



# 40<sup>th</sup> Anniversary Annual International Test & Evaluation Symposium

The Week of December 5-8, 2023  
Hilton Sandestin Hotel  
Miramar Beach, Florida

Subject to Change  
Update: Sept 8

## DRAFT AGENDA

### Monday, December 4

#### **Golf Tournament & Enhancing the Future T&E Workforce**

Links Golf Course at the Sandestin Golf and Resort

165 Sandestin Blvd N

Miramar Beach, FL 32550

12:00 PM Shotgun start

Cost \$100

Donations are available for the Emerald Coast Chapter Scholarship Program

The STEAM hack™ Chain Reaction Challenge is a speed-building event where teams of 3 – 6 students receive a kit of materials and about 3 hours to build the most impressive chain reaction-style machine based on their team’s pre-contest design. Machines and teams will be judged based on functionality, creativity, spirit of whimsy & fun, and teamwork.

If you are interested, consider being a judge, sponsor a team, or be a spectator!

Details coming soon.

### Tuesday, December 5

#### **Education and Training Tutorial Day**

Separate registration and fees associated with these educational courses. The fee to attend a 4-hour tutorial is \$300 for one or \$500 for two. You can attend a tutorial without having to attend the symposium.



If you take two courses, you are eligible to take the Certified T&E Professional (CTEP) exam for free – A \$250 value. Continuing Professional Education (CPE) credits will be awarded for completion of the tutorials.

#### **8:00AM – 12:00PM**

- End-to-End Automated AI/ML Test Case
- T&E in a Digital Engineering Environment
- RF Fundamentals
- DoD T&E Across the Acquisition Lifecycle
- T&E as a Part of Agile Development
- Introduction to Test and Evaluation

#### **1:00PM – 5:00PM**

- Overcoming Distributed T&E Challenges with TRMC Solutions
- Incorporating T&E into Acquisition Contracts “Shift All the Way to the Left”



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- Verification, Validation, and Accreditation of Modeling and Simulation for T&E
- Lethal Autonomy is the New Reality: Are we ready to dominate the needed doctrine and testing imperatives?
- Laser System T&E Challenges
- Cognitive EW: An AI Approach

## Wednesday, December 6

### General Session – Day 1

- 8:00AM – 8:30AM      Opening Ceremony
- 8:30AM – 8:45AM      Welcome Guest Speaker – [Invited](#)  
**Brig. Gen. Jason E. Bartolomei**, Program Executive Officer for Weapons and Director of the Armament Directorate, Air Force Life Cycle Management Center, Air Force Materiel
- 8:45AM – 9:30AM      Keynote Speaker – [Confirmed](#)  
**James S. Wells**, (SES) Director, Office of Test and Evaluation, Department of Homeland Security
- 9:30 AM – 10:15AM    Keynote Speaker – [Confirmed](#)  
**George Rumford**, (SES) Director, Test Resource Management Center
- 10:15AM – 10:45AM    Break: Poster Papers and Networking Opportunity with our Exhibitors & Sponsors
- 10:45AM – 12:00PM    Panel Discussion: Digital Twin Overview and Industry Definition  
This is a follow up collaboration from 2022 ITEA National Symposium by OSD-DOT&E and ITEA Industry Experts. – [Confirmed](#)  
Moderator: **Erwin Sabile**, Booz Allen Hamilton
- 12:00PM                      Lunch and the State of ITEA presented to membership.
- 1:00PM – 3:00PM      **Technical Track Sessions**

#### Session 1: Cyberspace Test Technology

Moderator: **Min Kim**, Deputy Executing Agent, TRMC T&E/S&T Cyberspace Test Technology (CTT)



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1:00 PM	<b>Dr. Mike Shields</b> , Chief Scientist, TRMC T&E/S&T CTT and <b>Min Kim</b> , TRMC T&E/S&T CTT	TRMC T&E/S&T Cyberspace Test Technology Overview
1:30 PM	<b>Arch Owen</b> , Program Manager for Weapon Security, Draper Laboratory	Vader Modular Fuzzer (VMF) – USG Fuzzing Capability
2:00 PM	<b>Dr. Donald Pellegrino</b> , CEO, DeciSym, LLC	Measure and Share: TRMC T&E/S&T Cyberspace Test Technology's project to improve Cyber T&E impacts across DoD
2:30 PM	<b>Andrew Shaffer</b> , Research and Development Engineer and Bruce Einfalt, The Applied Research Laboratory, The Pennsylvania State University	Automated Attack Framework for Test & Evaluation (AAFT)

## Session 2: T&E in Support of Agile Development Process

Moderator: **Robin Poston**, Dean of the Moody School of Graduate and Advanced Studies, Southern Methodist University and Research Fellow with the Systems Testing Excellence Program FedEx Institute of Technology

1:00 PM	<b>Andrew Pollner</b> , <b>Dr. Steve Oimoen</b> , and <b>Patrick Quilter</b> , ALPI/Scientific Test and Analysis Techniques Center of Excellence (STAT COE)	DevSecOps Evaluation Framework Dashboard
1:30 PM	<b>Joe Murphy, Sr.</b> , Ansys Government Initiatives	Leveraging Flexible and Interactive Model Based T&E Tools to Improve Efficiency and Effectiveness of Execution Phase Test Programs
2:00 PM	<b>Amnon Pollak</b> , FAA Automation and Agency Support Branch, ANG-E582 and <b>Matthew Thornton</b> , Leidos	A Collaborative Approach to Verify and Validate a Complex Air Traffic Control System
2:30 PM	<b>Saurabh Mittal</b> and <b>Rob Wittman</b> , MITRE	Mosaic Warfare Digital Engineering (MoWaDE) Environment for T&E of Effects-based System of Systems

## Session 3: Artificial Intelligence & Machine Learning

Moderator: **Teresa Dailey**, Technical Advisor, 780th Test Squadron

1:00 PM	<b>Neil Serebryany</b> , CalypsoAI	Large Language Models and Future Attack Surface
1:30 PM	<b>Jarrold Cornforth</b> and <b>Bex White</b> , DSTL	Transportable Modelling And Simulation System For Test &Evaluation
2:00 PM	<b>Andrew Rix</b> and <b>Peter Gould</b> , QinetiQ	Model-Derived Evidence for Composite Energetic Material Mechanical Properties in Support of Qualification
2:30 PM	<b>Priscila Silva</b> , PhD Student, and <b>Lance Fiondella</b> , Associate Professor, University of Massachusetts Dartmouth	Predictive Resilience Modeling



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Session 4: Data Analytics / Modeling & Simulation

Moderator: **Jenny Green**, KBR

1:00 PM	<b>Tim Grabert, Peter Nikoloff, Jeet Shah, Jamie Smith</b> , Nova Systems Australia	T&E Strategy to Validate the Physics-based Modelling of an Uncrewed Aerial System Applied to a Mission Engineering Thread
1:30 PM	<b>Dr. Joshua Walker, Brian Schreiber, Justin Vuong</b> , Georgia Tech Research Institute	An Approach for the Evaluation of Open Systems Architecture Compliant Systems
2:00 PM	<b>Dr. Kyle Kolsti</b> , STAT COE	Demonstration of Bayesian Analysis using Light Aircraft Performance Testing
2:30 PM	<b>Jarrod Cornforth</b> , DSTL and <b>Kamran Memon</b> , Ansys	General Autonomous Platform T&E Test Bed Approach

3:00PM – 3:30PM      Break: Poster Papers and Networking Opportunity with our Exhibitors & Sponsors

3:30PM – 4:15PM      **Amy J. Markowich** (SES), Executive Director, Digital Analytics Infrastructure & Technology, Advancement & Mission Systems Groups, Naval Air Warfare Center Aircraft Division

4:15PM – 5:15PM      Panel Discussion Artificial Intelligence and Machine Learning  
Moderator: **Dr. Karen Haigh**, Consultant, Cognitive Electronic Warfare & Embedded AI/ML

The panel will provide the listening audience with a high-level discussion the field of testing cognitive systems, including questions such as:

- What major changes in thinking need to happen when testing Cognitive systems vs testing traditional (complex) systems?
- What is the biggest challenge of testing a cognitive system?
- How do we evaluate decision making in cognitive systems?
- What sort of testing infrastructure changes do we need to evaluate cognitive systems?

5:15 PM                      **Networking Reception with Exhibitors and Sponsors**

Thursday, December 7

**General Session – Day 2**

8:00AM – 8:15AM      Convene

8:15AM – 9:00AM      Featured Speaker – **Confirmed**  
**Brig. Gen. Michael T. Rawls**, Commander, Air Force Operational Test and Evaluation Center, Kirtland AFB



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9:00AM – 9:45AM Keynote Speaker – [Confirmed](#)  
**Dr Raymond D. O'Toole, Jr.**, Principal Deputy Director, Operational T&E

9:45AM - 10:30AM Featured Speaker – [Confirmed](#)  
**Doreen Bingo**, Chief Engineer, Test and Evaluation, Boeing

10:30AM – 11:00AM Break: Poster Papers and Networking Opportunity with our Exhibitors & Sponsors

11:00AM – 12:15PM Panel Discussion **Engaging the Next Generation T&E Workforce**  
Moderator: **Terry Murphy**, Deputy Director DOT&E, DHS

There is a critical need to engage with our next generation to educate, expose, and attract the best and brightest to the test and evaluation (T&E) career field. As our next generation workforce looks towards their future, it is essential that the current T&E workforce educates younger generations about the unique opportunities and impact of a meaningful, influential career in T&E. Additionally, the demand within our society to accelerate the transition of new technologies into operation places T&E in a critical role for the future, both as a feedback loop for technology development and an assurance process for rapidly deploying new technologies. T&E needs professionals who are creative, adaptable, and resilient. So how do we ensure the next generation has the requisite information to attract them into joining the unique and critical career field of T&E as they develop their plans for their own future? This panel will discuss and put forth ideas to engage with our next generation and the concept of partnering with academia where our younger workforce currently resides.

12:15PM **The ITEA T&E Professional Awards Ceremony & Luncheon**

2:00PM – 4:00 PM **Technical Track Sessions**

Session 5: Digital Engineering  
Moderator: To Be Announced

2:00 PM	<b>Andrew Cunningham</b> , QinetiQ	Ensuring the Continued Relevance of UK T3E Services through Capability Development
2:30 PM	<b>Steve Summers</b> and <b>Ben Robinson</b> , NI (formerly National Instruments)	Building Confidence in Model Systems
3:00 PM	<b>Jeff Tolleson</b> , Director, PeopleTec, <b>Will Harrell</b> , Chief Technologist, Redstone Test Center	Redstone Test Center's Approach to Digital Engineering & LVC M&S In Support of Army Modernization
3:30 PM	<b>Vitor Lopes Pereira</b> , M.SC., Digital Twins, Ansys Inc.	Benefits/Challenges of Applying Digital Twins and Hybrid Analytics in T&E Programs



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## Session 6: Electronic Warfare

Moderator: To Be Announced

2:00 PM	<b>David Zurn, and Dr. Craig Arndt</b> , GTRI	Enabling T&E of Cognitive EW Systems through Hybrid Digital Twins
2:30 PM	<b>Jeremy Twaits</b> , NI (formerly National Instruments)	How to Test Cognitive EW Systems
3:00 PM	<b>Hajin Kim</b> , GaN Corporation	Modular EW Test and Evaluation System
3:30 PM	<b>Jeremy Twaits</b> , NI	Signal Classification using Deep Learning

## Session 7: Software & Cyber Testing

Moderator: To Be Announced

2:00 PM	<b>Matt Lembright</b> , CENSYS	Proactive Threat Hunting: Getting Left of Boom
2:30 PM	TO BE ANNOUNCED	
3:00 PM	<b>Melissa Glazener</b> , BrainGu	Next Generation Test Dominance: DevSecOps Platforms to Delivery Capabilities at the Speed of Relevance
3:30 PM	<b>Jacob Slattery, John Lillard, Alex Bustos, Dr. Joshua Walker</b> , Georgia Tech Research Institute	Spider Prime: A Software Testbed Framework for the Evaluation of Open Systems Architecture Compliant Systems

## Session 8: Workforce Development / Test Design Training

Moderator: To Be Announced

2:00 PM	<b>Scott Busby</b> , QinetiQ	T&E Sovereign Skills Program
2:30 PM	<b>Austin Ruth and Grace Kaylor</b> , Georgia Tech Research Institute	Improving Flight Test Data Management for Advanced Defense Operations
3:00 PM	<b>Brittany Fischer</b> , STAT COE	DevSecOps Evaluation Framework: The DevSecOps Approach to T&E
3:30 PM	<b>Mark Kiemele</b> , Air Academy Associates and <b>Chas McKee</b> , Consultant	Test Design

## Friday, December 8

### **General Session – Day 3**

8:30AM – 8:40AM Convene



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8:40AM - 10:10AM Panel Discussion on Digital Engineering in support of T&E  
Moderator: **Jean Petty**, Cyber Resilience T&E Coordinator, Office of T&E, DHS

Digital Engineering (DE) is an integrated digital approach that uses authoritative sources of systems' data and models as a continuum across disciplines to support lifecycle activities from concept through disposal. Implementing DE presents challenges in the areas of integrated models, shared authoritative data, supporting infrastructure, and developing the workforce. T&E tools, shared data, and verification, validation, and accreditation of models are not yet fully defined and understood as part of the DE ecosystem, presenting major challenges for T&E planning and performance. This panel will discuss T&E challenges, tools, and successes in a Digital Engineering environment.

10:15AM – 11:30AM Panel Discussion on **Modernizing T&E to Keep Pace with Technology**  
**Dr. Laura Freeman**, Virginia Tech

11:30AM – 12:15PM Closing Keynote – [Confirmed](#)  
**Col. Michael Christensen**, U.S. Space Force, Director, Test and Evaluation

12:15PM Program Close

12:30PM Adjournment of the 2023 ITEA Annual International Symposium

The planning committee is currently working on a Tour of Eglin AFB – We will provide more information as it is made available.