

Spotlight



Powerful Partnerships: SUPPLIER DAY 2022 Breakout Sessions

Supplier Day featured virtual breakout sessions which provided an in-depth look at the different business areas of GA and upcoming opportunities to work with GA. Presentations were followed by Q&A with instructors to provide real time information to attendees. “It was great to be part of an effort to have our suppliers better understand what we do at GA and why we do it, to support our customers and their mission” said **Nicholas Bucci**, presenter for the GA-EMS Programs Overview session.

Breakout session topics included:

- Quality Matters
- Supply Chain Resiliency
- GA-EMS Programs Overview
- Regulation Watch
- Supplier Performance Program
- Cybersecurity Corner
- Doing Business with GA
- Small Business Overview

“General Atomics invests in people’s knowledge to help suppliers do business with us” said **George Baumbach**, co-presenter for the Doing Business with GA session.

Supplier Focus

Want to stay involved?

Answer the questions below to help GA keep you up to date on topics important to you. Send responses to SupplierEngagement@ga.com.

- Was your business able to participate in General Atomics 2022 Virtual Supplier Day held on Thursday, November 10? If so, what were some of your key takeaways from the event?
- In terms of cybersecurity, what is your company’s biggest overall threat (e.g., Phishing, Exploitation of Remote Work, Mobile Devices, Cloud Security, Ransomware)?
- In terms of commitment to high quality standards, what initiative(s) does your company utilize (e.g., Continuous Improvement, ISO-9001, Lean, Six Sigma, Total Quality Management)?

Special Edition: SUPPLIER ENGAGEMENT 2022

General Atomics (GA) held its 6th Supplier Day on November 10th, 2022, welcoming over 500 current and prospective suppliers. The virtual event was hosted by GA Contracts, Procurement and Proposals Management, supported by GA Quality Assurance.

This invigorating event was the culmination of GA’s 2022 Supplier Engagement efforts; it celebrated Powerful Partnerships and the role they play in enabling GA’s vision of global progress through technology.

The event organizers would like to thank its distinguished executive speakers:

Dr. Christina A. Back, Ph.D., Vice President, Nuclear Technologies, and Materials;
Dr. Wayne Solomon, Ph.D., Vice President, Magnetic Fusion Energy Division,
Mr. Greg Burgess; Vice President, Space Systems General Atomics Electromagnetic Systems; and
Mr. Rolf Ziesing, Vice President, Maritime Programs General Atomics Electromagnetic Systems Group.

With the help of our Supplier Day Panel, these executives shared GA’s vision and outlined how together, with the support of its current and future suppliers, GA’s exciting mission will become reality.

Visit <https://www.ga.com/procurement/supplier-day-2022> for the videos and materials from General Atomics Supplier Day 2022.



General Atomics Supplier Awards Luncheon

On August 8th, 2022, GA hosted a Supplier Awards Luncheon at the scenic Rancho Bernardo Inn. Twelve top suppliers were recognized for their contributions and exemplary performance.

The luncheon was attended by keynote speakers, GA leadership, GA purchasing representatives, support staff and most importantly, this year’s Supplier Awardees. Supplier luncheon attendees were invited to attend a tour of GA’s DIII-D National Fusion Facility. **Kenly Burkart**, Project Manager from Kato Engineering said, “The tour of the nuclear fusion facility was fascinating, informative, and thought provoking; it would be difficult to top that from an engineering/scientific observer’s viewpoint.”

The GA Publications team recorded the event, which was showcased on **Virtual Supplier Day**, held on November 10th, 2022. Suppliers expressed their appreciation for GA’s recognition of their company’s support and the event held at such a fantastic venue. **Dave Delaney**, Sales Marketing Leader from Insight Direct USA said, “I think it’s fantastic that you take the time to value suppliers who work hard for your success. I thought there was a lot of effort put into the event and I appreciate everyone’s attention they gave. The luncheon was first rate.”

GA wishes to congratulate our 2022 Supplier Award Winners:

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|---|------------------------------------|--------------------------------|
| • Palomar Scientific Instruments | • Joseph T. Ryerson and Son | • Kato Engineering |
| • Insight Direct USA | • Billet Industries | • Ellsworth Corporation |
| • Graphite Sales | • CeramTec North America | • Solmar Precision |
| • Magellan Aerospace Middletown | • Steinerfilm | • Machinists Inc. |

Thank you, 2022 Supplier Performance Award Winners, and all GA Suppliers for your contributions.

In the News

General Atomics Unveils a New Fusion Pilot Plant Concept

General Atomics announced on October 20, 2022, that it has developed a steady-state, compact advanced tokamak fusion pilot plant concept (FPP) where the fusion plasma is maintained for long periods of time to maximize efficiency, reduce maintenance costs, and increase the lifetime of the facility.

To learn more about the concept, please visit: www.ga.com/fusion-pilot-plant.

“Excitement for fusion energy is at an all-time high, with historic interest from private industry and government. We look forward to working with our partners to make our vision for economic fusion energy a reality. Now is the time for fusion, and General Atomics plans to lead the way.”

– **Dr. Anantha Krishnan**, Senior Vice President of the GA Energy Group.

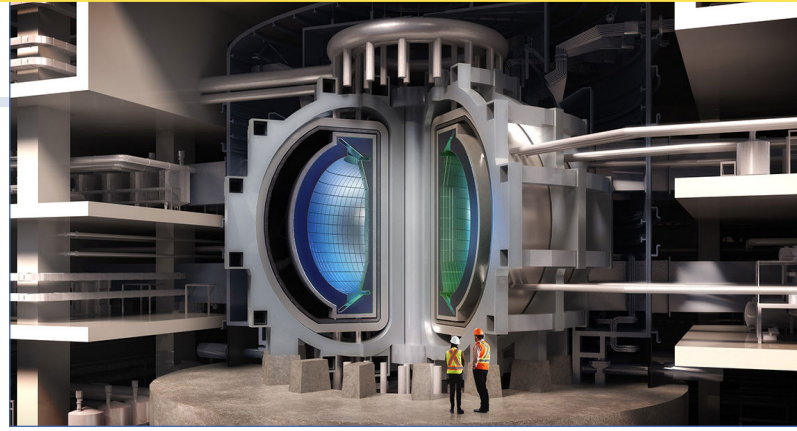
Fusion is the process that powers the stars and offers the potential for nearly limitless clean energy. It occurs when two light nuclei combine to form a new one, releasing vast amounts of energy. Researchers can achieve fusion using a “tokamak,” which uses heat and electromagnets to create the necessary heat and pressure to force the nuclei to fuse.

Fueled primarily by isotopes of hydrogen found in seawater and capable of generating its own fuel during operation, the GA FPP would provide baseload energy without any harmful emissions or long-lived waste. Capable of operating around the clock, commercialized fusion power plants would provide sustainable, carbon-free firm energy for generations.

“The General Atomics Fusion Pilot Plant is a revolutionary step forward for commercializing fusion energy,” said **Dr. Wayne Solomon**, Vice President of Magnetic Fusion Energy at General Atomics. **“Our practical approach to a FPP is the culmination of more than six decades of investments in fusion research and development, the experience we have gained from operating the DIII-D National Fusion Facility on behalf of the U.S. Department of Energy, and the hard work of countless dedicated individuals. This is a truly exciting step towards realizing fusion energy.”**

“General Atomics has a long and storied history of being at the forefront of fusion innovations,” said **Dr. Brian Grierson**, Director of the Fusion Pilot Plant Hub at General Atomics. **“We are proud to be a world leader in plasma theory and modeling, advanced materials engineering, and other areas necessary for commercializing fusion. We intend to bring the full strength of our institutional expertise to this effort as we advance our vision for fusion energy.”**

The GA FPP concept capitalizes on GA innovations and advancements in fusion technology. The facility would utilize GA’s proprietary **Fusion Synthesis Engine (FUSE)** to enable engineers, physicists, and operators to rapidly perform a broad range of studies and continuously optimize the power plant for maximum efficiency. GA has also developed an **advanced modular concept (GAMBL)** for the breeding blanket which is a critical component (of the fusion power



facility) that breeds tritium, a fusion energy fuel source, to make the fusion fuel cycle self-sufficient.

General Atomics recently announced a joint research partnership with [Savannah River National Laboratory](#) to address challenges of tritium handling as part of the U.S. Department of Energy’s **Innovation Network for Fusion Energy (INFUSE)** grant program.

With extensive experience in at-scale manufacturing and established relationships across industry and government, GA is actively engaging with leading institutions around the world to pursue the most rapid, economically practical path to fusion energy — including leading universities, national laboratories, government, and industry. GA is working with a wide range of energy stakeholders to ensure that fusion is deployed in a way that meets the needs of local and global communities. *Read more on our [GA Webpage](#).*

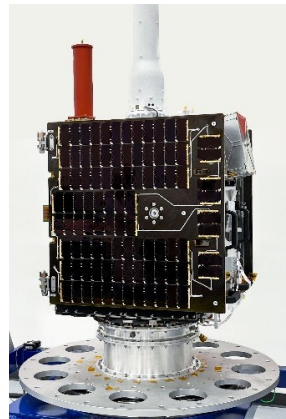
Other News

GAzelle Satellite

General Atomics GAzelle Satellite with Argos-4 payload successfully launched on-board Rocket Lab Electron Vehicle on October 7, 2022.

Argos-4, an advanced instrument designed to improve knowledge of Earth’s environment, ecosystems, and biodiversity, roared into orbit from Māhia Peninsula, New Zealand.

The instrument, developed in a partnership between NOAA and CNES, the French Space Agency, flew as a hosted payload aboard the General Atomics GAzelle satellite on a Rocket Lab Electron launcher. *Please see link to full article [here](#).*



The GAzelle Satellite prior to the Pre-Ship review at the General Atomics integration facility in Centennial, CO



Rocket Lab’s It Argos Up From Here mission patch. (Credit: Rocket Lab)



Spotlight: Christina A. Back, Ph.D.

Vice President,
Nuclear Technologies and
Materials, General Atomics

Dr. Christina Back is Vice President of Nuclear Technologies and Materials at GA. She is an internationally recognized expert in both fission and fusion energy research, with over 25 years of experience leading research for private industry, U.S. Department of Energy (DOE), and U.S. Department of Defense. She regularly serves on National Academy of Sciences, national laboratory, and university committees.

As a technical expert, she has been invited to the 2015 White House Summit on Nuclear Energy and provided testimony to U.S. Congressional Committees. Dr. Back earned a B.S. from Yale University, and a Ph.D. in physics from the University of Florida. She has over one hundred peer-reviewed publications, two patents, and was elected a Fellow of the American Physical Society.

Dr. Back believes nuclear energy must be part of the mix to meet U.S. and global energy needs. She is committed to

bringing innovation through engineered materials and advanced technologies to make transformational advances in nuclear energy. At General Atomics, Dr. Back is responsible for all nuclear fission programs and related technology development. Her major programs focus on space nuclear reactors, the terrestrial advanced fast modular reactor, accident-tolerant nuclear fuel, and energy storage solutions to ensure that the world has clean, safe, cost-competitive energy for today, and tomorrow.

QUALITY MATTERS

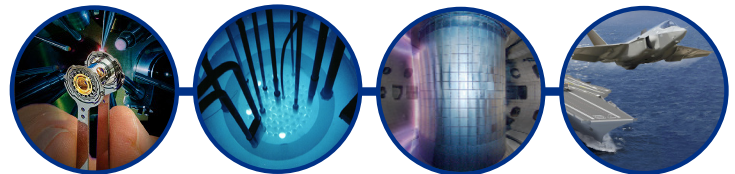
Risk-based Thinking and Risk Management

Risk of failure and negative consequences are the last things a company wants to think about. Nevertheless, risk comes from both internal and external sources.

Since failure in the aerospace and defense (A&D) industry can have catastrophic consequences, quality management standards for the industry require a formal process to manage operational risks. These requirements are laid out in the SAE AS9100D international standard “Quality Management Systems – Requirements for Aviation, Space, and Defense Organizations.”

Prevention of risk has been an inherent part of quality management systems for decades. From establishing quality requirements for military equipment in World War II and the evolution of inspection methodologies, to the push for continual improvement in post-war Japan and countries around the globe; quality management systems have served to prevent risk of nonconformance.

Risk management as a discipline, however, has been an evolving component of international standards. The international community started to focus on it in the 1990s but was unable to gain widespread agreement until more recently. In 2015, when the latest edition of the International Organization for Standardization (ISO) 9001 standard was released, the concept of risk-based thinking was introduced into the Quality Management System (QMS); though it had certainly been implied in previous editions. The ISO 9001:2015 edition increased emphasis on risk management.



Risk management is the process of identifying risks, determining, and employing actions to mitigate those risks, tracking those actions, and then accepting any risk remaining after actions are complete. This process involves not just thinking about risk; but, having an actual process to mitigate and track risks until they are either addressed or past the likelihood of occurring.

AS9100 is based on ISO 9001 and was updated in 2016 to include the requirements of ISO 9001:2015. The current edition, AS9100D, includes requirements for “operational risk management” or risks associated with operational processes needed to provide a product or service. It also includes a requirement to plan and implement actions to address opportunities. Addressing both risks and opportunities not only increases the effectiveness of the QMS but can also improve the bottom line.

GA is proud to be certified to the [AS9100D](#) international standard. We encourage our suppliers to also pursue certification and maintain a robust risk management program. All it takes is one bad event to learn how important risk management really is. There simply are no second chances when launching a satellite into space or launching and arresting a manned aircraft off an aircraft carrier.

CYBERSECURITY CORNER

The Department of Defense (DoD) and the Defense Industrial Base (DIB) have been working in partnership since at least 2016 to make cybersecurity a key pillar in source selection decisions. Since 2018, GA has considered compliance with cybersecurity standards to be a key gate in our supplier qualification process.

The DoD Chief of Information Office and the Director of the **Cybersecurity Maturity Model Certification (CMMC)** policy for the Defense Department, Stacey Bostjanick, has shared an updated timeline to implementing the CMMC. Currently, CMMC is in an ongoing rulemaking process that is expected to result in an interim rule in the Defense Federal Acquisition Regulation Supplement (DFARS) in March 2023. Should this come to pass, this rule is expected to be included in contracts starting in late 2023.

The full rollout of CMMC is expected to continue through 2025. To that end, GA has established a deadline for its Suppliers to implement minimum industry-standard cybersecurity practices by August 31, 2023. Minimum industry-standard cybersecurity practices mean compliance with the National Institute of Standards and Technology



(NIST) Special Publication (SP) 800-171. Proper implementation of the NIST SP 800-171 practices will support future CMMC compliance.

GA is committed to protecting and securing critical industry information and responding vigilantly to the growing threats posed to our customers. As required by our [Supplier Code of Conduct](#), Suppliers will take all appropriate measures to combat the increasing frequency of cyberattacks. They will implement the controls and processes necessary to safeguard information under their control while reporting and mitigating any compromise of systems or information. *To learn more, visit our page [GA Supplier Cybersecurity](#).*



Powerful Partnerships: Navy Gold Coast Event

On September 6th-8th, 2022, the **San Diego Navy Gold Coast event** was held by the **National Defense Industrial Association (NDIA)**. The Navy Gold Coast event is dedicated to guiding and educating businesses to support the warfighter mission. The San Diego chapter of the NDIA played host and is a nationally ranked "Model Chapter," therefore considered one of the most influential.

GA returned to the event as a "Silver Sponsor." The GA Small Business staff attended to connect with small and medium sized businesses to discuss GA partnering opportunities. GA is committed to leveraging small businesses to bring its cutting-edge products and services to life.

Throughout the two-day event, speakers from across industry discussed important programs and outreach efforts designed to enhance partnerships with small businesses in the San Diego area with the Department of the Navy (DON).

We would like to thank the NDIA and all the Navy Gold Coast attendees for hosting such a memorable event. See you next year.

GA appreciates the support of its Suppliers. 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.