

Cape Canaveral, FL | March 12 to 13, 2024



2024 CQSDI / Collaboration on Quality in the Space and Defense Industries Forum

Quality's Reach Across the Enterprise in the Age of Accelerating Disruption





















Aviation, Space & Defense Division Excellence Through Quality**



Quality's Reach Across the Enterprise in the Age of Accelerating Disruption

March 12-13, 2024 | Radisson at the Port

8701 Astronaut Boulevard, Cape Canaveral, FL 800-333-3333 or 321-784-0000

Sponsored by the ASQ Aviation, Space & Defense Division

Supported by the

National Aeronautics and Space Administration (NASA), the Department of Defense (DoD), the Missile Defense Agency (MDA), and the Defense Contract Management Agency (DCMA)

This forum will be your most important and rewarding professional experience for 2024! It includes keynote and featured speakers, panel presentations, and workshops. Government and industry leaders will discuss the latest policies and practices that will directly affect your organization.

Format for 2024 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 or the parallel training session, as they are concurrent sessions.

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



Committee

Phil Montag, KBR (CQSDI Chair)

Arnold Baldwin, NASA Johnson Space Center

Craig Bennett, DCMA

Don Brandl, NASA Safety Center

Chris Brust, DCMA

David Campbell, NASA Goddard Space Flight Center

Doug Cartney, Northrop Grumman (Industry Co-Chair)

Stephen Cassman, Lockheed Martin

Olga Ceritelli, Show Me Quality Consulting (SMQC)

Belinda Chavez, KBR (ASQ ASD Division Chair)

Pete Checklick, NASA Kennedy Space Center

Paul Chiodo. Universal Technical Resource Services

John Fordyce, RTX

Lisa Fenton, Past Industry Co-Chair

Bill Harris, MDA

Yvette Harris, The Aerospace Corporation

Jerri Ji, Sterling Quality Management (ASQ ASD Division Past Chair)

Ed Jopson, CQSDI Past Chair

Michael Kelly, NASA Safety Center

Brad Lovik, Boeing

Alexander Lule, Northrop Grumman

Shannon Marsh, Show Me Quality Consulting (SMQC)

Edmond S. Mitchell, Johns Hopkins, Applied Physics Lab.

Gerard Pearce, SQA Services

Amy Peters, Northrop Grumman

Mike Phelan, DCMA

Rob Pollard, Ball Aerospace

Rick Roelecke, Ball Aerospace

Amber Rowson, Show Me Quality Consulting (SMQC)

Mike Swenson, ASD/CQSDI Past Chair

Brian J. Tenney, Lockheed Martin Aeronautics

Clementine Uwineza, RTX

James Wade, Engineering & Mission Assurance Leader

Michael Walker, Boeing

Nicole Wendt, Northrop Grumman





Phil Montag VP, Human Performance and Research Division, KBR (CQSDI Chair)

Welcome everyone to CQSDI 2024! This is our 31st year of providing a forum for collaboration and reflection on everything changing in the world of Quality. As this year's event theme captures, we are collectively seeing an acceleration of changes in how we do business resulting from the speed of technology and innovation. I recall when Additive Manufacturing was the next big thing, and now people have home units. And with the introduction of AI, the acceleration will be even faster.

With our 2024 program, the committee is proud to bring some of these new topics to this audience and include updates on continuing challenges in supply chain health, developing the next generation of quality professionals, and quality culture. These are threads that will always be part of the fabric of quality. The next two days are designed to present topics that appeal to a mix of seasoned quality leaders and emerging quality professionals covering a variety of subjects.

I sincerely appreciate all of you who have made the trip to participate in person. I believe our 2-day program will provide valuable information for you and your colleagues, and an opportunity to connect with old friends and make some new ones. We are fortunate this year to be followed by the NASA Quality Leadership Forum (QLF), which CQSDI participants can attend at no cost. For attendees that recall the days before COVID shut-down, CQSDI was always followed by 2-days of the NASA QLF. This year we have re-engaged with our NASA partners to re-start that tradition.

As always, our intention is to provide a forum for leaders and professionals across our dynamic work environments to collaborate and learn how your colleagues are adapting to the challenges we are all facing. I am most fortunate to have a strong committee of professionals supporting me to make this event happen. Take a moment to look inside the cover of this program to see the exceptional members of our CQSDI Planning Committee. If you have any questions, feel free to ask them or provide direct feedback on your experience. We continue to incorporate your input into this event and look forward to receiving your feedback over the next two days.

Please take a moment to familiarize yourself with this program, including the keynote and featured speakers and the concurrent panels and training/ workshop venues. My sincere thanks to you all for your participation.



casai March 12 Day 1 - Tuesday

7:00 - 8:00 am Registration/Continental Breakfast

8:00 - 8:15 am **Welcome and Opening Remarks** Belinda Chavez, Operations Manager, KBR (ASQ ASD Division Chair)

Phil Montag, Vice President, Human Performance and Research Division, KBR (CQSDI Chair)

8:15 - 8:45 am

Sonya Ebright, Deputy Director, Defense Contract Management Agency (DCMA)

8:45 - 9:15 am Featured Speaker

Robert Hauge, President, SpaceLogistics LLC

9:15 - 9:30 am Break

9:30 - 11:45 am Session 1 (Attend Panel or Training/Workshop)

Session 1 Panel

Quality Intelligence: Practical Insights on the Digital Future of Quality Assurance in **Aerospace and Defense**

Jon Olson, Manufacturing Systems and Modeling, AI/ML, IFF, Lockheed Martin **Tiffany Esther**, Director, Global Supply Chain Digital Transformation, Northrop Grumman Emeline (Em) Grey, Director, Manufacturing Digital Transformation, Northrop Grumman Jim Wade, Engineering and Mission Assurance Executive

Session 1 Training/Workshop

Partnering with the Supply Chain - How Can We Help Our Suppliers Be Successful Through Teaming and Collaboration

Olga Ceritelli, VP, Show Me Quality Consulting (SMQC) John Danley, Director of Supply Chain Quality, Lockheed Martin

Terry Curtland, Staff Consultant, Supplier Quality Engineering, Ball Aerospace

11:45 - 1:00 pm Lunch

1:00 - 1:30 pm Luncheon Keynote Speaker

Sean Vogel, Vice President of Safety and Quality Assurance, Lockheed Martin Space

1:30 - 1:45 pm Transition to General Session

Featured Speaker 1:45 - 2:15 pm

Marisela Reyes, Vice President of Total Quality, Boeing Defense, Space and Security

2:15 - 2:30 pm

2:30 - 4:45 pm **Session 2** (Attend Panel or Training/Workshop)

Session 2 Panel Lessons Learned and How These Lessons Apply to Today's Environment

Rob Pollard, Director, Mission Success, Enterprise Assurance, Ball Aerospace Mike Vernoy, JWST Parts, Materials, and Process Manager, Northrop Grumman Joe Radich, (Retired) Chief of S&MA

for JWST at NASA GSFC

Session 2 Training/Workshop Early Quality Project Involvement, What Does This Mean?

> Wayne Domingue, Sr. Quality Manager, S&MA, JSOG COMET Program John Butler, Subject Matter Expert, Show Me Quality Consulting (SMQC) Kyle Hummel, Quality Executive, LibertyWorks Advanced Platforms, Rolls-Royce Defense

5:00 - 7:00 pm **Networking Reception Sponsored by:**

ASQ Aviation, Space & Defense Division

and Northrop Grumman



Day 2 - Wednesday March 13 casali

| 7:00 - 8:00 am | Registration/Continental Breakfast |
|-----------------|--|
| 8:00 - 8:15 am | Welcome and Opening Remarks Phil Montag, Vice President, Human Performance and Research Division, KBR (CQSDI Chair) |
| 8:15 - 8:45 am | Keynote Speaker Ronnie Rodriguez, Director of Safety & Mission Assurance, NASA Kennedy Space Center (KSC) |
| 8:45 - 9:15 am | Featured Speaker Chris DeLuca, Director for Specialty Engineering, DoD Office of the Executive Director for Systems Engineering and Architecture |
| 9:15 - 9:30 am | Break |
| 9:30 - 11:45 am | Session 3 (Attend Panel or Training/Workshop) |

Session 3 Panel Supply Chain (SCRM) Risks, Opportunities and Factors to Consider

Marc Doolittle, Sr. Technical Fellow, Collins Aerospace Jonathan Root, Deputy Program Manager, Supply Chain Risk Management, NASA Jennifer Fischer-Darby, SES/SMA Supervisor, JHU Applied Physics Laboratory (JHU/APL)

Session 3 Training/Workshop Successful Strategies to Enable a Quality Culture

Kim Withers, Principal Director, The Aerospace Company Yvette Harris, Associate Principal Director, The Aerospace Company Jim Wade, Engineering and Mission Assurance Executive

11:45 - 1:00 pm Lunch

1:00 - 1:30 pm **Luncheon Featured Speaker**

Mike Wadzinski, Director, Safety, Quality and Mission Assurance, Missile Defense Agency (MDA)

1:30 - 1:45 pm Transition to General Session

1:45 - 2:15 pm **Featured Speaker**

Jon Strizzi, Colonel, Director of Analysis and Interoperability Engineering,

Space Systems Command, U.S. Space Force

2:15 - 2:30 pm Break

2:30 - 4:00 pm **Session 4** (Attend Panel or Training/Workshop)

Session 4 Panel New/Young Quality Professionals

Panel 1: Young Quality Professionals

Christene Chavez, Student, University of Mississippi

Ethan Cote, Associate Program Quality

Engineer, Northrop Grumman Mohamed Shalaby, Quality Manager,

IEH Corporation

Panel 2: Company/Organization Leaders/ **Mentors**

Sid Bhatnagar, CEO, ASQ

Christopher Warner, Director of Talent Acquisition, KBR Science and Space

Business Unit

Nicole Wendt, Quality and Mission Assurance Manager, Northrop Grumman **Session 4 Training/Workshop** Disruptive Technologies in Quality, Advancing the Digital Transformation Journey with Quality

Jason Anderson, Field Engineer Director, SQA

Hannah Ensor, Quality Engineer, Staff,

Lockheed Martin Fred McMaier, Quality Engineer, Sr. Staff

Lockheed Martin

Ryan Wheeler, Sr. Technical Fellow, Collins Aerospace (an RTX Business) James Cooper, Chief Technologist,

Advanced Visualization, Raytheon (an RTX Business)

4:00 - 4:15 pm Wrap-Up

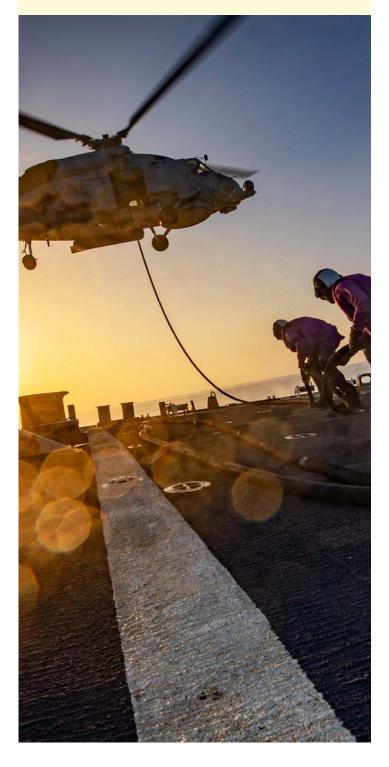


8:00 - 8:15 am

Welcome & Opening Remarks

Belinda Chavez Operations Manager, KBR (ASQ ASD Division Chair)

Phil Montag VP, Human Performance and Research Division, KBR (CQSDI Chair)



8:15 - 8:45 am Keynote Speaker



Sonya Ebright
Deputy Director,
Defense Contract
Management Agency
(DCMA)

As the Deputy Director for DCMA, Ms. Sonya Ebright oversees a team of 10,800 civilian and military personnel who provide contract administration services for the DOD, other federal organizations and international partners. The agency executes contract management responsibilities covering more than 230,000 contracts performed at 11,300 contractor locations worldwide, with a value of \$3.8 trillion. In addition, the agency authorizes nearly \$1.01 billion in payments to contractors each business day.

Ms. Ebright was previously the Executive Director of the DCMA Contracts Directorate at Fort Gregg-Adams, VA. She led over 3,000 contract acquisition professionals in support of DCMA's mission of delivering more than 440 million items – from fighter jets to fasteners – to the warfighter each year. She served 37 years in the Navy supporting operations and DOD major weapons systems and numerous systems' components and subsystems.

Ms. Ebright served with NATO and most recently commanded DCMA International. Her experience includes multiple jobs in Contracting, Operations, Financial, Logistics, Strategic Management and Special Programs.

Ms. Ebright holds a B.S. in English (Summa cum Laude) from the University of Idaho, and an M.S. in Systems Management with a specialty in Contracting from Naval Post Graduate School and an M.S. in Strategic Resourcing from National Defense University, Eisenhower School. She also earned a certification in the Program for Organizational Leadership from Stanford University.

Ms. Ebright was awarded the Admiral Edward F. Ney award for outstanding Food Service (USS CANOPUS), the Admiral Elmo R. Zumwalt award for 5 star Combined Quarters Management (Naval Station Everett) and the Admiral Robert F. Batchelder award for significant contribution to Supply readiness for operational forces at sea (USS DAVID R RAY). Her military awards and decorations include numerous Defense Service Awards.

8:45 - 9:15 am

Featured Speaker



Robert Hauge President, SpaceLogistics, LLC

Mr. Robert Hauge is president of SpaceLogistics, LLC, a Northrop Grumman company. In this role, he leads the development of current and next-generation on-orbit satellite servicing products for government and commercial customers.

Prior to this appointment, Mr. Hauge served as strategy director for Space Mobility and Logistics for Northrop Grumman Space Systems.

Previous to joining Northrop Grumman, Mr. Hauge served for nearly 30 years in various roles across the DoD and intelligence community including as a senior intelligence service officer, ground station commander, program manager with the Defense Advanced Research Projects Agency and as an Air Force officer.

Mr. Hauge earned the gold, silver and bronze medals, the director's circle, and innovator of the year award during his tenure with the National Reconnaissance Office, as well as the medal for exceptional public service from the Office of the Secretary of Defense. He is also a graduate of the Walt Disney World College Program where he worked as a custodial host in the Magic Kingdom.

Mr. Hauge holds a bachelor's degree in electrical engineering from the University of Massachusetts and a master's degree in electrical engineering from the University of Michigan.

SpaceLogistics, develops and deploys on-orbit satellite servicing systems, as well as performs on-orbit servicing for commercial satellites in geosynchronous orbit.





9:30 - 11:45 am

SESSION 1 PANEL

Quality Intelligence: Practical Insights on the Digital Future of Quality Assurance in Aerospace and Defense

Abstract: Digital transformation appears to be impacting the manufacturing landscape at an unprecedented pace. Advances in fields such as AI and other technology-based capabilities have the potential to greatly enhance quality and safety. This panel aims to showcase some practical applications of emerging technology, and to discuss the implications for quality professionals in the future. Key discussion points include current technology strategies, technological synergy, navigating the skills evolution, and visionary predictions.

For current technology strategies, panelists share their strategies for integrating new technologies into their quality assurance processes, highlighting both triumphs and tribulations.

For technological synergy, panelists take an indepth look into how technologies like autonomous devices and digital twins are practically being used in tandem with AI to achieve unparalleled accuracy and efficiency.

For navigating the skills evolution, panelists offer candid conversations on the changing role of quality assurance professionals and the skills that have proven indispensable in the age of technological disruption.

For visionary predictions, panelists draw from their wealth of experience to share their informed predictions for the next decade, offering a roadmap for the future of quality assurance in aerospace and defense.

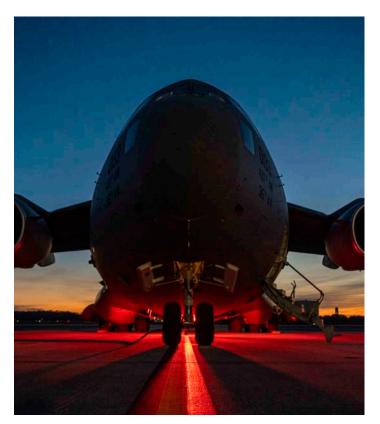
Session Manager/Panel Moderator Gerard Pearce

Executive Vice President, SQA Services, Inc.

Mr. Gerard Pearce is a quality and supply chain expert with over 30 years of experience in combining the disciplines of quality, technology, and supply management. His expertise spans a variety of quality-critical industries in a global manufacturing landscape.

Through his career Mr. Pearce has focused on defining the processes and infrastructure that provides managed supplier quality programs for numerous global leaders in the fields of aerospace, pharmaceuticals, defense, medical devices, oil and gas, electronics, consumer goods, and more. Central to this infrastructure is the technology required for effectively running global supplier quality operations by connecting all stakeholders in the supply chain.

Mr. Pearce is currently the Executive Vice President and Head of Operations of SQA Services. He is a regular industry commentator and contributor, and closely involved in shaping and implementing the global supplier quality strategy for SQA's Fortune 500 clients. His interest in digital transformation is a driver, and a beneficiary, of his studies in AI and business analytics at Harvard University.



Session 1 Panelist 1

Practical Considerations for Applying AI to Manufacturing Inspection Embracing and Leveraging Technology Change

Abstract (Jon Olson): Lockheed Martin Aeronautics, home of the world-renowned Skunk Works, delivers innovative solutions to support ever-evolving mission needs. Aeronautics employs more than 30,000 talented professionals around the world. The team is committed to shaping the future of aviation, defense tech and beyond by connecting systems across the battlespace, embracing digital tools to drive innovation into our processes and technologies, and developing hypersonic systems that allow for speed and maneuverability when it matters most. This presentation will highlight lessons learned in applying AI to manufacturing inspections. including considerations unique to manual inspections vs automatic. It will also touch on some of the business aspect of AI inspections, including use case development, justification for funding, and deciding between home-grown and outsourced capability.

Jon Olson

Manufacturing Systems & Modeling, AI/ML, IFF Lockheed Martin Aeronautics Company

Mr. Jon Olson is an AI/ML Manager for Lockheed Martin Aeronautics. He has 10 years of experience in advanced manufacturing technologies, including work in smart tools, robotics, and metrology.

Mr. Olson's most recent assignment involves advancing the vision of the Intelligent Factory and applying Artificial Intelligence and Machine Learning to the aircraft manufacturing process.

Mr. Olson holds a BS in Mechanical Engineering from Brigham Young University and a MS in Engineering Management from Duke University.





Session 1 Co-Panelists 2 Driving Performance and Quality through Digital Transformation

Tiffany Esther

Director, Global Supply Chain (GSC) Digital Transformation, Northrop Grumman Mission Systems

Ms. Tiffany Esther is the director of GSC Digital Transformation for Northrop Grumman's Mission Systems sector, a leading global provider of advanced solutions for defense and intelligence customers.

In this role, Ms. Esther is responsible for leading and defining GSC digital solution strategy and implementation across the enterprise, in coordination with the broader Digital Transformation Office, sector leadership, and corporate GSC leadership. She serves as an ambassador throughout the sector for Digital Transformation initiatives, driving a communication strategy.

Ms. Esther has 16 years of experience in the defense and aerospace industry. She is highly skilled in interpreting and implementing customer requirements into supply chain strategies, including risk management, cost-effectiveness, and strategic alliances. Throughout her tenure at Northrop Grumman, she has held various crucial positions within GSC.

Prior to this role, Ms. Esther was the senior manager of Quality Engineering for the Payload and Ground Systems division in Northrop Grumman's Space Systems sector. She led a geographically dispersed team of quality engineers to ensure that the supplier-delivered materials and services adhered to Northrop Grumman's quality standards and customer requirements.

Ms. Esther is a National Contract Manager Association (NCMA) certified contract manager. She holds a bachelor's degree and master's degree from the University of Arizona.

Northrop Grumman is a leading global aerospace and defense technology company. Our pioneering solutions equip our customers with the capabilities they need to connect and protect the world, and push the boundaries of human exploration across the universe. Driven by a shared purpose to solve our customers' toughest problems, our employees define possible every day.

Emeline (Em) Grey

Director, Manufacturing Digital Transformation, Northrop Grumman Mission Systems

Ms. Em Grey is the director of Manufacturing Digital Transformation for Northrop Grumman's Mission Systems sector - a leading global provider of advanced solutions for defense and intelligence customers.

In this role, Ms. Grey is responsible for leading Digital Transformation for Manufacturing across the sector and collaborating closely with peers across the enterprise. She is based at Northrop Grumman's Rolling Meadows, Ill. site.

Ms. Grey has 19 years of experience working for Northrop Grumman, where she has held various positions in Manufacturing and Program Management. Prior to her current role, she served as the Manufacturing Director for Operations Program Management and Shop Floor at the Rolling Meadows facility.

Additionally, Ms. Grey worked as an Infrared Counter Measures Program Manager, where she led large-scale production programs. She also has program experience in aircraft integration and international sustainment programs.

Prior to working for Northrop Grumman, Ms. Grey was a finance professional working for several commercial companies, including General Electric and 3 COM Corporation.

Ms. Grey is a certified Six Sigma Blackbelt from General Electric. She holds a bachelor's degree in finance from the University of Illinois Urbana-Champaign, and a master's degree from DePaul University -Kellstadt Graduate School of Business.



Session 1 Panelist 3 Digitization of Quality - A Great Solution in Search of the Perfect Problem

Jim Wade

Engineering and Mission Assurance Executive

Dr. James W. Wade has extensive experience in the aerospace and defense industry, spanning roles in government, federal research & development, education, and industry. Most recently he was the corporate vice president for Quality & Compliance at Raytheon Technologies. He collaborated with leadership in the areas of quality & mission assurance, engineering, supply chain, operations, and program management to deliver products and services that contributed to the customers' mission success. He joined the Raytheon Company in 2010 as vice president of Mission Assurance leading end-to-end Mission Assurance, Quality, Supplier Quality, and Continuous Improvement across the enterprise.

From 2006 to 2010, Dr. Wade was head of the MIT Lincoln Laboratory Safety and Mission Assurance Office, where he enhanced their system and component development capabilities in project hardware, software, integration and quality. He established the Laboratory's first Mission Assurance capability, which included the implementation of a quality management system compliant with the AS9100 industry standard.

From 1993 to 2006, Dr. Wade held critical leadership roles at NASA, including manager of the International Space Station Safety and Mission Assurance/Program Risk Office, and several technical and engineering positions. Along his other duties, he led and executed an integrated safety and risk analyses which confirmed the need to continue manning the ISS immediately following the Columbia accident.

Dr. Wade earned his doctorate in aerospace engineering sciences from the University of Colorado, Boulder. He also holds a master's degree in aeronautical and astronautical engineering from the University of Illinois, as well as both an MBA and an MS in space science from the University of Houston-Clear Lake. He received his bachelor's degree in physics from Gustavus Adolphus College.

Dr. Wade is a registered Professional Engineer, Texas, and an ASQ Certified Manager of Quality/ Organizational Excellence. He received an Executive Certification in Technology, Operations and Value Chain Management from the MIT Sloan School of Management. He is a Certified Instrument Flight Instructor and a Commercial Pilot. 9:30 - 11:45 am

SESSION 1 TRAINING/WORKSHOP
Partnering with the Supply Chain
- How Can We Help Our Suppliers
Be Successful Through Teaming
and Collaboration

Abstract: The relationship between "customer" and "supplier" sometimes can be viewed as tense or constraining as suppliers may see the relationship more from an auditing and oversight role versus a true partnership. This optic has developed over many years of receiving multiple audits of their QMS by numerous customers resulting in varying outcomes, or feeling overwhelmed by many and varied contract requirements. All of this is occurring while the suppliers are trying to maintain a consistent QMS and operations while also remaining profitable and competitive. With the current state of our ever-shrinking supply chain, and the infusion of more and more commercial space applications, the aerospace and defense community must embrace new ways of supporting and teaming with our suppliers so they achieve their internal goals while also providing the products and services expected in the demanding environments of defense and space. The goal of this workshop is to collaborate and discuss the various ways the government and prime contractors can try to assure that their suppliers feel as though they are part of a team by assisting them in various ways such as: requirements education, collaborative evaluations versus "audits", and recognizing where they may need relief or assistance due to their operations. Topics will vary through the different approaches that organizations may have to supplier teaming and also point to common issues that may be identified after working with a multitude of suppliers. The purpose of this workshop is to provide for interactive information-sharing amongst the attendees and our guest panel. There will be opportunities to discuss a wide variety of supply chain topics and attendees are highly encouraged to ask questions and participate in an interactive dialogue with the discussion leaders and all aerospace QA/QE attendees. It should be noted that this is strictly a collaborative discussion format with very few charts. Presentation materials during this workshop will be used to spark discussions so please be prepared to actively participate along with your peers.

Olga Ceritelli

Vice President. Show Me Quality Consulting, LLC (SMQC)

Ms. Olga Ceritelli is an SMA professional with extensive experience in high-risk/high-consequence environments. She has more than 20 years supporting aerospace, NASA, and SMA.

Ms. Ceritelli is Vice President at SMQC where she oversees program management. She continues to support NASA in numerous capacities including serving as a task team leader for the Office of Safety and Mission Assurance (OSMA) Supply Chain Risk Management (SCRM) program and NASA Supply Chain Insight Central information services initiative. She also serves as task team leader for Supplier Research and Analysis in support of the OSMA SCRM program and supports GSFC SMA directorate as a Supplier Research Analyst and Assessment Coordinator for Supply Chain Quality Assessments.

Ms. Ceritelli previously served as the Honeywell Program Manager for the NASA Audits, Assessments, and Assurance (A3) Contract and supported the predecessor's contract, NASA Contract Assurance Services (NCAS). She has also supported SMA agency-wide initiatives, provided training in several SMA subjects, and has performed assessments, audits, reviews and risk assessments for the NASA Safety Center, NASA HQ and JPL, where she started her SMA career.

Ms Ceritelli served in the U.S. Marine Corps Reserve in Supply Administration and later as an Intelligence Analyst. She holds a Master of Information Systems, and a BA in Psychology.

Terry Curtland

Staff Consultant, Supplier Quality Engineering, Ball Aerospace

Mr. Terry Curtland is the Functional and Technical Lead for Mechanical Products within the Supplier Quality Engineering organization at Ball Aerospace.

Ball Aerospace provides instruments, payloads, and bus infrastructures for national defense and civil space programs. Ball Aerospace also supports numerous warfighter programs with antenna, sensor, and infrared technology solutions.

Mr. Curtland mentors and leads a team of supplier quality engineers focusing on outsourced mechanical parts, assemblies, and associated special process providers. This organization fills an active role in the management and execution of supplier assessments, supplier development, supplier collaboration, and performance improvement initiatives.

With over 30 years of experience in both the automotive and aerospace industries, Mr. Curtland has held ASQ CQE, CQA, and Certified AS9100 Lead Auditor accreditations at various times throughout his career. He currently supports the Nadcap program as the Nadcap Management Council (NMC) representative for Ball Aerospace.

John Danley

Director of Supply Chain Quality, Lockheed Martin

Dr. John Danley is an accomplished Executive and Thought Leader with over 26 years of demonstrated success across the aerospace and defense, electrical and automotive electronic manufacturing industries. Leveraging his experience in strategic planning, he is an asset for profit and non-profit companies of all sizes.

As an Enterprise Director of Supply Chain Quality at Lockheed Martin - Space, Dr. Danley is responsible for supplier quality strategic performance, supplier improvement plans and execution to deliver value to Lockheed Martin Enterprise.

Throughout his career, Dr. Danley has held executive leadership positions with Lockheed Martin (Sr. Director/Program Planner), GKN Transparencies (President), Esterline Power Systems North America (President), Rockwell Collins Operations (Vice President), and BEI Systron Donner Automotive Division (Vice President/General Manager). He also served on the Board of Directors for GKN.

Dr. Danley holds a Bachelor of Art Degree, a Master of Business Management, and a Doctorate in Organizational Leadership.





1:00 - 1:30 pm Luncheon Keynote Speaker



Sean Vogel Vice President of Safety and Quality Assurance, Lockheed Martin

Mr. Sean Vogel is the vice president of Safety & Quality Assurance for Lockheed Martin Space. In this capacity, he is responsible for the workplace safety and operations of 24,000 Space employees and the quality assurance of \$11 billion in products and services for both domestic and international customers.

Mr. Vogel has worked at Lockheed Martin for 20 years in various positions including planning, program management, operations, missile engineering and business development. Prior to his current position, he was a program manager supporting the Navy's Fleet Ballistic Missile program. In that role, he led the program as they moved operations from Sunnyvale, California to Denver, Colorado and Titusville, Florida, all while ensuring consistent high-quality standards were maintained for our nation's primary deterrent.

Prior to joining Lockheed Martin, Mr. Vogel served in the United States Army for six years, serving in both Field Artillery and Signal Corps, earning a Bronze Star Medal for his service in the opening days of the Iraq war.

Mr. Vogel's education includes a Bachelor of Science in Computer Information Systems from Colorado State University and a Master of Business Administration from Regis University.

1:45 - 2:15 pm Featured Speaker



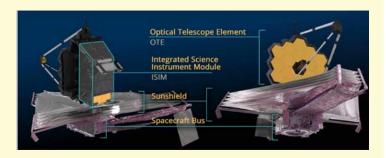
Marisela Reyes Vice President of Total Quality Boeing Defense, Space and Security

Ms. Marisela Reyes joined The Boeing Company in November of 2021 as the new vice president of BDS Total Quality. Previously she worked at Eaton Corp., where she spent three years as vice president, Corporate Quality and Continuous Improvement. Prior to that, she worked as a quality leader for UTC Aerospace Systems and for Six Sigma Systems, Inc.

Ms. Reyes began her more than 20-year career at the Ford Motor Co. where she held several key engineering and leadership roles.

Ms. Reyes holds a bachelor's degree in Industrial and Operations Engineering and a master's of Business Administration, both from the University of Michigan; as well as a master's degree in Industrial Engineering from Purdue University.





2:30 - 4:45 pm

SESSION 2 PANEL Lessons Learned and How These Lessons Apply to Today's Environment

Abstract: One benefit of the years prior to the advent of 'New Space' entrants consisting of private companies with shareholders and investors, was the willingness and strong desire to share lessons learned from tragic and costly accidents and failures within the space and defense industries. NASA embraced transparency and everyone benefitted from this approach. Even now, we know that there are some companies and experts who continue to share these valuable lessons in the hope that mistakes like them are not repeated. Now that companies have shareholders and others who base their investment decisions on perceived successes and failures, evidence of hesitancy to share this valuable data widely has been seen along with less and less explanation for launch vehicle failures, satellite failures, and other mission impacting events that we may hear about briefly but rarely know how or why they occurred. The same could be said for space missions within our intelligence and military areas of government.

This panel is an attempt to discuss the real benefit of the sharing of this kind of information within a peer group and industry so that mankind can continue to enjoy the successes and positive impacts on our everyday lives that come from this important work. Failures will be shared from some of our most visible past missions as well as from recent missions that show very common failure causes that have been with us for years if not decades that we can continue to learn from.

Session Manager/Panel Moderator

Rob Pollard

Director, Mission Success, Enterprise Assurance, Ball Aerospace and Technologies Corporation

Mr. Rob Pollard joined Ball Aerospace & Technologies in 2006, serving as Mission Assurance Manager on the James Webb Space Telescope (JWST) and later expanding to serve in the same role within the company's Electronic Products Center (EPC). He is currently the Director of Mission Success within the Enterprise Assurance Organization, responsible for identifying, assessing, investigating, and mitigating threats to the missions and programs of Ball Aerospace.

Prior to working at Ball Aerospace, Mr. Pollard held positions with Raytheon in reliability, quality assurance and system safety supporting the design, build and test of ground, air, and surface electronics for the U.S. Navy.

Mr. Pollard began his career serving in the U.S Navy and has since added more than 20 years of experience working up through and managing the various disciplines commonly held in the Mission Assurance arena. He has a Bachelor of Science Degree in Business Management from the University of South Florida.

Ball Aerospace

Ball Aerospace was responsible for the optics or mirrors for the Optical Telescope Element (OTE) subcontracted by Northrop Grumman Aerospace Systems (NGAS). There were 18 Primary Mirror Segment Assemblies (PMSA), one Secondary Mirror Assembly (SMA), a Tertiary Mirror (TM), and a Fine Steering Mirror (FSM) all made out of beryllium. There are actuators used on both the PMSA and the SMA that facilitate the focusing of the OTE and the required cryogenic electronics to move those mechanisms. There are 21 Cryogenic Multiplexer Units (CMU) and 2 Cryogenic Junction Boxes (CJB) that work to distribute the commands from the Actuator Drive Unit (ADU) to the actuators on the mirrors as well as to control deployment of the SMA boom and wings of the backplane that fold up for launch.

Session 2 Panelist 1

Mike Vernoy

James Webb Space Telescope (JWST) Parts, Materials, and Processes Manager, Northrop Grumman

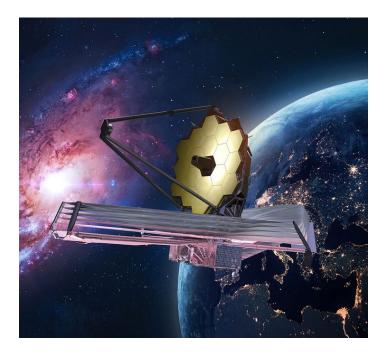
Dr. Michael Vernoy is a Hardware Acquisition Manager on a program at Northrop Grumman. He joined Northrop Grumman in 2003 where he worked on multiple programs before joining the JWST team in 2005.

For more than a dozen years, Dr. Vernoy was JWST's Parts, Materials, and Processes Manager where he was responsible for the selection and test of materials, manufacturing processes, and electronic parts for the program.

Dr. Vernoy received his AB in Physics from Occidental College and his doctorate in Physics from the University of California.

Northrop Grumman Space Systems (NGSS)

Northrop Grumman was the prime contractor for the JWST Observatory. They also provided the spacecraft bus and sunshield that allows for the low temperatures needed for IR collection. They managed the subcontractors required for the observatory major systems, including the Optical Telescope Element (OTE), the Sunshield, and the Spacecraft Bus. Dr. Vernoy was the manager for the parts, materials and processes used across the JWST observatory.



Session 2 Panelist 2

Joe Radich

(Retired) Chief Safety and Mission Assurance (S&MA) Officer (CSO) for James Webb Space Telescope (JWST), NASA's Goddard Space Flight Center (GSFC)

Mr. Joe Radich was the CSO for the JWST as a member of the S&MA Directorate at GSFC. He led a team of dedicated Quality, Safety and Reliability professionals that were responsible for supporting the implementation of Mission Assurance across the entire program life cycle. By working closely with the Mission Assurance teams across the program (Prime, Subcontractor, NASA Safety, Mission Assurance Audits, Assessments and Assurance Contract, and the Defense Contract Management Agency) he helped to foster the proper climate to ensure mission success.

Mr. Radich has over 31 years of S&MA experience at NASA and draws from the knowledge gained on many projects including: COBE, SMEX, CASSINI, POES, LRO, ICESat, TOPEX, SDO, XTE, GLAST, and HST. He began his NASA career working as a flight hardware mechanical inspector with both a Metrology and Non-Destructive Evaluation background and progressed into more challenging positions.

Mr. Radich completed his undergraduate studies at Excelsior College and MS Space Science at the University of North Dakota. The experience gained over the years, coupled with the relationships developed with both NASA and industry professionals, provided the foundation for his role on JWST. He retired from NASA in 2022.

Goddard Space Flight Center (GSFC)

Goddard Space Flight Center was responsible for managing the Webb project and provided components for the Integrated Science Instrument Module (ISIM). The ISIM consists of The Mid-Infrared Instrument (MIRI), the Near-Infrared Spectrograph (NIRSpec), the Near-Infrared Camera (NIRCam), and the Fine Guidance Sensor/Near Infrared Imager and Slitless Spectrograph (FGS-NIRISS). The Canadian Space Agency and the European Space Agency developed pieces of these instruments in collaboration with GSFC. GSFC was the managing center for the project where Mr. Radich served as the Chief Safety and Mission Assurance Officer (CSO) for the project.

Day 1 - Tuesday March 12 casali

2:30 - 4:45 pm

SESSION 2 TRAINING/WORKSHOP Early Quality Project Involvement, What Does This Mean?

Abstract: This workshop is designed to aide in answering the question: "How Early should Quality be involved in a project and why?" The workshop will engage attendees in discussions regarding Quality involvement in a project, framing it in terms of the "Project Lifecycle". Do we pick the points to get Quality involved or is Quality involved throughout the entire life cycle? Quality activities in the past were primarily focused on quality product verification (inspections). The workshop discussions will focus on identifying the blind spots and missed opportunities to build quality into the product/process life cycle to mitigate cost, schedule, and mission risk.



Wayne Domingue

Sr. Quality Manager, S&MA, JSOG COMET Program

Mr. Wayne Domingue leads the Quality Assurance team for the Jacobs Space Operations Group (JSOG) COMET Program providing Ground Systems, Integration, and Launch support for the Artemis missions at Kennedy Space Center.

Mr. Domingue began his career in Quality with Lockheed Martin supporting mission critical DoD programs where he held positions of increasing responsibility. His roles at Lockheed Martin include leading Quality and Operations teams in Lighter than Air Surveillance, Submersible Autonomous Vehicles, C-130 & F-35 Aircraft, and Operating Excellence positions in complex manufacturing operations.

Most recently, Mr. Domingue led the Quality Organization for L3Harris Imaging and Laser Systems where he focused his regional team on transformational change and the alignment of the Quality Management Systems of multiple business units.

Mr. Domingue earned his Bachelor of Science in Business with a concentration in Project Management and has a Graduate Degree in Organizational Development.



John Butler

Subject Matter Expert, Show Me Quality Consulting (Retired Director, NAVSEA Supplier Product Quality, NAVSEA 04P)

Mr. John Butler is currently a senior consultant to the U.S. Navy Virginia Class Submarine Program Office, NASA, and Woods Hole Oceanographic Institution.

In 2023, Mr. Butler received a NASA Silver Achievement Medal Award for the development of the Life Cycle Assessment (LCA) process.

Mr. Butler is a graduate of Massachusetts
Maritime Academy with a Bachelor of Science
degree in Marine Engineering. He attained DAWIA
Level III certification in Systems Planning,
Research, Development and Engineering, Level
II in Production, Quality and Manufacturing,
and a member of the Acquisition Professional
Community since 2002.

Previously, Mr. Butler was appointed in 2006 to the position of Department Head and Director, Supplier Product Quality (NAVSEA 04P) in SEA 04, Logistics, Maintenance and Industrial Operations Directorate.

Mr. Butler had leadership responsibilities for ships' Critical Safety Items (CSI), Material Control Standard (Level I), Shipyard Controlled Industrial Material, Joint Supplier Audits, and supplier inplant oversight requirements programs.

Mr. Butler was a member of the Navy Counterfeit Material IPT and led the development and implementation of NAVSEA programs to detect, deter and investigate procurement fraud and counterfeit material. He was Chair of the NAVSEA/NAVAIR/NAVSUP/DCMA Executive Steering Committee to improve supplier quality and government oversight of suppliers for all ships' CSI suppliers.

Mr. Butler was the Navy Program Manager of the Product Data Reporting and Evaluation Program (PDREP).

Mr. Butler received during his 32-year career three Navy Meritorious Civilian Service Awards.

Kyle Hummel

Quality Executive, LibertyWorks Advanced Platforms, Rolls-Royce Defense

Mr. Kyle Hummel is currently the Quality Executive for LibertyWorks - Advanced Platforms within Rolls-Royce Defense. He has spent almost twenty years in various engineering and quality management roles focused on building, maintaining, and improving quality systems.

Having gained diverse experience working in various facets of the business including operations, product and process design and supplier management, Mr. Hummel has passionately worked towards his goal of assisting organizations to improve their quality culture by realizing the benefits of ensuring that quality is not just a department but a role that everyone contributes to in order to improve product safety and customer satisfaction.

A lifelong commitment to education has led Mr. Hummel to earn bachelor's and master's degrees in Engineering and an MBA from Purdue University.



8:00 - 8:15 am

Opening Remarks

Phil Montag VP, Human Performance and Research Division, KBR, (CQSDI Chair)

8:15 - 8:45 am Keynote Speaker



Ronnie Rodriguez Director of Safety and Mission Assurance (S&MA), NASA Kennedy Space Center (KSC)

Mr. Ronnie Rodriguez is the director of S&MA at KSC. He is responsible for providing KSC's final input on risks and range analysis and providing an overall mission assurance endorsement that NASA's launches will be safe and successful. He is also responsible for the planning and execution of all SMA activities at KSC, ensuring the success of NASA's Exploration Ground Systems, Commercial Crew, Launch Services, Orion and the International Space Station (ISS) programs while protecting the safety of all center personnel and the public.

Previously, Mr. Rodriguez was selected in 2005 as chief of the Operations Management Branch within the ISS and Payload Processing Directorate. Since then he has served in different capacities including deputy division chief and division chief within the ISS Payload Processing Directorate, Constellation Project Office, and Ground System Development and Operations Program where he served as chief for the Systems Engineering and Integration Division.

In 2016, Mr. Rodriguez accepted a position as the associate director for Engineering with the Engineering Directorate where he developed the resources necessary to ensure the Launch Services, ISS, Commercial Crew, and Exploration Ground Systems Programs were successful as the agency prepared for missions to deep space including the journey to Mars. In his role, he also helped ensure the success of Advanced Exploration Systems and KSC's institution and infrastructure.

Mr. Rodriguez graduated with a bachelor's degree in aerospace engineering from the University of Florida in 1991. He earned a master's degree in space systems from the Florida Institute of Technology in 1995.

8:45 - 9:15 am Featured Speaker



Chris DeLuca Director for Specialty Engineering, DoD Office of the Executive Director for Systems Engineering and Architecture

Mr. Chris DeLuca is the Director for Specialty Engineering within the Department of Defense (DoD) Office of the Executive Director for Systems Engineering and Architecture. His portfolio includes reliability and maintainability, system safety, manufacturing and quality, and human systems integration. An Army veteran, he is committed to delivering reliable and sustainable capability to the warfighter. He has led acquisition program offices and has served as the OUSD (R&E) member of the Secretary of Defense Electromagnetic Spectrum Operations Cross-Functional Team.

Mr. DeLuca has more than 35 years of experience in DoD as a U.S. Army Colonel (R) and DoD Civilian, Level III qualified in Program Management, Systems Engineering, and Test and Evaluation. As a U.S. Army commissioned officer, he held multiple command, leadership, and staff positions including unit command and Army Program Acquisition Management Charters for Major Defense Acquisition Programs (MDAPs) and non-major defense acquisition programs (including rapid equipping and provisioning). He served on the Army Staff.

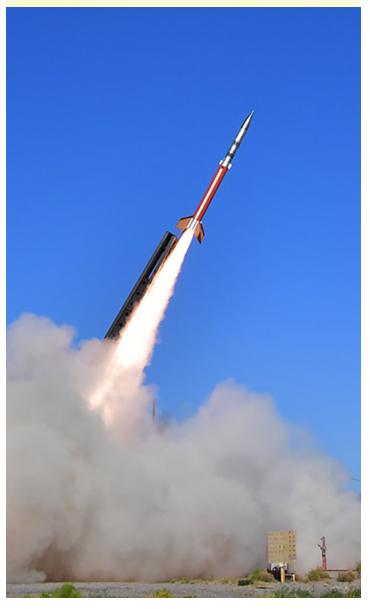
As a DoD Civilian, Mr. DeLuca served as a Deputy Program Manager for a Major Automated Information System (MAIS) Defense Business System (DBS). He directed systems engineering and developmental test and evaluation analysis teams for Space, Land Warfare and C4ISR MDAPs, MAIS, and DBS programs.



9:30 - 11:45 am

SESSION 3 PANEL Supply Chain (SCRM) Risks, Opportunities and Factors to Consider

Abstract: Supply Chain Risk Management has broad implications and having a strong grasp on the SCRM risks, opportunities and factors which impact your specific mission or organization can be the difference between an impactful SCRM program focused on minimizing risk to your supply chain and casting a wide net of risk management that lacks focus on your program's specific needs. This panel will discuss and explore SCRM strategy lessons learned, the role of quality standards in SCRM program development, the importance of supply chain visibility, and steps to identifying SCRM factors relevant to your organization.



Session Manager/Panel Moderator

Shannon Marsh

Deputy Program Manager, Supply Chain Management Senior Consultant, Show Me Quality Consulting, LLC (SMQC)

Ms. Shannon Marsh is a Safety and Mission Assurance (S&MA) professional with extensive experience in high risk/high consequence environments. She has more than 25 years of experience in threat and risk analysis with the majority of her career supporting aerospace, NASA, and S&MA. Her passion is in risk management program development, alternative analysis, risk management process improvement and mentorship and career development of personnel, particularly in the arena of analytic tradecraft.

Ms. Marsh serves as Deputy Program Manager for SMQC where she oversees Supply Chain Risk Management (SCRM) support in quality and risk analytics components, enhancing NASA's supply chain integrity and resilience. She also serves as a lead assessor for Supply Chain Quality Assessments.

Ms. Marsh's dedication to the field is reflected in her efforts to refine risk management practices and mentor professionals in the intricacies of analytic methods. Her career has also encompassed significant positions as a risk analyst across various sectors, including SCRM, Cyber-Threat Analysis, and Critical Infrastructure Protection, providing services to the U.S. Air Force, Army Corps of Engineers, Department of Homeland Security, and the Missile Defense Agency. Shannon's experience is backed by her time in the U.S. Air Force as an All-Source Intelligence Analyst, complemented by her academic achievements—a Master of Arts in Global Security Studies from Johns Hopkins University and a Bachelor of Science from Excelsior College.



Session 3 Panelist 1 The IAQG Supply Chain Management Handbook (SCMH)

Abstract (Marc Doolittle): The IAQG develops and deploys guidance materials and tools to address continual improvement of product conformity and on-time delivery performance throughout the entire value stream. The Supply Chain Management Handbook (SCMH) is intended to assist organizations with the understanding of IAQG member requirements and how to apply them. The SCMH is developed by IAQG subject matter experts and is continuously updated as changes and improvements are identified.

Marc Doolittle

Sr. Technical Fellow, Collins Aerospace

Mr. Marc Doolittle is a Sr. Technical Fellow at Collins Aerospace. He has a Mechanical Engineering degree from Michigan Technological University, and a Master in Business from the University of Tennessee. He has 35 years of experience in Design, Operations, Quality and Program Management, working at General Motors, ZF Steering, Schnieder Electric, and now Collins Aerospace. After implementing and mentoring Advanced Product Quality Planning (APQP) in the automotive industry, he moved to the aerospace industry in 2006.

Mr. Doolittle helped to create the aerospace version of APQP through the publishing of AS9145 by the IAQG. Currently, he is the chair of the IAQG Product and Supply Chain Improvement team (PSCI). His team is helping to further develop and improve the Aerospace, Space and Defense supply chain through the creation of guidance material, webinars and training. The team consists of nine members, three from each sector (North America, Europe, and Asia). He was recently awarded the IAQG "2023 Key Contributor" Award for the work being done by this team.



Session 3 Panelist 2 Advancing NASA Supply Chain Resiliency

Abstract (Jonathan Root): NASA mission performance relies upon the U.S. industrial base and transnational supply chains which are subject to a dynamic array of risks that threaten the provisioning of products and services required for mission success. NASA's recently established Supply Chain Resiliency Board is working to advance agency strategy, policy and capabilities for the assessment and management of these risks and related opportunities to assure resilient supply chains for NASA mission programs and projects. Attend this session to learn about NASA's ongoing initiative to improve visibility into its supply chains as a foundational element of collaborative, pro-active supply chain risk management across the NASA enterprise.

Jonathan Root

Deputy Program Manager, Supply Chain Risk Management, NASA

Jonathan Root is the Deputy Program Manager for Supply Chain Risk Management (SCRM) within the Office of Safety and Mission Assurance (OSMA) at NASA headquarters. He also serves as the Executive for NASA's Supply Chain Resiliency Board. With over 36 years of experience at NASA headquarters and centers, Root has performed leadership, management, and policy roles in the fields of technology innovation and commercialization, supplier quality management, information systems, and SCRM. He is also a member of the Editorial Board for the Journal of Supply Chain Management, Logistics and Procurement. His NASA honors include the Outstanding Leadership Medal, the Silver Achievement Medal, and the Robert H. Goddard Honor Award for Exceptional Mentoring. Root began his NASA career as a Presidential Management Intern after earning master's degrees in government administration and international relations at the University of Pennsylvania in Philadelphia, PA. Root also received a master's degree in national resource strategy from The Industrial College of the Armed Forces at the National Defense University in Washington, D.C. which he attended as a NASA fellow.

Session 3 Panelist 3 Partnering With Your Supplier Utilizing a Risk Based Evaluation Approach

Abstract (Jennifer Fischer): In the world of qualifying and approving suppliers, utilization of a risk-based evaluation can promote a collaborative and mutually beneficial assessment approach. Risk based supplier assessments allow the quality function within an institution to partner not only with their internal teams, such as engineering and procurement, but also with the suppliers themselves. Risk based evaluations also allow projects to tailor the evaluation in a manner that is often not possible in an audit-based approach. A risk-based approach ensures there is a common understanding of the requirements and needs of the project and ensures that the supplier is able to meet those needs, and understand necessary mitigations that may be required to address identified risk areas.

Jennifer Fischer-Darby

SES/SMA Supervisor, JHU Applied Physics Laboratory (JHU/APL)

Ms. Jennifer Fischer-Darby has been with the JHU/APL for over 23 years specializing in Space Mission Assurance (SMA). She has broad experience in the application of quality systems management requirements and principals during the design, development, test, and delivery of space flight hardware. She has supported numerous small and large scale projects throughout their entire lifecycle from inception through delivery and/or launch. She has extensive experience in quality compliance in terms of NASA requirements, ISO/AS9100, CMMI and internal auditing, including supplier management.

Ms. Fischer-Darby is a member of JHU/APL's Principal Professional Staff currently working as the Group Supervisor within their Space Exploration Sector, SMA Group where she is responsible for overall mission assurance, internal and external auditing, supplier management, and maintenance of the quality management system. She has also served as a Mission Assurance Manager for several APL managed projects including Interstellar Mapping and Acceleration Probe, Parker Solar Probe, and Van Allen Probes.

Ms. Fischer-Darby received a B.S. in Quality Systems Management from National Graduate School and a M.S in Human Environmental Sciences from the University of Alabama. 9:30 - 11:45 am

SESSION 3 TRAINING/WORKSHOP Successful Strategies to Enable a Quality Culture

Abstract: This is a follow on from the Quality Culture Immersive Quality Culture Workshop that was rated one of the best workshops of 2023 CQSDI. This improved, immersive, hands-on interactive workshop will provide you with success strategies to build a sustainable quality-centered culture. Our distinguished speakers will then unpack the inter-relatedness of quality culture, and change management, and provide concrete examples of successful culture change. Strategies and tools will be shared with you to help you ensure your organization or your customer's quality culture is continuously evolving to deliver inspirational leadership, candid communication, and all-around quality excellence.

Kim Withers

Principal Director, People & Organization Development, The Aerospace Corporation

Ms. Kimberly Withers is passionate about maximizing personal, team, and organizational potential by enabling a culture where everyone can thrive and be their best in support of corporate priorities - while fulfilling their career aspirations.

Ms. Withers holds a Bachelor of Business Administration from the University of Michigan with a focus in Marketing, as well as a Master of Science in Organization Development and Leadership from Saint Joseph's University. A certified executive coach, team coach, and change management professional, she loves sparking "aha" moments that bring new insights and propel growth.

Ms. Withers has been with The Aerospace Corporation since 2017 and leads the People and Organization Development team, which oversees leadership development, engagement, career development, and other initiatives in support of Aerospace's 'Commitment to our People'. Prior to that she worked across various industries to foster highly engaged, optimized workplaces where everyone could bring their best for organizational success.



Yvette Harris

Associate Principal Director, The Aerospace Corporation

Ms. Yvette Harris, LSSBB, CQM-OE, MSEM is currently the Associate Principal Director for Corporate Quality Management Office at The Aerospace Corporation. Prior to joining Aerospace, she worked for Raytheon as a Senior Manager of Mission Assurance at Raytheon where she was the mission assurance and engineering leader of 12 Program Quality Managers and Engineers.

Through her twenty plus year career, Ms. Harris has held several engineering organizational titles of Global Quality Director, Senior Manager Quality, Global Manufacturing Technology Program Manager, Regional Quality/CI Manager, NA Powder Coating Business Manager, LSSBB, Energy Engineering Consultant, Sales, Technical Services Leader, Lead Process and Production Engineering.

Ms. Harris earned a B.S. Chemical Engineering at the University of California, Berkeley, M.S. Engineering Management at Drexel University, and is currently pursuing her PhD in Business Management at Capella University. She has taught and mentored several Green Belt candidates. Yvette earned her Lean Six Sigma Black Belt Certification in 2009. She is an American Society of Quality (ASQ) Certified Manager of Quality/ Organizational Excellence and Certified ISO 9001/ AS9100/13485 Lead Auditor.

In 2022 Ms. Harris won The Engineers' Council in collaboration with the ASQ 706 San Fernando Valley Chapter the Quality Engineer of the Year Award. She was nominated for the Aerospace Women of the Year Award and for the Women in Aerospace (WIA) Leadership Award. In addition, she has been recognized in the UC Berkeley College of Chemistry Catalyst Magazine (June, 2022 Edition).



Jim Wade

Engineering and Mission Assurance Executive

Dr. James W. Wade has extensive experience in the aerospace and defense industry, spanning roles in government, federal research & development, education, and industry. Most recently he was the corporate vice president for Quality & Compliance at Raytheon Technologies. He collaborated with leadership in the areas of quality & mission assurance, engineering, supply chain, operations, and program management to deliver products and services that contributed to the customers' mission success. He joined the Raytheon Company in 2010 as vice president of Mission Assurance leading end-to-end Mission Assurance, Quality, Supplier Quality, and Continuous Improvement across the enterprise.

From 2006 to 2010, Dr. Wade was head of the MIT Lincoln Laboratory Safety and Mission Assurance Office, where he enhanced their system and component development capabilities in project hardware, software, integration and quality. He established the Laboratory's first Mission Assurance capability, which included the implementation of a quality management system compliant with the AS9100 industry standard.

From 1993 to 2006, Dr. Wade held critical leadership roles at NASA, including manager of the International Space Station Safety and Mission Assurance/Program Risk Office, and several technical and engineering positions. Along his other duties, he led and executed an integrated safety and risk analyses which confirmed the need to continue manning the ISS immediately following the Columbia accident.

Dr. Wade earned his doctorate in aerospace engineering sciences from the University of Colorado, Boulder. He also holds a master's degree in aeronautical and astronautical engineering from the University of Illinois, as well as both an MBA and an MS in space science from the University of Houston-Clear Lake. He received his bachelor's degree in physics from Gustavus Adolphus College.

Dr. Wade is a registered Professional Engineer, Texas, and an ASQ Certified Manager of Quality/ Organizational Excellence. He received an Executive Certification in Technology, Operations and Value Chain Management from the MIT Sloan School of Management. He is a Certified Instrument Flight Instructor and a Commercial Pilot.

1:00 - 1:30 pm

Luncheon 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 SQMA policy; system, component, and piece part requirements for design, test and manufacturing; flight and ground testing; and deployment. He was previously the Director (Acting) from 2012 to 2014.

Mr. Wadzinski served as the QS Deputy Director for the BMDS and the Chief Engineer from 2010 to 2013. He provided independent assessments for SQMA for the BMDS program, for developing SQMA policy and requirements, and 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 provided independent assessments 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 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.

Mr. Wadzinski earned a Master of Science degree in Management (Sloan Fellow) from the Leland Stanford Junior University in 1999. He attended the Air Command and Staff College - Air University (In Residence) in 1996. He earned a Master of Science degree in Systems Management from the Florida Institute of Technology in 1990. He earned a Bachelor of Science degree in Chemical Engineering from the Ohio State University in 1984. He is a member of the Defense Acquisition Corps.





1:45 - 2:15 pm Featured Speaker



Jon Strizzi Colonel, Director of Analysis and Interoperability Engineering, Space Systems Command, U.S. Space Force

Colonel Jon Strizzi is the Director of Interoperability Engineering for the Space Systems Integration Office (SSIO) at Space Systems Command (SSC), United States Space Force. He is also the SSC/S9 – Director of Studies, Analysis and Assessments. He is responsible for System of Systems Engineering and Integration; modeling, simulation, and analysis; space environment and spectrum; and Digital Ecosystem for a \$55B national security space portfolio across 6 Program Executive Officers (PEOs) and 16 enterprise installations.

Prior to this role, Col Strizzi was the Director of Engineering for the Assured Access to Space PEO and the Chief Engineer for the ACAT-1D National Security Space Launch Program.

Col Strizzi currently champions Digital Transformation, the Space Mobility and Logistics Ecosystem, cross-PEO integration, kill chain gap analysis with solution roadmaps, and collaboration partnerships with NASA, NRO, SDA, MDA, industry and academia.

Colonel Strizzi entered the Air Force through ROTC at MIT in 1992 and earned his PhD in Astronautical Engineering from the US Naval Postgraduate School in 2002. His 35-year career in industry and government spans space/ground systems acquisition, engineering and operations for NASA, Air Force, Space Force, NRO, and the Departments of Defense, Interior and Commerce. These include: Space Shuttle; GPS; Satellite

Control Network; surveillance and missile warning satellites; worldwide mission ground stations; and the Delta IV/Heavy, Atlas V, Falcon9/Heavy, Vulcan, New Glenn & Starship launch systems as well as a variety of small launch vehicles.

Col Strizzi also pioneered the stand up of the Space Mobility and Logistics mission area within the new US Space Force. He is certified as: NRO Senior Operations Controller and Mission Director; USSF Launch Console Operator and Materiel Leader. He also publishes/presents regularly with AIAA, IAC. NDIA and the Joint Army Navy NASA Air Force (JANNAF) Propulsion Committee, where he chairs the Launch Reusability panel, the Space Access, Mobility and Logistics (SAML) specialist session, and the Large Liquid Propulsion group; he is also the USSF lead for the Programmatic and Industrial Base Executive Committee.

2:30 - 4:30 pm

SESSION 4 PANEL New/Young Quality Professionals

Abstract: This session consists of two backto-back panel discussions both ending with a brief Q&A session. Panelists will explore communication methods between New/Young Quality Professionals and the rest of the established workforce, including their mentors, to include recruitment and retention viewpoints and strategies. The Panelists will also discuss methods, successes and lessons learned on the early career learning path. The first group of new/young quality professional panelists will discuss the pros and cons of their experiences with recruitment, retention, learning and communications and how they recognize and deal with risks associated with their job assignments. The second group of mentor and leader panelists will discuss their recruitment and mentorship relationships and programs, including communication tactics and early career learning methods, and how/why it is important for the new/ young quality professional to be able to recognize and manage risks. Attendees will learn from the valuable experiences of the panelists what to avoid (that doesn't work) and best practices to implement immediately within their organizations.

Session Manager/Panel Moderator

Belinda Chavez

Operations Manager, SMA Manager, KBR, Science and Space Solutions

Ms. Belinda Chavez is an Operations Manager for KBR, Science and Space Solutions, in support of the NASA Safety Center Assessments and Investigations Office and the Safety & Mission Assurance Manager for the SWFO Ground Segment Antenna Network contract. She has over 25 years of safety and quality experience in the aerospace industry.

Ms. Chavez earned a Bachelor of Science degree in industrial technology at the Southern Illinois University, and a Master's in Business Administration at the Louisiana Technical University. She has been an active ASQ volunteer member leader for 21 years holding various member leader positions including her current term as Aviation, Space and Defense Division Chair, and previous ASQ Board of Directors, Region Director, and officer/committee chair for multiple technical and geographic member communities. She is an ASQ Fellow and ASQ Certified Manager of Quality/Organizational Excellence, ASQ Certified Six Sigma Black Belt, and George Group Certified Lean Six Sigma Black Belt.

Ms. Chavez 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 Young Quality Professionals

Abstract: Young Professionals relay their early career learning experiences with recruitment, retention, learning and communications and how they recognize and deal with risks associated with their job assignments.

Christene Chavez

Student, University of Mississippi

Ms. Christene Chavez is a University of Mississippi Senior pursuing a dual major in Accounting and Public Policy. In college, she was the Student Body's Internal Comptroller that allowed her to demonstrate and improve her leadership skills and financial acumen. In 2022, she embarked on an internship with J.P. Morgan Investment Banking. During this internship, she completed a series of hypothetical tasks that simulated the responsibilities of a full-time employee at JPMorgan. She excelled in editing and creating Discounted Cash Flow (DCF) Models to extract and analyze target information and presented her prepared discounted cash flow analysis to explain unforeseen financial implications.

Ms. Chavez's achievements extend beyond the academic realm. She graduated from Hernando High School in 2020, where she recognized her passion for political campaigns. Eager to kickstart her collegiate career, she completed high school a year early. Looking ahead, she will intern as a consulting accountant at Crowe Accounting in Austin, Texas, and will continue exercising her financial analysis skills. She will graduate in May and plans to pursue a master's in accounting at the University of Mississippi where she will study to become a Certified Public Accountant (CPA).

Ethan Cote

Associate Program Quality Engineer, Northrop Grumman Mission Systems

Mr. Ethan Cote earned a Bachelor of Science degree in chemistry from the University of Central Florida in May 2023. He is a former Northrop Grumman "High School Involvement Partnership" student and worked as a material handler in Northrop Grumman's Apopka, Florida, warehouse before taking a stretch development assignment with the Quality team. Presently, he works as an Associate Program Quality Engineer supporting microelectronic and laser programs in Northrop Grumman's Mission Systems sector.



Mohamed Shalaby

Quality Manager, **IEH** Corporation

Mr. Mohamed Shalaby is the Quality Manager at IEH Corp, overseeing the quality assurance department's activities and staff. In this role, he develops, implements, and maintains a robust quality system for the organization's products. His professional journey at IEH Corp began as a Quality Technician during his senior year in college, rapidly advancing to an Engineer and eventually taking on managerial responsibilities.

With three years in his current role, Mr. Shalaby has been pivotal in IEH Corp's success in quality management. His journey began with an associate degree in engineering science, followed by a bachelor's degree in electrical engineering and a minor in math in 2021. His unwavering dedication to the field and continuous skill enhancement aligns seamlessly with his role as a dynamic Quality Manager at IEH Corp.

In addition to his professional pursuits, Mr. Shalaby is pursuing a master's degree in engineering at NYU, further enhancing his knowledge and skills. He also holds a Lean Six Sigma Green Belt, showcasing his commitment to quality and process improvement.

Session 4 Panel 2 Company/Organization Leaders/ Mentors

Abstract: Organizational Leaders and Mentors share how they communicate with young professionals and will relay their recruitment and mentorship relationships and programs, including communication tactics, early career learning methods, and how/why it is important for the new/young professional to be able to recognize and manage risks.



Sid Bhatnagar CEO, ASQ

Mr. Sid Bhatnagar joined the American Society for Quality, Inc. (ASQ) in 2020 and serves as its Chief Executive Officer, after holding multiple executive roles with ASQ during the last four years. He is a dynamic and accomplished executive spanning multiple industries, with 14+ years of focus in financial services.

Mr. Bhatnagar's career is characterized by his creative and entrepreneurial approach to complex, fast-changing environments. He has an extensive track record of leading enterprisewide initiatives that streamline operations, mitigate risk, capture savings, increase capability, improve service quality, and accelerate growth. Bhatnagar's strategic prowess has allowed him to build and coach cross-functional teams, and establish collaborative relationships with toplevel stakeholders, including Board of Directors, strategic partners, and other executives.

A testament to his management aptitude, Mr. Bhatnagar has a history of developing highperforming teams and introducing best-practice processes. He fosters a culture of excellence and collaboration within his teams, resulting in increased productivity and high employee satisfaction.

Mr. Bhatnagar continues to demonstrate unwavering dedication to advancing ASQ's mission, collaborating closely with its Board of Directors and dedicated member leaders to not only uphold ASQ mission and vision, but also propel the Society to greater heights.

Mr. Bhatnagar holds degrees in Management Information Systems and Corporate Communications from the University of Wisconsin.



Christopher Warner

Director of Talent Acquisition, KBR Science and Space Business Unit

Chris Warner serves as the Director of Talent Acquisition for KBR's Science and Space Business Unit. He plays a pivotal role in shaping the workforce for a business that operates globally providing solutions for NASA, federal civilian agencies, the U.S. Department of Defense, as well as commercial customers. With a passion for connecting exceptional talent, Chris leads all staffing activities that includes developing strategies to engage, attract and recruit early career through professional and senior level talent.

Chris is a graduate of Penn State University with a Bachelor's Degree in Business Management and Specialization in Human Resources. He brings with him nearly 20 years of recruiting experience and more than 15 years supporting the Aerospace and Defense Industry.

Nicole Wendt

Quality and Mission Assurance Manager, Northrop Grumman Mission Systems

Ms. Nicole Wendt is the Apopka, Florida, Site Quality and Mission Assurance Manager for Northrop Grumman's Mission Systems sector. In this role, she manages a team of quality engineers, managers, inspectors, and component engineers working on a variety of aerospace and defense programs. She is also responsible for the ISO-certified Quality Management System, an executive sponsor for site employee resource groups, and works as the QMA lead on several programs.

Ms. Wendt has over 15 years of experience in aerospace, defense and commercial industries with roles ranging from materials and process engineering to operations and program management. She is a CQSDI committee member and has mentored various QMA, engineering and supply chain staff members. She holds a Bachelor of Biomedical Engineering from Stevens Institute of Technology.



2:30 - 4:45 pm

SESSION 4 TRAINING/WORKSHOP
Disruptive Technologies in
Quality, Advancing the Digital
Transformation Journey with
Quality

Abstract: Digital Transformation is everywhere, and it has been said that digital transformation is an imperative for business survival. In this interactive workshop, you will have the opportunity to learn about successes and challenges that can be expected while on your digital transformation journey. Our distinguished speakers will share their expertise and experiences in the areas of mobile data capture techniques, integration of the "quality view" into the emerging digital ecosystem, and how advanced visualization capabilities are revolutionizing the quality workforce through assisted reality, virtual prototyping, and augmented work instructions. In this workshop, you will experience a look into the future of quality.

Fred McMaier

Quality Engineer, Sr. Staff Lockheed Martin

Mr. Fred Evan Schmidt McMaier, serving as a Senior Staff Quality Engineer at Lockheed Martin Aeronautics, applies his expertise in Quality Information Framework (QIF), SysML and UAF modeling in Cameo Systems Modeler, and Quality AI development to enhance Lockheed Martin's model-based enterprise transformation initiative, 1LMX.

With a decade in aerospace quality engineering, Mr. McMaier has managed teams in supplier and sustainment quality roles, overseeing \$10B in avionic and mission system components and aircraft modifications. His work in integrating advanced technologies is pivotal in evolving Lockheed Martin's quality assurance processes, exploring new standards in the aerospace industry through innovative use of modeling and AI.

Mr. McMaier has a Bachelor's of Science in Mechanical and Aerospace Engineering from the University of Florida, and a Master's of Science in Systems Architecture and Financial Engineering from the University of Southern California.

Hannah Ensor

Quality Engineer, Staff Lockheed Martin

Ms. Hannah Ensor is a Staff Quality Engineer at Lockheed Martin Space. In her current role, her team is responsible for maintaining Lockheed Martin Space's Quality Management System and AS9100 certification. In this capacity, she is also responsible for development and implementation of training curricula spanning all facets of Quality including but not limited to Root Cause and Corrective Action, Material Review Board, and work instruction quality review. Additionally, she provides quality engineering support to various missile and space programs as needed.

Ms. Ensor represents Lockheed Martin for the Joint Strategic Quality Council (JSQC) working group for Model Based Quality & Mission Assurance. Prior to her role at Space she obtained extensive experience working on the Apache Fire Control program at Lockheed Martin Missiles and Fire Control in both quality and sustainment, as well as operations management experience outside of the space and defense sector.

Ms. Ensor has a Bachelor of Science in Industrial Management from the University of Cincinnati, and a Master of Science in Engineering Management from the George Washington University.

Jason Anderson

Field Engineer Director, **SQA**

Mr. Jason Anderson is a Field Engineering Director with SQA Services, Inc. He is an aerospace quality and manufacturing expert who specializes in advanced inspection programs in some of the industry's most challenging environments. His focus is on the development and leadership of new techniques for inspection program consistency and performance for SQA's world-leading aerospace and technology clients. These techniques cover a broad range of commodities and are employed with high-precision mechanical, electro-mechanical, and composite production manufacturing methods.

Mr. Anderson's hands-on manufacturing background combined with his lean process, measurement systems, and data analytics capabilities put him at the forefront of SQA's technical support capabilities.

James Cooper

Chief Technologist, Advanced Visualization, Raytheon – An RTX Business

Mr. James Cooper is a Chief Technologist for advanced visualization capabilities, strategy, and vision at Raytheon. He is a leader in science and technology bringing two decades of work in advanced technologies, organizational leadership, and strategic pursuits. He has a strong professional history in engineering, leadership, and innovation and is active in diversity and inclusion, academic outreach, and industry representation. His responsibilities include industry competitive assessments, technology investigations, deployment of business discriminators, and advising growth and investment needs, with a focus on Industry 4.0 next generation smart factory and operations needs and digital transformation. He coordinates with technology startups, corporate venture capital, and company leadership to drive development on advanced visualization solutions for the aerospace and defense sector.

In prior roles, Mr. Cooper maintained a strong pipeline of new ideas and technical discriminators, feeding emerging needs and opportunities, and overseeing activities, partnerships, and physical spaces related to innovation.

Rvan Wheeler

Sr. Technical Fellow, Collins Aerospace - An RTX Business

Mr. Ryan Wheeler is a Senior Technical Fellow with Collins Aerospace, an RTX company. He invents proprietary, commercial grade visualization solutions in the Applied Research & Technology team. These applications, such as one of the earliest scaled deployments of VR, have saved Collins over \$100M and boosted employee productivity by hundreds of thousands of hours.

Mr. Wheeler has expertise in XR and other advanced visualization technologies. His passions include design, usability, cognitive science, intrapreneurship, storytelling, and technology diffusion and valuation.







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