



**VIRTUAL CONFERENCE**

*7th Cybersecurity Workshop:*

## **Solutions to Cybersecurity T&E Challenges**

November 17–19 | 2020

Hosted by the ITEA Emerald Coast Chapter

### **Monday, 16 November – Pre-Workshop Tutorials**

8:00 AM – 12:00 PM

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#### **Cyber Table Top (CTT) Workshop**

Vincent Lamolinara, Defense Acquisition University (DAU)

#### **Cyber Security Assessment of MIL-STD-1553**

Adam McCorkle, Georgia Tech Research Laboratory (GTRI)

### **Monday, 16 November – Pre-Workshop Tutorials**

1:00 PM – 5:00 PM

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#### **Air Force's New MBCRA (Mission Based Cyber Risk Assessment) and Integrated Engineering Approach**

Kevin McGowan, 47CTS/OL-A (COLSA)

#### **Introduction to Cybersecurity Test and Evaluation**

Pete Christensen, American Systems and Jean Petty, MITRE Corporation

#### **TENA and JMETC Solutions for Cyber Test and Training**

Gene Hudgins, Test Resource Management Center, Joint Mission Environment Test Capability (TRMC/JMETC)

[Tutorial Descriptions](#)

### **Tuesday, 17 November – Day 1**

Morning Session 8:00 AM – Noon

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#### **On the Main Stage**

**10:00 AM Opening Ceremony** – Pete Crump GTRI, ITEA President

**Welcome and Opening Remarks**, Min Kim, 96th Cyberspace Test Group, Program Chair

**10:10 AM Opening Keynote Speaker** – George Rumford, Principal Deputy Director, Department of Defense, Test Resource Management Center

**11:10 AM Guest Speaker** – Major General Christopher Azzano, Commander, Air Force Test Center, Edwards Air Force Base

**12:00 PM Lunch Break** – Please take this time to visit the Virtual Exhibits in the EXPO

**\* Workshop will be held in Central Time**

## Afternoon Technical Track Sessions: 1:00 PM – 4:15 PM – Each Session 30 Minutes

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### In Tech Sessions

#### T&E Methodology (Part 1)

- Emerging Cyber Table Top Toolset
- Cyber Conditions and Test Tools
- Cyber T&E for Aviation IFF

#### Test Environment (Part 1)

- Automated Knowledge-based Model Component Generation
- VulnerVAN: A vulnerable cyber security scenario generation tool for CyberVAN
- Component Test Bed for Cyber DT

### 2:30 PM Virtual Exhibits – EXPO

#### T&E Methodology (Part 2)

- Cyber Survivability Attributes (CSA) Tool
- Rethinking the Data Collection Problem in Cyber Ranges
- Airborne Instrumentation Cybersecurity

#### Test Environment (Part 2)

- Cyber Pipelines - Solving Cyber Challenges with Agile Tools
- Cyber T&E Tools: I'll Show You Mine if You'll Show Me Yours; A Realm of Possibility
- Meeting Cybersecurity Requirements with Your Operational Technology (OT)

### 4:15 PM Virtual Networking Event

## Wednesday, 18 November – Day 2

### Morning Session 8:00 AM – Noon

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#### 8:00 AM Coffee & Connect (Networking)

### On the Main Stage

**8:55 AM Welcome & Introductions**– Scott Thompson, EWA

**9:00 AM Keynote Speaker** – Brigadier General Evan Dertien, Director, Air, Space and Cyberspace Operations, Headquarters Air Force Materiel Command

**10:00 AM Featured Speaker** – Amy Henninger, PhD, Senior Advisor for Software and Cybersecurity Office of the Director Operational Test & Evaluation (DOT&E)

**10:45 AM Virtual Exhibits – EXPO**

**11:00 AM Guest Speaker** - Chip Ferguson - Deputy Executive Agent, CIO/AO, Cyber Portfolio Lead, Test Resource Management Center (TRMC)

**12:00 PM Lunch Break** – Please take this time to visit the Virtual Exhibits in the EXPO

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**Afternoon Technical Track Sessions: 1:00 PM – 4:15 PM – Each Session 30 Minutes**

**In Tech Sessions**

**Software Test and Assurance**

- Software Testing and Assurance at TRMC and the RDT&E Overlay
- Proteus: Automatically Find and Fix Vulnerabilities in Software Binaries
- Techniques for Fuzzing Embedded and Distributed System

**Cyber Test Range**

- A New Strategy for Funding T&E Range Infrastructure
- Why You Need Cyber Range as a Service
- Range Commander's Council (RCC) Cybersecurity Working Group Overview

**2:30 PM Virtual Exhibits – EXPO**

**T&E Methodology (Part 3)**

- FOSS Testing to Reduce Cybersecurity Risk
- Cyber T&E for Industrial Control Systems
- Using Probabilistic Mission Risk Analysis (PMRA) to Present Testing Data

**Test Environment (Part 3)**

- Virtualization: A Tool and A Challenge for T&E
- Cybersecurity - A Vendor Perspective, Part 3: Integrating Cyber Security into Product Development
- Hacking Methods and Their Effects

**Thursday, 19 November – Day 3**  
**Morning Session 8:00 AM – Noon**

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**8:00 AM Coffee & Connect (Networking)**

**On the Main Stage**

**8:50 AM Welcome & Introductions** – John Rafferty, 16 EWS/B2 Branch

**9:00 AM Featured Speaker** – Brigadier General Scott Cain, Commander, 96 Test Wing  
*“T&E Challenges in Cybersecurity”*

**10:00 AM Guest Speaker** – Colonel Michael Dooley, Commander, 96 Cyberspace Test Group

**10:45 AM Virtual Exhibits – EXPO**

**11:00 AM Guest Speaker** – Sarah Standard - Cybersecurity/Interoperability Technical Director OUSD R&E, DDTE&A, *“Cyber Testing - Yesterday, Today, and Tomorrow”*

**12:00 PM Lunch Break** – Please take this time to visit the Virtual Exhibits in the EXPO

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**Afternoon Technical Track Sessions: 1:00 PM – 4:15 PM – Each Session 30 Minutes**

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**In Tech Sessions**

**Test Resource Management Center**

- Artificial Intelligence Platform of Cyber Threat Automation and Monitoring (CTAM) System
- TRMC Cybersecurity Services Update

**2:30 PM Virtual Exhibits – EXPO**

**T&E Methodology (Part 4)**

- Updates to the JCIDS Manual and Their Impacts on Cybersecurity and T&E
- Human-in-the-loop Experimentation Support on the CyberVAN Test Bed

**Workforce Development**

- Youthful Discretion: Lessons Learned Recruiting, Engaging and Retaining Junior Cyber Engineers
- Supporting Cybersecurity Test and Evaluation Professionals