PRECISION STRIKE ASSOCIATION

presents the 25th annual PRECISION STRIKE TECHNOLOGY SYMPOSIUM (PSTS-15)

Precision Strike Priorities to Meet Global Challenges 27-29 OCTOBER 2015

THE JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS LABORATORY KOSSIAKOFF CONFERENCE CENTER * LAUREL, MD

PSTS-15 will be conducted at the SECRET//NOFORN Classification Level

This document is unclassified in its entirety

PSA Programs Chair: Ginny Sniegon

PSA Programs Vice-Chair: CAPT Sonic Hejmanowski, USN

Tri-Chairs: Kerry Neace (Day 1)—CAPT Larry Burt, USN (Ret) (Day 2)—Marc Tang (Day 3)

U.S. Military & Civilian Advisors

OSD: CAPT Sonic Hejmanowski, USN & Chuck Kelly

Air Force: Col Greg Payne, USAF Navy: CDR Jojo Wilson, USN

Army: LTC Nathan Fischer, USA & LTC Ken Britt, USA (Ret)

Marine Corps: MAJ Thriller Schiller, USMC The Joint Staff: Lt Col Ammo Friedel, USAF

TUESDAY, 27 OCTOBER 2015

0700	CHECK-IN / CONTINENTAL BREAKFAST
0750	SYMPOSIUM WELCOME: Ken Masson—Chairman of the Board
0755	JHU/APL WELCOME: Timothy Galpin—Assistant Director, Johns Hopkins University Applied Physics Lab
0800	PRECISION STRIKE CHALLENGES KICK-OFF: Captain Jaime Engdahl, USN—PM, Precision Strike Weapons Program Office, PMA-201 John Marino—Mission Area Lead Integrator for Surface & Strike Weapons, PEO(U&W)
0830 0910	CHALLENGES TO SUSTAIN OUR TECHNOLOGICAL EDGE: Honorable Christine Fox—Assistant Director, JHU/APL & former Acting Deputy Secretary of Defens CYBER THREAT CONCERNS FOR FUTURE WARFARE ENGAGEMENT:
0950	Donna Gregg—Asymmetric Operations Sector, Sector Head, JHU/APL NETWORKING REFRESHMENT BREAK
1015	INNOVATIVE APPROACHES TO WARFIGHTING:

Dr. Will Roper—Director, Strategic Capabilities Office, OSD

TUESDAY, 27 OCTOBER 2015 (continued)

1100	INTELLIGENCE ASSESSMENT UPDATE—SET THE SCENE: Lead: Dr. Sean Kirkpatrick—DIO for Scientific & Technical Intelligence, DIA China/Russia/Iran/North Korea/Non-State (ISIS, AQ)—Overview of Foreign Capabilities, Doctrine and Intent: Frank Miller—DIO East Asia, DIA Tim Shea—DIO Eurasia, DIA Speaker on Syria/ISIL/Iran TBD —DIO Middle East/North Africa, DIA
1200	INFORMAL LUNCHEON BUFFET—Kossiakoff Center Dining Room
1245	KEYNOTE ADDRESS—INNOVATIONS & TECHNOLOGIES FOR PRECISION ENGAGEMENT: Rear Admiral Michael Manazir, USN—Director, Air Warfare (OPNAV N98)
1330	TOPICS IN WEAPONS RESEARCH & ENGINEERING: Dr. Spiro Lekoudis—Director, Weapons Systems, ASD(R&E)/Research Directorate, OSD
1400	JOINT ATTACK MUNITION SYSTEMS (JAMS) UPDATE: Colonel James Romero, USA—Project Manager, Joint Attack Munition Systems, Redstone Arsenal
1430	CONGRESSIONAL PERSPECTIVES—KEEPING OUR ASYMMETRIC EDGE: Representative Randy Forbes (VA-04) (Video Presentation)—Chairman, U.S. House Committee on Armed Services Subcommittee on Seapower and Projection Forces Representative Rob Wittman (VA-01) (Video Presentation)—Member, U.S. House Committee on Armed Services
1500	REFRESHMENT BREAK
1515	MUNITIONS REQUIREMENTS ASSESSMENT TO ADDRESS WARFIGHTERS' NEEDS: Major Ryan McGuire, USAF—Warfighting Analysis Division, The Joint Staff (J-8)
1545	PROTOTYPING FOR AIR DOMINANCE FOR 2030+: Colonel John Gloystein, USAF—Acting Commander/Director, AFMC AFRL/RW, Eglin AFB
1630	SUSTAINING AMERICA'S PRECISION STRIKE ADVANTAGE—WEAPONS MIX RE-THINK: Mark Gunzinger—Senior Fellow, Center for Strategic and Budgetary Assessments
1715	USE OF DEFENSE CONSORTIA FOR RAPID TECHNOLOGY DEVELOPMENT: Chris Van Metre—President of SCRA
1800	EVENING RECEPTION WEDNESDAY, 28 OCTOBER 2015
0700	CHECK-IN / CONTINENTAL BREAKFAST
0730	OFFENSIVE ANTI-SURFACE WARFARE (OASuW) MISSION: OASuW Portfolio: Captain Jaime Engdahl, USN—Program Manager, Precision Strike Weapons Program Office, PMA-201 LRASM Deployment Office

• LONG RANGE ANTI-SHIP MISSILE (LRASM):

Captain Timothy Hill, USN—PMA-201 LRASM Deployment Office

WEDNESDAY, 28 OCTOBER 2015 (continued)

0815 ELECTRONIC WARFARE STRATEGY, OPERATIONAL SUPPORT & SECURITY:

Jay Kistler—Director for Electronic Warfare & Countermeasures, ASD(R&E)

0845 TARGETING SUPPORT FOR FUTURE WARFARE ENGAGEMENT::

Wayne Larsen—Director of Operations, 363rd ISR Group, Air Force Targeting Center, Air Combat Command, Langley AFB

0930 NETWORKING REFRESHMENT BREAK

1000 PANEL—TECHNOLOGIES TO SUPPORT PRECISION ENGAGEMENT REQUIREMENTS:

- Moderator: James MacStravic—DASD for Tactical Warfare Systems, OUSD(AT&L)
- Navy: Rear Admiral Mat Winter, USN—Chief of Naval Research, DASN for Science & Technology
- Air Force: Major General Paul "PJ" Johnson, USAF—Director, Operational Capability Requirements, HQ
 USAF
- Army: Joe Pelino—Director of Technology, Enterprise & SI Center, ARDEC
- Marine Corps: Brigadier General Michael Groen, USMC—Director of Marine Corps Intelligence, Intelligence Department, Headquarters USMC
- USSOCOM: Tony Davis—S&T Director, United States Special Operations Command
- Q&A with Above Panelists

1145 BREAKTHROUGH TECHNOLOGIES FOR AIR SUPERIORITY MISSION:

- Major General Paul "PJ" Johnson, USAF—Director, Operational Capability Requirements, HQ USAF
- 1230 INFORMAL LUNCHEON BUFFET—Kossiakoff Center Dining Room

1300 RICHARD H. JOHNSON TECHNICAL ACHIEVEMENT AWARD CEREMONY

 Presentation of Seventh Richard H. Johnson Award for Technical Excellence in the Field of Precision Strike to:

Dr. Wade Dyer—"In Demand" Consultant (Former Principal Fellow with Raytheon & Texas Instruments) **Paul Manz**—Chief Scientist, U.S. Army, PEO Ammunition, Pacatinny Arsenal

Remarks by Award Recipients

1330 DEVELOPMENT OF BREAKTHROUGH TECHNOLOGIES FOR NATIONAL SECURITY:

- Hypersonic Air-breathing Weapon Concept and Tactical Boost Glide System
- Swarming and Autonomous Systems (Gremlin, CODE, HYDRA, and ALIAS)
- Precision Fires (MadFires and Persistent Close Air Support)
 Dr. Brad Tousley—Director, DARPA/Tactical Technology Office
- 1430 REFRESHMENT BREAK

WEDNESDAY, 28 OCTOBER 2015 (continued)

1445 TECHNOLOGIES NEEDED FOR FUTURE SURFACE WARFARE ENGAGEMENT:

• Session Chair—Scene Setter Overview:

Kerry Neace—Program Area Manager for Kinetic Engagement, JHU/APL

Autonomy in Swarming Vehicle Control:

Treven Wall & Cammy Peterson—JHU/APL

Hypervelocity Projectile for Surface Attack:

David Drewry—JHU/APL and Adam Jones—HVP PM, NSWC/Dahlgren

Passive Sensing for Weapon Guidance:

Bill Emerson—BAE Systems

• Weapon-Weapon Communication for Collaborative Engagement:

Roger Sullivan—ONR

Enabling Concepts for OASuW Weapons:

Dr. Ken Olson—JHU/APL

Technology Papers Session Q&A with Above Team

1800 ADJOURN FOR THE DAY

THURSDAY, 29 OCTOBER 2015

0700 CHECK-IN / CONTINENTAL BREAKFAST

0730 INTEGRATED COUNTER-WMD ENGAGEMENT ENTERPRISE (ICEE) DEMONSTRATION:

Dr. Bob Hastie—Technical Director, Weapons & Capabilities Division, Counter-WMD Technologies Dept., Defense Threat Reduction Agency (DTRA)

0815 GROUND MOVING TARGET INDICATOR (GMTI)/MOTION INTELLIGENCE:

Mark Choiniere—Acting Director, InnoVision Directorate, National Geospatial-Intelligence Agency (NGA)

0845 CONVENTIONAL PROMPT GLOBAL STRIKE:

Dr. Karen St. Germain—Deputy Director for Remote Sensing & Prompt Strike, Office of DASD Space, Strategic & Intelligence Systems, OUSD(AT&L)

0915 STRATEGIC ISR:

Bong Gumahad—Deputy Director for ISR (Airborne & Space), Office of DASD Space, Strategic & Intelligence Systems, OUSD(AT&L)

0945 REFRESHMENT BREAK

1000 KEYNOTE—STRATEGIC CHALLENGES & ENDURING REQUIREMENTS OF DETERRENCE:

Lieutenant General Stephen Wilson, USAF—Deputy Commander, United States Strategic Command (USSTRATCOM)

1045 KEYNOTE—ARMY WARFIGHTING CHALLENGES WITH SPECIFIC EMPHASIS ON PRECISION STRIKE CAPABILITIES:

Lieutenant General H. R. McMaster, USA—Director, Army Capabilities Integration Center & Deputy CG, Futures, U.S. Army Training and Doctrine Command

THURSDAY, 29 OCTOBER 2015 (continued)

1130	INFORMAL LUNCHEON BUFFET-	 Kossiakoff Center Dining 	Room
------	---------------------------	--	------

1200 LUNCHEON ADDRESS—THE GLOBAL CHALLENGE OF PREVENTING NUCLEAR WAR BY WINNING THE WARS THAT COUNT:

Dr. Peter Huessy—President, Geostrategic Analysis

1245 HIGH ENERGY LASER – JOINT TECHNOLOGY OFFICE OVERVIEW:

Dr. Lawrence Grimes—Director, HEL-JTO

1330 TECHNOLOGIES AHEAD—NATIONAL LABS:

• Session Chair—Scene Setter Overview:

Jeff Braun—Senior Weapon Subsystems Engineer, Sandia National Laboratories

Sandia National Laboratories:

Dr. Gary Polansky—Senior Scientist, Integrated Military Systems Development Center

Los Alamos National Laboratory:

Andy Erickson—Deputy Principal Associate Director, Global Security Programs

Lawrence Livermore National Laboratory:

Dr. Mike Carter—Director, DoD Technologies Program, NIF & Photon Science

1530 CLOSING REMARKS

Marc Tang—Vice Chairman of the Board