Issue 3 · Spring/Summer, 2024

SupplierNewsletter

GENERAL ATOMICS

WELCOME

General Atomics (GA) is proud to have the support of our Suppliers for consistently delivering exceptional products and services.

Our ***Supplier Newsletter***, published at least twice a year, is an opportunity to connect with you and extend our gratitude. In this issue, look for your official **Save-the-Date**, **Tuesday, November 12,** for GA **2024 Virtual Supplier Day**. Also, we feature changes to federal regulations and key Quality Management System (QMS) standard changes. We are proud to showcase some of our latest technological advancements.

We look forward to seeing you at 2024 Virtual Supplier Day!

Spotlight

GA 2024 Virtual Supplier Day Brings "The Freedom to Explore" to Life – *Register Below!*

On Tuesday, November 12, 2024, from 8 a.m. to 12 p.m. PST, GA will present **Virtual Supplier Day 2024**, with the theme **"The Freedom to Explore."**

Supplier Day offers a unique and exciting opportunity to network with our Suppliers and share the exciting developments at GA that they have been and could be a future part of. Supplier Day is open to all Suppliers. Our event is planned to fall after Veterans Day, so we are planning a special salute to our Veterans and a special look at how GA and our Suppliers contribute to global peace.

Our CEO and Chairman, Mr. Neal Blue, will kick off this exciting event which culminates in the public announcement of our 2024 Supplier Performance Program Awardees. Join us as we dive into GA's rich history, and examine the emerging technologies that are pushing the boundaries of today. GA Leaders will discuss the role our Suppliers play in pushing boundaries. In addition, breakout sessions will offer an opportunity for attendees to choose compelling topics and to collaborate with GA Team Members in real time.

Prior to Virtual Supplier Day, GA will host an exclusive, invitation-only event with our Supplier Performance Program Awardees. Our awardees are the GA Suppliers who demonstrate consistent, exemplary supplier performance.

The GA Team is excited to host you during our virtual Supplier Day. We extend our utmost gratitude to our current suppliers for their continued support and extend a warm welcome to future partners. To join our Virtual Supplier Day, please **Register now!**

QUALITY MATTERS

By Thane Douglass

Impact of AS9102 Rev. C on Supply Chains

The AS9102 Standard provides an effective and efficient process for conducting a First Article Inspection (FAI) and creating the resulting document, a First Article Inspection Report (FAIR). This standard is occasionally revised to provide clarity, specificity or new requirements, helping manufacturers and customers agree on a final result. Revision C, the latest update to AS9102, was released in June 2023 and includes several new requirements and changes aimed at (1) improving alignment with the AS9100 production verification process, (2) enhancing planning, evaluation and re-accomplishment activities, and (3) improving FAIR documentation forms. The following is a summary of the most impactful new requirements, as well as some other commonly seen deficiencies. Suppliers conducting FAI on behalf or in support of GA should be aware of these changes.

Documented Process to Plan for FAI:

AS9102 Rev. C, Section 4.1 requires organizations to document a process to plan for FAI. In contrast, previous revisions only required a process exist, allowing organizations flexibility when presenting that process to external stakeholders. For organizations that did not previously delineate a FAI plan in procedures or work instructions, this new requirement could be substantial in that a documented process becomes auditable.

Documented Process to Evaluate Changes:

Similarly, Section 4.6 introduces a subtle, but impactful change, in that organizations must document a process to evaluate and determine when a product realization process change warrants a new or partial FAI. Partial FAIs, or "Deltas," were previously required if defined parts of the manufacturing process changed, allowing ambiguity for suppliers to determine in real time if a partial FAI was necessary. Documenting this criterion beforehand removes that flexibility and likely increases the number of Deltas required.

Monitoring and Measuring Equipment:

Section 4.1 requires appropriate resolution and accuracy of all monitoring and measuring equipment, as well as identification, qualification and traceability of specific gauges and tooling. This essentially amounts to implementing a version of measurement system analysis, which could pose challenges for some suppliers.

AS9100D CERTIFIED ISO 9001

Special Processes:

AS9102 Rev. C, Section 1.3 states external suppliers performing special processes are also subject to AS9102 requirements. These requirements are satisfied by documenting design characteristics and results on a FAIR or a detailed Certificate of Conformance.

Nonconformances:

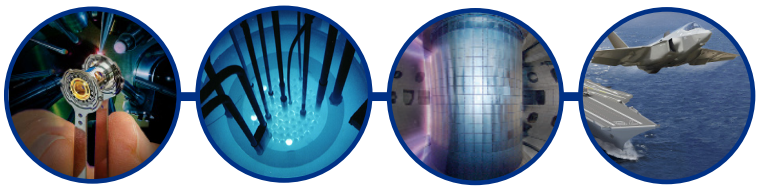
AS9102 Rev. C, Section 4.5 requires all nonconformances that occur during the first article process be recorded on Form 3 (field 11) and annotated on Form 1(field 19) regardless of whether the nonconformance was worked back to original drawing specification. The key is that an FAI is used to validate a production process, not a product. The fact that the process led to a nonconformance, even if easily correctable, must be documented.

Increased Tracking Requirements:

Compliance with AS9102 Rev. C demands comprehensive documentation of the entire FAI process and mandates tracking of certain items. Several changes to the existing AS9102 forms serve to improve traceability and accountability of the quality process.

Conclusion:

The improved requirements and compliance with the FAI standard will lead to several advantages. These include reductions in escapes, risk, and overall costs, as well as improved product safety. By identifying process issues early on and providing standardized, objective evidence in FAIR reports, organizations can better mitigate risks and validate corrective actions. Revision C of the FAI standard aims to instill confidence in the production of conforming products by demonstrating that manufacturers and processors understand the requirements and can ensure initial product or process conformity, even after changes are implemented.



REGULATION WATCH

Welcome to the Block Party, Part 40

By Meg English

The Department of Defense (DoD), General Services Administration (GSA) and National Aeronautics and Space Administration (NASA) have issued Final Rule 2022-010 to amend the Federal Acquisition Regulation (FAR) for FAR Part 40, "Information Security and Supply Chain Security," opening up a new home on the block for the FAR's existing information security and supply chain security policies and procedures.

Currently, Part 40 is vacant, and the Final Rule states that no new requirements have been established. But the foundation has been laid and three stories (subparts) of framing is complete. While the frame is there, related existing policies or procedures will move in through separate rulemaking later. FAR Part 40 will consolidate regulations currently spread across the blocks of the FAR neighborhood. These include Kapersky Lab bans, TikTok Bans, Section 889 prohibitions and policies, Federal Acquisition Supply Chain Security Act (FASCSA) exclusion and removal orders, among others. Ultimately, FAR Part 40 will include regulations concerning prohibitions, exclusions, supply chain risk information sharing, safeguarding information and supply chain security requirements. Policies and procedures that are unrelated to security will remain in other parts of the FAR (e.g., part 22 for labor and human trafficking risks and part 23 for climate-related risks).

FAR Part 40 will provide contracting officers and industry a single, consolidated location in the FAR for these security requirements. Following close behind the Final Rule, on April 10, 2024, DoD, GSA and NASA issued a Request for Information (RFI) seeking input on the scope and organization of the Part. Their RFI also clarifies that FAR Part 40 will contain regulations that address security objectives and include information and communications technology requirements. Public responses to the RFI are due no later than June 10, 2024. GA Suppliers are encouraged to participate in the rule making process.

The creation of Part 40 follows the Executive Administration's focus on ensuring the nation's security and emphasizes the importance of securing the "walls" that protect our nation from outside threats. It's all about keeping the neighborhood safe!

Keep your eyes peeled for the new neighbors.

2024 DEPARTMENT OF THE NAVY GOLD COAST

AUGUST 19-24, 2024

Powerful Partnerships:

Department of the Navy Gold Coast Event

Join us for the 36th Annual Department of the Navy Gold Coast Small Business Procurement Event, proudly presented by the San Diego Chapter of the National Defense Industrial Association (NDIA). Taking place from August 19th to 21st, 2024, this esteemed gathering is dedicated to empowering businesses to bolster the mission of the warfighter.

As a nationally recognized "Model Chapter," the San Diego NDIA chapter stands as a beacon of influence within the defense industry. General Atomics (GA) is honored to be a "DIAMOND Sponsor" of this year's event, underlining our commitment to fostering collaboration and innovation within the small business community.

Our GA Small Business team will be on-site to engage with small and medium-sized enterprises, exploring partnership opportunities that drive our cutting-edge products and services forward. Join us at Navy Gold Coast 2024, where ideas meet action, and together, we shape the future of defense. We look forward to connecting with you there!

In The News

GA Acquires EO Vista

General Atomics acquired EO Vista, LLC, a leader in the development of advanced space-based and airborne electro-optical payloads, based in Acton, MA. Its business will be integrated into the General Atomics Electromagnetic Systems (GA-EMS) group.

"EO Vista has a proven track record of rapid innovation that set new standards for performance and affordability in electro-optical payload designs," said Scott Forney, president of GA-EMS. "We look forward to bringing EO Vista's unique capabilities on-board as we continue to expand our weather and science programs and our growing portfolio of sensor system payload designs to support a wide range of customer requirements, including Intelligence, Surveillance, and Reconnaissance missions."

EO Vista is currently providing the advanced Electro-Optical Infrared (EO/IR) weather sensor payload to GA-EMS under their contract with the U.S. Space Force, Space Systems Command to deliver a EO/IR Weather System (EWS) satellite to support the transition from the Defense Meteorological Support Program (DMSP) on-orbit systems to a new generation of affordable, high performance, small weather satellites. "The EO Vista team is excited to join General Atomics, a company whose commitment to delivering innovative solutions in support of the national interest strongly aligns with our legacy," said Dr. Steven Wein, president of EO Vista.

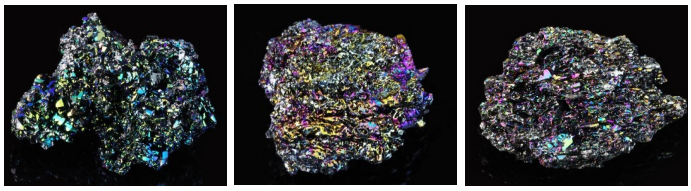
Founded in 2013, EO Vista is an advanced technology company specializing in the development and delivery of next-generation electro-optical sensor systems. The EO Vista team has a depth of experience in deploying some of the nation's highest performing surveillance and sensing assets and offers expertise in rapid innovation, development, and delivery of visible and infrared sensor systems.

General Atomics Awarded DOE Contract To Develop Silicon Carbide Materials for Fusion Power Plants

SAN DIEGO – 30 Jan 2024 - General Atomics Electromagnetic Systems (GA-EMS) announced today it has been awarded a three-year contract from the Department of Energy (DOE) Office of Science to develop a scalable, cost-competitive path to manufacture silicon carbide (SiC) and SiC composite foam materials for advanced fusion power plants.

"SiC and SiC foam will provide significant advantages in both efficiency and longevity to support fusion power plant applications," stated Scott Forney, president of GA-EMS. "Foam made of SiC is a highly effective insulator that prevents unwanted heat transfer and is extremely resistant to radiation compared with other insulating materials that degrade over time. Our unique manufacturing method allows us to finely control the properties of the material and provides a cost-effective approach for the fabrication of SiC foam specifically engineered for the fusion environment."

GA-EMS is developing high temperature ceramic-based composites for the nuclear environment, including SiGA® cladding – a SiC composite based technology. SiGA® cladding is the material of choice under DOE's Accident-Tolerant Fuel program to develop and demonstrate nuclear fuel rods capable of surviving temperatures far beyond that of current materials. GA-EMS will leverage its high temperature ceramic fabrication and fusion test facilities to



demonstrate the path toward manufacturing first-of-kind SiC and SiC foam materials.

"General Atomics' unique capabilities in advancing nuclear technologies provides us with the range and depth of expertise across the organization to support this effort," added Christina Back, vice president of GA-EMS Nuclear Technologies and Materials. "We are developing the path forward to customize and test our SiC materials and composites at the dimensions, scale, and performance metrics required for application to fission and magnetic fusion programs in support of future nuclear power plants."

General Atomics announced its concept for a fully integrated fusion pilot plant in October 2022. The concept utilizes SiC–based materials that can withstand the intense conditions within a high-power fusion device. "Advanced materials like SiC and SiC composites will increase efficiency, reduce waste, and make fusion facilities more cost effective," added Brian Grierson, director of General Atomics' Energy Group's Fusion Pilot Plant Design Hub.

Go to: General Atomics Awarded DOE Contract To Develop Silicon Carbide Materials for Fusion Power Plants | General Atomics (ga.com).

In The News (continued)

General Atomics Awarded Space Development Agency Contract to Demonstrate Optical Communication Terminals

SAN DIEGO – 24 Jan 2024 - General Atomics Electromagnetic Systems (GA-EMS) has been awarded a contract from the Space Development Agency (SDA) to demonstrate the capabilities of the company's Optical Communication Terminals (OCTs) hosted on GA-EMS' GA-75 (75 kilogram class) spacecraft while in Low Earth Orbit (LEO).

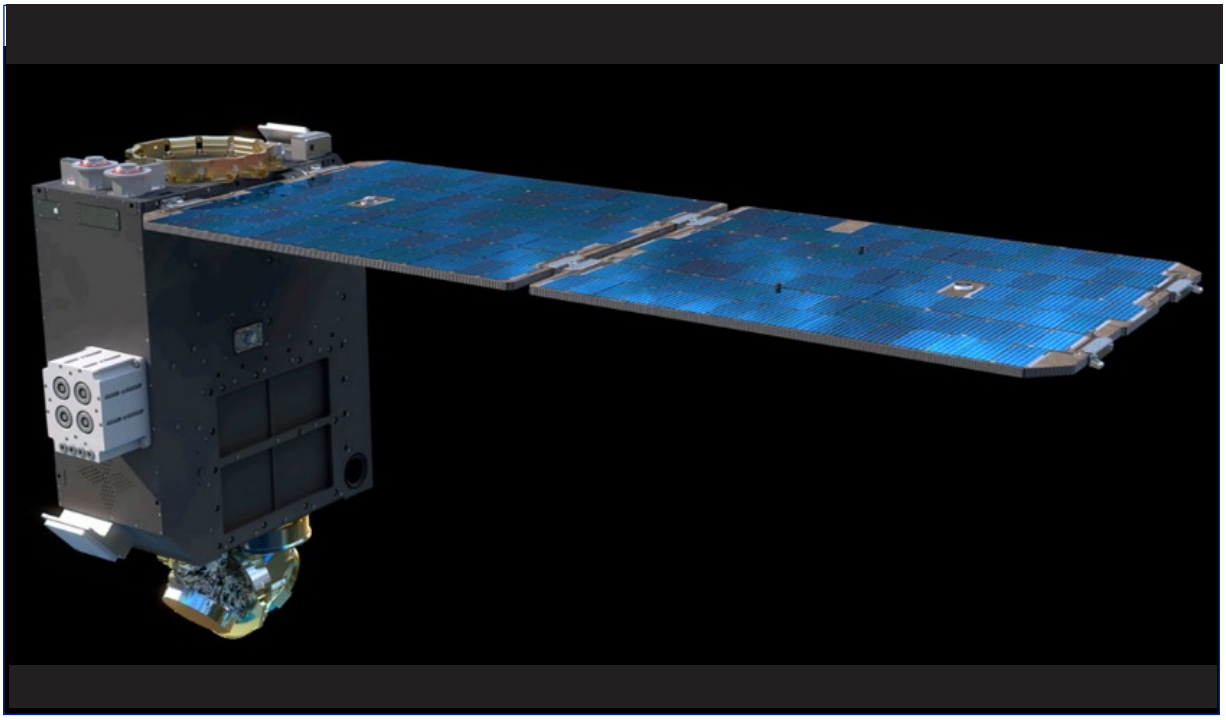
"We're excited to continue working with SDA and look forward to demonstrating our OCT capability developed, built, and tested by GA-EMS, and integrated on GA-EMS-designed and built spacecraft," said Scott Forney, president of GA-EMS.

"This contract supports the deployment of next generation optical communication technologies that will provide faster, more secure, higher fidelity transmissions, and greater resiliency to ensure 24/7 connectivity from the earth to space."

GA-EMS is designing and building two OCTs to provide robust space-to-space communication in a degraded environment and establish and maintain links to meet SDA standards and requirements. The OCTs can support a vast network of satellites, data and information sharing, and collective on-orbit computing resources to support customer and mission requirements.

The OCTs will be integrated on two GA-EMS GA-75 spacecraft. The GA-75 is a resilient, modular, and configurable half-ESPA bus design with capabilities to support a variety of communications and Intelligence, Surveillance, and Reconnaissance (ISR) payloads and missions. The GA-75 is a commercially available platform that utilizes standard payload interfaces to enable seamless integration and mission-ready delivery times. It is also compatible with multiple launch vehicles and can package two spacecraft per ESPA port or fill a single ESPA port depending on mission payload size.

Go to: https://www.ga.com/ga-awarded-space-development-agency-contract-to-demonstrate-optical-communication-terminals



GA-EMS GA-75 Satellite with Optical Communication Terminal

In The News (continued)

General Atomics Expands International Collaborations and Partnerships with Japan in Critical and Emerging Technologies

SAN DIEGO – 19 February 2024 – General Atomics, a defense and diversified technologies company with affiliates operating on five continents, is expanding its collaborations and partnerships across Japan with new investments in the nuclear energy and rare earth elements sectors.

Numerous teaming arrangements are in the late stages of discussion and are set to be announced in early 2024. These partnerships will complement the company's existing relationships as a long-term partner collaborating with Japanese industry and government agencies.

"General Atomics is committed to collaborating with its Japanese partners to advance the development of cutting-edge technologies in the maritime security, nuclear energy, and rare earth elements sectors," said Dr. Vivek Lall, chief executive at General Atomics Global Corporation. "Building on a legacy of successful collaborations, we have held a series of strategic engagements with government officials, industry leaders, and research institutions in Japan. These engagements have laid the foundation for future partnerships aimed at advancing the development of critical and emerging technologies."

In 2023, Japan's Kyoto Fusioneering announced an agreement with GA to supply two advanced gyrotrons to the U.S. Department of Energy's DIII-D National Fusion Facility in San Diego, Calif.

Currently, the Japan Coast Guard (JCG) and Japan Maritime Self-Defense Force (JMSDF) are testing and deploying the MQ-9B SeaGuardian® Remotely Piloted Aircraft (RPA) built by General Atomics Aeronautical Systems, Inc. (GA-ASI). SeaGuardian is a long-endurance maritime surveillance aircraft that can be used for a variety of missions, including search and rescue, disaster response, and maritime law enforcement.

GA-ASI's MQ-9B aircraft is revolutionizing the global RPA systems market by providing true all-weather capability and full compliance with STANAG-4671 (NATO UAS airworthiness standard). This feature, along with GA-ASI's operationally proven collision avoidance radar, enables flexible operations in civil airspace.

Go to: General Atomics Expands International Collaborations and Partnerships with Japan in Critical and Emerging Technologies | General Atomics (ga.com)

MQ-9B SeaGuardian® Remotely Piloted Aircraft (RPA)

In The News (continued)

GA-ASI Hosts Joint Industry/Government Open Architecture Conference

February Conference Focused on Modular Open Systems Approach for UAS

SAN DIEGO – 13 March 2024 – General Atomics Aeronautical Systems, Inc. (GA-ASI) hosted an Open Architecture Symposium on Feb. 29, 2024, at its headquarters in Poway, California. At the symposium, government and industry speakers highlighted the tools, communities, and partners required to put Modular Open Systems Approach (MOSA) into practice in the development of Unmanned Aircraft Systems (UAS). More than 80 attendees from approximately 30 organizations attended the event, which featured addresses from the U.S. Army, U.S. Air Force, Chief Digital & Artificial Intelligence Office (CDAO), and industry speakers, as well as demonstrations of GA-ASI's open architecture efforts.

"Open Architecture is key to GA-ASI systems," said GA-ASI CEO Linden Blue, who spoke at the event. "The Department of Defense's MOSA efforts are building products that are quicker to integrate and faster to iterate. This enables best-of-breed competition and forms the basis for delivering new capabilities, such as mission autonomy, across our platforms."

The symposium highlighted a large cross-section of government and industry. GA-ASI appreciated the support and participation of guest speakers from more than a dozen companies. The conversation covered lessons learned from experienced integrators of Future Airborne Capability Environment (FACE) and Open Mission Systems (OMS) capabilities, highlighted the diversity of products aligned to MOSA technical standards, and spotlighted growing autonomous capabilities built on open foundations. The Symposium highlighted the rich ecosystem, challenges, and opportunities surrounding open architecture initiatives across the Department of Defense.

The new Gray Eagle 25M (GE 25M) brings MOSA to the Multi-Domain Operations (MDO)-capable system to ensure incremental enhancements can be made at the speed of emerging threats. Rapid integration of technology enables GE 25M to act as an information quarterback, receiving data from multiple reconnaissance assets, employing launched effects, and extending communications networks. GE 25M flew for the first time in Dec. 2023 and adheres to MOSA principles, leveraging modernized avionics, data links, sensor integration, and a laptop ground control station.

Go to: https://www.ga.com/ga-asi-hosts-joint-industry-government-open-architecture-conference

Gray Eagle 25M (GE 25M)

In The News (continued)

GA-ASI Makes First Flight of XQ-67A OBSS

SAN DIEGO – 29 February 2024 – General Atomics Aeronautical Systems, Inc. (GA-ASI) flew the XQ-67A Off-Board Sensing Station (OBSS) for the first time on Feb. 28, 2024. OBSS is an Air Force Research Laboratory (AFRL) program and GA-ASI was selected in 2021 to design, build and fly the new aircraft.

With flight of the AFRL-funded XQ-67A, GA-ASI has validated the "genus/species" concept first developed with AFRL as part of the Low-Cost Attritable Aircraft Platform Sharing (LCAAPS) program focused on building several aircraft variants from a common core chassis.

Under LCAAPS, AFRL and GA-ASI explored development of a chassis, termed a "genus", as the foundational core architecture from which several "species" of aircraft can be built.

"This provides an alternative acquisition approach for military aircraft that enables faster development, lower costs and more opportunities for frequent technology refresh," said Trenton White, OBSS Program Manager and aerospace engineer in AFRL's Aerospace Systems Directorate. "XQ-67A is the first "species" to be designed and built from this shared platform. Flight demonstration of this system is a major first step toward showing the ability to produce affordable combat mass."

"OBSS is the first aircraft type built and flown using a common core chassis developed by GA-ASI that promotes commonality across multiple vehicle types," said GA-ASI Vice President of Advanced Programs Michael Atwood.

Go to: GA-ASI Makes First Flight of XQ-67A OBSS | General Atomics

XQ-67A Off-Board Sensing Station (OBSS)