

58TH ANNUAL FUZE CONFERENCE

"FUZING IN A CHALLENGING ENVIRONMENT"



Hilton Baltimore - Baltimore, MD

JULY 7 - 9, 2015
WWW.NDIA.ORG/MEETINGS/5560
EVENT #5560

TUESDAY, JULY 7TH

- 2:00PM - 7:00PM REGISTRATION - KEY BALLROOM SOUTH FOYER
- 2:00PM - 4:00PM DISPLAY SET UP - KEY BALLROOM SOUTH FOYER
- 5:30PM - 7:00PM OPENING RECEPTION - KEY BALLROOM SOUTH FOYER

WEDNESDAY, JULY 8TH

- 7:00AM - 7:00PM REGISTRATION - KEY BALLROOM SOUTH FOYER
- 7:00AM - 8:00AM CONTINENTAL BREAKFAST - KEY BALLROOM SOUTH FOYER

SESSION I - WELCOME, ADMINISTRATIVE & KEYNOTE ADDRESS - KEY BALLROOM 5, 6

- 8:00AM - 8:05AM INTRODUCTION & ADMINISTRATIVE ANNOUNCEMENTS
MR. DON SHUTT, DIRECTOR, BUSINESS DEVELOPMENT, ORBITAL ATK MISSILE PRODUCTS,
NDIA FUZE COMMITTEE CHAIR
- 8:05AM - 8:15AM NDIA OPENING REMARKS
MG BARRY BATES, USA (RET.), VICE PRESIDENT OF OPERATIONS, NDIA
- 8:15AM - 8:45AM KEYNOTE ADDRESS
MR. JOSE GONZALES, DIRECTOR, OUSD-AT&L, LAND WARFARE & MUNITIONS

SESSION II - U.S. GOVERNMENT SCIENCE, TECHNOLOGY & ACQUISITION - KEY BALLROOM 5, 6 *SESSION CHAIR: BARRY NEYER, SESSION ASSISTANT: ROY STREETZ*

- 8:45AM - 9:10AM ARMY S&T STRATEGY
MR. PHIL GORMAN, COMPETENCY MANAGER, FUZE DIV., FPAT, METC, ARDEC, FUZE DIVISION
MR. GENE HENDERSON, AVIATION & MISSILE RESEARCH, DEVELOPMENT & ENGINEERING
CENTER
- 9:10AM - 9:30AM NAVY S&T STRATEGY
DR. MICHAEL DEEDS, FUZE AND INITIATION BRANCH HEAD, NAVAL SURFACE WARFARE
CENTER IHEODTD
- 9:30AM - 10:00AM AIR FORCE S&T STRATEGY
MR. TIM TOBIK, FUZE BRANCH CHIEF, AIR FORCE RESEARCH LABORATORY
- 10:00AM - 10:40AM MORNING BREAK IN DISPLAY AREA - KEY BALLROOM SOUTH FOYER
- 10:40AM - 11:10AM JOINT FUZE TECHNOLOGY PROGRAM (JFTP)
MR. LAWRENCE FAN, SR. FUZE ENGINEER, SURFACE WARFARE CENTER IHEODTD
- 11:10AM - 11:30AM US AND NATO FUZING RELATED STANDARDS
MR. HOMESH LALBAHADUR, TEAM LEADER, US ARMY ARDEC
- 11:30AM - 12:00PM AWARD CEREMONY

FUZE CONFERENCE

12:00PM - 1:00PM

LUNCH - KEY BALLROOM 8, 11, 12

THANK YOU TO OUR SPONSOR:



1:00PM - 3:00PM

CONCURRENT SESSIONS:

SESSION	CLASSIFICATION	1:00 PM	1:20 PM	1:40 PM	2:00 PM	2:20 PM	2:40 PM
SESSION IIIA KEY BALLROOM 5, 6 Session Chairs: Mr. Roy Streetz & Mr. Bruce Hornberger	OPEN SESSION		17638 - Long-Term Data Retention of Flash Cells Used in Critical Applications Mr. Keith Bergevin, <i>Defense Microelectronics Activity (DMEA)</i>	17753 - Target Characterization Testing Mr. John Gautz, <i>Electronics Development Corp.</i>	17709 - The Evolution of Nammo's 40mm Airburst Fuzes Mr. Helge Stadheim, <i>Nammo Raufoss AS</i>	17723 - Planned Obsolescence of Electronic Fuzes Mr. David Pernas, <i>Stragitech Labs, Inc.</i>	17707 - A Low Voltage Command-Arm System for Distributed Fuzing Mr. Mark E Etheridge, <i>US Army-AMRDEC</i>
SESSION IIIB KEY BALLROOM 7, 9, 10 Session Chairs: Mr. Bob Hertlein & Mr. Dave Lawson	CLOSED SESSION	17774 - Improved Solid-State High Voltage Switch Mr. Chad Hettler, <i>Sandia National Laboratories</i>	17606 - Integrated Switch Slapper Progress Mr. Bradley L Hanna, <i>NSWC Dahlgren Division</i>	17719 - Tunability of G-Switches for Target Detection Dr. Jeffrey R Hill, <i>Sandia National Laboratories</i>	17698 - Command Arm for Non-Spinning S&A Mr. John Geaney, <i>US Army ARDEC</i>	17729 - Rotor Safety and Arming (S&A) Design and Development for Multi-Stage Arming of Submunition at Expulsion Event Mr. Jintae Kim, <i>US Army RDECOM ARDEC</i>	17725 - Initiation Generator for Insensitivity and Tailorable Effects (IGNITE) Dr. Michael J Barnard, <i>Enig Associates, Inc.</i>

3:00PM - 3:20PM

AFTERNOON BREAK IN DISPLAY AREA

3:20PM - 5:00PM

CONCURRENT SESSIONS:

SESSION	CLASSIFICATION	3:20 PM	3:40 PM	4:00 PM	4:20 PM	4:40 PM	5:00 PM
SESSION IIIA KEY BALLROOM 5, 6 Session Chairs: Mr. Roy Streetz & Mr. Bruce Hornberger	OPEN SESSION	17747 - Evaluation of a Novel Mounting Method for Surface Mount Capacitors Mr. Shane Curtis, <i>Sandia National Labs</i>	17748 - Target Detection Devices for a Maritime Environment Mr. Gary Buzzard, <i>Thales</i>	17750 - A Modern Modular Fuze Design and its Modeling and Test for Hard Target Use Mr. Laurie Turner, <i>Thales</i>	17700 - LEEFI Plasma Firing Currents, Causes, Consequences and Cures Mr. Thomas M Nickolin, <i>Weacomm, Inc.</i>	17771 - Controlled and Timed Obsolescence Electric Fuzes in Medium Caliber Munitions Mr. David Pernas, <i>Stragitech Labs, Inc.</i>	
SESSION IIIB KEY BALLROOM 7, 9, 10 Session Chairs: Mr. Bob Hertlein & Mr. Dave Lawson	CLOSED SESSION	17706 - Fuze Setting Technologies for Rockets & Missiles Mr. Mark E Etheridge, <i>US Army-AMRDEC</i>	17720 - Novel Rf Fuze Setting Mr. Joseph Brezczinski, <i>ARDEC</i>	17727 - The Effects of Fuze Parameters on Safe Separation Analysis Mr. Shane Strickland, <i>AMRDEC</i>	17728 - Advanced High Voltage Connector Dr. Daniel M Peairs, <i>L-3 Fuzing & Ordnance Systems</i>	17710 - Decreasing the Sensitivity and Increasing the Delay Time in the M739A1 Impact Delay Module (IDM) Ms. Melissa N Rhode, <i>US Army ARDEC</i>	17699 - Micro Scale Materials & Energetic Effects Characterization Mr. John Geaney, <i>US Army ARDEC</i>

5:20PM

ADJOURN

5:30PM - 7:00PM

GRAND RECEPTION - KEY BALLROOM SOUTH FOYER

THANK YOU TO OUR SPONSOR:



THURSDAY, JULY 9TH

7:00AM - 12:00PM

REGISTRATION - KEY BALLROOM SOUTH FOYER

7:00AM - 8:00AM

CONTINENTAL BREAKFAST - KEY BALLROOM SOUTH FOYER

8:00AM - 12:00PM

CONCURRENT SESSIONS:

SESSION	CLASSIFICATION	8:00 AM	8:20 AM	8:40 AM	9:00 AM	9:20 AM	9:40 AM
SESSION IVA KEY BALLROOM 5, 6 Session Chairs: Mr. Nassir Alaboud & Mr. Eric Roach	OPEN SESSION	17704 - Shock Hardened Miniature GPS-denied INS for Smart Weapons Applications Mr. Martin Tanenhaus, <i>Tanenhaus and Associates</i>	17701 - Lead is Dead Mr. Harald Wich, <i>Diehl & Eagle Picher</i>	17724 - A New Commercial Fuze Family Fulfilling Modern Safety and Reliability Requirements for 40mm Grenades Mr. Robert Huettner, <i>Rheinmetall Defence</i>	17755 - A Robust Methodology for Calculating MIL-DTL-23659 Fireset Compliance Dr. Glen A Kading, <i>Excelitas Technologies Corporation</i>	17743 - Development of the MCEFI Mr. Gert H Scholtes, <i>TNO</i>	Pulse Test of Firing Capacitor Characteristics Mr. Fred Piering, <i>Weacomm, Inc.</i>
SESSION IVB KEY BALLROOM 7, 9, 10 Session Chairs: Telly Manolatos & Mr. Bob Hertlein	CLOSED SESSION	17737 - Unpowered Cannon and Railgun Arming Environment Sensing Mr. Michael Haddon, <i>NAWCWD</i>	17758 - Flyer Velocity Modeling using Fireset Characteristics Mr. Shawn Denlinger, <i>L-3 Fuzing & Ordnance Systems</i>	17763 - Modeling Distributed Targets for Advanced Fuze Processor Development Mr. Charles H. Overman IV, <i>University of Florida-Electronic Comm. Lab</i>	17741 - Fuze Modeling Grand Challenge: Computational Comparisons Round 2 Dr. Janet Wolfson, <i>Air Force Research Laboratory</i>	17703 - Multi-Mode Fuzing for XM1069 Tank Ammunition Mr. Lloyd D. Khuc, <i>US ARMY-ARDEC</i>	17781 - Stacked MOSFET/IGBT Pulse Discharge Switch Mr. Paul E. Anderson, <i>NAWCWD China Lake</i>

10:00AM - 10:20AM

MORNING BREAK IN DISPLAY AREA - KEY BALLROOM SOUTH FOYER

SESSION	CLASSIFICATION	10:20 AM	10:40 AM	11:00 AM	11:20 AM	11:40 AM
SESSION IVA KEY BALLROOM 5, 6 Session Chairs: Mr. Nassir Alaboud & Mr. Eric Roach	OPEN SESSION	17582 - Distributed Ignition Safety Device for a Divert and Control System Mr. Joseph E. Carvalho, <i>Pacific Scientific Energetic Materials Company</i>	17583 - SENS, A Miniaturized High-g Sensing Data Recorder Mr. Manuel Fritz, <i>MBDA TDW GmbH</i>	17722 - Characterizing Detonator Performance in Dynamic Witness Plates Dr. Michael J. Murphy, <i>Los Alamos National Laboratory</i>		
SESSION IVB KEY BALLROOM 7, 9, 10 Session Chairs: Telly Manolatos & Mr. Bob Hertlein	CLOSED SESSION	17702 - High Versatility, Electro-Optical Proximity Sensor Architecture for Smart Weapons Applications Mr. William P Elkins, <i>Kaman Precision Products</i>	17764 - Reverse Ballistics Techniques for Embedded Characterization Lt Hayley Chow, <i>USAF CHARACTERIZATION</i>	17714 - FMU-139 Fuze to IM Auxiliary Booster Characterization for the BLU-111 Mr. Erik Wrobel, <i>US Army ARDEC</i>	17744 - Precision Initiation for Next-generation Engagements (PINE) Fireset R&D for General Purpose Warhead Applications Mr. John Bailey, <i>USAF Fuzes Branch Eglin AFB</i>	17708 - Methods for Proving the Equivalency of Detonator Performance Dr. Keith A. Thomas & Mr. Mark Lieber, <i>Los Alamos National Laboratory</i>

12:00PM - 1:00PM

LUNCH - KEY BALLROOM 8, 11, 12

THANK YOU TO OUR SPONSOR:

KAMAN

Fuzing & Precision Products

1:00PM - 5:00PM

CONCURRENT SESSIONS:

SESSION	CLASSIFICATION	1:00 PM	1:20 PM	1:40 PM	2:00 PM	2:20 PM	2:40 PM
SESSION VA KEY BALLROOM 5, 6 Session Chairs: Mr. Tomas Harward & Mr. Mark Etheridge	OPEN SESSION	17732 - Proximity Sensor Technologies – Application to New Munitions Mr. Max Perrin, <i>JUNGHANS Defence</i>	17752 - Target Scene Generator Mr. Don Atkins, <i>Electronics Development Corp.</i>	17731 - Kaman MEMS Based Fuzing Technology Mr. Robert Renz, <i>Kaman Precision Products</i>	17769 - DoD MEMS Fuze Reliability Evaluation Mr. Daniel Lanterman, <i>NSWC IHEODTD</i>	17735 - Process Simulation for Manufacturing Mr. Don Conrad, <i>Orbital ATK</i>	17715 - Nano Second Behavioral of Exploding Bridge Wire (EBW) using Ultra High Speed Imaging Technology Dr. Muthurajan Harries, <i>Energetics Research Institute</i>
SESSION VB KEY BALLROOM 7, 9, 10 Session Chairs: Mr. Ken Kelly & Mr. Roy Streetz	CLOSED SESSION	17746 - Distributed Embedded Fuzing System (DEFS) Capt Dennis “Mack” Cross, <i>USAF Fuzes Branch Eglin AFB</i>	17749 - Coupled Electrical-Mechanical Response of Fireset Components in High Shock Environments Dr. Jason R Foley, <i>AFRL Fuzes Branch</i>	17751 - Experimental Evaluation of Additively Manufactured Supports under High-G Loads Dr. Jason R Foley, <i>AFRL Fuzes Branch</i>	17717 - Fuze Qualification for Challenging Environments Mr. Jeremy Oligmueller, <i>Orbital ATK</i>	17767 - Miniature High Velocity In Line (MHVIL) Fuze Module Development Mr. Kenneth Williamson, <i>Air Force Research Laboratory</i>	17768 - Characterizing the Dynamic Environment of an Embedded Fireset Dr. Jacob Dodson, <i>Air Force Research Laboratory</i>

3:00PM - 3:20PM

AFTERNOON BREAK IN DISPLAY AREA - KEY BALLROOM SOUTH FOYER

SESSION	CLASSIFICATION	3:20 PM	3:40 PM	4:00 PM	4:20 PM	4:40 PM	5:00 PM
SESSION VA KEY BALLROOM 5, 6 Session Chairs: Mr. Tomas Harward & Mr. Mark Etheridge	OPEN SESSION	17726 - High Shock Testing Capabilities and Instrumentation Strategies Mr. Christian Euba, <i>TDW (MBDA)</i>	17756 - A Synchronous Addressed Communications Method for Coordinating Multiple Output and Effects in Fuzing Systems Mr. Steven P Cornett, <i>Excelitas Technologies Corp.</i>	17757 - Apex Sensing Using COTS Motion Processor Units Mr. Robert N. Johnson, <i>Electronics Development Corp</i>	17740 - Designing for Challenging Environments – Getting it Right the First Time Mr. Stephen Redington PE, <i>US Army ARDEC</i>	17770 - A Technique of Measuring Rolling Angle for Course Correction Fuze in Flight Dr. Yanning Gui, <i>212th Research Institute, China North Industries</i>	
SESSION VB KEY BALLROOM 7, 9, 10 Session Chairs: Mr. Ken Kelly & Mr. Roy Streetz	CLOSED SESSION	17782 - Freefall Energy Harvesting and Sensor Design Mr. Paul E Anderson, <i>NAWCWD China Lake</i>	17713 - MEMS Retard & Impact Sensors Mr. Randall Drobny, <i>NAVAIR</i>	17766 - Evaluation of Computational Approaches for Structural Responses of Fuzes Subjected to High-Frequency Environments Dr. Stephen R Beissel, <i>Southwest Research Institute</i>	17775 - Developing Defense Products Utilizing High Resolution and High Accuracy 3D Printers Mr. Mark Holthaus, <i>L-3 Fuzing and Ordnance Systems</i>	17760 - High Reliability DPICM Replacement (HRDR) Mr. Daniel Pines, <i>NSWC IHEODTD</i>	17739 - Selectable Effects Munition (SEM) Height-of-Burst (HOB) Sensor Mr. Aaron Bass, <i>L-3 Mustang Technology</i>

5:20PM

CONFERENCE ADJOURN

HARRY DIAMOND FUZING EXCELLENCE AWARD

The Harry Diamond Fuzing Excellence Award recognizes the individual who, in the judgment of the panel, has made the greatest overall contribution to the fuze program during their lifetime. The achievements for which this award has been considered may relate to any of the many components that make up this highly diverse, complex, vital commodity, from R&D through demilitarization and disposal.

TABLE TOP DISPLAY INFORMATION

Displaying Companies

CIRCOR Aerospace, Inc.

Defense Systems Information Analysis Center -
(DSIAC)

Diehl & Eagle-Picher GmbH

e2v, Inc.

EnerSys

Excelitas Technologies

Knowles

Meggitt Sensing Systems

PCB Piezotronics, Inc.

Presidio Components, Inc.

Display Hours

July 7, 2015

2:00 - 4:00 pm

5:30 - 7:00 pm

Set-up

Reception in display area

July 8, 2015

7:00 - 8:00 am

10:00 - 10:40 am

3:00 - 3:20 pm

5:30 - 7:00 pm

Continental Breakfast

AM Break in display area

PM Break in display area

Reception in display area

July 9, 2015

7:00 - 8:00 am

10:00 - 10:20 am

3:00 - 3:20 pm

4:00 - 5:00 pm

Continental Breakfast

AM Break in display area

PM Break in display area

Dismantle

SECURITY INFORMATION*Closed Session Attendance*

In order to attend the closed sessions, verification of citizenship and eligibility to receive export-controlled technical information is required. Verification will be based on Distribution Statement D, and will only be granted to U.S. DoD and U.S. DoD contractors (to include FFRDCs).

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DATES OF VISIT:	07 JUL - 09, 2015
NAME OF THE EVENT:	58TH ANNUAL NDIA FUZE CONFERENCE
POC:	SHEKIA WILMER
POC PHONE NUMBER:	(301) 744-4704

For closed session attendees without access to JPAS , please complete the “Certification for Attendance” form posted on our website at <http://www.ndia.org/meetings/5560> under the “Attendee Information” tab.

Security POC's: Shekia Wilmer, Shekia.wilmer@navy.mil, (301) 744-4704 or Karen Wood, karen.wood1@navy.mil, (301) 744-4219, FAX #: (301) 744-6406

MARK YOUR CALENDARS: 59th Annual Fuze Conference**May 3 - 5, 2016****Charleston Marriott - Charleston, SC**

OPEN SESSION PROCEEDINGS WILL BE AVAILABLE FOR DOWNLOAD WITHIN 3 WEEKS OF THE CONFERENCE AT:
<http://www.dtic.mil/ndia/2015fuze/2015fuze.html>

ATTENDEE ROSTER *AS OF 7/1/2015*

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Orbital ATK

Mr. Michael Adamson
Defence Science &
Technology Laboratory, UK
MoD

Mr. Nassir Alaboud
Lockheed Martin Missiles and
Fire Control

Mr. Paul Anderson
NAWCWD China Lake

Mr. Thomas Ang
Singapore Technologies
Engineering Ltd

Mr. Carmelo Aresco
Kaman Precision Products

Mr. Don Atkins
Electronics Development
Corp.

Mr. Román Avellán
EXPAL Systems

Mr. John Bailey
Air Force Research
Laboratory

Mr. Jose Luis Barbosa
EXPAL Systems

Dr. Michael Barnard
Enig Associates, Inc.

Mr. Aaron Bass
L-3 Mustang Technology

Mr. Alex Bates
Dynamic Systems and
Research

Mr. Emre Bayram
Roketsan Missile Industries,
Inc.

Mr. Jens Beimforde
JUNGHANS microtec GmbH

Dr. Steve Beissel
Southwest Research Institute

Mr. Keith Bergevin
Defense Microelectronics
Activity

Mr. Dana Beyeler
Ellwood Group, Inc.

Dr. Gorkem Bingol
TUBITAK SAGE

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Lockheed Martin Missiles and
Fire Control

Mr. Frank Blodgett
Alinabal, Inc.

Mr. Bill Cain
Lockheed Martin Missiles and
Fire Control

Mr. Michael Carlsson
Saab Bofors Dynamics AB

Mr. Steve Carrington
L-3 Fuzing & Ordnance
Systems

Mr. Joseph Carvalho
Pacific Scientific

Mr. Gökmen Cengiz
ASELSAN A.S.

Mr. Fatih Cengiz
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Air Force Life Cycle
Management Center -
Munitions Sustainment
Division

Mr. Ed Chen
Stragitech Labs

Mr. Alan Chesley
CIRCOR Aerospace Products
Group

1st Lt Hayley Chow,
USAF
AFRL/RWMF

Mr. Charlie Clark
Defence Science and
Technology Laboratory

Mr. Jon Clark, Jr.
U.S. Army Aviation and Missile
Research, Development and
Engineering Center

Mr. Olivier Clesca
Thales Nederland BV

Mr. Resul Coban
Roketsan A.S.

Mr. Norman Coker
AFLCMC/EBDZ

Mr. Don Conrad
Orbital ATK

Mr. Graham Cook
e2v technologies, PLC.

Mr. Rodger Cornell
Armament Research,
Development, and
Engineering Center

Mr. Steven Cornett
Excelitas Technologies

Mr. Jason Cowell
Thales Missile Electronics

Mr. Andrew Culton
Thales Missile Electronics

Mr. Shane Curtis
Sandia National Laboratories

Mr. John Deep
Air Force Research
Laboratory

Mr. Shawn Denlinger
L-3 Fuzing

Dr. Jacob Dodson
AFRL/RWMF

Dr. Ko DongSik
Poongsan

Mr. Randall Drobny
NAWCWD

Mr. Matt Eckel
AMTEC Corporation

Mr. William Edmonds
Army Material Command

Mr. Bill Elkins
Kaman Precision Products,
EODC

Mr. Eric Enig
Enig Associates, Inc.

Mr. Mark Etheridge
AMRDEC

Mr. Christian Euba
TDW GmbH, an MBDA
Company

Mr. Bill Evelyn
Day & Zimmermann, Inc.

Mr. Michael Faber

Mr. Dave Fine
Orbital ATK

Mr. Eric Fiore
Defense Systems Information
Analysis Center

Mr. David Flowers
Defense Microelectronics
Activity

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Center-Dahlgren

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Energetics Research Institute

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Mr. Thomas Harward
Raytheon Company

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Nammo Raufoss AS

Mr. Danny Hayles
Booz Allen Hamilton

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U.S. Army AMRDEC

Mr. Bob Hertlein
L-3 Fuzing & Ordnance
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Sandia National Laboratories

Dr. Jeff Hill
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Mr. Ken Kelly
Kaman Precision Products

Mr. Hanwha Kim
Hanwha Corporation

Mr. Jintae Kim
U.S. Army ARDEC

Mr. Jason Koonts
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Raytheon Missile Systems

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Naval Surface Warfare Center

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U.S. Army AMRDEC

Mr. Rickard Lindström
Saab Bofors Test Center AB

Mr. Joe Lucero
Dynamic Systems and
Research

ATTENDEE ROSTER *CONTINUED***Dr. Jim Luoma**

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Meggitt Sensing Systems/
Endevco

Mr. Hardy Madsen-Leibold

Rheinmetall Denel Munition

Mr. Assaf Malual

BAE Systems Rokar

Mr. Telly Manolatos

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Lockheed Martin Corporation

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(Ret.)**

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JUNGHANS microtec GmbH

Mr. Bob Nyulassy

Knowles

Mr. Tim O'Donnell

Lockheed Martin Missiles and
Fire Control

Mr. Jeremy Oligmueller

Orbital ATK

Mr. Kelly Oliver

Air Force Research Laboratory

Mr. Lee Olson

Orbital ATK

Mr. Patrick O'Malley

Sandia National Laboratories

Mr. Johan Ostlund

Saab Bofors Dynamics AB

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JUNGHANS microtec GmbH

Mr. Ron Persson

L-3 Mustang Technology

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Lockheed Martin Corporation

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Army Fuze Management
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General Dynamics-OTS

**LtCol Bill Rumble, USMC
(Ret.)**

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CIRCOR Aerospace Products
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Mr. Perry Salyers

L-3 Fuzing & Ordnance
Systems

Dr. Nathaniel Sanchez

Los Alamos National
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Ms. Tanya SanTERS

Orbital ATK

Dr. Aaron Sathrum

General Atomics

Mr. Murat Savkilioglu

ASELSAN A.S.

Mr. Gert Scholtes

TNO Defence, Security, and
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NAWCWD China Lake

Mr. Zac Spears

L-3 Fuzing & Ordnance
Systems

Mr. Helge Stadheim

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Dr. Clay Staley

General Atomics

ATTENDEE ROSTER *CONTINUED***Mr. Wayne Steege**

Orbital ATK

Mr. Anthony Steele II

U.S. Army AMRDEC

Mr. Steven StepheyElectronics Development
Corp.**Mr. Alan Stillwell**

Meggitt

Mr. Roy Streetz

Excelitas Technologies

Mr. Shane Strickland

Dynetics, Inc.

Mr. Rodney Tache

CIRCOR Aerospace, Inc.

Mr. Martin Tanenhaus

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As part of Defense Systems Group, the Orbital ATK Missile Products Division is an industry leader in the development and production of propulsion and controls for air-, sea- and land-based tactical missiles and missile defense interceptors, as well as a recognized innovator in the development of fuzing and warheads for both tactical missiles and munitions. Earlier this year Orbital ATK completed a Milestone C review, and received approval for entry into Low Rate Initial Production (LRIP), for its revolutionary FMU-167/B Hard Target Void Sensing Fuze (HTVSF), under development for the US Air Force and Navy. The HTVSF is an advanced technology, cockpit-programmable fuze that provides the capability to destroy hardened deeply-buried targets not reachable by other fuzing options. It provides multiple delay arming and detonation times, as well as a void sensing function which allows precision activation of the fuze. As an industry leader in advanced intelligent and hard target impact survivable fuzing technology, Orbital ATK developed the all-electronic FMU-167/B leveraging the company's decades of design and production experience.

The new Orbital ATK combines the best of space pioneer Orbital Sciences with aerospace and defense leader ATK to create a bold new company dedicated to aerospace and defense technologies. The company designs, builds and delivers space, defense and aviation-related systems for customers around the world, both as a prime contractor and merchant supplier. Its main products include launch vehicles and related rocket propulsion systems; satellites and associated components and services; composite aerospace structures; tactical missiles, subsystems and defense electronics; and precision weapons, armament systems and ammunition. Headquartered in Dulles, Virginia, Orbital ATK employs more than 12,000 people in 20 states across the U.S. as well as international locations.

