



# COUNTER UNMANNED AUTONOMOUS SYSTEMS

## INNOVATION FORUM GUIDE

*PRESENTED BY MARCANTONIO GLOBAL, THE CATALYST COALITION, AND  
CARAHSOFT TECHNOLOGY CORP.*

### Attendee Logistics

Date and Time: 01 November 2024, 10:00am – 1:00pm ET

Location: [Carahsoft Conference & Collaboration Center, 5<sup>th</sup> Floor, Reston, VA](#)

### Agenda

10:00 AM	10:30 AM	Networking and Refreshments
10:30 AM	10:35 AM	Opening
10:35 AM	11:30 AM	Government and Industry Panels
11:30 AM	12:30 PM	Speed Capability Overviews
12:30 PM	12:35 PM	Close Presentations
12:35 PM	1:00 PM	Lunch & Company Exhibits (may extend)

### Innovation Forum Overview

The purpose of this Innovation Forum is to create an opportunity for government officials and private sector solution providers to connect and collaborate, enabling a rapid response to the need for c-UAS solutions. In support of the Replicator 2 mission and tasking to Marcantonio Global (MG) to identify, evaluate, and present critical breakthrough technologies for the Department of Defense (DoD), MG's Defense Logistics Innovation Forum (DLIF) has partnered with The Catalyst Coalition (TCC) and Carahsoft Technology Corporation to scout, develop, and present an integrated solution to the counter-unmanned autonomous systems (c-UAS) mission challenge for the United States and allied nations. A Mission Problem Statement was developed to guide the solution.

## c-UAS Mission Problem Statement

**Summary:** Detect, track, and neutralize UAS threats; and manufacture and sustain the capability.

**Overview:** The growing threat of UAS at a global level requires expedited solutions to significantly enhance the capability of the DoD, federal intelligence community, and allied nations to effectively counter these threats. By fostering collaboration among all parties, the initiative aims to enhance situational awareness and operational effectiveness.

### Goals:

- Enhance Detection and Tracking Capabilities
- Improve Situational Awareness
- Foster Multinational Collaboration
- Identify Advanced Sensors
- Integrate into Command & Control Framework
- Conduct US-based and Global Exercises
- Operational Improvement
- Promote Collaboration and Innovation

## Integrated Solution Approach

We developed a baseline list of c-UAS System requirements, or capabilities, and related sub-capabilities, for effective counter-drone operations and scouted innovative solutions included in the profiled solution set. Recognizing that the mission is ever-changing, future comprised solution sets will include an expanded set of capabilities as required to support the evolving mission. The solution capabilities we sought for this Forum include detection, tracking/classification, neutralization, and enablers.

Selected companies are based on their current ability to provide solutions related to the above capabilities, leveraging our developed assessment criteria. We engaged the innovators, and with their input assessed each solution provider's capabilities and contributions to the integrated solution. We then notionally integrated the component solutions in this living document to provide a powerful, complementary, point-in-time bundled solution as described below.

## The Component Solutions

**Dedrone**, a leading provider of counter-drone solutions, offers a comprehensive approach to detecting, tracking, and mitigating drone threats. Their multi-sensor technology, including RF, radar, and optical sensors, enables them to detect drones in various environments. Dedrone's AI-powered platform can identify drone models, track their flight paths, and classify potential threats.

**Armada** provides advanced AI and machine learning solutions to enhance counter-UAS operations. Their real-time data processing and sensor fusion capabilities, enabled by hardware and software infrastructure and satellite connectivity, improve detection accuracy and response times. Armada's edge AI technology enables rapid analysis of drone threats, even in remote or low-bandwidth environments.

**SubUAS** specializes in hybrid drones capable of both aerial and underwater operations. These drones are equipped with advanced sensors and can be used for maritime surveillance, coastal security, and other specialized missions.

**Flare Bright** offers un-jammable GPS-free navigation and flight control solutions, ensuring reliable drone operations in GPS-denied environments. Their technology is critical for military and intelligence operations, as it allows drones to maintain their mission objectives even in the face of electronic interference.

**Goodman Technologies** provides patented processes and procedures in printed, additively manufactured advanced materials that could improve the durability and performance of drones in harsh climate conditions such as deserts and maritime environments.

**Vantiq** provides a platform for real-time data integration and decision-making, enabling seamless collaboration between different systems and organizations. This platform is essential for effective counter-UAS operations, as it allows for rapid information sharing and coordinated responses.

**JTEK** offers cybersecurity and data analytics solutions to protect sensitive information and enhance intelligence analysis. Their expertise in data security and cyber defense is crucial for safeguarding critical infrastructure and national security.

**Pegasus Defense Solutions** provides tactical training and operational support to help organizations effectively deploy counter-UAS technologies. Their expertise in security operations and training ensures that personnel are well-prepared to respond to drone threats.

**9HI** leverages AI and machine learning to improve decision-making and accelerate innovation. The technology can be applied to the identification of innovative solutions to meet the evolving mission.

By combining these technologies and capabilities, these companies are helping the US government address critical challenges related to counter-UAS operations, including:

- **Enhanced Situational Awareness:** Improved detection and tracking of drones.
- **Rapid Response:** Faster identification and neutralization of threats.
- **Resilient Operations:** Continued operation in GPS-denied environments.
- **Data Security and Privacy:** Protection of sensitive information and infrastructure.
- **Effective Training and Support:** Ensuring personnel are well-prepared to respond to drone threats.
- **Advanced Analytics and Decision-Making:** Leveraging AI and machine learning to improve operational efficiency.

Through these advancements, the US government can strengthen its national security posture and protect critical infrastructure from the growing threat of drones.

### The Integrated Solution Set

Dedrone, Armada, Naviator, and Flare Bright each contribute uniquely and strategically to the counter-UAS (Unmanned Autonomous System) mission through different focused advancements in detection, tracking, identification, and neutralization of threats. Dedrone employs a multi-sensor approach combining RF, radar, optical, and infrared capabilities to detect, track, and identify drones across diverse environments, from urban areas to battlefields. Their AI-powered platform supports threat classification and behavioral analysis, enhancing situational awareness by predicting drone movements and intentions. Armada complements this capability with its high-capacity hardware and software infrastructure leveraging AI and machine learning for rapid, real-time data processing and global satellite connectivity, enhancing sensor fusion and situational awareness. Armada's EdgeAI technology specifically contributes to identifying and tracking small UAS threats in real-time, while its Commander platform acts as a unified control interface for counter-UAS operations, allowing seamless integration with various detection and countermeasure systems.

A quote by Aristotle: "The whole is greater than the sum of its parts."

Aristotle

SubUAS and Flare Bright each bring niche capabilities to the counter-UAS field. SubUAS' Naviator hybrid drones operate both in air and underwater, offering specialized capabilities for maritime surveillance and coastal defense, though less optimized for broader land-based operations. Equipped with EO and IR sensors, Naviator is effective in low-visibility settings and amphibious environments, where visual tracking and environmental adaptability are critical. Flare Bright, specializing in un-jammable GPS-free navigation and flight control, brings robust solutions to the mission by providing reliable, critical support in GPS-denied zones, providing resilient navigation for surveillance and defense. These strengths make Flare Bright's solutions particularly reliable for operations in contested airspaces.

Supporting and enabling these solutions, Vantiq, JTEK, Pegasus, and 9HI capabilities enhance counter-UAS systems through integration, analytics, and secure operations. Vantiq's platform supports Combined Joint All-Domain Command and Control (CJADC2) and Collaborative Autonomous Unmanned Systems (CAUS) initiatives, facilitating real-time data integration and rapid decision-making. Vantiq's scalable architecture and industry partnerships add to situational awareness and multi-stakeholder coordination, enhancing UAS threat management. JTEK strengthens cybersecurity and data analytics, safeguarding operational integrity, and enhancing counter-UAS systems by securing communication channels and improving intelligence analysis for UAS-related threats. Pegasus Defense Solutions provides security services, tactical training, and operational support to assist in the effective deployment of counter-UAS technologies in sensitive military and law enforcement settings. 9HI's AI-driven technology platform combines data, evidence, and expert knowledge to improve the success rates of product and technology projects. In the context of Counter-AUS applications, 9HI can enhance decision-making by providing real-time insights and guidance.

Together, these solutions help strengthen the operational foundation of the counter-UAS mission by providing mission-critical advancements in detection, tracking, and identification of threats, with the supporting structures of data security, support services, and advanced communication systems.

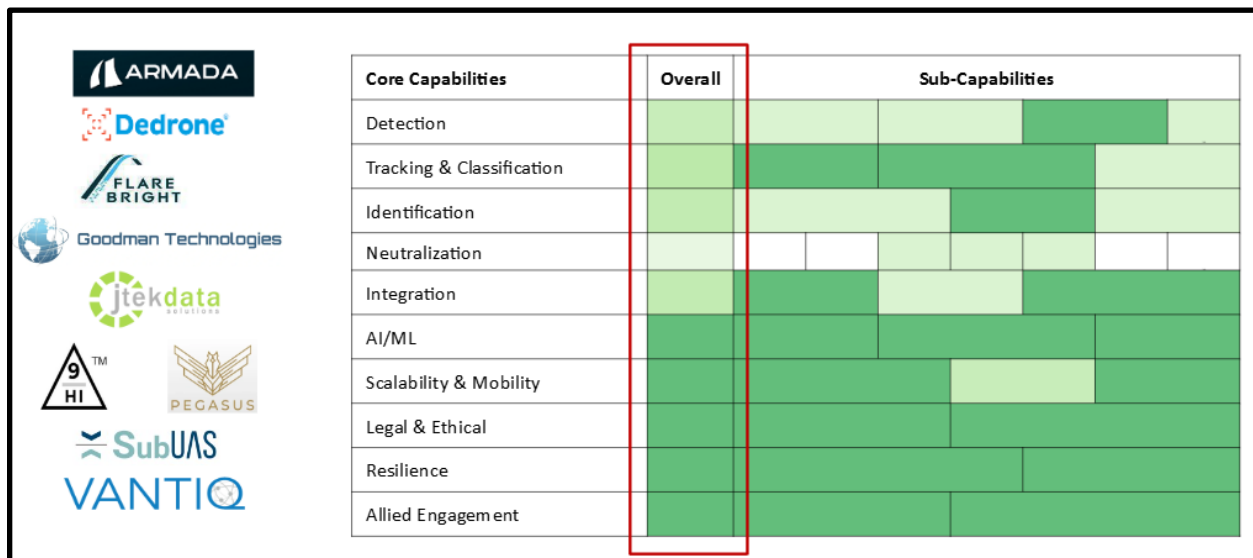


Figure 1: Integrated Solution Set Capability Coverage

## Panelist Biographies

We are grateful to all of the panelists, moderators, and speakers for sharing their time and expertise. Included are the biographies shared with the team.

### Mr. Miguel B. Hobbs: A Distinguished Career in Defense



Colonel (Retired) Miguel B. Hobbs currently serves as the Program Manager for the Joint Rapid Acquisition Cell (JRAC) at the Office of the Secretary of Defense (OSD). With a distinguished career spanning over three decades, Col. Hobbs has made significant contributions to the U.S. military, particularly in the fields of Psychological Operations (PSYOP) and rapid acquisition.

#### *Early Career and Education:*

- **Commissioning and Early Service:** Col. Hobbs was commissioned as a U.S. Army Chemical Corps second lieutenant in 1988 after graduating from Washington University in Saint Louis, Missouri.
- **Transition to PSYOP:** In 1999, he transitioned to Psychological Operations, beginning his PSYOP career at Fort Bragg, N.C.

#### *Key Assignments and Achievements:*

- **Operational Deployments:** Col. Hobbs has been deployed in support of numerous operations, including Operation Joint Guard in Kosovo, Operation Enduring Freedom, and Operation Iraqi Freedom. His roles included Tactical PSYOP Detachment leader and PSYOP Battalion Executive Officer.
- **Leadership Roles:** He served as the S3 (Operations Officer) for the 4th PSYOP Group, where he managed peacetime training and wartime operations. Later, he became the Chief of the Civil Affairs and Psychological Operations branches at the U.S. Army Human Resources Command.
- **PSYOP Commandant:** As the PSYOP Commandant, Col. Hobbs was responsible for recruitment, selection, and training, significantly advancing the PSYOP Regiment.

#### *Current Role at JRAC:*

- **Program Management:** In his current role at JRAC, Col. Hobbs oversees the rapid assessment and acquisition of solutions to meet Joint Urgent Operational Needs (JUON) and Joint Emergent Operational Needs (JEON). His work ensures that the U.S. military can quickly respond to immediate warfighter needs, enhancing operational readiness and effectiveness.

#### *Awards and Honors:*

- **Military Decorations:** Col. Hobbs' exemplary service has been recognized with numerous awards, including the Legion of Merit, Bronze Star Medal with oak-leaf cluster, and the Meritorious Service Medal with five oak-leaf clusters.
- **Distinguished Member of the PSYOP Regiment:** In 2018, he was inducted as a Distinguished Member of the Psychological Operations Regiment, honoring his significant contributions to the field.



**Mr. Stephen Moretto, NAVSEA S&T leader and founder of the Defense Logistics Innovation Forum in partnership with OSD Innovation and Policy**

Mr. Moretto is currently serving as a logistics manager and a S&T Leader in the LCS program office. He served as Production Business Manager where prepared and managed the execution of the production department's budget which exceeded \$40M per year. He also led successful efforts that significantly reduced the costs of LCS ships.

Mr. Moretto served as the Navy's Engineering and Science Community Manager in the Bureau of Personnel. While there he advised senior Navy leadership on strategic human resource management issues relating to the Navy's 40,000 civilian engineers and scientists. He built a coalition and network that included the Office of Personnel Management, Navy Labs, System Commands, and the Accreditation Board of Engineering and Technology to help accomplish the community's objectives which included projects to improve engineering manpower metrics, staffing, recruitment, hiring, retention, selection, employee development and training, performance evaluation, and competency definition.

Mr. Moretto served as the Director of Analysis and Evaluation in the Office of Naval Research Planning and Evaluation Office, where he led efforts to establish requirements, programmatic policies, and guidelines to manage the Navy's Science and Technology and Test and Evaluation Programs. He worked with a team that represented stakeholders and produced analysis that showed how the Office of Naval Research's programs funded by their multibillion-dollar budget was aligned to, and supporting Navy priorities for capability development.

As Information Technology Department Head, Mr. Moretto successfully led the effort leading to the cut over phase of NMCI implementation at Carderock Division. He managed efforts associated with the Navy's \$8 billion NMCI contract as the Information Technology Department Head at the Navy's Carderock Division. The contract implemented a fundamental change to the NAVY's IT Strategy by switching to contractor owned and managed IT infrastructure. The implementation involved the preparations to deploy computers to 3800 personnel over several different sites. Mr. Moretto received a substantial special act award for "providing outstanding leadership and overall direction to successfully reach the cutover milestone for this highly complex deadline driven effort."

Mr. Moretto was hand picked by COMNAVSEA to help stand up the new NAVSEA POM integration group (SEA-06P) as the Force Net POM Integration Manager. He worked with the other systems commands to analyze and interpret OPNAV's integrated system capability plans, and the mission capability packages for Sea Basing, Sea Shield, and Sea Strike and Force Net. Mr. Moretto received a letter of appreciation for his "amazing performance" while helping to stand up the new organization.

In his assignment as Deputy Director, Center for Innovation in Ship Design, Mr. Moretto prepared the strategic plan and developed necessary program details for the Center. He helped set up the first National Naval Engineering Education Conference sponsored by the Center. In accomplishing the centers objectives, he worked with the naval ship design community, which includes over 30 universities, the shipbuilding and repair industry, ship design consulting firms, professional societies, ONR, Coast Guard, MARAD, Army Corps of Engineers, and NOAA.

**Mr. Jay Bienlien, Vice President Business Development, DoD  
Dedrone by Axon**



Dedrone appointed retired Army [Brig. Gen. James Bienlien](#) as vice president of defense to drive their growing business. Along with other members of Dedrone's Defense Advisory Board, he has helped build the momentum that has led to a record number of 16 separate transactions with national defense organizations around the world, including the US DoD, where Dedrone has secured all necessary credentials to conduct specialized contract work. The company is collaborating with the DIU and other key DoD organizations to work on urgent requirements, based on the knowledge gained through its ongoing international engagements.

Mr. Bienlien was the Deputy Commanding General of the U.S. Army Combat Capabilities Development Command (DEVCOM) and the Senior Commander, Natick Soldier Systems Center. He previously served as Director G3/5/7 Futures and Concepts Center Fort Eustis, Virginia. Prior to serving at FCC, he was the Chief of Staff, Army Futures Command.

During his 30 years of service, BG Bienlien held command and staff assignments in the 5th Infantry Division, Fort Polk; 2nd Armored Division, Fort Hood; 25th Infantry Division, Schofield Barracks; 18th Airborne Corps, Fort Bragg; Human Resources Command; NATO Supreme Allied Command Transformation; United States Army Pacific; Operation Iraqi Freedom; Headquarters Department of the Army; and the United States Army Futures Command.

Mr. Bienlien is a 1990 graduate of Radford University and holds a Master of Science in Public Policy from Troy State University and a Master of Science in National Security Strategy from the National War College, Washington DC. His military education includes the Ordnance Officer Basic and Advance Courses; Marine Corps Staff College; Force Management Course; the National War College; and CAPSTONE.

His awards and decorations include the Legion of Merit, Bronze Star Medal, Defense Meritorious Service Medal, Meritorious Service Medal (with 6 Oak Leaf Clusters), the Parachutist Badge, Air Assault Badge, and the Army Staff Identification Badge.





Anthony "Tony" Schwarz is a distinguished professional with a robust career spanning both the public and private sectors, particularly in areas involving national security, strategic planning, and business development. Tony currently serves as the Head of Federal at Armada Systems, Inc., where he leads the sales of network management, edge computing, and AI solutions to U.S. federal customers, focusing on defense and national security.

Previously, Tony was the Chief Growth Officer at Infinity Technology in McLean, VA, where he directed company growth strategies, managed P&L across different revenue domains, and maintained deep relationships with

numerous U.S. government agencies.

Currently a U.S. Navy Reserve Captain, Tony began his military career as a Naval Aviator. He assumed various leadership roles within the Navy, including Middle East policy advisor roles at the National Security Council and State Department, J5 Branch Chief at U.S. Central Command, and Chief of Staff at the Office of the Secretary of Defense, where he advised on Middle East-related national security issues and built interagency relationships to enhance policy initiatives.

He possesses a Master of Arts in National Security & Strategic Studies from the U.S. Naval War College, a Master of Arts in Organizational Management from George Washington University, and a Bachelor of Science in English from the U.S. Naval Academy. He also holds a certificate from Harvard University in Leadership and Decision Making.

Tony's extensive experience in strategic operations, policy development, and business growth strategies, coupled with his Top Secret security clearance, make him an impactful leader in addressing and managing complex security and operational challenges. He resides in Arlington, VA, with his wife and six children.

### **Adam Cooper, Principal Solutions Engineer**

Adam Cooper is a retired Combat Controller from the U.S. Air Force, serving for 21 years until 2019. He holds a bachelor's degree in Aeronautical Science, along with PMP certification and a Six Sigma Black Belt. Currently, Adam is pursuing a Master's in Applied Digital Technology, focusing on AI/ML, and is on track to graduate on December 6, 2024.



## Jim Hathaway, JTEK Data Solutions



### **Credentials**

Co-Founder, Velos Solutions  
Principal, JTEK Data Solutions  
Limited Partner, Okapi VC  
Active DoD TS Clearance  
(Fmr) DoD Area Manager, EMC Corp

### **Contact**

P: +1 240 760 1270

[jim@velos-solutions.com](mailto:jim@velos-solutions.com) | [jhathaway@itekds.com](mailto:jhathaway@itekds.com)

Jim has been delivering IT solutions to private sector businesses and the U.S. Government for over 25 years. He has driven information technology modernization and resilience across a wide range of market segments: US Fortune 500, LATAM, Eastern and Central Europe, and US Federal Agencies including the Civilian Agencies, the Department of Defense, and the Intelligence Community. Throughout his career he has held positions of leadership with technology providers such as EMC Corporation and JTEK Data Solutions. He is also a Limited Partner with Okapi Venture Capital.

Beyond participating and leading organizations, he has a proven track record of delivering success, which has been recognized three times in Inc. Magazine's 5000 Fastest Growing Privately Held Companies in America, Dell President's Circle, and being named to the RSA Security Partner Advisory Board.

In 2020, Jim co-founded Velos Solutions, an IT and Cybersecurity integrator focused on using US Foreign Aid to assist Partner Nations and Allies improve their information security posture.

To provide a forum through which Senior Level Government and Industry can share and collaborate in an open forum on IT ideas, challenges, and successes, Jim joined the Advanced Technology Academic Research Center (ATARC) and the American Council for Technology and Industry Advisory Council (ACT-IAC). Jim held the Industry Chair for the AI Working Group and RPA Project Team and sits on the INOVA Health Systems Community Insights Board.



**Chance Cole**  
**Director, UAV Programs and Aeronautical Initiatives**  
**Alethia Labs**

Chance is a highly experienced professional with a Top-Secret clearance and over 20 years of leadership in Air Force Special Operations Program Management and Operations. Specializing in Unmanned Aerial Vehicles (UAVs).

He has over 16 years of personnel management experience and four years coordinating Combined Joint Air Domain Command and Control.

His strong networks with industry leaders such as General Atomics, Lockheed Martin, and SOCOM underscore his capability to lead UAV programs and advance aeronautical interests.



**David Mrocza is President and CEO of AI Strategy Corp.**

As a business and product development leader, he is known for his insightful revenue growth abilities, as well as, his versatility in launching products and growing businesses in a variety of markets. He has led five business units, has over twenty years in P&L leadership roles with companies from start-up to \$5 billion in revenue.

Creativity and insight are David's hallmarks. With over 25 patents and patents pending, and over 15,000 product and service evaluations, largely coming from his experience as the top executive leading hundreds of engineers and technicians at the largest privately owned development test lab for the DoD in

the US, Dayton T. Brown Corp.

Dave founded AI Strategy Corp to develop and commercialize 9-HITM (Patent pending), a Human-AI enabled decision guidance platform for selecting and developing new technologies. The platform is based on Dave's experience helping companies that need a dynamic growth trajectory or that have faltered with new product or service offerings. [www.Nine-HI.com](http://www.Nine-HI.com) 9-HITM creates a collaborative environment that allows a project leader to select from a wide variety of subject matter experts to assist in a system guided approach. 9-HITM guides users from problem definition and solution discovery to selection of the best technology options for investment, development or deployment at any TRL stage. 9-HITM uses a standard process and standard scoring of 9 fundamental metrics that allow judging of multiple options enabling the best decisions throughout development and deployment processes.

After decades of independent and largely manual use, OUSD Defense Production Act Title III has funded 9-HITM development as a multi-user platform to leverage this successful system driven by ML/AI. AI Strategy has been awarded Phase I, II, & III SBIR contracts totaling \$5.6 million from AFWERX and the Office of the Undersecretary of Defense, Defense production Act and Joint Enhanced Munition Technology Program. (OUSD JEMTP).

David's strong domestic and international market strategy experience spans the gamut from B2B, B2C, and B2G. This successful broad-based experience has equipped him to be an ideal strategy and business risk leader for commercialization and growth through innovative business practices, new products and new services. David has set sales and profit records for multiple employers by launching or re-launching products for ClipFix, Luitpold Pharmaceuticals, UBE Industries, API Industries and Dayton T. Brown. At DTB as a senior executive, David also won a \$200 million US Navy IDIQ contract to develop aircraft technologies by partnering with VSE Corp. (\$1 billion) and utilizing 9-HITM principles.

While obtaining his Bachelor of Science in Mechanical Engineering at the University of Hartford, he began his career with Kaman Aerospace and then Philips Electronics NA where he set record performance levels after graduating from the renown Philips management training program and completing his MS and MBA from Rensselaer Polytechnic Institute graduating at the top of his class with a 4.0 GPA.

**Dr. Bill Goodman, Founder | Rainmaker | CETO | SPIE Fellow**  
**Goodman Technologies, LLC**



Dr. Goodman is a Technologist and Entrepreneur. He received his PhD in Materials Science and Engineering from UCLA and a “Streetwise MBA Certificate” from the Small Business Emerging Leaders Program. Bill was a 2020 SBA Small Business Person of the Year, a 2021 Distinguished Alumni of the University of New Mexico, and GT was a 2020-2023 Technology Flying Forty winner selected by the New Mexico Technology Council. Bill has worked in Space, Defense and Aerospace his entire career; he has more than 90 publications and his technologies have flown on 7 different space missions. Bill is a Fellow of the International Society for Optics and Photonics (SPIE), a Partner in Vista Business Group, a nationwide M&A and investment group for the middle market, and the President & CEO of Goodman Technologies LLC a New Space Platform Company, that designs and manufactures Nanocomposite Materials for Extreme Environments via 3D/AM and other State-of-The-Art processes. He has won numerous SBIR/STTR.



## **Dr. Karen Hathaway Viani**

Chief Innovation Officer, The Catalyst Coalition, LLC

Founder, Hathaway & Associates, LLC

Experienced innovation strategist, leader, coach, and catalyst for lab to market solutions, with a successful track record of implementing initiatives in unstructured, dynamic environments. She enables organizations and leaders in the tech sector to achieve goals in their professional and personal lives, and she embodies a holistic, relationship focused approach.

Dr. Karen Hathaway Viani founded Hathaway & Associates, LLC in 2023, offering transformational leadership coaching to accelerate innovation and scale impact for individuals, teams, and organizations. She joined The Catalyst Coalition in 2024 as Chief Innovation Officer to scout emerging technology solutions for critically needed government mission problems enabling quick-response mission impact.

Prior to this, Karen dedicated more than 12 years to supporting the U.S. Government and DoD at The MITRE Corporation. Her recent roles include serving as senior technical advisor to executives in the National Security and Innovation sectors, and deputy director for strategic partnerships and technology transfer. In these roles she was focused on corporate strategy development, innovation management, and forming global partnerships in the private and public sectors and academia to accelerate innovation and commercialization of MITRE technologies. Her efforts resulted in relationships with companies from startups to Fortune 500; collaborative development and licensing of life-changing and globally impactful technologies; execution of agreements with universities and private sector entities; and increased return on investment for MITRE's internal research and development program. Previously, she built trusted relationships with government and industry leaders and provided engineering solutions to complex global problems at MITRE and other organizations. A systems engineer by training, her doctoral research focused on identifying the success factors leading to impactful outcomes.

She is active in community, charitable, and professional organizations, including the Society of Women Engineers, Smart City Works, and MassChallenge, and the Mid-Atlantic Quantum Startup Foundry at the University of Maryland. Karen earned a Doctorate in Systems Engineering from The George Washington University, a Master's degree in Business Administration, and an undergraduate degree in Physics. She is an Integral Associate Certified Coach and has earned Lean Six Sigma Green Belt, Program Management Professional (PMP), and SAFe Agile Product Manager/ Product Owner (PM/PO) certifications. She enjoys distance running, travel, and spending time with family and friends.



## **Karen Lieu Base**

Co-Founder, The Catalyst Coalition  
President, KB Catalyst, LLC

Technology Executive with over 30 years of professional experience anchored in software & systems development with a focus on data, Karen's strength is in building competitive capabilities and driving innovation for commercial and US federal organizations.

Drawing from her experience at industry leading companies such as Booz Allen, Samsung and Capgemini, and fortified with insights from the Wharton CTO Program, Karen is a triple threat consultant, capable of delivering complex technology solutions, managing teams, and driving strategic business growth. Her experience spans client engagements, highly strategic investment initiatives, and corporate enterprise leadership roles.

Karen has launched three businesses in her career, all with different offerings. She launched her first business, KLB Solutions in 2010, focused on technology and management consulting. More recently, she bootstrapped two businesses in 2023, KB Catalyst and The Catalyst Coalition (along with two other co-founders), the former offering fractional c-suite expertise to small and mid-sized companies, and the latter focused on building a community of trusted companies to deliver leading edge solutions to the US federal government. Both companies strengthen small businesses, bringing the right people, processes, and technologies as part of an innovation ecosystem supporting the US government's global leadership positioning. In addition to launching her businesses, Karen has also led the development of service offerings for Booz Allen, Samsung and Capgemini Government Solutions. These offerings had global reach and involved working with leaders based in the United Kingdom, India, South Korea, and France to successfully instantiate each service offering.

Karen's education includes completion of the Wharton Chief Technology Officer Program, Bachelor of Science in Computer Science from George Mason University, and the Executive Leadership program from the Kellogg School of Management at Northwestern. Her other training and certifications include PMI's Project Management Professional (PMP), Scrum Product Owner Certification, Six Sigma White Belt, among others. She was awarded the 2021 Advocacy Award by the Society of Asian Scientists and Engineers (SASE).

In her free time, Karen enjoys spending time with family and friends, playing paddle sports such as pickle ball and table tennis. She is a foodie who is a fan of all shows on the Food Network. Karen enjoys giving back to the community and supports numerous organizations that helps women, minorities, underserved communities and building the future workforce of tech.



## Russell (Rusty) O'Bryan

Co-Founder, The Catalyst Coalition

Founder, Revenue ER, LLC

Serial entrepreneur and a passionate professional with deep expertise in professional coaching, building multinational teams, and leading organizational transformation to influence and achieve organizational goals.

Rusty is a marketing, business development, and sales strategist with the ability to assess highly complex, multi-disciplinary environments in a simplified manner to produce quantifiable results. He specializes in developing and implementing go-to-market strategies for multinational organizations using open-sourced market intelligence, risk mitigation strategies, brand repositioning, data analytics, and other techniques to drive growth.

He holds a BS in Business Administration from Virginia Tech and spent 10 years working in Brazil and speaks fluent Portuguese.



## Nino “Typhoon” Marcantonio: OSD Strategic Visionary in Defense Technology



Nino “Typhoon” Marcantonio is a renowned strategic consultant and the founder of Marcantonio Global, a firm dedicated to delivering breakthrough technologies to address national security challenges. With extensive experience in defense technology and innovation, Nino has been instrumental in shaping the future of defense capabilities for the U.S. Department of Defense (DoD) and allied nations, successfully standing up and conducting two OSD and NAVSEA tech scouting programs.

### Professional Background:

- **Founder & President, Marcantonio Global:** Since its inception, Marcantonio Global has been at the forefront of scouting, assessing, and delivering cutting-edge technologies. Nino’s leadership has driven the firm’s success in collaborating with key defense organizations, including OSD JRAC, NAVSEA, USASOC, DTRA, and OSD Readiness, ONR, ARMY HQDA, ARMY ASALT, OSD RE, OUSD Policy, DHS, White HOUSE, DHHS, IARPA, DARPA, PIF, et AL.
- **Defense Technology Expertise:** Nino’s expertise spans multiple domains, including artificial intelligence, space, energy resilience, and emerging technologies. His strategic insights have been pivotal in addressing complex national security challenges.

### Key Contributions:

- **Innovative Solutions:** Under Nino’s guidance, Marcantonio Global has developed and implemented innovative solutions that enhance defense capabilities. His work has led to significant advancements in UAV/UUV technologies, propulsion systems, and AI-driven autonomy.
- **Collaborative Initiatives:** Nino has played a crucial role in fostering collaboration between the DoD and private sector, ensuring that the latest technological advancements are effectively integrated into defense strategies. His involvement in initiatives like DLIF and the 9HI platform highlights his commitment to driving innovation and efficiency in defense acquisition.

### Recognition and Impact:

- **Thought Leadership:** Nino is a sought-after speaker and advisor, known for his deep understanding of defense technology and strategic foresight. His insights have been instrumental in shaping policy and operational strategies within the defense sector.
- **Awards and Honors:** Throughout his career, Nino has received numerous accolades for his contributions to defense technology and innovation. His work continues to be recognized for its impact on national security and defense readiness.

### Personal Attributes:

- **Visionary Leader:** Known for his strategic vision and innovative thinking, Nino has earned the nickname “Typhoon” for his dynamic approach to problem-solving and his ability to drive rapid, impactful change.
- **Mentor and Advocate:** Nino is dedicated to mentoring the next generation of defense professionals, sharing his knowledge and experience to inspire and guide future leaders in the field.

Nino “Typhoon” Marcantonio’s career is a testament to his unwavering commitment to advancing defense technology and ensuring national security. His leadership and vision continue to shape the future of defense capabilities, making him a pivotal figure in the industry.

[\(1\) Nino \(An Inspirational Father and Faithful Husband\) Marcantonio | LinkedIn](#)

## **Dr. F. Javier Diez: Innovator in Aerospace Engineering and Autonomous Systems**



Dr. F. Javier Diez is a distinguished figure in the field of aerospace engineering, holding a PhD from the University of Michigan. He is a Full Professor at Rutgers University in the Department of Mechanical & Aerospace Engineering, with a graduate faculty appointment in the Department of Electrical and Computer Engineering. Over his illustrious career, Dr. Diez has guided more than 100 students in their research endeavors, fostering the next generation of engineers and innovators. Dr. Diez's expertise spans a wide range of cutting-edge technologies, including Unmanned Aerial Vehicles (UAVs), Unmanned Underwater Vehicles (UUVs), propulsion systems, sensors, and artificial intelligence applied to drone autonomy and detection. His research has garnered substantial funding from prestigious organizations such as DARPA, ONR, DIU, AFOSR, FAA, and NSF, reflecting the high impact and relevance of his work. In recognition of his outstanding contributions to engineering, Dr. Diez received the 2019 Outstanding Engineering Faculty Award. He has delivered over 25 invited lectures and authored more than 100 journal articles, conference papers, and technical publications. His innovative spirit is further evidenced by his numerous patents, including the prestigious 2022 Edison Patent Award in Defense. Dr. Diez is also a successful entrepreneur, co-founding two Rutgers startups: SubUAS LLC and XTT LLC. As the CEO of SubUAS LLC, he is leading the commercialization of the Naviator, the world's first unmanned vehicle capable of seamless transition between underwater and aerial environments, capable of diving to depths of 1000 feet. This groundbreaking technology has earned SubUAS LLC the Tibbetts Award from the U.S. Small Business Administration and the Innovation Challenge award at IMDEX Singapore 2023. Beyond his technical and entrepreneurial achievements, Dr. Diez is committed to fostering inclusive innovation. He serves as a member of the Council for Inclusive Innovation under the U.S. Patent and Trademark Office (USPTO), contributing to efforts that ensure diverse perspectives and equitable opportunities in the field of innovation. Dr. Diez's career is a testament to his dedication to advancing aerospace engineering and autonomous systems, his commitment to education, and his passion for innovation. His work continues to shape the future of technology and inspire the next generation of engineers.