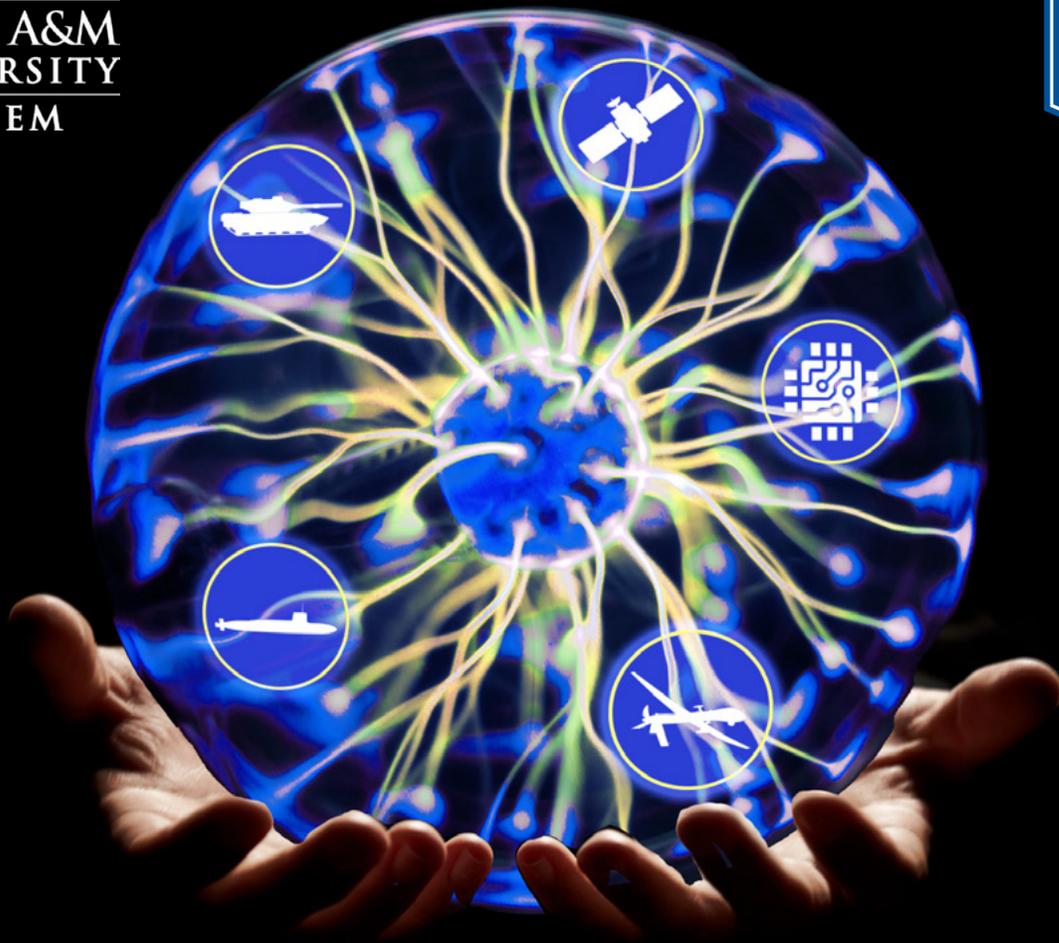


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JADC2 & ALL DOMAIN WARFARE SYMPOSIUM

Implications for the Future Force

October 27 – 28, 2020 | [NDIA.org/JADC2](https://www.ndia.org/JADC2)

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NDIA

WHO WE ARE

The National Defense Industrial Association is the trusted leader in defense and national security associations. As a 501(c)(3) corporate and individual membership association, NDIA engages thoughtful and innovative leaders to exchange ideas, information, and capabilities that lead to the development of the best policies, practices, products, and technologies to ensure the safety and security of our nation. NDIA's membership embodies the full spectrum of corporate, government, academic, and individual stakeholders who form a vigorous, responsive, and collaborative community in support of defense and national security. For more than 100 years, NDIA and its predecessor organizations have been at the heart of the mission by dedicating their time, expertise, and energy to ensuring our warfighters have the best training, equipment, and support. For more information, visit NDIA.org

THE TEXAS A&M UNIVERSITY SYSTEM

WHO WE ARE

The Texas A&M University System is one of the largest systems of higher education in the nation with a budget of \$6.3 billion. The System is a statewide network of 11 universities; a comprehensive health science center; eight state agencies, including the Texas Division of Emergency Management; and the RELLIS Campus. The Texas A&M System educates more than 151,000 students and makes more than 22 million additional educational contacts through service and outreach programs each year. System-wide research and development expenditures exceeded \$1 billion in FY 2019 and helped drive the state's economy.



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WELCOME TO THE JADC2 & ALL DOMAIN WARFARE SYMPOSIUM

On behalf of the NDIA Cyber-Augmented Operations Division and the Texas A&M University System, we welcome you to our inaugural symposium on the development and future evolution of the Joint All Domain Command and Control (JADC2) capability. Over the course of two days, the symposium brings together leaders across the Services and the Joint community along with industry leaders to communicate openly about joint warfighting and the new challenges that the U.S. government and its industry partners must address to secure the space domain.

This inaugural event builds on the legacy of NDIA's concentration on Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) as well as joint operations and the evolution of the technologies enabling both concepts. Moreover, the event introduces the Texas A&M University System as a partner of NDIA in exploring the implications of the JADC2 concept for basic and applied research.

This symposium will be held at an unclassified level to expand its reach to our government and industry partners. Keynote addresses and panel presentations will include industry leaders and our senior Service leaders who will address the joint vision for JADC2, experimentation associated with JADC2, core enabling technologies, and potential applications for JADC2 in the joint force.

We are pleased that you are joining us for this inaugural event. We—along with the passionate group of NDIA professionals and volunteers as well as the leadership, faculty, and staff of the Texas A&M University System—hope you will both contribute to and learn from this symposium today, tomorrow, and into the future!

Guy Walsh

*Chair, Cyber-Augmented Operations Division, NDIA
Executive Director, National Security Collaboration Center*

Stephen Cambone

*Associate Vice Chancellor for Cybersecurity Initiatives and
Professor of Practice, Texas A&M University System*



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LEADERSHIP AND COMMITTEES

Guy Walsh

Division Chair

Bob Elder

Subcommittee Chair

Jim Keffer

Subcommittee Chair

CYBER-AUGMENTED OPERATIONS

WHO WE ARE

The Cyber-Augmented Operations (CAO) Division harnesses the power of cyber-related technologies to deliver speed and automation to create both tactical and operational advantages in military operations. The Division brings industry and government executives together to address pressing policy, technology, and budgetary matters to ensure the incorporation of CAO capabilities into the military and national security enterprises. In periodically sponsoring symposia, seminars, workshops, and executive breakfast meetings, the Division identifies and mitigates challenges confronting combatant commands and military services. Interested in joining or volunteering with the NDIA Cyber-Augmented Operations Division? Click [here](#) for more information.

EVENT INFORMATION

EVENT CONTACTS

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Bob Elder

Kevin McLaughlin

Nicole Solecki

Jim Keffer

George Patterson

Guy Walsh

SURVEY AND PARTICIPANT LIST

You will receive via email a survey and list of participants (name and organization) after the symposium. Please complete the survey to make our event even more successful in the future.

SPEAKER GIFTS

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

HARASSMENT STATEMENT

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

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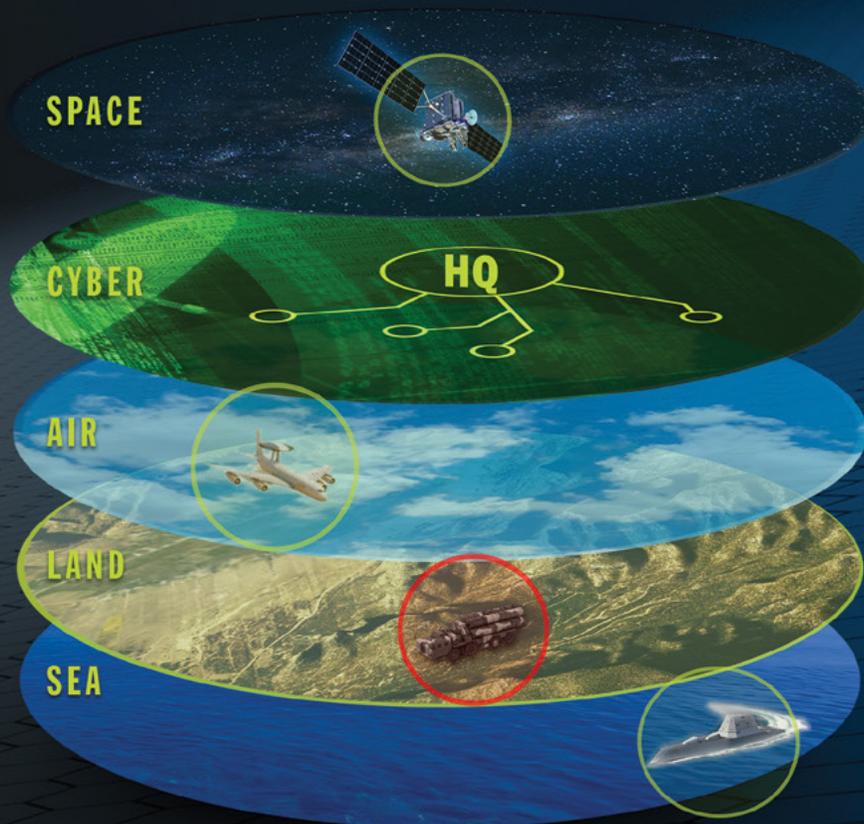
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AGENDA

TUESDAY, OCTOBER 27

10:00 – 10:10 am

WELCOME REMARKS

All times are in EDT

Gen Hawk Carlisle, USAF (Ret)

President and Chief Executive Officer, National Defense Industrial Association (NDIA)

10:10 – 10:35 am

WELCOME FROM TEXAS A&M

John Sharp

Chancellor, The Texas A&M University System

10:35 – 10:45 am

KEYNOTE INTRODUCTION

Gen Mark Welsh, III, USAF (Ret)

Dean, The Bush School of Government and Public Service, Texas A&M University

10:45 – 11:30 am

OPENING KEYNOTE

Gen Charles Q. Brown, Jr., USAF

Chief of Staff, United States Air Force

11:30 – 11:45 am

NETWORKING CHAT LOBBY

11:45 am – 12:45 pm

PANEL: DELIVERING ON THE JOINT VISION

Lt Gen Bradford Shwedo, USAF

United States Air Force

Moderator

VADM Andrew Lewis, USN

Commander, U.S. Second Fleet Command, Joint Forces Command

Lt Gen Samuel Hinote, USAF

Deputy Chief of Staff for Strategy, Integration and Requirements, U.S. Air Force

LtGen Robert Hedelund, USMC

Commander, U.S. Marine Corps Forces Command

Commanding General, Fleet Marine Force, Atlantic

12:45 – 1:15 pm

NETWORKING CHAT LOBBY

1:15 – 1:45 pm

FEATURED SPEAKER

Gen David Thompson, USSF

Vice Chief, Space Operations, United States Space Force

1:45 – 2:00 pm

NETWORKING CHAT LOBBY



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2:00 – 2:45 pm

PANEL: ALL DOMAIN WARFARE CONCEPTS AND EXPERIMENTATION

Lt Gen Dave Deptula, USAF (Ret)

Dean, Mitchell Institute of Aerospace Power Studies
Moderator

Maj Gen Charles Corcoran, USAF

Commander, U.S. Air Force Warfare Center

Lt Gen Kevin McLaughlin, USAF (Ret)

Former Deputy Commander, U.S. Cyber Command

2:45 – 3:00 pm

NETWORKING CHAT LOBBY

3:00 – 4:00 pm

PANEL: CORE ENABLING TECHNOLOGIES AND CAPABILITIES FOR MULTI DOMAIN OPERATIONS (MDO)

LTG Ed Cardon, USA (Ret)

Former Commander, U.S. Army Cyber Command
Moderator

LtGen Michael Groen, USMC

Director, Joint Artificial Intelligence Center, U.S. Department of Defense

John Bier

Program Director, Command, Control, Battle Management & Communication, Missile Defense Agency

LTG L. Neil Thurgood, USA

Director, Hypersonics, Directed Energy, Space, & Rapid Acquisition, Army RCO

Gen David Thompson, USSF

Vice Chief, Space Operations, United States Space Force

Brig Gen David Kumashiro, USAF (Ret)

Director, Research & Analysis, National Security Commission on Artificial Intelligence (NSCAI)

4:00 – 4:05 pm

NETWORKING CHAT LOBBY

4:05 – 4:45 pm

CLOSING KEYNOTE

Gen Glen VanHerck, USAF

Commander, North American Aerospace Defense Command and U.S. Northern Command

4:45 – 4:50 pm

CLOSING REMARKS

Stephen Cambone

Associate Vice Chancellor for Cybersecurity Initiatives and Professor of Practice, The Texas A&M University System

WEDNESDAY, OCTOBER 28

12:00 – 12:15 pm

WELCOME REMARKS

Dr. M. Katherine Banks

Vice Chancellor of Engineering & National Laboratories and Dean of The College of Engineering,
Texas A&M University

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12:15 – 12:45 pm

FEATURED SPEAKER

Dr. Timothy Grayson

Director, Strategic Technology Office, Defense Advanced Research Projects Agency (DARPA)

12:45 – 1:00 pm

NETWORKING CHAT LOBBY

1:00 – 2:05 pm

INDUSTRY PANEL

Dr. Timothy Grayson

Director, Strategic Technology Office, DARPA
Moderator

Hector Cuevas

Executive Vice President, Missile Defense & C5ISR Market Leader, Parsons

Paul Madera

Co-Founder, Meritch Capital Partners

Phil Dismukes

Chief Executive Officer and Founder, BGI LLC

John Clark

Vice President, Technology & Engineering Aerospace, Lockheed Martin

2:05 – 2:15 pm

NETWORKING CHAT LOBBY

2:15 – 3:20 pm

PANEL: SERVICE CYBER COMPONENT COMMANDERS PANEL

Lt Gen Kevin McLaughlin, USAF (Ret)

Former Deputy Commander, U.S. Cyber Command
Moderator

Lt Gen Tim Haugh, USAF

Commander, Sixteenth Air Force and Air Forces Cyber, U.S. Air Force

LTG Steve Fogarty, USA

Commander, U.S. Army Cyber Command

VADM Ross Myers, USN

Commander, Fleet Cyber Command, U.S. Navy

3:20 – 3:35 pm

NETWORKING CHAT LOBBY

3:35 – 4:20 pm

CLOSING KEYNOTE

David Spirk

Chief Data Officer, U.S. Department of Defense

4:20 – 4:25 pm

CLOSING REMARKS

Gen Hawk Carlisle, USAF (Ret)

President and Chief Executive Officer, NDIA



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SPEAKER BIOGRAPHIES



GENERAL CHARLES Q. BROWN, JR., USAF

Chief of Staff
United States Air Force

Gen. Charles Q. Brown, Jr., is the Chief of Staff of the Air Force. As Chief, he serves as the senior uniformed Air Force officer responsible for the organization, training and equipping of 685,000 active-duty, Guard, Reserve and civilian forces serving in the United States and overseas. As a member of the Joint Chiefs of Staff, the general and other service chiefs function as military advisers to the Secretary of Defense, National Security Council and the President.

Gen. Brown was commissioned in 1984 as a distinguished graduate of the ROTC program at Texas Tech University. He has served in a variety of positions at the squadron and wing levels, including an assignment to the U.S. Air Force Weapons School as an F-16 Fighting Falcon Instructor. His notable staff tours include Aide-de-Camp to the Chief of Staff of the Air Force; Director, Secretary of the Air Force and Chief of Staff Executive Action Group; and Deputy Commander, U.S. Central Command. He also served as a National Defense Fellow at the Institute for Defense Analyses, Alexandria, Virginia.

Gen. Brown has commanded a fighter squadron, the U.S. Air Force Weapons School, two fighter wings and U.S. Air Forces Central Command. Prior to serving as the Air Force Chief of Staff, Gen. Brown was the commander of Pacific Air Forces, Air Component Commander for U.S. Indo-Pacific Command.

Gen. Brown is a command pilot with more than 2,900 flying hours, including 130 combat hours.



DR. TIMOTHY GRAYSON

Director, Strategic Technology Office
Defense Advanced Research Projects Agency (DARPA)

Dr. Timothy Grayson is the Director of the Strategic Technology Office (STO) at DARPA. In this role, he leads the office in development of breakthrough technologies to enable warfighters to field, operate, and adapt distributed, joint, multi-domain combat capabilities at continuous speed. These technologies include sensing, communications, and electronic warfare technology and the supporting tools and decision aids needed to compose, integrate, and operate complex combat architectures.

Dr. Grayson came to STO in 2018 from a varied career in government and industry. Most recently he was the founder and

president of Fortitude Mission Research LLC, a consulting company specializing in organizational and operational strategy development and technology analysis related to defense, security, and intelligence. His primary client was DARPA, and in this role, he provided direct support to the Deputy Secretary of Defense's Modernization Study, of which DARPA was the lead in the fall of 2017. Dr. Grayson helped spearhead the project that resulted in "A Blueprint for Winning," a framework for how to modernize the Department for the 21st century.

Dr. Grayson has extensive government experience. He spent several years as a senior intelligence officer with the Central Intelligence Agency (CIA) in the Directorate of

Science and Technology and culminating in a tour at the Office of the Director of National Intelligence. Prior to CIA, Dr. Grayson was a program manager and senior scientist at DARPA. He initiated new programs in space situation awareness and networked sensing and also managed DARPA's quick reaction program portfolio, successfully deploying technology to Afghanistan during the early days of Operation Enduring Freedom.

Dr. Grayson holds a Ph.D. in Physics from University of Rochester, where he specialized in quantum optics, and a B.S. in Physics from University of Dayton with minors in mathematics and computer science.



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DAVID SPIRK

Chief Data Officer

U.S. Department of Defense

In June 2020, Dave Spirk was appointed as the Department of Defense's (DoD) Chief Data Officer (CDO) to stand up the DoD's Data Office and drive a strong focus on warfighter needs, data governance, and a data ready workforce to create a strong data culture across the department.

In July 2018, Dave joined the U.S. Special Operations Command (USSOCOM) as its first CDO where he was dual hatted as the Director of Artificial Intelligence for U.S. Special Operation Forces (SOF). As a direct report to the USSOCOM Commander, he was responsible for the creation of a data driven decision making culture and led the integration of AI across all U.S. SOF. While at USSOCOM he developed and implemented SOF's Data and AI Strategies, established and opened USSOCOM's Data Engineering Lab, and established partnerships with AI leaders in commercial and academic spaces.

After resigning from the Defense Intelligence Agency to undertake entrepreneurial interests, he was recruited back to the DoD in early 2017 to serve as the Associate Director for Technology Investment at the Secretary of

the Air Force's Concept Development and Management Office. His primary task was to stand up and lead the DoD's first training quality data production refinery for the Algorithmic Warfare Cross Functional Team (aka, Project Maven).

Dave was previously the Deputy Director of Intelligence (J2) for Operations at U.S. Central Command (USCENTCOM), where he led the USCENTCOM J2's Divisions for Operations, Plans, Intelligence Surveillance, and Reconnaissance, and Foreign Disclosure/Special Security Office. He arrived at USCENTCOM in 2010 but quickly moved forward to Afghanistan to serve as the Senior Intelligence Advisor to the Commander of the International Security and Assistance Force.

In 2008, Dave was selected by the Director of National Intelligence to stand up the Associate Director of National Intelligence for Afghanistan and Pakistan (ADNI Af/Pak) and was retained by the ADNI Af/Pak to serve as its Deputy and Chief of Operations. He oversaw daily operations, working with senior officials across the U.S. Interagency while ensuring strategic alignment of the Intelligence Community's (IC)

Af/Pak and counter-terrorism missions. Dave first joined the ODNI in 2006 as the Chief of Operations for the Cuba/Venezuela Mission Manager, taking the lead role in developing and implementing the U.S. IC's strategy to support U.S. Interagency and Government of Mexico efforts against the expanding influence and violence of drug cartels. Prior to joining the ODNI, Dave stood up the USSOUTHCOM Intelligence Directorate's Venezuela Division as a Department of Army Civilian and was the Strategic Planning Process' Mission Panel Chair for Ensure Domain Awareness.

Dave is a former Marine who served across echelons at various east coast U.S. Marine Corps elements and deployed throughout the Balkans, Africa, and South Asia. As a member of Task Force-58—specifically, the 26th Marine Expeditionary Unit (Special Operations Capable)—he participated in the seizure of Kandahar Airfield and the reopening of the American Embassy in Kabul. Following his time in Afghanistan, Dave received orders to U.S. Southern Command, from which he deployed to Colombia numerous times and held various analytic/targeting positions before receiving an honorable discharge.



LIEUTENANT GENERAL DAVID D. THOMPSON

Vice Chief, Space Operations

United States Space Force

Lt. Gen. David D. Thompson is Vice Commander, Headquarters United

States Space Force. He is responsible to the Chief of Space Operations for the U.S. Space Force in carrying out space missions and integrating space policy, guidance, coordination and synchronization of space-related activities and issue resolution for the Department of the Air Force. U.S. Space

Force organizes, trains, equips and maintains mission-ready space forces and provides missile warning, positioning, navigation and timing and communications for North American Aerospace Defense Command, U.S. Strategic Command, U.S. Space Command and the other functional and geographic combatant commands. Lt. Gen. Thompson was commissioned in 1985 as a graduate of the U.S. Air Force Academy. He is a career space officer with assignments in operations,

research and development, acquisition and academia. He has commanded operational space units at the squadron, group and wing levels. The general is also an Olmsted Scholar, graduate of the Senior Acquisition Course and a Level III-Certified Program Manager. Prior to his assignment as Vice Commander, U.S. Space Force, Lt. Gen. Thompson was the Vice Commander, U.S. Air Force Space Command.



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GENERAL GLEN VANHERCK, USAF

Commander

North American Aerospace Defense Command and U.S. Northern Command

General Glen VanHerck is Commander, North American Aerospace Defense Command

(NORAD) and United States Northern Command (USNORTHCOM). NORAD conducts aerospace warning, aerospace control, and maritime warning in the defense of North America. USNORTHCOM conducts homeland defense, civil support, and security cooperation to defend and secure the United States and its interests.

General VanHerck is a graduate of the University of Missouri and was commissioned through the Reserve Officer Training Corps program. He has a diverse operational and training background that includes assignments in the F-15C, F-35A, B-2A, and B-1B with over 3,200 flight hours. He has served as

an instructor pilot and flight examiner in the F-15C, B-2A, and T-6A. Additionally, he served as a U.S. Air Force Weapons School instructor in the F-15C and the B-2A.

He has commanded at the squadron, group and twice at the wing level, including the 325th Weapons Squadron, the 71st Operations Group, the 7th Bomb Wing, the 509th Bomb Wing. As a Major General, he commanded the U.S. Air Force Warfare Center. His staff assignments include tours as the Chief of the B-2 Program Element Monitor at Headquarters Air Combat Command, the Director of Operations at Headquarters Air Force Global Strike Command, the Director of Plans and Integration at U.S. Strategic Command, the Vice Director of Strategy, Plans and Policy (J5) at the Joint Staff, and the Vice Director of the Joint Staff.

Prior to his current assignment, he was the Director of the Joint Staff at the Pentagon. In this capacity, he assisted the Chairman of the Joint Chiefs of Staff in his role as advisor to the President and Secretary of Defense, coordinated and directed activities of the Joint Staff in support of the Chairman, and served as the Staff Inspector General.

His personal decorations include the Defense Distinguished Service Medal, the Air Force Distinguished Service Medal, the Defense Superior Service Medal, the Legion of Merit with two oak leaf clusters, the Meritorious Service Medal with three oak leaf clusters, the Air Medal, the Aerial Achievement Medal with oak leaf cluster, the Joint Service Commendation Medal, the Air Force Commendation Medal, and the Air Force Achievement Medal.

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