

IARPA Resilience Teaming Information – General Atomics

General Atomics is a defense and diversified technologies company, founded in 1955 as a Division of General Dynamics and acquired by the Blue family in 1986. GA and affiliated companies operate on five continents.

Finding more efficient ways to power today's complex, energy-hungry systems is an on-going challenge. General Atomics Electromagnetic Systems (GA-EMS) specializes in creating power and energy systems designed to meet that challenge and support a wide range of land, sea, and air applications. GA's Electromagnetic Systems Division produces electro-magnetic aircraft launch and recovery systems for the US Navy, satellite surveillance, electro-magnetic rail gun, high power laser, hypervelocity projectile, and power conversion systems. Recently, the first Dry Combat Submersible (DCS) featuring GA-EMS' Lithium-ion Fault Tolerant (LiFT™) battery system as an energy source was accepted by the U.S. Special Operations Command (USSOCOM).

GA-EMS locations provide more than 1.7 million square feet (ft²) of space for engineering, quality assurance, research and development, manufacturing, testing, program management, and support activities. GA-EMS has over 2,000 employees and support staff, including mechanical, electrical, systems, and software engineers, designers, control systems specialists, test specialists, information systems security professionals, quality assurance and configuration management technicians, and procurement, administrative, management, and other support personnel.

GA-EMS R&D capabilities include a myriad of fabrication ranging from chemical vapor deposition to wet chemistry facilities and include the ability to fabricate and test in inert conditions. Microstructural analysis via SEM, is available on-site as are a range of thermomechanical and nondestructive analysis techniques. Electrochemical analysis and corresponding cell fabrication is present at both coin cell and pouch cell form factors. Battery safety is a priority for GA-EMS and a complete suite of safety test capability for system assemblies is on-site.

For IARPA GA-EMS is seeking partners with high capacity and high voltage electrode materials, high voltage electrolytes. Chemistries can be primary and secondary chemistries. GA is able to work with all technology readiness levels from concept up to full manufacturing.