



Federal Aviation  
Administration

# Agenda

13<sup>th</sup> Annual

## Verification & Validation Summit

September 19 - 20, 2018

*“Systems Thinking – Thinking”*

*The V&V Summit will include speakers and discussions addressing innovative methods and strategies that embrace V&V philosophies and principles.*

### Resorts

1133 Boardwalk  
Atlantic City, NJ 08401



## Wednesday, September 19, 2018

8:00-9:00	Check-in and Refreshments	
9:00-9:20	Welcome to the V&V Summit – Opening Remarks	<b>John Frederick</b> FAA, Manager, V&V Strategies & Practices Branch, ANG-E5A
9:20-9:30	WJHTC Perspective on Systems Thinking	<b>Shelley J. Yak</b> FAA, Director, William J. Hughes Technical Center, ANG-E
9:30-10:10	V&V for Autonomous Systems in a Lifecycle Approach to Securing Trust	<b>Paul D. Nielsen, Ph.D.</b> Carnegie Mellon University, Software Engineering Institute, Director and Chief Executive Officer
10:10-10:40	Approaches to Vetting UAS Service Suppliers in UAS Traffic Management	<b>Joseph Rios, Ph.D.</b> NASA, Chief Engineer, UAS Traffic Management
10:40-10:55	Break	
10:55-11:05	#1 Video: “The Value of Systems Thinking” Centers for Disease Control and Prevention (CDC)	
11:05-11:30	Bringing NextGen to the Operation	<b>Pamela Whitley</b> FAA, Acting Assistant Administrator for NextGen, ANG-1
11:30-12:00	5th-Gen Weapon Systems Testing...an Elixir for Systems Thinking: M&S, Big Data Analytics, and Prototyping	<b>Major General (Ret) Matt Molloy</b> United States Air Force
12:00-1:30	Lunch and Networking on Your Own	
1:30-1:35	#2 Video: “Systems Thinking – Rethink Everything” Complexity Labs	
1:35-2:15	National Air Traffic Services (NATS) UK Perspective	<b>Mark Flanigan</b> National Air Traffic Services, Chief Innovation Officer
2:15-2:45	Systems-oriented Requirements Development (in an age of rapid technology-driven evolution)	<b>Gregory S. Woo, Ph.D., PMP</b> U.S. DOT Volpe Center, Chief of Aviation Systems Engineering
2:45-3:00	Break	
3:00-3:05	#3 Video: “Systems Thinking” Complexity Labs	
3:05-3:35	Model Based Systems Engineering and Model Based Safety Analysis	<b>Daniel J. Fogarty</b> Boeing, Technical Fellow and Development Assurance Focal
3:35-4:05	Integrating Commercial Launch and Reentry Operations into the NAS: Realtime Ops	<b>Daniel P. Murray</b> FAA, Manager, Space Transportation Development Division, AST-100
4:05-4:15	Wrap up, questions	<b>John Frederick</b> FAA, Manager, V&V Strategies & Practices Branch, ANG-E5A

## Thursday, September 20, 2018

8:00-8:30	Check-in and Refreshments	
8:30-8:35	Welcome – Day 2	<b>John Frederick</b> FAA, Manager, V&V Strategies & Practices Branch, ANG-E5A
8:35-9:05	V&V of Cyber-Physical, Autonomous, Artificial Intelligence, and Deep Learning Systems	<b>William D. Miller</b> Innovative Decisions, Inc., Executive Principal Analyst Stevens Institute of Technology, School of Systems & Enterprises, Adjunct Professor
9:05-9:55	PMO Requirements Management (RqM) & Systems Thinking – Thinking	<b>Ann M. McDonald</b> U.S. DOT Volpe Center, Technology Policy Analyst, Aviation Systems Engineering Division  <b>Jennafer Miller, PMP</b> Evans Incorporated, Senior Consultant
9:55-10:10	Break	
10:10-10:40	Concepts, Validation & Requirements (CVR) Operating Model Overview	<b>Maureen Keegan</b> FAA, Manager, Technical Analysis and Operational Requirements Group, AJV-73
10:40-11:10	The FAA’s Role in Research and Development	<b>Maureen Molz</b> FAA, Manager, Research and Development Management Division, ANG-E4
11:10-11:20	Break	
11:20-11:25	#4 Video: “A Systems Story (Systems Thinking)” BEE Environmental Communication	
11:25-11:50	Systems Thinking – Thinking Technical Operations Perspective	<b>Donald Taylor</b> FAA, Manager, Surveillance/Weather Systems In-Service Management, AJW-135
11:50-12:20	Second Level Engineering (SLE) Test Past – Present – Future	<b>Gina Oliver</b> FAA, Front Line Manager, SLE Program Management, AJM-2522
12:20-12:30	Wrap up, questions	<b>John Frederick</b> FAA, Manager, V&V Strategies & Practices Branch, ANG-E5A

“Systems Thinking – Thinking”