

# 2018 MUNITIONS EXECUTIVE SUMMIT

MUNITIONS READINESS AND MODERNIZATION:  
MEETING CURRENT AND FUTURE WARFIGHTER NEEDS



April 16 – 18, 2018

Hilton Parsippany

Parsippany, NJ

[NDIA.org/2018MES](http://NDIA.org/2018MES)

# TABLE OF CONTENTS

- WHO WE ARE 2
- EVENT INFORMATION 3
- SCHEDULE AT A GLANCE 3
- AGENDA 4
- BIOGRAPHIES 8
- SPONSORS 11
- THANK YOU TO OUR SPONSORS 14
- NOTES 15



## WHO WE ARE

The National Defense Industrial Association is the trusted leader in defense and national security associations. As a 501(c)(3) corporate and individual membership association, NDIA engages thoughtful and innovative leaders to exchange ideas, information, and capabilities that lead to the development of the best policies, practices, products, and technologies to ensure the safety and security of our nation. NDIA's membership embodies the full spectrum of corporate, government, academic, and individual stakeholders who form a vigorous, responsive, and collaborative community in support of defense and national security. For more information, visit [NDIA.org](http://NDIA.org)

# SCHEDULE AT A GLANCE

## MONDAY, APRIL 16

**Reception**  
Nobel Ballroom C  
5:00 - 6:30 pm

**Continental Breakfast**  
Nobel Assembly  
7:00 - 9:00 am

## WEDNESDAY, APRIL 18

**Registration**  
Preassembly  
7:00 - 9:00 am

**General Session**  
Nobel A/B  
7:00 am - 1:00 pm

## TUESDAY, APRIL 17

**Registration**  
Preassembly  
7:00 am - 5:00 pm

**General Session**  
Nobel A/B  
8:00 am - 5:00 pm

**Reception**  
Nobel A/B  
5:00 - 6:30 pm

# EVENT INFORMATION

## LOCATION

Hilton Parsippany  
1 Hilton Ct.  
Parsippany, NJ

## EVENT WEBSITE

[NDIA.org/2018MES](http://NDIA.org/2018MES)

## EVENT CONTACT

**K. Ashley Phayme**  
Meeting Planner  
(703) 247-2540  
[aphayme@ndia.org](mailto:aphayme@ndia.org)

## PLANNING COMMITTEE

**Tim Bagniefski**  
Event Chair

**Charles Feldmayer**  
**Kevin Knotts**  
**Bart Olson**  
**Tammy O'Meara**  
**Nicholas Perry**

**Jon Phillips**  
**Bill Sanville**  
**Lisa Spinelli**  
**Douglas Stark**  
**Matt Butler**

## EVENT THEME

Munitions Readiness and Modernization: Meeting Current and Future Warfighter Needs

## ATTIRE

Business attire for civilians or uniform of the day for military personnel.



## LEADERSHIP

**Tim Bagniefski**  
Division Chair

# MUNITIONS TECHNOLOGY DIVISION

## WHO WE ARE

NDIA's Munitions Technology Division works to maintain the open exchange of technical information among government and industry programs and technical managers, and to identify changes and trends in policy, guidance and organizational functions that affect the development, production, maintenance and demilitarization of munitions.

**SURVEY AND PARTICIPANT LIST**

A survey and list of attendees (name and organization only) will be emailed to you after the conference. NDIA would appreciate your time in completing the survey to help make our event even more successful in the future.

**SPEAKER GIFTS**

In lieu of speaker gifts, a donation is being made to the Fisher House Foundation.

**HARASSMENT STATEMENT**

NDIA is committed to providing a professional environment free from physical, psychological and verbal harassment. NDIA will not tolerate harassment of any kind, including but not limited to harassment based on ethnicity, religion, disability, physical appearance, gender, or sexual orientation. This policy applies to all participants and attendees at NDIA conferences, meetings and events. Harassment includes offensive gestures and verbal comments, deliberate intimidation, stalking, following, inappropriate photography and recording, sustained disruption of talks or other events, inappropriate physical contact, and unwelcome attention. Participants requested to cease harassing behavior are expected to comply immediately, and failure will serve as grounds for revoking access to the NDIA event.

# AGENDA

## MONDAY, APRIL 16

4:00 – 6:30 pm **REGISTRATION – SPONSORED BY ORBITAL ATK**  
PREASSEMBLY

5:00 – 6:30 pm **OPENING RECEPTION – SPONSORED BY BAE SYSTEMS OSI**  
NOBEL BALLROOM C

## TUESDAY, APRIL 17

7:00 am – 5:00 pm **REGISTRATION – SPONSORED BY ORBITAL ATK**  
PREASSEMBLY

8:00 – 8:10 am **WELCOME AND INTRODUCTIONS**  
NOBEL A/B  
**Tim Bagniefski**  
Vice President of Marketing and Business Development, General Dynamics  
Chairman, NDIA Munitions Division  
**Frank Michael**  
Senior Vice President, Programs and Membership, NDIA

8:10 – 9:00 am **OPENING REMARKS**  
NOBEL A/B  
**BG Alfred Abramson III, USA**  
Program Executive Officer- Ammunition  
**John Hedderich**  
Executive Director SES, ARDEC  
**JoEtta Fisher**  
US Army, JMC - Deputy Director, MLRC

9:00 – 10:00 am **2018 MES KEYNOTE SPEAKER**  
NOBEL A/B  
**LTG David D. Halverson, USA (Ret)**  
Chairman and CEO, Cypress International

10:00 – 10:15 am **NETWORKING BREAK – SPONSORED BY L3 DEFENSE**  
NOBEL ASSEMBLY

10:15 – 11:00 am **U.S. THREAT BRIEFING – UNCLASSIFIED**  
NOBEL A/B  
**Mike Santaspirt**  
US Army, RDECOM

11:00 – 11:45 am **US DOD BUDGET UPDATE & OUTLOOK**  
NOBEL A/B  
**Charles “Chick” Feldmayer**  
Senior Executive Service, Feldmayer Consulting

11:45 am – 1:00 pm **LUNCH – SPONORED BY GENERAL DYNAMICS**  
NOBEL C/D

1:00 – 3:15 pm **AMMUNITION ENTERPRISE CROSS- SERVICE UPDATE**  
NOBEL A/B  
**BG Alfred Abramson, III, USA**  
Program Executive Officer-Ammunition  
*Moderator*  
**John Hedderich**  
Executive Director SES, ARDEC  
**Lt Col Greg Voth, USAF**  
Air Force Liaison and Principal Advisor, AFLCM/EBH  
**Scott Rideout**  
Program Manager for Ammunition, USMC  
**JoEtta Fisher**  
Deputy for MLRC, Joint Munitions Command

3:15 – 3:30 pm **NETWORKING BREAK – SPONSORED BY L3 DEFENSE**  
NOBEL ASSEMBLY

3:30 - 4:30 pm **“THE EYE OF THE STORM”: ADDRESSING THE DRAMATIC INCREASE IN EXPLOSIVE REQUIREMENTS**  
NOBEL A/B

**Kevin Knotts**  
CEO, Azimuth Consulting  
*Moderator*

**David Dunavin**  
Director and General Manager,  
General Dynamics - OTS

**Michael Ervin**  
Director, Research and Development  
BAE Systems

**Kevin McDonald**  
President, Chemring North America

**COL Joseph H. Chan, USA**  
Project Director, Joint Services

**Col Brad Tannehill, USAF**  
Project Director - Joint Products

4:30 – 5:00 pm **INDUSTRY UPDATES: ICAP REPORT AND MIBTF REPORT**  
NOBEL A/B

**John McGuinness**  
President and CEO, American Ordnance, LLC

**Nick Perry**  
Executive Director, MIBTF

5:00 pm **ADJOURN**  
NOBEL A/B

5:00 – 6:30 pm **RECEPTION – SPONORED BY WINCHESTER AMMUNITION-MILITARY**  
NOBEL C BALLROOM

**WEDNESDAY, APRIL 18**

7:00 am – 10:00 am **REGISTRATION – SPONSORED BY ORBITAL ATK**  
PREASSEMBLY

8:00 – 8:15 am **ADMINISTRATIVE REMARKS**  
NOBEL A/B

**Tim Bagniefski**  
Vice President of Marketing and Business Development, General Dynamics  
Chairman, NDIA Munitions Division

8:15 - 9:00 am **US ARMY CROSS-FUNCTIONAL TEAMS**  
NOBEL A/B  
**COL Will McDonough, USA**  
Project Manager, CFTs (Long-Range Precision Fires)

9:00 – 9:30 am **JOINT CAPABILITIES & ACQUISITION PRIORITIES**  
NOBEL A/B  
**COL Moises Gutierrez, USA**  
Chief CAD Division, OSD-J8

9:30 - 9:45 am **NETWORKING BREAK – SPONSORED BY L3 DEFENSE**  
NOBEL ASSEMBLY

9:45 – 11:45 am **PM ACQUISITION PANEL**  
NOBEL A/B

**Bob Kowalski**  
Business Manager, Program Executive Officer-  
Ammunition  
*Moderator*

**COL Will McDonough, USA**  
Project Manager, CFTs (Long-Range Precision Fires)

**COL Joseph H. Chan, USA**  
Project Director, Joint Services

**Col Brad Tannehill, USAF**  
Project Director, Joint Products

**Joe Pelino**  
Director of Technology, ARDEC

**Matt Zimmerman**  
Deputy Project Manager, Maneuver Ammunition Systems

**William Sanville**  
Deputy Project Manager, Close Combat Systems

11:45 am - 12:00 pm **CLOSING REMARKS – ADJOURN**  
NOBEL ASSEMBLY

**Tim Bagniefski**  
Vice President of Marketing and Business Development, General Dynamics  
Chairman, NDIA Munitions Division

The NDIA has a policy of strict compliance with federal and state antitrust laws. The antitrust laws prohibit competitors from engaging in actions that could result in an unreasonable restraint of trade. Consequently, NDIA members must avoid discussing certain topics when they are together at formal association membership, board, committee, and other meetings and in informal contacts with other industry members: prices, fees, rates, profit margins, or other terms or conditions of sale (including allowances, credit terms, and warranties); allocation of markets or customers or division of territories; or refusals to deal with or boycotts of suppliers, customers or other third parties, or topics that may lead participants not to deal with a particular supplier, customer or third party.

# BIOGRAPHIES



**BG ALFRED F. ABRAMSON III, USA**

*Program Executive Officer Ammunition, Commanding General Picatinny Arsenal, New Jersey*

Brigadier General Alfred F. Abramson III became the Program Executive Officer Ammunition and the Commanding General, Picatinny Arsenal on December 29, 2017, leading the mission to develop and procure conventional and leap-ahead munitions to increase the Warfighter's combat power. Prior to this, BG Abramson served as the Deputy Program Executive Officer Ammunition and Senior Commander Picatinny Arsenal.

Brigadier General Abramson was commissioned a Second Lieutenant in the Chemical Corps after graduating from Virginia State University where he received a Bachelor of Science degree in Chemistry. Brigadier General Abramson

served in a variety of positions overseas as well as the contiguous United States to include: Battalion Chemical Officer, 6-37th Field Artillery; Smoke Platoon Leader, 172nd Chemical Company; Company Commander, 266th Quartermaster Battalion; Chemical Staff Officer, Project Manager's Office for NBC Defense; Aide-De-Camp, Soldier Biological Chemical Command; Assistant Product Manager, NBC Point Detection; Program Executive Office Liaison Officer, Coalition Forces Land Component Command; Assistant Product Manager, NBC Reconnaissance Systems; Budget Team Chief, Office of the Assistant Secretary of the Army (Acquisition, Logistics and Technology); Joint Product Manager, Biological Detection Systems; Military Assistant to the Under Secretary of the Army; Joint Project Manager for NBC

Contamination Avoidance; Executive Officer for the Principle Military Deputy Assistant Secretary of the Army (Acquisition Logistics, and Technology); and previously served as the Deputy, Joint Program Executive Officer for Chemical and Biological Defense.

His civilian education includes a Master's degree in Chemistry from Johns Hopkins University, a Master's degree in National Security and Strategic Studies from the Naval War College, and a Master's degree in Strategic Studies from the Army War College. His military education includes the Chemical Officer Basic and Advanced Courses, the Combined Arms and Services Staff School, Command and General Staff College, the Advanced Program Management Course, the Senior Service College and Senior Leaders Course.



**JOHN HEDDERICH**

*Executive Director, SES ARDEC, Munitions Engineering & Technology Center.*

John F. Hedderich III was assigned as Director of the U.S. Army Armament Research, Development and Engineering Center (ARDEC) at Picatinny Arsenal, New Jersey, on February 8, 2015.

As Director, Mr. Hedderich provides strategic leadership and managerial accountability to ARDEC's obligation of over \$1.3 billion, 64 laboratories, and a workforce of over 4,000 government and support personnel, including engineers and technical staff dedicated in delivering superior lethal and non-lethal armament solutions to the warfighter.

Prior to his current position, Mr. Hedderich was the Executive Director of the Munitions Engineering and Technology Center at ARDEC. He was responsible for providing guidance and direction to an engineering

and scientific community. He was also responsible for developing, directing and managing ARDEC investment strategies to ensure state-of-the-art facilities, people and equipment, as well as the center's extensive research, development and engineering efforts for fielding new ammo, munitions, and combat systems.

Mr. Hedderich previously served as the Director of the Armaments Engineering Technology Center from January 2007 to June 2008. He also served as Acting Director for ARDEC from November 2004 to August 2005.

Mr. Hedderich was Director for Enterprise Management from October 2003 to January 2007. In this capacity, he was responsible for ARDEC's technology base and manufacturing technology programs, strategic planning, and portfolio and knowledge management.

From June 2002 to October 2003, Mr. Hedderich served as Senior Technical Executive in the former ARDEC Close Combat Armaments Center, where he was responsible for developing and executing scientific and technology strategies for small, medium and large caliber weapons, ammunition, mines and countermine, non-lethal weapons and ammunition and special operations gear. He also served as Associate Technical Director (Systems Concepts and Technology) where he was responsible for the Armament Technology Base Program executed by ARDEC.

A career executive, he was appointed to the Senior Executive Service, the highest level of civilian government service, in November 1998.



**JOETTA FISHER**

*Director, Supply Planning Directorate HQ, Joint Munitions Command (JMC)*

Ms. Joetta Fisher is the Deputy for MLRC at Headquarters, Joint Munitions Command. She serves as the deputy to the Executive Director for Ammunition, with oversight in providing joint conventional munitions acquisition sustainment, readiness, and logistics direction for all U.S. military services and allies. She also serves as the Ammunition Management (CP-33) Career Program Representative for JMC.

From February 2014 to December 2015, she served as the Director of Supply

Planning, a directorate that consists of approximately 60 personnel responsible for developing a consolidated and integrated supply plan for all JMC products and services to include production, logistics, financial integration, and demilitarization missions. She coordinated the Command Organic Industrial Base Reviews and Sales and Operations Planning Initiatives and championed the Enterprise Integrated Logistics Strategy.

Ms. Fisher's previous assignments at JMC include: the Deputy Chief of Staff for MLRC; Chief, Readiness Assessment Division; and

team leader, Logistics Integration Planning and Execution Division. She also held various inventory and logistics management positions during her 29 years with the Joint Munitions Command.

She is a graduate of Truman State University, Kirksville, Missouri, with a bachelor's in business management. She completed the Ammunition Management Internship from the Defense Ammunition Center.



**LTG DAVID D. HALVERSON, USA (RET.)**

*CEO Cypress International, Inc.*

LTG David D. Halverson, USA (Ret.) became the Chief Executive Officer of Cypress International, Inc. in Alexandria, Virginia on 1 October. On 1 January 2018, he became the Chairman and Chief Executive Officer.

He grew up in Babbitt, Minnesota and graduated from the United States Military Academy with a Bachelor of Science Degree and was commissioned a second lieutenant in the Field Artillery. He attended the U.S. Naval Postgraduate School in Monterey, California, where he was awarded a Master of Science degree in Operations Research and Systems Analysis. He graduated from the Kenan-Flagler Business School's Executive Development Program at the University of North Carolina.

Dave's last active duty assignment was the U.S. Army Assistant Chief of Staff for Installation Management, where he transformed the business approach to the global installation management and

programmed the \$19B annual energy, general services, force protection, construction and quality of life programs for over 154 installations in the Total Army. He has served in various staff and leadership positions including command at every level from Battery to Post Command to the Commanding General of the U.S. Army Installation Management Command. He has served in Continental America, Europe, Korea, Panama, and South West Asia. His staff positions, focused on program development, testing, concept and requirement development, strategic planning, cost-benefit and risk analysis, with assignments as the Senior Military Analyst in the Joint Wargaming and Policy Division of the U.S. Southern Command in Panama, joint requirements and Army budget development in positions such as the Commander in Chief Team Chief in the Office of the Chief of Staff of the Army, Program, Analysis, and Evaluation Directorate. He was the Central Command J3, Chief of Plans, and planned, coordinated, and executed war plans for OPERATION ENDURING FREEDOM and OPERATION IRAQI FREEDOM after 9-11.

He deployed as the Deputy Commanding General (Support) for the 4th Infantry Division for OIF 5/7. After his deployment, he assumed duties on the Army Staff, as the Director of Operations, Readiness, and Mobilization, G-3 and then became the Director of Force Development, G-8, where he developed the RDT&E investment, modernization and equipping programs for the Army totaling \$200B across the POM. He transformed the training and modernization as the Commanding General of the U.S. Army Fires Center of Excellence and Fort Sill, Oklahoma, where the Air Defense and Field Artillery merged.

under one post. Dave served as the Deputy Commanding General, U.S. Army Training and Doctrine Command where the newest doctrine and concepts were developed, along with leader development, training and learning models programs were revamped.

His military education includes the Field Artillery Basic and Advanced Courses, the Armed Forces Staff College, the Army War College, and the British Higher Command and Staff College.



**KEVIN KNOTTS**

*President and CEO*  
Azimuth Consulting Services

Kevin Knotts is the president and CEO of Azimuth Consulting Service

and is a certified Project Manager Professional.

Kevin has over 30 years' experience in logistics, industrial engineering, and acquisition. The first 21 years were in Army logistics operations and acquisition as an Ordnance Officer. Kevin's assignments were in both the Army's wholesale logistics and field service organizations. His wholesale logistics experience was at the Tank and Automotive Command where he was a contracting/project officer, and later the Executive Officer to the Commanding General. His field service positions included, Army G4 Staff as the Readiness

Branch Chief, Battalion Commander, and the 1st Armored Division DISCOM XO & S3. During Desert Storm, Kevin was the Executive/Operations Officer of the 66th Maintenance Battalion supporting the 10th Special Forces Group, Operations Support Command.

Kevin traded Army Green for Corporate Grey in 1998. He cut his teeth in consulting with PricewaterhouseCoopers, and IBM focusing on industrial base supply chain logistics and acquisition. Kevin then partnered with Dr. Jay Sculley (former Assistant Secretary of the Army for Acquisition Logistics and Technology) at Horne Engineering in 2004 and established a supply chain logistics group specializing in munitions. In 2005 Kevin moved his group to CSC and in 2013 Kevin

established Azimuth Consulting Services. He is currently its president and CEO and continues to lead his management consulting company that specializes in supply chain logistics to include: supply chain management, industrial base assessments, acquisition, financial management, public private partnerships, and business process re-engineering.

Kevin holds a Bachelors of Arts degree in Economics from the Virginia Military Institute and a Masters Degree in Business Administration with a concentration in finance and accounting from Babson College. His military schooling includes the Materiel Acquisition Management Project Mangers Course and Contract Management Courses required for an unlimited Procuring Contracting Officer's (PCO's) Warrant.

# SPONSORS



## WINCHESTER AMMUNITION-MILITARY

### CONFERENCE RECEPTION SPONSOR

Considered one of the world's leading ammunition manufacturers, Winchester has built its reputation on delivering innovative ammunition products, providing top-shelf customer service and demonstrating industry leadership. Our legacy in servicing U.S. warfighters runs deep, with decades of support at the highest levels including delivering technologically advanced products for its U.S. warfighters. From our research and development efforts to our manufacturing processes, we understand the value of product quality and performance in critical moments.

With a reputation steeped in tradition, we have earned the moniker, 'The American Legend' by delivering on our commitment to excellence in everything we do.

Winchester's manufacturing operations include a state-of-the-art manufacturing facilities in Oxford, MS and East Alton, IL.

E-mail: [winmilitary@olin.com](mailto:winmilitary@olin.com)  
Phone: 662-281-7929  
[Winchestermilitary.com](http://Winchestermilitary.com)



## GENERAL DYNAMICS

### TUESDAY LUNCH SPONSOR

General Dynamics Ordnance and Tactical Systems empowers the U.S. military and its allies with an extensive range of overarching product segments applied across all levels of strategic and tactical operations. A business unit within the Combat Systems Group of General Dynamics, we are a world leader in the manufacture of large, medium and small caliber direct and indirect-fire munitions; and a leader in the development and production of lightweight tactical vehicles, weapons and armament systems. The company designs and produces shaped charge and penetrator warheads; and manufactures precision metal components for missiles, rockets and composite structures for the commercial, aerospace and defense markets. The company also produces propellants and non-lethal and force-protection products; and provides

explosive load, assemble and pack services for a variety of munitions, tactical missile and rocket programs. Our explosive array of capabilities and services include innovative engineering and design, advanced modeling, simulations, system integration and management, precision machining and forging, as well as testing and evaluation. Combining proven ammunition development and production capabilities with advanced research and development strengths in key technological areas, we continue to meet the needs of the armed forces of the United States, its friends and allies with the highest quality "best value" combat solutions. More information about General Dynamics Ordnance and Tactical Systems is available online at [www.gd-ots.com](http://www.gd-ots.com).



## REGISTER TODAY

### 61<sup>ST</sup> ANNUAL FUZE CONFERENCE

May 15 – 17, 2018

Marriott San Diego Mission Valley

San Diego, CA

[NDIA.org/Fuze18](http://NDIA.org/Fuze18)

**BAE SYSTEMS**

**BAE SYSTEMS OSI**

**OPENING RECEPTION SPONSOR**

Headquartered in Radford, Virginia, BAE Systems Ordnance Systems Inc. (OSI) operates the Holston and Radford Army ammunition plants in support of U.S. Department of Defense (DoD) and commercial requirements. In addition to production, OSI provides a host of ammunition related services including modernization program management, inventory management, and energetics research and development.

Holston Army Ammunition Plant is the single source for U.S. DoD high explosives. Portfolio product mix includes RDXs, HMXs, IMXs, and PBXs. Radford Army Ammunition Plant is the single source for high-volume U.S. DoD Nitrocellulose / Propellants.

Portfolio product mix includes Nitrocellulose, single-base propellants, multi-base propellants and rocket propellants.

OSI is an innovation leader in next generation explosives and propellants development thru its robust IR&D program. OSI is an active supporter of U.S. DoD and commercial product development through a wide variety of CRAD programs. In addition, OSI has provided total Program Management for all modernization projects conducted at its two ammunition plants. This extensive program includes modernization planning, project management, design, construction, and prove-out of a wide variety of projects.



**MUNITIONS INDUSTRIAL BASE TASK FORCE**

**AGENDA SPONSOR**

The Munitions Industrial Base Task Force (MIBTF) is a consortium of defense companies formed to advocate for the continued health and viability of the Nation's munitions industrial base. Created twenty five years ago in response to an existential threat, we have worked constantly to enhance the knowledge and understanding of decision makers and organizations in government and industry. That knowledge and understanding are key to ensuring adequate funding and policy support for sustainment of a responsive, capable U.S. munitions industrial base able to develop, produce, and support

superior munitions for the U.S. and its allies. The Task Force is comprised of small, medium and large companies – and serves as the single unified voice on the status of the entire munitions industrial base, on concerns relevant to preservation of key capabilities for U.S. national security, and on recommended actions tailored to effect that preservation. The Task Force remains a strong, credible advocate for our industry in its interactions with the Department of Defense, the Congress, and other sectors of the total defense Industrial base.



**PacSci EMC**

**AGENDA SPONSOR**

Pacific Scientific Energetic Materials Company (PacSci EMC) is the leader in energetic component / system technology and lean manufacturing. Whether you require defense or commercial pyrotechnic solutions, we work as a partner to address your unique program or technical needs. Off-the-shelf, semi-custom or fully-customized, our team takes a proactive approach, leveraging our decades of engineering and chemical experience throughout the design process. At PacSci EMC, we produce energetic solutions that work as commanded, when commanded, while providing superior reliability and safe energetic performance.

Our production facilities in Chandler, Arizona and Hollister, California are comprised of more than 300,000 square feet, including engineering, manufacturing, and testing. We utilize the most comprehensive engineering design and analysis tools, including Solid Works 3D Modeling & Drawings, COSMOS

Module For Structural & Static Analysis, ProEngineer 3D and have 3D printing capability onsite. In addition, we also incorporate industry-leading analytical tools such as PEPCAL, CHETA, OSLO and SYNOPSIS - all critical for product design and optimal performance.

At PacSci EMC, our engineering and design expertise supports multiple product lines, encompassing ESAD/ESAF, CAD/PAD, Linear Explosives, Electronic & Laser Initiated Ordnance Systems (LIOS), Missile Attitude Control/Divert Thrusters, including cubesat and smallsat Modular Architecture Propulsion System (MAPS™). We also offer Vehicle Arresting systems and extreme environment oil exploration networked ordnance systems. PacSci EMC offers munition solutions for land, sea and air that aides in the support of the warfighter.

To find out more about our unique capabilities and products, please visit [www.psemc.com](http://www.psemc.com)

**REGISTER TODAY!**

**INTERNATIONAL EXPLOSIVES SAFETY SYMPOSIUM & EXPOSITION**

August 6 – 9, 2018

Sheraton San Diego Hotel & Marina  
San Diego, CA

[NDIA.org/Intl-Explosives-Safety](http://NDIA.org/Intl-Explosives-Safety)

THANK YOU TO OUR SPONSORS



**GENERAL DYNAMICS**  
Ordnance and Tactical Systems

**BAE SYSTEMS**



**PACSCI EMC**



NOTES

Lined area for notes, consisting of horizontal lines on a white background.



**REGISTER TODAY!**



## **2018 ARMAMENT SYSTEMS FORUM**

May 7 – 10, 2018

Sheraton Indianapolis Hotel at Keystone Crossing

Indianapolis, IN

[NDIA.org/Armament-Forum](http://NDIA.org/Armament-Forum)

