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SupplierNewsletter

GENERAL ATOMICS

Spotlight

Zach Baur Chosen to Lead GA's Strong Small Business Program

Zachary ("Zach") Baur is appointed GA's Small Business Liaison Officer (SBLO) supporting GA's long-standing policy to encourage, to the maximum extent possible, the participation of small businesses, small businesses owned and controlled by socially and economically disadvantaged individuals and women-owned businesses, in its procurements. Zach brings over 8 years of experience in small business advocacy, private sector purchasing, and Federal contract administration to this important role. Zach earned a B.A. in managerial sciences from Georgia State University and a M.S. in business analytics from Pepperdine University. Notably, Zach served in the Peace Corps in Panama from 2016 – 2018 where he discovered a passion for connecting small businesses with the resources and opportunities in the greater marketplace to support goals that better society. He believes a strong small business community is the key to a strong nation and prosperous communities.

Zach looks forward to continuing GA's success in developing partnerships with small businesses that drive the American economy and support GA's world-changing technology solutions. What does Zach love most about working at GA (so far)? It's the commitment every team member brings to the company mission – Global Progress Through Technology.

Please join us in welcoming Small Business Liaison Officer Zachary Baur, you can reach him by e-mailing **SB4GA@ga.com**.

Welcome aboard Zach!

(Spotlight continued p.7)

WELCOME

At General Atomics (GA) we understand the vital role of our suppliers in the success of our business. "Thank You" for your continued partnership with GA. You are essential to our organization; you provide the raw materials, components or finished products we need on time, affordably, and at the highest practical quality. Our strong supply chain, supported by Suppliers, allows us to consistently delivers products and services that excite our customers.

Thank you for doing what you do.

In the News

General Atomics and the ITER International Energy Project

This is a continuation of a feature in our Summer 2020 newsletter.

ITER ("The Way" in Latin) is one of the most ambitious energy projects in the world today.

Construction of the ITER project in France is now 75% complete with first plasma scheduled for 2025. Courtesy ITER

In southern France, 35 nations are collaborating to build the world's largest tokamak, a magnetic fusion device that has been designed to prove the feasibility of fusion as a large-scale and carbon-free source of energy based on the same principle that powers our Sun and stars.

The experimental campaign that will be carried out at ITER is crucial to advancing fusion science and preparing the way for the fusion power plants of tomorrow.

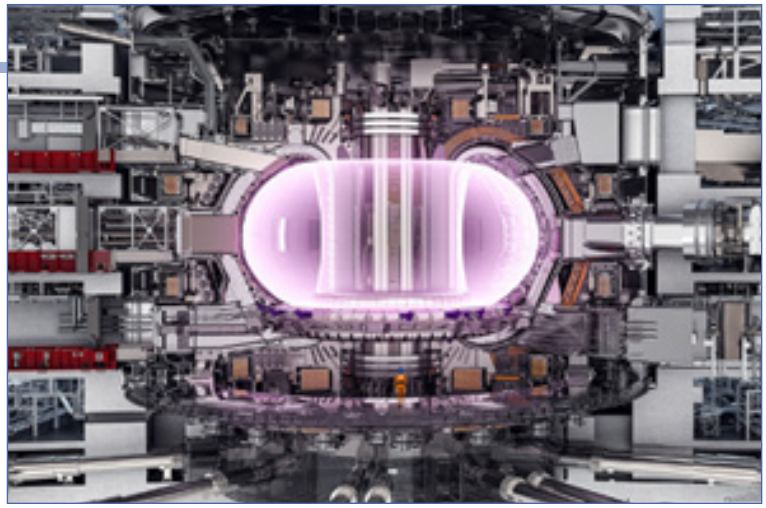
(Continued p.2)

ITER (continued)

General Atomics and the ITER International Energy Project

ITER is designed to yield from its plasma a ten-fold return on power (Q=10), or 500 MW of fusion power from 50 MW of input heating power. ITER will not convert the heating power it produces as electricity but is paving the way for the next generation of fusion machines that will. That is because ITER will be the first fusion device to demonstrate many of the integrated technologies, materials, and physics regimes necessary for the next step, commercial production of fusion-based electricity.

Thousands of engineers and scientists have contributed to the design of ITER since the idea for an international joint experiment in fusion was first launched in 1985. The ITER Members — China, the European Union, India, Japan, South Korea, Russia and the United States — are now engaged in a collaboration to build and operate the ITER experimental device, and together bring fusion to the point where a demonstration fusion reactor can be designed.



Courtesy ITER

ITER is a high priority project in the U.S. Department of Energy Office of Science, and its success is critical for fusion energy to move forward in the U.S. and in the world. The success of ITER is the highest priority of the GA's DIII-D program.

Want to know what it takes to light a star?

Watch this amazing video: https://youtu.be/pmx6zUJiiVg**. Read more:** https://www.ga.com/magnetic-fusion/international-iter-project.

REGULATION WATCH

Federal Acquisition Regulatory Council's Interim Rule Bans Use of TikTok in Government Contracting

To quote an old WWII saying, "loose lips sink ships." These days, social media apps are the new security risk for inadvertent disclosures. The U.S. Government is taking action to mitigate those risks.

On June 2, 2023, the Federal Acquisition Regulatory Council (FAR Council) issued an interim rule implementing FAR 52.204-27, Prohibition on a ByteDance Covered Application. The rule implements the Office of Management and Budget's (OMB) M-23-13 memorandum and expands the reach of the previous prohibition.

The interim rule prohibits government contractors and subcontractors from having the TikTok app, or any other apps developed by ByteDance Limited, on any information technology (IT) used in the performance of a contract. It uses a new statutory definition for IT that was introduced in the No TikTok on Government Devices Act, which includes embedded IT, unlike the already established FAR definition. The rule "applies to devices regardless of whether the device is owned by the Government, the contactor, or the contractor's employees (e.g., employee-owned devices that are used as part of an employer bring your own device (BYOD) program)," to the extent a device is used in the performance of a contract. The rule became effective immediately upon release in order to meet the 120-day deadline for compliance provided by the OMB Memorandum.The interim rule applies to all government procurement contracts, including contracts under the simplified acquisition threshold and contract for commercial products and commercial services. Contracting officers are required to include the clause in solicitations issued on or after June 2, 2023, and in solicitations issued prior to June 2, 2023, provided the award of the resulting contract occurs after that date. The rule must also be included in all subcontracts, including subcontracts for the acquisition of commercial products or commercial services. There are limited exceptions to the rule for national security interests and activities, law enforcement activities and security research activities set forth in OMB M-23-13.

Although the rule requires immediate implementation, it does not require contractors and subcontractors to submit reports or certify to compliance. Contractors have until August 1, 2023 to submit comments to be considered in the development of the final rule.

GA is committed to taking all steps to combat the growing threat of cyberattack and to supporting compliance with the interim rule. We encourage our suppliers to act immediately.

Join us in the fight to keep America safe!

QUALITY MATTERS

Embracing Efficiency and Adaptability: Changes to AS9100 Certification Process and the Rise of Remote Auditing

In an increasingly digital world, technology is reshaping industries; and the aerospace and defense sector is no exception. The AS9100 certification process, the internationally recognized standard for quality management systems in the aerospace industry, has undergone significant changes to adapt to evolving needs. One notable change has been the incorporation and proliferation of remote auditing, enabling organizations to streamline the certification process and achieve greater efficiency. Let's overview the AS9100 certification process and the benefits of remote auditing.

An Overview

The AS9100 certification process ensures that aerospace companies adhere to rigorous quality management standards, encompassing various areas such as risk management, product realization, and continual improvement. Compliance with AS9100 signifies an organization's commitment to delivering safe, reliable, and high-quality products and services to the aerospace industry.

The Rise of Remote Auditing

Remote auditing involves the use of digital tools and technologies to conduct audits while reducing or eliminating (depending on the type of audit) the need for physical presence. In 2022, the International Aerospace Quality Group (IAQG) introduced several changes to the AS9104, Requirements for Certification of Aviation, Space, and Defense Quality Management System standard. One of the more notable changes was the increased acceptance of remote auditing. Traditionally, auditors would visit organizations on-site to assess their compliance with AS9100 standards. Many believed remote-based audits were largely ineffective and could not adequately ensure adherence to strict standards in a highly regulated industry. Though some aspects of the audit process could be performed remotely, the practice was slow to gain traction and was often viewed with skepticism.

Of course, the onset of COVID-19 forced the industry to embrace what was once scoffed at and common solutions aimed at mitigating legitimate limitations incurred with distance were quickly implemented. In 2021, in response to the sharp increase of remote audits, the International Accreditation Forum (IMF) updated its Mandatory Document for Use of Information and Communication Technology (ICT) for Auditing/Assessment purposes to better optimize audit efficiency and effectiveness through ICT while still maintaining audit integrity. Remote auditing, begrudgingly accepted by many only out of necessity, soon revolutionized the certification process, bringing a range of benefits to both auditors and organizations seeking certification.

Here are some key advantages of remote auditing in the AS9100 certification process:

Enhanced Efficiency:

Remote auditing reduces the need for auditors to travel, saving time and resources. Auditors can conduct portions of audits from their own offices, enabling them to allocate more time to the actual assessment and analysis.

Cost Savings:

With remote auditing, organizations can reduce costs associated with travel expenses, accommodation, and logistics. This makes certification more accessible to smaller companies that may have previously found the process financially burdensome.

Flexible Scheduling:

Remote auditing offers increased flexibility in scheduling audits. Organizations can choose time slots that align with their operational requirements, reducing disruption to daily activities.

Global Reach:

Remote auditing enables organizations from around the world to undergo AS9100 certification. It reduces geographical barriers, allowing auditors to assess compliance with reduced regard for location.

Technological Advancements:

Remote auditing relies on advanced digital tools and technologies, such as video conferencing, file sharing platforms, and virtual collaboration tools. These innovations ensure secure communication and data exchange during the auditing process.

(Continued on p.7)

In The News

USS Colorado Virginia-class attack submarine.
U.S. Navy photo by Chief Petty Officer Darryl I. Wood/Released. Source: Defense Visual Information Distribution Service The appearance of U.S. Department of Defense (DoD) visual information does not imply or constitute DoD endorsement

GA Awarded Contract from General Dynamics Electric Boat for Virginia- class Payload Tube Manufacturing

SAN DIEGO – 04 May 2023 – General Atomics Electromagnetic Systems (GA-EMS) announced today that it has been awarded a contract from General Dynamics Electric Boat for manufacturing, production, and delivery of Virginia Payload Tubes (VPTs) for upcoming Virginia-class submarines. GA-EMS will prepare manufacturing and quality systems, and will build, test and ship two VPTs for use by Electric Boat and HII's Newport News Shipbuilding in their construction of the submarines.

"Our Manufacturing Center of Excellence in Tupelo, Mississippi offers world-class fabrication and precision machining industrial base capabilities, supported by an experienced program management team and manufacturing engineering and quality assurance experts that are critical for on-time production of large, complex submarine assemblies," stated **Scott Forney**, president of GA-EMS. "We are very proud to be working with Electric Boat, as we bring demonstrated expertise in manufacturing to tight tolerances, exacting specifications, and documented first-time-quality performance to deliver these critical payload tubes that allow the Virginia-class submarines to support critical national security missions."

Read more: https://www.ga.com/ga-awarded-contract-from-general-dynamics-electric-boat-for-virginia-class-payload-tube-manufacturing.

GA Awarded Contract for EMALS and AAG for Future Ford-Class Aircraft Carrier USS Doris Miller

SAN DIEGO – 08 June 2023 – General Atomics Electromagnetic Systems (GA-EMS) announced today that it has been awarded a contract modification by Naval Air Systems Command for the Electromagnetic Aircraft Launch System (EMALS) and Advanced Arresting Gear (AAG) for the future Ford-class aircraft carrier USS Doris Miller (CVN 81). GA-EMS will provide production, manufacturing, engineering, program management, logistics support, and information assurance to deliver EMALS and AAG shipsets for CVN 81.

"From coast to coast, our employees, subcontractors, and suppliers are excited to begin work delivering these critical launch and recovery technologies to the fourth carrier in the Ford-class," stated **Scott Forney**, president of GA-EMS. "Having GA-EMS now under contract to provide EMALS and AAG for the CVN 81 enables greater efficiency and utilization of our unique capabilities and resources to help meet construction and maintenance requirements and fleet readiness for all Ford-class carriers going forward."

GA-EMS delivered EMALS and AAG to the first-in-class USS Gerald R. Ford (CVN 78) and is under contract with the Navy to support CVN 78 sustainment requirements. CVN 78 has completed blue water certification with a full air wing and sustained operations supported by EMALS and AAG. In addition to this CVN 81 contract award, GA-EMS is also under contract and delivering EMALS and AAG for the future USS John F. Kennedy (CVN 79) and USS Enterprise (CVN 80).

"CVN 79 EMALS and AAG certification is underway, and over 80% of CVN 80 EMALS and AAG production has been completed. We are proud to continue our working relationship with the Navy as each carrier continues preparations to enter service to our nation for the decades to come," said **Rolf Ziesing**, vice president of GA-EMS Maritime Programs.

Read more: https://www.ga.com/ga-awarded-contract-for-emals-and-aag-for-future-ford-class-aircraft-carrier-uss-doris-miller.

In The News (continued)

GA Awarded Contract for Advanced Submarine Propulsion Concept Designs

SAN DIEGO – 30 June 2023 – General Atomics Electromagnetic Systems (GA-EMS) announced today that it has been awarded a contract from General Dynamics Applied Physical Sciences to perform propulsion system design, to provide modeling, technical evaluation, and analysis supporting the Defense Advanced Research Projects Agency's (DARPA) Advanced Propulsor, Experimental (APEX) program. The APEX program is intended to develop and demonstrate a new generation of propulsion technology designs to power submarines and other undersea vehicles.

"We are excited to leverage our expertise in system design, modeling, and analysis, along with our extensive manufacturing experience to support the APEX program objectives. We look forward to working with General Dynamics to develop and explore propulsion concepts focusing on efficiency, signature, mechanical design and limits, and operational considerations" said **Scott Forney**, president of GA-EMS.

Phase 1 of the APEX program will last 24 months. General Dynamics Applied Physical Sciences is the prime contractor. GA-EMS will perform propulsion system design, engineering and analysis in its Boston, MA facility, and any required manufacturing and testing in its Manufacturing Center of Excellence in Tupelo, MS.

Read more:https://www.ga.com/ga-awarded-contract-for-advanced-submarine-propulsion-concept-designs.

GA-ASI Engineers Win Awards from AIAA

SAN DIEGO – 13 June 2023 – Three senior engineers from General Atomics Aeronautical Systems, Inc. (GA-ASI) were honored with awards from the San Diego section of the American Institute of Aeronautics and Astronautics (AIAA) in the areas of outstanding aerospace engineering and engineering management. The awards were presented at an event hosted by the AIAA on May 21, 2023. GA-ASI is a leading employer in the San Diego area and manufacturer of Unmanned Aircraft Systems (UAS), radars, and electro-optic and related mission systems solutions.

Leon Alvarez, **James McPherson** and **Walter (Terry) von Klein** were the three GA-ASI engineers who were honored with awards.

"We are very proud of the important contributions of Leon, James and Terry," said GA-ASI Vice President of Engineering **Dee Wilson**. "As the world leader in unmanned systems, engineering is the lifeblood of our company. These engineers have helped to pioneer the development of new and innovative technologies that are utilized on our UAS platforms, which are critical to U.S. national security and throughout the world."

Leon Alvarez is technical director for GA-ASI's Guidance, Navigation and Control (GNC) Group, and is the company's leader in development of a revolutionary technology for GA-ASI's aircraft – Automatic Takeoff and Landing Capability (ATLC) utilizing only onboard sensors. He has worked as a leader over 15 years on the architecture and development of the technology and is integral in the deployment of ATLC as a key enabler of GA-ASI's line of unmanned aircraft that are deployed with customers around the world and has zero mishaps after more than 130,000 takeoff and landing events.

James McPherson is GA-ASI's program manager for U.S. Marine Corps (USMC) programs and was awarded for outstanding contributions to aerospace management. He manages technical projects involving GA-ASI's USMC customer, including all training and sustainment for the USMC MUX Program and support of the USMC's Service Level Training Exercises where he has led a team of project managers, engineers, technicians, mechanics, and aircrew to a Link 16 solution without impacting a rigorous flight schedule.

Leon Alvarez, James McPherson and Terry von Klein Receive AIAA San Diego Section Awards

Terry von Klein, GA-ASI engineering director for Flight Technologies and Advanced Programs, was awarded a Lifetime Achievement Award from AIAA for his outstanding contributions to GNC activities on all GA-ASI platforms. Over the course of his 36-year career, which also included stops at Northrop Grumman and Boeing, he had significant impact on aerospace engineering, primarily in GNC and flight simulation across programs as diverse as C-17, X-48B, ATT, MD-11, MQ-1, MQ-9, and numerous advanced and novel systems. His work has been published by AIAA and NASA, and he holds a patent for a novel method of automatic control of a vehicle.

Read more: https://www.ga.com/3-ga-asi-engineers-win-awards-from-aiaa.

In The News (continued)

GA and Tokamak Energy Announce Collaboration Regarding High Temperature Superconducting Magnet Technologies

Companies to cooperate on HTS technologies for fusion energy and other applications

SAN DIEGO, USA & OXFORD, UK – 30 May 2023 – US headquartered General Atomics (GA) and UK headquartered Tokamak Energy Ltd have signed a memorandum of understanding to collaborate in the area of High Temperature Superconducting (HTS) technology for fusion energy and other industry applications. The collaboration would leverage GA's world-leading capabilities for manufacturing large-scale magnet systems and Tokamak Energy's pioneering expertise in HTS magnet technologies.

Creating clean, sustainable fusion energy requires strong magnetic fields to confine and control hydrogen fuel, which becomes a plasma several times hotter than the sun. Fusion power stations will provide safe and secure clean energy to towns and cities, and heat to industrial factories. One kilogram of fusion fuel releases the same amount of energy as burning around 10 million kilograms of coal, with no harmful emissions.

"GA is excited to collaborate with Tokamak Energy on HTS magnets. Tokamak Energy is a leader in HTS magnet modelling, design and prototyping and GA has expertise in developing and fabricating large-scale superconducting magnets for fusion applications." said **Anantha Krishnan**, Senior Vice President at General Atomics.

Warrick Matthews, Managing Director at Tokamak Energy, said: "GA has significant experience, knowledge and facilities to produce large superconducting magnets at scale. Tokamak Energy has been developing HTS technologies for fusion for more than a decade. The integration of these complementary capabilities promises to accelerate the development and production of HTS technologies in additional fields, such as aviation, naval, space and medical applications.""

HTS Magnet Applications to Fusion Energy

Magnetic fusion is the most thoroughly researched path to fusion energy. The approach utilizes a device known as a tokamak, which use several sets of powerful electromagnets to shape and confine superheated hydrogen gas – known as plasma. To achieve fusion conditions relevant for energy production, tokamaks must heat the gas to temperatures exceeding 100 million degrees Celsius — more than ten times the temperature at the center of the sun. This is the threshold required for fusion to be a commercially viable energy source.

Strong magnetic fields are generated by passing large electrical currents around arrays of electromagnet coils that circle the plasma. The magnets are wound from ground-breaking HTS tapes, multi-layered conductors with a crucial internal coating of 'rare earth barium copper oxide' (REBCO) superconducting material. Developing more powerful HTS magnets will allow fusion power plants to use thinner magnetic coils while generating plasmas at greater densities. This would enable the facilities to operate with greater efficiency and smaller footprints, thereby improving their cost effectiveness.

Fusing hydrogen atoms in a tokamak produces approximately ten million times more energy than comparable chemical reactions, such as the burning of coal or natural gas, without producing any carbon emissions or long-lasting waste. When deployed at scale, fusion will serve as a nearly limitless source of clean, safe, and always-available energy.

Read more: https://www.ga.com/ga-and-tokamak-energy-announce-collaboration-regarding-high-temperature-superconducting-magnet-technologies.

Inside the General Atomics Magnet Technologies Center the ITER Central Solenoid superconducting magnet is being manufactured.

Spotlight (continued from p.1)

Natalie Garcia joins the Supplier Performance Program

Natalie ("Nat") Garcia joins the General Atomics team as a Supplier Performance Program Administrator supporting GA's Supplier Performance Program (SPP). GA's SPP, established in 2008, provides a transparent and objective Supplier performance assessment platform to both drive continuous improvement and ensure GA's supply base satisfies the most stringent of performance requirements for GA's customers. Natalie brings over two years of focused aerospace experience from Raytheon to her current position where she will continue to positively contribute to improving supply chain operations.

Natalie earned a B.A. in English from San Diego State University (SDSU) and plans to earn her M.S. in Supply Chain Management. What does Natalie love most about working at GA (so far)? The team atmosphere, the welcoming staff, and the opportunity to immediately contribute to the development and enhancement of GA's SPP.

Please join us in welcoming Supplier Performance Program Administrator Natalie Garcia, you can reach her by emailing: **SPP@GA.com**.

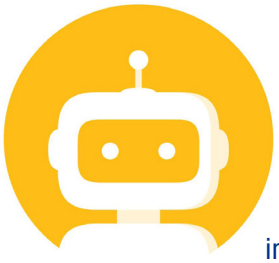
Welcome aboard Natalie!

QUALITY MATTERS

(Continued from p.3)

The incorporation of remote auditing brings enhanced efficiency, cost savings, flexibility, and a global reach to the certification process. As the aerospace industry continues to evolve, embracing remote auditing as a standard practice in the AS9100 certification process will foster a more efficient, accessible, and sustainable approach to quality management. With the benefits it offers, remote auditing is poised to become an integral part of the aerospace and defense sector's drive for continuous improvement and excellence.

Other News



'Chatbots' and Supply Chain Security

Large Language Models (LLMs) such as ChatGPT, Google Bard and other similar applications, commonly called 'chatbots', utilize advances in computer neural generation (i.e., generative AI) to produce information on demand. These applications can piece together ideas and instantaneously generate text and images that a user can repurpose into various forms, including business communications (e.g., presentation, research paper, email, etc.).

While these open-source (i.e., freely available) applications are innovative and valuable, users are cautioned that they may lack security functions necessary to protect information entered into the application.

Like most things on the internet, once information is added, it cannot be removed. Be cautious – any proprietary, controlled unclassified information, classified, or any sensitive data should never be disclosed in a chat bot.

According to our Supplier Code of Conduct Suppliers doing business with GA will take all appropriate measures to combat the growing threat of cyberattack; and will implement the controls and processes necessary to safeguard information under their control while reporting and mitigating any compromise of systems or information in accordance with contract terms and industry best practices. For more information, see our Supplier Code of Conduct.

GA Navy Gold Coast Attendees: Nancy Koch, Natalie Garcia, Brandon Khuu, Vince Verdin, Tal Ferguson, and Zachary Baur.

Natalie Garcia and Tal Ferguson meet with conference attendee.

Powerful Partnerships: Navy Gold Coast Event

General Atomics (GA) was a proud Gold Sponsor of the 35th annual Navy Gold Coast small business procurement event at the Convention Center in San Diego, CA on July 26th – 28th. Navy Gold Coast is the premier Navy procurement conference in the country. This event provides a forum to educate, guide, and assist businesses, large and small, in support of the warfighter mission.

GA's Small Business Office participates in Navy Gold Coast annually to strengthen and diversify our supplier base through small business partnership. This year our Small Business Office team met with over a hundred small business and industry partners attending the event. We are excited to build on all the connections made at Navy Gold Coast 2023!

GA is a San Diego-based defense and diversified technologies company with more than a half-century of experience developing successful solutions to defense, energy, and environmental challenges. GA and affiliated companies operate on five continents and include GA Aeronautical Systems, Inc. (GA-ASI).

GA-ASI produces a series of unmanned aircraft and provides electro-optical, radar, signals intelligence, and airborne surveillance systems. GA's Electromagnetic Systems division produces electromagnetic aircraft launch and recovery systems, satellite surveillance, railgun, high power laser, and hypervelocity projectiles.

GA is the principal private sector participant in thermonuclear fusion research through its internationally recognized DIII-D and inertial confinement programs and is a leader in the development of next generation nuclear fission and high temperature materials technologies.

As a high technology and high concept provider of Defense and Energy solutions, GA is uniquely positioned for growth and success. Global progress through technology remains our mission. GA appreciates the support of its Suppliers in accomplishing this mission.

Remember to contact your Purchasing Representative about any questions regarding open Orders or your continued performance. Your Purchasing Representative is your primary point of contact. Please advise your Purchasing Representative when contacted by other GA personnel. If you have any comments or questions about this publication, please contact us at SupplierEngagement@GA.com.