Collaboration on Quality in the Space and Defense Industries Forum

March 11 - 12, 2019



Cape Canaveral, FL

26th Annual

NEW FRONTIERS Equipping Quality Professionals for the Future









2019 CQSDI

Committee

Bob Bodemuller, Lockheed Martin Missiles and Fire Control

Chris Brust, DCMA

Tripp Camden, Northrop Grumman

Belinda Chavez, KBRwyle

Pete Checklick, NASA Kennedy Space Center

Jeff Church, DCMA

Dan DiMase, Aerocyonics

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James Wade, Raytheon (Industry Co-Chair)

Don Watson, Raytheon



Aviation, Space & Defense Division The Global Voice of Quality

26th Annual Collaboration on Quality in the Space and Defense Industries Forum

March 11-12, 2019

New Frontiers - Equipping Quality Professionals for the Future

Sponsored by the ASQ Aviation, Space & Defense Division

Supported by the National Aeronautics and Space Administration, the Department of Defense, the Missile Defense Agency, and the Defense Contract Management Agency

This forum will be your most important and rewarding professional experience for 2019! It includes keynote and featured speakers, panel presentations, in-depth concurrent breakouts, and workshops. Government and industry leaders will discuss the latest policies and practices that will directly affect your organization.

Format for 2019 includes different training/workshops in parallel with the panels. All participants will be able to attend the keynote and featured speakers, but for the workshops, attendees would need to select either a panel discussion/breakout or the parallel training session, as they are concurrent sessions.

Recertification Credits from ASQ will be issued for this event. Please save a copy of your attendee badge as proof of attendance.

Radisson at the Port 8701 Astronaut Boulevard, Cape Canaveral, FL 800-333-3333 or 321-784-0000





Phil Montag VP, Mission Support Division KBRwyle (CQSDI Chair)

Welcome to the 2019 CQSDI!

Hello everyone and welcome to the 2019 CQSDI! I am humbled and honored to be handed the CQSDI Chair baton from Ed Jopson. I want to personally thank Ed for his leadership and coordination support for this event over the years, and will do my best to fill his shoes.

This event, now in its 26th year, continues to provide a forum for professionals across our dynamic work environments to collaborate and learn new tools and techniques to take back to and improve their organizations. As in past years, we have responded to your feedback and added more content, touching on new topics that are impacting all of us. Specifically, we have our first panel ever addressing the challenges of Cyber physical system security with respect to control of satellites in space, UAV hardware, and Malware. We also are addressing a topic of interest and concern in our environments: engaging our less seasoned professionals. This topic is the theme of our event this year, "New Frontiers: Equipping Quality Professionals for the future." We are often challenged with retaining the knowledge of our experienced workforce while engaging and inspiring the next generation of professionals to carry the torch. In support of this theme you will see two sessions, "Equipping Quality Professionals for the future in Commercial Space" and "Attracting Young SMA Professionals".

Please take a moment to review this program and identify what will be of interest and value to you and your organization, including the concurrent training/workshop venues. The planning committee members listed on the inside front cover have put a lot of time and energy into preparing this event and we hope you have a productive two days. As always, we look forward to receiving your feedback on this event via the revised feedback forms or through direct communication to committee members. Thank you all for your participation.



4	March 11 Da	y 1 - Monday				
7:00-8:00 am	Registration/Continental Breakfast					
8:00-8:05 am	Welcome Remarks Fred Martin, ASD Chair, Lockheed Martin					
8:05-8:15 am	Opening Remarks Phil Montag, VP, Mission Support Div., KBRwyle (CQSDI Chair)					
8:15-8:45 am	Keynote Speaker (pg. 6) Marshall Smith, Gateway and Human Lunar Lander Formulation Leader, NASA					
8:45-9:15 am	Featured Speaker (pg. 6) Mike Wadzinski, Director, Safety, Q&MA, MDA					
9:15-9:30 am	Break					
9:30-11:45 am	SESSION 1 (Attend Panel or Training/Workshop)					
	Session 1 Panel (pg. 7) Cyber Physical System Security: Control of Satellites in Space, UAV Hardware, Malware	Session 1 Training/Workshop (pg. 9) Counterfeit Parts Regulations and Impacts: Implementation of CP Plan and Compliance to Industry Requirements				
	 Dan DiMase (Moderator), President & CEO, Aerocyonics Gloria D'Anna, SAE CyberSecurity for Commercial Vehicles Holly Dunlap, Sr. Principal Engineer, Raytheon Dr. Brian Cohen, Research Staff Member, Information Technology and Systems Division of the Institute for Defense Analyses (IDA) 	Jeff Church, Senior Quality Assurance Engineer, DCMA Rick Roelecke, Director, Corporate Quality Management, L3 Mitch Edwards, Director, Quality and Mission Success, Lockheed Martin				
11:45-1:00 pm	Lunch					
1:00-1:30 pm	Luncheon Featured Speaker(pg. 10)Brett Hamilton, Distinguished Scientist for Trusted MicroE	Electronics, Naval Surface Warfare Center				
1:30-1:45 pm	Transition to General Session					
1:45-2:15 pm	Featured Speaker TBA					
2:15-2:30 pm	Break					
2:30-4:45 pm	SESSION 2 (Attend Panel or Training/Workshop)					
	Session 2 Panel (pg. 11) Introducing New Technologies in Quality Control: New tools/Virtual Tools/, 3D Printing/Additive Manufacturing	Session 2 Training/Workshop (pg. 13) Mission Assurance in Commercial Space versus Government Space - A Suppliers Perspective				
	 Don Watson (Moderator), Quality Director, Raytheon Sue Gavin, Manager, Quality Technology Integration, Raytheon Dr. Inuka D. Dissanayake, Product Development Quality Manager, Raytheon Ron Witkowski, Director of Quality – Regulatory Compliance, Gulfstream Aerospace 	Timothy A. Priser, Director, QA, Lockheed Martin Michael Verzuh, Director Mission/Quality and Information Assurance, L-3 Dave King, Quality Director, Amphenol Aerospace Operations				
5:00-7:00 pm	Networking Reception Sponsored by Northrop Grumman and Aviation Space and Defense Division					

		March 12 D	ay 2 -	Tuesday	5	
7:00-8:00 am	Registration/Continental	Breakfast				
8:00-8:15 am	Opening Remarks Phil Montag, VP, Mission Support Div., KBRwyle (CQSDI Chair)					
8:15-8:45 am	Keynote Speaker (pg. 14) Ella Studer, Senior VP, Government Services, KBRwyle					
8:45-9:15 am	Featured Speaker (pg. 15) Wayne Brown, VP Q&MA, Raytheon					
9:15-9:30 am	Break					
9:30-11:45 am	SESSION 3 (Attend Panel or Training/Workshop)					
	Session 3 Panel (pg. 15) Equipping Quality Professionals for the Future in Commercial Space			Session 3 Training/Workshop (<i>pg. 17</i>) AS9100 Implementation, Improvements, and What's Next?		
	Pete Checklick, Sr. Qualit (Moderator) Billy Stover, Deputy Chie Commercial Crew Program Pete Munoz, Human Spac Assurance Manager, Lock	f Safety Officer of the n, NASA KSC ce Flight Safety & Missio	n		ionnie, President of ASD Expertise President, NQA, Inc.	
11:45-1:00 pm	Lunch		I			
1:00-1:30 pm	Luncheon Keynote Speaker (pg. 17) Kelvin Manning, Associate Director, NASA KSC					
1:30-1:45 pm	Transition to General Sec	ssion				
1:45-2:15 pm	Featured Speaker(pg.Mike Shields, Executive I		ance, DCI	MA		
2:15-2:30 pm	Break					
2:30-4:00 pm	SESSION 4 Special To	pics (Attend Panel or	• Trainin	g/Workshop)		
Session 4 Pane	Session 4 Panel 2 (pg. 19) Recruiter Perspective on Attr Young/New SMA Professiona					
Attracting You	ung/New SMA Professional	S	Rec	ruiter Perspect	ive on Attracting and Retaining	
	ung/New SMA Professional Bel	linda Chavez, Operations	Rec You	ruiter Perspect ng/New SMA I	ive on Attracting and Retaining Professionals	
Amanda Hans Laboratory Jessalyn Teed, Amber Tully, I	ung/New SMA Professional Bel sen, Quality Specialist, Space , First Officer B737-800/8, St Hardware Quality Engineer, I	linda Chavez, Operations e Dynamics unwing Airlines Ball Aerospace	Rect You s Manager Susa Stev Huiz Gil 1 and San Cust	ruiter Perspect ng/New SMA I c, KBRwyle (Ma an Green, Strate te Kramer, Asse zenga School at BevenFlorez Ju Instructor at Ec Bernardino Cor comized Trainia	ive on Attracting and Retaining Professionals oderator) egic Sourcing Analyst, Piper Aircraft ociate Professor of Decision Sciences, Nova Southeastern University , Faculty Member, California State University onomic Development & Corporate Training, nmunity College District, and Center for g at El Camino College	
Amanda Hans Laboratory Jessalyn Teed, Amber Tully, I	ung/New SMA Professional Bel sen, Quality Specialist, Space , First Officer B737-800/8, St Hardware Quality Engineer, 1 current Lecture/Training	linda Chavez, Operations e Dynamics unwing Airlines Ball Aerospace Session 4 Concurren Series B (pg. 21)	Rec: You s Manager Susa Stev Huiz Gil 1 and San Cust	ruiter Perspect ng/New SMA I c, KBRwyle (Man Green, Strat- te Kramer, Asso tenga School at BevenFlorez Ju Instructor at Ec Bernardino Cor omized Trainin e/Training	ive on Attracting and Retaining professionals oderator) egic Sourcing Analyst, Piper Aircraft ociate Professor of Decision Sciences, Nova Southeastern University Faculty Member, California State University onomic Development & Corporate Training, nmunity College District, and Center for	
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Amanda Hans Laboratory Jessalyn Teed, Amber Tully, Session 4 Con Series A (pg. DCMA and In Reduce Waste Joe Tessier, Sr: Brian Tenney,	Bel sen, Quality Specialist, Space , First Officer B737-800/8, Sp Hardware Quality Engineer, E current Lecture/Training 20) ndustry Collaboration to and Improve Oversight : QA Specialist, DCMA	linda Chavez, Operations e Dynamics unwing Airlines Ball Aerospace Session 4 Concurren Series B (pg. 21) Risk Management: S Compliant Materials for Long Term Stora Bob Vermillion, CEO	Recc You s Manager Susa Stev Huiz Gil 1 and San Cust at Lecture Suspect a s in the C age of EE 0 & Found LC Most Fro ertified Le ngineer, Q unagement	ruiter Perspect ng/New SMA I r, KBRwyle (Ma an Green, Stratu re Kramer, Asso renga School at BevenFlorez Jr Instructor at Ec Bernardino Cor comized Training romized Training and Non- rosshairs E Devices ler, RMV om Your read Quality t Services,	ive on Attracting and Retaining professionals oderator) egic Sourcing Analyst, Piper Aircraft ociate Professor of Decision Sciences, Nova Southeastern University Faculty Member, California State University onomic Development & Corporate Training, munity College District, and Center for g at El Camino College Session 4 Concurrent Lecture/Training Series C (pg. 22) Improving the Quality of Quality Reports Gregory (Grisha) Gorodetsky, Quality, Safety and Environmental Manager, Wipro	

March 11 Day 1 - Monday

March 12 - Day 1 Monday

8:00-8:15 am Welcome and Opening Remarks

Fred Martin, ASD Chair, Lockheed Martin

Phil Montag, VP, Mission Support Division, KBRwyle (CQSDI Chair)

8:15-8:45 am Keynote Speaker



Marshall Smith Gateway and Human Lunar Lander Formulation Leader, NASA

Marshall Smith directs the formulation and execution of NASA's human lunar exploration activities—the Gateway, which will be the first deep space outpost in cislunar space, and the human lunar lander initiative that will establish a sustainable, 21st century human presence on the Moon.

Most recently, Mr. Smith served as the Director of Crossprogram System Integration (CSI) for the Exploration Systems Development (ESD) Division at NASA Headquarters. In this role, he was responsible for Systems Engineering and Integration (SE&I) of NASA's next deep-space transportation system—the agency's crew vehicle, next generation heavy-lift rocket, and supporting ground systems and operations. In parallel, Mr. Smith also served as SE&I lead for the Gateway, ensuring that the Gateway systems work seamlessly with the ESD systems while meeting agency objectives to foster both a sustainable presence on, and broad access to, the lunar vicinity through commercial and international partnerships.

Mr. Smith works closely with NASA's human and robotic lunar exploration personnel to identify requirements, concepts of operations, architectures, and to resolve technical issues associated with design, development, and operations of the integrated systems.

Mr. Smith has served NASA for more than 30 years, working in flight simulation, aircraft, robotic, and human spaceflight systems. For the past 10 years, he has focused on human spaceflight and served as the Langley Research Center lead for Ares activities, the Flight Test 2 Manager for the Constellation Program, the Ares I-X SE&I Chief and on the Space Launch System formulation team. Mr. Smith received his Bachelor of Science in Electrical and Computer Engineering from the University of Tennessee with a Master of Science in Electrical and Computer Engineering from Virginia Polytechnic Institute and State University.



8:45-9:15 am Featured Speaker



Mike Wadzinski Director, Safety, Quality and Mission Assurance (SQMA), MDA

Mr. Mike Wadzinski is the QS Director, responsible for ensuring SQMA for the Ballistic Missile Defense System (BMDS) and for all MDA programs throughout their life cycles. This includes development of policy; system, component, and piece part requirements for design, test and manufacturing; flight and ground testing; and deployment.

Mr. Wadzinski served as the QS Deputy Director for the BMDS and the Chief Engineer from 2010 to 2013. He was responsible for ensuring and providing independent assessments and oversight for SQMA for the BMDS and programs, as required. He was responsible for developing SQMA policy and requirements. He was responsible for SQMA for BMDS level tests.

Mr. Wadzinski served as the QS Functional Manager for SQMA for the Ground Missile Defense (GMD) Program from 2007-2010. He was responsible for ensuring and providing independent assessments and oversight for SQMA for the GMD program.

Mr. Wadzinski served as the first MDA Deputy Director for Safety from 2003-2007, responsible for ensuring the safety of MDA personnel and resources at all locations. He led the development of MDA safety requirements and policies, ensured residual safety risks were accepted at the proper level of management, and provided independent safety assessments and oversight of the BMDS and each of the MDA programs.

From 1985 until 2003, Mr. Wadzinski worked for the 45th Space Wing Range Safety Office at Cape Canaveral Air Force Station/ Patrick Air Force Base (the Eastern Range) in various positions.

From 2000 to 2003, Mr. Wadzinski was the Chief of Systems Safety for New and Navy Programs overseeing programs such as NASA's X-33 and X-34, the Air Force Evolved Expendable launch Vehicle (EEL V) programs, Navy's C-4 and D-5 Fleet Ballistic Missiles and the commercial Beale BA-1, Space-X Falcon, the Orbital Sciences Pegasus and Taurus.



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SESSION ONE 9:30-11:45 am

Session 1 Panel Cyber Physical System Security: Control of Satellites in Space, UAV Hardware, Malware

Abstract: Cyber Physical Systems Security (CPSS) is an emerging and important field to ensure quality, reliability, safety, and security of cyber physical systems. Cyber physical systems includes Industrial Control Systems (ICS), Internet of Things (IoT) systems, Platform Information Technology (PIT) systems, and embedded systems. There is a need for government, industry, and academic collaboration and action to address vulnerabilities unique to microelectronic parts and security of Cyber Physical Systems (CPS).

Attacks are often the result of exploited vulnerabilities in cyber physical systems. The intent of the attacks may include economic espionage, denial of services, or more nefarious intentions. Systems level hackers study the system to determine the vulnerabilities that enable an attack. Cyber physical systems are susceptible to successful attacks due to unintended vulnerabilities introduced with the integration of complex hardware, software, and firmware supporting the critical infrastructure of the system without a holistic integrated approach to close the gaps in the multiple areas of concern.

The panel will emphasize solutions from a systems engineering perspective that includes analysis of the system operating environment defined by the operational, functional, and architectural systems engineering elements can help close the gaps. The discussion will include the need for a common lexicon of terms and metrics to assess vulnerabilities associated with design of the system resulting in a more robust and resilient CPS. The discussion will address gaps in the resiliency of hardware assurance and security from persistent and dynamic threats to cyber physical systems.

The panel includes participation from government, industry, and academia who recognize a need for action in developing a systems engineering approach to standardization of cyber physical systems security, and will include ideas how to: - Advance the knowledge of how vulnerabilities are introduced and exploited in cyber physical systems

Identify best practices for addressing different areas of concern
Develop a detailed taxonomy for cyber physical system security
Establish and standardize methods for identifying vulnerabilities in cyber physical systems that could be introduced at any point in the CPS life cycle

- Develop cost-effective design and evaluation methods for use in cyber physical systems security design that includes assessing effectiveness of solutions. Dan DiMase, Session Manager/Panel Moderator, President & CEO, Aerocyonics

Mr. Daniel DiMase is the President & CEO of Aerocyonics, Inc. He is an expert and recognized industry leader in Supply Chain Risk Management, Logistics, Counterfeit Parts Avoidance & Detection, Cyber Physical Systems Security, and Hardware Assurance. He is experienced in aerospace global sourcing, logistics and building organizations. He drives both strategic and tactical actions to advance innovation of products and services, and improvements in policies, processes, and procedures in focal areas.

Early in his career, Mr. DiMase worked in Authorized Distribution and was certified Field Application Engineer. He continued to work supply chain issues in leadership roles as President at SemiXchange, Inc., President at ERAI, Inc. and Director at Honeywell Aerospace. While at Honeywell, he mitigated the counterfeit parts risk and compliance to regulatory requirements. He published white papers and publications regarding counterfeit parts avoidance and detection and cyber physical systems security. He has been a principle contributor to industry standards including IDEA-STD-1010 – Acceptability of Electronic Components Distributed in the Open Market, SAE International AS5553 - Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition, and SAE AS6171 - Test Methods Standard; General Requirements, Suspect/Counterfeit, Electrical, Electronic, and Electromechanical Parts.

Mr. DiMase is Chairman Emeritus of SAE International G-19A Test Laboratory Standards Development Committee, and Co-Chairman of the SAE Distributor Process Rating Committee. He served leadership roles on industry committees and working groups including the SAE G-19 Counterfeit Electronics Parts subcommittees, SAE G-21 Counterfeit Materiel Committee, The Aerospace Industries Association Counterfeit Parts Integrated Projects Team, and the TechAmerica Supply Chain Assurance Committee. He has been a member of the U.S. Customs and Border Protection Advisory Committee on Commercial Operations in the Intellectual Property Rights Subcommittee and the Subcommittee on Trade Enforcement and Revenue Collection, and the Government-Industry Data Exchange Program (GIDEP) Industry Advisory Group.

Mr. DiMase has received the Arch T. Colwell Cooperative Engineering Medal from SAE, the Dr. Desmond G. Newman Award for Supply Chain Excellence from the National Defense Industrial Association Manufacturing Division, and the DMSMS Achievement Special Recognition Award from the DoD.

Mr. DiMase has an Executive MBA from Northeastern University. He has a Six-Sigma Green Certificate from Bryant University. He received his Bachelor of Science Degree in Electrical Engineering from The University of Rhode Island.



Session 1 - Breakout 1 Securing Our Transportation Infrastructure

Abstract (Gloria D'Anna): Cybersecurity for all segments of the commercial vehicle industry requires comprehensive solutions to secure networked vehicles and the transportation infrastructure. It clearly demonstrates the likelihood that an attack can happen, the impacts that would occur, and the need to continue to address those possibilities.

Gloria D'Anna, SAE CyberSecurity for Commercial Vehicles

Ms. Gloria D'Anna is an engineer, entrepreneur and multiple patent award holder – an expert in vehicle engineering and cybersecurity. She likes to solve problems, from the best-in-class light trucks, to beefing up the cybersecurity of vehicles, always rolling out new technologies, reducing inefficiencies and driving business.

Ms. D'Anna began her career at General Motors, winning an MBA Fellowship to the University of Chicago, moving on to Ford, Navistar, Textron, New Venture Gear, Eaton and Ricardo. Later, she led sales at three successful startups, addressing challenges from school safety, to building connected devices for law enforcement.

Ms. D'Anna has been working with SAE for the last five years, creating and moderating popular and educational cyber security technical sessions from Commercial Vehicle markets to the Internet of Things. Her 2018 book, SAE's "Cyber Security for Commercial Vehicles" with a foreword by Governor Synder.

Ms. D'Anna is currently the CEO of General Telecom Systems, a private communications company, a mentor for Techstars Mobility, an advisor to 202 Partners and a Board Member at Atmos XR.

Session 1 - Breakout 2 Approach to System Security

Abstract (Holly Dunlap): System security engineering evaluates, integrates, and manages the risks of security specialties: hardware assurance, software assurance, antitamper, supply chain risk management, and cybersecurity, to provide a security perspective within the system architecture and throughout the system development lifecycle. A holistic approach to system security is critical to fielding cyber resilient, survivable, trustworthy, and affordable national security platform and embedded systems. The defense industry has unique challenges as we typically design highly complex, relatively low quantity, and very high quality systems that must work in harsh conditions and last for decades all while integrating components (hardware, software, and firmware) from the global industrial base. To reduce the risks of the threats and vulnerabilities, we need every function (Engineering, Supply Chain, Contracts, Mission Assurance, Quality, Program Management, etc.) in an organization and the extended ecosystem engaged and committed. The time is ripe for developing partnerships with other non-defense focused industries that are also challenged by the increase of pervasive cyber-attacks.

Holly Dunlap, Senior Principal Engineer, Raytheon

Ms. Holly Dunlap is a Senior Principal Engineer responsible for maturing and implementing a system security engineering and holistic approach to program protection to manage and balance the security-relevant risks within platform or embedded defense systems. She leads Raytheon strategic initiatives to integrate system security into standard processes and business practices and currently leads the Raytheon Cyber Operations, Development and Evaluation Center, Cyber Supply Chain Working Group.

As the National Defense Industrial Association (NDIA) Systems Security Engineering Committee Chair, Ms. Dunlap stimulates collaboration with industry and government to address common SSE challenges. She developed and chaired the NDIA Cyber Resilient and Secure Weapon Systems Summit in 2017. As an industry recognized subject matter expert, she presented at the Potomac Institute Tiers of Trust Workshop 2017, the National Academy of Science Air Force Board 2016 and Defense Science Board Cyber Supply Chain Task Force 2015. She is a member of the Air Force Cybersecurity Industry Technical Advisory Group and is internationally published in the INCOSE Insight magazine. Her career has included working for the National Nuclear Security Administration's Federal Manufacturing and Technology National Security Campus operated by Honeywell and with the Office of the Secretary of Defense, Director of Defense Research and Engineering, Technical Intelligence.

Ms. Dunlap has extensive experience in manufacturing, secure supply chain risk management and is a certified Lean Six Sigma Black Belt. She has in-depth experience working throughout the product life cycle from cradle to grave: concept development, design, prototyping, modeling and simulation, manufacturing, testing, maintenance support and dismantlement. She has successfully led teams through this process for strategic enduring weapon systems as well as custom rapid fielding products.

Ms. Dunlap has a Bachelor of Science in electrical engineering from the University of Kansas and an MBA from Webster University.



Session 1 - Breakout 3 Cyber Security and Malicious Threats

Abstract (Dr. Brian Cohen): Traditional quality has focused on the occurrence of unintentional defects that cause a product to not conform to its specification. Unfortunately we are now faced with a more complex problem, particularly as we consider cyber security and a malicious threat environment. We are still unable to formally and precisely define security specifications which mean that products can be delivered which totally meet specification but utterly fail to be free from cybersecurity vulnerabilities. In addition, because of the possibility of malicious action we cannot assume that defects are simply due to random processes and they may in fact occur in specific manners which defeat traditional quality processes. "Hardware Assurance" is intended to extend beyond quality to assess and mitigate these issues.

Dr. Brian Cohen, Research Staff Member, Information Technology and Systems Division of the Institute for Defense Analyses (IDA)

Dr. Brian Cohen has been a Research Staff Member in the Information Technology and Systems Division of the Institute for Defense Analyses (IDA) for over 30 years. He received his B.S. EE and Mathematics from Carnegie-Mellon University in 1981, an M.S. ECE, Systems and Control Theory from University of Massachusetts in 1983, and a Ph.D. in Engineering Sciences from Thayer School of Engineering, Dartmouth College in 1988. He performed a range of studies at IDA, with a focus on technology and business assessments for national security. He supported the science and technology enterprise in the DoD with studies of sensor, electronic and microsystem device technology issues. He helped establish a group at IDA that provided deep subject matter expertise on DoD use of microelectronics technologies and products.

Dr. Cohen performed a number of assessments on behalf of DoD related to establishing what has now become known as the DoD Trusted Foundry Program. He was directly involved in the development of policy and guidance and the oversight related to supply chain risk management for custom design and/or manufactured microelectronics. He helped establish the GOMACTech conference as a premier forum for government hardware security research as well as helping to establish an on ongoing series of on Trusted Microelectronics with the National Defense Industrial Association.

In 2017, DOD started a major program called the Trusted and Assured Microelectronics program to develop a defense in-depth strategy to deal with the risks associated with the microelectronics supply chain. Dr. Cohen is now working directly with that program to define overall strategies and establish strong collaborations throughout government, industry, and academia to help identify and surmount the growing challenges.



Session 1 Training/Workshop Counterfeit Parts Regulations and Impacts: Implementation of CP Plan and Compliance to Industry Requirements

Abstract: Counterfeit avoidance in the defense, space and aviation industries continues to be a perplexing and challenging topic. With the inclusion of counterfeit prevention requirements in the National Defense Authorization Act of 2012 industry has seen activity in the regulatory area that has resulted in the current DFARS 252.246-7007 and DFARS 252.246-7008 for electronic parts and assemblies. In order to develop and implement processes that address DFARS compliance and minimize supply chain risk, industry must address questions that arise regarding the interpretation and intent of the DFARS requirements. Current data suggests that many counterfeit parts are introduced in the lower tiers of the supply chain. What are some of the methods that can be used to assure that the supply chain is secure and counterfeit risks are minimized? The workshop will provide information to help participants companies counterfeit avoidance program mature using current avoidance methodologies. The first topic to be discussed will be, "what are the DFARS requirements and how well do we understand both the requirements and their intent?". Next we will look at what is done at the program level to see how these requirements are used to minimize supply chain risk and assure the authentic products are procured. Then we will discuss the problem of implementing a program across multiple sites and business within one corporate structure within the DFARS frame work.

Jeff Church, Senior Quality Assurance Engineer, DCMA

Mr. Jeff Church is a Senior Quality Assurance Engineer with DCMA and serves as the Counterfeit Mitigation (CFM) Lead for the Agency.

Mr. Church has over 30 years of combined private sector and government procurement, quality assurance, design and contract management experience. He provides expert technical assistance to DCMA management, Customers and to the Office of the Secretary of Defense (OSD), DPAP / DCP, DAR Quality Chair and supports FAR/DFARS development on counterfeit.

Mr. Church provides Counterfeit Mitigation guidance to approximately 11,500 civilian and 530 military professionals throughout the U.S. and in 26 countries around the world carrying out DCMA's mission.



Rick Roelecke, Director, Corporate Quality Management, L3 Technologies Corporation

Mr. Rick Roelecke has been managing Quality and Mission Assurance Programs at L3 for 27 years. For the past 6 years, he has supported the L3 Corporate Quality Management Team and leads the Counterfeit Parts and Obsolescence Management Programs.

Mr. Roelecke holds a Bachelor of Science Degree in Electronic Engineering and a Master of Business Administration (MBA).

Mr. Roelecke has presented at various ASQ, NASA and Industry conferences including CQSDI, Goddard Supply Chain, NASA Quality Leadership Forum (QLF), and CALCE on a variety of topics. He is a member of ASQ, the AIA Counterfeit Parts and DMSMS Teams, the NASA Quality Leadership Forum (QLF), and various Government and Industry Counterfeit Parts Committees.

Mitch Edwards, Director, Quality and Mission Success, Lockheed Martin

Since 2018, Mr. Mitch Edwards leads the Quality effort for all Lower Tier Air and Missile Defense programs out of Dallas. He is responsible for ensuring the quality of the products for US and foreign customers.

Prior to coming into this role, Mr. Edwards led the Quality effort for all Orlando and Dallas based production facilities. He was responsible for ensuring the quality of the products received from suppliers, built in various facilities. He was also head of Quality prior to that for all Missiles and Fire Control Tactical Missiles and Strike Weapons programs. His other experiences include the Senior Quality Manager on multiple contracts including the AGMS programs (2006 – 2010), and Javelin program (2001 – 2006). He led these program Quality teams to support production ramp rate increases, supporting both U.S. Government and foreign customer accelerated fielding needs. During this time, he served on the Board of Directors for the Florida Sterling Council.

Mr. Edwards' experience with Lockheed Martin spans thirty years. His assignments have varied from program to functional responsibilities. His functional assignments include Quality Engineering, Software Quality Engineering and Commodity Shops support. His program assignments include activities from proposals, production-line start up, program management, program close out, high-rate production, and supplier interface.

Mr. Edwards holds a Bachelor of Science in Mechanical Engineering from the Rose-Hulman Institute of Technology in Indiana.

1:00-1:30 pm Luncheon Featured Speaker

Brett Hamilton Distinguished Scientist for Trusted MicroElectronics, Naval Surface

Warfare Center

Mr. Brett Hamilton was promoted to the rank of Senior Scientific Technical Manager (SSTM) and assumed the duties as the DoN's Distinguished Scientist for Trusted Microelectronics in Oct 2017. In this role he oversees full spectrum life cycle of scientific and engineering functions in research, design, development, testing, and evaluation of microelectronics and electronics. He work ensures a trusted microelectronics supply chain for the acquisition of safe, reliable, secure hardware for DoD Strategic Weapons Systems supporting nuclear deterrence and traditional weapon systems. This includes systems requiring Cyber Security that must have a trusted supply chain of hardware utilizing components such as Application Specific Integrated Circuits (ASICs), Field Programmable Gate Arrays (FPGAs), Memory Devices, Micro-controllers, and GPUs.

Mr. Hamilton has over 35 years of experience in the area of Microelectronics and has been with NSWC Crane since 2000 where he most recently served as the Chief Engineer for Trusted Microelectronics. His experience includes the development of advanced techniques for malicious and counterfeit circuit detection and security feature robustness evaluations. He is nationally-recognized in his field routinely advising senior leadership regarding issues involving microelectronics trust and integrity and has testified before the House Armed Services Committee on Oversight and Investigations and briefed the former Secretary of Defense, the Honorable Ashton Carter.

In 1999 Mr. Hamilton earned a Bachelor's Degree from the Indiana University Individualized Program with departmental honors where his area of study was Particle Accelerator Diagnostics Systems Engineering with Physics minor. He is a United States Air Force veteran and a recent graduate of the Federal Executive Institute (FEI) Leadership Development and OPM National Security Policy Programs. He Chairs the Joint Federated Assurance Center (JFAC) for Hardware Assurance, and is the Government Advisor for multiple DARPA and IARPA programs as well as Chair of the Government Liaison Committee for the recently formed National Defense Industrial Association (NDIA) Electronics Division.



March 11 Day 1 - Monday

1:45-2:15 pm Featured Speaker

To Be Announced

SESSION TWO 2:30-4:45 pm

Session 2 Panel Introducing New Technologies in Quality Control: New tools/Virtual Tools/, 3D Printing/Additive Manufacturing

Abstract: As new technologies are developed and moved from lab to full-scale production, the quality aspects of those technologies must be understood and developed as well. The acceptance criteria and the appropriate methods of measurement must be developed. Additive manufacturing, for instance has inherent characteristics that must be understood for effective quality control. Sometimes the environments for new technologies (e.g. hypersonic vehicles) are difficult to replicate for production test, so test methodology development can itself become a full project. This panel will explore lessons learned in roll-out of new quality control technologies and development of quality control for new technologies.

Don Watson, *Session Manager/Panel Moderator*, Quality Director, Raytheon

Mr. Don Watson is the Quality Director for the Strategic and Naval Systems product line for Raytheon Missile Systems (RMS). His previous RMS positions include Quality Director of the Air & Missile Defense Systems, Quality Excellence Center Director, Senior Manager of Supplier Quality, and Paveway Program Quality Manager. In addition, he was Program Manager of Paveway U.K. and Saudi Arabian programs.

Mr. Watson has more than 35 years of defense, aerospace, automotive and commercial industry experience in design, operations, quality and program management.

Mr. Watson served four years as a surface warfare officer in the U.S. Navy and earned a bachelor's degree in mechanical engineering and a master's degree in engineering administration.





Session 2 - Breakout 1 Development of Quality Assurance for Additive Manufacturing

Abstract (Sue Gavin): We will discuss the initial baseline requirements for Raytheon through corporate command media, which standardize requirements for the Raytheon businesses and are applicable to all production lines. Key requirements established in the command media include, but are not limited to: • Classification of additively manufactured components as to functional criticality

 Unique identification of AM components from inception of design through the product life cycle, distinguishable from conventionally produced parts, and traceable through bills of material and other configuration management media
 Coding of AM components with Universal Commodity Codes (UCCs) for identification and traceability of AM components into the Supply Chain, and to facilitate flow-down of requirements to suppliers with AM-specific engineering drawing notes and Qnotes.

• Establishment of technical requirements, in 3 categories: Design, Manufacturing and Inspection based upon component criticality

 \cdot Control of computer models and sub-tier files for accuracy related to AM builds and for anti-tamper/cybersecurity

• Establish minimum design requirements for statistical reliability of material property data

• Requirement that qualification of AM components include the combination of 1) material, 2) design, 3) specific AM process, 4) the specific machine (the serial number of the production machine) of the build unless machine signatures confirm statistical equivalence from one production line to the next in addition to typical component qualification.

Sue Gavin, Manager, Quality Technology Integration, Raytheon Missile Systems

Ms. Susan Gavin is the Manager of Quality Technology Integration for Raytheon Missile Systems. She has more than 28 years of experience spanning roles in aerospace, industrial power generation, and engineering, procurement and construction.

Ms. Gavin joined Raytheon Missile Systems in 2016, and currently leads a Quality Excellence Center team focused on development of quality requirements for emerging technologies, utilizing Additive Manufacturing as a pathfinder. She wrote the initial corporate command media documents for Additive Manufacturing, now in the process of release, for Raytheon Corporation.

In prior industry experience Ms. Gavin was a Deputy Department Chief of Materials Engineering Technology for Bechtel Oil, Gas & Chemicals, responsible for all aspects of specifying materials of construction and fabrication processes for large-scale liquefied natural gas plants globally. She served Entergy Operations in the nuclear industry as a manager in Supplier Quality Assurance for production of nuclear fuel batches for five nuclear power stations, and for manufacturing and assembly of a replacement steam generator for Arkansas Nuclear One. In this position, oversight included qualification of prime and sub-tier international and domestic suppliers, and management of long-term manufacturing surveillance and audit campaigns.

Ms. Gavin served Pratt & Whitney as a Design Metallurgist, and exercised materials engineering signature authority on engineering drawings for DoD and other government engine programs including: the F119 (F-22 Raptor), PW220/229 (F-15 Eagle & F-16 Fighting Falcon), Space Shuttle Main Engines Alternate Turbo-pump Design, TF-30 (F-14 Tomcat), J-58 (SR-71 Blackbird), RL-10 rocket engine, and the National Aerospace Plane. Purview included development/review/approval of design curves and materials and processing specifications for new alloy/material introductions, and for development of advanced materials testing in extreme environments such as high temperature, high pressure (5000 psi) gaseous hydrogen testing, and cryogenic testing to minus 452°F for SSME ATD materials.

Ms. Gavin also served NASA JSC Safety & Mission Assurance as a Technical Advisor on the Source Evaluation Board for the Crew Exploration Vehicle, Orion, and as a lead for Systems Engineering and Integration and T&E in the early stages of the Constellation program.

Ms. Gavin holds a Bachelor's Degree in Materials Science and Engineering from the University of Florida, and a master's degree in Environmental Engineering, Health Physics from the University of Florida.



Session 2 - Breakout 2 The Capability Element – Design Analysis and Feedback

Abstract (Dr. Inuka D. Dissanayake): For designs to be successful, we must ensure that process capability analysis of supplier items, sub-assemblies and systems are prepared for and conducted as the earliest hardware data becomes available. Performed early, the quality engineer can play a key role in the designing of requirements to achieve lowest cost production by carefully aligning process capability and requirements. A good analysis will predict future yields for the product reducing supplier rework cost as well as getting input back to the design team while still in the EMD phase. Variation management is more than measurement and six sigma, deployed early this will be a key contributor to supplier partnering towards a common understanding of requirements and alignment of efforts.

Dr. Inuka D. Dissanayake, Product Development Quality Manager, Raytheon Missile Systems

Dr. Inuka D. Dissanayake is the Product Development Quality Manager at Raytheon Missile Systems. She has held this position since January 2018 and is responsible for increasing quality processes within the various design programs across the business unit, ensuring producibility and manufacturability early.

Previously, Dr. Dissanayake was a product line Margin Improvement team member. In this role, she worked closely with the Product Line Directors identifying barriers to program strategies and developing mitigation plans to meet or exceed productivity and profitability goals. Prior to that, she was the Lead Quality Engineer for the NATO SeaSparrow Consortium development program Evolved SeaSparraow Missile Block II. In this position, she led design for manufacturing readiness reviews under an agile environment and introduced process capability measurement techniques across the supply base. She also collaborated with the Affordability Office to continue to grow the business wide nonconforming material management tool under the support of Program Office, Operations, Quality, and PMX.

Dr. Dissanayake joined Raytheon in 2006 and has held numerous cross functional roles supporting several programs and factories over her career. Her assignments included roles in optical product handling, material processing operations, energetics supplier capabilities, and operations manufacturing engineer. She has a diverse technical background across multiple phases of the product lifecycle.

Dr. Dissanayake holds a bachelor's degree in Chemical Engineering from Rensselaer Polytechnic Institute, a doctorate in Chemical Engineering from University of Maryland College Park and a Master of Business Administration in Project Management from the Florida Institute of Technology. While at UMCP, she coauthored conference papers on polymer dynamics. She also holds a patent for a bladeless ionizer blower and is an ASQ Certified Quality Engineer. She is in the process of becoming Raytheon Six Sigma Expert certified. Session 2 - Breakout 3 Virtual Presence Conformity Inspections

Abstract (Ron Witkowski): Today's quickly advancing live video streaming (LVS) capabilities enable aerospace companies to introduce new technologies into activities and methodologies traditionally requiring travel of personnel to conduct in-person inspections. Norms are being recalibrated. LVS has become a viable avenue for professions to conduct their activities virtually anywhere to the same level or better acumen than when conducted in person.

Ron Witkowski, Director of Quality - Regulatory Compliance, Gulfstream Aerospace

Mr. Ron Witkowski is the Director of Quality - Regulatory Compliance at Gulfstream Aerospace Corporation. He is responsible for liaising with multiple FAA divisions in addition to various foreign civil agencies to support certification and regulatory compliance across the Gulfstream Enterprise. He is also the Accountable Manager for the Gulfstream FAA-issued Production Certificate and its associated quality management system.

Mr. Witkowski holds a Bachelor's degree in Aeronautical Technology from Purdue University and a Master of Business Administration from Georgia Southern University. He is an Independent Designated Airworthiness Representative for both the Manufacturing and Flight Standards branches of the FAA and was recently appointed as a member of the FAA's newly formed Aviation Rulemaking Advisory Committee ARAC Part 145 Working Group. He participates on various committees supporting several industry associations including Aerospace Industries Association, General Aviation Manufacturers Association, and Aeronautical Repair Station Association.



Session 2 Training/Workshop Mission Assurance in Commercial Space versus Government Space - A Suppliers Perspective

Abstract: With the ever increasing demand and reliance on commercial space providers to supplement, or even replace, programs or projects that were previously provided by government agencies such as NASA or MDA, the dynamic for the supply chain is changing. The supply chain is now working between two ends of the spectrum when providing products or services to the "space" industry.

This workshop is intended to provide the supplier a voice to the larger aerospace and defense community in order to provide their perspective on the challenges and/or differences they are experiencing when providing similar or the same products or services to both customer bases. Can commercial space learn more from the government approach? Are there any risks being accepted by commercial space that the government could learn from and possibly accept to save costs and schedule? The workshop will provide a perspective from multiple suppliers addressing, or at least sparking more conversation, for the attendee's awareness and for potential change to assure we, as an aerospace community, are working towards the appropriate requirements for the overall space industry in the 21st century. There will be presentations provided by each supplier along with added time for open discussions.

Timothy A. Priser, Director, QA, Lockheed Martin Space - Military Space & Mission Solutions

Mr. Tim Priser has over 30 years of aerospace industry experience spanning Launch Vehicles to Planetary Spacecraft and from new pursuits to mission operations. He joined Martin Marietta in 1987 after earning a Bachelor of Science Degree in Aeronautical & Astronautical Engineering from The Ohio State University.

After 13 years of launch vehicle design, verification, and operations Mr. Priser transitioned to the planetary spacecraft side of the business where he placed three orbiters around Mars and two landers successfully on the surface. He is credited with innovating the first successful direct-injection, powered descent, soft landing on Mars. He is also credited with architecting the first image of a Mars entry vehicle to be taken by a Mars orbiting asset.

Mr. Priser began his career as a Software Systems Engineer and methodically evolved his responsibilities through roles such as Launch Operations Engineer, Entry-Descent-Landing Mission Phase Lead, Chief Systems Engineer, and Program Manager. He recently held the position of Quality Director for the Commercial Civil Space line of business and currently is the Quality Director for both the Military Space and the Mission Solutions lines of business. His experience with the Commercial Space, Civil Space, and Department of Defense customers brings a relevant perspective to the topic of Mission Assurance in Commercial Space versus Government Space - A Suppliers Perspective. Michael Verzuh, Director Mission/Quality and Information Assurance, L3

Mr. Michael Verzuh is the Director of Mission and Quality Assurance for L3 Technologies SSG Division. In this role he is responsible for all aspects of SSG Mission Assurance and Quality Assurance, which includes the disciplines of Mission Assurance (MA) Engineering, Reliability Eng., EEE Parts Eng., Materials/ Processes, Contamination Control, Radiation Effects Eng., and all aspects of Quality Assurance including SSG's Quality Business Management System with Continuous Improvement and Configuration Management.

Mr. Verzuh has over 35 years' experience leading high profile Mission Assurance and Product Assurance Engineering teams. This experience is split between aerospace and pure commercial products. He has been responsible for Mission Assurance Program Execution, Hardware Quality Assurance, Software Quality Assurance, Material Quality Assurance, Reliability Engineering, Radiation Effects Engineering and Parts Engineering. He has also been responsible for the MA business section leading to successful capture of major aerospace instrument programs. He has deployed industry leading MA approaches to scale program processes according program risk level, deployed fully integrated Non-Conformance management systems, and been an executive Mission Assurance liaison for key aerospace industry forums such as, National Security Space MA Summit, Aerospace Industry Association (AIA), Space Quality Improvement Council, and served on the Aersopace Corp. Mission Assurance Improvement Workshop council.

Mr. Verzuh's roots are in electrical engineering with early roles in control system design, and system engineering. Approximately half of his experience has been in the computer disk drive commercial industry with companies such as Seagate Technology. Commercial product development methods are different from space payloads, but his experience brings contrast and best practices to space programs as the technology challenges are similar even in the face of different driving requirements. The overlaps and synergy between development methods used in each industry can provide insight into evolving space payloads and will be explored.

Dave King, Quality Director, Amphenol Aerospace Operations

Mr. Dave King has been with Amphenol Aerospace Operations for 13 years. He has been the Director of Quality in the last 3 years, and in the previous 10 years he was the Director of Operations in the Commercial Air Division. For the last two years the Quality group at AAO has been focused on deploying a Zero Defect mindset within the organization to deliver Zero Defects to the Commercial, Space, and Defense industries. His previous experience of 13 years was in the Automotive Industry in a variety of Quality and Operations roles including implementing PPAP activities.

Mr. King has Bachelor and Master of Science degrees in Mechanical Engineering from Rensselaer Polytechnic Institute. He also has an MBA from the University of South Carolina.

March 12 - Day 2 Tuesday

8:00-8:15 am Opening Remarks

Phil Montag, VP, Mission Support Division, KBRwyle

8:15-8:45 am Keynote Speaker



Ella Studer Senior Vice President, Government Servces, KBRwyle

Ms. Ella Studer manages a project portfolio valued at over \$1 billion that is critical to the United State's national defense. This involves the leading and overseeing of over 12,000 employees on numerous projects around the world and in the United States. This covers base support, infrastructure and engineering services, as well as contingency response operations.

Ms. Studer has focused the Logistics Business Unit on expanding their footprint within the Department of Defense, and other Federal Government agencies. She has influenced the growth and expansion of KBR's services and performance by implementing the company's state of the art asset management program's robust maintenance strategy reducing cost and increasing asset reliability.

Before joining KBR, Ms. Studer retired from the Defense Logistics Agency (DLA) after 26 years of service, where she was the Senior Executive Service (SES) for DLA Enterprise Support. In this position she managed critical infrastructure with a \$1B budget and 1,400+ people at nine field locations worldwide.

Prior to that Ms. Studer served as an Aerospace Ground Equipment Technician in the U.S. Air Force (1976-1980) and the Ohio Air National Guard from 1980-1984.

Ms. Studer received her Master of Science in national resource strategy from the Industrial College of the Armed Forces, National Defense University and a Bachelor of Science in business management from Malone College.

When she is not managing the Logistics Business Unit, Ms. Studer volunteers as the Second Vice Chair for the American University of Afghanistan as part of their Board of Trustees.



8:45-9:15 am Featured Speaker



Wayne Brown Vice President of Q&MA, Raytheon Missile Systems

Mr. Wayne E. Brown is the Quality and Mission Assurance (Q&MA) vice president for Raytheon Missile Systems (RMS).

An internationally recognized quality leader, Mr. Brown has extensive commercial and defense industry experience in engineering, operations, human resources, quality assurance and mission success, including quality operating systems, supplier quality and quality improvement. As president of the IAQG, he led a consortium of aerospace manufacturers for improving industry supply-base quality.

Previously, he was Q&MA Deputy. He joined RMS in 2013 from the Boeing Company, where he held a variety of executive positions since 1997. Most recently he was Director of Operations for Boeing Commercial Aircraft (BCA) Manufacturing and Quality. He was responsible for manufacturing and quality of aircraft production systems, processes and tools, including strategic design and implementation of production systems of the future.

Previously Mr. Brown directed BCA Supplier Quality, where he worked with suppliers to enhance and improve the quality of hardware furnished to production. He also was director and chief engineer for interior engineering for Boeing's 737 airliner, directed Propulsion Systems Division Engineering and Quality, directed BCA's Engineering human resources organization and led the Boeing 747 Manufacturing and Quality team.

Before joining Boeing, Mr. Brown worked with McDonnell Douglas from 1985 to 1997. His positions included Advanced Quality Systems Senior Program Manager and Technical Support Manager.

Mr. Brown earned a Bachelor's Degree in Business Administration and Master's Degree in Aeronautical Science and Business Administration. He also holds a certification in global leadership from the American Graduate School of International Management.



SESSION THREE 9:30-11:45 am

Session 3 Panel Equipping Quality Professionals for the Future in Commercial Space

Abstract: Today's commercial space environment has shifted from a primarily government assurance model to a shared accountability/assurance model. Towards this end, we have an opportunity in today's collaborative environment for increased cooperation across government and industry in commercial spaceflight. This shared assurance enables greater transparency, communication and collaboration toward a common goal. On this panel, representative stakeholders and participates will share their vision and experiences related to Quality initiatives that illustrate the shared accountability/assurance model.

Pete Checklick, Session Manager/Panel Moderator, Senior Quality Engineer, NASA KSC

Mr. Peter Checklick currently serves as a senior Quality engineer at Kennedy Space Center. In this role, he develops, interprets and implements Quality Engineering (QE) and Quality Assurance (QA) policies and procedures to establish, develop and maintain QA programs.

Mr. Checklick has 14 years of experience in NASA Safety and Mission Assurance (SMA); more than 20 years of experience in QE and QA; and more than 40 years of experience in industrial, manufacturing, and Quality engineering. During his time at NASA, he has led project teams from multiple organizations in the execution of projects, planning, directing and coordinating teams of professional engineers and specialists. He is regularly appointed as the discipline expert for Quality, safety, industrial and manufacturing engineering for a variety of NASA initiatives.

Prior to his current position, Mr. Checklick was the Quality technical expert for the Source Evaluation Board SMA team, acting QE Section Chief and Lead Quality Engineer for the Materials Review Board. Before NASA, he worked for multiple companies in the private industry in the Industrial Engineering, QE, Manufacturing Engineering, Systems Engineering and software development fields.

Mr. Checklick is part of many committees and affiliations including the NASA Quality Assurance Working Group, NASA Workmanship Standards Committee, Collaboration on Quality in the Space and Defense Industries Forum, American Society for Quality (ASQ), NASA Quality Leadership Forum, NASA Joint Audit Planning Committee, and NASA Electrostatic Discharge Committee.

Mr. Checklick has a SMA Technical Excellence Program Level 4 certification in QE and an AS9100 Aerospace Lead Auditor certification. He has received the Silver Snoopy Award, two Space Flight Awareness Group Achievement Awards, NASA Group Achievement Award, Kennedy Group Achievement Award, and ASQ Orlando Section Honor Award for the Advancement of the Theory and Practice of Quality.

Mr. Checklick has a Bachelor of Science in Industrial Engineering and Operations research from Syracuse University and a Master of Science in Mathematics and Education from Nova Southeastern University in Broward County, Florida. Session 3 - Breakout 1 Shared Assurance Programs

Abstract (Billy Stover): We will provide a basic background of what and why for shared assurance and then share some of the practical lessons learned in developing and implementing a new assurance program.

Billy Stover, Deputy Chief Safety Officer of the Commercial Crew Program (CCP), NASA KSC

Mr. Billy Stover is the Deputy Chief Safety Officer for NASA's CCP at KSC. He is responsible for S&MA technical authority to the program where he ensures that safety policy, processes and requirements applicable to CCP are correctly implemented.

Mr. Stover also worked as Chief of the CCP, and as the program's Acting Chief Safety Officer. He previously worked in the Space Transportation Planning office, where he helped develop the architecture and program structure for the 21st Century Space Launch Complex at KSC. His expertise is in ground processing, systems engineering and program/project management.

Mr. Stover began working at KSC in 1987 as a Systems Engineer with Lockheed Space Operations Company on the Shuttle Processing Contract. He went on to serve as Systems Specialist and eventually Engineering Manager. He was a certified member of the prime space shuttle launch team.

Mr. Stover joined NASA in May 2004 as a Ground Projects Branch Project Engineer. He led the STS-114 Return to Flight Design Certification Review Team within Kennedy's Shuttle Processing Directorate. He served as the Ground Systems Manager for the Launch Vehicle Processing Directorate, responsible for developing launch site/system architectures, ensuring that associated ground systems, equipment and facilities are designed, constructed and tested to support existing and new launch complex needs. He led an agencywide working group in updating and rewriting the NASA Standard for Ground Support Equipment Design and Fabrication for all future programs.

Mr. Stover also served as the Ares I-X Ground Systems Integrated Product Team (IPT) Integration manager/deputy, responsible for concept, development and implementation of all the necessary modifications to facilities, systems and hardware to make Kennedy Ares I-X capable.

A certified professional manager, Stover has received multiple awards, including the NASA Honor Award, the NASA Astronauts Personal Achievement Award, NASA Public Service Award, NASA Group Achievement Awards, NASA Certificates of Commendation and United Space Alliance's Andy Petro Engineering Excellence Award.



Session 3 - Breakout 2 Quality for the Human Space Flight Programs

Abstract (Pete Munoz): In this session, we will discuss the Lockheed Martin Space strategy on equipping Quality Assurance personnel on entering the human space flight programs with a commercial space approach with high reliability in support of an aggressive cost and schedule baseline. This entails identifying the right team members, the appropriate trainings, and performing stretched assignments that allow personal and professional growth.

Pete Munoz, Human Space Flight Safety & Mission Assurance Manager, Lockheed Martin

Mr. Pete Munoz is the Lockheed Martin Human Space Flight Safety & Mission Assurance Manager for the Orion and Sierra Nevada Crew Re-Supply Services (CRS2) vehicle programs.

Mr. Munoz started his career in 1986 with General Dynamics in supporting the Shuttle Centaur Program. He worked to transition the Atlas Launch vehicle to a commercial program and the Atlas II, IIA and IIAS development and qualification programs and Titan Centaur production program. General Dynamics then sold their space entity to Martin Marietta, which later became Lockheed Martin.

Through his 33-year career, Mr. Munoz has worked on Army, Air Force, Navy and NRO programs, specifically on launch vehicles, satellites and missile defense articles.



Session 3 Training/Workshop AS9100 Implementation, Improvements, and What's Next?

Abstract: This workshop will discuss the AS9100 implementation with data analysis of auditing resources and Certification Body nonconformities issued. The data analysis will break down and compare Americas and International data. There will be discussion from an industry and Certification Body perspective regarding the transition. Topics will include what are the upcoming IAQG improvement initiatives and ISO 9001/AS9100 future concepts. Workshop attendees will be given an opportunity to provide inputs to the writing teams on future concepts.

L. L. "Buddy" Cressionnie President of ASD Expertise

Mr. Buddy Cressionnie has led the writing of IAQG 9100 revisions in 2009 and 2016 and engaged with ISO 9001 standard writings. He has been engaged with the complete life cycle of Aviation, Space & Defense (ASD) quality management system standards. As Americas Aerospace Quality System Committee (AAQSC) Chair, he had oversight of over 30 ASD standards and leadership in the development and maintenance of IAQG 9100 standards. He represented IAQG on ISO TC176 ISO 9001:2015 development and interpretations and ISO 9004 writing. He has conducted workshops on behalf of training providers, conference workshops, and internal training. He implemented ISO 9001 and IAQG 9100 at 10-site and major ASD OEM. He is experienced in conducting first, second, and third party audits to ensure compliance with requirements and quality management system effectiveness. He has over 18 years of 3rd party audit certification and contract auditor for certification bodies. He is responsible for all IAQG 9100 clarifications worldwide and participated on ISO TC176 clarification process.

Kevin Beard, President, NQA, Inc.

Mr. Kevin Beard is the President of NQA, Inc., responsible for the global 3rd Party Certification Services and other Services. This involves oversight of all business and strategy activities for all global certification regions; industry sector Business Units (Cybersecurity, Aerospace and numerous other Industry sectors). Mr. Beard is a long time member of the International Aerospace Quality Group (IAQG) and the regional division (AAQG). Mr. Beard is also a voting member of SAE G-14 (AAQSC) committee and is active in the SAE G-19 committee and working group writing teams which have responsibilities for development of many of the Aerospace standards including the AS9100 writing team.

As a Project Manager & Lead Assessor, Mr. Beard has worked with numerous Aerospace & Defense facilities covering a wide range of organizations including NASA, European Space Agency, Johns Hopkins University APL, Raytheon and Draper Laboratories, as well numerous organizations within the Aerospace Supply Chain.

1:00-1:30 pm Luncheon Keynote Speaker



Kelvin Manning Associate Director, NASA KSC

Mr. Kelvin Manning serves as Associate Director of NASA KSC. He is responsible for the oversight of Kennedy's institutional technical and business support functions, planning, directing and coordinating center policies on a day-to-day basis. This includes establishing strategies and procedures to ensure the Kennedy workforce, facilities and operations are aligned to facilitate agency program and project goals.

In 1992, Mr. Manning began his career at KSC and has served in a number of positions within the former Shuttle Processing Directorate, including flow director for space shuttle Atlantis, chief engineer (acting) for Shuttle Upgrades, vehicle manager for space shuttle Columbia, and NASA test director. More recently, he was the Orion division chief in the Kennedy Constellation Project Office and also served on the last two NASA Astronaut Candidate Selection Boards.

Mr. Manning earned B.S. from the U.S. Air Force Academy. In addition, he has an M.S. in Engineering Management from the University of Central Florida and has completed the Senior Executive Fellows Program at the John F. Kennedy School of Government at Harvard University.

As an Air Force Officer, Mr. Manning served six years as a space operations analyst, stationed at Eglin Air Force Base and NORAD Cheyenne Mountain. Following his military service and prior to joining NASA, he was an Engineer with General Electric Aerospace, Military and Data Systems Operations, and McDonnell Douglas Space Systems Company.

Mr. Manning has received numerous awards, including the NASA Exceptional Achievement Medal, NASA Exceptional Service Medal, the astronauts' Silver Snoopy Award, National Black Engineer of the Year Award for Outstanding Technical Achievement in Government, NASA Public Service Award, and the Department of Defense Joint Service Commendation Medal.



1:45-2:15 pm Featured Speaker



Mike Shields Executive Director of Quality Assurance, DCMA

In his current position, Mr. Michael Shields manages the agency's Quality Assurance Directorate, which is composed of a community of functionally aligned Quality Assurance Engineers and Specialists in performance of their contract management responsibilities. He is responsible for leadership in providing quality assurance support throughout the acquisition system, achieving operational excellence which inspires warfighter confidence through the issuance of new policies and management of core quality assurance business processes, developing effective performance management measures which influence industrial base performance, and in revitalizing the agency's quality assurance workforce through development of professional certification and training.

Prior to his assignment at DCMA, Mr. Shields managed the Defense Logistics Agency's Quality Assurance and Product Testing Programs. In that position, he was responsible for developing policies, defining informational functional requirements, performing operational analysis, surveillance oversight, and staff direction to each of the Agency's Defense Supply Center Quality Assurance and Product Verification business units. He also served as the Agency's representative on the Quality Assurance Committee of the DAR Council. He served the Joint Aeronautical Logistics Commanders Council in development of effective controls for the acquisition of critical safety items and audit of both major buying centers and defense distribution depots. He also participated in numerous engineering and quality assurance cross talks and conferences with Military Service customers.

Mr. Shields is an ASQ Certified Quality Engineer, and ASQ Certified Auditor. He started his education at New York State University with a Bachelor of Science degree in business. He completed his formal education with a Master's degree in business administration from the Colorado State University. His awards include three Vice President Gore Hammer Awards for making government operate more efficiently.



Abstract: In a continuation of last year's successful panel, we will discuss the need for attracting young professionals to Safety, Mission, and Quality Assurance (known as Safety & Mission Assurance or SMA in the NASA world). This two-part (fresh perspective and recruitment) panel will consist of up-and-coming talent, hiring staff, and educators. The audience will hear directly from young professionals to identify factors that may draw or repel them, in addition to what motivates today's graduating classes. The recruitment portion of this year's panel will include university educators to provide insight into programs, training options, and the social education trends of today. The SMA industry has stiff competition in recruiting and retaining skilled and driven staff. The target of this panel is to provide intelligence and tools, enabling defense and aerospace employers to attract the young contributors essential to bridging the gap with much of the current workforce.

Belinda Chavez, Session Manager/Panel Moderator, Operations Manager, KBRwyle

Ms. Belinda Chavez is an Operations Manager for KBRwyle Technical Solutions, LLC, in support of the NASA Safety Center Audits and Assessment Office. She has over 25 years of safety and quality experience with NASA and Department of Defense contractors.

Ms. Chavez earned a Bachelor of Science degree in Industrial Technology from Southern Illinois University, and a Master in Business Administration degree from Louisiana Technical University. She currently serves in several ASQ member leader positions: ASD Division Secretary; Co-chair of the ASQ Societylevel Performance Awards and Recognition (PAR) program, Education Division Newsletter Editor and Auditing Committee Chair; West South Central Region Deputy Regional Director; and Nominating Committee and Audit Committee chair positions in several sections. She previously served on the ASQ Board of Directors (2007- 2012), was Section Affairs Council Chair (2010-2012), Region 14/14A Director (2007-2012), Education Division Chair (2015-2016), ASD Division VOC Chair (2013- 2017), and numerous Division and Section Committee Chair positions from 2003-2018.

Ms. Chavez is an ASQ Fellow and ASQ Certified Manager of Quality/Organizational Excellence, ASQ Certified Six Sigma Black Belt, an IPCM Certified Manager, and George Group Certified Lean Six Sigma Black Belt. She received various company and NASA awards including a United Space Alliance Safety Quest Award, a NASA Space Flight Awareness Award, the NASA Astronaut Silver Snoopy Award, and multiple NASA Group Achievement Awards.





Session 4 Panel 1 Attracting Young SMA Professionals

Abstract: The young/new SMA professionals will share their insights and experiences on what inspired them to enter their profession and some challenges they have experienced in their early careers. They will also share some very important aspects of their profession, their mentors, the work place, management and peers that entice them to remain in their profession as well as what makes them want to explore other fields.

Amanda Hansen, Quality Specialist, Space Dynamics Laboratory

Ms. Amanda Hansen is a Quality Specialist at Space Dynamics Laboratory (SDL). For the past year and a half, she's audited internal QMS processes, received and inventoried external products and materials, supported SDL's document configuration management system, served as an independent witness for defense software acceptance tests, and facilitated continual improvement efforts. While working as a student at Space Dynamics Laboratory, she served as the student chair of SDL's Student Scholars committee, planning technical and business training workshops, participating in public outreach, and coordinating with committee members.

Ms. Hansen received her Bachelor of Science degree in Management Information Systems with a minor in Operations Management from Utah State University (USU) in 2017. While enrolled at USU, she began working for Space Dynamics Laboratory as a student and was introduced to quality assurance within the defense and aerospace industry.

Jessalyn Teed, First Officer B737-800/8, Sunwing Airlines

Ms. Jessalyn Teed is a First Officer B737-800/8 pilot at Sunwing Airlines. She also serves on a mentorship program at Sunwing Airlines as well as a Multi-Crew Coordination Course Instructor at Waterloo Wellington Flight Centre. She earned a Bachelor of Environmental Studies in Geography and Aviation at the University of Waterloo. She completed flight training and earned her commercial airplane pilot licenses from 2014-2017 on numerous aircrafts including the Cessna 150, 152, 172N/S, 172 RG, and the Multi-Engine - Piper Seminole PA-44. She then was hired by Sunwing Airlines where she completed her Boeing 737-800 type rating through the University of Waterloo and Sunwing "Cadet" program. A strong advocate for WWFC Girls Can Fly, Ms. Teed promotes piloting to young women to encourage, empower and expose them to the opportunities in the aviation industry.

Amber Tully, Hardware Quality Engineer, Ball Aerospace

Ms. Amber Tully received a Bachelor of Science degree in Industrial Engineering with an emphasis in Health Systems Engineering from Northern Illinois University in 2013 as well as an MBA from North Central College. She started as an Internal Auditor at Ball Aerospace and was quickly promoted to a Hardware Quality Engineer. She currently works in electrical solutions at Ball where she supports electronic boxes and harnesses across a variety of programs.

Session 4 Panel 2 Recruiter Perspective on Attracting and Retaining Young/New SMA Professionals

Abstract (Susan Green): The traditional path toward a Quality career has changed as the profession has evolved and expanded. Auditors, testing lab personnel, and inspectors have given way to Reliability Engineers, Safety and Mission Assurance Professionals, and Software Quality Engineers (to name a few) involved in many aspects of our businesses. Susan will tell us how internal recruitment and retention efforts played a role in her non-traditional path to quality.

Susan Green, Strategic Sourcing Analyst, Piper Aircraft

Ms. Susan Green is a Strategic Sourcing Analyst at Piper Aircraft, Inc. She has more than 25 years of experience in project coordination and execution, process improvement, generating cost savings, and customer service with a strong background in sales management and public speaking. Before joining Piper, she was as a Branch Manager and Recruiter for Griffin Services and progressed as a Market Manager for Precision Fabrics Group, Inc. In her current position as Strategic Sourcing Analyst, she is responsible for identifying process and quality improvement opportunities, developing business cases to support those projects, and working with relevant organizations to implement continuous improvement initiatives. She is an active member of the Piper internal audit team, the environmental green team and the community outreach committee.

Ms. Green holds an MBA from Nova Southeastern University, and a BS in Business Administration & Economics from Greensboro College. She is an ASQ Certified Six Sigma Black Belt, a licensed Human Subjects Researcher, and was a certified ISO 9001 Auditor.

Abstract (Steve Kramer): Process Improvement knowledge and skills are at the heart of SMA professionals. We find it challenging to attract emerging SMA professionals into academic programs and then to engage them in extracurricular opportunities such as ASQ's Student Branches. Dr. Kramer facilitated the chartering of a Student Branch at Nova Southeastern University in 2014. He will share lessons learned and examples of successful programming as well as thoughts looking toward the future.

Steve Kramer, Associate Professor of Decision Sciences, Huizenga School at Nova Southeastern University

Dr. Steve Kramer is an Associate Professor of Decision Sciences at the Huizenga School at Nova Southeastern University. He is the lead professor for the HCBE Process Improvement MBA Concentration and is the cognizant professor for undergraduate Operations Management. He holds a Bachelor and Master of Science in Industrial Engineering degrees and a Ph.D. in Business and Management. He was certified by the American Society of Quality as a Six Sigma Master Black Belt and has facilitated and mentored hundreds of lean/six sigma process improvement projects. He has applied process planning and improvement techniques in a variety of environments via his active consulting in areas including healthcare, engineering, manufacturing, government operations, financial services and education. He has published in and about process management issues and applications eclectically in Journal of Dental Education, Electronic Journal of Business Ethics & Organizational Studies, International Journal of Applied Decision Science, International Journal of Production Research, Operations Research Letters and to the Darden School Case Collection and is currently working on a paper targeted for ASQ's Quality Management Journal.

Prior to entering academia Dr. Kramer worked in aerospace/ defense for 20 years, with his most recent position Sector Integration and Process Improvements Manager where he standardized processes across sites. He led development of the strategic supplier sourcing program for his business group and facilitated the development of the divisions-level strategic plan.

Dr. Kramer is a student advocate and has been the Counselor for the Student Branch of the Southeast Florida chapter of ASQ since facilitating its charter in 2014.

Abstract (Gil BevenFlorez Jr): The demographics and pathways of education have significantly changed. The current paradigms of attracting youth and colleges need to change. Maintaining the current paradigms is resulting in the loss of highly qualified and experienced prospects from educational and vocational institutions. These valuable prospects can and would be significant contributors to safety and mission assurance from the "production line to the flight line." While there is no easy solution to these challenges, these challenges can be overcome. Gil will share his experiences from growing up and working in the aerospace environment and as an instructor in both vocational and university programs.

Gil BevenFlorez Jr, Faculty Member, California State University and Instructor at Economic Development & Corporate Training, San Bernardino Community College District, and Center for Customized Training at El Camino College

A former U.S. Army Captain, Mr. Gil BevenFlorez Jr. served in the military for 16 years. His aerospace experience has been with TRW, Zodiac Aerospace, Esterline Engineered Materials, and Lisi Aerospace-Hi Shear. He is a second-generation aerospace professional and is very active in the aerospace community and the preservation of its history and lessons learned.

Mr. BevenFlorez Jr. is a Certified Quality Improvement Associate and OSHA Outreach Trainer (General Industry & Construction), with experience in training, administration and quality of environmental, health, and safety programs for Aerospace/ Defense/Manufacturing and Construction environments.

Mr. BevenFlorez Jr. is a part-time faculty member at the Department of Technology at California State University-Los Angeles. He is also an instructor at the Economic Development & Corporate Training and San Bernardino Community College District and Center for Customized Training at El Camino College.

Mr. BevenFlorez Jr. left the U.S. Army and then earned his Master's degree from the University of Southern California. After completing the Veterans Safety program at Occupational Safety Councils of America/Chabot-Las Positas Community College, he was accepted at Embry Riddle Aeronautical University-Worldwide where he is furthering his passion for aerospace. His article, "Aerospace Safety: The Future is Now," was published in the March 2017 issue of Professional Safety Magazine. In 2017, he joined ASQ and earned his CQIA.

Session 4 Concurrent Lecture/Training A

DCMA and Industry Collaboration to Reduce Waste and Improve Oversight

Abstract: Lockheed Martin Aeronautics (LM Aero) and DCMA completed and are engaged in multiple projects to eliminate redundancies while improving efficiency and effectiveness of the Quality Management System (QMS). For example, one success is the elimination of DCMA QMS audits at multiple sites. Several major contractors are part of this journey. Both DCMA and contractor perspectives are presented. The workshop provides participants an opportunity to provide their perspectives and gain a better understanding of this DCMA agency-wide initiative.

Joe Tessier, Sr. QA Specialist, DCMA

Mr. Joe Tessier is currently assigned to DCMA's leading Agency "Detection 2 Prevention" (D2P) initiatives. He plays a vital role as Agency coordinator/liaison in development and deployment of projects across the Agency with Defense Industry partners.

Previously, Mr. Tessier served as Quality Director at Lockheed Martin Aerospace. He was responsible for all Government quality production, manufacturing and development acquisition activities. He joined DCMA in 2000 leading teams executing quality oversight that include C-130J F-22, F-35, and C-5M, as well as sustainment and support services.

Mr. Tessier received a Bachelor's and Master's Degree from Embry-Riddle Aeronautical University receiving a certification in Aviation & Aerospace Safety Systems and Aviation & Aerospace Management. He is a member of the Defense Acquisition Corp with a level III certification in manufacturing, production, and quality assurance.

Brian Tenney, Director, QA, Lockheed Martin Aeronautics Company

Mr. Brian J. Tenney is Director of Quality Assurance for the Lockheed Martin Aeronautics Company. He is responsible for Quality Management System compliance. His previous roles in quality include Mission Assurance Director for the F-35, F-16, F-22 and F-2 programs.

Before moving to the F-35 program, Mr. Tenney served as Director of Production Engineering on the F-22 program. He led a team responsible for tooling, planning, MRB and corrective action. Mr. Tenney previously worked as a structural design engineer on the F-22, Trident II D5, Mk4/5 and B-2 programs.

In addition to his work in the aerospace industry, Mr. Tenney served for 32 years in the Army National Guard and Army Reserve.

Mr. Tenney received a Bachelor's Degree in Space Science from the Florida Institute of Technology, a master's degree in Quality Assurance from Southern Polytechnic State University and a master's degree in Strategic Studies from the US Army War College.

Session 4 Concurrent Lecture/Training B

Risk Management: Suspect and Non-Compliant Materials in the Crosshairs for Long Term Storage of EEE Devices

Abstract: The first to present and the first to publish on Suspect Counterfeit ESD materials and packaging in the DoD Supply ChainTM for the 2010 NASA QLF Forum, Bob Vermillion will provide an update on Trends & New Developments of Non-Compliant and Suspect Counterfeit ESD Materials & Protective Packaging of EEE Components in the Global Supply Chain that impact logistics and materials management with solutions for a "first line of defense".

Bob Vermillion, CEO & Founder, RMV Technology Group LLC

Headquartered at NASA Ames Research Center since 2008, Mr. Bob Vermillion, a foremost Industry Leader in specialty materials science and SME in Electrostatics, was named the ESD Technical Authority for NASA in 2018.

From the development of an advanced ESD material for a Mars mission in 1999, the Ameristar winner of the USA Top Electronics Packaging Engineering Design in 2002, Mr. Vermillion's anti-counterfeit embedded watermark was a precursor to some methods in use today. Inducted into the IOPP College of Fellows in 2007, RMV Technology Group (RMV) was named 2014 Corporation of the Year by NIPHLE. In 2018, he was awarded the prestigious James A. Russell Lifetime Achievement Award for Packaging Engineering Innovation & Technical Excellence in Protection of the Warfighter.

Since 2016, Mr. Vermillion has been an Invited Speaker for GIDEP on suspect counterfeit materials and packaging trends and new developments not yet in the public eye. In 2017, he collaborated with NASA centers on a suspect counterfeit "wireless wriststrap" worn by personnel in the assembly and manufacture of ultra-sensitive electronic parts for Industry and Government. That same year, he was a featured speaker for the Annual GIDEP Conference, whose material and packaging questions on shipping, handling and long-term storage were unprecedented.

Founder and Co-Chair of the SAE G-19 Subcommittee on EEE Packaging, Mr. Vermillion is an active member of the NASA Interagency Working Group (IAWG – ESD) and Advisory Board member of the NASA Academy of Aerospace Quality (AAQ) in partnership with Auburn University.

In 2018, RMV partnered with Exemplar Global (ASQ) to provide the NEW iNARTE Certified ESD Aerospace & Defense Engineer Training for NASA and the US Military. Developed by Mr. Vermillion in a collaborative effort to meet the requirements for NASA and the DoD, this unique "hands on" ESD training is graded upon class participation, instrument driven training followed by an iNARTE computer generated 3rd party proctored examination.

Are You Getting the Most From Your Quality Engineer?

Abstract: Charlie Robinson will present an outline of how a QE should be adding value during the life cycle phases of a project. This presentation will include: A matrix of a life cycle model with NASA Policy Directives (NPDs), NASA Procedural Requirements (NPRs) and the new AS9100D standard; A tool for evaluating a QE's holistic application of processes and procedures during the project life cycle; A reference tool that QE's can use during the life cycle of a project; An understanding of how a project has embraced the mission assurance aspects of AS9100D from a QE's perspective.

Charlie Robinson, Certified Lead Auditor / Senior Quality Engineer, Quality Assurance & Risk Management

Mr. Charlie Robinson has designed, fabricated, and inspected aerospace products as well as managed these departments in several organizations. For the past 10 years he has led NASA supplier assessments for organization's compliance with Mission Assurance Requirements. This coupled with his previous experience gives him a unique perspective on the importance of the Quality Engineering Discipline throughout the life cycle of a project.

Mr. Robinson's positions include, but are not limited to, NASA Lead Assessor, Program Manager for Honeywell Aerospace, Director, Engine Systems QA for Grime Aerospace, Engineering Manager for Turbine Support Southeast, Manager of Repair Development for Turbine Support, Director of Quality for Allied Signal, Senior QE for Garrett Turbine Engines, Methods Engineer for General Electric Aircraft Engines, and Tool Designer for Lockheed Propulsion.

Mr. Robinson is a member of American Society fo Quality Control (ASQC) and is an IRCA Certified Aerospace Lead Auditor. He has a Bachelor's Degree in Business Administration from University of La Verne. He received the NASA "Exceptional Public Service Medal" for exceptional performance to the NASA GSFC Supply Chain Management Program.



Session 4 Concurrent Lecture/Training C

Improving the Quality of Quality Reports

Abstract: The necessity to keep documents accurate and easy to understand while properly curating an increasingly diverse portfolio of quality control reports requires an ERP system with suitable quality modules. How can we make documents more friendly, more professional, more simple and more comprehensive simultaneously?

To meet this demand, our quality department collaborated with a software company to modify the standard quality module of our ERP system. This has enabled electronic tracking of all quality control documents, which in turn simplifies monitoring and analysis, and allows easy access to information for quick interpretation.

The immediate impact? Vastly reduced time and effort by the quality department in all aspects of document handling. By using single source for report generation and publishing all documents in an identical way—using drop-down lists, red-flags, check boxes and other accessories—we nearly eliminated all mistakes. Among other long-term benefits is the ability to run trend analysis on specific parameters.

Grisha Gorodetsky, Quality, Safety and Environmental Manager, Wipro Givon Ltd.

Mr. Gregory (Grisha) Gorodetsky began his career in the late 1980's when he moved to Israel to join a vibrant pool of professional engineers. He worked as a Mechanical Engineer at Tadiran Electrical Appliances (Carrier Group), but he was soon recruited to work in Quality. This included positions as Quality Manager at SodaStream, Arad Water Meter Technologies and more.

As a Quality and Reliability Engineer, and particularly with his background as a Mechanical Engineer, Mr. Gorodetsky is singularly able to arrive at practical solutions with the Engineers with whom he works and coordinates efficiently between quality and production engineers. He has a strong and resilient skill set to collaborate effectively with regulators, auditors and governmental authorities.

Leadership & Management Fundamentals in a Quality Environment

Abstract: What is leadership? What is management? How do they complement each other? Peter Drucker said, "Management is doing things right; leadership is doing the right things." There are many definitions of leadership and even more opinions of what "good" leadership is.

This program will be an interactive discussion of leadership concepts and how they apply to quality professional's work environments. The presentation starts by defining leadership and management then transitions into the differences between these topics. This section is wrapped up by explaining how the two roles are interactive and gives practical examples of each point.

The next section defines trust and explains how it is the foundation for both leadership and management.

This leads into a detailed discussion of self-leadership/selfmanagement, which is the cornerstone for being a good leader/ manager. Critical self-reflection is the key ingredient for leading ourselves. Everyone does some self-reflection, but a leader should be conscious of the process and make it a practice to look from four different angles. This guides an individual's belief system which guides their leadership style because "we lead as we believe".

ISO9001 & AS9100 are shifting the emphasis from management to leadership, so the presentation spends some time addressing the concepts that are included in both standards.

The presentation concludes with thoughts on self-leadership and how to effectively lead from any level in an organization.

Jeff Robinson, Quality Manager, General Dynamics-OTS

Mr. Jeff Robinson is a Quality Manager at General Dynamics-OTS. He has a Master's degree in Organizational Leadership through Norwich University and a Bachelors in Business & Aviation Science. He is a Certified Manager of Quality & Organizational Excellence (CMQ/OE) and Certified Quality Engineer (CQE) through ASQ. His experience has been built through several roles: Quality Assurance, Continuous Improvement Leader & Consultant, Value Stream Management, Manufacturing Engineering and Aircraft Maintenance Technician.





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