



NFCS

National Fire Control Symposium 2016

COLLABORATIVE FIRE CONTROL IN THE INFORMATION AGE



8 - 11 February 2016 Lake Buena Vista, Florida

SYMPOSIUM AGENDA

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Vital Security Reminders

Please Read Carefully

- NFCS photo badges must be worn at all Symposium functions. When you are not at the Symposium, please secure your badge. If you lose it, report it to the registration desk immediately.
- No electronic devices (including smart devices such as watches and health monitoring devices) are allowed into the technical session rooms. Please leave them in your room or car. Electronics may be left at the NFCS electronics table, however, neither NFCS nor the Shades of Green are liable for lost or damaged items. Turn off phones or put them into silent mode when leaving them on the electronics table.
- No briefcases or bags are allowed in the meeting rooms. Purses are subject to inspection.
- Notes may only be taken in NFCS Redbooks. Redbooks must be turned back in to the Redbook table staff before anyone may leave the room. All Redbooks will be shipped to the attendees after the event.
- Be aware of your surroundings when having technical conversations outside of the meeting rooms.
- If you see or hear anything that concerns you, please err on the side of caution and report it to the registration desk.

Thank you for your vigilance and awareness!

I acknowledge that I have read and agree to the above security policy.

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Sponsors & Committee

Thank You To Our Industry Sponsors!

Raytheon Company
 The Boeing Company
 Lockheed Martin Corporation
 MIT Lincoln Laboratory

Lead Symposium Advisors

Mr. Robert Strider, U.S. Army SMDC/ARSTRAT Technical Center
 Mr. Joseph Deroba, U.S. Army CERDEC I2WD

Advisory Committee

Dr. Barry Alexia, Rockwell Collins
 Mr. Jeffrey Ayers, The Boeing Company
 Mr. Roy Ballard, Air Force Research Laboratory
 Mr. Steven Buckley, Navy PEO IWS6
 Mr. James Cech, Georgia Tech Research Institute
 Mr. Clyde Elliott, U.S. Army SMDC/ARSTRAT
 Mr. Keith Englander, Missile Defense Agency
 Mr. Jesse Hodge, Naval Air Warfare Center Weapons Division
 Ms. Bonnie Johnson, Naval Postgraduate School
 Mr. Herbert Landau, Raytheon Company
 Mr. Mark Longbrake, Black River Systems Company
 Dr. Gary McCown, SPAWAR Systems Center SD
 Mr. Glenn McLeod, Lockheed Martin Corporation
 Mrs. Penny Moran, Naval Surface Warfare Center Dahlgren Division
 Mr. Douglas Osborne, Johns Hopkins Applied Physics Laboratory
 Mr. Neeraj Pujara, Air Force Research Laboratory
 Dr. Katherine Rink, MIT Lincoln Laboratory
 Mr. Stan Schroeder, Lockheed Martin Corporation
 Mr. Pat Sisson, General Dynamics Information Technology
 Dr. Gary Somers, Raytheon Space and Airborne Systems
 Ms. Jennifer Splaingard, The Boeing Company
 Dr. Karla Priestersbach, Missile Defense Agency
 Mr. John (J.J.) Thompson, Northrop Grumman Aerospace Systems

Coordination Team

Advisory Committee, cont'd

Mr. Ralph Tillinghast, U.S. Army ARDEC
Mr. John Warnke, Lockheed Martin Corporation
Dr. Stephen Woodall, Strategic Synthesis, Ltd.

Coordination Team

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Ms. Stephanie Whitehouse, Naval Surface Warfare Center Dahlgren Division

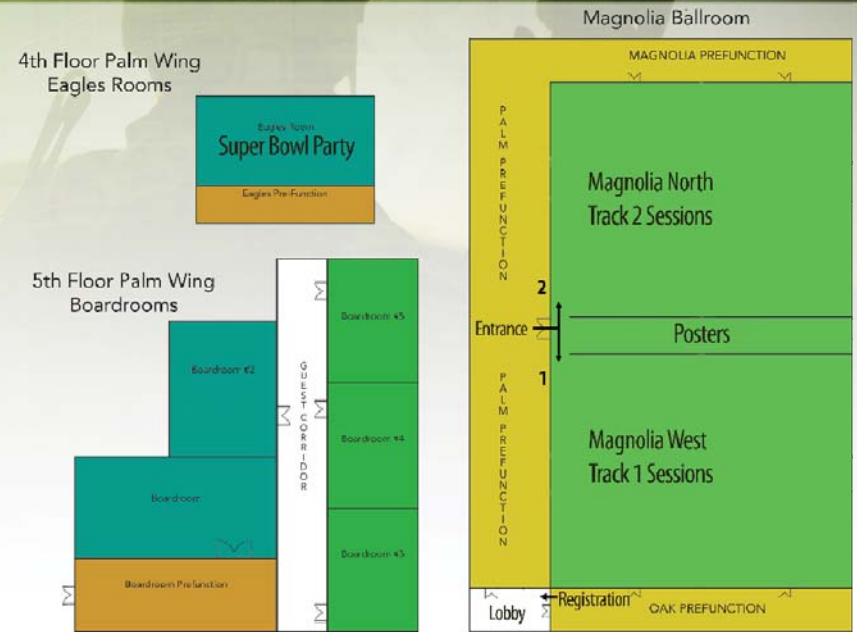
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Map & Exhibitors



Tabletop Exhibitors

(Location Shown Above)

Georgia Tech Research Institute (1)

<http://www.gtri.gatech.edu/>

Georgia Tech Research Institute (GTRI) is a recognized global leader for applied research and development and is positioned within Georgia Tech. Core research areas include complex and agile systems engineering, sensor design and integration, information management and cyber security, and defense technology development. GTRI, in conjunction with Air Force Research Laboratory (AFRL) and Air Force Special Operations Command, continues to excel in sensor research, development and integration, providing the warfighter with unparalleled situational awareness and targeting capabilities. GTRI and AFRL will exhibit an interactive demonstration of real-time, SAR-GMTI processing and displays of wide-area radar data.

Pugh Associates, LLC (2)

<http://www.pughassociates.com/>

We are a small group of experienced professionals that provide Consulting Services for US and/or FMS. Our Consulting Engineers each have over 30 Years' Experience in Surface Combatant Design, Development, Engineering, and Test and Evaluation.

NFCS Posters

Poster Session Chair: Ms. Jennifer Splaingard, The Boeing Company

Thank you to our poster authors! Posters are located in the Magnolia Ballroom.

- **Real-Time Characterization of the Atmosphere in Support of Electromagnetic Maneuver Warfare (EMW)**, Ms. Emily Anesta and Mr. Adam Schnabel, MIT Lincoln Laboratory
- **Army Howitzers for Naval Bombardment and Incursion**, Mr. Matthew Bush, U.S. Army ARDEC
- **Establishing Community Security Overlays to Assist in Addressing Deviations from Standard Baseline for Fire Control Software**, Mr. Daniel Campbell, U.S. Army RDECOM ARDEC
- **Extended-RANGE Targeting (E-RAT) Bayes Learning for AiTR**, Mr. Chris Carlton, Naval Air Warfare Center Weapons Division
- **Achieving Accurate Counter-Battery Fire Control Solutions in Expeditionary Environments**, Dr. Michael Christensen, Northrop Grumman
- **Improving Noise Performance of Digital-Pixel Readout Integrated Circuits for Wide Area Surveillance**, Dr. Christopher David, MIT Lincoln Laboratory
- **Experimental Results for C-UAS Active Sensing**, Dr. Mark Govoni, U.S. Army RDECOM CERDEC
- **Defense of Surface Ships against an Advanced ASCM**, Dr. Nicholas Hatch, MIT Lincoln Laboratory
- **ASuW AiTR - Ships-at-Sea**, Mr. Jesse Hodge, Naval Air Warfare Center Weapons Division
- **Extended-Range AiTR**, Mr. Jesse Hodge, Naval Air Warfare Center Weapons Division
- **Fire Control Technology Development**, Mr. Jesse Hodge, Naval Air Warfare Center Weapons Division
- **The Bank Shot Future Naval Capabilities (FNC) Project**, Mr. Jesse Hodge, Naval Air Warfare Center Weapons Division
- **Denied Targets for ASuW AiTR**, Dr. John Jensen, Naval Air Warfare Center Weapons Division

- **Cyber Defense Vulnerability Insight Laboratory (Cyber Devil): Moving the Culture of Software Development toward Security**, Mrs. Carol Lee, Naval Surface Warfare Center Dahlgren Division
- **Artillery Launched Pseudolite System (ALPS)**, Mr. David Musgrave, U.S. Army ARDEC
- **The Broadband Challenge for Next Generation Electronic Warfare**, Mrs. Anu Myne, MIT Lincoln Laboratory
- **Robust Algorithms for Launch Event Association**, Dr. David Padgett, MIT Lincoln Laboratory
- **High Isolation Simultaneous Transmit and Receive Technologies for Multifunction Operation**, Dr. Bradley Perry, MIT Lincoln Laboratory
- **Modernizing Mortar Fire Control**, Mr. Ernesto Pupo, Jr., U.S. Army ARDEC
- **G/ATOR Performance during Hyper Velocity Projectile Testing at WSMR in Support of the Electro-Magnetic Rail Gun Program**, Mr. Thomas Queeney, Northrop Grumman Electronic Systems
- **Deep Modeling of Cyber Threats (Deep-C)**, Dr. J. Wesley Regian, PeopleTec and Ms. Kaye Blankenship, U.S. Army SMDC/ARSTRAT
- **Fusion for AiTR**, Mr. Levi Roberts, Naval Air Warfare Center Weapons Division
- **Adaptive Radar Signal Processing Results Summary**, Mr. Duane Roth, Naval Air Warfare Center Weapons Division
- **Simplified High Frequency Simulation Validating Air and Missile Defense Sensor Systems**, Mr. Ted Selig, FishEye Software, Inc.
- **Three Approaches to Unlock Innovation and Control Costs and Risks of Advanced Multi-Function Sensor Systems**, Mr. Ted Selig, FishEye Software, Inc.
- **Targeting through the Clouds with Video Synthetic Aperture Radar**, Mr. Vincent Terek, Air Force Research Laboratory
- **The ASCM Threat: Historical Developments and Current Challenges**, Dr. Matthew Vanderhill, MIT Lincoln Laboratory
- **Micro-Ladar for Advanced Seekers**, Dr. Alexandru Vasile, MIT Lincoln Laboratory
- **Rapid Geolocation of Short Time-On Emitters**, Dr. Brian Watson, Information Systems Laboratories

Sunday, 7 Feb 16	Monday, 8 Feb 16	Tuesday, 9 Feb 16		Wednesday, 10 Feb 16		Thursday, 11 Feb 16	
	Single Track	Track 1	Track 2	Track 1	Track 2	Track 1	Track 2
	Continental Breakfast	Continental Breakfast		Continental Breakfast		Continental Breakfast	
	Open Architectures and Scalable Arrays Workshop	Plenary Session		Enabling Joint Integrated Fire Control & Events	Cyber Warfare (Threat, Exploitation, Assurance, Attack & Defense)	Modeling & Simulation	Air & Missile Defense
	Mid-Morning Break						
	Open Architectures and Scalable Arrays Workshop, cont'd	Plenary Session		Enabling Joint Integrated Fire Control & Events, cont'd	Cyber Warfare (Threat, Exploitation, Assurance, Attack & Defense), cont'd	Unmanned & Autonomous Systems (Sensors, Weapons & Platforms)	Air & Missile Defense, cont'd
	Networking Lunch	Networking Lunch Sponsored by The Boeing Company		Networking Lunch Sponsored by Lockheed Martin Corporation		Networking Lunch	
	Special Topics	Interoperability & Network Enhanced Fire Control	Advanced Technologies	Enabling Joint Integrated Fire Control & Events, cont'd	Fire Control in the Presence of Electronic Warfare	Persistent Intelligence, Surveillance & Reconnaissance	Air & Missile Defense, cont'd
	Afternoon Break						
Early Registration & Super Bowl Party	Special Topics, cont'd	Interoperability & Network Enhanced Fire Control, cont'd	Advanced Technologies, cont'd	Enabling Joint Integrated Fire Control & Events, cont'd	Fire Control in the Presence of Electronic Warfare, cont'd	Persistent Intelligence, Surveillance & Reconnaissance, cont'd	Interoperability & Integration
	Evening Off	Networking Reception Sponsored by Raytheon Company		Informal Outing at Jellyrolls (Piano Bar at Disney's Boardwalk Resort)		Evening Off	

Sunday, 7 February 2016

1700 - 2100	Early Registration
1815-->	NFCS Super Bowl Party (Snacks and Cash Bar Available) (Eagles Room)

Monday, 8 February 2016

0800 - 0845	Speaker Breakfast for Monday's Presenters (Mangino's)
0800 - 0930	Attendee Continental Breakfast (Palm Prefunction)
0800 - 1700	Registration Open (Lobby)
	Open Architectures and Scalable Arrays Workshop Workshop Chairs: Mr. Joseph Deroba, U.S. Army CERDEC I2WD and Mr. Sean Broderick, U.S. Army CERDEC I2WD (Magnolia Ballroom)
0900 - 0910	Welcome & Announcements Mr. Joseph Deroba and Mr. Sean Broderick, U.S. Army CERDEC I2WD
0910 - 0940	Army Fires Radar Open Systems Technologies (FROST) Overview Mr. Sean Broderick, U.S. Army CERDEC I2WD
0940 - 1010	Transitioning to Open Architecture Processing Solutions Mr. Michael LaRoi, Northrop Grumman Mission Systems
1010 - 1040	OA Radar Within the Open Mission Systems and MOSA Back End Framework Mr. Neil Young, General Dynamics Mission Systems
1040 - 1110	Mid-Morning Break (Palm Prefunction)
1110 - 1200	Panel Discussion
1200 - 1330	Attendee Networking Lunch (Included in Registration Fee) Guests Welcome for \$12.95 + SC (Reserve spot at NFCS Desk) (Garden Gallery Restaurant)

Networking Functions

Don't miss these great opportunities to network with your colleagues!

- **Sunday, 1815: NFCS Super Bowl Party** (Eagles Room). Snacks and cash bar will be available.
- **Monday – Thursday (See program for times each day): Networking Lunches** (Garden Gallery Restaurant). Attendee networking lunches are included in the registration fee this year. Guests are welcome and can pay \$12.95 plus service charge at the door. Must reserve in advance at the registration desk.
- **Tuesday, 1715 – 1900: Networking Reception** – Sponsored by Raytheon Company (Magnolia Foyer). Join colleagues for a reception following technical sessions to view the technical posters, meet with exhibitors, and continue dialogue with colleagues. Light Hors d'Oeuvres will be provided and a cash bar will be available.
- **Wednesday, 1930: Jellyrolls Dueling Piano Bar Outing** (Disney's Boardwalk Resort). Join your colleagues for an informal outing at Jellyrolls. Jellyrolls opens at 1900 and pianos will start at 2000, \$12 cover charge. There is no kitchen, just popcorn and drinks, so eat first. Attendees are on their own for transportation. We encourage you to wear your NFCS shirts so you can locate each other. Maps available at the registration desk.

	Special Topics Chair: Mr. Neeraj Pujara, Air Force Research Laboratory <i>(Magnolia Ballroom)</i>
1330 - 1335	Welcome & Announcements Mr. Neeraj Pujara, Air Force Research Laboratory
1335 - 1435	UAS (RPV) Technical Intelligence: Mitigating Risk Posed by UAS (RPV) Threats Mr. Michael Martin, U.S. Army RDECOM
1435 - 1535	SILVER FANG - Small Unmanned Aerial System (SUAS) Radio Frequency Direction Finding (RFDF) and Geolocation Lessons Learned Mr. Benjamin Tran, Air Force Research Laboratory
1535 - 1600	Afternoon Break <i>(Palm Prefunction)</i>
1600 - 1700	Cyber Threats & Defense of the Fire Control Loop Mr. Mark Byrkit, Johns Hopkins Applied Physics Laboratory
Tuesday, 9 February 2016	
0800 - 0845	Speaker Breakfast for Tuesday's Afternoon Presenters <i>(Mangino's)</i>
0800 - 0930	Attendee Continental Breakfast <i>(Palm Prefunction)</i>
0800 - 1730	Registration Open <i>(Lobby)</i>
Plenary Session	
0900 - 0910	Welcome, National Anthem, & Announcements Mr. Robert Strider, U.S. Army SMDC/ARSTRAT Technical Center & Mr. Joseph Deroba, U.S. Army CERDEC I2WD
0910 - 0945	Keynote: Mr. Richard De Fatta Acting Director, USASMDC/ARSTRAT Technical Center
0945 - 1020	Mr. Keith Englander Director for Engineering, Missile Defense Agency
1020 - 1055	Mr. C. Douglas Ebersole Executive Director, Air Force Research Laboratory

1055 - 1125	Mid-Morning Break <i>(Palm Prefunction)</i>	
1125 - 1200	Mr. William Bray Executive Director, Program Executive Office, Integrated Warfare Systems, Office of the Assistant Secretary of the Navy, (Research, Development and Acquisition)	
1200 - 1230	Fireside Chat with Plenary Speakers	
1230 - 1400	Attendee Networking Lunch Sponsored by The Boeing Company Guests Welcome for \$12.95 + SC (Reserve spot at NFCS Desk) <i>(Garden Gallery Restaurant)</i>	
	Track One <i>(Magnolia West)</i>	Track Two <i>(Magnolia North)</i>
	Interoperability & Network Enhanced Fire Control Session Chairs: Mr. Steven Buckley, U.S. Navy PEO IWS6; Dr. Gary McCown, SPAWAR Systems Center SD; and Dr. Katherine Rink, MIT Lincoln Laboratory	Advanced Technologies Session Chairs: Dr. Barry Alexia, Rockwell Collins; Mr. Mark Longbrake, Black River Systems Company; and Dr. Karla Spriestersbach, Missile Defense Agency
1400 - 1405	Session Introduction	Session Introduction
1405 - 1425	Adapting Tight Weapon and Sensor Coupling in IAMD Mr. David Saalwaechter, U.S. Army AMRDEC	Improving Noise Performance of Digital-Pixel Readout Integrated Circuits for Wide Area Surveillance Dr. Christopher David, MIT Lincoln Laboratory
1425 - 1445	IAMD Knowledge-Based Engagement Planning to Counter Advanced Threat Mr. Keith Godwin and Mr. Joel Hill, Torch Technologies, Inc.	Fire Control Lidar Receivers using Geiger-Mode Avalanche Photodiode Arrays Dr. Erik Duerr, MIT Lincoln Laboratory
1445 - 1505	Multi-Function Radars and Multi-Source Tracking for Air Surveillance Mr. Ryan Elwell, U.S. Army CERDEC	Multispectral Aperture Sensor Common Testbed (MASCOT) Mr. William Moore, Defense Engineering Corporation
1505 - 1525	Critical Link Management for Small Form Factor Link 16 Terminals Mrs. Raffianne Doyle, SPAWAR Systems Center Pacific	Glint Reduction for Extended Target Tracking using a Synthetic High Range Resolution Scattering Centroid Dr. Daniel Lawrence, Technology Service Corporation
1525 - 1555	Afternoon Break - Votes are Due for Best Poster <i>(Palm Prefunction)</i>	

1555 - 1615	Extended-Range AiTR Mr. Jesse Hodge, Naval Air Warfare Center Weapons Division	Bistatic SAR Imaging with an Airborne Transmitter and Ground-Based Receiver Ms. Wendy Garber, Matrix Research
1615 - 1635	Fusion for AiTR Mr. Levi Roberts, Naval Air Warfare Center Weapons Division	Long Wave Infrared Hyperspectral Heterodyne Imagery Dr. Shawn Redmond, MIT Lincoln Laboratory
1635 - 1655	Common Subsystem Performance Assessment & Required Qualities Resource Mr. Douglas Keating, The Boeing Company	Delivery Performance Evaluation for Non-Impact Munitions Mr. Tomas Bober, U.S. Army ARDEC
1655 - 1715	Fire Control Application of the Internet-of-Things Mr. Ralph Tillinghast, U.S. Army ARDEC	Advanced State Estimation Algorithms Applied to A2/AD Threats Mr. Matthew McLaughlin, MIT Lincoln Laboratory
1715 - 1900	Networking Reception Sponsored by Raytheon Company <i>(Magnolia Foyer)</i>	
Wednesday, 10 February 2016		
0800 - 0845	Speaker Breakfast for Wednesday's Presenters <i>(Mangino's)</i>	
0800 - 0930	Attendee Continental Breakfast <i>(Palm Prefunction)</i>	
0800 - 1730	Registration Open <i>(Lobby)</i>	
	Track One <i>(Magnolia West)</i>	Track Two <i>(Magnolia North)</i>
	Enabling Joint Integrated Fire Control & Events Sub-Session 1: Bi-Static Radar Enabling Joint Integrated Fire Control Support Session Chair: Mr. Jesse Hodge, Naval Air Warfare Center Weapons Division	Cyber Warfare (Threat, Exploitation, Assurance, Attack & Defense) Session Chairs: Mr. Douglas Ousborne, Johns Hopkins Applied Physics Laboratory and Ms. Jennifer Splaingard, The Boeing Company
0900 - 0905	Session Introduction	Session Introduction
0905 - 0925	Bistatic Combat Identification Dr. Bill Pierson, Matrix Research	Cyber-Physical Systems Security Challenges and Lessons Learned Mr. Richard Massey, The Boeing Company
0925 - 0945	Radar Signal Processing for Denied Access Mr. Mark Hammond, Raytheon Space and Airborne Systems	Overview of Cyberspace Analysis Mr. David Silvernail, U.S. Army SMDC/ARSTRAT

0945 - 1005	The Bank Shot Future Naval Capabilities (FNC) Project Mr. Jesse Hodge, Naval Air Warfare Center Weapons Division	Artillery Enabled Network Attack Mr. David Musgrave, U.S. Army ARDEC
1005 - 1025	Adaptive Radar Signal Processing Results Summary Mr. Duane Roth and Ms. Cindy Fuentes-Munoz, Naval Air Warfare Center Weapons Division	A Proposed "Exploit Collateral Effect Potential (ECEP)" Metric Mr. Giorgio Bertoli, U.S. Army RDECOM
1025 - 1055	Mid-Morning Break <i>(Palm Prefunction)</i>	
	Enabling Joint Integrated Fire Control & Events Sub-Session 2: Combat ID in Support of Anti-Surface Warfare Session Chair: Mr. Roy Ballard, Air Force Research Laboratory	Cyber Warfare (Threat, Exploitation, Assurance, Attack & Defense), cont'd
1055 - 1100	Announcements	Announcements
1100 - 1120	ASuW AiTR - Ships-at-Sea Mr. Jesse Hodge, Naval Air Warfare Center Weapons Division	A Cyber Security Risk Management Tool for Naval Combat Systems Mr. Said Saadi, Naval Surface Warfare Center Dahlgren Division
1120 - 1140	Denied Targets for ASuW AiTR Dr. John Jensen, Naval Air Warfare Center Weapons Division	Modeling the Decision Processes of Cybersecurity Analysts to Improve Security Assessments and Defense Strategies Dr. Jaime Acosta, U.S. Army Research Laboratory
1140 - 1200	Active Discrimination Analysis for an Advanced Anti-Ship Cruise Missile Ms. Leah Uftring, MIT Lincoln Laboratory	Cyber Active Defense Evaluation and Development Mr. Paul McFall, Naval Surface Warfare Center Dahlgren Division
1200 - 1220	Defense of Surface Ships against an Advanced ASCM Dr. Nicholas Hatch, MIT Lincoln Laboratory	Cyber Supply Chain Risk Management (SCRM) in Military Avionics: A Contractor's View Mr. Brian Steele, Boeing Military Aircraft
1220 - 1400	Attendee Networking Lunch Sponsored by Lockheed Martin Corporation Guests Welcome for \$12.95 + SC (Reserve spot at NFCS Desk) <i>(Garden Gallery Restaurant)</i>	
	Track One <i>(Magnolia West)</i>	Track Two <i>(Magnolia North)</i>
	Enabling Joint Integrated Fire Control & Events Sub-Session 3: Searching for Patterns using Big Data Techniques Session Chair: Mr. Jesse Hodge, Naval Air Warfare Center Weapons Division	Fire Control in the Presence of Electronic Warfare Session Chairs: Mr. Jeffrey Ayers, The Boeing Company; Mrs. Penny Moran, Naval Surface Warfare Center Dahlgren Division; and Mr. Richard Moran, Naval Surface Warfare Center Dahlgren Division
1400 - 1405	Announcements	Session Introduction

1405 - 1425	Big Data and Fire Control Dr. Arjuna Flenner, Naval Air Warfare Center Weapons Division	Softkill Coordination for the Surface Navy Dr. George Foster, Naval Surface Warfare Center Dahlgren Division
1425 - 1445	Robust Representations: Symmetries and Stability for ATR Dr. Arjuna Flenner, Naval Air Warfare Center Weapons Division	Army Electronic Protection Road Map Dr. G. Mark Jones, MIT Lincoln Laboratory
1445 - 1505	Extended-RANge Targeting (E-RAT) Bayes Learning for AiTR Mr. Chris Carlton, Naval Air Warfare Center Weapons Division	Fighter Radar Counter-DRFM EP Testing Ms. Laura Ross, MIT Lincoln Laboratory
1505 - 1525	Big Data Architecture and Analytics for Improving Combat ID: Evidence and Potentials Dr. Ying Zhao, Naval Postgraduate School	Operational Analysis of Air and Missile Defense Plug-and-Fight Architectures during Electronic Attack Mr. Steven Faulise, Raytheon Company
1525 - 1555	Afternoon Break (Palm Prefunction)	
	Enabling Joint Integrated Fire Control & Events Sub-Session 4: Technology Advances in Support of Combat ID Session Chair: Mr. James Cech, Georgia Tech Research Institute	Fire Control in the Presence of Electronic Warfare, cont'd
1555 - 1600	Announcements	Announcements
1600 - 1620	Advanced Small Arms Ballistic System (ASABS) Mr. Gerard Gaeta, U.S. Army RDECOM ARDEC	Modernization of Sidelobe Cancellation Technology in a Legacy Fire Control Radar Mr. Ryan Nichols, Raytheon Integrated Defense Systems
1620 - 1640	Advanced CID Techniques to Improve Integrated Fire Control Dr. Sami Ashour and Mr. Richard Loveless, Raytheon Space and Airborne Systems	Direction Finding Conformal Antenna Array Mr. Jason Reneau, U.S. Army AMRDEC
1640 - 1700	Active Stabilization of Firearms by Optical Target Tracking Mr. Terence Rice, U.S. Army ARDEC	Estimating Threat Intent for Soft-Kill Effectiveness Assessment Mr. Andrew Berman, MIT Lincoln Laboratory
1700 - 1720	Air Force Combat Identification Portfolio Mr. Andrew Freeman, Air Force Research Laboratory	VECTS: Joint Integrated EW Training Mr. David Lowe, Georgia Tech Research Institute
1930 -->	Informal Outing at Jellyrolls (Piano Bar at Disney's Boardwalk Resort) Opens at 1900, Pianos Start at 2000 (\$12 Cover, No Kitchen - Only Drinks and Popcorn)	

Thursday, 11 February 2016

0800 - 0845	Speaker Breakfast for Thursday's Presenters <i>(Mangino's)</i>	
0830 - 0930	Attendee Continental Breakfast <i>(Palm Prefunction)</i>	
0800 - 1600	Registration Open <i>(Lobby)</i>	
	Track One <i>(Magnolia West)</i>	Track Two <i>(Magnolia North)</i>
	Modeling & Simulation Session Chairs: Ms. Bonnie Johnson, Naval Postgraduate School; Mr. Herbert Landau, Raytheon Company; and Mr. Gary Somers, Raytheon Company	Air & Missile Defense Session Chairs: Mr. Stan Schroeder, Lockheed Martin Corporation and Mr. Robert Strider, U.S. Army SMDC/ARSTRAT Technical Center
0900 - 0905	Session Introduction	Session Introduction
0905 - 0925	Integrated Weapons Environment for Analysis (IWEA) Weapons Effects Server Overview Mr. Eric Scarborough, Air Force Research Laboratory	Analysis of an Advanced Anti-Ship Cruise Missile Passive Seeker Mr. Bryan Babcock, MIT Lincoln Laboratory
0925 - 0945	Assessment of Time Critical Target Strike Options Dr. Sara Velez, MIT Lincoln Laboratory	Passive Kill Chain Analysis Dr. Russell Miller, MIT Lincoln Laboratory
0945 - 1005	AFRL's Fast-Running Hard Target Penetration Modeling Overview Ms. Keri Bailey, Air Force Research Laboratory	Force-on-Force Electronic Warfare Ms. Emily Anesta, MIT Lincoln Laboratory
1005 - 1025	Warhead Design using Fragment Flux Characteristics with Respect to Target Lethality Mr. David Hogg, Air Force Research Laboratory	Leveraging Search/Track Data to Drive Air and Missile Defense Digital Simulations Ms. Rebecca Goins, U.S. Army AMRDEC
1025 - 1055	Mid-Morning Break <i>(Palm Prefunction)</i>	
	Unmanned & Autonomous Systems (Sensors, Weapons & Platforms) Session Chairs: Dr. Gary Somers, Raytheon Space and Airborne Systems and Mr. Ralph Tillinghast, U.S. Army ARDEC	Air & Missile Defense, cont'd
1055 - 1100	Session Introduction	Announcements

1100 - 1120	RoboPaladin: A Path to Autonomous Howitzers Mr. Matthew Bush, U.S. Army ARDEC	Multiple Aegis Ships' Command and Control (C2) and Battle Management for IAMD: An Affordable Path to Defeating Coordinated Raids - Progress Since 2015 Dr. Stephen Woodall, IERUS Technologies, Inc.
1120 - 1140	The Power of the Payload: Innovation for Intelligent Systems Ms. Jennifer Pels, SPAWAR Systems Center Pacific	Assessment of Offensive / Defensive Integration for Ballistic Missile Defense Mr. Martin Goodman, U.S. Army SMDC/ARSTRAT
1140 - 1200	Real-Time, Autonomous Multi-Sensor Coordination and Data Fusion for Tactical Reconnaissance Dr. Thomas Walls, Naval Research Laboratory	Trade Study on Cruise Missile Defense of Forward Bases Mr. Carl Aten, Johns Hopkins Applied Physics Laboratory
1200 - 1220	The Undersea Constellation: Providing Leap-Ahead Capabilities for the Third Offset Strategy Ms. Rachel Volner, SPAWAR Systems Center Pacific	High Resolution Waveform Application for Missile Defense Kill Assessment Mr. Michael Christian, U.S. Army AMRDEC
1220 - 1400	Attendee Networking Lunch (Included in Registration Fee) Guests Welcome for \$12.95 + SC (Reserve spot at NFCS Desk) (Garden Gallery Restaurant)	
	Persistent Intelligence, Surveillance & Reconnaissance Session Chairs: Mr. Clyde Elliott, U.S. Army SMDTC; Mr. Herbert Landau, Raytheon Company; Mr. Glenn McLeod, Lockheed Martin Corporation; and Mr. John Warnke, Lockheed Martin Corporation	Air & Missile Defense, cont'd
1400 - 1405	Session Introduction	Announcements
1405 - 1425	Nanosatellite Military Utility Analysis (MUA) for ISR - Kestrel Eye Mr. Martin Goodman, U.S. Army SMDC/ARSTRAT	Reverse Engineering of an A2/AD Threat from Radar Measurements Dr. Audrey Dumanian, MIT Lincoln Laboratory
1425 - 1445	Gunship over Degraded Visual Environments (DVE) Sensor Investigation (GODSI) Ms. Brooke Hayden, Air Force Research Laboratory	Captive Carry Missile Seeker Testbed Development Dr. Nicholas Allan, MIT Lincoln Laboratory
1445 - 1505	Digital-Pixel Focal Plane Array (DFPA) Enables Next Generation Infrared Search and Track (IRST) Mr. Justin Baker, MIT Lincoln Laboratory	Robust Algorithms for Launch Event Association Dr. David Padgett, MIT Lincoln Laboratory
1505 - 1525	Gotcha Spiral 2 Radar Ground Demonstration Performance Ms. Kasandra Maxwell, Air Force Research Laboratory	Overview of Countermeasure Flight Testing Mrs. Linda Maciel, MIT Lincoln Laboratory

1525 - 1555	Afternoon Break <i>(Palm Prefunction)</i>	
	Persistent Intelligence, Surveillance & Reconnaissance, cont'd	Interoperability & Integration Session Chairs: Mr. James Cech, Georgia Tech Research Institute and Dr. Gary McCown, SPAWAR Systems Center SD
1555 - 1600	Announcements	Session Introduction
1600 - 1620	Routing of Cooperative Autonomous Vehicles for Persistent ISR Dr. Hector Ortiz-Pena, CUBRC, Inc.	Time-Stamped Messaging in the VITA-49.2 Standard Supports Precision-Events Across Platforms for Open-Architecture Systems Mr. Guy Zaybekian, Johns Hopkins Applied Physics Laboratory
1620 - 1640	MIMO Radar for Airborne ISR Platforms in the Maritime Environment Mr. Jordan Shibley, MIT Lincoln Laboratory	Enterprise Wide Integration of AIAMD Architecture into Hardware-in-the-Loop to Test Integrated Operation prior to Field Test and Facilitate Future International Integration Mr. Richard Erasquin, Jr., Raytheon Company
1640 - 1700	Small Form Factor High Frequency Direction Finding Mr. Matthew Shuman, Air Force Research Laboratory	Metadata Enrichment of Images and Video (MEIV) - Empowering the Warfighter Dr. Daniel Reiningger, Semandex Networks, Inc. and Ms. Kaye Blankenship, U.S. Army SMDC/ARSTRAT
1700 - 1720	High Probability of Intercept Super Wideband Compressive Receiver Dr. Charles Cerny, Air Force Research Laboratory	G/ATOR Performance during Hyper Velocity Projectile Testing at WSMR in Support of the Electro-Magnetic Rail Gun Program Mr. Thomas Queeney, Northrop Grumman Electronic Systems
1720	Adjourn	

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