

# DIRECTED ENERGY / SUMMIT 2018

REALIZING THE IMPACT OF DIRECTED  
ENERGY ON NATIONAL SECURITY

*Wednesday, March 21, 2018*

## Table of Contents

### **Sponsored by Booz Allen and the Center for Strategic Budgetary Assessments (Leadership and Presenters in Alphabetical Order)**

<a href="#">Clark, Bryan</a> .....	4
<a href="#">Edelman, Eric S. Ambassador</a> .....	5
<a href="#">Gibson, Dennis</a> .....	7
<a href="#">Gunzinger, Mark</a> .....	8
<a href="#">Mahnken, Thomas G Ph.D.</a> .....	11
<a href="#">Motherway, Mara A.</a> .....	12
<a href="#">Obering III, Henry A. “Trey”</a> .....	13
<a href="#">Pfeifer, Tom</a> .....	14
<a href="#">Potter, Patrick “Jim”</a> .....	15
<a href="#">Rozanski, Horacio</a> .....	16
<a href="#">Stoudt, David Ph.D.</a> .....	17
<a href="#">Via, Dennis L.</a> .....	18

### **2018 Directed Energy Summit Presenters (Alphabetical Order)**

<a href="#">Ali, Azar S. Ph.D.</a> .....	19
<a href="#">Colby, Elbridge A.</a> .....	21
<a href="#">Cooper, William L. Ph.D.</a> .....	22
<a href="#">DeBell, Gary Ph.D.</a> .....	24
<a href="#">Englander, Keith</a> .....	25
<a href="#">Flatley, Ronald</a> .....	26
<a href="#">Gates, Kevin</a> .....	27
<a href="#">Glitz, Richard W.</a> .....	28
<a href="#">Griffin, Michael D. Under Secretary</a> .....	29
<a href="#">Hahn, David J. Rear Admiral</a> .....	31
<a href="#">Heinrich, Martin Senator</a> .....	32
<a href="#">Hirono, Mazie Senator</a> .....	34
<a href="#">Hoffman, Ryan</a> .....	35
<a href="#">Huyak, Kevin A. Brigadier General</a> .....	36
<a href="#">Ka’iliwai, George Ph.D.</a> .....	37
<a href="#">Keeney, Scott</a> .....	39
<a href="#">Lamborn, Doug Congressman</a> .....	40
<a href="#">Langevin, Jim Congressman</a> .....	42

<a href="#"><u>Lockhart, Thomas A.</u></a> .....	44
<a href="#"><u>Masinsin, Rey Q. Colonel</u></a> .....	46
<a href="#"><u>Mattera, Vincent Ph.D.</u></a> .....	48
<a href="#"><u>McElhinney, Mark Ph.D.</u></a> .....	49
<a href="#"><u>Mitchell, Kathryn</u></a> .....	50
<a href="#"><u>Norwood, J. Scott</u></a> .....	51
<a href="#"><u>Rand, Robin General</u></a> .....	53
<a href="#"><u>Ratcliff, A. Adele</u></a> .....	55
<a href="#"><u>Rogers, Mike Congressman</u></a> .....	56
<a href="#"><u>Ryan, Tim Congressman</u></a> .....	57
<a href="#"><u>Samp, P. Tony</u></a> .....	59
<a href="#"><u>Schadlow, Nadia, Ph.D</u></a> .....	59
<a href="#"><u>Totte, Jon Captain</u></a> .....	60
<a href="#"><u>White, Jeffrey</u></a> .....	61
<a href="#"><u>Wille, Dennis G. Colonel</u></a> .....	62
<a href="#"><u>Williams, R. Scott Lieutenant General</u></a> .....	63

## Bryan Clark

Senior Fellow

Center for Strategic and Budgetary Assessments

Prior to joining CSBA in 2013, Bryan Clark was Special Assistant to the Chief of Naval Operations and Director of his Commander's Action Group, where he led development of Navy strategy and implemented new initiatives in electromagnetic spectrum operations, undersea warfare, expeditionary operations and personnel and readiness management.

Mr. Clark served in the Navy headquarters staff from 2004 to 2011, leading studies in the Assessment Division and participating in the 2006 and 2010 Quadrennial Defense Reviews. His areas of emphasis were modeling and simulation, strategic planning and institutional reform and governance. Prior to retiring from the Navy in 2007, Mr. Clark was an enlisted and officer submariner, serving in afloat and ashore submarine operational and training assignments including tours as Chief Engineer and Operations Officer at the Navy's nuclear power training unit.



He is the recipient of the Department of the Navy Superior Service Medal and the Legion of Merit.

### **Education**

*Master of Science in National Security Studies*

National War College

*Bachelor of Science in Chemistry and Philosophy*

University of Idaho

## Ambassador Eric S. Edelman

Counselor

Center for Strategic and Budgetary Assessments

Ambassador Eric S. Edelman is Counselor at the Center for Strategic and Budgetary Assessments. He retired as a career minister from the U.S. Foreign Service on May 1, 2009. He has served in senior positions at the Departments of State and Defense as well as the White House, where he led organizations providing analysis, strategy, policy development, security services, trade advocacy, public outreach, citizen services, and congressional relations. As undersecretary of defense for policy (August 2005-January 2009), he was DoD's senior policy official, overseeing strategy development with global responsibility for bilateral defense relations, war plans, special operations forces, homeland defense, missile defense, nuclear weapons and arms control policies, counterproliferation, counternarcotics, counterterrorism, arms sales, and defense trade controls.



He served as U.S. ambassador to Finland in the Clinton administration and Turkey in the Bush administration and was Vice President Cheney's principal deputy assistant for national security affairs. He was chief of staff to Deputy Secretary of State Strobe Talbott, special assistant to Undersecretary of State for Political Affairs Robert Kimmitt, and special assistant to Secretary of State George Shultz.

His other assignments included the State Department Operations Center, Prague, Moscow, and Tel Aviv, where he was a member of the U.S. Middle East delegation to the West Bank/Gaza autonomy talks.

Ambassador Edelman has been awarded the Department of Defense Medal for Distinguished Public Service, the Chairman of the Joint Chiefs of Staff Joint Distinguished Civilian Service Award, the Presidential Distinguished Service Award, and several Department of State Superior Honor Awards. In 2010, he was named a knight of the French National Order of the Legion of Honor.

Ambassador Edelman serves on the National Defense Panel, on the bipartisan board of directors of the United States Institute of Peace, and on the board of the Foreign Policy Initiative.

Education

*B.A. in History and Government*  
Cornell University

*Ph.D. in U.S. Diplomatic History*  
Yale University

*Roger Hertog Distinguished Practitioner-in-Residence*  
Philip Merrill Center for Strategic Studies  
Johns Hopkins University

*Senior Associate of the International Security Program*  
Belfer Center for Science and International Affairs  
Harvard University

## Dennis Gibson

Senior Vice President  
Booz Allen Hamilton

Dennis Gibson leads the firm's business in the Pacific Rim. Located in Honolulu, Hawaii, Dennis serves U.S. government clients in defense and civil agencies throughout the region including Guam, Singapore, Korea, Japan, and Alaska. He is responsible for providing clients with a wide range of services across all of the firm's capabilities including technology, analytics, strategy and organization, and engineering and operations.

Prior to his career at the firm, Dennis served 24 years in the U.S. military. He then took on the role of vice president for program management and government business development for a small IT company. He has served as a consultant to the Army Science Board, participating in several key summer studies. He currently serves as a board member of the Armed Forces Communications and Electronics Association international.



Dennis also served on the National Guard Bureau Wargame Team, National Guard Pathways to the Future, and Revolution in Military Affairs. Additionally, he served on the United States Military Academy Selection Committee for U.S. Senator Rick Santorum from 1999-2004.

Dennis holds a B.S. in business management from Thomas Edison State College.

## Mark Gunzinger

Senior Fellow

Center for Strategic and Budgetary Assessments

Mr. Mark A. Gunzinger has vast experience in several capability and policy areas. During the 1990s, he conducted research on behalf of the Air Force Chief of Staff and Secretary of the Air Force on future operational concepts for air warfare. In the late 1990s, he was a co-author of the Defense Department's first transformation strategy that prioritized the development of new technologies to sustain the U.S. military's ability to project power into contested areas. As Director for Defense Transformation, Force Planning and Resources on the National Security Council staff, The White House, Mr. Gunzinger co-led the development of strategic plans focused on offsetting emerging of anti-access and area-denial (A2/AD) challenges in the Western Pacific. Acting as project leader for government-sponsored wargames that examined the challenges of emerging A2/AD threats in the Persian Gulf region, he developed elements of a new operational concept for U.S. military operations, which informed development of DoD's Air-Sea Battle concept.



Mr. Gunzinger's recent studies have focused on future directed energy capabilities, such as ship-based lasers and high-power microwave weapons; operational concepts and technologies needed to maintain the U.S. military's dominance in the electromagnetic spectrum; and concepts and capabilities to create advantages in precision strike salvo competitions with China, Russia, and Iran. He has led and co-led wargames and workshops sponsored by the Office of Net Assessment and the DARPA Strategic Technology Office to assess future concepts and systems-of-systems for U.S. military operations in highly contested environments.

Mr. Gunzinger's publications include "Beyond the Bottom-Up Review" in *Strategic Essays Vol. XIII*, National Defense University Press, which won a Chairman of the Joint Chiefs of Staff Distinguished Essay Award for 1997. He also authored multiple articles on future warfighting concepts and capabilities that have been published in *Airpower History*, *Proceedings*, and the *Airpower Journal*. His most recent CSBA monographs are *Changing The Game: The Promise of Directed-Energy Weapons* (2012); *Outside-In: Operating from Range to Defeat Iran's Anti-Access and Area-Denial Threats* (2012); *Shaping America's Future Military: Toward a New Force Planning Construct* (2013); *Toward a Balanced Combat Air Force* (2014); *Sustaining America's Precision Strike Advantage* (2015); *Winning the Airwaves: Regaining America's Dominance in the Electromagnetic Spectrum* (2015); and *Winning the Salvo Competition: Rebalancing America's Air and Missile Defenses* (2016).

## **CURRENT POSITION**

As a Senior Fellow at CSBA, Mr. Gunzinger plays a significant role in informing the development of national defense strategic priorities. He provides advice to senior leaders in the Office of the Joint Chiefs of Staff, the Service headquarters staffs, and the Office of the Secretary of Defense. His analytical focus area includes emerging capabilities that are key to DoD's Third Offset Strategy, including directed energy weapons, next-generation electronic warfare capabilities, advanced unmanned systems, and the next long-range strike family of systems. He has been in his current position since 2010.

## **PREVIOUS PROFESSIONAL EXPERIENCE**

From 1972 to early 1992, Mr. Gunzinger served in the United States Air Force as a B-52 copilot, aircraft commander, and senior instructor/evaluator pilot. Following graduation as a member of the first class of the Air Force's School of Advanced Air and Space Studies, he joined the personal staff of the Air Force Chief of Staff and provided advice to the Chief of Staff on the 1993 Bottom-Up Review and 1994 Roles and Missions Review of the Armed Forces.

After completing his final operational tour in 1997 as an aircraft commander with over 3,000 hours in the B-52, Mr. Gunzinger returned to the Pentagon to support DoD's first Quadrennial Defense Review. As a member of the Office of the Secretary of Defense, he co-led the Congressionally mandated 1997 Deep Attack Weapons Mix Study that resulted in decisions to develop new precision-guided munitions and other surveillance and strike capabilities. Mr. Gunzinger developed multiple QDR briefings, reports, and testimony on advanced systems needed to sustain the Nation's long-range strike capability advantage to the Defense Science Board, the General Accounting Office, the White House, and Congress. Over the next few years, he co-authored Defense Planning Guidance documents that established resource and capability priorities that shaped development of three defense budgets. Rejoining the Air Force in 1999, Colonel Gunzinger was appointed as the Chief, Joint Issues Division. As a division chief, he proposed the development of new operational concepts for projecting air power into the Pacific and Persian Gulf.

Following retirement as a colonel and command pilot in 2002, Mr. Gunzinger was appointed as the Deputy Associate Director for Strategic Planning, Headquarters United States Air Force. Over the next two years, he helped lead five Air Staff divisions that authored the Air Force's Transformation Flight Plan, Long-range Strategic Plan, and resource planning guidance. After transferring to the Office of the Under Secretary of Defense for Policy, Mr. Gunzinger helped prepare DoD leadership for the 2006 QDR. As OSD/Policy's lead for the Department's annual Program and Budget Review, he briefed principals on the Defense Acquisition Board and developed guidance on behalf of the Secretary of Defense to develop new capabilities needed to sustain the U.S. military's freedom of action in an emerging precision-guided munitions regime. Appointed to the Senior Executive Service in 2005, Mr. Gunzinger led the Department's QDR integration office to prepare the Secretary of Defense, Deputy Secretary of Defense, Chairman and Vice Chairman of the Joint Chiefs for QDR meetings. He was a co-author of DoD's 2006 QDR Report, and developed the Secretary of Defense's *Strategic Planning Guidance for Fiscal Years 2008–2013*. As a result of his contributions during the 2006 QDR, Mr. Gunzinger was awarded the Department of Defense Distinguished Civilian Service Medal.

In 2006 and 2007, Mr. Gunzinger led the interagency effort to implement 2006 QDR recommended initiatives to help shape the rise of China and other emerging powers. Mr. Gunzinger was the primary author of the initial briefing to the President's National Security Advisor proposing the military "surge" to Iraq. Subsequent briefings on the surge to Iraq authored by Mr. Gunzinger were used to brief the full National Security Council. Prior to the 2010 QDR, Mr. Gunzinger served as the Deputy Assistant Secretary of Defense for Forces Transformation and Resources in the Office of the Under Secretary of Defense for Policy. In this position, he authored the *Defense Department's Guidance for Development of the Force for Fiscal Years 2010–2015* and gave multiple briefings on future plans, capabilities, and resource issues to the Deputy Secretary of Defense. Mr. Gunzinger led DoD's first congressionally mandated Quadrennial Roles and Missions Review (QRMR) and authored the review's report to Congress signed by the Secretary of Defense. Mr. Gunzinger most recently served in government as a senior advisor for the U.S. Air Force during the 2010 Quadrennial Defense Review. Appointed as a Highly Qualified Expert, he was asked to co-lead an Air Force Tiger Team that assessed the need to develop a new optionally manned penetrating bomber and other long-range strike capabilities.

## **EDUCATION**

*Bachelor of Science in Chemistry* United States Air Force Academy

*Master of Arts in Personnel Administration* Central Michigan University

*Master of Military Art and Science* United States Air Force School of Advanced Air and Space Studies

*Master of Science, National Security Strategy (Distinguished Graduate)* National War College

*Completed multiple training courses in military history and campaign planning*

# Dr. Thomas G. Mahnken

President

Center for Strategic and Budgetary Assessments

Dr. Thomas G. Mahnken is President and Chief Executive Officer of the Center for Strategic and Budgetary Assessments.

He is a Senior Research Professor at the Philip Merrill Center for Strategic Studies at The Johns Hopkins University's Paul H. Nitze School of Advanced International Studies and has served for over 20 years as an officer in the U.S. Navy Reserve, to include tours in Iraq and Kosovo.

He currently serves as a member of the Congressionally-mandated National Defense Strategy Commission and as a member of the Board of Visitors of Marine Corps University. His previous government career includes service as Deputy Assistant Secretary of Defense for Policy Planning from 2006–2009, where he helped craft the 2006 Quadrennial Defense Review and 2008 National Defense Strategy. He served on the staff of the 2014 National Defense Panel, 2010 Quadrennial Defense Review Independent Panel, and the Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction. He served in the Defense Department's Office of Net Assessment and as a member of the Gulf War Air Power Survey. In 2009 he was awarded the Secretary of Defense Medal for Outstanding Public Service and in 2016 the Department of the Navy Superior Civilian Service Medal.



Dr. Mahnken is the author of *Strategy in Asia: The Past, Present and Future of Regional Security* (Stanford University Press, 2014), *Competitive Strategies for the 21st Century: Theory, History, and Practice* (Stanford University Press, 2012), *Technology and the American Way of War Since 1945* (Columbia University Press, 2008), and *Uncovering Ways of War: U.S. Intelligence and Foreign Military Innovation, 1918–1941* (Cornell University Press, 2002), among other works.

## **Education**

*B.A. in History and International Relations (summa cum laude)*  
University of Southern California

*National Security Fellow*  
John M. Olin Institute for Strategic Studies

*MA and Ph.D in International Affairs*  
Johns Hopkins University's School of Advanced International Studies (SAIS)

## Mara A. Motherway

Head of Government Relations  
Booz Allen Hamilton

Mara Motherway is the Head of Government Relations for Booz Allen. She previously led business development for the firm's military intelligence markets. Prior to joining Booz Allen, Mara was the Director of Special Projects and Strategic Captures for BAE Systems Intelligence, Surveillance, and Reconnaissance Electronic Systems. Mara served as an intelligence officer in the US Navy and has extensive strategic and operational DoD and intelligence community experience.

Mara served aboard both aircraft carriers and amphibious assault ships, deploying multiple times, including in support of Operation IRAQI FREEDOM. She also deployed to the Middle East on multiple occasions as a weapons and targeting expert for a range of crisis and contingency operations.

While in the military, her strategic assignments included Deputy, Joint Intelligence Task Force Combating Terrorism (JITF-CT) for Crisis Support; Special Assistant to the Chairman Joint Chiefs of Staff for Indications and Warning; Acting Director, Defense Intelligence Agency office of Congressional Affairs; Congressional Liaison to HPSCI and SASC; Senior Advisor to the Secretary of the Navy and Chief of Naval Operations for current intelligence; Executive Officer to the Deputy Chief of Naval Operations for Information Dominance; and Senior Strategic Advisor to the Director, Defense Intelligence Agency.

Mara earned a B.S. in Political Science from the U.S. Naval Academy, an MPA from Harvard University, and an M.S. in National Resource Strategy (Distinguished Graduate) from National Defense University's Industrial College of the Armed Forces.



## Henry A. “Trey” Obering III

Executive Vice President, Directed Energy Innovation Services Officer  
Booz Allen Hamilton

Trey Obering is a Booz Allen Hamilton Executive Vice President based in McLean, Virginia. He works with clients in the Directed Energy area across the DoD and Intelligence communities. An expert in acquisition and program management, he also works with clients in the Air Force Materiel Command, Air Force Space Command, and Missile Defense markets. He leads the Acquisition Program Management and Logistics Functional Community which develops and improves the skills of the hundreds of acquisition and logistics professionals across the firm. Based on his experience, he has led two National Academy of Sciences committees sponsored by the Assistant Secretary of the Air Force (Acquisition) to help the Air Force improve the management of their programs. Prior to joining Booz Allen, he led a comprehensive review of the National Reconnaissance Office for the Director, National Intelligence, which provided a new charter for that organization.



Mr. Obering retired from the US Air Force as a Lieutenant General with more than 35 years of experience in space and defense systems development, integration, and operations. He served as Director of the 8,500-person Missile Defense Agency, Office of the Secretary of Defense.

He was the Department of Defense (DoD) Acquisition Executive for the nation's \$10 billion per year missile defense portfolio. In addition, he served as the program manager for the Ballistic Missile Defense System. Prior to his assignment at MDA, he planned and programmed 68 joint, Air Force and international programs with a \$28 billion budget as Mission Area Director for Information Dominance on the Air Staff.

Mr. Obering entered the Air Force in 1973 after completing the University of Notre Dame's ROTC program as a distinguished graduate. He received his pilot wings in 1975 and flew operational assignments in the F-4E. Later, he was assigned to the Space Shuttle program and participated in 15 space shuttle launches as a NASA orbiter project engineer and was responsible for integrating firing room launch operations. Other assignments include tours with the Air Force Inspector General, the Defense Mapping Agency, and Electronic Systems Center.

Mr. Obering has twice earned the DoD's highest non-combat award, the Defense Distinguished Service Medal for leadership. In 2008, he received the prestigious University of Notre Dame Rev. William Corby Award recognizing alumni who have led a distinguished military career. He was honored by the National Defense Industrial Association's Missile Defense Division with the 2011 Kadish Award for Acquisition Excellence. He received a B.S. degree in Aerospace Engineering from Notre Dame University and an M.S. degree in Astronautical Engineering from Stanford University.

## Tom Pfeifer

Executive Vice President  
Booz Allen Hamilton

Tom Pfeifer is an executive vice president with 30+ years of experience providing systems and software engineering services across the Department of Defense, civil, commercial, and international communities with a particular emphasis on enterprise architectures and IT-based solutions.

He is an expert in all aspects of business development as well as business execution and operational performance. In addition, he has been a key contributor to Booz Allen's functional standards/quality initiatives including the firm's software CMMi, ISO-9001, and ISO-20000 certifications. Tom is a subject-matter expert in position, navigation, and timing (PNT) technology and GPS. Within Booz Allen, he is the senior leader of integrated resilient-PNT (R-PNT) research and development facilities and he is highly engaged in R-PNT external engagements for defense, intelligence, civil and commercial clients.



He has recently presented perspectives, insights, and solutions at the following conferences:

- Defense One, Washington, DC, (November 2016)
- Time and Money, New York, NY (January 2017)
- DiUX PNT hackathon/workshop, Austin, TX (February 2017)
- South by Southwest conference, Austin, TX (March 2017)

From a market perspective, Tom currently leads Booz Allen's Air Force business. This entails addressing challenges including C4ISR, combat support, logistics, air platforms, space systems, ground systems, modeling and simulations, economic analysis, strategic planning, domain specific analytics, and training and education.

The nature of the work ranges from traditional consulting and acquisition support to cybersecurity, engineering, system/software development, and "big data" analytics solutions. The Air Force team consists of professionals working onsite with clients or in Booz Allen facilities from the Pacific Rim to EUCOM and the Middle East, as well as facilities in the U.S.

Tom holds a master's degree in computer systems management and a bachelor's degree in economics, both from the University of Maryland. He is a member of the Institute of Navigation, the Institute of Electrical and Electronic Engineering Computer Society, the American Society for Quality, and the Armed Forces Communications and Electronics Association.

## Patrick James “Jim” Potter

Principal/Director, Directed Energy Innovation  
Booz Allen Hamilton

Jim Potter leads the Directed Energy Innovative Services Team at Booz Allen which is home to the High-Powered Microwave, High Energy Laser, Electromagnetic Programs, RF Systems, and Network Modeling and Exploitation organizations across many markets and geographies.

After 8 ½ years on active duty with the Coast Guard in a variety of engineering billets, Jim began his private sector career at ARINC Incorporated in 1999 working as an RF engineer in support of the FAA Aeronautical Mobile Communications Services (AMCS) contract for Air-Ground International (AGI) Services. Soon after completing a successful High Frequency Air-Ground receiver site upgrade in McMurdo Station, Antarctica, Jim transferred to ARINC Engineering Services, the Defense focused Division of ARINC, and ultimately helped to establish the Electromagnetic Programs organization, a computational electromagnetics center of excellence. ARINC Engineering Services was purchased by Booz Allen in December 2012.



Jim has been involved in systems engineering and system integration programs for more than 26 years. Prior to joining the private sector, he spent over eight years on active duty with the United States Coast Guard as a commissioned officer specializing in communication systems engineering. Following a two-year tour of duty on a 210-foot medium endurance cutter and time earning his master's degree in Electrical Engineering, he was responsible for managing all technical aspects of the Coast Guard's Communication System 2000 project—a multi-year operation involving high frequency Communication Stations in Boston, Miami, Honolulu, and New Orleans, as well as primary and backup Communication Area Master Stations in San Francisco, CA and Chesapeake, VA. Jim was also an Electrical Engineering Instructor at the U. S. Coast Guard Academy in New London, CT while on active duty.

Jim earned a BSEE from the U. S. Coast Guard Academy and a MSEE from the University of Maryland.

## Horacio Rozanski

President and Chief Executive Officer  
Booz Allen Hamilton

Horacio Rozanski is president and chief executive officer of Booz Allen, a global firm that brings bold thinking in consulting, analytics, digital solutions, engineering, and cyber to Fortune 500 corporations, governments, and not-for-profits in a diversity of fields, from defense and health to energy and transportation.

Horacio is involved in all aspects of managing Booz Allen's national and international operations and workforce, leading efforts to set the firm's business goals and growth strategy, build value for investors, and identify emerging trends that will affect clients.



He has played a central role in major strategic initiatives, including the 2008 separation of the firm's core government and commercial businesses into two distinct companies, Booz Allen Hamilton's 2010 initial public offering, and its 2011 expansion into international and commercial markets. Beginning in 2012, he led Vision 2020, which set the company's growth strategy for the future and has allowed Booz Allen to deliver industry-leading financial results. In 2016, he led an initiative that refreshed the firm's values and defined its purpose statement—empower people to change the world.

Horacio joined Booz Allen in 1992 as a consultant to commercial clients, where he focused on marketing and channel strategy across a range of industries. He was elected vice president in 1999, and served as chief personnel officer, chief strategy and talent officer, and president and chief operating officer before becoming CEO. He also is a member of the firm's board of directors.

A respected authority and leader in the consulting industry, Horacio has expertise in business strategy, technology and operations, talent and diversity, and the future of consulting. Hispanic Business Magazine named him to its list of the 2012 Most Influential Leaders in the United States.

Born and raised in Argentina, Horacio originally came to the United States to attend college. He holds a B.B.A. degree (summa cum Laude) from the University of Wisconsin Eau Claire and an M.B.A. degree with high honors from the University of Chicago. He sits on the board of directors for the Center for Talent Innovation and is a member of the United States Holocaust Memorial Museum's Committee on Conscience.

## Dr. David Stoudt

Senior Executive Advisor  
Booz Allen Hamilton

Dr. David Stoudt is a Booz Allen Hamilton Senior Executive Advisor and Engineering Fellow for Directed Energy. He provides scientific and business strategy and leadership to help advance directed energy capabilities for the warfighter.

Prior to joining Booz Allen Hamilton, he served in the Department of the Navy for 32 years, the last 12 of which he held an executive position as the Navy's first Distinguished Engineer for Directed Energy. He has a proven track record of providing sound results driven technical strategic leadership that led to the establishment of world-class directed-energy programs, personnel, and facilities at the Naval Surface Warfare Center, Dahlgren, Virginia (NSWCDD). From 2008 through 2012, he was also the first NAVSEA Technical Authority Warrant for Directed Energy and Electric Weapon Systems, such as high-energy laser (HEL) weapon systems, the Electromagnetic Rail Gun Weapon System, high-power microwave (HPM) weapon systems, and the electromagnetic launch of weapons.



While at NSWCDD, he established and technically directed a number of HPM and HEL technology programs, including: airborne electronic attack, counter-Improvised Explosive Devices (IEDs), HPM and HEL lethality efforts, and the start of the Navy's Laser Weapon System (LaWS) that is currently deployed on the USS Ponce. He established several prototype weapon development efforts to support Operation Iraqi Freedom (OIF) to help mitigate the impact of IEDs. These prototypes represented the first ever successful tactical employment of directed-energy weapons.

From 2011 to 2015, he was the Senior Director, Capabilities and Concepts in the Office of the Deputy Under Secretary of the Navy for Policy, and stood up a new organization within the DON Secretariat that was chartered to assess naval programs, technology development and warfighting concepts, and analyze their implications for future naval capabilities. As the Senior Director, he initiated and served as the Executive Secretary for the Naval Directed Energy Steering Group, which was chartered by the Under Secretary of the Navy to develop the DON Vision, Strategy, and Roadmap for Naval directed energy weapons. He also initiated the establishment of, and served as the Executive Secretary for, both the Navy Non-Acoustic Anti-Submarine Warfare Steering Group and the Naval Space Board, chartered by the Under Secretary of the Navy and the Secretary of the Navy, respectively.

Among other honors, he was awarded the Navy Distinguished, Superior, and multiple Meritorious Civilian Service Awards, as well as the Naval Sea Systems Command Scientist of the Year Award. He received a B.S. (Summa Cum Laude), M.S., and Doctor of Philosophy, all in Electrical Engineering, from Old Dominion University. In 2018, Dr. Stoudt became the President of the Directed Energy Professional Society's Board of Directors.

## Dennis L. Via

Senior Executive Advisor  
Booz Allen Hamilton

Dennis Via is a Senior Executive Advisor and Defense Fellow with Booz Allen, where he advises the firm's leadership in the defense, intelligence, homeland, and international markets. He recently retired from the US Army as a 4-Star General. In his last assignment, he led the largest global logistics command in the US Army and Department of Defense (DoD), comprising 120,000 military and civilian employees in 38 countries and 41 states, with an annual budget of \$50B.



As the commander of Army Materiel Command (AMC), he was directly responsible for all logistics, information technology, foreign military sales, and Industrial Base operations for the US Army. From 2004 to 2011, he held multiple senior leader positions across the DoD in the areas of information technology, network operations, cyber security, and global supply chain.

Prior to his promotion and assignment as the AMC commander, he was assigned as the command's deputy commander, where he deployed to Southwest Asia in October 2011 to manage the strategic integration of the retrograde of equipment and materiel out of Iraq after the conclusion of combat operations. Prior to this appointment, he was assigned as a Director on The Joint Staff, Pentagon, where he was a direct report to the Chairman, Joint Chiefs of Staff, for all policies, plans, and programs for DoD communications, information systems, and cyber security.

General Via served 12 years as a general officer, and is the first Signal Corps Officer in US Army's 242-year history to achieve the rank of 4-Star General. He is a member of the Council on Foreign Relations, the Association of the United States Army, and the Armed Forces Communications-Electronics Association.

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## Dr. Azar S. Ali, SES

### Chief Scientist for Pacific Air Forces

Dr. Azar S. Ali, a member of the Senior Executive Service, is the Chief Scientist for Pacific Air Forces. He is the senior science and technology adviser to the PACAF Commander, Joint Base Pearl Harbor-Hickam, Hawaii. PACAF's mission is to deliver rapid and precise air, space, and cyberspace capabilities to protect and defend the U.S., its territories, and interests; to provide integrated air and missile defense; to promote interoperability throughout the 36 nations in PACAF's area of responsibility; to maintain strategic access and freedom of movement across all domains; and to respond across the full spectrum of military contingencies in order to restore Asia-Pacific security.



Dr. Ali is the primary authority and integrator of PACAF's science and technology requirements. He evaluates, identifies and advocates for emergent air, space and cyberspace science and technology solutions, partnerships, and technology development. He provides technical expertise and experience necessary to authoritatively guide and serve as the senior interface between PACAF and the Air Force Research Laboratory, numbered Air Force commands, the Defense Advanced Research Projects Agency, NASA, the Department of Energy, the National Reconnaissance Office, the National Security Agency, other major commands, services, industry, federally funded research and development centers, and the scientific community at large. He participates in PACAF's long range planning processes and informs long range concept and roadmap development. He mentors and develops members of the staff across the Pacific Air Force Command to assure technical quality and excellence in program execution in areas of highest interest to the Air Force. He serves as the air component senior science and technology representative in joint activities and meetings with other services across the Pacific Command.

From 2010 to 2014, Dr. Ali served as the Senior Strategic Technical Advisor for the Munitions Directorate, Air Force Research Laboratory, Eglin Air Force Base, Florida. He developed new and novel weapons concepts that incorporated the most advanced technologies for agile airframes, precision navigation, guidance and control, and terminal effects of air-launched air-to-air, air-to-ground, and penetration weapons. He worked closely with DARPA, AFRL Directorates, major commands, services, FFRDCs, industry, agencies and academia and initiated several large weapons and technology development programs. He also worked closely with the Secretary of the Air Force, International Affairs and the Office of the Secretary of Defense and established project agreements with Italy and Germany.

From 1995 to 2010, Dr. Ali held a number of positions in the air-launched munitions community, including branch chief, chief engineer, chief scientist, and technical director. He developed, tested, and integrated many munitions – including the Advanced Medium Range Air-to-Air Missile and the Joint Stand-Off Weapon – onto various platforms such as the F-15, F-16, B-2 and B-52. He was instrumental in the recently successful development and live fire testing of a remotely-piloted-aircraft launched weapon for U.S. Special Operations Command. He led a multi-Service, multi-agency group and developed electronic attack and electronic protection techniques with roadmaps to address the pacing electromagnetic threat.

From 1986-1995, he served as a professor in electrical engineering at the U.S. Air Force Academy where he taught courses in electronic circuits, digital and analog communications, airborne radar, electromagnetics, antennas, fiber optic communications, electromagnetic pulse protection, radar cross section measurements, antenna pattern measurements, and signal processing.

From 1981 to 1985, he was a microwave and satellite systems engineer for PACAF. He installed satellite communications systems in Japan, microwave communications systems in the Philippines, and he resolved several electromagnetic compatibility and interference problems in South Korea.

Dr. Ali enlisted in the Air Force as a medic/pharmacy technician in 1974 and honorably retired from active duty at the rank of major in 1998.

#### EDUCATION

1973 High School Graduate, Christ Church High School, Georgetown, Guyana

1981 Bachelor of Science, Electrical Engineering, University of Illinois, Champaign-Urbana

1986 Master of Science, Electrical Engineering, University of Illinois, Champaign-Urbana

1993 Doctor of Philosophy, Electrical Engineering, University of Colorado, Boulder

(Current as of February 2015)

## Elbridge A. Colby

### Deputy Assistant Secretary of Defense for Strategy and Force Development

Elbridge A. Colby is the Deputy Assistant Secretary of Defense for Strategy and Force Development, in which capacity he is responsible for defense strategy, force development, and strategic analysis for Office of the Secretary of Defense Policy. During 2017 and early 2018, Colby served as the Department of Defense co-lead for the development of the Department's premier strategic planning guidance, the National Defense Strategy, which was released in January 2018 and focuses the Department on major power competition and sustaining the Joint Force's military edge in a more competitive era. Colby is also responsible for developing the Defense Planning Guidance and the Defense Planning Scenarios, and serves as a lead Policy representative to the Program and Budget Review and Support for Strategic Analysis processes.



Prior to entering government service, Colby was from 2014 to 2017 the Robert M. Gates Senior Fellow at the Center for a New American Security, and from 2010 to 2013 a principal analyst and division lead for global strategic affairs at CNA. Earlier in his career he served for over five years in the U.S. Government at the Department of Defense, Department of State, and in the Intelligence Community working on a range of strategic forces, WMD, and intelligence reform matters, including service with the Coalition Provisional Authority in Iraq in 2003. Colby has also served as a staff member for or consultant to a number of government commissions, including the 2014 National Defense Panel, the 2008-2009 Strategic Posture Commission, and the 2004-2005 President's WMD Commission.

Colby is the author of many book chapters, reports, and articles on defense and foreign policy issues, and co-edited a volume on Strategic Stability: Contending Interpretations. He has testified before Congress and the U.S.-China Economic and Security Review Commission. Colby is a recipient of the Exceptional Public Service Award from the Office of the Secretary of Defense and of the Superior and Meritorious Honor Awards from the Department of State. He is a member of the Council on Foreign Relations and the International Institute of Strategic Studies. Colby is a graduate of Harvard College and Yale Law School.

## Dr. William L. Cooper

Hybrid Defense of Restricted Airspace (HyDRA) Study Director

Dr. William L. Cooper is the Hybrid Defense of Restricted Airspace (HyDRA) Study Director; Weapons Modeling, Simulation & Analysis (WMS&A) Deputy Core Technical Competency (CTC) Lead; and Senior Weapons Strategist at the Directed Energy (DE) Directorate, Air Force Research Laboratory, Kirtland AFB, NM. WMS&A is the primary mission-level Directed Energy (DE) military utility assessment team for the USAF.



Dr. Cooper has served in a variety of kinetic and directed energy weapons research, development, simulation and assessment roles since entering the USAF as an officer in 1995, including time in industry and federal civil service. He has led multiple high-energy laser (HEL), high-powered electromagnetic (HPEM) and Electro-Optical/InfraRed (EO/IR) system assessments. His kinetic weapons experience includes development of penetrators for hard & deeply buried targets, explosively-forged projectiles (EFPs), shaped charges, etc. Related activities span the weapons technical spectrum including operationally-focused utility assessments, weapons development with DoD and DoE partners, international basic research collaborations, and Research & Development (R&D) logistics leadership.

Immediately prior to his current assignment, Dr. Cooper served as the USAF liaison and visiting scientist for c-IED (counter Improved Explosive Device) research at the Office of Naval Research's Multi-disciplinary University Research Initiative (MURI) at the University of Colorado, Boulder.

### EDUCATION

1991 Bachelors of Science degree in aerospace engineering, University of Notre Dame  
1993 Masters of Science degree in mechanical engineering, University of Notre Dame  
1997 Doctor of Philosophy degree in mechanical engineering, University of California, Los Angeles  
2015 Air War College

### CAREER CHRONOLOGY

1. 1995-1997, Munition warhead R&D Program Manager (PM), Wright Laboratory, Eglin AFB, FL.
2. 1997-1999, Munition energetic material R&D engineer & PM, Munitions Directorate, Air Force Research Laboratory (AFRL), Eglin AFB, FL
3. 1999-2000, Senior business analyst, NEXTEL Communications Inc., Reston, VA.
4. 2000-2000, Process reengineering manager, NEXTEL Communications, Inc., Reston, VA.
5. 2000-2001, Operations Manager, NEXTEL Communications Inc, Hampton, VA.
6. 2001-2001, Training and Quality Manager, NEXTEL Communications Inc, Hampton, VA.
7. 2001-2002, Senior Operations Manager, NEXTEL Communications Inc, Hampton, VA.
8. 2002-2005, Munitions energetic matls R&D Team Ld, Munitions Directorate, AFRL, Eglin AFB, FL.

9. 2005-2006, Logistics Division Chief (QA & ESOH), Munitions Directorate, AFRL, Eglin AFB, FL.
10. 2006-2012, Munitions Fundamental Science Team Ld, Munitions Directorate, AFRL, Eglin AFB, FL.
11. 2012-2013, Visiting Scientist for c-IEDs, University of Colorado, Boulder, CO.
12. 2013-Present, Weapons MS&A Dep. CTC lead, Directed Energy Dir., AFRL, Kirtland AFB, NM.
13. 2015-Present, Director—Hybrid Defense of Restricted Airspace Study, AFRL, Kirtland AFB, NM

#### AWARDS, HONORS AND ACHIEVEMENTS

2017 Earl Good Commander's Cup Team Award

2012 Special Act or Service Award

2011 Summer Intern Mentorship Award

2004 Warren Payne Quality Award

2002 Nextel Inner Circle Award (top 1%)

2001 Nextel Circle of Excellence (top 2-5%)

1991 Engineering Honors Graduate, University of Notre Dame

1989 Vice Commandant Award, Air Force Field Training

1987 Eagle Scout

## Dr. Gary DeBell

Founder and Managing Member  
MLD Technologies LLC

Gary DeBell is a Founder and Managing Member of MLD Technologies LLC, a leading supplier of optical thin films and optical components for lasers and laser based systems.

He has an AB in Physics from UC Berkeley and a Ph.D. in Optics from the University of Rochester, Institute of Optics. He is a Fellow of the Optical Society of America and the SPIE. He has more than 40 years' experience in the design and production of thin-film optics, optical components and optical instruments, including engineering and management positions at Spectra-Physics, where he became President and CEO of Spectra-Physics Optics Corporation, a wholly owned Spectra Physics subsidiary.

Gary has three patented inventions in the field of Laser Optics and more than two dozen technical publications and presentations in the field of Optical Thin Films.

## Mr. Keith L. Englander, SES

### Director for Engineering

Mr. Keith L. Englander assumed the duties as Director for Engineering, Missile Defense Agency on January 9, 2006. In this capacity he serves as the Agency's Single Technical Authority. This includes responsibility for system and element engineering; generation of system and element test requirements; development of the system level modeling and simulation efforts; development of technical intelligence information; lead for failure review boards and conduct of independent technical assessments.

A member of the Senior Executive Service, Mr. Englander earned a Bachelor of Science degree in Aerospace and Ocean Engineering from Virginia Polytechnic Institute in 1975 and a Masters degree in Public Administration in 1996. He is also a 1991 graduate of the Defense Systems Management College.



Mr. Englander's career began with the Department of the Navy in 1975 where he was responsible for the design and development of propellant devices for rocket motors. He later served as Chief Engineer for the Navy A-6 attack aircraft. Mr. Englander left NAVAIR in 1992 to head the System Engineering and Integration Directorate for Brilliant Pebbles at the Strategic Defense Initiative Organization (SDIO). When SDIO transitioned to the Ballistic Missile Defense Organization (BMDO), he was assigned the positions of System Engineering Director followed by the Deputy for Integration, and subsequently promoted to the Technical Director, all within the National Missile Defense (NMD) Program Office. As BMDO transitioned to the Missile Defense Agency (MDA), he assumed the duties for the MDA Deputy for System Engineering and Integration where he defined the BMD system and its capability. He later assumed the duties of the MDA Technical Director in 2005.

His awards include three Presidential Rank Awards, the American Institute of Astronautics and Aeronautics (AIAA) David R. Israel Award for Meritorious Achievement for International Ballistic Missile Defense and the Secretary of Defense's Exceptional Civilian Service Award. He was inducted into the Virginia Tech College of Engineering Academy of Excellence (April 2016) and the Virginia Tech Aerospace and Ocean Engineering Department Academy of Excellence (October 2016). He is currently on the Advisory Board for Space at Virginia Tech.

Current as of January 2017

## Mr. Ronald J. “Flats” Flatley

Program Officer for the Solid State Laser Technology Maturation (SSL-TM) Program at the Office of Naval Research, Code 35

Mr. Ronald J. “Flats” Flatley is the Program Officer for the Solid State Laser Technology Maturation (SSL-TM) Program at the Office of Naval Research (ONR), Code 35. As Program Officer, he is responsible for leading this high visibility, fast-paced, and challenging Rapid Prototyping, Experimentation, and Demonstration (RPED) effort to be the first, advanced, field-tested, 150kW Solid State Laser Weapon System installed on a U.S. Navy surface combatant for Fleet operations in 2019.

Mr. Flatley leads a Government team spanning multiple Navy Warfare Centers and a prime contractor, Northrup Grumman Aerospace Systems (NGAS). The Laser Weapon System Demonstrator incorporates a modular design, unique off-axis beam director, and state-of-the-art sensor technology. The Government is providing overall system integration and developing the fire control, console interface, power, cooling, and predictive avoidance subsystems; studying host platform requirements and options; and integrating the overall system with the platform.



## Mr. Kevin Gates

Vice President for Advanced Concepts  
Strategic Analysis, Inc.

Since December 2017, Kevin Gates has been serving as the Vice President for Advanced Concepts at Strategic Analysis, Inc, a professional technology services and consulting company. In that role, he is responsible for managing a corporate division with contracts across the Navy, Air Force and Office the Secretary of Defense. In this role, he has day-to-day responsibility for managing contracts and workforce across the division, as well as articulating and pursuing a strategy for maintaining high standards of customer service, and growth into new technology sectors and customer sets.

Prior to that, he worked as a Professional Staff Member for the House Armed Services Committee since March 2007, responsible for the Information Technology (IT) and cyber operations portfolio, as well as the Science and Technology (S&T) portfolio. Previously, he worked for 8 years at Strategic Analysis, Inc of Arlington, Virginia for a variety of clients within the DoD science & technology community (including DARPA, ONR and the Defense Science Board), as well as the Homeland Security Advanced Research Projects Agency within DHS(S&T) and the intelligence community. He graduated from the University of North Carolina at Chapel Hill with BAs in History and International Studies, and has a MA from Georgetown University's Security Studies Program. He is the co-author of a chapter on critical infrastructure protection in Volume III of Homeland Security: Protecting America's Targets, James Forest (ed.), 2006.



## Richard W. Glitz, PE

Technical Director

Joint Integrated Air and Missile Defense Organization

Richard W. Glitz is Technical Director of the Joint Integrated Air and Missile Defense Organization (JIAMDO), part of the Joint Chiefs of Staff Force Structure, Resources, and Assessment Directorate (J-8). A Professional Engineer, he oversees and directs research, development, and acquisition associated with air and missile defense. As the scientific and technical expert and advisor to the JIAMDO Director, he is responsible for developing Joint solutions to air and missile defense challenges. Originally from Des Plaines, IL, Mr. Glitz retired from the Air Force as a Colonel after 30 years of service. He flew jet fighters in the US and Europe, including the F-111A, A-7D, F-16C, and the F-117A Nighthawk while it was still a highly classified national asset. In 1992 Mr. Glitz joined the Air Force Reserve, where his assignments included the Air Force Research Laboratory and the Office of the Secretary of Defense.



In civilian life, Mr. Glitz helped develop new aerospace vehicles as an engineer at Northrop-Grumman's Advanced Technology and Design Center and flew the Boeing 737 as a Captain for a major airline. He has logged over 10,000 hours piloting jet aircraft. Mr. Glitz earned a Bachelor of Science in Aeronautical Engineering from the US Air Force Academy, a Master of Engineering in Mechanical Engineering from the University of Idaho, and a Master of Arts in National Security Studies from American Military University. Additionally, he has completed numerous professional education courses offered by NATO, the Department of Defense, and all four military services. Mr. Glitz holds Level 3 DAWIA certifications in both Engineering and Science & Technology Management.

## Dr. Michael D. Griffin

Under Secretary of Defense, Research and Engineering

**Dr. Michael D. Griffin** is the Under Secretary of Defense for Research and Engineering. He is the Department's Chief Technology Officer, and is responsible for the research, development, and prototyping activities across the DoD enterprise and is mandated with ensuring technological superiority for the Department of Defense. He oversees the activities of the Defense Advanced Research Projects Agency, the Missile Defense Agency, the Strategic Capabilities Office, Defense Innovation Unit Experimental, the DoD Laboratory enterprise, and the Under Secretariate staff focused on developing advanced technology and capability for the U.S. military.



Mike was previously Chairman and Chief Executive Officer of Schafer Corporation, a professional services provider in the national security sector. He has served as the King-McDonald Eminent Scholar and professor of Mechanical and Aerospace Engineering at the University of Alabama in Huntsville, as the Administrator of NASA, and as the Space Department Head at the Johns Hopkins University Applied Physics Laboratory. He has also held numerous executive positions in industry, including President and Chief Operating Officer of In-Q-Tel, CEO of Magellan Systems, and EVP/General Manager of Orbital ATK's Space Systems Group. Griffin's earlier career includes service as both Chief Engineer and Associate Administrator for Exploration at NASA, and as the Deputy for Technology at the Strategic Defense Initiative Organization. Prior to joining SDIO in an executive capacity, he played a key role in conceiving and directing several "first of a kind" space tests in support of strategic defense research, development, and flight-testing. These included the first space-to-space intercept of a ballistic missile in powered flight, the first broad-spectrum spaceborne reconnaissance of targets and decoys in midcourse flight, and the first space-to ground reconnaissance of ballistic missiles during the boost phase. Mike also played a leading role in other space missions at the John Hopkins University Applied Physics Laboratory and NASA's Jet Propulsion Laboratory.

Griffin has been an adjunct professor at the University of Maryland, Johns Hopkins University and George Washington University, teaching spacecraft design, applied mathematics, guidance and navigation, compressible flow, computational fluid dynamics, spacecraft attitude control, estimation theory, astrodynamics, mechanics of materials, and introductory aerospace engineering. He is a registered professional engineer in California and Maryland, and the lead author of some two dozen technical papers and the textbook *Space Vehicle Design*.

He is a member of the National Academy of Engineering and the International Academy of Astronautics, an Honorary Fellow and former president of the American Institute of Aeronautics and Astronautics, a Fellow of the American Astronautical Society, and a Senior Member of the Institute of Electrical and Electronic Engineers. He is the recipient of numerous honors and awards, including the NASA Exceptional Achievement Medal, the AIAA Space Systems Medal and Goddard Astronautics Award, the National Space Club's Goddard Trophy, the Rotary National Award for Space

Achievement, the Missile Defense Agency's Ronald Reagan Award, and the Department of DoD Distinguished Public Service Medal, the highest award which can be conferred on a non-government employee.

Griffin obtained his B.A. in Physics from the Johns Hopkins University, which he attended as the winner of a Maryland Senatorial Scholarship. He holds master's degrees in aerospace science from Catholic University, electrical engineering from the University of Southern California, applied physics from Johns Hopkins, civil engineering from George Washington University, and business administration from Loyola University. He received his Ph.D. in aerospace engineering from the University of Maryland, and has been recognized with honorary doctoral degrees from Florida Southern College and the University of Notre Dame.

Mike is a 4000+ hour commercial pilot and flight instructor with instrument and multiengine ratings, and holds an Extra Class Amateur Radio license.

## Rear Admiral David J. Hahn

Chief of Naval Research

Director of Innovation, Technology Requirements and Test & Evaluation  
(OPNAV N94)

A native of Tampa, Florida, Rear Adm. David Hahn graduated from the U.S. Naval Academy with distinction in 1985, earning a Bachelor of Science in Mechanical Engineering. Additionally, he holds a Master of Business Administration from George Mason University and has completed the Massachusetts Institute of Technology Seminar XXI program in International Security Affairs.

Prior to command, he served at sea aboard USS Casimir Pulaski (SSBN 633), USS William H. Bates (SSN 680) and USS Springfield (SSN 761), deploying to the North Atlantic and Western Pacific, as well as conducting several strategic deterrent patrols.

Ashore, he served as flag lieutenant to superintendent, U.S. Naval Academy; squadron engineer, Submarine Development Squadron (SUBDEVRON) 12; action officer, Joint Staff in the Command, Control, Communications and Computers (C4) Directorate; and legislative fellow on the staff of U.S. Senator John Warner.



Hahn commanded the USS Pittsburgh (SSN 720) from September 2003 to January 2007. In command, he deployed to the Caribbean Sea and Pacific Ocean and conducted an Engineered Overhaul in Portsmouth, New Hampshire.

Since becoming an acquisition professional in 2007, he has served as Joint Test and Evaluation test director and program manager, Advanced Submarine Research and Development and served as major program manager, Submarine Combat and Weapon Control Systems program.

Hahn's first flag assignment was as the senior technical advisor to the deputy chief of Naval Operations for Information Warfare/director of Naval Intelligence (OPNAV N2/N6). In November of 2016, he became the 26th chief of Naval Research with concurrent flag responsibilities as director, Innovation Technology Requirements and Test & Evaluation (OPNAV N94).

Hahn has been awarded the Defense Superior Service Medal, Legion of Merit, Defense Meritorious Service Medal, the Meritorious Service Medal (three awards), the Navy and Marine Corps Commendation Medal (four awards), the Navy and Marine Corps Achievement Medal and various campaign and unit awards.

## US Senator Martin Heinrich

Elected in 2012, Martin Heinrich is a United States Senator for New Mexico. Heinrich serves on the Senate Energy and Natural Resources, Armed Services, and Intelligence Committees. He is the Ranking Member of the Joint Economic Committee and the Subcommittee on Emerging Threats and Capabilities.

With a background in engineering, Heinrich brings a unique perspective to the Senate, where he is focused on creating the jobs of the future and protecting the vital missions at New Mexico's national labs and military installations. He is a strong advocate for working families, a staunch ally of Indian Country, and a champion for New Mexico's public lands and growing clean energy economy.



Serving on the Senate Armed Services Committee, Heinrich is deeply committed to ensuring our men and women in uniform are prepared for the threats they face and making sure we keep our promises to those who serve. New Mexico plays a pivotal role in our national security. The state is home to several military installations – Kirtland Air Force Base, Holloman Air Force Base, Cannon Air Force Base, Fort Bliss, and White Sands Missile Range – two major national laboratories – Los Alamos National Laboratory and Sandia National Laboratories – and the Waste Isolation Pilot Plant. Through his role on the committee, Heinrich has secured new missions and made sure the personnel at New Mexico's defense installations have the resources and support they need to keep the nation safe.

Heinrich is a member of the Congressional Sportsmen's Caucus, Senate Outdoor Industry Caucus, Senate Climate Action Task Force, Senate Democratic Hispanic Task Force, National Service Congressional Caucus, Congressional Dietary Supplement Caucus, and the founder of the Congressional Directed Energy Caucus.

Prior to being elected to the U.S. Senate, Heinrich served two terms in the U.S. House of Representatives. In the House, Heinrich voted to cut taxes for the middle class, worked to make college more affordable, improved benefits for veterans, opposed cuts to Social Security and Medicare, and championed the DREAM Act as an original cosponsor. Heinrich authored the HEARTH Act to remove barriers to homeownership for American Indian families and led the effort in Congress to reauthorize the Indian Health Care Improvement Act. As a member of the House Armed Services Committee, Heinrich secured language in the National Defense Authorization Act of 2010 that prohibited the retirement of the 150th Fighter Wing from Kirtland Air Force Base, which helped preserve 1,000 jobs.

Before he was elected to Congress, Heinrich served four years as an Albuquerque City Councilor and was elected as City Council President. During his time on City Council, Heinrich championed successful efforts to raise the city minimum wage, address crime through community policing, support local small businesses, make Albuquerque a leader in energy and water conservation, and fought for campaign finance reform. He also served as New Mexico's Natural Resources Trustee, working to conserve the state's outdoor heritage.

After completing a Bachelor of Science degree in Mechanical Engineering at the University of Missouri, Heinrich and his wife, Julie, moved to Albuquerque where he began his career as a contractor working on directed energy technology at Phillips Laboratories, which is now Air Force Research Laboratory at Kirtland Air Force Base. Heinrich later served in AmeriCorps for the U.S. Fish and Wildlife Service, and was the Executive Director of the Cottonwood Gulch Foundation. He also led the Coalition for New Mexico Wilderness and founded a small public affairs consulting firm.

Heinrich's principled leadership is driven by his working-class upbringing, his wife, Julie, his two sons, and the people of New Mexico.

## US Senator Mazie K. Hirono

Mazie K. Hirono was elected to the Senate in 2012 and sworn in as Hawaii's first female senator and the country's first Asian-American woman senator. Hirono's priority is to ensure that every American family has the opportunity to work and succeed. Her efforts to advance these goals include expanding access to early education, supporting a sustainable economy, and ensuring that we keep our promises to our seniors.

Hirono serves on the Committee on Armed Services, the Committee on Energy and Natural Resources, Select Committee on Intelligence, Committee on Small Business and Entrepreneurship, and Committee on Veterans' Affairs. She is also the ranking member of the Armed Services Subcommittee on Seapower and the Energy and Natural Resources Subcommittee on Water and Power.



Born in Fukushima, Japan, Hirono was nearly eight years old when her mother brought her and her older brother to Hawaii to escape an abusive husband and seek a better life. Hirono served in the Hawaii House of Representatives from 1981 to 1994 and earned a reputation as an advocate for consumers and workers. After being elected as Hawaii's lieutenant governor in 1994, Hirono led efforts to support Hawaii's tourism industry through visa reform. Voters in Hawaii's second congressional district elected Hirono to serve in the U.S. House of Representatives in 2006.

## Ryan Hoffman

Program Officer in the areas High Power Radio Frequency and High Power Microwave Weapons for the Office of Naval Research Code 35

Ryan Hoffman has been at the Office of Naval Research (ONR) since 2010 and his current research portfolio includes Directed Energy Weapons. He currently serves as ONR Program Officer in the areas High Power Radio Frequency (HPRF) and High Power Microwave (HPM) weapons for ONR Code 35 - Naval Air Warfare and Weapons with a focus on offensive payload development under the High-power Joint Electromagnetic Non-Kinetic Strike (HIJENKS) Program as well as other Programs for Counter-vessel and Counter-UAS applications.

Recent efforts include ONR Program Officer for the Counter Directed Energy Weapons (CDEW) and Ultrashort Pulsed Lasers (USPL) Programs until 2016. Prior Program Office duties included the Free Electron Laser (FEL) Program which completed in 2015 and the Maritime Weapons of Mass Destruction Detection (M-WMD-D) Program which completed in 2014. He also previously served through ONR as Test and Evaluation Lead for the US Navy Electromagnetic Railgun program where his research focused on advanced instrumentation and diagnostic development, novel materials research and pulsed power development.

Previous technical duties include Research Physicist at the Naval Research Laboratory, Plasma Physics Division, Charged Particle Physics Branch working in railgun technologies and electron beam research and Physicist at the Naval Surface Warfare Center Dahlgren Division, Engagement Systems Department, Gun Weapon Systems Branch working in railgun technologies.

He holds a B.S. in Physics, a B.S. in Mathematics and an M.S. in Physics from Penn State University with a focus on High Energy Particle Physics having studied in Hamburg, Germany at the DESY Particle Accelerator Facility. Ryan is also a 2014 Fellow of MIT SEMINAR XXI, a 2016 recipient of the Secretary of the Navy (SECNAV) Innovation Award in Technology Development, and a 2016 recipient of the Assistant Secretary of the Navy (Research, Development and Acquisition) Dr. Delores M. Etter Top Scientists and Engineers Award.



# Brigadier General Kevin A. Huyck

Deputy Director of Operations, Headquarters  
North American Aerospace Defense Command

Brig. Gen. Kevin A. Huyck is the Deputy Director of Operations, Headquarters North American Aerospace Defense Command, Peterson Air Force Base, Colorado. As the Deputy Director, he is responsible for supporting the execution of aerospace warning, aerospace control and maritime warning for North America to include the Canadian, Alaskan and continental NORAD regions within the bi-national command.

General Huyck is a 1990 graduate of the U.S. Air Force Academy and earned his wings at Sheppard AFB, Texas. He was a distinguished graduate and instructor at the U.S. Air Force's Weapons Instructor Course and attended National War College. His assignments include F-22 Initial Cadre, F-22 Follow-on Operational Test and Evaluation, director of operations and combat Joint Staff, commanding at the squadron, group and wing level.



General Huyck is a command pilot with more than 3,000 flying hours in the F-15 and F-22, and 295 combat hours in support of Operation Southern Watch.

Prior to his current assignment, General Huyck served at the directorate level as Deputy Chief of Staff Operations at NATO's Headquarters Allied Air Command, Ramstein Air Base, Germany. He was responsible for all operational related matters, including air policing, ballistic missile defense, Article 5 and crisis response operations.

## **EDUCATION**

1990 Bachelor of Science, computer science, U.S Air Force Academy, Colorado Springs, Colo.

1997 Squadron Officer School, Maxwell AFB, Ala.

1998 U.S. Air Force Fighter Weapons Instructor Course, Nellis AFB, Nev.

2002 Air Command and Staff College, by correspondence

2002 Master of Business Administration, Military Management Degree, Touro University, Calif.

2006 Air War College, by correspondence

2010 Master of Science, national security studies, National War College, Fort Lesley J. McNair, Washington, D.C.

## **EFFECTIVE DATES OF PROMOTION**

Second Lieutenant May 30, 1990

First Lieutenant May 30, 1992

Captain May 30, 1994

Major May 30, 2001

Lieutenant Colonel May 1, 2005

Colonel Sept. 1, 2009

Brigadier General July 6, 2015

## Dr. George Ka'iliwai

Director, Resources and Assessment Directorate  
US Pacific Command

Dr. George Ka'iliwai III is the Director, Resources and Assessment Directorate (J8), Headquarters, U.S. Pacific Command (HQ USPACOM). As the HQ USPACOM J8, Dr. Ka'iliwai leads the Command in the strategic assessment process, facilitates the development of USPACOM requirements, translates those requirements into material and non-material solutions through advocacy, science and technology, innovation and experimentation, and is also responsible for managing and directing the HQ USPACOM budget.

Dr. Ka'iliwai was appointed to the Senior Executive Service in July 2007. Prior to his appointment into the Senior Executive Service, Dr. Ka'iliwai was a Senior Level from July 2003 to July 2007. Dr. Ka'iliwai has 25 years as an active duty Air Force officer.

Dr. Ka'iliwai served as the Chief Technology Officer and Technical Advisor, Air Force Flight Test Center from July 2003 through July 2007. In this capacity, Dr. Ka'iliwai provided the leadership and final review of the technical aspects of the center's overall program as well as consultant advice and technical guidance to the center's commander. Through the center's commander, Dr. Ka'iliwai established policy and procedures, and provided technical expertise to a work force of more than 6,000 military and civilian personnel. He also formulated the testing philosophy and testing approaches to assure scientific validity and maximum efficiency in accomplishing ground and flight tests.

From January 2001 through June 2003, Dr. Ka'iliwai served as the Commandant of the U.S. Air Force Test Pilot School at Edwards Air Force Base, California. As Commandant, he oversaw the training of experimental test pilots, flight test navigators and flight test engineers to conduct and manage the ground and flight test evaluation of research prototype and production aerospace vehicles and their systems.

Dr. Ka'iliwai was the Technical Director, Electronic Warfare Directorate, 412 Test Wing, Air Force Flight Test Center from July 1999 to January 2001. As Technical Director, Dr. Ka'iliwai supervised over 30 engineers and managers and controlled \$200 million in the Future Years Defense Program. He successfully led a team of engineers to develop the Air Force's first-ever Electronic Warfare Test and Evaluation (T&E) Roadmap and chaired a multi-service DoD electronic warfare T&E resource panel.

From July 1997 to July 1999, Dr. Ka'iliwai i was the Squadron Commander for the Air Force Occupational Measurement Squadron, Air Education and Training Command. Dr. Ka'iliwai commanded 156 personnel to develop 350 promotion tests & analyze 260 career fields each year and developed enlisted promotion tests in which 98.4% of the questions were valid, fair, & credible. He was also the first commander to administer disk-based surveys and secured \$225K for web-based surveys.



Dr. Ka'iliwai was Deputy Chief, Regional Strategy and Policy Division, Strategic Planning and Policy Directorate (J5), United States Pacific Command from June 1994 to July 1997. He led five active duty joint staff officers, nine reservists and two civilians; developed and implemented strategic concepts and policies that supported US national interests and strategic objectives; researched, analyzed and assessed political-military developments throughout the Asia-Pacific region; developed the Command's future military strategy and force structure for the 1997 Quadrennial Defense Review (QDR); and was the Command's top strategy briefer.

From May 1978 to June 1994, Dr. Ka'iliwai was a National Defense Fellow, served with the Air Force Studies and Analyses Agency (now AF/A9), was a RAND Research Fellow, and managed several high-priority, classified DoD avionics flight test programs on high-value, prototype aircraft.

Dr. Ka'iliwai is a distinguished graduate of the U.S. Air Force Academy and attended the California Institute of Technology under the Senior Commander's Education Program. He holds two other masters degrees from Golden Gate University. He is also a distinguished graduate of Squadron Officer School, Air Command and Staff College and the U.S. Air Force Test Pilot School. He earned a Doctor of Education degree in Educational Leadership at the University of Southern California in December 2000.

Dr. Ka'iliwai's Air Force decorations include the Legion of Merit, Defense Meritorious Service Medal, Air Force Meritorious Service Medal (with two Oak Leaf Clusters), Joint Commendation Medal, Air Force Commendation Medal (with two Oak Leaf Clusters), and Air Force Achievement Medal. While at the USAF Academy, he was a United States Track and Field Federation All-American. Dr. Ka'iliwai is the only non-rated officer to have commanded the USAF Test Pilot School. He is the International Society of Flight Test Engineers' 2001 Kelly Johnson Award Recipient and Past President of the Society of Flight Test Engineers.

## Scott Keeney

Founder and CEO  
nLIGHT

Scott Keeney is Founder and CEO of nLIGHT, a vertically integrated semiconductor and fiber laser manufacturer employing over 500 people in global manufacturing facilities in Vancouver, WA; Hillsboro, OR, Shanghai, China; and Lohja, Finland. nLIGHT has been named one of the fastest growing companies in the Deloitte Technology Fast 50 program and was awarded the Outstanding Achievement Award from The Oregon Entrepreneur's Network. Scott was awarded the Ernst & Young Entrepreneur of the Year Award for Technology in the Pacific Northwest.



Prior to founding nLIGHT in 2000, Scott was CEO of Aculight (acquired by Lockheed) and a consultant with McKinsey & Company. Scott was founder of nConnect.org an education non-profit focused on enhancing rigorous high school science and math programs.

Scott holds an M.B.A. from Harvard Business School and a B.A. from the University of Washington.

## US Congressman Doug Lamborn

Born in Leavenworth, Kansas in 1954, Doug had service-before-self instilled in him at an early age by his father, a World War II combat veteran and a corrections officer at the Leavenworth Federal Penitentiary.

After meeting his wife Jeanie, Doug graduated from the University of Kansas with a Journalism Degree (as a National Merit Scholar). As they began to raise their five children, Doug worked hard to put himself through law school, earning a law degree from the University of Kansas before moving his family to Colorado Springs, Colorado to practice business and real estate law.

It was in Colorado that Doug was called to public office and served in the Colorado General Assembly from 1995 to 2006, in both the State House and State Senate. During his time in the Colorado Legislature, Doug was elected Senate President Pro-Tem, served as Chairman of the Senate State Military and Veterans Affairs Committee, Chairman of the Senate Republican Caucus, and House Majority Whip. He was also the lead sponsor of the largest tax cut in Colorado history. Doug also introduced legislation creating a license plate honoring Bronze Star recipients, exempting active duty soldiers from paying state income taxes, allowing public school students to recite the Pledge of Allegiance, eliminating and reducing state services to illegal immigrants, banning late-term abortions, implementing DNA testing of convicted felons, eliminating sales tax on telephone service, eliminating the business personal property tax for thousands of businesses, and repealing expired and outdated laws. While serving in the part-time State Legislature, Doug continued to practice law and raise a family.



Doug was then elected to the US House of Representatives in 2006 to represent Colorado's Fifth District. Colorado's Fifth District, based in Colorado Springs, is one of our nation's most military-intensive congressional districts and the proud home to more than 100,000 veterans who have served our country with distinction and honor. Because of the district's military and veteran's concentration, Doug serves as a high-ranking member on the House Armed Services Committee. In these roles, he has protected important national defense funding, programs, and missions and has fought hard for the right of veterans to receive the healthcare they have earned. Additionally, the Congressman has worked since his first full day in office to bring about a dignified and fitting National Veterans Cemetery to the Pikes Peak Region, and he is well on the way to achieving that goal, with construction slated to begin in the near future.

Additionally, Doug serves on the Strategic Forces and Emerging Threats and Capabilities Subcommittees of the House Armed Services Committee. The Strategic Forces Subcommittee oversees our nation's strategic weapons, ballistic missile defense, space programs, and Department of Energy national security programs (excluding nonproliferation programs). It makes sure our nation is properly prepared for any missile or nuclear attacks. The Emerging Threats and Capabilities Subcommittee is responsible for overseeing counter-terrorism programs and initiatives and counter proliferation of weapons of mass destruction.

Doug also serves as the Chairman of the House Natural Resources Committee's Subcommittee on Water, Power, and Oceans. This Subcommittee is responsible for water resources, federal irrigation projects, hydroelectric energy efforts, interstate water issues, fisheries, and more.

This new assignment places him in the middle of important concerns affecting the West. Doug is looking forward to working with diverse groups who have a stake in the region's water future and is committed to providing the leadership and oversight needed to ensure stable and clean water supplies for the Fifth Congressional District and for Colorado.

Throughout his time in public service, Doug has been a leader on pro-family and small business issues, a strong advocate for our veterans and our military, and a supporter of lower taxes, immigration reform, less government spending, and protection of the Second Amendment.

Doug is married to Jeanie, his wife of 41 years and an accomplished artist and former teacher at the Bemis School of Art in Colorado Springs. The Lamborns have also raised five extremely successful children. Their four sons were Eagle Scouts and, among them, have served as a doctor, in the military, as an attorney, and as a member of the creative arts community in Los Angeles. Their daughter was an accomplished collegiate track and field athlete and holds a Master's Degree in Journalism. The family has continued to grow with the addition of a son-in-law who works in the medical field and two daughters-in-law, one of whom is a Christian missionary and one of whom served as a Deputy District Attorney in El Paso County. The youngest members of the family are three beloved grandchildren.

# US Congressman Jim Langevin

Throughout his career, Congressman Jim Langevin has made Rhode Island's priorities his own and fought to open the doors of government to its rightful owners - the people of this great nation.

Recognized as a national and party leader on national security, health care and cybersecurity, Congressman Jim Langevin has dedicated his many years of public service at the federal and state levels to the hard-working citizens of Rhode Island.

Langevin is a senior member of the [House Armed Services Committee](#), where he is the Ranking Member of the [Emerging Threats and Capabilities Subcommittee](#), and also serves on the Subcommittees on [Seapower and Projection Forces](#) and [Tactical Air and Land Forces](#). As a supporter of the critical national security work done by Rhode Island's defense industry, he has worked in committee to double production of the extraordinary Virginia Class Submarines built in Quonset, meeting military needs and creating hundreds of new jobs.



After fulfilling an eight-year term on the House Permanent Select Committee on Intelligence, Langevin returned as a senior member of the [House Committee on Homeland Security](#), where he serves as a member of the Subcommittees on [Cybersecurity and Infrastructure Protection](#) and [Emergency Preparedness, Response and Communications](#).

As part of the Democratic Leadership team, Langevin serves as both a Democratic Regional Whip for New England and a member of House Minority Whip Steny Hoyer's Senior Whip Team. In these roles, he is responsible for educating other Democratic members on key issues and helping to craft the party's strategy and legislative agenda.

Securing our nation's technology infrastructure against cyber attack is a top priority for Langevin. As the Co-Founder and Co-Chairman of the bipartisan [Congressional Cybersecurity Caucus](#), he led the way in raising awareness of cybersecurity issues in Congress and fostering dialogue and debate on the critical questions surrounding this topic. He co-chaired the Center for Strategic and International Studies (CSIS) [Commission on Cyber Security for the 44th Presidency](#), which made policy recommendations to President Obama. Langevin has introduced the [Personal Data Notification and Protection Act](#) to ensure consumers are appropriately alerted when their sensitive information is compromised. To further improve cybersecurity, he has also introduced the [Executive Cyberspace Coordination Act](#), which aims to strengthen the country's defenses against cyber threats and reflects concerns listed in the Commission's report, including the vulnerability of critical infrastructure.

## **Personal Biography**

Born April 22, 1964, Langevin is the first quadriplegic to serve in the U.S. House of Representatives.

At the age of 16, Langevin was injured while working with the Warwick Police Department in the Boy Scout Explorer program. A gun accidentally discharged and a bullet struck Langevin, leaving him paralyzed. The

tremendous outpouring of support from his community inspired Langevin to give something back and enter public service.

Langevin graduated from Rhode Island College and earned a Master's Degree in Public Administration from the Kennedy School of Government at Harvard University. He resides in Warwick, Rhode Island.

## Thomas A. Lockhart, SES

Director, Materials and Manufacturing Directorate  
Air Force Research Laboratory

Thomas A. Lockhart, a member of the Senior Executive Service, is Director, Materials and Manufacturing Directorate, Air Force Research Laboratory, Wright-Patterson Air Force Base, Ohio. He is responsible for more than 900 military and civilian personnel developing the next generation materials and manufacturing techniques for our nation's defense.

Prior to his current assignment, Mr. Lockhart was the Deputy Air Force Program Executive Officer for Tankers, Tanker Directorate, Air Force Life Cycle Management Center, Wright-Patterson Air Force Base, Ohio. He exercised oversight of developing, testing, fielding, and supporting the replacement aircraft for the KC-135.

Mr. Lockhart began his career in 1987 working as a journeyman engineer in training and simulation at Hill AFB, Utah. He has served as an engineer, chief engineer, acquisition program manager, combatant command financial manager, group director, and deputy director for both Iraq Security Assistance Management and the Office of Security Cooperation, Iraq transition team.



### **EDUCATION**

1987 Bachelor of Science degree in electrical engineering, University of Wyoming, Laramie  
1992 Air Command and Staff College, Seminar, Air University, Montgomery, Alabama  
1997 Air War College, Seminar, Air University, Montgomery, Ala.  
2004 Master of Business Aviation Administration, Embry Riddle Aeronautical University  
2005 Graduate Certification for System Engineers, Air Force Institute of Technology, Wright-Patterson AFB, Ohio  
2009 Graduate Certification for Homeland Defense, University of Colorado, Colorado Springs, Colorado

### **SPECIALIZED TRAINING**

Defense Institute of Security Assistance Management Certification, Baghdad, Iraq  
Center for Creative Leadership, Colorado Springs, Colorado  
Senior Manager Course in National Security, George Washington University, Washington, D.C.  
Strategic Persuasion, University of Pennsylvania - Wharton School, Philadelphia  
Air Force Enterprise Leadership Seminar, University of North Carolina, Chapel Hill  
Program for Executives in Logistics and Technology, University of North Carolina, Chapel Hill  
Acquisition Certification Level III, Program Management, System Engineering, Defense Acquisition University  
Acquisition Certification Level I, Logistic Management, Test and Evaluation, Defense Acquisition University

## **CAREER CHRONOLOGY**

1. 1987 – 1995, Design Engineer, Hill AFB, Utah
2. 1995 – 1998, System Engineer, Training and Simulation Product Group, Hill AFB, Utah
3. 1998 – 1999, Acquisition Support Specialist, Training and Simulation Product Group, Hill AFB, Utah
4. 1999 – 2000, Chief Engineer, Training and Simulation Product Group, Hill AFB, Utah
5. 2000 – 2001, Chief Engineer, Telecommunications Product Group Manager, Hill AFB, Utah
6. 2001 – 2003, Chief Engineer, Space, Command, Control and Communication Directorate, Hill AFB, Utah
7. 2003 – 2004, System Engineer Practitioner, Air Force Institute of Technology, Center for System Engineering, Wright-Patterson AFB, Ohio
8. 2004 – 2005, Deputy Director, Advanced Computational Analysis Directorate, Wright-Patterson AFB, Ohio
9. 2005 – 2005, Transformation Advisory Group, Air Force Materiel Command, Wright-Patterson AFB, Ohio
10. 2005 – 2008, Director and Deputy Director, 526th Intercontinental Ballistic Missile System Group, Hill AFB, Utah
11. 2008 – 2010, Assistant Director, Programs and Evaluation, NORAD-NORTHCOM, Peterson AFB, Colorado
12. 2010 – 2011, Deputy Director, USF-I, Iraq Security Assistance Mission, Baghdad, Iraq
13. 2011 – 2011, Deputy Director, USF-I, Office of Security Cooperation Iraq Transition Team, Baghdad, Iraq
14. 2011 – 2014, Deputy PEO for Tankers, Air Force Life Cycle Management Center, Air Force Materiel Command, Wright-Patterson AFB, Ohio
15. 2014 – present, Director, Materials and Manufacturing Directorate, Air Force Research Laboratory, Wright-Patterson AFB, Ohio

## **MAJOR AWARDS**

2003 Exemplary Civilian Service Award  
2010, 2011 Joint Civilian Service Commendation Award  
2011 Meritorious Civilian Service Award  
2011 Iraq Campaign Medal

(Current as of April 2014)

## Rey Q. Masinsin

Colonel, US Marine Corps

Director, Joint Non-Lethal Weapons Directorate

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Colonel Masinsin is currently the Director, Joint Non-Lethal Weapons Directorate, Marine Corps Base Quantico, VA.

He was commissioned in May 1988 after graduating from the University of California at Irvine with a Bachelor of Science Degree in Biochemistry. In 1991, he received a Master's in Business Administration from Webster University; in June 2000, he received a Master's in Military Studies from the Marine Corps

University. He attended executive business training at the University of Virginia's Darden Graduate School of Business in 2007 and University of North Carolina's Keenan-Flagler Business School in 2010. His formal military education includes the Weapons and Tactics Instructor Course, Marine Corps Amphibious Warfare School, Marine Corps Command and Staff College, Joint Forces Staff College, Air

War College (Seminar Program), National Defense University (SECDEF Corporate Fellows Program), and the Defense Acquisition University Program Manager/Executive Program Manager's courses. He is DAWIA Level III certified in Program Management and a certified Project Management Professional (PMP).



After completing Officer Candidate School, The Basic School, and the Marine Corps Communications Electronics School, Colonel Masinsin served with various Marine Air Command and Control Squadrons within the 1<sup>st</sup> and 3<sup>rd</sup> Marine Aircraft Wings in California, Arizona, and Japan from 1988 to 1994. In 1990, he deployed to Southwest Asia with Marine Aircraft Group 50, 5<sup>th</sup> Marine Expeditionary Brigade aboard the USS TRIPOLI in support of combat operations in DESERT SHIELD and DESERT STORM.

From 1994 through 1999, Colonel Masinsin attended the Amphibious Warfare School in Quantico, VA then transferred to the Program Management Office for Air Defense, Marine Corps Systems Command where he managed the development of the Air Defense Communications Platform and integration of Marine Corps sensors and weapon systems into the U.S. Navy's Cooperative Engagement Capability. In 2000, Colonel Masinsin remained in Quantico and attended the Marine Corps' Command and Staff College in residence.

From 2000 through 2002, Colonel Masinsin returned to the 3<sup>rd</sup> Marine Aircraft Wing where he served as Company Commander, Marine Tactical Air Command Squadron 38. In 2002, he transferred to Headquarters, U.S. Central Command in Tampa, Florida for Joint duty. While at HQ USCENTCOM, he served as the C2 Branch Chief in the Operations Directorate (J-3C) and was forward deployed in support of Operations ENDURING FREEDOM, IRAQI FREEDOM, and the Global War on Terrorism. He was designated a Joint Specialty Officer while at HQ, USCENTCOM.

From 2005 through 2006, Colonel Masinsin served as the Commanding Officer of Marine Air Control Squadron 2 in Cherry Point, North Carolina. In June 2005, he deployed his Squadron to Al Anbar Province, Iraq in support of II Marine Expeditionary Force (FWD)'s combat operations in Operation IRAQI FREEDOM. In 2006, he served as the Marine Air Control Group 28 (Rear) Officer-in-Charge responsible for over 2,000 Marines in the rear echelon as MACG-28 (FWD) re-deployed to Iraq.

In 2007, Colonel Masinsin attended Top Level School as a Secretary of Defense Corporate Fellow in residence at the Time Warner Corporation in New York, New York where he focused his studies on industry best practices, change management, corporate long-range planning, and business execution. After Top Level School, he reported to the Program Executive Officer Land Systems in July 2008 for duty as the Deputy Program Manager for the Common Aviation Command and Control System (CAC2S). He assumed his current duty as Program Manager for the Air Command & Control and Sensor Netting portfolio in August 2012. In 2013, Col Masinsin served as the Marine Corps representative to the Acquisition Efficiency and Partnering with Industry Issue Teams for the SECDEF's Strategic Choices and Management Review where he contributed to the revamp of DoD's policies on Information Technology and Defense Business Systems procurement.

Colonel Masinsin's personal military awards include the Bronze Star, Defense Meritorious Service Medal with OLC, Meritorious Service Medal, Navy and Marine Corps Commendation Medal, Navy and Marine Corps Achievement Medal w/ three Gold Stars, and the Combat Action Ribbon. He is the 2013 recipient of the Marine Corps Association and Foundation's Andrew Higgins Award for Acquisition Innovation and Excellence.

## Dr. Vincent D. Mattera

President and Chief Executive Officer, II-VI

Dr. Mattera initially served as a member of the II-VI Board of Directors from 2000-2002. Dr. Mattera joined the company as a Vice President in 2004 and served as Executive Vice President from January of 2010 to November of 2013, when he became the Chief Operating Officer. In November of 2014, Dr. Mattera became the President and Chief Operating Officer, and was reappointed to the Board of Directors. In September of 2016, Dr. Mattera became the Company's third President and Chief Executive Officer in 45 years.

Prior to joining II-VI as an executive, Dr. Mattera had a continuous 20 year career in the Optoelectronic Device Division of AT&T Bell Laboratories, Lucent Technologies and Agere Systems during which he led the development and manufacturing of semiconductor laser based materials and devices for optical and data communications networks. Dr. Mattera has 34 years of leadership experience in the compound semiconductor materials and device technology, operations and markets that are core to II-VI's business and strategy. Dr. Mattera holds a B.S. in chemistry from the University of Rhode Island (1979), and a Ph.D. degree in chemistry from Brown University (1984). He completed the Stanford University Executive Program (1996).



## Dr. Mark McElhinney

President

Lasertel, Inc.

Dr. Mark McElhinney is the President of Lasertel Inc., a subsidiary of Selex Galileo Inc. and member of the Leonardo group. Dr. McElhinney has led the growth of Lasertel, and key advancements in laser diode technology for application to a range of defense programs, from advanced targeting to directed energy. Today, Lasertel is the leading manufacturer of semiconductor lasers for defense applications worldwide.

Dr. McElhinney joined Lasertel in 2003, and led the sale of Lasertel to Selex Galileo Inc in 2010 from its' former parent Presstek Inc. Prior to his tenure at Lasertel, Dr. McElhinney was a founder of the Minnesota company Spectracom, leading the development of pump modules for optical amplifiers. After ADC Telecommunications' acquisition of Spectracom in 2000, Dr. McElhinney served as ADC's Director of Engineering.



Prior to Spectracom, Dr McElhinney served as an engineering manager for Pirelli Cavi SpA in Milan, Italy, where he worked on the development of diode lasers for telecom applications.

Dr. McElhinney has authored and presented numerous technical publications on semiconductor laser development and applications. He has a Bachelor of Engineering degree and a PhD in Electrical and Electronic Engineering from the University of Glasgow in the United Kingdom.

## Kathryn Mitchell

Kathryn Mitchell is the Military Legislative Assistant for Congressman Jim Langevin of Rhode Island's Second District. In her role, she manages the Congressman's portfolio as it pertains to Armed Services, National Security, Intelligence, Cybersecurity, Foreign Affairs, Human Rights, Space, Science, and Veterans Affairs. She primarily manages his work on the House Armed Services Committee and his Ranking Member duties on the Emerging Threats and Capabilities Subcommittee. She came to Capitol Hill following completion of her Master's degree in International Relations with a concentration in Security from Ohio University.



## **J. Scott Norwood, SES**

Strategic Effects Director  
U.S. Army Pacific



Mr. Norwood serves as Strategic Effects Director to the Commander, U. S. Army Pacific (USARPAC). In this role, he advises the Commander with respect to the theater environment, campaign strategy, and the synchronization of campaign activities and communications with theater partners to achieve desired strategic effects.

Mr. Norwood joined USARPAC following his assignment as Executive Director of Strategy, Policy, and Plans, Combined Security Transition Command, Afghanistan. Prior assignments as an SES include a Fellowship at the Naval Postgraduate School and a five-year tour of duty as Deputy Director for Global Security Affairs, Strategic Plans and Policy, Joint Staff.

Mr. Norwood served 27 years in the U.S. Air Force as a fighter pilot before becoming an SES. While on active duty, he served as a policy and issues analyst for the Secretary of the Air Force; as commander of a USAF fighter and bomber test group; as Director of Operations, Cheyenne Mountain, NORAD/USPACECOM during 9/11; and as Senior Military Assistant to the Administrator of the Coalition Provisional Authority during the occupation of Iraq.

### **CAREER CHRONOLOGY:**

- 2015-Present: Strategic Effects Director, U.S. Army Pacific
- 2013-2014: Executive Director of Strategy, Policy, and Plans; Combined Security Transition Command, Afghanistan.
- 2010-2013: DoD Fellow in Security Studies, Naval Postgraduate School
- 2005-2009: Deputy Director for Global Security Affairs, Strategic Plans and Policy; the Joint Staff
- 2004-2005: Chief, Central and South Asia Division, Directorate for Strategic Plans and Policy, the Joint Staff
- 2003-2004: Senior Military Assistant to the Administrator of the Coalition Provisional Authority in Iraq
- 2002-2003: Military Assistant to the Principle Deputy Under Secretary of Defense for Policy, Office of the Secretary of Defense
- 2000-2002: Director of Operations, Cheyenne Mountain, NORAD/USPACECOM
- 1998-2000: Commander, USAF 53<sup>rd</sup> Weapons Evaluation Group, Tyndall AFB, FL
- 1995-1997: Squadron Commander, USAF 35<sup>th</sup> Fighter Wing, Misawa Air Base, Japan
- 1994-1995: Policy and Issues Analyst; Office of the Secretary of the Air Force

**POSTGRADUATE EDUCATION:**

- 1993, Master of Arts Degree, Air and Space Studies, US Air Force School of Advanced Air and Space Studies, *Top academic graduate*
- 1992, Master of Arts Degree, National Security and Strategic Studies, Naval War College, *Graduate of Highest Distinction and the Recipient of the Colbert Memorial Prize*
- 1985, Master of Science Degree, Systems Management, University of South California

**PROFESSIONAL MEMBERSHIPS AND ASSOCIATIONS:**

- Life Member, Air Force Association
- Life Member, Association of Old Crows
- Life Member, Association of the United States Army

**MAJOR PUBLICATIONS:** *Formulation and Assessment of War Policy and Strategy in Limited War*, Harvard University, 1998

## General Robin Rand

Commander, Air Force Global Strike Command (AFGSC) and Commander, Air Forces Strategic Air, U.S. Strategic Command

Gen. Robin Rand is Commander, Air Force Global Strike Command (AFGSC) and Commander, Air Forces Strategic - Air, U.S. Strategic Command (USSTRATCOM), Barksdale Air Force Base, Louisiana. AFGSC provides strategic deterrence, global strike and combat support to USSTRATCOM and other geographic combatant commands. The command is comprised of more than 33,700 professionals operating at two Numbered Air Forces; eleven active-duty, Air National Guard, and Air Force Reserve wings; the Joint Global Strike Operations Center; and the Nuclear Command, Control and Communications (NC3) Center. Weapons systems assigned to AFGSC include all U.S. Air Force Intercontinental Ballistic Missiles and bomber aircraft; UH-1N helicopters, E-4B National Airborne Operations Center aircraft, and the remaining U.S. Air Force NC3 weapons system.



General Rand entered the U.S. Air Force in 1974 and graduated from the U.S. Air Force Academy in 1979. He's had multiple flying assignments; air liaison officer duty with the U.S. Army; and staff tours on the Joint Staff, Office of the Secretary of Defense, and Air Staff. His previous commands include the 36th Fighter Squadron, USAF Weapons School, 8th Fighter Wing, 56th Fighter Wing, 332nd Air Expeditionary Wing, 12<sup>th</sup> Air Force (Air Forces Southern), and Air Education and Training Command.

General Rand is a command pilot with more than 5,100 flying hours, including more than 470 combat hours.

### **EDUCATION**

1979 Bachelor of Science degree in aviation science, U.S. Air Force Academy, Colorado Springs, Colo.

1983 Squadron Officer School, Maxwell AFB, Ala.

1986 Air Command and Staff College, by seminar

1988 Master of Science degree in aeronautical science, Embry-Riddle Aeronautical University, Fla.

1990 U.S. Air Force Fighter Weapons Instructor Course, Nellis AFB, Nev.

1998 Master of Arts degree in national security policy, Naval War College, Newport, R.I.

2010 Joint Flag Officer Warfighter Course, Maxwell AFB, Ala.

2012 Pinnacle Course, National Defense University, Fort Lesley J. McNair, Washington, D.C.

### **MAJOR AWARDS AND DECORATIONS**

Distinguished Service Medal with oak leaf cluster

Defense Superior Service Medal

Legion of Merit with two oak leaf clusters

Bronze Star Medal

Air Medal with four oak leaf clusters

Korea Defense Service Medal

Iraq Campaign Medal with two bronze stars  
Republic of Korea Order of National Security Merit (Samil Medal)  
Colombian Air Force Cross of Aeronautical Merit (Grand Cross)  
Brazilian Air Force Order of Aeronautical Merit (Grand Officer)

**EFFECTIVE DATES OF PROMOTION**

Second Lieutenant May 30, 1979  
First Lieutenant May 30, 1981  
Captain May 30, 1983  
Major July 1, 1990  
Lieutenant Colonel February 1, 1995  
Colonel February 1, 2001  
Brigadier General January 1, 2006  
Major General June 1, 2009  
Lieutenant General December 1, 2011  
General October 10, 2013

(Current as of October 2017)

## A. Adele Ratcliff

Director, Manufacturing Resiliency & Assurance & International Manufacturing & Innovation

Office of the Deputy Assistant Secretary of Defense

Ms. Adele Ratcliff is currently the Director of Manufacturing Resiliency & Assurance and Program Director, Industrial Base Analysis and Sustainment Program within the Office of the Deputy Assistant Secretary of Defense for Manufacturing and Industrial Base Policy (ODASD(MIBP)). During her tenure in OSD, she has focused on building strong interagency partnerships to address broad transition of manufacturing issues such as manufacturing readiness and the Advanced Manufacturing Enterprise.

Her current position uses the broad authorities of the Industrial Base Analysis & Sustainment (IBAS) program element to enable a modern Industrial Base that integrates traditional and emerging sectors to be able to respond at will to National Security Requirements. Most recently, as the Director of the DOD Manufacturing Technology (ManTech) Program, Ms. Ratcliff led the effort in establishing the DOD's national Manufacturing Innovation Institutes (MIIs) outlined in the President's 2013 State of the Union address, now known as Manufacturing USA Institutes.



Ms. Ratcliff has a long acquisition career, including Program Manager for the congressionally mandated Defense Acquisition Challenge Program, Deputy Program Manager for the Foreign Comparative Test Program, and more than eleven years in Air Force Test and Evaluation at Eglin Air Force Base in Florida. As Test Manager, she guided the Air Force's Wind Corrected Munitions Dispenser test program (better known as WCMD), from prototype through the production and deployment phase of the Platform, earning her the Air Force Materiel Command Test Engineer of the Year Award. More importantly, her efforts transitioned this Platform to support the Warfighter in the initial phases of Operation Enduring Freedom.

She is a proud alumnus of the Mississippi State University Bulldogs, earning a BS in Mechanical Engineering in 1988. In 2011 she graduated from the U.S. Army War College (in-residence) earning a MS in Strategic Art and graduated from the Department of Defense's Defense Senior Leadership Development Program (DSLDP). She received the SECDEF Award for Excellence for her support of the Pilot Institute for Additive Manufacturing in March 2013.

## US Congressman Mike Rogers

Mike Rogers is a fifth generation East Alabamian. He is a conservative, a Christian, the father of three and married to his wife, Beth, for over 30 years. Mike grew up in Calhoun County, Alabama, in the small mill village of Blue Mountain. His mother worked in the local textile mill and his father was a firefighter. Mike learned the values of family, hard work and sacrifice from his parents.

Since first elected in 2002, Mike has been known for his tireless advocacy for the people and interests of Alabama's Third Congressional District. He currently serves on the Agriculture Committee (<http://agriculture.house.gov/>), the Armed Services Committee (<http://armedservices.house.gov/>) and the Homeland Security Committee (<http://homeland.house.gov/>), all vital to Alabama's interests. Nationally, he has built a reputation as a recognized leader on key national security issues.



### **Advocate for a Strong National Defense, East Alabama's Military Installations.**

As a senior member of the Armed Services Committee, Mike was selected to serve as Chairman of the Subcommittee on Strategic Forces. The Subcommittee deals with missile defense and nuclear weapons issues. These are vital issues important to America's national security and Alabama's economy, especially now as our nation faces nuclear and ballistic missile threats from North Korea and Iran. Mike is an ardent proponent of our nation's missile defense system to protect the United States and our key allies like Israel, and is consistently at odds with the Obama Administration over its positions on defense policy.

East Alabama is home to the Anniston Army Depot (<http://www.anad.army.mil/>), Fort Benning (<http://www.benning.army.mil/>), and Maxwell-Gunter Air Force Base (<http://www.maxwell.af.mil/>). To help advocate for these installations, Mike also serves on the Armed Services Readiness Subcommittee (<http://armedservices.house.gov/index.cfm/readiness>) which has jurisdiction over military readiness, maintenance and logistics. The Readiness Subcommittee oversees the largest account in the Department of Defense's budget. From this position, Mike works tirelessly to ensure our warfighters have the very best equipment, which includes the hard work done at the Anniston Army Depot, known as the 'Pit Crew of America's Warfighters.'

Mike graduated from Saks High School and earned both his undergraduate degree in Political Science and Masters of Public Administration at Jacksonville State University (<http://www.jsu.edu/>). Later he graduated with honors from the Birmingham School of Law (<http://www.bsol.com/>). He was a practicing attorney and is a small business owner in Calhoun County.

## US Congressman Tim Ryan

Tim Ryan is a relentless advocate for working families in Ohio's 13th District. He was first elected to the U.S. House of Representatives in 2002 and was sworn in on January 3, 2003. Successfully reelected seven times, he is now serving in his eighth term. Congressman Ryan currently serves as a member of the powerful House Appropriations Committee which controls the expenditure of money by the federal government.

Ryan serves as co-chairman of the Congressional Manufacturing Caucus and remains a leader in the fight to strengthen America's manufacturing base and reform U.S. trade policies. The House Manufacturing Caucus examines and promotes policies to help American manufacturers find trained, educated workers, continue to lead the world in developing new industrial technologies, operate on a level playing field with their foreign competitors, and obtain the capital they need to thrive. Ryan is the leading advocate in the House to impose sanctions on unfair Chinese currency manipulation.



Ryan's primary focus remains on the economy and quality-of-life in Northeast Ohio. He works closely with local officials and community leaders to advance local projects that enhance the economic competitiveness and help attract high-quality, high-paying jobs.

He is a dynamic leader in the House and speaks out on issues of particular concern in Northeast Ohio. He is a champion of efforts to make college more affordable, revitalize America's cities and improve the health and well-being of American families and children. His work on these and other issues has garnered the attention of the national media. He is the author of [A Mindful Nation: How a Simple Practice Can Help Us Reduce Stress, Improve Performance, and Recapture the American Spirit](#) and [The Real Food Revolution: Healthy Eating, Green Groceries, and the Return of the American Family Farm](#).

Ryan has also served in the Ohio State Senate where he spearheaded efforts to establish a state-based earned income tax credit, to standardize community school data reporting, and bring college students into the debate over higher education funding.

Before his election to public office, Ryan served as President of the Trumbull County Young Democrats and as Chairman of the Earning by Learning program in Warren, Ohio. He began his career in politics as a congressional aide with the U.S. House of Representatives in 1995 and later served as an intern for the Trumbull County Prosecutor's Office. Ryan holds a law degree from the University of New Hampshire School of Law (formerly the Franklin Pierce Law Center), studied abroad as part of the Dickinson School of Law's International Law Program in Florence, Italy, and graduated with a Bachelor's Degree in Political Science from Bowling Green State University in Bowling Green, Ohio.

Ryan was born on July 16, 1973 in Niles, Ohio and currently resides in Howland, Ohio with his wife Andrea and three children.

## Tony P. Samp

Tony Samp is Senior Policy Advisor to U.S. Senator Martin Heinrich (D-NM).

Senator Heinrich is a member of the Senate Armed Services Committee and is the Ranking Member of the Subcommittee on Emerging Threats and Capabilities. Senator Heinrich is also a member of the Senate Select Committee on Intelligence. Tony played a leadership role in writing legislation to establish the Directed Energy Weapons System Demonstration and Prototyping Program and to authorize Rapid Acquisition Authorities for Directed Energy Weapon Systems.



Tony received a Master of Arts Degree in Strategic Security Studies from the National Defense University in Fort McNair, Washington, DC.

Tony received his undergraduate degree of International Affairs and minored in Business Administration and Spanish at Baylor University in Waco, Texas.

## Dr. Nadia Schadlow

### National Security Council

Dr. Nadia Schadlow is an Assistant to the President and Deputy National Security Advisor for Strategy on the National Security Council (NSC). In February 2017, Dr. Schadlow was appointed as the lead drafter for the National Security Strategy by LTG H.R. McMaster, National Security Advisor.

Prior to joining the NSC, Dr. Schadlow was a Senior Program Officer in the International Security and Foreign Policy Program of the Smith Richardson Foundation. The Foundation operates one of the country's largest grant programs on national security and foreign policy issues. She played a central role there identifying strategic issues which warrant further attention from the U.S. policy community and managed and developed programs and projects related to these issues.

She has written on national security matters and her articles have appeared in *Parameters*, *The American Interest*, *The Wall Street Journal*, *Armed Forces Journal*, *War on the Rocks*, and several edited volumes. Her book, *War and the Art of Governance: Consolidating Combat Success into Political Victory*, (Georgetown University Press, 2017) examines fifteen cases of the U.S. Army's experiences with political and economic reconstruction in wartime.

Dr. Schadlow has been a guest lecturer at the United States Military Academy; served on the Defense Policy Board from September 2006 to June 2009; is a life member of the Council on Foreign Relations; and served as an adjunct professor at Sacred Heart University in Fairfield, CT. Dr. Schadlow received a B.A. degree in Government and Soviet Studies from Cornell University and M.A. and Ph.D. degrees from the John Hopkins SAIS.



## Captain Jon Totte

Chief, Office of Specialized Capabilities  
US Coast Guard

Captain Jon Totte assumed the duties of Chief, Office of Specialized Capabilities in June 2014. The Office of Specialized Capabilities is the Headquarters program office responsible for policy, management, and capabilities development of Coast Guard Deployable Specialized Forces, subsurface and dive, all weapons and ammunition program oversight to include Nonlethal weapons, and Chemical/Biological/Radiological/Nuclear (BCRN) response capabilities to combat maritime terrorism and Counter Weapons of Mass Destruction.

Captain Totte's most recent assignment was the U.S. Coast Guard fellow at the Center for Strategic and International Studies, a non-partisan think tank in Washington, D.C. Prior to that he served as Commanding Officer, Pacific Tactical Law Enforcement Team in San Diego, CA. In this role, he was responsible for training, equipping, and deploying eight law enforcement detachments (LEDETs) to conduct noncompliant boarding and maritime interdiction operations in support of national counter-drug and counter-piracy missions.



Captain Totte served as Deputy Chief, Office of Counterterrorism and Defense Operations, Coast Guard Headquarters, Washington, D.C. He was responsible for policy oversight of the national defense and homeland security missions, expeditionary naval coastal warfare, antiterrorism force protection through the port security unit (PSU), and Marine Safety and Security Team programs, coordinator of Coast Guard/Navy/ Marine Corps/National Guard Bureau staff talks, and Joint Operations war gaming for the Coast Guard's military readiness requirements.

Captain Totte has held several other operational and staff positions during his 27-year career, including afloat tours on board a 378' high endurance cutter performing law enforcement and search and rescue missions in the Bering Sea and Eastern Pacific Ocean, Executive Officer on a 110' patrol boat in Key West, FL, and Commanding Officer on a patrol boat in San Juan, Puerto Rico. He also served as Operations Officer at Group Miami, FL where he supervised the operations of eight Coast Guard cutters and four small boat stations. In addition, he oversaw the Group Miami Command Center that executed a myriad of Law Enforcement, Ports Waterways and Coastal Security, and Search and Rescue operations. Other assignments include Coast Guard Activities New York, where he served as a Command Duty Officer, Command Center/Rescue Coordination Center Controller, and Coast Guard Headquarters in the Office of Cutter Forces, where he was program manager for cutter training, the Coast Guard ordnance program and led the development of the Coast Guard's nonlethal weapons program.

A native of Guilford, Connecticut, Captain Totte was commissioned in 1991 following graduation from the U.S. Coast Guard Academy in New London, Connecticut. He earned a Master's Degree in National Security and Strategic Studies from the Naval War College in 2007. He is a designated Coast Guard Cutterman. Captain Totte is married to Krista (Cole) Totte of Cincinnati, Ohio. They have a son named Ryan.

## Jeffrey S. White

Principal Deputy

Assistant Secretary of the Army

(Acquisition, Logistics, and Technology)

Mr. Jeffrey S. White currently serves as the Principal Deputy Assistant Secretary of the Army (Acquisition, Logistics & Technology). As the Principal Deputy, he advises the Assistant Secretary and Army leadership on all matters relating to Army acquisition, procurement, research & development and logistics. He participates in the development of policies, programs and processes for the execution of the Army's acquisition efforts.

Prior to being named to this position, he served as Vice President of Business Development at Siemens Government Technologies, Arlington, VA. In this role he was responsible for identifying business opportunities, developing market strategy, and providing business intelligence to senior leadership as well as managing federal engagement opportunities between US Government customers and Siemens Corporation.



Prior to his time with Siemens, he served in multiple SES positions within the Office of the Secretary of the Army, to include Assistant Deputy Under Secretary of the Army. His duties included the transformation of the Army's strategic human capital to include reengineering the Senior Executive Service assignment and distribution system. He served as the integrator for programs related to senior civilian development throughout the Army and oversaw projects related to Business Transformation and Continuous Process Improvement and the day-to-day execution of the Army's business transformation efforts.

Mr. White is a 1978 graduate of Shippensburg State College with a bachelor's degree in psychology. He holds master's degrees in national security and strategic studies from the United States Naval War College, strategic studies from the United States Army War College, and an MBA from the University of Tennessee. Mr. White has over 33 years of Federal Service, including 27 years as an Army Aviation Officer.

## Colonel Dennis Wille

Chief, G3 Strategic Programs  
United States Army Europe

Colonel Dennis Wille currently serves as the senior space operations officer within the Operations Directorate of United States Army Europe in Wiesbaden, Germany.

COL Wille is a 1995 graduate of the United States Military Academy where he received a commission as an Armor Officer, and during his 22 years of service, he has served in operational overseas assignments in Bosnia, Iraq, and Afghanistan.

Prior to his assignment in Germany, COL Wille graduated from the United States Army War College in 2016 where he earned a Master's degree in Strategic Studies.



## Lieutenant General R. Scott Williams

Commander, 1 AF (Air Forces Northern) and Commander, Continental U.S. North American Aerospace Defense Command Region

Lt. Gen. R. Scott Williams is Commander, 1 AF (Air Forces Northern) and Commander, Continental U.S. North American Aerospace Defense Command Region, Tyndall Air Force Base, Florida. As the Combined Force Air Component Commander for North American Aerospace Defense Command and the Joint Force Air Component Commander for U.S. Northern Command, Gen. Williams oversees three distinct missions: homeland air defense for the continental United States, aerial support of civil authorities, and theater security cooperation for North America. Additionally, 1 AF ensures the operational readiness of assigned, aligned or gained forces for homeland defense, defense support for civil authorities and world-wide AEF missions.

Prior to assuming his current assignment, General Williams was the Chief, Office of Military Cooperation, U.S. Embassy, Kuwait.



Gen. Williams received his commission in 1984 after graduating from the Georgia Institute of Technology. He has served as an instructor pilot and has extensive command experience. His previous commands include Commander, 169th Operations Group and Commander, 169th Fighter Wing at McEntire Joint National Guard Base, South Carolina, as well as Commander, Air National Guard Readiness Center, Joint Base Andrews, Maryland. Gen. Williams is a graduate of the National Defense University and has multiple Air Staff tours assigned while on active duty and in the Air National Guard. A command pilot with more than 3,900 flying hours, he's also flown 300 combat hours in operations Provide Comfort, Deny Flight, Southern Watch, and Iraqi Freedom. He was a participating commander in numerous coalition-partner exercises.

### **EDUCATION**

1984 Bachelor of Science degree in Aerospace Engineering, Georgia Tech, Atlanta

1989 Squadron Officer School, Maxwell AFB, Ala.

1997 Master of Science in Aeronautical Science Technology, Embry-Riddle Aeronautical University, Fl.

1997 Air Command and Staff College, by Pentagon seminar

2004 Air War College, by Pentagon seminar

2006 Master of Arts in National Resource Strategy, Industrial College of the Armed Forces, National Defense University, Fort Lesley J. McNair, Washington, D.C.

2012 CAPSTONE National Defense University, Fort Lesley J. McNair, Washington, D.C.

2012 Joint Task Force Commander's Course, U.S. Northern Command, Colorado Springs, Colo.

2012 National Security Studies Management Course, Syracuse University, Syracuse, N.Y.

2012 Air Force Smart Operations for the 21st Century (AFSO21), Rosslyn, Va.

2013 Harvard US-Russia Security Program, Washington, D.C.

2014 Joint Military Attaché School, Joint Base Anacostia Bolling, Washington, D.C.

2014 Defense Institute of Security Assistance Management, Wright-Patterson AFB, Ohio

2015 Joint Force Air Component Commander Course, Maxwell AFB, Ala.

2016 Pinnacle Course, National Defense University, Fort Lesley J. McNair, Washington D.C.

#### **MAJOR AWARDS AND DECORATIONS**

Defense Superior Service Medal

Legion of Merit with oak leaf cluster

Meritorious Service Medal with five oak leaf clusters

Air Medal with oak leaf cluster

Aerial Achievement Medal with two oak leaf clusters

Air Force Commendation Medal with two oak leaf clusters

Army Commendation Medal

Joint Meritorious Unit Award with gold frame

Air Force Outstanding Unit Award with four bronze oak leaf clusters

Southwest Asia Service Medal with three bronze service stars

Iraq Campaign Medal with bronze service star

Korean Defense Service Medal

Air Force Overseas Ribbon Short

Air Force Overseas Ribbon Long with oak leaf cluster

(Current as of December 2016)