



# 44<sup>th</sup> ANNUAL GUN & MISSILE SYSTEMS CONFERENCE & EXHIBITION

*“Shaping The Future in Weapon System  
Development, Deployment, and Reset”*

APRIL 6-9, 2009  
[WWW.NDIA.ORG/MEETINGS/9590](http://WWW.NDIA.ORG/MEETINGS/9590)

HYATT REGENCY CROWN CENTER ► KANSAS CITY, MO

EVENT #9590

# 44TH ANNUAL GUN & MISSILE SYSTEMS CONFERENCE & EXHIBITION

**APRIL 6-9, 2009 ▶ KANSAS CITY, MO**

The 44th Annual NDIA Armament Systems: Gun and Missile Systems Conference and Exhibition will address the theme, "Shaping The Future in Weapon System Development, Deployment, and Reset." The conference will provide a forum for discussing methods to enhance defense-related capabilities—not only through available technology, but also through development of personnel. A broad range of topics related to design and development of technology and training, and development of people in the gun and missile system industry will be presented.

The full scope of gun and missile tactical weaponry and related components will be discussed including: direct/indirect/precision fire systems, tactical rockets and missiles, energetics, effectiveness, modeling and simulation, platform integration and emerging technologies. Representatives of the U.S. and international defense communities, including both government and industry members are invited to participate.

## GUN & MISSILE SYSTEMS LEADERSHIP

**Armaments Division Chair:** Mr. David Broden, *Broden Resource Solutions, LLC*

**Gun & Missile Committee Chair:** Mr. Brian Tasson, *Alliant Techsystems, Inc.*

**Conference Chairman:** Mr. Scott Martin, *Raytheon*

**Conference Co-Chairs:** Mr. Robert Glantz, *Alliant Techsystems, Inc.*; Mr. Greg Hill, *Meggitt Defense Systems*

## GUN & MISSILE SYSTEMS SESSION CHAIRS

**Requirements and Program Trends:** Mr. Matthew Diehl, *General Dynamics-ATP*; Mr. James Ripley, *United States Marine Corps*

**Emerging Technologies:** Mr. Robert Glantz, *Alliant Techsystems, Inc.*; Mr. Michael Till, *NSWC/Dahlgren*

**Energetics:** Mr. Joseph Buzzett, *General Dynamics - OTS*; Mr. Michael Thornton, *NSWC/Indian Head*

**Ammunition:** Mr. Matt Solverson, *General Dynamics - OTS*; Mr. Charles Cording, *U.S. Army, PM, MAS*

**Tactical Rockets & Missiles:** Mr. Ed De Pasquale, *Nammo Talley*; Mr. Anthony Gabriele, *RDECOM-ARDEC Benet Labs*

**Precision Weapons:** Mr. Enrico Mutascio, *Esterline Defense Group*; Mr. James Talley, *General Dynamics-ATP*

**Platforms & Weapon Systems Integration:** Mr. Steven French, *BAE Systems*; Mr. CJ Toombs, *NAVAIR-WD, China Lake*

**Effectiveness:** Mr. Greg Hill, *Meggitt Defense Systems*; Mr. Steven Piper, *Pacific Coast International*

## GENERAL CONFERENCE INFORMATION:

*During conference registration and check in, each participant will be issued an identification badge. Please be prepared to present picture ID. Badges must be worn at all conference functions.*

*Proceedings will be available on the web one to two weeks after the conference through the Defense Technical Information Center (DTIC). You will receive notification via email that proceedings are posted and available.*

*Appropriate dress for this conference is business casual for civilians and Class B uniform or uniform of the day for military.*

## MONDAY, APRIL 6

- 10:00 am - 3:00 pm**     **EXHIBITOR MOVE-IN**
- 12:00 pm - 5:00 pm**     **REGISTRATION**
- 2:00 pm - 3:00 pm**     **TRAINING SESSION A - ATLANTA BALLROOM**  
Lessons Learned in EVM Control Account Analysis and Design, *Mr. Thomas Cowles, Raytheon Space and Airborne Systems*
- 3:00 pm - 4:00 pm**     **TRAINING SESSION B - ATLANTA BALLROOM**  
Changes in DoD 5000, *Ms. Karen Byrd, Defense Acquisition University*
- 5:00 pm - 6:00 pm**     **EXHIBIT HALL OPEN & WELCOME RECEPTION**

## TUESDAY, APRIL 7

- 7:00 am - 5:00 pm**     **REGISTRATION**
- 7:00 am - 8:00 am**     **CONTINENTAL BREAKFAST IN FOYER**
- 8:00 am - 8:15 am**     **WELCOMING REMARKS & CONFERENCE OVERVIEW**  
Mr. Bob Glantz, *NDIA Conference Co-Chair; Alliant Techsystems, Inc.*  
Mr. Brian Tasson, *NDIA Gun & Missile Chairman; Alliant Techsystems, Inc.*
- 8:15 am - 8:20 am**     **NDIA 2010 GUN & MISSILE/SMALL ARMS JOINT SYMPOSIUM**  
Mr. Greg Hill, *2010 NDIA Conference Chair; Meggitt Defense Systems*
- 8:20 am - 8:30 am**     **NDIA ARMAMENTS DIVISION UPDATE**  
Mr. Dave Broden, *NDIA Armaments Division Chair; Broden Resource Solutions*
- 8:30 am - 9:00 am**     **KEYNOTE ADDRESS:**  
Mr. Chris Deegan, *Executive Director, Integrated Warfare Systems, PEO IWS*
- 9:00 am - 9:30 am**     **KEYNOTE ADDRESS:**  
Mr. Darren McConnell, *Director, Systems Engineering & Integration, Redstone Arsenal*
- 9:30 am - 10:00 am**     **BREAK IN EXHIBIT HALL**
- 10:00 am - 12:25 pm**     **GENERAL SESSION - "REQUIREMENTS AND PROGRAM TRENDS"**
- 10:00 am - 10:20 am**     Definition of CEP and the Warfighter Benefits of Precision, *Mr. Jim Rodrigue, Raytheon Missile Systems*
- 10:20 am - 10:40 am**     Design Tools to Reduce Development and Deployment, *Mr. Bernard Halls, MSAIC NATO*
- 10:40 am - 11:00 am**     Demilitarization as a Systems Engineering Requirement, *Mr. Gary Mescavage, U.S. Army ARDEC - Picatinny*
- 11:00 am - 11:20 am**     Design for Demil Efforts at GD-OTS, *Mr. David Grymonpre, General Dynamics - OTS*
- 11:20 am - 12:05 pm**     Panel Discussion - Demilitarization, *U.S. Army*
- 12:05 pm - 12:25 pm**     PEO-AMMO PD Non-standard Ammo Initiative, *Mr. William Sanville*
- 12:25 pm - 1:25 pm**     **LUNCH IN PERSHING HALL**

**1:25 pm - 5:10 pm**      **CONCURRENT SESSIONS**

**ATLANTA BALLROOM**

**EMERGING TECHNOLOGIES**

- 1:30 pm - 1:50 pm**      Large Caliber Gun Assembly Safety Certification – US Approach, *Mr. David Smith, U.S. Army RDECOM Benet Laboratories*
- 1:50 pm - 2:10 pm**      7787 - Revolutionary Insensitive, Green and Healthier Training Technology with Reduced Adverse Contamination (RIGHTTRAC) Technology Demonstrator Program, *Mr. Patrick Brousseau, DRDC Valcartier*
- 2:10 pm - 2:30 pm**      77863 - Flowform, Lightweight Machine Gun Barrel, *Mr. Matthew Fonte, Dynamic Flowform Corp.*
- 2:30 pm - 2:50 pm**      7899 - Optical Communication, Powering and Data Transfer Technology to Eliminate Internal Wirings and Umbilical Cords, *Dr. Jahangir Rastegar, Omnitek Partners, LLC*

**NEW YORK BALLROOM**

**ENERGETICS**

- 1:30 pm - 1:50 pm**      Marine Corps Total Life Cycle Management Value Stream Deployment, *Mr. Gale Heavilin*
- 1:50 pm - 2:10 pm**      7885 - Novel Techniques for Improved Munitions Development, *Mr. Gert J.H.G Scholtes, TNO Defence, Security and Safety*
- 2:10 pm - 2:30 pm**      7781 - High Density, Multi-Granulation, Propelling Charge Design, *Mr. Robert Pulver, General Dynamics-OTS*
- 2:30 pm - 2:50 pm**      7782 - ECL® Propellant Demonstration of Extended Range in 120mm Mortar Combined with Ballistic and Chemical Stability Equals Win for the Warfighter, *Mr. Howard Shimm, U.S. Army ARDEC - Picatinny*
- 2:50 pm - 3:10 pm**      7925 - Advanced Celluloid Technology for the 120mm Mortar Propelling Charges, *Mr. Brian Talley, U.S. Army ARDEC - Picatinny*

**2:50 pm - 3:30 pm**      **BREAK IN EXHIBIT HALL**

- 3:30 pm - 3:50 pm**      Rarefaction Wave Gun Tank Main Armament Demonstrator, *Mr. Erick Kathe, ARDEC Benet Labs*
- 3:50 pm - 4:10 pm**      7938 - Technology Innovations Realized in the M150/M151 Dismounted Fire Control System Development, *Mr. Ralph Tillinghast, U.S. Army ARDEC - Picatinny*
- 4:10 pm - 4:30 pm**      7772 - Development of a Projectile Muzzle Exit Sensor, *Mr. Don Levin, Aberdeen Test Center*
- 4:30 pm - 4:50 pm**      7917 - Advances in High Performance, Non-Metallic Engineering Materials, *Mr. Victor C.F. Hillyard, Ensinger, Inc.*

- 3:30 pm - 3:50 pm**      7924 - Environmentally Friendly 120mm LED Tank Ammunition Tracer, *Mr. John Kostka, U.S. Army ARDEC - Picatinny*
- 3:50 pm - 4:10 pm**      7858 - Highly Energetic Materials Incorporated into New Warhead Designs, *Dr. Charles Kline, Kline Technical Consulting, LLC*
- 4:10 pm - 4:30 pm**      7784 - Processing of Aluminum-Based Nanothermites in a Circulating Mixer, *Dr. Jacek Swiatkiewicz, Innovative Materials and Processes, LLC*
- 4:30 pm - 4:50 pm**      7759 - Gun Propellant For The 27mm Cal. Gun Eurofighter Jet, *Mr. Dietmar Mueller, Fraunhofer Institut Chemische Technologies*
- 4:50 pm - 5:10 pm**      7783 - Improved LW30 Ammunition via Ballistic and Chemical Stability of ECL® Propellant and Improved Ignition System, *Ms. Kelly Moran, Alliant Techsystems, Inc.*

**5:10 pm - 6:30 pm**      **RECEPTION IN EXHIBIT HALL**

**WEDNESDAY, APRIL 8**

- 7:00 am - 5:00 pm**      **REGISTRATION**
- 7:00 am - 8:00 am**      **CONTINENTAL BREAKFAST IN FOYER**
- 8:10 am - 11:50 am**      **CONCURRENT SESSIONS**

## ATLANTA BALLROOM

### EMERGING TECHNOLOGIES

- 8:00 am - 8:20 am** 7819 - The Combustion Light Gas Gun - A Progress Update, *Mr. David Kruczynski, UTRON, Inc.*
- 8:20 am - 8:40 am** 7972 - A New Method for Fabricating Copper Rotating Bands on Munitions, *Mr. Michael Minnicino, Aberdeen Proving Ground*

### AMMUNITION

- 8:45 am - 9:05 am** 7741 - Super 40mm High Explosive Air Burst - Shaping the Future, *Mrs. Kara Sims, General Dynamics - OTS*
- 9:05 am - 9:25 am** 7742 - 30x113mm Target Practice Spotter Cartridge - Shaping the Future, *Mr. Paul Reynolds, General Dynamics - OTS*

### 9:25 am - 10:10 am BREAK IN EXHIBIT HALL

- 10:10 am - 10:30 am** 7743 - 30x113mm Programmable Air Burst Munitions - Shaping the Future, *Mr. Paul Reynolds, General Dynamics - OTS*
- 10:30 am - 10:50 am** 7921 - HERO Compliant Electric Primer for Tank Ammunition, *Mr. Jason Mishock, U.S. Army ARDEC - Picatinny*
- 10:50 am - 11:10 am** 7922 - Warhead Development for the Long Range Land Attack Projectile, *Mr. Tyrus Burford, General Dynamics - OTS*

### 11:50 am - 1:15 pm AWARDS LUNCH

### 1:15 pm - 4:00 pm CONCURRENT SESSIONS

- 1:15 pm - 1:35 pm** 7794 - Medium Caliber Ammunition, *Dr. Rao Yalamanchili, U.S. Army ARDEC - Picatinny*
- 1:35 pm - 1:55 pm** Lightweight Polymer Cased Ammunition Cartridges, *Mr. Paul McElroy, Temeku Technologies, Inc.*

## NEW YORK BALLROOM

### ENERGETICS

- 8:00 am - 8:20 am** 7754 - Reactive Material Ignition, Output & Explosive Neutralization Assessment, *Mr. Steven Kim, NSWC Indian Head*
- 8:20 am - 8:40 am** 7863 - Consolidation of 105mm Artillery M67/M200 into Single Charge System, *Ms. Kelly Moran, Alliant Techsystems, Inc.*

### TACTICAL ROCKETS & MISSILES

- 8:45 am - 9:05 am** 7946 - Adaptive Flight Control Surfaces: Revolutionizing Missile and Munition Flight Control Systems, *Professor Ronald Barrett, University of Kansas, Aerospace Engineering Department*
- 9:05 am - 9:25 am** Flowforming of Components for Tactical Rockets is both Practical and Economically Feasible, *Mr. Matthew Fonte, Dynamic Flowform Corp.*

- 10:10 am - 10:30 am** Rapid PAn Evaluation of the Fire Appreciation Modelling, *Captain Hakan Gurkan, Turkish Air Force 3rd Air Support Maintenance Center*
- 10:30 am - 10:50 am** 7738 - IM Explosive for SMAW HEAA Warhead, *Ms. Nancy Johnson, NSWC Indian Head*
- 10:50 am - 11:10 am** 7918 - GMLRS Rod Payload, *Ms. Renita Friese, General Dynamics - OTS*
- 11:10 am - 11:30 am** Rocket Trainer, *Nammo Talley*
- 11:30 am - 11:50 am** AARGM, *Alliant Techsystems, Inc.*

- 1:15 pm - 1:35 pm** 7919 - Development and Fielding of the Guided Multi-Launch Rocket System (GMRLS) Unitary Warhead, *Ms. Renita Friese, General Dynamics - OTS*
- 1:35 pm - 1:55 pm** 7948 - Hovering Missiles: New Tools for Target ID, Interior Precision Strike, Friendly Fire Mitigations and Persistent Suppression, *Professor Ronald Barrett, University of Kansas, Aerospace Engineering Department*
- 1:55 pm - 2:15 pm** 7943 - ETF (Electronics Test Fuze) - A Flight Platform for Test and Evaluation of Water Piercing Missile Launcher (WPML) Systems, *Mr. Michael Irwin, NSWC/Dahlgren*

**2:15 pm - 2:35 pm**      **BREAK IN EXHIBIT HALL**

**2:35 pm - 7:00 pm**      **EXHIBIT HALL CLOSES & EXHIBITOR MOVE-OUT**

**ATLANTA BALLROOM**

**PRECISION WEAPONS**

- 2:40 pm - 3:00 pm**      7713 - Issues to be Considered in Collateral Damage with Projectiles, *Mr. Chris Geswender, Raytheon Missile Systems*
- 3:00 pm - 3:20 pm**      7949 - Joint Development of a Non-Magnetic Azimuth Sensor for Dismounted Targeting Operations in All Environments, *Ms. Kate Jones, NSWC/Dahlgren*
- 3:20 pm - 3:40 pm**      7856 - Control of a Fin Stabilized High Spinning Projectile, *Mr. Rabin Shalil, MalaM, IAI, Israel*
- 3:40 pm - 4:00 pm**      7895 - BTERM II Projectile, *Mr. Mike Lukas, Naval Surface Warfare Center/Dahlgren Division*

**NEW YORK BALLROOM**

**PLATFORMS & WEAPON SYSTEMS INTEGRATION**

- 2:40 pm - 3:00 pm**      7861 - Integrating Robotic Platforms and Non-Lethals for the Future Warfighter, *Mr. Edward Hackett, EH-Group, Inc.*
- 3:00 pm - 3:20 pm**      7775 - Paladin Armament Upgrade through Integration of NDI Technology, *Mr. Peter Henry, BAE Systems*
- 3:20 pm - 3:40 pm**      Mk-45 Stabilized Gun System, *Mr. Steve Cannon, NSWC*

**4:00 pm**      **CONFERENCE ADJOURNS FOR THE DAY**

**THURSDAY, APRIL 9**

**7:00 am - 12:00 pm**      **REGISTRATION**

**7:00 am - 8:00 am**      **CONTINENTAL BREAKFAST IN FOYER**

**8:00 am - 12:20 am**      **CONCURRENT SESSIONS**

**PRECISION WEAPONS**

- 8:00 am - 8:20 am**      7876 - Precision Guidance Kit (PGK) System Development and Demonstration (SDD) Status Update, *Mr. Doug Storsved, ATK Advanced Weapons*
- 8:20 am - 8:40 am**      7937 - Precision Urban Mortar Attack, *Mr. Bryan Freeman, NSWC/Dahlgren*
- 8:40 am - 9:00 am**      7793 - Flight Control 81mm Mortar, *Mr. Sanford Steelman III, NSWC/Dahlgren*
- 9:00 am - 9:20 am**      7729 - EndFire Proximity Sensor, *Mr. Robert Hertlein, L3-KDI Precision Products*

**EFFECTIVENESS**

- 8:00 am - 8:20 am**      7839 - Driving Affordable Common Solutions with Mission Analysis, *Mr. Andrew Hinsdale, Raytheon Missile Systems*
- 8:20 am - 8:40 am**      Simulation-based Development and Optimization of Advanced Gun Weapon Systems, *Mr. Dave Cooper, BAE Systems*
- 8:40 am - 9:00 am**      8151 - 25mm Ammunition Development for the JSF, *Mr. Martin van de Voorde, TNO Defence, Security and Safety*
- 9:00 am - 9:20 am**      Simulation-Based, Effects-Driven CONOPS and Growth Strategy Development, *Mr. Dave Cooper, BAE Systems*
- 9:20 am - 9:40 am**      7906 - Trajectory Matching Procedure/Practice for a Guided Projectile using MATLAB/Simulink, *Ms. Yin Chen, U.S. Army ARDEC - Picatinny*

10:00 am - 10:20 am

BREAK IN FOYER

## ATLANTA BALLROOM

### PLATFORMS & WEAPON SYSTEMS INTEGRATION

- 10:20 am - 10:40 am** 7744 - Warship Upgrades to Utilize Modern Standard Missile, *Mr. Newell (Butch) Young, Raytheon Missile Systems*
- 10:40 am - 11:00 am** 7914 - Qualification Testing of High Rate of Fire Gun Systems, *Mr. David Maher, General Dynamics Armament and Technical Products*
- 11:00 am - 11:20 am** 7961 - 40mm Cased Telescoped Weapon System Comes to Maturity Advancing the State of the Art, *Mr. David Leslie, BAE Systems*
- 11:20 am - 11:40 am** 155mm Third Generation Maritime Fire Support (TMF), *Mr. Rob McClure*



12:20 pm

CONFERENCE ADJOURNS

## NEW YORK BALLROOM

### EFFECTIVENESS

- 10:20 am - 10:40 am** 7970 - A Numerical Method to Predict the Spin Behavior of Despun Munitions, *Mr. Michael Minnicino, Aberdeen Proving Grounds*
- 10:40 am - 11:00 am** 7745 - Evolving Artillery Operational Concepts from Guided Projectiles, *Mr. Chris Geswender, Raytheon Missile Systems*
- 11:00 am - 11:20 am** 7810 - Trajectory Simulation of the Ejected Vent Plugs during Premature Fuze Detonation of the 81mm, M879 Full Range Practice Mortar Cartridge, *Mr. Seungeuk Han, U.S. Army RDECOM-ARDEC*
- 11:20 am - 11:40 am** 7912 - Modeling and Simulation Advances in Large Caliber Muzzle Brake Development, *Mr. Daniel Cler, U.S. Army RDECOM/ARDEC/WSEC/Benet Laboratories*
- 11:40 am - 12:00 pm** 7923 - Effectiveness of ABM, *Mr. Pascal Paulissen, TNO Defence, Security and Safety*
- 12:00 pm - 12:20 pm** 7915 - A Different Approach to Determining Weapon System Caliber, *Mr. Moban Palathingal, U.S. Army ARDEC - Picatinny*

## **HOTEL PARKING**

### **VALET:**

Short term (in & out the same day): \$9.00

Overnight: \$17.00 - with in/out privileges.

### **SELF PARKING:**

Overnight: \$13.50 with in/out privileges.

Banquet Validation: \$4.00 (3 hours)

Early Bird (in before 10am & out the same day): \$7.00

This hotel cannot accommodate vehicles that are taller than 6'9" (i.e. no motorhomes/tall vans, etc).

## **AIRPORT INFORMATION**

### **FROM AIRPORT:**

KCI Super Shuttle (Hours 5:50am-11:25pm): \$17.00 per person - \$29.00 round trip per person. Leaves from Baggage Claim area at 5 minutes to the hour and 25 minutes after the hour. Reservations are not required. For additional info, please call KCI Shuttle service at 800-243-6383.

Shuttle Service is wheelchair accessible with chair lifts. (Maroon vans and buses with yellow lettering that say KCI Shuttle.)

TAXI: Approx \$35.00-\$40.00

## **DIRECTIONS FROM AIRPORT**

From Kansas City International Airport (20 miles): Take I-29 South to U.S. 169 South (169 turns into Broadway). Proceed on Broadway to 20th Street. Turn left (east) and proceed to McGee Street. Turn right onto McGee Street. Hotel is 3 blocks uphill on left.



# Thank You to Our Promotional Partner!



ATK is a premier aerospace and defense company with \$4.6 billion in annual sales, more than 17,000 employees, and operations in 21 states. We bring non-traditional approaches to the market, with speed and innovation. With more than 30 years of proven performance in developing and producing small, medium and large caliber tank, artillery, mortar and gun ammunition with guided and unguided capabilities, ATK has signature expertise in delivering timely, advanced and affordable capabilities with reliable performance – in many cases economically upgrading current inventories with force multiplier affect.

ATK is the world's largest manufacturer of small- and medium-caliber ammunition. Our military and commercial ammunition portfolio spans from 5.56mm through .50 caliber for handguns, shotguns, and rifles and 20mm, 25mm, and 30mm rounds for air, land, and sea platforms. ATK is expanding the armaments business to provide survivability and lethality solutions and also pioneering the development of enhanced tactical ammunition, air bursting munitions, next generation energetics, and advanced propellants.

As the world's top producer of battle-proven weapon systems with unmatched reliability and lethality, ATK produces the Bushmaster medium-caliber chain gun for ground, naval and air armament to include the M242 25mm cannon for the Bradley Fighting Vehicle, the MK44 30/40mm cannon selected for the U.S. Marine Corps' Expeditionary Fighting Vehicle, and the 30mm M230 cannon for the AH-64/AH-64D Apache Longbow helicopters. It also produces the Mk19 Grenade Machine Gun and the Palletized Autonomous Weapon System (PAWS).

ATK has developed several breakthrough advanced weapon systems and is currently the systems integrator for the development and production of both conventional and guided systems. These include the development of artillery Precision Guidance Kit (PGK), Excalibur 1b, next generation 120mm tank ammunition, Individual Airburst Weapon System (IAWS), Multi-Stage Supersonic Target (MSST) and the development and low rate initial production of the Advanced Anti-Radiation Guided Missile (AARGM).

ATK is the world leader in the design, development, and production of solid rocket propulsion systems for space, strategic-missile defense, and tactical applications. Our tactical rocket motor portfolio includes propulsion systems for air-to-air, air-to-surface, surface-to-air, and surface-to-surface missiles and forms the backbone for tactical missile defense weapons systems. Using state-of-the-art guidance, navigation and control systems, targeting systems, high-energy propellants, and advanced warheads, ATK is developing weapons, such as the Guided Advanced Tactical Rocket (GATR), that will fly farther, faster, and strike targets with unprecedented precision and lethality at affordable procurement cost.

Additional ATK news and information can be found at [www.atk.com](http://www.atk.com).

## ADDITIONAL AUTHORS

<b>Abstract ID</b>	<b>Abstract Title</b>	<b>Secondary Authors</b>
7738	IM Explosive for SMAW HEAA Warhead	Mrs. Carrie Gonzalez, Mr. Wayne Reed, Ms. Laura Kowalczyk, Mr. William Myers
7744	Warship Upgrades to Utilize Modern Standard Missile	Mr. Vineet Daga
7745	Evolving Artillery Operational Concepts from Guided Projectiles	Mr. Steve Bennett, Mr. David Brockway
7749	Cluster Munition Demilitarization at GD-OTS	Mr. Wilfried Meyer, Mrs. Carol Sabat
7754	Reactive Material Ignition, Output & Explosive Neutralization Assessment	Mr. Dan Lanterman, Mr. Brian Amato, Mr. Gerry Laib, and Mr. Kendall Elliott
7759	Gun Propellant For The 27 mm Cal. Gun Eurofighter Jet	Dr. Dietmar Mueller, Mr. Walter Langlotz
7772	Development of a Projectile Muzzle Exit Sensor	Mr. Arthur Krenzel, Mr. George Cawrse
7775	Paladin Armament upgrade through integration of NDI technology	Mr. Bart Anderson
7779	Precision Extended Range Munition	Mr. George Barnych, Mr. Patrick Freemyers
7781	High Density, Multi-Granulation, Propelling Charge Design	Mr. Daniel Lapage
7782	ECL® Propellant Demonstration of Extended Range in 120mm Mortar Combined with Ballistic and Chemical Stability Equals Win for the Warfighter	Mr. Howard Shimm, Mr. Dominik Antenen, Mr. Peter Zoss, Dr. Ulrich Schaedeli
7783	Improved LW30 Ammunition via Ballistic and Chemical Stability of ECL® Propellant and Improved Ignition System	Mr. Bishara Elmasri, Mr. Dominik Antenen, Dr. Ulrich Schaedeli, Mr. Howard Shimm
7784	Processing of Aluminum-Based Nanothermites in a Circulating Mixer	Dr. Jacek Swiatkiewicz, Dr. Kelvin Higa
7787	Revolutionary Insensitive, Green and Healthier Training Technology with Reduced Adverse Contamination (RIGHTTRAC) Technology Demonstrator Program	Dr. Sylvie Brochu, Mr. Marc Brassard, Dr. Guy Ampleman, Dr. Sonia Thiboutot
7790	Design for Demil Efforts at GD-OTS	Mrs. Carol Sabat, Mr. Wilfried Meyer
7791	Lightweight Polymer Cased Ammunition Cartridges	Dr. Andrea Hoyt-Haight, Dr. Peter Poulsen, Dr. Ronald Allred, Dr. Jan Gosau
7794	Environmentally Friendly Electric Primers for Medium Caliber Ammunition	Mr. John Hirlinger, Mr. Chris Csernica
7819	The Combustion Light Gas Gun – A Progress Update	Mr. Dennis Massey
7839	Driving Affordable Common Solutions with Mission Analysis	Mr. Daniel Cheeseman, Mr. David Stone
7858	Highly Energetic Materials Incorporated into New Warhead Designs	Dr. Vivek Dave
7861	Integrating Robotic Platforms and Non-Lethals For the Future Warfighter	Ms. Charlotte Hallengren
7863	Consolidation of 105mm Artillery M67/M200 into Single Charge System	Mr. Dominik Antenen, Mr. Michael Ramin, Dr. Ulrich Schaedeli, Mr. Nguyen Tran
7885	Novel techniques for improved munitions development	Mr. Gert Scholtes, Mr. Wim de Klerk, Mr. Chris van Driel, Mr. Martijn Zebregs
7890	Definition of CEP and the Warfighter Benefits for Precision Projectiles	Mr. Jon Peoble

7899	Optical Communication, Powering and Data Transfer Technology to Eliminate Internal Wirings and Umbilical Cords	Mr. Carlos Pereira, Dr. Harbans Dhadwal
7906	Trajectory Matching Procedure/Practice for a Guided Projectile Using MATLAB/Simulink	Mr. Thomas Recchia
7912	Modeling and Simulation Advances in Large Caliber Muzzle Brake Development	Mr. Robert Carson, Mr. Mark Doxbeck, Mr. Jeffrey Greer, Mr. Mark Witherell
7914	Qualification Testing of High Rate of Fire Gun Systems	Mr. Douglas Parker
7915	A Different Approach to Determining Weapon System Caliber	Mr. Yu Lu, Mr. Mihaly Horvath, Mr. Daniel Vo
7917	Advances in High Performance, Non Metallic Engineering Materials	Ms. Kim Reddick
7918	GMLRS Rod Payload	Mr. Gary Jimmerson
7919	Development and Fielding of the Guided Multi-Launch Rocket System (GMRLS) Unitary Warhead	Ms. Tracey Westmoreland
7921	HERO Compliant Electric Primer for Tank Ammunition	Mr. Jason Mishock
7922	Warhead Development for the Long Range Land Attack Projectile (LRLAP)	Mr. Aaron Warriner
7923	Effectiveness of ABM	Mr. Theo Verhagen, Mr. Eelko van Meerten
7925	Advanced Celluloid Technology	Mr. Howie Shimm, Mr. Peter Bonnett, Mr. Joseph Palk, Mr. Brian Talley
7926	Extended Range Propelling Charge for the 120mm M934A1 Mortar Cartridge	Mr. Howie Shimm, Mr. Mike Kauffman, Mr. Brian Talley, Mr. Peter Bonnett
7927	Design of Experiments Application to M103 Cartridge Case Neck Failure Investigation	Mr. Kurt Schroeder
7938	Technology Innovations Realized in the M150/M151 Dismounted Fire Control System Development	Mr. Amit Makhijani
7943	ETF (Electronics Test Fuze) – A Flight Platform for Test and Evaluation of Water Piercing Missile Launcher (WPML) Systems	Mr. Hamish Malin
7972	A New Method for Fabricating Copper Rotating Bands on Munitions	Dr. Matthew Trexler
8019	EFSS Precision Extended Range Munition	Mr. Patrick Freemyers, Mr. Stephen Driscoll
8151	25 mm Ammunition Development for the JSF	Mr. Eelko van Meerten
8254	Simulation Results of Precision Guided Munition Performance using Precision GPS Ephemeris (PGE) Guidance	Dr. Bruce Johnson, Ms. Yan Lu, Mr. Frank Fresconi