. How can M&S be embedded in unit training/advanced training for quickly evolving career fields (i.e., cyber)? How do we improve collaboration between DAF and Industry in order to streamline realistic M&S solutions to better train and equip our forces? How can M&S tools be used to effectively train Airmen and Guardians in ethically ambiguous situations, such as those arising in cyber defense and autonomous weapons systems — (i.e. mission systems, Electronic Warfare, Orbital Warfare, etc.)?

OTHER RELEVANT INFO:

Our panel will have representation from NCOs in both the USAF and the USSF.



WEDNESDAY, 4 DECEMBER • 0830 - 1000 • ROOM 310AB

NAVY CONTINUOUS TRAINING ENVIRONMENT

MODERATOR

CHRISTOPHER BOYLETraining Technology Director, United States Fleet Forces Command N72

PANELISTS

TOM DALY

Enterprise Services Manager, Naval Surface Warfare Center Corona

ERIC FOX

NCTE Sites Manager, Naval Surface Warfare Center Corona

KEVIN KOHL

NCTE Program Manager, Naval Surface Warfare Center Corona

MIKE STEEN

LVC Operations Manager, Naval Surface Warfare Center Corona



MR. BOYLE



MR. DALY



MR. FOX



MR. KOHL



MR. STEEN

The importance of Live, Virtual, and Constructive (LVC) training is at the heart of this year's I/ITSEC theme: Assuring Deterrence Through Integrated Training and Readiness — The Need is Now! The Navy Continuous Training Environment (NCTE) is the integrating architecture that forms the Navy's LVC range for distributed training. This panel will bring together the United States Fleet Forces Command Training Technology Director with the heads of the NCTE program management, operations, engineering, and ranges pillars to set the stage for an engaging discussion centered on NCTE and how the pillars work together to provide LVC training to the Navy Warfighter.





WEDNESDAY, 4 DECEMBER • 0830 - 1000 • ROOM 310CD

EVOLUTION vs. REVOLUTION: SPECIAL OPERATIONS' PATH TO INTEGRATED TRAINING IN A SYNTHETIC ENVIRONMENT

MODERATOR

BRIGADIER GENERAL PAUL ROWLETT, USAF (RET.)

Civilian Branch Chief, SOFPREP, USSOCOM

PANELISTS

COLONEL DAVID M. ROBERTSON, USAF

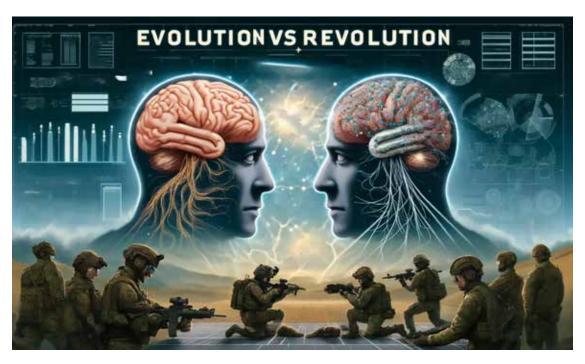
Chief, Operations Training Division, U.S. Air Force Special Operations Command

WILLIAM "JOE" MILLER, SES

Deputy to the Commanding General, U.S. Army Special Operations Command

LISA R. SANDERS, SES

Science and Technology Director, Special Operations Forces, Acquisition, Technology & Logistics, USSOCOM





BRIG GEN ROWLETT, USAF (RET.)



COL ROBERTSON, USAF



MR. MILLER, SES



MS. SANDERS, SES

Special Operations Forces' (SOF) value proposition lies in its global perspective, transcending regional boundaries, and its ability to operate with a diverse array of options. To maintain this edge, SOF must continuously evolve, embodying adaptability, agility, flexibility, and innovation. A panel of senior SOF leaders will discuss the critical need for integrating reality-virtuality continuum into Joint Force training, exercises, experimentation, and rehearsals to fulfill SOF's global objectives. Emerging technologies — such as virtual/augmented reality and artificial intelligence — offer significant enhancements to virtuality continuum-based force-on-force engagements, yet their adoption within the Joint Force has been slow and fragmented. Despite rapid advancements in technologies that significantly enrich mission readiness, perceptions and acceptance of these capabilities lag. Amongst others, Collaborative Autonomy will enable the Joint Force to deploy teamed, unmanned systems in contested environments. To fully leverage these technological enhancements within the Joint environment, we must cultivate a revolutionary mindset. Augmented training, seamlessly integrated with live training, represents the future. The future and need are now.



WEDNESDAY, 4 DECEMBER • 0830 - 1000 • ROOM 320H

MARINE CORPS SENIOR ENLISTED PANEL

DEVELOPING AND TRAINING THE NATION'S PREMIERE FORCE IN READINESS

MODERATOR

MASTER SARGEANT JOSHUA HAYES, USMC NAWCTSD

PANELISTS

SERGEANT MAJOR STEPHEN GRIFFIN, USMC

Training and Educaton Command (TECOM)

SERGEANT MAJOR JESSE DORSEY, JR., USMC

Marine Corps System Command

SERGEANT MAJOR DAVID ELLIOT, USMC

Command SgtMaj Training Command

MASTER GUNNERY SERGEANT JASON TAYLOR, USMC

Aviation Training Systems Analyst, Training and Education Command



MSGT HAYES, USMC



SGTMAJ GRIFFIN, USMC



SGTMAJ DORSEY, USMC



SGTMAJ ELLIOT, USMC

This panel brings together senior enlisted Navy/Marine Corps leaders to provide operational training concepts for the Marine Corps. The panel members will provide insight and perspectives from their broad operational backgrounds to the challenges facing simulation, training, and instrumentation to meet the emerging Navy/Marine Corps operational concepts. This panel provides an opportunity for I/ITSEC participants to engage with enlisted Navy/Marine Corps leaders involved with developing and training the Nation's premiere Force In Readiness.



FOCUS EVENT

WEDNESDAY, 4 DECEMBER • 1030 - 1200 • ROOM 310CD

ARMY SENIOR NCO PERSPECTIVE

OPERATIONAL READINESS LEVERAGING SIMULATIONS FOR TRAINING & MISSION REHEARSAL

MODERATOR

SERGEANT MAJOR TOM DOW, JR., USA

U.S. Army, Program Executive Office for Simulation, Training, and Instrumentation (Proposed)

PANELISTS

COMMAND SERGEANT MAJOR STEPHEN H. HELTON, USA

U.S. Army Futures Command

SERGEANT MAJOR ROBERT M. HAYNIE, USA

ASA (ALT)

SERGEANT MAJOR JAMES CARD, USA

U.S. Army, Training Support Center

COMMAND SERGEANT MAJOR BRIAN HAYDT, USA

U.S. Army DEVCOM

COMMAND SERGEANT MAJOR BRADFORD L. SMITH, USA

U.S. Army Test and Evaluation Command (ATEC)



SGM DOW, JR., USA



CSM HELTON, USA



SGM HAYNIE, USA



SGM CARD, USA



CSM HAYDT, USA



CSM SMITH, USA

The feedback from combat-tested senior NCOs has always been valuable to the training and development of the latest generation of Army Soldiers. These seasoned leaders know today's youngest Warfighters grew up surrounded by constantly changing and advancing technology, resulting in them being more accepting of digital simulation for training and mission rehearsal. Despite their ability to adapt to technology, these young Warfighters must still embrace the idea that synthetic training only augments and does not replace live training evolutions. Additionally, simulation and mission rehearsal technology is not limited to only weapons and platforms, but also covers the entire spectrum of military operations including communications, logistics, tactical data links, and battlefield medicine. Each of these critical elements must be included in any type of synthetic training environment in order to achieve both individual and unit operational readiness.



WEDNESDAY, 4 DECEMBER • 1330 - 1500 • ROOM 310AB

ETHICAL, LEGAL, AND SOCIAL IMPLICATIONS OF HUMAN-AI TEAMING

CRITICAL ELSI NEEDS AND OPPORTUNITIES TO INTEGRATE TRAINING AND READINESS

MODERATOR

SYLVAIN BRUNI

Interim Director & Principal Engineer, Performance Augmentation Systems Division, Aptima, Inc.

PANELISTS

REBECCA CROOTOF, PH.D.

ELSI Visiting Scholar, DARPA Professor of Law, University of Richmond School of Law

VALARIE YERDON, PH.D.

Senior Human System Integration Analyst, THOR Solutions

GRANT ENGBERSON

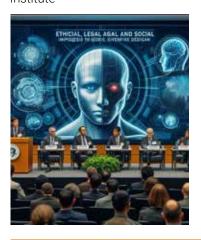
Artificial Intelligence Engineer, Intelligent Performance Analytics Division, Aptima, Inc.

KELLY HALE, PH.D.

Principal Engineer & Group Leader, UX/Human Performance Group, Draper

LAUREN REINERMAN JONES, PH.D.

Acting Section Manager & Principal Analyst, SwRI Div 16, Southwest Research Institute





MR. BRUNI



DR. CROOTOF



DR. YERDON



MR. ENGBERSON



DR. HALE



DR. JONES

The NATO SG-278 study on Cognitive Augmentation for Military Applications identified a series of challenges and opportunities related to the ethical, legal, and social implications (ELSI) of leveraging new forms of training and operational support (including neurostimulation, neuroaugmentation, and human-AI teaming). This topic is under-addressed and requires more depth and visibility in our community, as evidenced by questions and requests from the 2023 I/ITSEC conference when SG-278 was briefed.

This vast new field is actively being researched in several critical domains, such as healthcare, transportation, and public policy. Engaging with and hearing from those working at the forefront of ELSI will preview and inform future work that aligns with the needs of the I/ITSEC community, specifically as we seek to integrate training and readiness more closely and rapidly with artificial intelligence and other advanced technologies.

This moderated panel will feature perspectives from scientists and practitioners in Government, industry, and non-profit research organizations. The purpose of this special event is (1) to raise awareness about challenges and opportunities related to ELSI in training and ops, (2) to build a network of interested practitioners and decision-makers across government and industry, and (3) to identify priority areas for training and simulation research.



WEDNESDAY, 4 DECEMBER • 1330 - 1500 • ROOM 330ABCD

SPACE CAPABILITIES PANEL

MODERATOR

SUSAN SORENSON, PH.D.Chief Analyst, Test Enterprise
Division, HQ STARCOM S2/3V

PANELISTS

BRIAN McBEE, PH.D.

Portfolio Lead, Space Control Technologies; Model-Based Systems Engineering & Analysis AFRL Space Vehicles Directorate

LIEUTENANT COLONEL M. SCOTT PEEPLES, USSF

Materiel Leader, Space Force Digital Test & Training Operational Test & Training Infrastructure (OTTI) Space Systems Command (SSC/TIDV)

MAJOR SEAN P. MITCHAM, USA

Deputy Branch Chief, USSPACECOM J812 Advanced Analytics

RICH SHERTZER, PH.D.

Combat Analysis Team Lead, Space Operations Command (SpOC)/S739



DR. SORENSON



DR. McBEE



LT COL PEEPLES, USSF



MAJ MITCHAM, USA



DR. SHERTZER

PURPOSE:

Introduce the audience to advanced M&S functions across the Space Force and Space Command landscape.

OVERVIEW:

This session discusses how space-related M&S issues contribute towards joint lethality. How is M&S employed to leverage the greatest effect so that more informed decisions and trade-offs can be made to allocate limited resources in the face of advanced persistent threat? What are key M&S challenges associated with delivering a robust LVC environment? How do we use M&S to best understand near/mid/far-term capability gaps that can only be addressed by R&D? What are we doing right in the space analyic community, and how can we double down on those successes? What is the most important capability needed to simulate space systems effectively?

OTHER RELEVANT INFO:

Our panel will have diverse voices across USSF, as well as operational insight from SPACECOM M&S Leadership.



WEDNESDAY, 4 DECEMBER • 1330 - 1500 • ROOM 330GH

WOMEN IN MODELING AND SIMULATION

MODERATOR

JENNIFER SOLBERG, PH.D. Chief Executive Officer, Quantum Improvements Consulting

PANELISTS

TAMI GRIFFITH, PH.D.

Chief Engineer, Training and Simulation Division (TSD), U.S. Army DEVCOM SC STTC

TARA KILCULLEN-OLIVA

Principal, ZYGOS Consulting

HEATHER PRIEST, PH.D.

Senior Scientific Technical Manager (SSTM) for LVC Training Solutions, NAWCTSD

RACHAEL GERMANSKY

Lead Acquisition Engineer for Range Training Systems, PM TRASYS

HEATHER DEMIS

Director of Corporate Development, HAVIK



DR. SOLBERG



DR. GRIFFITH



MS. KILCULLEN-OLIVA



DR. PRIEST



MS. DEMIS

Over the past decades, the defense industry has shifted toward including women in every level of operations and decision-making. Despite these positive steps, women still navigate specific challenges in the workplace. To maintain a competitive edge in today's climate, organizations should be aware of barriers to recruiting and retaining top talent. Understanding women's experiences in modeling and simulation, and in defense broadly, will help organizations make smart human resources and policy decisions.

In this panel, women from a variety of career paths — Active Duty, DoD civilian, and industry — will share their workplace experiences. Our discussion will cover topics such as leadership, mentorship, and other issues women face. We will talk about how women's experiences have changed over time, and how emerging technology can increase opportunities for everyone who wants to contribute to this industry.

YOU WILL LEARN:

- How organizational policy can be used as a recruiting and retention tool to bring women into our industry
- How the post-pandemic job landscape has shifted for women
- How women's roles could change in the future

FOCUS EVENT

WEDNESDAY, 4 DECEMBER • 1400 - 1530 • ROOM 320H

NAVY SENIOR ENLISTED PANEL

MODERATOR

FLEET MASTER CHIEF JOHN PERRYMAN, USN

U.S. Fleet Forces Command

PANELISTS

Command

FORCE MASTER CHIEF RICK MENGEL, USN

Naval Education and Training Command

COMMAND MASTER CHIEF NORMAN W. CLARKE, USN Submarine Learning Center

COMMAND MASTER CHIEF HUGH J. RAPE, USN Surface Warfare Schools

MASTER CHIEF ELECTRONICS TECHNICIAN EDWARD A. JACKSON, JR., USN

Naval Reactors Headquarters



FLTCM PERRYMAN, USN



FORCM MENGEL, USN



CMDCM CLARKE, USN



CMDCM RAPE, USN



ETNCM JACKSON, JR., USN

This panel will bring together a group of the Navy's senior enlisted leaders to provide their unique experiences training our sailors to ensure that they are ready for the fight. This panel will highlight areas where the use of modeling and simulation technology has provided positive impact to the mission while drawing attention the curent capability gaps that the collective I/ITSEC community can work together to resolve for the benefit of our Nation's Warfighters.



THURSDAY, 5 DECEMBER • 0830 - 1000 • ROOM 310AB

M&S REQUIREMENTS: URGENCY, INNOVATION TO MEET TOMORROW'S GLOBALLY CONNECTED TRAINING GAPS

MODERATOR

MAJOR DES BRAZIEL, USAModeling & Simulations Planner,
Joint Staff J-7

PANELISTS

COLONEL THOMAS TABAKA, USA

Chief, G3/7 Training and Exercises, U.S. Army Europe and Africa

COLONEL SANGHYOUN PARK (KOR)

Director of Analysis and Assessment, Air and Space Combat Development Wing, Republic of Korea Air Force Headquarters

COLONEL GREG PAVLICHKO, USA

Director, U.S. Army National Simulation Center

LIEUTENANT COLONEL SEBASTIAN ALEKSANDROWICZ (AUS)

J-7 Joint Collective Training Branch, AUS Joint Operations Command

BIJAL MISTRY (UK)

Head of Defence Modelling & Simulation Officer, UK Integrated Warfare Centre



MAJ BRAZIEL, USA



COL PARK (KOR)



COL PAVLICHKO, USA



LTCOL ALEKSANDROWICZ (AUS)



MS. MISTRY

This panel will feature real-world stakeholder examples of using innovation involving live instrumented forces, virtual simulators, constructive models and military war-gaming to replicate emerging and complex challenges of tomorrow's battlefield. Key themes include addressing barriers to a fully-informed Joint M&S environment and discussing actions to grow the Joint Training Synthetic Environment by expanding the current M&S catalog. Panelists will promote Joint / Service specific cross-domain initiatives, training requirements "at scale" that increase M&S interoperability, and build a better trained and interconnected global force. Finally, this panel will feature discussion on the vision forward of the expanded Joint Training Synthetic Environment, which is nested with the Joint Operational Training Gaps.



FOCUS EVENT

THURSDAY, 5 DECEMBER • 1330 - 1500 • ROOM 330ABCD

AIR FORCE MAJCOM 0-6 PANEL

MODERATOR

COLONEL ANTHONY GRAHAM, USAFAFAMS Commander

PANELISTS

COLONEL CHRISTOPHER FINCH, USAF HAF/A3TI

COLONEL MATT MCDANIEL, USAF AFGSC/A3

COLONEL SHANE GARNER, USAF

Chief, Test and Training Division, ACC/A5T

COLONEL JUSTIN DAHMAN, USAF

AMC/A3T

JASON MILLER
HO AFSOC A3/A3TS



COL GRAHAM, USAF



COL FINCH, USAF



COL MCDANIEL, USAF



COL GARNER, USAF



COL DAHMAN, USAF



MR. MILLER

This panel brings together training command leaders to provide insights into the needs of the user. The Air Force leaders will provide insight from a mission readiness perspectives and near term needs to meet operational imperative to meet readiness. This panel provides an opportunity for I/ITSEC participants to engage with the Air Force leaders with sustaining a global force in training technology across the Air Force enterprise to increase readiness and lethality in a digital world.



THE NEXT BIG THING AT I/ITSEC



ALL EVENTS IN THE DESTINATION LOUNGE ON THIRD FLOOR, SOUTH CONCOURSE

ACCELERATING THE ADOPTION OF EMERGING TECHNOLOGIES

SERIES OF TED STYLE TALKS (TALX), AND EVENTS DESIGNED TO INSPIRE, INFORM, AND COLLABORATE

TUESDAY, 3 DECEMBER • 1400 - 1530 • LARGE LANGUAGE MODELS

The Great Hallucination

Speaker: Brian Stensrud, Ph.D., CAE

The year is 2025. Catching the wave of excitement over its possibilities, many government organizations began rolling out generative AI capabilities for a range of applications, and many of those capabilities are now in place. However, something horrible happened. One of the systems has 'hallucinated', producing catastrophically incorrect content that has led to a spectacular failure. It makes national news, and a congressional investigation follows. In the fallout, the DoD adopts a policy banning the use of GenAI, and ongoing AI programs are paused indefinitely. Luckily it is still 2024, and this is a future we can avoid. How?

Augmenting Humans with Compound Al: The Future of Military Training and Wargaming

Speakers: Svitlana Volkova, Ph.D., Aptima, Inc.; Summer Rebensky, Ph.D., Aptima, Inc.

This TalX unveils a groundbreaking vision of compound AI that seamlessly blends human intuition with AI, transforming military training and wargaming. We'll explore how cutting-edge AI models, rigorously evaluated for transparency and robustness, work in concert to create immersive, adaptive experiences tailored to everyone. Witness the power of AI-generated scenarios that push the boundaries of strategic thinking. Discover how human-AI synergy could redefine operational readiness. Join us on a journey to the frontiers of technology, where the fusion of human creativity and AI capabilities promises to unlock unprecedented levels of performance and decision making across military operations.

LLM Co-pilots for Domain Specific Modeling Languages

Speaker: Matt Naveau, Tangram Flex

The DoD's digital transformation is advancing with domain specific modeling languages (DSMLs) for precise design specifications, which are better suited than general purpose modeling languages, like SysML, when implementing complex designs. Tangram Flex has successfully used Retrieval-Augmented Generation (RAG) with large language models (LLMs) to generate DSML code quickly and accurately. Experiments showed significant time savings when using LLMs, reducing development from months to weeks. Additional benefits include easier verification and a reduced learning curve for new users. LLMs thus enhance rapid, confident development of DSMLs, easing adoption for systems and software engineers.

TUESDAY, 3 DECEMBER • 1600 - 1730 • HUMAN & MACHINE TEAMING

From Simulation to Autonomy: Evolving Needs for Humans and Machines

Speaker: Shane Arnott, Anduril Industries

This TalX will discuss the evolving requirements, challenges and opportunities as simulation is now used to enable humans to prepare for missions alongside autonomous systems, as well as train the autonomous systems to get them ready for the future fight. Considering the different abilities of humans and machines to go beyond visual and leverage additional signals and spectral bands, or the speed with which each participant can go through a simulation or training plan and how to harmonize these discrete requirements come to the forefront, as will the need to consider new testing and validation.

Optimizing for Human Performance in Human Machine Teams

Speaker: Dan Javorsek, Ph.D., EpiSci

The future of competition and conflict will be defined by the effective employment of human machine teams. To date, the focus has been on developing exquisite Al-driven solutions, like Al pilots for collaborative combat aircraft, to work alongside human pilots. This TalX will explore these advancements, while discussing how the I/ITSEC community can optimize for human performance in those human-machine teams through new and novel training methodologies.

Bridging the Gap: Overcoming Barriers in the DoD's Adoption of Novel Immersive Reality Technology Solutions

Speakers: Leah Rowe, Ph.D., Booz Allen Hamilton; Christopher Palmer, Ph.D., Office of the Under Secretary of Defense for Research and Engineering DoD has been slow to adopt and integrate cuttingedge immersive reality technology particularly in the critical area of HMI. Specifically in regard to technologies that enhance human machine teaming and augmented and virtual reality. Rapid advancements and adoption in this technology area will have a multitude of benefits for our service members. This session will explore the barriers for adoption, focusing on the lack of formalized requirements and funding, and ultimately support from the government for these transformative technologies. We highlight the approach that Office of the Assistant Secretary for Defense for Critical Technologies is taking for technology adoption, addressing the dynamic demands of modern warfare, and identify the most significant gaps that must be addressed to spur immediate investment and development in HMI.





THE NEXT BIG THING AT I/ITSEC

WEDNESDAY, 4 DECEMBER • 1030 - 1200 • NOVEL APPLICATIONS OF DATA

Synthetic Training Data for Autonomous System Training Generated with Al

Speaker: Hannes Walter, Blackshark.ai Several machine learning and generative AI technologies are employed in the approach discussed in this TalX to produce high-quality synthetic sensor data for autonomous system training. Real sensor data as initial input ensures focus on target areas and generative Al creates synthetic variation. A novel machine-learning approach extracts relevant custom features from the sensor data sets. These features are used as input to reconstruct realistic 3D training environments. Aspects too detailed to be captured by the sensor data, environmental conditions and dynamic scenarios, are augmented generatively. The workflow allows permutations of any parameter, ensuring high-quality synthetic sensor training data. To make truly autonomous systems as robust as possible, it needs as much training and training data as possible which can only be achieved via synthetic training data. The introduced approach ensures targeted synthetic sensor training generation, aligned with current, realistic, localized, training scenarios to avoid misstraining.

The Evolution of Autonomous Tactical AI – Learning the Lessons from Ukraine

Speaker: Peter Morrison, Bohemia Interactive Simulations

The Ukrainian conflict has seen trench warfare coupled with new technology including drones and modern sensors. Militaries are updating their doctrine to exploit and defend against these new technologies. Simulation and Al will enable new tactics to be tested in a safe, virtual environment before expensive acquisitions and field deployments. While semi-autonomous AI has been used for decades, recent advancements will deliver intelligent and autonomous computer-generated forces with utility from training to operations. This TalX looks at the biggest advancements and predicts when these force-multiplying technologies will make a meaningful difference to the Warfighter. Attendees will leave educated on how current / near-future advances in AI will actually impact training and operations, focusing on entity-level AI and COA analysis.

The Data Mesh and Zero Trust

Speakers: Erica Dretzka, OSD Chief Digital and Al Office; Jordan Gottlieb, Zero Trust Portfolio Management Office

This TalX will explore the co-dependency between the Data Mesh and Zero Trust and their intersection with MS&T. We will discuss the strategic need, emphasizing the rapid change in technology. For example, the fear that quantum computing, with a horizon of about 3-4 years hence, is the first technology able to break traditional encryption methods. Other examples are the ability for LLMs and other bots to perform rapid, nearly undiscernible security attack and the increased need for scalable, real-time security measures that are flexible and trustworthy as the data mesh adoption enables collaboration while needing to protect their Intellectual Property.

WEDNESDAY, 4 DECEMBER • 1600 – 1730 • CATALYSTS TO ADOPTION

Why Can't We Innovate?

Speaker: CAPT Tim Hill, USN (Ret.), Intuitive Research and Technology Corp.

This discussion will focus around barriers to adopting innovative technologies and what the MS&T community might do to mitigate those barriers. This TalX center around three main barriers to innovation, regardless of specific technology, and what we can do about it.

Accelerating Software Accreditation in the Department of Defense

Speaker: Tyler Sweatt, Second Front Systems

Software accreditation – obtaining an Authority to Operate (ATO) – and deployment can be a thorny challenge for new and small businesses when attempting to work with the Department of Defense (DoD). This TalX will discuss new pathways to onboard, secure, and run commercial SaaS applications on DoD networks at a fraction of the cost and time through new DevSecOps platforms that provide an alternative to the traditional ATO process, allowing software to be delivered at the speed of relevance.

Modeling and Simulation in Software Defined Conflict

Speaker: Chris Morales, Point72 Ventures

The defense technology innovation system is changing with new venture-capital backed entrants developing new novel digital technologies, modeling and simulation capabilities, and training tools for the government. This TalX will explore the impact venture capital can have on defense acquisitions and modernization. It will address how venture capital firms try to identify talented new startups and the types of attributes they look for when making funding decisions.

Accelerating Adoption via an Al Framework

Speaker: Charles Newton, Soar Technology, LLC

The commercial world is quickly adopting AI in their workflows. These enhancements make users more efficient, organized, and more timely and consistent on meeting tasks. This TaIX will present design patterns for adopting AI that match existing workflows for accelerating the realization of AI in government organizations.





THE NEXT BIG THING AT I/ITSEC



THURSDAY, 5 DECEMBER • 0830 – 1000

THE FUTURE OF XR-BASED, AI-DRIVEN SIMULATION TECHNOLOGIES:
WHAT EFFECTIVE HUMAN FOCUSED SYSTEMS WILL LOOK LIKE BEYOND THE NEXT 5 YEARS

Massive Scale, Unprecedented Complexity: The Challenges & Advantages of Al-Enabled Modelling & Simulation Tech

Speakers: Jason Kennedy, Skyral; Naomi Hulme, Skyral

Traditional modeling of civilians walking down a road, ignoring traffic, gunshots, and explosions is worthless, even at scale. Training our warfighters for today must include more than "Move, Shoot, Communicate." Warfighters need simulations that model human behavior and reactions with accuracy, and this accuracy relies on delivering immense scale. Simulations capable of complex, reactive behaviors of 5M+ civilians civilians in a city are necessary to prepare our Warfighters for the challenges they face today, and in the future. While artificial intelligence (AI) is capable of producing assets on a massive scale, incorporating these assets into extended reality (XR) simulations introduces a new set of challenges. Designers and engineers of these simulation systems need to be able to engage and influence "populations" of AI-generated entities into a virtual training environment, which requires interoperability with other complex M&S technologies. This TalX will explore how to incorporate human needs, goals, fears, and sentiment into simulation technologies and provide an example delivered to the UK MoD and Western Allied Nations.

Extended Reality (XR) and Human Computer Interaction (HCI) – What's Coming Beyond the Next 5 Years

Moderator: Eliot Winer, Ph.D., Iowa State University
Speakers: Doug Bowman, Ph.D., Virginia Tech; Mark Dennison, Ph.D., U.S. Army
DEVCOM Army Research Laboratory West; Daniel O'Brien, HTC VIVE
Extended Reality (XR) and Human Computer Interaction (HCI) have been
covered quite a bit in NBT events the last few years. This moderated discussion
will focus on what is coming beyond the typical five (5) year technology
horizon. XR and HCI are often discussed as mature areas of research and
implementation, while in reality they are in their infancy. This group of
experts from industry, academic, and government will discuss the next major
advancements coming, the technological challenges that exist, and the barriers
to adoption that must be addressed to move these fields into the next decade
and more.

THURSDAY, 5 DECEMBER • 1030 – 1200 • BIOMETRICS / GOVERNMENT INNOVATION LABS

Leveraging Labs for Accelerated Adoption

Speakers: Glenn Gunzelmann, 711th Human Performance Wing, AFRL; Luis Velazquez, MARCORSYSCOM; Mike Cannizzaro, Army Futures Command, STE CFT

We will hear from Government representatives from several labs describing how they create an environment for technology experimentation, maturation, and transition that helps speed the delivery of new capabilities to the force by providing an operationally relevant infrastructure that is connected to the broader operational training and test infrastructure (OTTI). A central motivation is to provide an environment that enables early contact with operators to explore human performance, integration, and machine teaming issues in a high-fidelity, operationally-relevant environment. The long-term objective is to provide an enterprise capability to rapidly integrate new technologies, capabilities, and concepts to facilitate adoption for operations.

Catch the Brain Wave and Make Metrics Matter

Speaker: Amy Bair, Ph.D., KBR

The intersection of computer science and the enigmas of brain performance represents an exhilarating fusion of technology and biology. This convergence is giving rise to a new generation of intelligent systems utilizing biometrics to establish a 'Brain Score' that leverages machine learning to track progress, offer data-driven insights, and foresee performance declines within a higher fidelity picture. The reach can expand to the field with asynchronous monitoring and intervention delivery tailored to WarFighter's schedule. It is crucial to address the current barriers to adoption and strategize how to capitalize on this meaningful crossover for performance optimization and neurocognition.

THURSDAY, 5 DECEMBER • 1300 - 1430 • NATO TECH GROVE AI SHOWCASE

Al Showcase - State of the Art in Al Applied to Military Training and Education

Moderators: Benjamin Goldberg, Ph.D., U.S. Army DEVCOM SC STTC; Erin Baker, Ph.D., Central Florida Tech Grove

The recent proliferation of AI has created new possibilities for training data analysis, assessment, and adaptive learning. To drive collaboration and information sharing, a new Exploratory Team managed by NATO's Human Factors & Medicine (HFM) and Modeling & Simulation Group (MSG) panels was established (HFM-MSG-ET-218 "AI Applied to Military Training and Education"). In collaboration with the Central Florida Tech Grove, the Exploratory Team is hosting this event, which provides a smaller, more intimate demonstration setting showcasing cutting-edge technologies that leverage AI techniques applied specifically to military-centric use cases. The event will start with short introductions on the fourteen (14) innovative technologies in play, followed by hands-on engagement with demonstrations.



MONDAY - THURSDAY, 2-5 DECEMBER • EXHIBIT HALL, BOOTH 2285

SERIOUS GAMES SHOWCASE & CHALLENGE

EXPERIENCE BEST-IN-CLASS SERIOUS GAMES IN BOOTH 2285!

SGS&C DIRECTOR

JENN McNAMARA

BreakAway Games

COMMITTEE LEADERSHIP

SGS&C INDUSTRY CHAIR

MATT BECCHIO

Engineering & Computer Simulations

SGS&C GOVERNMENT LEAD

LIEUTENANT COMMANDER STEVEN J. STASIK, USN NAWCTSD

SGS&C GOVERNMENT LEAD
MAJOR MICHAEL ASHMORE,
USMC

PM TRASYS











MS. MCNAMARA

MR. BECCHIO

LCDR STASIK, USN

MAJ ASHMORE, USMC

In Booth 2285, the Serious Games Showcase & Challenge (SGS&C) provides a casual and interactive showcase of exemplar learning games from businesses, students, and government organizations competing for awards recognizing their achievements. Visit the booth anytime the Exhibit Hall is open to experience exciting PC, XR, and mobile learning games, meet the developers and our organizing committee members, and engage in conversations about applying serious games in your work.

CAST YOUR VOTE FOR THE PEOPLE'S CHOICE AWARD BY 1800 WEDNESDAY, 4 DECEMBER

The People's Choice Award is based on votes from attendees like you. Your I/ITSEC badge includes your ballot. Be sure to visit the booth to play the games and vote!

HEAR THE SGS&C AWARDS ANNOUNCED LIVE ON THURSDAY, 5 DECEMBER

Join us at 1300 in the Innovation Showcase, Booth 2909 for the live announcement of the Winners of the:

- Best General Audience Serious Game
- Best Government Audience Serious Game
- Best Student-developed Serious Game
- Best XR Serious Game

- · Best Serious Game Innovation Award
- Students' Choice Award
- People's Choice Award

WE THANK OUR GENEROUS SPONSORS:

ARA Virtual Heroes Division, BreakAway Games, Box.com, Engineering & Computer Simulations, Hatalom Corporation, HP, Mass Virtual, NTSA, and VMASC.



MONDAY, 2 DECEMBER • 1415 - 1545 • ROOM 320H

IMPLICATIONS OF ARTIFICIAL INTELLIGENCE FOR DOD HUMAN SYSTEMS TRAINING APPLICATIONS

TRAINING DESIGN IS A WHOLE NEW BALLGAME

MODERATOR

HENRY PHILLIPS, PH.D.

Program Manager, Advanced Distributed Learning (ADL) Initiative

PANELISTS

BRIAN STENSRUD, PH.D.

Technical Fellow, Artificial Intelligence, Defense & Security, CAE USA

ERIC STOHR

Sr. Human Factors Systems Engineer, Basic Commerce & Industries (BCI), Ltd.

BENJAMIN GOLDBERG, PH.D.

Senior Scientist, U.S. Army DEVCOM SC STTC

BRENT SMITH

Research, Development, and Engineering (RDE) Principal, Advanced Distributed Learning (ADL) Initiative



DR. PHILLIPS



DR. STENSRUD



MR. STOHR



DR. GOLDBERG



MR. SMITH

The maturity and capability of artificial intelligence (AI) applications has skyrocketed in the last several years with new advances in generative AI, large language models, autonomous agents, computer vision, dynamic interfaces, and adaptive training. These new capabilities have massive implications for the broad capabilities of the DoD's training tools and systems into which they are being integrated. They have similarly massive implications for how humans use these augmented tools and capabilities, and how the roles, needs, limitations, and risks assumed by human users, operators, trainees, and stakeholders may change as a result.

Human systems integration (HSI) technical warrant holders for DoD programs and program offices are expected to keep program managers and leadership informed about the opportunities, opportunity costs, and risks associated with resource allocation and design decisions affecting human users and stakeholders. The challenges and opportunities before training stakeholders are becoming more complex by the day.

This special event will bring together experts in AI, human factors, and training design and implementation for a discussion of how the challenges faced by training acquisition programs are changing with the maturation of AI, and how and where stakeholders and practitioners can incorporate understanding of those challenges and help manage their impacts on programs, learners, instructors, decision-makers, and stakeholders.

Questions to be explored here include what developers and acquisition stakeholders should know, and how these capabilities will be accommodated in the near and more distant term.



WEDNESDAY, 4 DECEMBER • 0830 - 1000 • ROOM 330GH

DATA & CYBER CONSIDERATIONS TO M&S

EFFICACY OF MODELS AND CYBERSECURITY ASSOCIATED WITH DOD TRAINING SYSTEMS

MODERATOR

GAURANG DÄVÉ

Cyber Technology Officer, MARCORSYSCOM, Marine Corps ACQ Authorizing Official

PANELISTS

COLIN CROSBY, PH.D.

Service Data Officer/Deputy DON CDO (HQE) DC Information

DAN CORBIN, PH.D.

Acting USMC CIO and AO Chief Technology Advisor DCI/IC4 Technical Director

SHERY THOMAS

MARFORCYBER CyTO

KEEGAN MILLS

HQE Marine Corps System Command



MR. DÄVÉ



DR. CROSBY



DR. CORBIN



MR. THOMAS



MR. MILLS

- Efficacy of models and cybersecurity associated with training systems
- Joint Panel technical discussions on data & Cyber considerations to M&S
- Emphasizing training, engineering, experimentations and adversarial assessments
- Panel will highlight the importance of equipping professionals with the necessary skills to navigate the complexities of growing data requirements and importance of understanding the cyber



WEDNESDAY, 4 DECEMBER • 1030 - 1200 • ROOM 330GH

HOW STAKEHOLDERS IN NICHE MARKETS CAN BENEFIT FROM, AND DRIVE, INTEROPERABILITY STANDARDS AND MOSA

EXAMPLES FROM THE MEDICAL SIMULATION ARENA

MODERATOR

WILLIAM PIKE, PH.D. Science & Technology Manager, U.S. Army DEVCOM SC STTC

PANELISTS

DAN IRIZARRY, M.D.Medical Advisor, TacMed Solutions

DAN SILVERGLATE

Vice President, Systems Architecture and Development, Vcom3D

MICHAEL O'CONNOR

Chief Technologist, Trideum Corporation

BRIAN PARRISH

Principal Modeling & Simulation/Multi-Discipline Systems Engineer, The MITRE Corporation

M. BETH PETTITT. PH.D.

Chief, Medical Simulation Research, U.S. Army DEVCOM SC STTC

AMIT KAPADIA

Chief Engineer, Program Manager Synthetic Environments (PM SE), U.S. Army PEO STRI



DR. PIKE



DR. IRIZARRY



MR. SILVERGLATE



MR. O'CONNOR



MR. PARRISH



DR. PETTITT



MR. KAPADIA

The term interoperability is often co-mingled with the term modularity, which unfortunately allows for different definitions. To the government, the terms both indicate that a subsystem developed by Company ABC can be used in a system developed by Company XYZ. To some companies, the term simply means they can use swap their own subsystems in their systems. In the example of a human patient simulator, Company ABC could sell an arm capable of IV training, and a broken army for splint training, both guaranteed to work in their torso. While certainly modular, this does not align with the government's concept.

There are several players with interest in interoperable training systems. Within the Department of Defense (DoD) there is a stated preference to adhere to the tenets of MOSA — Modular Open Systems Approach — so DoD program managers have an interest. Research organizations, with their limited budgets, obviously prefer the reuse afforded by interoperable systems. Training centers and schoolhouses can't afford to purchase multiple manikins just to be able to train treatment of different injuries.

The government should not overlook the concerns of industry, both large and small businesses, however. Businesses, small and large, did not develop proprietary standards without considering the financial impact to their business. Still, in an era of dwindling financial resources, companies that offer true interoperability will be rewarded for their efforts

While many in smaller, niche markets may consider interoperability and open systems as "the next new thing", they have been practiced for many years in other training arenas. By researching the lessons learned from other communities that have instituted more rigor into their MOSA policies, smaller modeling & simulation communities can leverage open systems to better take advantage of interoperability.

The purpose of this panel is to present multiple views and opinions on the promises — and pitfalls — of true interoperability and a MOSA-based approach to developing training simulations. Panel members will include industry members, acquisition program managers, and government R&D leaders, representing large and small communities. For some, interoperability is indeed "the next big thing". For others, interoperability and open systems have been applied for several years.

While medical simulation is represented heavily on the panel, the concepts and lessons learned can apply to many other smaller markets as well.



WEDNESDAY, 4 DECEMBER • 1400 - 1530 ECOSYSTEM OF LEARNING, EXHIBIT HALL, BOOTH 2395

VALUE PROPOSITION OF STEM IN ACQUISITION TALENT MANAGEMENT

MODERATOR

LINDA BRENT, ED.D., CMSPChief Executive Officer, The
ASTA Group, LLC
STEM Coordinator, NTSA

PANELISTS

EMILY SHERKOWSTEM Program Manager, NAWCTSD

BRANDI PRIEBE

Electronics Engineer, U.S. Army PEO STRI

PAUL BOURGEOIS

APM Engineering, PM TRASYS









MS. SHERKOW MS. PRIEBE

MR. BOURGEOIS

- DoD's STEM mission is to inspire, cultivate and develop exceptional STEM talent to enrich our current and future Military to tackle evolving defense technological challenges.
- Panel will provide insight on the value STEM knowledge in Acquisition Talent Management.
- Questions from the Moderator to get the discussion Going Questions from the audience expected.



WEDNESDAY, 4 DECEMBER • 1530 - 1700 • ROOM 330GH

DIGITAL MATERIEL MANAGEMENT

MODERATOR

CHRIS GARRETT Technical Advisor for Architectures, AFLCMC/EN-EZ

PANELISTS

JIM GUMP, PH.D.

Senior Technical Advisor (STA) for Modeling Simulation and Analysis (MS&A), AFRL and CMSO

ALEXIS BONNELL

Chief Information Officer, Director of the Digital Capabilities Directorate, AFRL

KYLE HURST

Digital Transformation Lead, AFMC

BRIAN KINKADE

Chief of Enterprise Digital Lifecycle Management, Air Force Product Lifecycle Management Lead



MR. GARRETT



DR. GUMP



MS. BONNELL



MR. HURST



MR. KINKADE

Digital Transformation is the disruptive enabler the DAF needs to maintain its competitive edge. Digital Materiel Management (DMM) is the concept of Digital Transformation applied to AFMC's mission to Organize, Train, and Equip the USAF. This panel will provide insights into DMM advantages and the efforts of the Air Force to unify disjointed modernization efforts, enable discovery of cross-cutting opportunities, and catapult the delivery of new capabilities to the field faster. With the renewed focus on great power competition and the recent standup of the DAF Integrated Development Office, the need is now!



WEDNESDAY, 4 DECEMBER • 1530 - 1700 • ROOM 310CD

ARTIFICIAL INTELLIGENCE (AI) - TRAINING, ANALYTICS, EXPERIMENTATION AND ACQUISITIONS

MODERATOR

LUIS VELAZQUEZ

Chief Technology Officer (CTO), Marine Corps Systems Command

PANELISTS

MARC PROULX

NAVMARCOL Wargaming U.S. Navy

COLIN CROSBY, PH.D.

Deputy DON CDO, DC Information, U.S. Marine Corps

KEITH BRAWNER, PH.D.

Senior Engineer Artificial Intelligence, U.S. Army DEVCOM SC STTC

THOMAS HOLLAND, PH.D.

Georgia Technical Research Institute, Education and Al



MR. VELAZQUEZ



MR. PROULX



DR. CROSBY



DR. BRAWNER



DR. HOLLAND

- Joint panel discussion on Artificial Intelligence (AI)
- Discuss the impact on the future of Wargaming, Experimentation, Education, Cyber, and Acquisitions
- Artificial Intelligence Panel focuses on the integration of advanced technological solutions to optimize multi-domain functions from system engineering, training, experimentation, and acquisition processes



THURSDAY, 5 DECEMBER • 0830 - 1000 • ROOM 320H

NATO M&S DEVELOPMENT AND OPPORTUNITIES

MODERATOR

LIEUTENANT COLONEL JASON FRISCO, USA

NATO NexGen M&S Programme Coordinator, NATO Allied Command Transformation Norfolk, USA



STEFANO IZZO

Staff Officer (M&S), ACO Innovation Management Branch Supreme Headquarters Allied Powers Europe (SHAPE), NATO Brussels, Belgium

PHIL DRAPER

Computer Assisted Exercise Support Branch Head, NATO Joint Warfare Centre Stavanger, Norway

COL OLAF WERNER

Training & Exercise Enabling
Division Head, NATO Joint Force
Training Center
Bydgoszcz, Poland

BHARAT PATEL, PH.D.

Chair, NATO Modelling & Simulation Group, NATO Science & Technology Organization Brussels, Belgium

TONYA BONILLA

Staff Officer - Contracting, NATO Allied Command Transformation Norfolk, USA



LTC FRISCO, USA



MR. IZZO



MR. DRAPER



COL WERNER



DR. PATEL



MS. BONILLA

NATO must rapidly and continuously examine the future operating environment and train nations across the alliance to stand ready to defend against sophisticated adversaries. NATO is currently developing the first NATO M&S capability to support computer-assisted exercises, operational planning, operational analysis, and computer-assisted wargaming – NATO Next Generation Modeling and Simulation (NexGen M&S). NATO is also examining Distributed Synthetic Training to enable nations across the alliance to conduct virtual training exercises together.

Industry M&S developers and leaders should attend to better understand the NATO environment to identify where they can engage in the future of NATO M&S. This event will also be thought provoking for U.S. military M&S leaders, managers, and practitioners.

ATTENDEES WILL LEARN ABOUT:

- NATO structure and NATO's unique requirements and procurement process
- Current NATO M&S research, development, implemention activities
- NATO challenges and opportunities for industry to engage in the future of NATO M&S





THURSDAY, 5 DECEMBER • 0830 - 1000 • ROOM 330GH

TRANSFORMING SIMULATION SUPPORTED TRAINING WITH PROJECT TRIPOLI

MODERATOR

HECTOR VIRAMONTES

Project Tripoli Technical Lead

PANELISTS

LIEUTENANT COLONEL MATTHEW MORSE, PH.D., USMC

Senior M&S Advisor, OAD, CD&I / Training and Education Command

LIEUTENANT COLONEL CHARLES P. ROWAN, PH.D., USA

Director, The Modeling, Virtual Environments, and Simulation (MOVES) Institute

MAJOR BRIAN PUGH, USMC

C4I Planner, Joint Staff J-7











MR. VIRAMONTES

LTCOL MORSE, USMC

LTC ROWAN, USA

MAJ PUGH, USMC

This panel discussion will explore how the Marine Corps is transforming its development and delivery of simulation-supported training and identify opportunities for collaboration with industry, academia, and government partners. This panel will identify how the Marine Corps is increasing effectiveness and efficiency in the delivery of simulation-supported training, with an emphasis on how the Marine Corps is partnering with other services and academia.

Attendees can expect to learn about available resources and opportunities for collaboration with the Project Tripoli team for the development, documentation, and implementation of Marine Corps LVC training environments.

The conversation will focus on how the Project Tripoli team is increasing effectiveness and efficiency in collaboration with other government partners.

Increased effectiveness in the delivery of sim-supported training is addressed with consideration of:

- Making a clear connection between capability development, mission engineering, and training environment design,
- · Using training effectiveness evaluations to inform use of sim-supported training environments,
- Providing guidance for modeling methodologies for LVC constructs relative to operational capabilities,
- Supporting implementation of sim-supported training by more formally connecting organizations for training design and LVC integration, and
- · Using organizations for their respective areas of expertise.

Increased efficiency in the delivery of sim-supported training is addressed with consideration of:

- Leveraging and investing in existing DoD simulations, exercise design/control tools, and M&S artifact repositories,
- Collaborating for the development of well-documented LVC constructs for use by all by connecting the TECOM Integration Center with other services' laboratories, schools, and integration centers, and
- This panel discussion will explore how the Marine Corps is transforming its development and delivery of simulation-supported training and identify opportunities for collaboration with industry, academia, and government partners.



THURSDAY, 5 DECEMBER • 1030 - 1200 • ROOM 310AB

THE M&S STANDARDS LANDSCAPE FOR NATO DISTRIBUTED SYNTHETIC TRAINING

TOWARDS A PERSISTENT NATO DISTRIBUTED SYNTHETIC TRAINING CAPABILITY

MODERATOR

WIM HUISKAMP

Chief Scientist Modelling & Simulation, TNO Defence Research; Scientific Advisor, NATO Modelling & Simulation Group (NMSG)



LIONEL KHIMECHE

Head, M&S Department, DGA (Direction Générale de l'Armement); Chair, NATO M&S Standards Subgroup (MS3)

ROBERT SIEGFRIED, PH.D.

Senior M&S Consultant and Managing Director, Aditerna

BJÖRN LÖFSTRAND

Vice President, Pitch Technologies

DAVID LUSK

RAF Contractor, DST Architecture Tigerteam

KATHERINE MORSE, PH.D.

Principal Professional Staff, The Johns Hopkins University Applied Physics Laboratory (JHU/APL); Chair, SISO EXCOM



MR. HUISKAMP



MR. KHIMECHE



DR. SIEGFRIED



MR. LÖFSTRAND



MR. LUSK



DR. MORSE

Standards provide interoperability and reduce time and cost to deliver effective solutions. This is especially true in the synthetic training domain where a mix of existing and/or newly developed components often need to be integrated in a short timeframe. M&S standardization leads from NATO Modelling and Simulation Group (NMSG), the Simulation Interoperability Standards Organization (SISO) will describe their ongoing efforts in the context of the NATO initiative for a persistent Distributed Synthetic Training (DST) capability.

You will gain renewed appreciation for the value of standards and more in-depth understanding of how they are developed, adopted, supported, and maintained. If you attended the NMSG-SISO session last year, plan to join again this year to get an update on NATO and SISO standards development products for the training domain.









THURSDAY, 5 DECEMBER • 1030 - 1200 • ROOM 330GH

TRAINING AS A SERVICE: FLIPPING THE SCRIPT

MODERATOR

JAMES BROWN

Deputy Director, Range and Training Programs Division, Training and Education Command, United States Marine Corps

PANELISTS

COLONEL MARCUS J. REYNOLDS, USMC

Program Manager Training Systems, MARCORSYSCOM

JOSEPH LOMANGINO

Live, Virtual, Constructive-Training Environment Team Lead, Range and Training Programs Division, Training and Education Command

MICHAEL CHANEY

Senior Advisor, Joint Staff J-7

CHRISTOPHER BOYLE

USFFC N72 Training Technology Director, U.S. Navy



MR. BROWN



COL REYNOLDS, USMC



MR. LOMANGINO



MR. CHANEY



MR. BOYLE

INTRODUCTION:

The panel will discuss shifting from traditional procurement of simulators and training content to Training as a Service (TaaS). While commercial markets widely adopt TaaS, the U.S. Department of Defense increasingly leverages service contracts for training needs. This transition offers lessons on acquisition strategies and business case analysis.

BENEFITS INCLUDE:

- High-quality training.
- Reduced procurement times.
- · Cost savings within budget cycles.
- Agility in meeting evolving requirements.

However, risks involve defining acquisition strategies, managing lifecycle costs, legal considerations, and data rights. TaaS is effective with shared risk and a comprehensive understanding of business and regulatory landscapes.

WHY ATTEND:

Training as a Service (TaaS) has been employed in procurement strategies for several years. However, navigating regulatory and statutory complexities becomes challenging when purchasing a service that may involve substantial contractor investment, potentially limiting long-term competition. Past procurements have taught valuable lessons in meeting demanding requirements. The types of funding allocated are closely linked to both the advantages and risks associated with acquiring TaaS.

WHAT WILL YOU LEARN:

This panel will provide invaluable insights into the transition from traditional procurement of simulators and training content to a service-based approach. Participants will learn about the benefits of TaaS, including high-quality training, reduced procurement times, cost savings within budget cycles, and the ability to adapt to evolving requirements. The panel will delve into the challenges of defining acquisition strategies, managing lifecycle costs, legal considerations, and data rights. Attendees will also explore the complexities of regulatory and statutory frameworks that impact the procurement of services requiring substantial contractor investment. By understanding past procurement lessons and the nuances of funding allocation, participants will gain a comprehensive understanding of how TaaS can meet demanding requirements and deliver trained students or specific outcomes to defined standards. This session will equip attendees with the knowledge to navigate the business and regulatory landscapes essential for successful implementation of TaaS in military training programs.



THURSDAY, 5 DECEMBER • 1330 - 1500 • ROOM 320H

TRAINING INFORMATION ADVANTAGE: USING MODELING AND SIMULATION TO ENABLE THE INFORMATION WARFIGHTER

DISCUSSION ON CURRENT AND FUTURE EFFORTS TO TRAIN IN THE INFORMATION SPACE

MODERATOR

LIEUTENANT COLONEL JOHN M. WILLIAMS II, PH.D., USA

Product Manager, Forces Training Systems, PM CT2, U.S. Army PEO STRI

PANELISTS

COLONEL TAMISHA R. NORRIS. USA

Director, Joint Information School

COLONEL ADAM BRYSON, USMC

Information Environment Battlespace Awareness (IEBA) Lead, DC-I LNO to Marine Corps Information Command (MCIC), Deputy Commandant for Information (DC-I)

LIEUTENANT COLONEL CHAVESO COOK. PH.D., USA

Division Chief, Strategic Competition Division, Joint Staff, J39

ALLEN GEDDES

S&T Manager, Advanced Modeling and Simulation Branch, U.S. Army DEVCOM SC STTC



LTC WILLIAMS II, PH.D., USA



COL NORRIS, USA



COL BRYSON, USMC



LTC COOK, PH.D., USA



MR. GEDDES

This panel includes leaders from PEO STRI, DEVCOM, and the and developing training technologies. The panel of experts will space. The discussion will include updates to information advantage doctrine and organizations, current training efforts,

Joint force to discuss training needs in the information advantage also look to provide academia and industry with key friction points, and offer opportunities for synergy across the DoD.

THURSDAY, 5 DECEMBER • 1330 - 1500 • ROOM 310AB

ARMY LIVE TRAINING

STATE OF ARMY LIVE TRAINING

MODERATOR

COLONEL THOMAS R. MONAGHAN, JR., USA

Project Manager, Training Devices

PANELISTS

COLONEL DANA T. STOWELL. USA

Director, TRADOC Proponent-Live

JOHN McCABE

Division Chief, U.S. Army Contracting Command, Orlando

LIEUTENANT COLONEL JAMES E. FLOTT, USA

Product Manager, Tactical Training Systems

LIEUTENANT COLONEL JENNIFER C. BREWSTER, USA

Product Manager, Combat Training Instrumentation Systems

MICHAEL POWELL

Product Manager, Synthetic Training Environment, Live **Training Systems**

JOHNNY FIGEUROA

Product Director, Virtual Training Systems

This panel will provide insights on the current state and future vision of Army live training. The panel will discuss current initiatives, future plans, and alignment with Army modernization efforts, offering valuable information to the live training community. This forum encourages dialogue, promotes collaboration, and fosters a better understanding of Army live training, ultimately contributing to the achievement of Army modernization goals. Participants will have the opportunity to engage in dialogue, ask questions, and provide feedback on the topics covered. Please click on the link below if you would like to submit your questions early. https://forms.osi.apps.mil/r/ExvXqDU8vG



PROGRAM BRIEFS

MONDAY, 2 DECEMBER • 1430 - 1545 • ROOM 330EF

USMC PM TRASYS – ACQUISITION UPDATE

MODERATOR

JOHN TAYLOR

Deputy Program Manager, Program Manager, Training Systems

Most current look at opportunities now and into the future

Acquisition Updated from Program Manager Training Systems

PANELISTS

LIEUTENANT COLONEL RORY HERMAN, USMC

Product Manager, Range Training Systems, Program Manager, Training Systems

LIEUTENANT COLONEL MARCIAL GARCIA, USMC

Product Manager, Warfighter Training Support, Program Manager, Training Systems

ELIZABETH TYGART

Product Manager, Synthetic Training Systems, Program Manager, Training Systems

TUESDAY, 3 DECEMBER • 1400 - 1530 • ROOM 310AB

JOINT SIMULATION ENVIRONMENT (JSE)

PANELISTS

COLONEL C. MATT RYAN, USAF

Senior Materiel Leader, Advanced Training Capabilities Division, AFLCMC/WNR

LT COL JOHN KOVACIC, USAF

JSE Materiel Leader, AFLCMC/WNRJ

DEREK GREER

Department Head, IBST/JSE, NAWCAD

NICHOLE WINGATE

JSE Technical Baseline Manager, NAWCAD

DOUGLAS ROSENSTOCK

JSE Chief Test Pilot, NAWCAD

JOHN PUGNALE

Chief Engineer, Blue Air Section, AFLCMC/WNRJ

This panel will introduce the audience to JSE, provide update on program status and near-term outlook. This session will also focus on current status of the JSE program, describing major efforts under way and identifying key interest areas for near-term capability enhancement, including industry partnership opportunities. Representation from across the government stakeholders will be available to answer industry questions on how to participate in the JSE eco-system.



PROGRAM BRIEFS

THURSDAY, 5 DECEMBER • 0830 - 1000 • ROOM 330EF

NAVY TRAINING PROGRAMS VISION

MODERATOR

MIKE MERRITT

Acquisition Director, NAWCTSD

PANELISTS

CAPTAIN JIM RORER, USN

F-35 Training Systems and Simulation PMO

DAVID KEMP

Director, Ready Relevant Learning, PEO MLB

ARNOLD MALLORY

IW Training Department Head, Naval Information Warfare Systems Command

Navy Captains and senior civilian leaders representing key programs and capabilities pertinent to the Navy Training mission spanning weapons platforms, sailors, and the training environments the Navy uses. The panel members will discuss their program's highlights and share their strategic vision. I/ITSEC participants are welcome and encouraged to attend to hear about the state of the Navy's Training Systems.

THURSDAY, 5 DECEMBER • 0830 - 1200 • ROOM 310CD

ARMY ACQUISITION UPDATE (TSIS UPDATES)

MODERATOR

LEE A. JAMES III, SES

Deputy Program Executive Officer, U.S. Army PEO STRI

PANELISTS

COLONEL THOMAS MONAGHAN, JR., USA

Project Manager, Training Devices (PM TRADE), U.S. Army PEO STRI

JOHN GILLETTE

Project Manager, Synthetic Environment (PM SE), U.S. Army PEO STRI

CHRISTINA BELL

Acting Cyber, Test and Training Project Manager (PMCT2), U.S. Army PEO STRI

DESTINY LASKI

Acting Project Lead Enterprise Transformation and Integration (PL ETI), U.S. Army PEO STRI

DALE WHITTAKER

Project Lead International Office (PL IPO), U.S. Army PEO STRI

MICHAEL WILLOUGHBY

Project Lead TADDS Support Operations (PL TSO), U.S. Army PEO STRI

The U.S. Army Program Executive Office Simulation, Training and Instrumentation (PEO STRI), Training & Simulation Industry Symposium (TSIS) updates at I/ITSEC will provide the latest information regarding current and future PEO STRI business opportunities. This is an update from the June 2024 TSIS.



PROGRAM BRIEFS

THURSDAY, 5 DECEMBER • 1030 - 1200 • ROOM 330EF

NAVY VISION FROM TRAINING SYSTEMS PROGRAM MANAGERS

MODERATOR

MIKE MERRITT

Acquisition Director, NAWCTSD

PANELISTS

CAPTAIN KEVIN T. MCGEE, USN

Program Manager, Naval Aviation Training and Ranges Program (PMA-205)

CAPTAIN TIM JAMES, USN

Commanding Officer, NAWCTSD and NSA Orlando

BOB KERNO

Program Manager, Surface Training Systems Program Office (PMS-339)

Each year at I/ITSEC, a panel of Training Systems Program Managers consisting of Navy Captains and senior civilian leaders representing the Navy's training acquisition organizations convenes to discuss the year's highlights and share their strategic vision. I/ITSEC participants are welcome and encouraged to attend to hear about the state of the Navy's Training Systems.

THURSDAY, 5 DECEMBER • 1030 - 1200 • ROOM 330ABCD

AIR FORCE ACQUISITION UPDATE

USAF CHANGES - PART 2

PANELISTS

COLONEL CARLOS QUINONES, USAF

Acting PEO for PEO Training, AFLCMC/WNS

COLONEL C. MATT RYAN, USAF

Senior Materiel Leader, Advanced Training Capabilities Division AFLCMC/WNR

COLONEL NICHOLAS FERANEC, USAF

Senior Materiel Leader, Simulators Division AFLCMC/WNS

COLONEL ROBERT A. VOLESKY, USAF

Senior Materiel Leader, T-7 Division AFLCMC/WNB

ABBIGAIL H. POGORZELSKI, USAF

Senior Materiel Leader, Legacy Training Aircraft Division AFLCMC/WND

This special event will present information about the stand up of PEO Training for the USAF as a part of the realignment to meet the challenges of the Great Power Competition. It will feature remarks from Col Carlos Quinones, the acting Air Force Program Executive Officer (PEO) Training. Col Quinones will share his perspective on the current state of the Air Force acquisition process along with ongoing initiatives. In addition, each Division which reports to the PEO will be available for questions on the restructure.



SPECIAL EVENTS INTERNATIONAL

INTERNATIONAL PAVILION

ROOM S310E-H

International attendees can meet and connect with counterparts from around the world. Limited private meeting space is available on a first-come, first-served basis to our international participants and may be scheduled at the International Pavilion's Welcome Desk. Additional information about the many international activities throughout I/ITSEC is readily available in the International Pavilion.

International registrants should register at the dedicated international check-in station positioned near the main registration desk in the lower level of the South Concourse. International conference attendees' meeting bags will be available for pick-up at the main registration desk this year.

INTERNATIONAL PAVILION HOURS OF OPERATION

Monday, 2 December	0800 – 1800
Tuesday, 3 December	1200 - 1800
Wednesday, 4 December	0800 - 1500
Thursday, 5 December	0800 - 1500

International Pavilions

Australia	1961
Canada	1969

PAVILION SPONSOR: A. HAROLD AND ASSOCIATES, LLC



WEDNESDAY, 4 DECEMBER • 1400 - 1530 • INNOVATION SHOWCASE, BOOTH 2909

BEST FROM AROUND THE GLOBE



Best from Around the Globe features the Best Paper awardees of MODSIM World and IT²EC. Each of the winners was selected by a committee and criteria specific to the particular global conference focus and theme. Come hear the award winners offer their outstanding presentations from these prestigious international conferences.

IT2EC 2024 BEST PRESENTER

OPTIMIZATION OF VIRTUAL REALITY MEDICAL SIMULATION SCENARIOS FOR OPERATIONAL COMPETENCY AND MULTI-DISCIPLINARY TEAM TRAINING Cheryl Lockhart, Senior Military Advisor, SimX

IT2EC 2024 BEST PAPER

ON-BOARD SYNTHETIC TRAINING - WHY IS IT SO HARD?

Nick Benedek, Capture Lead, BAE Systems

MODSIM WORLD 2024 BEST PAPER

CREATING VIRTUAL WORLD ENVIRONMENTS FOR OCEAN VEHICLES

Ryan Capozzi, Amanda Costa, and Ian Friedrichs, Umanned Systems, HII, Mission Technologies Division

To view session descriptions, please view the Digital Program at IITSEC.org/Agenda/Agenda-Details.

The most up-to-date session information is available on the mobile app.

SPECIAL EVENTS **EXHIBIT HALL: CYBER PAVILION**

EXHIBIT HALL

CYBER PAVILION

BOOTH 2369

NTSA's CYBER PAVILION at I/ITSEC provides events and engagements with Cyber, Electromagnetic, Wargaming, and Information Warfare leaders, developers, and educators. Corporate sponsorship enables these areas:

- Communication about opportunities that span Cyberspace and Electromagnetic Warfare operations from the Tactical through Operational and Strategic levels; Integration support for policy makers and staffs, EW/Cyber/SIGINT operations; Information Warfare challenges, understanding about Mis/Dis-Information Campaigns, and Multi-Domain Operations.
- Understanding of current Defense Department service perspectives: U.S. Army Cyber Command, Army Cyber Center of Excellence, USAF (16th AF IW Command), Navy (U.S. Fleet Cyber Command) and Marines (USMC Force Cyber Command), Coast Guard (USCG Cyber Command); Department of Homeland Security (Cybersecurity and Infrastructure Security Agency CISA), International Partners perspectives.
- **Education** about Academic opportunities, studies and workforce development and model & tool development (i.e., Persistent Cyber Training Environment, Electronic Warfare Planning Management Tool (EWPMT), and others).
- Presentations and Demonstrations of applications, training, and technology approaches in development or in use to support operational organizations.

As the capabilities enabling training and simulation support for cyber, electromagnetic, wargaming, and information warfare areas continue to evolve and expand across the U.S. Government and military services, the Cyber Pavilion serves as NTSA's enabling platform at I/ITSEC for professional dialog, networking, cooperation, and discovery of solutions to address the challenges presented by Cyberspace for Information Warfare and Multi-Domain Operations. Events and attendees span U.S. Government, Department of Defense, Department of Homeland Security, International Partner Nations, Industry and Academia. Senior leaders from many organizations will attend and speak at the Pavilion. Sponsorship delivers better understanding of current capabilities and assists in communicating the needs across organizations and services. Support the proven success of the Cyber Pavilion and the pursuit of solutions at I/ITSEC.

NOTABLE ATTENDEES • NETWORKING CONTACTS ALL AT THE CYBER PAVILION:

SPECIAL EVENT – COMMENTS FROM CURRENT AND FORMER OPERATIONAL GENERAL OFFICERS

 An I/ITSEC SPECIAL EVENT: Cyberspace – Perspectives on Challenges of Future Multi-Domain Operations Panel

DISCUSSIONS ON CURRENT TOPICS

- Panel on CMMC Impacts and How to Position Your Company for Success
- Mis/Dis Information Impact on How We Prepare and Execute Conflicts
- Al Impact LTG(R) Ed Cardon
- Bringing Cyber, Electronic, Information Warfare into M&S
- Cyber Readiness and Training
- · And many more topics!



CYBER PAVILION SPONSORS

BAE-SYSTEMS, INC.

COMMAND POST TECHNOLOGIES

LOCKHEED MARTIN

TRIDEUM CORPORATION

NOBLIS

PERATON

ULTIMATE KNOWLEDGE INSTITUTE (UKI)

SPECIAL EVENTS **EXHIBIT HALL**

Innovation Showcase

Exhibit Hall - South Hall • Booth 2909

Presentations within the Innovation Showcase are led by cutting-edge exhibiting companies and government agencies that are knowledgeable on the various subject matter within the M&S Industry. Be sure to stop by one of the 30-minute sessions to hear what is new and exciting in M&S! Check the onsite schedule for any changes or updates to the Innovation Showcase schedule.

The most up-to-date information will be available on the mobile app, website, and onsite during I/ITSEC.

AS OF 31 OCTOBER 2024

AS OF 31 OCT	OBER 2024	
MONDAY, 2	DECEMBER	
1500 - 1530	Hololight USA, Inc.	Hololight Hub: Revolutionizing Defense with XR - Explore the Tactical Advantages
1545 - 1615	HTC VIVE	Scaling Secure XR Training Deployments
1630 - 1700	Concurrent Real-Time	From Soft to Hard Real-Time: Integrating AI Across the Aerospace and Defense Spectrum
1715 - 1745	AVRT - Adaptive VR Training	AVRT - Adaptive Virtual Reality Training: The Application of Human-Centric Design to Dismounted Combat Simulation Training
TUESDAY, 3	BDECEMBER	
1230 - 1300	The Weather Company	Weather Affects Outcomes: to be Mission Ready is to be Weather Ready
1315 - 1345	Bohemia Interactive Simulations	A Wind of Change: Bohemia Interactive Simulations Vision of the Future
1400 - 1430	Vrgineers, Inc.	Next-Gen Pilot Training: Mixed Reality Generic Cockpit Simulation
1445 - 1515	HTX Labs	Warfighter Readiness: Al and XR Training Solutions
1530 - 1600	Ruddy Nice	The Identification, Recruitment and Development of Talent in Professional Wargaming: An Analysis of Women, Gen Z, and Gen Alpha Wargaming Practices
1615 - 1645	Nutanix, Inc.	Generating Readiness with Generative Al
1700 - 1730	Avalon Holographics	Holographic Display for a New Mission Planning Experience
WEDNESDA	Y, 4 DECEMBER	
1000 - 1030	Loft Dynamics AG	Future of Pilot Training
1045 - 1115	Lone Star Analysis	The Alchemy of Innovation: Exploring Lone Star's Emerging Technologies
1130 - 1200	Air Force Agency for Modeling and Simulation (AFAMS)	Air Force Air Operations Center (AOC) Training Modernization
1215 - 1245	Panasonic Connect North America	Innovations in Rugged Mobile Technology for Military Training and Readiness
1300 - 1330	Bluemont Technology & Research, Inc.	Improving SOP Training Retention with Digital Twin Experiences
1400 - 1530	Best from Around the Globe	IT ² EC 2024 Best Presenter: Optimization of Virtual Reality Medical Simulation Scenarios for Operational Competency and Multi-Disciplinary Team Training; IT ² EC 2024 Best Paper: On-Board Synthetic Training – Why is it So Hard?; MODSIM World 2024 Best Paper: Creating Virtual World Environments for Ocean Vehicles
1600 - 1630	SIMTHETIQ, Inc.	Digital Twins and the Digital Twin Framework: Uses and Applications for Training
1645 - 1715	Radiation Emergency Services	Use of Digital Twin Simulations to Prepare the U.S. Disaster Assistance Response Team for Environments Complicated by Radiological Contamination
1730 - 1800	Deloitte Consulting, LLP	Beyond the Battlefield: How Deloitte is Using M&S Tools for Business and Enterprise Innovation
THURSDAY	, 4 DECEMBER	
1000 - 1030	Scaled Foundations	GRID: General Robot Intelligence Development Developing, Validating and Integrating New Autonomous Al Skills with Human on the Loop Operator Training
1045 - 1115	Anthology	Leveraging Artificial Intelligence for Training Delivery in a COTS Based IL4 SaaS Environment
1130 - 1200	STM	Understanding Complexity: Tactical/Operational Decision Support
1215 - 1245	FedLearn	Advancing Warfighter Readiness with Adaptive Learning Enabled by Al
1300 - 1400	Serious Games Showcase & Ch	nallenge Awards



EXHIBITORS

AS OF 19 NOVEMBER 2024

NTSA Sustaining Member • NTSA Regular Member • NTSA Associate Member

2 Circle, Inc.	257	Bluedrop USA	1081	Delaware Resource Group of Oklahoma, LLC	1391
3D perception	859	BlueHalo	469	Deloitte	2027
4C Strategies	1023	Bluemont Technology & Research, Inc.	2189	Department of Homeland Security, S&T	173
19 AF Detachment 24	3000	BlueRoom Simulations	1961	DESAPRO, Inc.	794
A Square Games and Simulation, LLC	299	BMC Software	139	Design Interactive, Inc.	1461
Ace Computers	1921	BMK Ventures/Marketing Assessment	520	Diamond Visionics	1727
Acme Worldwide Enterprises, Inc.	571	BNH Expert Software Inc.	333	Digital University	166
Adaptive Immersion Technologies	269	Boeing	2301	Dignitas Technologies	2288
Adder Technology	987	Bohemia Interactive Simulations	538	Discovery Machine, Inc.	1031
Aditerna	1649	Booz Allen Hamilton	1821	Displays & Optical Technologies, Inc.	1086
Adobe	2463	Boresight Aerial Targets	1961	DiSTI Corporation	1171
ADS, INC.	1687	Box	2900	DiversityBrothers LLC	697
				DLH Corporation	
Advanced Technology International	726	Bugeye Technologies	833	•	1955
Aechelon Technology	1101	By Light Professional IT Services LLC	1249	Docebo NA, Inc.	1487
Aerotronics LLC	217	C2 Technologies	1660	DoD ATEA	2459
AGENIUM IT & SYSTEMS	MR2748	CAE	1433	DOD Starbase	2393
Air Force Agency for Modeling and Simulation	249	CAE Australia	1961	Dogfight Boss	463
Air Force Modeling and Simulation Square	249	Calian Ltd.	1649	Doron Precision Systems, Inc.	581
Air Force Research Laboratory	457	Calnex Solutions	2465	DRAKEN	487
Akima	965	Camaraderie Foundation, Inc.	796	Driven Technologies, Inc.	2113
Allen3D	2813	Capgemini	187	dSPACE, Inc.	2520
AMERICAN SYSTEMS	1390	Carley Corporation IC	W Room S319	Dynamic Graphics, Inc.	2415
Anatomage	329	CATI Training Systems	2534	Dynepic, Inc.	1621
ANSYS, Inc.	1090	CDW & Google	894	E2M Technologies BV	1857
Anthology	2524	CEA Technologies Pty Limited	1961	EcosySTEM of Learning Discovery Den	2395
Applied Training Solutions LLC	2288	Central Florida Tech Grove	141	EcosySTEM of Learning Info Desk	2484
Aptima, Inc.	1018	Cervus Defence and Security Ltd.	1927	EDM Ltd.	1092
ARA Virtual Heroes Division	1309	•	2817, MR2917	Education Management Solutions, Inc.	1412
Army Modeling & Simulation Office	1469	Cesium	221	EducationXR	1841
ASI (Aero Simulation, Inc.)	749	Circadence Corporation	2481	Eduworks Corporation	1026
Association of the United States Army (AUSA)	373	Clark Synthesis, Inc.	321	Elasticsearch, Inc.	1995
ASTI				Elbit Systems Ltd.	1635
	1458	Cleemann Chair-Systems GmbH	1380	•	
Astrion	1843	Clinkenbeard	540	Electric Picture Display Systems	1201
Astronaut Scholarship Foundation	2389	Cole Engineering Services, Inc. (CESI), a By Light Comp		Embry-Riddle Aeronautical University	436
Athena Technologies LLC	167	Collins Aerospace	2201	Emerging Technologies Institute (ETI)	2181
Atlantic Canada Aerospace & Defence Association	2161	COLSA Corporation	2564	Emotional Intelligence Institute	2096
Aurora InfoTech LLC	2298	Command Post Technologies, Inc.	2365	Engineering & Computer Simulations, Inc.	1949
AVADirect Custom Computers	1290	Concurrent Real-Time	2309	Engineering Support Personnel (ESP) Inc.	757
Avalon Holographics	2161	Conflict Kinetics	1971	Entrol	473
Avatar Partners, Inc.	287	Connections Café	100	Ergoneers	422
Aviation Training Consulting. LLC (ATC)	995	Control Products Corporation	1942	eSim Games	2425
AVRT - Adaptive Virtual Reality Training	1649	Corporate CourseWare	2296	Esri	1827
AVT Simulation	1230	Corsair for Business	530	EWA Government Systems, Inc.	1281
Axelera Tehnologies	2195	Corvalent	428	Explotrain, LLC	993
Axiom AI	2526	Craftsmen Industries	174	Exxar, Inc.	2912
Babcock International	871	CS GROUP	281	EyeTracking LLC	693
BadVR	1837		1013	FAAC	2349
BAE Systems	538		184	FedLearn	1934
BAGIRA SYSTEMS LTD.	2449	Cyber Pavilion	2369	Fight Club International	1649
Barco, Inc.	1735	•	1466	FIRST Robotics	2594
Battle Road Digital, Inc.	2281	Dalcomm Tech LLC	393	FLAIM Systems	1961
• •					
Battlespace Simulations, Inc.	1411	DART Range Simulation Training	2116	FN America, LLC	1001
B-Design3D	593		698	Fortifyedge.Al	1961
Bernoullium	2199	Dataunitor AS	771	FoxGuard Solutions	357
Bihrle Applied Research, Inc.	657	David Clark Company Incorporated	2017	Frasca International, Inc.	1049
BILT Incorporated	2186		1909	FSI Defense, A FlightSafety International Company	1049
Birket Engineering, Inc.	2901	Defense Acquisition University	2805	Full Sail University	799
Blackshark.ai	3001	Defense Maritime Solutions/Wartsila North America	749	Fynd Reality AS	369
Blue Marble Geographics	492	Defense Unicorns	2190	GameDriver	2098



EXHIBITORS

Gaming Research Integration for Learning L	_ab (GRILL), 2584	Jedburgh	1889	Nakamir	1936
AFRL		JF Taylor, Inc.	1321	National Center for Simulation	1161
Gaumard Scientific	1981	JIRACOR	341	National Defense Industrial Association (NDIA)	2181
GBLS USA, Inc.	2809	Joint Force Development	2171	National Defense Magazine	2181
GBvi Ltd.	1521	JRM Technologies	2081	National Training & Simulation Association (NTSA)	2181
GDIT	721	JVC Visual Systems	1113	NATO	363
Geeks and Nerds (GaN) Corporation	2441	Katmai	1481	Naval Air Warfare Center - Aircraft Division (NAWCAD)	149
Gemstar Manufacturing	798	KBR	2220	Naval Air Warfare Center Aircraft Division	149
General Dynamics Mission Systems	713	Kent State University College of Aeronautics	694	Webster Outlying Field (NAWCAD WOLF)	
Georgia Tech Research Institute	1071	and Engineering		Naval Information Warfare Center (NIWC)	149
Geospatial eXploitation Products™	538	Kentucky Trailer	527	Naval Research Laboratory (NRL)	149
GitLab	493	Keysight	1090	Naval Surface Warfare Center Corona (NSWC Corona)	149
GlobalSim, Inc.	1291	King Crow Studios	867	Naval Surface Warfare Center Dahlgren Division	149
G02Altitude	1961, 2562	Kinnetek	380	Dam Neck Activity (NSWCDD DNA)	
GooVision Technology Co. Ltd.	989	KNDS Deutschland GmbH & Co. KG	2337	Naval Undersea Warfare Center Keyport (NUWC Keypo	ort) 149
GovClO	795	Kongsberg Defense & Aerospace	538	Naviworks Co., Ltd.	2254
GREEN AMMO	180	Kongsberg Digital - Maritime Simulation	1787	Netskope	2198
Grid Raster, Inc.	895	Kopin Corporation	472	Newton Design, LLC	827
GSA	197	Korea Aerospace Industries, Ltd.	606	Nighthawk Cyber LLC	2294
Hadean	239	Kratos	1221	NLR -Royal Netherlands Aerospace Centre	441
Haptech Defense Systems 53	38, 586, 587, MR2742	KTL Solutions	1088	North American Rescue	2097
Hatalom Corporation	MR2845	Laerdal Medical	1980	Northrop Grumman	MR2741
HAVIK Solutions LLC	313	Larsen Motorsports, Inc.	2385, 2488	•	1808, 1809
Hewlett Packard Enterprise	481	Laser Shot	801, MR2725	NOVA Technologies	1031
Hexagon US Federal	430	Leading Technology Micro, Inc.	2461	NQ SPARK	1961
HigherEchelon, Inc.	2357	Learn to Win		NTS	2196
HII	2049	Leonardo	2001	Nutanix, Inc.	240
HIPER Global US	337	Leonardo Helicopters	687	NVIDIA	MR3017
HOLOGATE GmbH	1987	LG Electronics North America	181	Oakwood Controls	1927
Holo-Light USA, Inc.	323	Lockheed Martin	1449		3, MR2736
HTC VIVE	889	Loft Dynamics AG	387	Ocean Software	1961
HTX Labs, Inc.	2409	Lone Star Analysis	437	Office of Naval Research (ONR)	149
Human Systems Integration, Inc.	1587	LSAS Tec	1090	OpenBCI	425
I/ITSEC Park	3223	LSI, Inc.	701	Operative Experience, Inc.	1786
IB3 Global Solutions	2197	Luna Labs USA LLC	1887	Operator XR	1961
IBM Federal Storage	194	LuxCarta	1649	•	0, MR2929
IHSE USA, LLC	2528	LVCIM	2430	Oracle America, Inc.	398
Immersive Display Solutions, Inc.	1381	MAK Technologies	1213, MR2835	Orama Technologies	263
Immersive-FX	793	Mantis	1473	Oshkosh Specialty Vehicles	440
Industrial Smoke & Mirrors	1601	Marathon Robotics	2226	Oversight	231
Industrial Structures	981	MASA Group	2325	Panasonic Connect	1193
Inert Products LLC	991	Mass Virtual, Inc.	849, MR2945	Panasonic Connect Mobility	2560
Information Systems Laboratories, Inc.	433	Massachusetts Institute of Technology Horizon	2089	Parker Group, Inc.	181
InfoSmart Technologies Inc.	2912	Matrix Pro Sims	1649	PatchPlus Consulting, Inc.	1835
Ingalls Information Security	372	Matrox Video	673	Patriot Products, LLC	933
Inhance Digital Corporation	1820	Maxar	512, MR2829	PeopleTec, Inc.	1581
Innovation Showcase	2909	MedVR Education	293	Peraton	MR2738
Integration Innovation, Inc. (i3)	2909	Metris Global	781	PERIGEAN TECHNOLOGIES LLC	2194
IntelliBoard	528	MicroHealth, LLC	1940	PEZTCo. TRAINING, Inc.	1293
Inter-Coastal Electronics, LLC (ICE)	2349	Millennium Corporation	468, MR2717	,	8, MR3023
Intuitive Research and Technology Corporation		Mission Decisions Moodle	1649	Pitch Technologies	538
InVeris Training Solutions	1401, MR2935		168	Pivot Maritime International	1961
iPerformX LLC	1768	Modal	649	PLEXSYS PLEXCYC Australia	1273
iQ3Connect Inc.	474	MORAI	2087	PLEXSYS Australia	1961
Israel Aerospace Industries Ltd. (IAI)	1259	Moth+Flame	663, MR2849	PLW Modelworks	480
IT2EC	1187	Moulage Sciences and Training	2094	Polhemus	1681
ITI Engineering	401	MOVES Institute/NPS	188	Polytronix, Inc.	392
Jacobs Technology Inc.	1191	MS&T Magazine - Halldale Group	2556	PowerTrain, Inc.	1586
JANUS Research Group	273	MSI Computer Corp.	312	Pratt Miller Defense/Trackless Moving Targets	881
Jaycon	431	MVRsimulation, Inc.	727, MR2949	Precise Systems	1715



EXHIBITORS

Precision Flight Controls	463	Soar Technology, LLC	138, MR2923	United Electronic Industries (UEI)	959
Program-Ace Europe	1394	Society for Simulation in Healthcare	2095	University of Arizona – Applied Research Corporation	2381
Pulau Corporation	1070	Sonalysts, Inc.	1781	University of Central Florida	1161
Q4 Services	1815	SOSSEC, Inc.	423	Unreal Engine/Epic Games	2021
QinetiQ	MR2749	Specular Theory, Inc.	407	UpSkill, LLC	695
Quantum Improvements Consulting	429	Spry Squared	1961	USAF - PEO Training/USSF-PEO OTTI	1333
Quantum3D/HAVELSAN	1761	Sterling	375	USMC PM TRASYS	1233
Radeus Labs, Inc.	2461	Stirling Dynamics	1061	USSF - PEO OTTI	1333
Radiation Emergency Services	898	STM	1089	UtopiaCompression Corporation	2905
RAIDER Targetry	1961	Strategic Systems, Inc.	201	V2X	1701
Rapid Prototyping Services	213	Street Smarts VR	1285	Valkyrie Enterprises	1760
Rapiscan	2091	SummitET	2457	Vantari VR	1986
RAVE Computer	1123	Symbolic Displays, Inc.	229	Varjo Technologies	612
Rayenswood Solutions	2331	Symetrie	292	Varonis Systems	193
Real-Time Innovations	2421	Synaptic Aviation	192	Vcom3D	1721
Red 6	627	Synthetic Training Environment CFT, Army Futures	1861	Vector Solutions	1938
RedRick Technologies	181	Command	1001	Veraxx Engineering Corporation (a By Light Company)	1249
Redspin	792	Systems Engineering, Inc.	538	Vertex Solutions	839
RGB Spectrum	2112	TacMed Simulation	1881	Vigilante	1649
Rheinmetall Electronics GmbH	538	Talon Simulations	328	VIOSO GmbH	1384
Ridgeline International	181	Tagtile, Inc.	328	VirTra	449
RPA Electronic Solutions, Inc.	521	Team Defence Australia	1961	Vision Products LLC	524
RSi Visuals	1301	Team Orlando News	1161	VMASC	2171
Ruddy Nice International Pavilion	1649	Team Orlando STEM (USA, USAF, USN)	2584	VRAI Simulation	538
Rugged Portable Computers, MaxVision	235	TEC Simulation	421	Vrgineers, Inc.	2007
RYAN AEROSPACE		Tech Wizards, Inc.	1429	VSTEP Simulation	1382
Saab	839, 1961	Technical Systems Integrators, Inc.	420	VuWall	181
	1039			Wescom Defence	671
Safeguard Medical	1065	Teledyne Brown Engineering	2522		892
Safety Training Systems, Inc. SAIC	536 1849	Ternion Corporation Textron Systems	301 692	Westar Display Technologies, Inc. Western Governors University	896
SAMWOO Immersion Co., Ltd.	182	Thales	2319, MR3045	Will-Burt Company	2288
Savannah College of Art & Design (SCAD)	2027	Thales Australia	1961	WITTENSTEIN motion control, Inc.	1267
Scalable Display Technologies, Inc.	1201	The Dave School	186	Women In Defense, A National Security	2181
Scaled Foundations	592	Theissen Training Systems, Inc.	1869	Organization (WID)	2101
Scientific Research Corporation	1189	The Weather Company	681	Workera	797
Sea Box, Inc.	595	Thinklogical, A Belden Brand	238	World Wide Technology	MR3049
Second Air Force (2 AF)	1395	Thomas Global	1961	Xiphos Partners	994
Second Wave	1961	Threat Tec	2271, MR2828	XR Training	332
SECURE & INNOVATE GROUP	1961	Trango Systems	1294	Yorktown Systems Group, Inc.	600
SenseGlove	470	Traxara Robotics		YTEK Pty Ltd.	1961
Senspex, Inc.	1709	TREALITY SVS	819	Zarges, Inc.	501
Serious Games Showcase & Challenge	2285	TREX II (Training & Readiness Accelerator II)	726	Zeiss Zeiss	909
Serious Simulations LLC	1839	Trideum Corporation	2213	ZEN TECHNOLOGIES USA, INC.	1611
SGB Enterprises, Inc.	1997	TRU Simulation + Training	2248	Zephyr Drone Simulator	170
Shen Te Enterprises, Inc.	207	Twin Oaks Computing	242	Zepriyi Dione Simulator	170
Shenandoah Center Immersive Learning	2590	Tyto Athene	2288		
SIGUN	381	U.S. Army DEVCOM	2135		
		U.S. Army DEVCOM Armaments Center	2135		
SimCentric Technologies Simlat Ltd.		U.S. Army DEVCOM Armaments Center U.S. Army DEVCOM Aviation and Missile Center	2135		
		U.S. Army DEVCOM Soldier Center			
SimPhonics, Inc.			2135		
SimSpace Corporation		U.S. Army PEO STRI	1339, 1935 s 2135		
Simtek, Inc.	621	U.S. Army UARC Institute for Creative Technologie at USC	s Z135		
	1 401	di UOL			
Simthetiq Inc.	1421		770		
Simulation and Control Technologies	307	U.S. JACLEAN, INC.	770		
Simulation and Control Technologies Simulator Product Solutions LLC	307 1181	U.S. JACLEAN, INC. U.S. Office of Personnel Management (OPM)	1095		
Simulation and Control Technologies Simulator Product Solutions LLC Simulator Solutions	307 1181 1961	U.S. JACLEAN, INC. U.S. Office of Personnel Management (OPM) U.S. Navy	1095 149		
Simulation and Control Technologies Simulator Product Solutions LLC Simulator Solutions SimX VR	307 1181 1961 809, MR2732	U.S. JACLEAN, INC. U.S. Office of Personnel Management (OPM) U.S. Navy U.S. Navy / NAWCTSD	1095 149 1239		
Simulation and Control Technologies Simulator Product Solutions LLC Simulator Solutions	307 1181 1961 809, MR2732	U.S. JACLEAN, INC. U.S. Office of Personnel Management (OPM) U.S. Navy U.S. Navy / NAWCTSD UCF STEM Aviation Showcase	1095 149		