



PRECISION STRIKE ANNUAL REVIEW

(PSAR-19)

Our Nation's Security Demands Lethal Precision Strike

Lockheed Martin Global Vision Center

March 26 – 27, 2019



PSAR-19 will be conducted at SECRET//NOFORN classification level.
This document is unclassified in its entirety.

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NDIA

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WHO WE ARE

The Precision Strike Association is an affiliate of the National Defense Industrial Association. PSA is a world class organization dedicated to advancing the art and science of precision engagement concepts and technologies. The Association focuses on DoD's Kill Chain by supporting the development of systems that find, fix, track, target, attack, and assess hard and soft targets. PSA is a coalition of military, government, academic and industrial subject matter experts. PrecisionStrike.org

SCHEDULE AT A GLANCE

TUESDAY, MARCH 26

General Session

8:00 - 11:30 am

William J. Perry Award Ceremony

11:30 am - 12:00 pm

Networking Luncheon

12:00 - 1:00 pm

General Session

1:00 - 5:20 pm

Networking Reception

5:20 - 7:00 pm

WEDNESDAY, MARCH 27

General Session

8:00 am - 11:45 pm

Networking Luncheon

11:45 am - 1:00 pm

General Session

1:00 - 5:00 pm

WELCOME TO PSAR-19

With the re-emergence of great power competition, the Precision Strike community must be ready, and we've put together a compelling agenda for government, industry and academia participants. Critical topics at this year's review and discussion will characterize the new strategic environment, define the new national security strategy agenda, and address requirements for future conflicts. PSAR-19 will allow the precision strike community the opportunity to pursue many new challenges and concerns by showcasing focus areas related to:

- Congressional Perspective – Navigating the Threat
- Next Generation Strike Weapons Trade-Space Analysis Update
- Resurgent Russia in Europe – Precision Strike Challenges
- F-35 Continuous Capability Development and Deployment (C2D2)
- U.S. Fleet Posture for a Resurgent Russia
- Precision Strike Weapons, from Systems towards Effects
- Integrated Military Systems Analytics
- Balancing Cost and Performance of DoD's Hypersonic Strike Weapons
- Hypersonic Strike and the Role of Speed in Precision Engagement
- Innovation – Design Thinking
- Multi-Domain Warfighting Efficiency
- Agility and Innovation – Adapting the Force for the Fight
- U.S. Posture to Meet the European Threat
- Strategic and Agile Acquisition
- Speed to the Fight for Precision Engagement
- Workforce Development – Industrial Capacity and Brainpower

Special Award Ceremony

Presentation of 23rd William J. Perry Award



WILLIAM J. PERRY AWARD

In recognition of superb contributions to precision strike systems, the Precision Strike Association and the William J. Perry Award recognizes public or private sector leadership or achievement that results in significant contributions to the development, introduction or support of precision strike systems. The recipient must have made significant contributions that have led to the strengthening of our national security by direct application of precision strike capabilities to DoD systems and/or to the enhancement of our industrial technology base for application to precision strike technology.

This year's award will be presented during the Precision Strike Annual Review on March 26, 2019.

More information about this award can be found at:

PRECISIONSTRIKE.ORG

EVENT INFORMATION

EVENT THEME

Our Nation's Security Demands Lethal Precision Strike Capabilities

PLANNING COMMITTEE

PSA Board Chair:

Ken Masson

Annual Review Chair:

Kurt Chankaya

PSA Programs DoD Advisor

CDR Sam "Chubs" Gray, USN

Congressional & William J. Perry Award Chair:

Dick Rumpf

U.S. MILITARY & CIVILIAN ADVISORS

OSD

CDR Sam "Chubs" Gray, USN &
Chuck "Tooba" Kelly

Army

COL Frank Leija, USA, LTC Jeff Munn, USA &
LTC Ken Britt, USA (Ret)

Air Force

Col Mark "Smash" Van Brunt, USAF

Marine Corps

Maj Mark "Karch" Koval, USMC

Navy

CDR Eric "Skip" Taylor, USN &
LtCol Ryan "Puddles" Thompson, USMC

The Joint Staff

Lt Col Nathan "VI-DOF" Diller, USAF &
Maj Dan "Otis" Harper, USAF

EVENT CONTACT

Kimberly Williams

Director, Meetings
(703) 247-2578
kwilliams@ndia.org

ATTIRE

Civilian: Business
Military: Uniform of the day

SPEAKER GIFTS

In lieu of speaker gifts, a donation is being made to the Fisher House Foundation.

SECURITY

This event is **classified at the SECRET//NOFORN level**. All attendees must be US Citizens holding a Secret or higher clearance.

SURVEY AND PARTICIPANT LIST

You will receive via email a survey and list of attendees (name and organization) after the conference. Please complete the survey, which helps make our events even more successful in the future.

HARASSMENT STATEMENT

NDIA is committed to providing a professional environment free from physical, psychological and verbal harassment. NDIA will not tolerate harassment of any kind, including but not limited to harassment based on ethnicity, religion, disability, physical appearance, gender, or sexual orientation. This policy applies to all participants and attendees at NDIA conferences, meetings and events. Harassment includes offensive gestures and verbal comments, deliberate intimidation, stalking, following, inappropriate photography and recording, sustained disruption of talks or other events, inappropriate physical contact, and unwelcome attention. Participants requested to cease harassing behavior are expected to comply immediately, and failure will serve as grounds for revoking access to the NDIA event.

AGENDA

TUESDAY, MARCH 26

0700 REGISTRATION / CONTINENTAL BREAKFAST



Ken Masson

0800 PSA ANNUAL REVIEW WELCOME

Ken Masson
PSA Chairman



Brian Kelly

0810 PSAR-19 OPENING REMARKS

Kurt Chankaya
PSAR-19 Event Chair

0815 CONGRESSIONAL PERSPECTIVE—NAVIGATING THE THREAT

Heath Bope
Senate Armed Services Committee Staff, U.S. Senate
Invited



Major Evan Parr, USAF

0845 NEXT GENERATION STRIKE WEAPONS TRADE-SPACE ANALYSIS UPDATE

Brian “Irish” Kelly
NAVAIR 4.OM Analysis of Alternatives Lead

0915 RESURGENT RUSSIA IN EUROPE—PRECISION STRIKE CHALLENGES

Major Evan “Bogey” Parr, USAF
European Division Checkmate



Honorable James Anderson

0945 NETWORKING REFRESHMENT BREAK

1005 KEYNOTE ADDRESS: NATIONAL SECURITY PERSPECTIVE—MISSILE DEFENSE REVIEW

Honorable James Anderson
Assistant Secretary of Defense of Strategy, Plans, and Capabilities, Office of the Secretary of Defense



Vice Admiral Mat Winter, USN

1050 F-35 CONTINUOUS CAPABILITY DEVELOPMENT AND DEPLOYMENT (C2D2)

Vice Admiral Mat Winter, USN
Director, Joint Strike Fighter Program, Office of the Secretary of Defense



1130 NDIA GOLD MEDAL AWARD PRESENTATION

PSA Chairman's Remarks

Ken Masson
Precision Strike
Association Board
Chairman

Award Remarks

MG James Boozer,
USA (Ret)
Chief of Staff, National
Defense Industrial
Association

Presentation of 23rd William J. Perry Award

Family of
Virginia Sniegon



Major General
James Boozer,
USA (Ret)

WILLIAM J. PERRY AWARD PRESENTATION

PSA Chairman's Remarks

Ken Masson
Precision Strike
Association Board
Chairman

Remarks: Dr. Bill Perry (Via Letter)

Captain Bruce
Roulstone, USN (Ret)

Special Remarks

Vice Admiral Mat
Winter, USN
Director, Joint Strike
Fighter Program, Office of
the Secretary of Defense

Presentation of 23rd William J. Perry Award

Family of
Virginia Sniegon



Rear Admiral
John Mustin, USN

1200 NETWORKING LUNCHEON

1300 U.S. FLEET POSTURE FOR RESURGENT RUSSIA

Rear Admiral John Mustin, USN
Deputy Commander, U.S. SECOND Fleet

1345 PRECISION STRIKE WEAPONS, FROM SYSTEMS TOWARD EFFECTS

Adam Johnston
PMA-201 Strategic Planning & Initiatives



Denise Padilla

1430 NETWORKING BREAK

1450 SANDIA NATIONAL LABORATORIES INTEGRATED MILITARY SYSTEMS ANALYTICS

Denise Padilla
Sandia National Laboratory



Dr. Austin Long

1530 STRATEGY AND NUANCE OF RESERVE VERSUS PUBLIC TECHNOLOGICAL CAPABILITY

Dr. Austin Long
Strategic Analyst, Joint Staff J5



Mike White (SES)

1615 BALANCING COST AND PERFORMANCE OF DODS HYPERSONIC STRIKE WEAPONS ROADMAP

Mike White (SES)
Hypersonic Weapons Research & Engineering, Office of Under Secretary of Defense (R&E)

1700 NETWORKING RECEPTION

WEDNESDAY, MARCH 27

0700 REGISTRATION / CONTINENTAL BREAKFAST

0800 PSAR-19 OPENING REMARKS

Kurt Chankaya
PSAR-19 Event Chair



David Nobles

0805 INNOVATION—DESIGN THINKING

David Nobles
JHU-APL Innovation—Innovation Team



Rear Admiral
Brian Corey, USN

0850 PANEL: FIGHT SMARTER—MULTI-DOMAIN WARFIGHTING EFFICIENCY

Rear Admiral Brian Corey, USN
Program Executive Officer, Unmanned Aviation and Strike Weapons

Brigadier General S. Clinton Hinote, USAF
Deputy Director, Air Force Warfighting Integration Capability, Deputy Chief of Staff for Strategic Plans and Requirements, Headquarters U.S. Air Force



Brigadier General
S. Clinton
Hinote, USAF

1020 NETWORKING BREAK

1045 U.S. POSTURE TO MEET THE EUROPEAN THREAT—TYRANNY OF TIME & DISTANCE

Rear Admiral John Polowczyk, USN
Deputy Director J4, Joint Chiefs of Staff



Rear Admiral John
Polowczyk, USN

1145 NETWORKING LUNCHEON

1300 KEYNOTE ADDRESS: STRATEGIC AND AGILE ACQUISITION

Honorable Dr. Bruce Jette
Assistant Secretary of the Army for Acquisition, Logistics and Technology



Honorable
Dr. Bruce Jette

1345 SPEED TO THE FIGHT FOR PRECISION ENGAGEMENT

Lieutenant Colonel Frederick “Stryker” Haley, USAF
Airpower Strategist, Air Force Warfighting Integration Capability, Futures and Concepts Division, Headquarters U.S. Air Force



Lieutenant Colonel
Frederick Haley,
USAF

1430 NETWORKING BREAK



Greg Weaver (SES)

1445 STRATEGIC PERSPECTIVE: INTERMEDIATE-RANGE NUCLEAR FORCES WITHDRAWAL

Greg Weaver (SES)

Deputy Director, Strategic Stability (DD STS), Strategic Plans and Policy Directorate (J5), The Joint Staff

1530 WORKFORCE DEVELOPMENT PANEL: INDUSTRIAL CAPACITY & BRAINPOWER



Jose Gonzalez (SES)

Mark Gustafson
Raytheon 'Growing our
Technical Workforce'
Moderator

Jose Gonzalez (SES)
OSD Acquisition &
Sustainment

**Major General James
Boozar, USA (Ret)**
Chief of Staff, National
Defense Industrial
Association

Dr. David Van Wie
Sector Head, The Johns
Hopkins University Applied
Physics Laboratory

1700 ADJOURN

The NDIA has a policy of strict compliance with federal and state antitrust laws. The antitrust laws prohibit competitors from engaging in actions that could result in an unreasonable restraint of trade. Consequently, NDIA members must avoid discussing certain topics when they are together at formal association membership, board, committee, and other meetings and in informal contacts with other industry members: prices, fees, rates, profit margins, or other terms or conditions of sale (including allowances, credit terms, and warranties); allocation of markets or customers or division of territories; or refusals to deal with or boycotts of suppliers, customers or other third parties, or topics that may lead participants not to deal with a particular supplier, customer or third party.



Dr. David Van Wie

WILLIAM J. PERRY AWARD



In recognition of superb contributions to the advancement of precision strike systems, the Precision Strike Association takes great pride in awarding the 23rd

Annual William J. Perry

Award to Virginia "Ginny" Sniegon.

Ginny served our country faithfully with an expansive career in the pentagon on the Secretary of Defense Staff and at the Institute for Defense Analysis. Her passion was in Precision Strike, ensuring our Nation maintained its decisive military edge. Her knowledge of the Defense strategic and budgetary processes, as well as her personal connections throughout the Pentagon were second to none, she knew "the Building". Over her six-decade career, she was a true champion for our National Defense, and especially for Precision Strike.

Ginny was dedicated, loyal, and driven to make Precision Strike and the Department of Defense as strong as it could be. She was the foremost champion of Precision Weapons Systems and used her connections to senior leadership to transform the Defense Post-Cold-War Culture of massed strikes to surgical strikes. Her contributions to the state of the art in Precision Strike are marked by the enormous improvement in reduced civilian loss of life and vastly strengthened national defense capability and deterrence.

She tirelessly promoted precision strike with the whole government/industry team pushing our warfighters' precision strike capabilities ever higher. Ginny's dedication is largely responsible for significant increases in weapons capability and precision targeting over the last several decades. Through her efforts, PSA and NDIA have reached thousands. She has truly made a difference for our nation, our military, and our PSA team.

As PSA's Programs Chair, Ginny had an uncanny ability to put a national program together in a way that "educated" both attendees and speakers alike. She ensured speakers were well informed and coordinated, the resulting coherent, informative and productive events that helped solve the most daunting defense challenges. Through her cutting edge classified Precision Strike Events, Ginny was able to elevate the critical challenges to senior leaders across Defense, Industry and Academia.

Virginia "Ginny" Sniegon is the embodiment of the Precision Strike credentials for the William J. Perry Award. The breadth of her contributions to the Precision Strike Community is staggering and is in keeping with the highest standards set forth by Dr. Bill Perry. The Precision Strike Association takes great pride in presenting the 23rd William J. Perry Award to Ginny Sniegon. A grateful precision strike community and nation are forever better for Ginny's devotion.

BIOGRAPHIES

IN ORDER OF APPEARANCE



BRIAN "IRISH" KELLY

4.OM Analysis of Alternatives Lead NAVAIR

Brian Kelly became the next-generation land attack weapon analysis-of-

alternatives study lead at Patuxent River Naval Air Station in July 2016. Among his roles, he is responsible for developing and implementing a multidimensional, analytical effort assessing 61 systems-of-systems solutions for a potential replacement or augmentation to the Tomahawk Weapon System. Previous to his current position, Kelly was the deputy program manager

for Naval Aviation Systems Command, PMA-266, at Patuxent River. He also was a warfare analyst Air 4.10 and deputy program manager of offensive anti-surface warfare. Kelly has been at Patuxent River since August 2008, where he began with the Joint Strike Force Office and advanced through several increasingly important roles.

Kelly began his career in 1991 as an aviation logistics officer with Marine Corps Air Station Beaufort. From 1995-97, he was a flight training student and later

became F/A-18-D fleet weapons systems officer there. He also was flight test project officer at Naval Air Station China Lake and manager of several programs under Joint Direct Attack Munition at Eglin Air Force Base before going to Patuxent River.

Kelly has a bachelor's degree in business administration and marketing from Villanova University, and a master's degree in business administration with a focus on systems acquisition management from the Naval Post Graduate School.



MAJOR EVAN "BOGEY" PARR, USAF

Airpower Strategist Air Force Checkmate

Major Evan C. Parr is an Airpower Strategist for Air Force Checkmate.

Checkmate is responsible for providing best military advice to the Deputy Chief of Staff, Operations, as well as the Chief of Staff of the Air Force. Since its inception, Checkmate has become a key Air Force resource for the development of air and space power strategy at the operational level of war.

Major Parr earned his commission through the United States Air Force Academy in 2005. He began Undergraduate Pilot Training at Moody AFB, GA and

then completed it at Laughlin AFB, TX. Following pilot training, Maj Parr attended F-15C Basic Course training at Tyndall AFB, FL. Following his first assignment in the F-15C, Maj Parr was selected to cross over to the F-22. Along with becoming an F-22 instructor pilot, Maj Parr served in various leadership positions at the wing and squadron level, to include flight commander and Weapons Officer for the 27th Fighter Squadron. Major Parr is a senior pilot with more than 1,500 hours in the F-15C and F-22.

Prior to his assignment in Checkmate, Maj Parr completed two years of academic instruction at Maxwell Air Force Base, AL.

He first completed the requirements for a Masters of Military Operational Art and Science through the Air Command and Staff College. Maj Parr was then selected for and achieved a Masters of Military Strategy through the Air Force's School of Advanced Air and Space Studies.



HONORABLE JAMES ANDERSON

Assistant Secretary of Defense for Strategy, Plans, and Capabilities
Office of the Secretary of Defense

Dr. James H. Anderson was confirmed by the U.S. Senate on

August 28, 2018 as Assistant Secretary of Defense for Strategy, Plans, and Capabilities. Dr. Anderson is responsible for advising the Secretary of Defense and the Under Secretary of Defense for Policy on national security and defense strategy; the forces and contingency plans necessary to implement defense strategy; nuclear deterrence and missile defense policy; and security cooperation plans and policies. Dr. Anderson ensures that the Department's program, budget, and posture decisions support and advance senior DoD leaders' strategic direction.

Prior to this appointment, Dr. James H. Anderson served three years as the Vice President for Academic Affairs at the Marine Corps University. In this capacity, he supervised academic programs that educate thousands of Marines annually. From 2012 to 2015, he was Dean of

Academics and Deputy Director at the Marine Corps War College. From 2009 to 2012, he worked as Professor of International and Security Studies at the George C. Marshall Center for European Security Studies, where he directed the Program in Advanced Security Studies. Dr. Anderson served in the Office of the Secretary of Defense from 2001 to 2009, where he was Director of Middle East Policy in International Security Affairs, among other positions.

In addition to his Pentagon service, Dr. Anderson worked as an Associate at DFI International, a private consulting firm; a Research Fellow at The Heritage Foundation, a Washington think tank; and an Associate Professor of International Relations at Command and Staff College, Marine Corps University. He has also taught courses at National Defense University, George Washington University, Lasell College, and the University of Phoenix.

He is the co-author of *Leading Dynamic Seminars: A Practical Handbook for University Educators* (Palgrave Macmillian, 2013). He is the author of *America at Risk: The Citizen's Guide to Missile Defense* (Heritage Foundation, 1999), and has written numerous articles and op-eds on a wide range of national security topics.

Earlier in his career, Dr. Anderson served three years on active duty as an intelligence officer in the United States Marine Corps, and then became a reservist in the Individual Ready Reserve.

Dr. Anderson earned his Doctorate in International Relations and Masters of Arts in Law and Diplomacy from the Fletcher School, Tufts University. He graduated Magna Cum Laude from Amherst College with a Bachelor of Arts in Philosophy.

He is a recipient of the Department of the Army Superior Civilian Service Award (2012) and the Office of the Secretary of Defense Medal for Exceptional Public Service (2009).



VICE ADMIRAL MATHIAS WINTER, USN

Director, Joint Strike Fighter Program
Office of the Secretary of Defense

Vice Adm. Mat Winter is a 1984 graduate of the University of Notre

Dame with a Bachelor of Science in Mechanical Engineering. He received his commission through the Naval Reserve Officers Training Corps (NROTC) and was designated a naval flight officer in 1985. Winter holds a Master's in Computer Science from the Naval Postgraduate School and a Master's in National Resource Strategy from National Defense University's Industrial College of the Armed Forces. He also received Level III

certification in Program Management and Test & Evaluation from the Defense System Management College.

Winter served operational tours as an A-6E Intruder Bombardier/navigator with Attack Squadrons 42, 85 and 34 making multiple deployments aboard aircraft carriers USS Saratoga (CV 60), USS America (CV 66), USS Dwight D. Eisenhower (CVN 69) and USS George Washington (CVN 73).

Winter's major acquisition tours include assistant deputy program manager for the Joint Standoff Weapon System; chief engineer for Joint Strike Fighter Integrated Flight and Propulsion Control;

deputy program manager for the Tactical Tomahawk cruise missile program; and his major acquisition command tour as the Precision Strike Weapons (PMA-201) program manager.

Winter has served flag tours as the commander, Naval Air Warfare Center Weapons Division, China Lake/Point Mugu, California; assistant commander for Test and Evaluation, Naval Air Systems Command; PEO for Unmanned Aviation and Strike Weapons; director, Innovation Technology Requirements and Test & Evaluation; the 24th chief of naval research and deputy program executive officer for the F-35 Lightning II Joint Program Office. In May 2017, he became the

program executive officer for the F-35 Lightning II Joint Program Office, leading the Department of Defense's largest acquisition enterprise that is responsible for developing and acquiring the F-35, the most advanced next-generation strike aircraft weapon system for the Navy, Air Force, Marines and many allied nations.

His personal awards include the Navy Distinguished Service Medal, Legion of Merit (three awards), Defense Meritorious Service Medal (two awards), Navy Meritorious Service Medal (two awards), Navy and Marine Corps Commendation Medal (four awards), Joint Service Achievement Medal (two awards), Navy

and Marine Corps Achievement Medal, Air Force Acquisition Excellence Award, Southwest Asia Service Medal, Kuwait Liberation Medal and various unit and sea service awards.



REAR ADMIRAL JOHN MUSTIN, USN

Deputy Commander
U.S. SECOND Fleet

Rear Adm. John Mustin is a native of Alexandria, Virginia. He is a

graduate of the U.S. Naval Academy, where he earned a Bachelor of Science in Weapons and Systems Engineering and was commissioned in 1990. He holds a Master of Science in Operations Research from the Naval Postgraduate School in Monterey, California, and a Master of Business Administration (cum laude) in Finance and Management from the F. W. Olin Graduate School of Business at Babson College. He earned his Joint Professional Military Education from the Air University's Air Command and Staff College at Maxwell Air Force Base.

His initial sea duty assignment was aboard USS Vincennes (CG 49), where he served as combat information center officer, navigator with the USS Independence (CV 62) Battle Group's Air Warfare Commander. Subsequent sea duty assignments include a tour as the pre-commissioning operations officer onboard USS Donald Cook (DDG 75), where he served as the Navy's first underway regional air defense commander during the All Services Combat Identification Evaluation Team exercise.

Affiliating with the Navy Reserve in 2001, Mustin served as assistant operations officer at Battle Group Staff 2 in support of USS George Washington (CVN 73)

Strike Group during Operation Enduring Freedom. Other staff assignments include tours as the training department head (N7) Navy Reserve (NR) chief of naval operations for Operations, Plans and Strategy (N3N5) at the Pentagon Navy Command Center, deputy commander and plankowner at Maritime Expeditionary Security Squadron 14, operations officer (N3) at NR Carrier Strike Group 10 in support of USS Harry S Truman (CVN 75) Strike Group, and executive officer at Personnel Mobilization Team 101.

His command tours include NR Joint Staff South in Suffolk, Virginia; NR U.S. Fleet Forces Command Maritime Operations Center, Greensboro, North Carolina; NR Maritime Expeditionary Security Squadron 6 in Portsmouth, Virginia and Inshore Boat Unit 22 in Groton, Connecticut, including a mobilization to Kuwait during Operations Enduring Freedom and Iraqi Freedom. Additionally, he served for two years as the inaugural Littoral Combat Ship (LCS) Navy Reserve enterprise director, responsible for the reserve manning, training and

equipping of the 1000-billet LCS surface reserve force. In his most recent flag assignment, he served as deputy commander of Naval Surface Forces, spanning the Surface Type Commanders of the U.S. Pacific and Atlantic fleets.

Mustin is a graduate of the Senior Navy Reserve Officer Course and is a member of the Secretary of the Navy's National Navy Reserve Policy Board.

His awards include the Defense Superior Service Medal, Legion of Merit, Meritorious Service Medal (two awards), Navy Commendation Medal (two awards), Navy Achievement Medal (four awards), Navy Battle Efficiency 'E', Military Outstanding Volunteer Service Medal and various service, expeditionary, unit and campaign awards. He is authorized to wear the Command Ashore insignia, and Small Craft Insignia as Officer-in-Charge of combatant craft.



ADAM JOHNSTON

Strategic Planning and Initiatives, PMA-201
NAVAIR

Adam Johnston is a 13-year member of the acquisition workforce, currently

the Director of Strategic Planning and Initiatives for the Precision Strike Weapons Program Office (PMA-201) at Naval Air Systems Command. In that role, he provides the acquisition response to operational threats by leveraging technology injection at any applicable level of integration – defeating an adversary's will to compete by innovating across the range of possible precision strike requirements and systems. A member of the Executive Leadership

Team, he provides counsel to the PM and PDPM across the entire portfolio with obligation authority exceeding \$11B across the FYDP.

In his most recent previous tour, he served on the MQ-4C Triton team, executing a major defense acquisition program under the Persistent Maritime Unmanned Aircraft Systems Program Office (PMA-262). As the culminating point of multiple roles spanning eight years in the office, he served as the Development Lead, guiding the program through a successful Operational Assessment and Milestone C in 2016, transitioning from the Engineering and Manufacturing

Development phase into the Production and Deployment phase. In previous work as a defense contractor (for a veteran-owned small business contractor support services company), he also accrued experience in business development and corporate management.

He is a veteran of the United States Navy, having served over 10 years of active duty as a Naval Aviator. He served as a qualified Mission Commander and Aircraft Commander in the P-3C Orion and also as a military Instructor Pilot in the C-12 (King Air 200). He is a graduate of Oxford University, and the United States Naval Academy.



DENISE PADILLA

Program Manager, Military Systems Analytics
Sandia National Laboratory

Mrs. Denise Padilla is a Program Manager in the Military Systems Analytics

group at Sandia National Laboratories where she leads Sandia's Nuclear Deterrent Investment Strategy Analysis for the Office of the Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs/Nuclear Matters. Her responsibilities include managing a diverse team of partners (Department of Energy and Department of Defense Laboratories, Federally Funded Research and Development Centers, and University Affiliated Research Centers) to develop and integrate advanced modeling, simulation, and optimization capabilities to identify investment strategies needed to maintain a credible and effective U.S. nuclear deterrent.

Mrs. Padilla received her Bachelor of Science and Master of Science degrees in Electrical Engineering from the University of New Mexico in 1996 and 1998 respectively. She has 20 years of experience at Sandia with the last decade leading the research, development, and application of advanced analytical methods, system-of-systems modeling, simulation and optimization, as well as advanced software engineering to support various aspects of planning and operations within the National Nuclear Security Administration's Nuclear Security Enterprise, Department of Homeland Security Customs and Border Protection, Army and Navy Program Executive Offices, and Goodyear Manufacturing. Her work has been recognized through several awards including NNSA Defense Programs Awards of Excellence and the Technical Excellence Award for the Future Force

Integrated Support Team's contribution to the US Army's Future Combat Systems Program.

Mrs. Padilla also has technical and leadership experience across several specialized disciplines including synthetic aperture radar, microelectromechanical systems, autonomous navigation, and satellite data communication. She was awarded a patent for her work in reducing background clutter in structured lighting systems for situational awareness in autonomous navigation applications.

Mrs. Padilla volunteers her time as a mentor to entry-level engineers at Sandia and as a Science, Technology, Engineering, and Math instructor for local schools in the Albuquerque community.



DR. AUSTIN LONG

Nuclear Policy Advisor
Joint Staff J5

Dr. Austin Long is a nuclear policy advisor serving in the Joint Staff J5 (Strategy, Plans, and Policy) Strategic Deterrence and Nuclear Policy Division. He is also a non-resident senior fellow at the Foreign Policy Research Institute. Dr. Long was previously a senior political scientist at the RAND Corporation and an associate professor at Columbia University's School

of International and Public Affairs. He was an analyst and adviser to the U.S. military in Iraq (2007-2008) and Afghanistan (2011 and 2013). In 2014-2015, he was a Council on Foreign Relations International Affairs Fellow in Nuclear Security, serving in the Joint Staff J5. Dr. Long's research has appeared in *International Security*, *Security Studies*, the *Journal of Strategic Studies*, the *Journal of Cold War Studies*, *Orbis*, the *Journal of Cybersecurity*, and

Survival. He is also the author of *The Soul of Armies: Counterinsurgency Doctrine and Military Culture in the United States and United Kingdom* (Ithaca, NY: Cornell University Press, 2016). He received his B.S. from the Sam Nunn School of International Affairs at the Georgia Institute of Technology and his Ph.D. in political science from the Massachusetts Institute of Technology.



MIKE WHITE (SES)

Hypersonics Weapons Research & Engineering
Office of the Under Secretary of Defense

Michael E. White became the Assistant Director for Hypersonics (AD,H)

in the Office of the Under Secretary of Defense for Research and Engineering (OUSD R&E) on October 29, 2018. In that capacity Mr. White is responsible for leading the Nation's vision and strategy for

developing warfighting capability enabled by hypersonic systems, including; high speed strike systems, systems to defend against adversary hypersonic weapons, and future reusable global reach systems.

Before his OUSD position as AD, H, Mr. White was Sector Head for Air and Missile Defense at the Johns Hopkins University Applied Physics Laboratory where he led

over 1,100 staff members developing advanced concepts to enhance the Nation's air and missile defense (AMD) capability for programs in the Navy and the Missile Defense Agency. His 37 year career at APL included over two decades of leadership developing hypersonic concepts and technologies, strike systems and air and missile defense capabilities.



DAVID NOBLES

Design Strategist
The Johns Hopkins University Applied Physics Laboratory

David Nobles is part of the Tactical Advancements for the Next Generation

(TANG) team, a group, led by Johns Hopkins University Applied Physics Laboratory, that applies design and systems thinking to solve the gnarliest National Security challenges. Dave has recently led projects to redesign missile defense mission planning systems, aviation mission support systems, surface ship training and readiness frameworks, and naval intelligence architectures.

Internally to the JHU APL, Dave leads efforts to grow the innovation capability of the organization by applying customized design processes to tackle problems and developing a cadre of design thinking practitioners and futurists.

Prior to APL, Dave was a Surface Warfare Officer in the Navy with tours that included multiple ships and a role as an Assistant Professor of Naval Science. Before transitioning to the civilian sector, Dave was the Combat Systems Officer aboard the Ballistic Missile Defense destroyer USS BENFOLD, where he managed the most advanced AEGIS combat system in the Navy.

Dave has 15 years of experience solving complex problems in the Navy and academia. For the past five years, he has been applying commercial innovation processes to turbocharge Department of Defense innovation initiatives. He founded the open innovation initiative The Athena Project, which continues to catch fire across the Navy, and was chosen as a member of the Chief of Naval Operations' Innovation Cell (CRIC), serving a two-year term with the elite group.

Dave has a B.S. from the University of Kansas and an MBA from The Pennsylvania State University.



REAR ADMIRAL BRIAN COREY, USN

Program Executive Officer for Unmanned Aviation and Strike Weapons

Rear Adm. Brian Corey earned a Bachelor of Science in Chemical

Engineering and a commission from Naval Reserve Officer Training at the University of Illinois. He is a distinguished graduate of the U.S. Naval Test Pilot School and holds a master's in National Security and Strategic Studies from the Naval War College.

Corey served operationally as an F/A-18 pilot in Strike Fighter Squadron (VFA) 86 deployed in USS America (CV 66), VFA-146 deployed aboard USS Nimitz (CVN 68) and command of VFA-192 forward deployed aboard USS Kitty Hawk (CV 63) to Japan. During these tours he participated in operations Desert Storm,

Southern Watch, Provide Hope, Deny Flight, Operation Iraqi Freedom and several Western Pacific deployments.

His shore tours include service as a selectively retained graduate (SERGRAD) flight instructor with Training Air Wing 2 and the Office of the Chief of Naval Operations (OPNAV) staff where he served as the F/A-18 requirements officer and as the deputy for Strike Aircraft Plans and Requirements.

Corey has served in numerous acquisition tours beginning with the U.S. Naval Test Pilot School where he was selected to fly the MiG-29 aircraft in Russia. His test experience includes two tours at Naval Air Warfare Center Weapons Division, China Lake, California, where he worked on improvements to weapons, sensors and software upgrades for F/A-18 A-F models.

His program management experience includes leading the Core Avionics Integrated Product Team and serving as the deputy program manager for Systems and Advanced Development in the F/A-18 and EA-18G Program (PMA-265). He also commanded the Direct and Time Sensitive Weapons Program (PMA-242) and served as Naval Air Systems Command vice commander.

From October 2015 - May 2018, Corey served as commander, Naval Air Warfare Center Weapons Division, and assistant commander for Test and Evaluation, Naval Air Systems Command.

Corey has more than 3,800 flight hours and 660 carrier arrested landings, mostly in the F/A-18 Hornet. He has logged hours in more than 20 aircraft, including the F/A-18 A-F, MiG-29, AV-8B, F-15 and F-16.



BRIGADIER GENERAL S. CLINTON HINOTE, USAF

Deputy Director, Air Force Warfighting Integration Capability, Deputy Chief of Staff for Strategic Plans and Requirements

Headquarters U.S. Air Force

Brig. Gen. S. Clinton Hinote is the Deputy Director, Air

Force Warfighting Integration Capability, Deputy Chief of Staff for Strategic Plans and Requirements, Headquarters U.S. Air Force, Washington, D.C. In this position, he supports the AFWIC Director in developing Total Force, multi-domain operating concepts to implement the National Defense Strategy, and drive integration through centralized enterprise design and capability planning. AFWIC identifies prioritized ways and means to guide resourcing priorities improving Air Force lethality and enhancing the joint and coalition fight.

General Hinote was commissioned in 1992 upon graduation from the U.S. Air Force Academy. After completing a master's degree in public policy from Harvard's Kennedy School of Government, he accomplished pilot training at Columbus Air Force Base, Miss., and F-16 training at Luke AFB, Ariz. His operational assignments include instructor duty at the USAF Weapons School, leader of the Air Forces Central Strategy Division, Squadron Commander, Wing Vice Commander and Wing Commander. General Hinote is a graduate of the U.S. Air Force Weapons School, Air Command and Staff College, and the School of Advanced Air and Space Studies. Prior

to assuming his present duties he served as the Deputy Chief, Office of Security Cooperation-Iraq, Baghdad.

He is a command pilot with more than 2,000 flight hours and 240 combat hours in operations Northern and Southern Watch.



REAR ADMIRAL JOHN POLOWCZYK, USN

*Vice Director
Joint Staff J4*

Rear Adm. John Polowczyk is a native of Manhasset,

Long Island, New York. He graduated from the United States Naval Academy in 1987 with a Bachelor of Science in engineering. He holds a Master of Science in Contract and Acquisition Management from the Naval Postgraduate School and a Master of Science in National Resource Strategy from the National Defense University Industrial College of the Armed Forces. He also completed an executive education program at the Tuck School of Business at Dartmouth.

Polowczyk's sea duty assignments include supply department head tours aboard the fast attack submarine USS Queenfish (SSN 651), the destroyer USS Peterson (DD 969) and the amphibious assault ship USS Bataan (LHD 5).

Ashore, he most recently served as director, logistics programs and business operations in the Office of the Chief of

Naval Operations (OPNAV N41). His other shore assignments include Fleet Ordnance and Supply (N41) and fleet supply officer on the staff of Commander, U.S. Fleet Forces Command, in Norfolk; comptroller, U.S. Fleet Forces Command; commanding officer, Naval Supply System Command, Fleet Logistics Center Pearl Harbor; business management officer, U.S. Joint Forces Command, Norfolk; military assistant to the assistant secretary of the Navy for Financial Management & Comptroller; OPNAV N413 Joint Logistics officer, where he developed the Navy-Marine Corps Naval Logistics Integration program; business financial manager, Seawolf Program Office, Naval Sea Systems Command; financial officer, Commander, Naval Surface Force, U.S.

Atlantic Fleet; contracting officer with Naval Sea Systems Command; and instructor, Naval Supply Corps School, Athens, Georgia.

Polowczyk assumed the position of vice director for logistics, logistics directorate (J4), Joint Staff in June 2017. The J4 is responsible for integrating logistics planning and execution in support of joint operations to drive joint force readiness, maximize the Joint Force Commander's freedom of action and advise the chairman of the Joint Chiefs of Staff on logistics matters.

Polowczyk is a qualified submarine supply officer, Surface Warfare Supply Corps officer and member of the Defense Acquisition Professional Community. His personal awards include the Defense Superior Service Medal, Legion of Merit (three awards), Meritorious Service Medal (four awards), Navy and Marine Corps Commendation Medal (four awards) and Navy and Marine Corps Achievement Medal (four awards).



HONORABLE DR. BRUCE JETTE

Assistant Secretary of the Army (Acquisition, Logistics and Technology) And Army Acquisition Executive

Hon. Dr. Bruce D. Jette was confirmed by the United States Senate as

the Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASA(ALT)) on December 20, 2017, and sworn into office on January 2, 2018. In this position, he serves as the Army Acquisition Executive, the Senior Procurement Executive, the Science Advisor to the Secretary of the Army, and the Army's Senior Research and Development official. He also has principal responsibility for all Department of the Army matters related to logistics.

Dr. Jette leads the execution of the Army's acquisition function and the acquisition management system. His responsibilities include providing oversight for the life cycle management and sustainment of Army weapon systems and equipment from research and development through test and evaluation, acquisition, logistics, fielding, and disposition. He is also responsible for appointing, managing, and evaluating program executive officers and managing the Army Acquisition Corps and Army Acquisition Workforce. In addition, he oversees the Elimination of Chemical Weapons program.

Prior to his confirmation, Dr. Jette served as President and Chief Executive Officer of Synovision Solutions, LLC, an innovative company he founded to provide management and technical consulting, engineering services, and project management in support of military and governmental agencies, as well as commercial industry.

A decorated veteran of 28 years of active duty, Dr. Jette retired as a Colonel following a career that included several armor and cavalry company commands, two overseas tours, various staff assignments at the battalion and brigade level, and over two years of operational deployments to Afghanistan,

Iraq and Kuwait. Highlights of his previous acquisition service include founding the U.S. Army Rapid Equipping Force; serving as Program Manager for Solider Systems which led to the establishment of Program Executive Office Soldier; and being honored as U.S. Army PM of the Year for his success as Product Manager for all Army airborne electronic warfare systems.

Dr. Jette is a graduate of the United States Military Academy with a Bachelor of Science degree in Nuclear Engineering and Chemistry. He also holds both a Master of Science degree and a Doctorate in Electronic Materials from the Massachusetts Institute of Technology. He was an Adjunct Professor at the Edmund A. Walsh School of Foreign Service Security Studies Program at Georgetown University.

His numerous military awards and commendations include the Distinguished Service Medal, Legion of Merit (3), Bronze Star Medal, Meritorious Service Medal (3), Army Commendation Medal, Army Achievement Medal (2), National Defense Medal (2), Operation Iraqi Freedom Campaign Ribbon, Operation Enduring Freedom Ribbon, Army Service Ribbon, Army Overseas Ribbon (2), Parachutist Badge, Army General Staff Award, and Order of Saint Maurice (Legionnaire).



LIEUTENANT COLONEL FRED "STRYKER" HALEY, USAF

Airpower Strategist

AFWIC Futures and Concepts (Skunk Works)

Lieutenant Colonel Don "Stryker" Haley is an Airpower Strategist, Air Force Warfighting Integration Capability, Futures and Concepts Division, Headquarters US Air Force, Pentagon, Washington DC.

In his current role, he develops future concepts of air and space employment while integrating efforts in the science/technology communities, the defense industry, academia, and across the Joint Force. These concepts inform future force design and capability development that drive enterprise-wide changes across the Air Force.

A native of Gulfport, Mississippi he graduated from Vanderbilt University in 1999, earning his commission through Air Force Reserve Officer Training Corps. He graduated Euro-NATO Joint Jet

Pilot Training in 2001 and remained at Sheppard AFB as a T-38 Instructor Pilot and T-38 Subject Matter Expert. Colonel Haley completed initial F-15E training in 2005 and was assigned to the 335th Fighter Squadron, Seymour Johnson Air Force Base, North Carolina where he served in various positions culminating as F-15E Instructor Pilot and Director of Staff. He deployed in support of Operations IRAQI FREEDOM and ENDURING FREEDOM. He was then assigned to Headquarters Combined Forces Command, United States Forces Korea, where he served as a theater contingency planner, writing major operational war plans for the defense of South Korea. Following Air Command and Staff College, Colonel Haley moved to RAF Lakenheath where he served as 48th Fighter Wing Chief of Advanced Programs and Director of Operations, 492d Fighter Squadron. He led combat flying operations through

the beginning months of OPERATION INHERENT RESOLVE. From 2015-2017, he served as Commander, 333d Fighter Squadron, Seymour Johnson AFB, NC. After squadron command, Colonel Haley attended the School of Advanced Military Studies, Command and General Staff College, as a senior developmental education fellow. He is a command pilot with over 3,200 total hours, including 699 combat hours.



GREG WEAVER

Deputy Director, Strategic Stability (DD STS)
Strategic Plans and Policy Directorate (J-5), The Joint Staff

Mr. Weaver, a career member of the Senior Executive Service, is the

Deputy Director (DD) for Strategic Stability, Strategic Plans and Policy Directorate (J-5), the Joint Staff. In this role, he is responsible for the formulation of Joint Staff positions and recommendations regarding strategic deterrence, nuclear policy, Department of Defense efforts to combat Weapons of Mass Destruction, strategic arms reduction negotiations and agreements, as well as other international negotiations and agreements.

Prior to joining the Joint Staff, Mr. Weaver served as Principal Director for Nuclear and Missile Defense Policy in the Office of the Under Secretary of Defense for Policy (OSD/Policy). In that role he was responsible for all policy matters involving U.S. nuclear and missile defense forces, strategy, plans, and requirements.

Before joining OSD/Policy, Mr. Weaver was the DD of Plans and Policy, U.S. Strategic Command, Offutt Air Force Base, Neb. He was the senior technical adviser for policy, strategy, and plans to the Director, Plans and Policy, and the Commander, USSTRATCOM. In this capacity he was responsible for shaping and implementing national security policies, strategies and plans in accordance with the execution of the command's assigned missions. He also assisted in formulating and implementing strategy for U.S. Strategic Command's Unified Command Plan assigned missions, which includes strategic deterrence and global strike, space operations, cyberspace operations, combating weapons of mass destruction, missile defense, and intelligence, surveillance and reconnaissance.

Mr. Weaver earned a bachelor's degree at Georgetown University School of Foreign Service, a master's degree at

the University of Pennsylvania, and is nearing completion of a doctoral degree at the University of Nebraska-Lincoln. He was a legislative assistant for Foreign and Defense Policy for Congressmen Pete Stark and Charles Bennett, and a legislative assistant for Defense Policy under Senator Carl Levin. He worked at Science Applications International Corporation for 18 years as a Senior Analyst, Project Manager, Division Manager and Assistant Vice President. He and his wife have two adult children.



JOSE GONZALEZ (SES)

Executive Director, Human Capital Initiatives

Office of the Under Secretary of Defense for Acquisition & Sustainment

Mr. Jose Gonzalez has over thirty three years of public service experience.

He has been with the Office of the Secretary of Defense (OSD) since 2001 and with the Department of Defense (DoD) since 1985. He was appointed to the Senior Executive Service in June 2010 and is currently serving as the Executive Director for Human Capital Initiatives. In this position, he advises the Under Secretary of Defense for Acquisition and Sustainment on matters relating to policy and governance of the DoD-wide 169,000 member acquisition workforce. Mr. Gonzalez executes statutory responsibilities of the Defense Acquisition Workforce Improvement Act, policy and execution for the 40,000 participants in the Civilian Acquisition Workforce Personnel Demonstration

Project, and management of the \$400M annual Defense Acquisition Workforce Development Fund.

Mr. Gonzalez started his career in the defense industry at Vitro Corporation, Silver Spring, Md., as a software engineer for the U.S. Navy's TARTAR Mk 14 Weapons Direction System. In 1989, he entered federal government service at the Naval Surface Warfare Center (NSWC), Dahlgren, Va. While at NSWC, he served as Technical Direction Agent and Systems Engineer for the U.S. Navy's Mk 41 Vertical Launching System, facility manager for the Navy's Program Assurance Facility, Head of the Advanced Launching Systems Group, and Head of the Advanced Control Systems Engineering Branch. During this time, he took on two developmental assignments, first as the Combat Systems Department Head for the U.S. Navy's Smart Ship Project and second as a Staff Specialist in OSD, supporting the office of Naval Warfare. While in OSD, Mr. Gonzalez

served as a staff specialist, then served as the Deputy Director for Land Warfare and Munitions and later as Deputy Assistant Secretary of Defense for Tactical Warfare Systems, within the Office of the Under Secretary of Defense for Acquisition, Technology and Logistics, where he was responsible for major platform and weapon system acquisition oversight and technology advancement across the air, land, naval, and electronic warfare portfolios – investments valued at over \$70 billion annually.

Mr. Gonzalez received a Bachelor of Science degree in Electrical Engineering from the University of Maryland in 1985. He earned a Masters Degree in Public Administration from Virginia Polytechnic Institute and State University in 2005. He is a graduate of the Leadership for a Democratic Society program from the Federal Executive Institute.



MAJOR GENERAL JAMES BOOZER, USA (RET)

Chief of Staff

National Defense Industrial Association

James "Jim" Boozer became Chief of Staff of the National Defense Industrial

Association (NDIA) December 4, 2017. Major General Boozer came to NDIA after a 35-year career in the U.S. Army, from which he retired as a two-star general in October 2015. His last assignment was as Commander, U.S. Army Japan at Camp Zama in Japan.

Before that, Jim was the Deputy Commanding General of U.S. Army in Europe; the Army component for U.S. European Command; in Weisbaden, Germany.

Prior to that assignment, Jim was the Operations Director for the Assistant Chief of Staff for Army Installations in Washington, DC, the Pentagon. Jim has served in various operational and staff assignments throughout the Army and commanded at the Brigade and 2 Star level. He served as chief of plans, at U.S. Central Command Forward in Baghdad and Qatar. Jim has also participated

in multiple deployments in support of Operation Iraqi Freedom and Operation Enduring Freedom.

Jim was a field artilleryman and commanded a brigade in Operation Iraqi Freedom 1 as a part of the Task Force that secured Baghdad. Jim graduated from The Citadel in 1980 with a bachelor's of arts degree in History. He received a master's degree in Strategic Studies in 2001 from the US Army War College.



DAVID VAN WIE

Sector Head

The Johns Hopkins University Applied Physics Laboratory

Dr. David Van Wie became the Head of the Air and Missile Defense Sector of

range detection and targeting systems through revolutionary application of technologies in the areas of hypersonics, adaptive coordination of discrete kinetic and non-kinetic systems, and upstream data fusion.

Dr. Van Wie has also played key roles in major studies conducted by the National Academies of Sciences, Engineering, and Medicine, USAF Scientific Advisory Board, and the Defense Science Board investigating a broad range of topics including hypersonic strike systems, ballistic and cruise missile defenses, reusable boosters for space launch, and hybrid warfare. He has previously served as a member of the Air Force Scientific Advisory Board and is currently a member of the National Academies Aeronautics and Space Engineering Board. Dr. Van Wie holds a research faculty position in the Department of Mechanical Engineering at Johns Hopkins University, and he has also lectured extensively in the Department of Aerospace Engineering at the University of Maryland in the areas of hypersonics, fluid dynamics, and space propulsion.

Dr. Van Wie was elected to the National Academy of Engineering in 2017. He is a fellow of the American Institute of Aeronautics and Astronautics and is a recipient of the Air Force Award for Meritorious Civilian Service. Dr. Van Wie has been an active member of the U.S. science and technology community, and has published more than 140 papers in the fields of hypersonics, high-temperature fluid dynamics, airbreathing propulsion, and plasma aerodynamics. He was recognized for sustained contributions to the Joint Army, Navy, NASA, and Air Force (JANNAF) Airbreathing Propulsion Subcommittee.

Dr. Van Wie earned his Bachelor of Science (summa cum laude), Master of Science, and Ph.D. degrees in aerospace engineering from the University of Maryland as well as a Master of Science degree in electrical engineering from Johns Hopkins University.

the Johns Hopkins University Applied Physics Laboratory on January 7, 2019. Dr. Van Wie is responsible for strategic planning, execution, and performance of more than \$300M in annual funding in programs advancing the ability of the nation to defend itself and its allies against airborne and ballistic threats. As the nation's largest University Affiliated Research Center, APL performs research and development on behalf of the Department of Defense, the intelligence community, National Aeronautics Space Administration, and other federal agencies. The Laboratory has more than 6,000 staff members who are making critical contributions to a wide variety of nationally and globally significant technical and scientific challenges.

Prior to his current appointment, Dr. Van Wie served as Mission Area Executive for Precision Strike focusing on advanced weapon development, electromagnetic spectrum dominance, and novel long-

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