

# 2015 ARMAMENT SMALL ARMS FORUM

*“Small Arms Systems in Times of Diminishing Resources”*



JUNE 1-3, 2015  
[WWW.NDIA.ORG/MEETINGS/5610](http://WWW.NDIA.ORG/MEETINGS/5610)  
HANOVER MARRIOTT ► WHIPPANY, NJ

EVENT #5610

## MONDAY, JUNE 1, 2015

12:00 PM - 4:45 PM                      **Registration Open and Displayer/Poster Move-in**

1:00 PM - 4:45 PM                      **Tutorial Sessions**

Tutorials	
1:00 PM - 2:45 PM	2015 ITAR Update and Introduction to Basics <i>Mr. Jason Wong, Firearms Law Group</i>
3:00 PM - 4:45 PM	Manufacturing Readiness Assessments of Technology Development Projects <i>Mr. Jordan Masters, U.S. Army ARDEC</i>

## TUESDAY, JUNE 2, 2015

7:00 AM - 7:00 PM                      **Registration Open**

7:00 AM - 7:55 AM                      **Networking Breakfast**

7:55 AM - 8:05 AM                      **Opening Remarks**

- ▶ Mr. Dave Broden, *President, Broden Resource Solutions, LLC; NDIA Armaments Division Chair*
- ▶ Mr. Brian Berger, *Vice President, Business Development – U.S. Programs, General Dynamics OTS - Canada; NDIA Small Arms Committee Chair*

8:05 AM - 8:10 AM                      **Welcome**

- ▶ Mr. John Hedderich, III, *Director, RDECOM ARDEC*

8:10 AM - 8:45 AM                      **Keynote Speaker**

- ▶ BG Brian Cummings, USA, *Program Executive Officer, Program Executive Office Soldier*

8:45 AM - 9:00 AM                      **NDIA Policy Overview**

- ▶ Mr. Will Goodman, *Vice President, Policy, NDIA*

9:00 AM - 9:20 AM                      **Gun Trouble**

- ▶ MG Bob Scales, USA (Ret)

9:20 AM - 10:00 AM                      **The Department of Defense Weapons and Ammunition Legal Review Program: Four Decades of Experience (17423)**

- ▶ Mr. Hays Parks, *Former Senior Associate Deputy General Counsel, Office of General Counsel, DoD*

10:00 AM - 10:30 AM                      **Networking Break**

10:30 AM - 11:15 AM                      **Session I: PM Maneuver Ammunition Systems**

Session Chair: COL Moises Gutierrez, USA, *PM MAS*

- ▶ COL Moises Gutierrez, USA, *PM MAS*
- ▶ Mr. Bill Sanville, *Deputy Project Manager, PM MAS*
- ▶ LTC John Todd Masternak, USA, *Deputy Project Manager, PM MAS*
- ▶ Mr. John Amick, *PM MAS*
- ▶ Mr. Matt Walker, *MCoE*

## TUESDAY, JUNE 2, 2015 CONTINUED

11:15 AM - 12:00 PM

### Session II: Soldier Weapons

Moderator: COL Scott Armstrong, USA, *PM Soldier Weapons*

Panelists:

- ▶ Mr. David Libersat, *U.S. Army Maneuver Center of Excellence*
- ▶ LTC Paul Alessio, USA, *Product Manager Crew Served Weapons*
- ▶ LTC Terry (TR) Russell, USA, *Product Manager Individual Weapons*

12:00 PM - 1:00 PM

### Networking Luncheon

1:00 PM - 1:45 PM

### Awards Ceremony

- ▶ 2014 CHINN AWARD presented to Mr. George Niewenhous  
Presented by Mr. Patrick Donahue
- ▶ 2015 CHINN AWARD presented to Mr. Jim Schatz  
Presented by Mr. Angelo Mancini
- ▶ 2015 HATHCOCK AWARD presented to SGM Pete Gould, USA (Ret)  
Presented by Mr. Hays Parks
- ▶ SILVER MEDALS presented to Mr. Joel Goldman and Mr. Chuck Buxton  
Presented by Mr. Brian Berger

1:45 PM - 3:45 PM

### SESSION III: Weapons & Weapon Enablers

Session Chair: Mr. George Kontis, *Gun IQ International, LLC*

#### 1:45 PM - 2:05 PM NATO Weapons and Sensors Working Group Update (17335)

- ▶ Dr. Bart Halpern, *U.S. Army ARDEC*

#### 2:05 PM - 2:25 PM Advanced Surface Treatments for Armament Weapon Systems (17348)

- ▶ Mr. Adam Foltz, *U.S. Army ARDEC*

#### 2:25 PM - 2:45 PM Enhancement of the USMC Benelli M1014 Combat Shotgun Shooting Lethal and Non Lethal Rounds from the M1014 U.S. Marine Corps Systems Command (MARCORSYSCOM) Contract No: M67854-10C-1123 (17361)

- ▶ Mr. Scott Turlington, *GSA Direct*

#### 2:45 PM - 3:05 PM SEG Suppressors (17366/68)

- ▶ Mr. Robert Morrison, *Stealth Engineering Group*

#### 3:05 PM - 3:25 PM Advances in Army Machine Gun Suppressor Design (17374)

- ▶ Dr. Laurie Florio, *U.S. Army ARDEC*

#### 3:25 PM - 3:45 PM Potential Development Path Integrating Fire Control Radar for Advanced Combat Optic Displays (17383)

- ▶ Mr. Howard Kent, *Armor Development Group, LLC*

3:45 PM - 4:05 PM

### Networking Break

4:05 PM - 4:45 PM

### SESSION III Continued: Weapons & Weapon Enablers

#### 4:05 PM - 4:25 PM Dynamic Universal Reflex Sight (17426)

- ▶ Mr. Magnus Andersson, *Fire Control Systems*

#### 4:25 PM - 4:45 PM Future Advanced Squad Technologies (FAST) (17355)

- ▶ Mr. Adam Jacob, *U.S. Army ARDEC*

## TUESDAY, JUNE 2, 2015 CONTINUED

4:45 PM - 5:25 PM

### SESSION IV: 40mm

Session Chair: Mr. Dave Broden, *Broden Resource Solutions, LLC*

#### 4:45 PM - 5:05 PM 40mm Fuze Reliability Trends in the System Contract (17362)

- ▶ Mr. Matt Eckel, *AMTEC Corporation*

#### 5:05 PM - 5:25 PM Grenade Launchers and Their Ammunition: An International Survey (17392)

- ▶ Mr. Anthony Williams, *IHS Jane's*

5:25 PM - 7:00 PM

### Networking Reception

## WEDNESDAY, JUNE 3, 2015

7:00 AM - 5:00 PM

### Registration Open

7:00 AM - 7:45 AM

### Networking Breakfast

7:45 AM - 7:50 AM

### Administrative Announcements

- ▶ Mr. Brian Berger, *Vice President, Business Development – U.S. Programs, General Dynamics OTS - Canada; NDIA Small Arms Committee Chair*

7:50 AM - 8:20 AM

### Keynote Speaker

- ▶ Mr. Michael Holthe, *HQDA, Office of ASA(ALT)/Deputy Assistant Secretary of the Army for Research and Technology*

8:20 AM - 9:40 AM

### Joint Service Small Arms Synchronization Team (JSSAST) Panel

Moderator: COL John Turner, USA, *U.S. Army ARDEC*

Panelists:

- ▶ Mr. David Libersat, *U.S. Army Maneuver Center of Excellence*
- ▶ LtCol Christopher Woodburn, USMC (Ret), *Marine Corps Combat Development Command*
- ▶ Lt Col Enrico Venditti, USAF, *U.S. Air Force Security Forces Center*
- ▶ LCDR Omar Garcia, USN, *U.S. Naval Operations*
- ▶ CAPT Jonathan Totte, USCG, *U.S. Coast Guard*
- ▶ Lt Col Joshua Bohnart, USA, *U.S. Special Operations Command*

9:40 AM - 10:10 AM

### Networking Break

## WEDNESDAY, JUNE 3, 2015 CONTINUED

10:10 AM - 11:50 AM

### Session I: Joint Service Small Arms Program (JSSAP)

Session Chair: Mr. Joel Goldman, *JSSAP, U.S. Army ARDEC*

#### 10:10 AM - 10:30 AM JSSAP Science and Technology Advisory Council (17334)

▶ Dr. Bart Halpern, *U.S. Army ARDEC*

#### 10:30 AM - 10:50 AM Advanced Small Unit Small Arms Technology (ASUSAT) Research Program (17351)

▶ Mr. Terence Rice, *U.S. Army ARDEC*

#### 10:50 AM - 11:10 AM Small Arms Grenade Munitions Project (17332)

▶ Mr. Steve Gilbert, *U.S. Army ARDEC*

#### 11:10 AM - 11:30 AM VPR: A Next Generation Small Arms Fire Control System (17378)

▶ Dr. Benjamin Bachrach, *IAI*

#### 11:30 AM - 11:50 AM Cased Telescoped Systems (17338)

▶ Ms. Kori Phillips, *U.S. Army ARDEC*

11:50 AM - 12:30 PM

### Session II: Looking Ahead

Session Chair: SGM Pete Gould, USA (Ret)

#### 11:50 AM - 12:10 PM Where to Now? (17354)

▶ Mr. Jim Schatz

#### 12:10 PM - 12:30 PM Deep Future of Small Arms Study - Maintaining Small Arms Dominance (17350)

▶ Mr. Terence Rice, *U.S. Army ARDEC*

12:30 PM - 1:30 PM

### Networking Luncheon

1:30 PM - 3:10 PM

### Session III: Ammunition

Chair: Mr. Bruce Webb, *Nammo-Talley, Inc.*

#### 1:30 PM - 1:50 PM Propellant Analysis in Support of Low Observable Tracer (LOT)/One-Way Luminescence (OWL) Efforts (17339)

▶ Mr. Matthew Horch, *U.S. Army ARDEC*

#### 1:50 PM - 2:10 PM Tagging, Tracking, and Locating (TTL) Performance Calculations for Low Observable Tracer (LOT) and One-Way Luminescence (OWL) Technologies (17360)

▶ Dr. Gary Glaspell, *USACE-ERDC*

#### 2:10 PM - 2:30 PM Improved Tungsten Carbide Armor Piercing Technology (17379)

▶ Mr. Fredrik Erninge, *Nammo Tactical Ammunition Co.*

#### 2:30 PM - 2:50 PM External Ammunition Sealant (17398)

▶ Mr. Harry Arnon, *Heron Manufacturing, Inc.*

#### 2:50 PM - 3:10 PM Alternative Approaches to "Cold" or "One-Way Luminescence" Tracing Rounds Using Unconventional Methods & Materials (17367)

▶ Mr. Howard Kent, *Armor Development Group, LLC*

## WEDNESDAY, JUNE 3, 2015 CONTINUED

3:10 PM - 3:30 PM

**Networking Break**

3:30 PM - 4:50 PM

**Session IV: Modeling and Simulation**

Session Chair: Mr. Mark Minisi, *U.S. Army ARDEC*

**3:30 PM - 3:50 PM Coupling of a Lumped Mass Interior Ballistic Code with Structural Finite Element Analysis/Factors Effecting Bore Resistance in the Structural Analysis of Interior Ballistics (17372/73)**

▶ Mr. Ray Chaplin, *U.S. Army ARDEC*

**3:50 PM - 4:10 PM Single Munition Variable Velocity Non-Lethal Ballistic System for Fires Near the Muzzle to More Than 100 Meters (17375)**

▶ Dr. Jeff Widder, *Battelle*

**4:10 PM - 4:30 PM Future Small Arms & Ammunition Design: Bullet Shapes and Barrel Length (17391)**

▶ Mr. Anthony Williams, *IHS Jane's*

**4:30 PM - 4:50 PM Unclassified Damage Model for Use by Industry (17399)**

▶ Mr. Mark Minisi, *U.S. Army ARDEC*

4:50 PM - 5:00 PM

**Closing Comments**

▶ Mr. Brian Berger, *Vice President, Business Development – U.S. Programs, General Dynamics OTS - Canada; NDIA Small Arms Committee Chair*

5:00 PM

**Adjourn**

## POSTER PRESENTATIONS

### **SEG Suppressors - Silencers Re-Engineered/SEG Folding QD (Suppressor Quick Disconnect) (17368/17366)**

- ▶ Mr. Robert Morrison, *Stealth Engineering Group*

### **Cased Telescoped Systems (17338)**

- ▶ Ms. Kori Phillips, *U.S. Army ARDEC*

### **Modeling Case Pressurization and Extraction Using Finite Element Analysis (17377)**

- ▶ Mr. Michael Cataldi, *U.S. Army ARDEC*

### **External Ammunition Sealant (17398)**

- ▶ Mr. Harry Arnon, *Heron Manufacturing, Inc.*

### **U.S. Navy M2A1 .50 Cal Machine Gun Conversion Program (17412)**

- ▶ Mr. Bruce Richards, *NSWC Crane*

### **Caliber .50 API Bullet Burst (17353)**

- ▶ Mr. Thomas Gmyrek, *U.S. Army ARDEC*

### **The Effects of Ullage on Caliber .50 Ballistic Performance (17343)**

- ▶ Ms. Connie Hackett, *U.S. Army ARDEC*

### **Problems Found with Piezo-Electric Transducers During Ballistic Testing (17420)**

- ▶ Mr. Kevin Adams, *U.S. Army ARDEC*

### **Reduced Range Training Ammunition (RRTA) Lessons Learned and Path Forward (17333)**

- ▶ Mr. Tan Nguyen, *U.S. Army ARDEC*

### **Digital Fire Control Module (DFCM) for Small Arms (17422)**

- ▶ Mr. Gerard Gaeta, *U.S. Army ARDEC*

## ADDITIONAL AUTHORS

- 17360 Dr. Toomas Alik
- 17361 Mr. Jeff Hajjar
- 17372 Mr. Adrian Blot
- 17373 Mr. Dan Gubernat
- 17375 Mr. Chris Perhala
- 17377 Mr. Ray Chaplin
- 17378 Dr. Benjamin Bachrach  
Mr. Richard LeBlanc
- 17383 Dr. Ram Narayan  
Mr. Jeremy Sarao
- 17399 Mr. Shawn Spickert-Fulton
- 17422 Mr. Mark Sproul  
Ms. Joan Kirnes  
Mr. Stephen Graham

## DISPLAYERS

- ACE ELECTRONICS DEFENSE SYSTEMS, LLC
- U.S. ARMY ARDEC
- DIGITAL SOLID STATE PROPULSION
- GENERAL DYNAMICS-OTS
- GLOCK, INC.
- HECKLER & KOCH
- KISTLER INSTRUMENT CORPORATION
- OLIN CORPORATION
- THEISSEN TRAINING SYSTEMS, INC.

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