

Partnerships for the Future

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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**

SCHEDULE AT A GLANCE

WEDNESDAY, AUGUST 18

Registration

Eisenhower Golf Course Pro Shop 7:00 am – 4:00 pm

THURSDAY, AUGUST 19

Registration

Marriott Colorado Springs Salon D-F Prefunction 7:00 am – 5:00 pm

General Session

Salon D-F 8:00 am - 4:30 pm

Reception

Marriott Pavilion 4:30 – 5:30 pm

FRIDAY, AUGUST 20

Transportation

Marriott Colorado Springs 6:30 – 7:30 am

Registration

Catalyst Campus 7:00 am - 1:20 pm

General Session

Catalyst Campus SCIF Auditorium 8:00 am – 1:20 pm

Transportation

Catalyst Campus 12:30 – 1:30 pm

NDIA

WELCOME TO SWIF 2021

On behalf of NDIA and the Space Warfighting Industry Forum (SWIF) committee, we would like to welcome you to our second annual event joining industry with leaders from the U.S. Space Command, the U.S. Space Force, the Department of Defense (DoD), and numerous other space contributors. Our goal is to communicate openly about space warfighting and the new challenges that the U.S. government and its industry partners must address to secure the space domain.

This year's event builds on the legacy of the NDIA Rocky Mountain Chapter's (NDIA-RMC) Executive Forum that has linked our industry partners with DoD space leaders to discuss the problems our government leaders face today and will face in the foreseeable future. Those early exchanges set the stage for our SWIF discussions, panels, and presentations. This year, we can move from the virtual meeting to an in-person meeting in Colorado Springs, which will allow more intimate discussions in both classified and unclassified settings. This two-day forum will

be held at an unclassified level the first day, followed by a smaller classified setting on the second day, to allow more focused discussions with panelists and members.

We will hear from several exciting keynote speakers from the military and industry. We have planned for lively exchanges through moderated panels that feature leaders from industry, government, and the international defense industry. The NDIA-RMC will cap off this event by hosting its annual NDIA Ball and presenting the General James V. Hartinger Award to the 2021 recipient, General David "DT" Thompson, the U.S. Space Force Vice Chief of Space Operations, in recognition of his outstanding achievement in the military space mission of the United States.

We are glad you have joined us for this key event to grow our partnerships between the military and industry. We, along with the passionate group of NDIA professionals and volunteers, hope you will both contribute to and learn from this forum today, tomorrow, and into the future!

Marty Whelan

Chair, Space Division, NDIA Senior Vice President, The Aerospace Corporation

Kevin "Morty" Mortensen

Vice Chair, Space Division, NDIA Vice President, Business Development, BAE Systems

Phil Kwong

President, Rocky Mountain Chapter, NDIA Principal Account Executive, U.S. Space Force, Amazon Web Services

GET INVOLVED

Learn more about NDIA's Divisions and how to join one at NDIA.org/Divisions



SPACE DIVISION

WHO WE ARE

The Space Division offers a continuing forum for communication, discussions, and the exchange of views on all space activities with the government through periodic meetings, conferences, symposia, and studies that the Division conducts. The Division works jointly and coordinates with NDIA Chapters and other Divisions, and U.S. defense and government agencies in activities relating to space matters such as cost reduction and cost credibility of space programs; space operations; space industry information programs; strategic defense initiatives; space policy and strategy; and space research, development, and technology. The Division maintains a close liaison with other industry associations, professional societies, universities, and other groups with similar interests in meeting its mission objectives.

DIVISION LEADERSHIP

Marty Whelan

Division Chair

Kevin "Morty" Mortensen

Division Vice Chair

Al Ballenger

Vice President, Eastern Region

Dr. Richard H. "Doc" Klodnicki

Vice President, Rocky Mountain Region

Arnie Streland

Vice President, West Coast Region

Frank Gallegos

Vice President, Midwest Region

Gayle White

Executive Secretary

Dr. Tom Walker

SWIF Chair



ROCKY MOUNTAIN CHAPTER

WHO WE ARE

NDIA's Rocky Mountain Chapter focuses on supporting member needs to ensure the strength and resiliency of the local defense economy that contributes billions of dollars to our state and creates thousands of jobs centered in the Colorado Springs and Denver metro areas. Our Chapter creates opportunities for collaboration between academia, industry, U.S. Space Force, and U.S. Space Command to ensure our warfighters always have the best training, capabilities, and materials to ensure a competitive advantage across the spectrum of conflict within the space domain. In addition, the Chapter conducts outreach and supports critical industry and military missions, facilities, and operating bases, including: Peterson SFB, Schriever SFB, Buckley SFB, and Cheyenne



Philip Kwong

Chapter President

Kristen Christy

Chapter Executive Vice President

Kathy Vinson

Chapter Treasurer

Michael Pennica

Chapter Secretary

COMMITTEE CHAIRS

Joe Kahoe

Dr. Richard "Doc" Klodnicki

Laura Fitzmorris

Isaac James

Kathy Vinson

Kevin "Morty" Mortensen

Jeff Benesh

Kelly Shelton

Norman Black

Karri Palmetier

Erin Miller

Mountain Space Force Station; North American Aerospace Defense Command (NORAD) / U.S. NORTHCOM; Army Strategic Command (ARSTRAT) / Army Space and Missile Defense Command (SMDC); Fort Carson and its Pinon Canyon Maneuver Site; the U.S. Air Force Academy; Aerospace Data Facility-Colorado (ADF-C), the 10th Special Forces Group; the Colorado National Guard; the High Altitude Army Training Facility; The Pueblo Chemical Depot; Intercontinental Ballistic Missile (ICBM) Sites in northeastern Colorado; and the Missile Defense Agency's Integration Operations Center.

EVENT INFORMATION

LOCATION

Unclassified Venue

Colorado Springs Marriott 5580 Tech Center Drive Colorado Springs, CO 80919 Classified Venue

The Catalyst Campus for Technology & Innovation 555 E Pikes Peak Ave Colorado Springs, CO 80903

ATTIRE

Civilian: Business | Military: Uniform of the Day

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

EVENT CONTACTS

Andrew Peters

Meeting Manager (703) 247-2572 | apeters@NDIA.org George Webster

Program Manager, Divisions (703) 247-9491 | gwebster@NDIA.org

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.

EVENT CODE OF CONDUCT

NDIA's Event Code of Conduct applies to all National Defense Industrial Association (NDIA), National Training & Simulation Association (NTSA), and Women In Defense (WID) meeting-related events, whether in person at public or private facilities, online, or during virtual events. NDIA, NTSA, and WID are committed to providing a productive and welcoming environment for all participants. All participants are expected to abide by this code as well as NDIA's ethical principles and practices. Visit NDIA.org/ CodeOfConduct to review the full policy.

REAL-TIME Q&A

slı.do

Sli.do is an audience engagement platform that allows users to crowd-source top questions to drive meaningful conversations and increase crowd participation. Participants can up-vote the questions they

would most like to hear discussed. Simply tap the thumbs-up button to up-vote a question. Top questions are displayed for the moderator and speaker to answer.

Event code: SWIF2021



MOBILE APP



Make the most of your attendance at the Space Warfighting Industry Forum (SWIF) with the NDIA Events mobile app, available on the App Store for Apple devices and Google Play for Android devices. Simply search "NDIA Meetings" to find and download the NDIA Events app for free. With it, you will have 24/7 access to an activity feed, speaker listings, sponsor and exhibitor information, Sli.do, and venue maps. Be sure to accept push notifications so that you can receive the most up-to-date information regarding any changes to the forum agenda.

AGENDA

WEDNESDAY, AUGUST 18

2021 INDUSTRY MILITARY ANNUAL GOLF EVENT (IMAGE) 6:30 am (8:00 Tee) MT

EISENHOWER GOLF COURSE PRO SHOP, USAF ACADEMY

Pre-registration required. Hosted by the NDIA Rocky Mountain Chapter.

7:00 am - 4:00 pm SWIF REGISTRATION & BADGE PICK-UP

EISENHOWER GOLF COURSE, PRO SHOP, USAF ACADEMY



NO-HOST NETWORKING SOCIAL 4:00 - 5:00 pm

MARRIOTT COLORADO SPRINGS LOBBY BAR



THURSDAY, AUGUST 19 - UNCLASSIFIED

7:00 am – 5:00 pm **REGISTRATION**

MARRIOTT COLORADO SPRINGS SALON D-F PREFUNCTION

Sponsored by

Avantus

7:00 – 8:00 am NETWORKING CONTINENTAL BREAKFAST

SALON D-F PREFUNCTION

8:00 – 8:15 am **OPENING REMARKS**

SALON D-F

Gen Hawk Carlisle, USAF (Ret)

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





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8:15 – 9:15 am SENIOR INDUSTRY PANEL: MITIGATING RISK

SALON D-F

Dr. Jamie Morin

Vice President, Defense Systems Operations, Defense Systems Group, The Aerospace Corporation *Moderator*

Chris Shank

Vice President, National Security Space, MAXAR Technologies

Zach Mears

Head of Strategy, Anduril Industries

Steve Lindsey

Senior Vice President, Strategy & Programs, Sierra Space

Maj Gen Clint Crosier, USAF (Ret)

Director, Aerospace & Satellite Solutions, Amazon Web Services

9:15 – 9:45 am **NETWORKING BREAK**

SALON D-F PREFUNCTION



9:45 – 10:45 am INTERNATIONAL PARTNER PANEL: BUILDING ON SUCCESS

SALON D-F

Stacy Kubicek

General Manager and Vice President, Space, Lockheed Martin Corporation *Moderator*

Air Vice-Marshal Harv Smyth

Director, Space, United Kingdom Ministry of Defense

Air Commodore Nicholas Hogan

Director General, Space Domain Review

BGen Kevin Whale, RCAF

Canadian Exchange Officer, Advisor to the Commander Space Operations Command, U.S. Space Force, Peterson Air Force Base, Colorado

10:45 – 11:15 am U.S. SPACE COMMAND OPENING KEYNOTE

SALON D-F

Gen Hawk Carlisle, USAF (Ret)

President and Chief Executive Officer, NDIA

Moderator

GEN James H. Dickinson, USA

Commander, U.S. Space Command

11:15 –11:30 am **NETWORKING BREAK**

SALON D-F PREFUNCTION

11:30 am – 1:00 pm **WORKING LUNCH**

SALON D-F

Martin "Marty" Whelan

Chair, Space Division, NDIA

Senior Vice President, Defense Systems Group, The Aerospace Corporation

Moderator

Gen David "DT" Thompson, USSF

Vice Chief, Space Operations, U.S. Space Force



1:00 - 2:00 pm

INDUSTRY PANEL: SPACE COMMAND AND CONTROL: GETTING INFORMATION TO THE TACTICAL EDGE

SALON D-F

Dr. Mark Lewis

Executive Director, Emerging Technologies Institute, NDIA Moderator

Eric Schoonover

Head of U.S. Engineering, Rebellion Defense

Milo Medin

Vice President, Access Services, Google

Norine Amato

Director, Mission Exploitation Operating Unit, Space Systems, Northrop Grumman

2:00 - 3:00 pm

INDUSTRY KEYNOTE

SALON D-F

Kevin "Morty" Mortensen

Vice Chair, Space Division, NDIA

Vice President, Business Development, Strategy & Growth (Air & Space Force Solutions), BAE Systems Moderator

Gwynne Shotwell

President and Chief Operating Officer, SpaceX

3:00 - 3:30 pm

NETWORKING BREAK

SALON D-F PREFUNCTION





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3:30 – 4:30 pm CONGRESSIONAL PERSPECTIVE: SPACE DELIVERING WARFIGHTER ADVANTAGE

SALON D-F

Col Wesley Hallman, USAF (Ret)

Senior Vice President, Strategy & Policy, NDIA

Moderator

Bob Winkler

Professional Staff Member, Senate Armed Services Committee

4:30 – 5:30 pm NETWORKING RECEPTION

MARRIOTT PAVILION

Sponsored by



FRIDAY, AUGUST 20 - CLASSIFIED

6:30 – 7:30 am TRANSPORTATION TO CATALYST CAMPUS

MARRIOTT COLORADO SPRINGS

Last bus leaves the Marriott at 7:30 am.

7:00 am - 12:00 pm **REGISTRATION**

CATALYST CAMPUS SCIF AUDITORIUM PREFUNCTION

Sponsored by Avantus

7:00 – 8:00 am NETWORKING CONTINENTAL BREAKFAST

HARVEY HOUSE

EMERGING TECH HORIZONS

A National Security Podcast with Dr. Mark Lewis

This brand-new podcast invites you to listen in on conversations with Dr. Mark Lewis, the Executive Director of NDIA's Emerging Technologies Institute, as he welcomes a diverse slate of national security leaders from government, industry, and academia to discuss the defense technologies of today and tomorrow. Each episode takes a deep dive as the experts share their personal views on future technology topics, providing listeners with unique perspectives on the latest in emerging technologies and how they relate to national security. Listen to Emerging Tech Horizons where you find all your favorite podcasts.

NDIAETI.org/Podcast



NDIN LEADING THE WAY IN ENGAGEMENT, NETWORKING, AND NATIONAL DEFENSE

PLAN AHEAD FOR SUCCESS | 2021-22 FEATURED MEETINGS, CONFERENCES, AND EVENTS



2021 CBRN DEFENSE CONFERENCE AND EXHIBITION

August 16 - 18 | Baltimore, MD

Biological | CBRN | Combat Architecture | Defensive Measures | Domestic Preparedness | Nuclear Defense | Radiological | Research & Development



2021 UNDERSEA WARFARE FALL CONFERENCE

September 27 - 29 | Groton, CT

Aviation USW | C4I | Mine Warfare | Undersea Sensors & Vehicles | Warfighter Performance



24TH ANNUAL SYSTEMS & MISSION ENGINEERING CONFERENCE

October 4 - 7, 2021 | Orlando, FL

Engineering & Manufacturing | Human Systems Integration | Security Engineering | Systems Architecture Systems



2021 FUTURE FORCE CAPABILITIES CONFERENCE AND EXHIBITION

October 18 - 21 | Columbus, GA

Autonomous Systems | GARM | Live Fire | Multi-Domain | Small Arms | Explosive Ordnance Disposal



PRECISION STRIKE TECHNOLOGY SYMPOSIUM (PSTS-21)*

October 19 - 21, 2021 | Laurel, MD

 $\label{thm:linear_equation} \mbox{Hypersonics} \ \ | \ \mbox{Cruise Missiles} \ \ | \ \mbox{Non-kinetic Strike} \ \ | \ \mbox{Stand-off Weapons}$



2021 AIRCRAFT SURVIVABILITY SYMPOSIUM*

November 2 - 4 | Monterey, CA

Combat Survivability | Concealment and Deception | Countermeasures | Urban Warfare | Vulnerability Reduction



32ND ANNUAL NDIA SO/LIC SYMPOSIUM

November 3 - 4, 2021 | Washington, DC

Special Operations Forces | Strategic Competition



2021 JOINT NDIA/AIA FALL INDUSTRIAL SECURITY CONFERENCE

November 8 - 10 | Chantilly, VA

Industrial Security | Insider Threat | Cybersecurity/CMMC | NISPOM Updates



I/ITSEC 2021

November 29 - December 3 | Orlando, FL

Simulation | Training | Virtual Reality



2022 TACTICAL WHEELED VEHICLES CONFERENCE

February 28 - March 2 | Norfolk, VA

Autonomous Vehicles | Electric Drive | Modernization & Sustainment | Acquisition



2022 UNDERSEA WARFARE SPRING CONFERENCE

March 28 - 30 | San Diego, CA

Aviation USW $\|$ C4I $\|$ Mine Warfare $\|$ Undersea Sensors & Vehicles $\|$ Warfighter Performance



2022 PACIFIC OPERATIONAL SCIENCE & TECHNOLOGY (POST) CONFERENCE**

 $March \ 7 - 9 \ \hbox{(Unclassified)}, \ 9 - 10 \ \hbox{(Classified)} \ \ \big| \ \ Honolulu, \ HI$

Regional Security | Science & Engineering Technology | Technology Engagement



65[™] ANNUAL FUZE CONFERENCE**

May 10 - 12, 2022 | Seattle, WA

Fuze | Missiles | Munitions Technology | Safety & Arming Devices | Warheads



2022 SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE & EXHIBITION (SOFIC)

May 16 - 19 | Tampa, FL

Communications | Light Vehicles | Small Arms | Special Operations

*All Classified | **Partially Classified

8:00 – 8:10 am ADMINISTRATIVE REMARKS

SCIF AUDITORIUM

Gen Hawk Carlisle, USAF (Ret)

President and Chief Executive Officer, NDIA

8:10 – 8:25 am **OPENING REMARKS**

SCIF AUDITORIUM

Ron Grundman

Director, Military Space Programs, National Security Technologies Group, Defense & Intel, KBR, Inc. Introduction

Robert W. Thomas, Jr.

Director, Capability & Resource Integration Directorate, U.S. Space Command, Peterson Air Force Base, Colorado

8:25 – 10:00 am USSPACECOM THREATS, WARFIGHTING, & LESSONS LEARNED

SCIF AUDITORIUM

Ron Grundman

Director, Military Space Programs, National Security Technologies Group, Defense & Intel, KBR, Inc. *Introduction*

Brig Gen Greg Gagnon, USAF

Director, Intelligence (J2), U.S. Space Command

Maj Gen David "Rock" Miller, USSF

Director, Operations, Training, & Force Development (J37), U.S. Space Command

10:00 – 10:30 am **NETWORKING BREAK**

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BAE SYSTEMS

10:30 – 11:30 am INDUSTRY PANEL: DELIVERING FLEXIBLE DETERRENT OPTIONS FOR THE SPACE DOMAIN

SCIF AUDITORIUM

Dr. John Klein

SETA Contractor, Space Policy & Integration Division, Office for the Assistant SECAF for Space Acquisition & Integration *Moderator*

Mandy Vaughn

Chief Executive Officer, GXO, Inc.

John Wagner

Vice President, Space & National Security, Sierra Nevada Corporation

Dean Cheng

Senior Research Fellow, Heritage Foundation

Bryan "Stu" Eberhardt

Senior Director, Government & Commercial Satellite Systems, Boeing Space and Launch



11:30 am - 12:15 pm

INDUSTRY PANEL: SPACE CAPABILITIES FOR SIMULTANEOUS JOINT ALL DOMAIN / MULTIPLE AOR OPERATIONS

SCIF AUDITORIUM

Brig Gen Tom Gould, USAF (Ret)

Vice President, Air Force & Space Force Programs, L3Harris Technologies Moderator

Pete Trainer

Vice President and General Manager, Air Force Solutions, Intelligence & Security, BAE Systems, Inc.

Kari Bingen

Chief Strategy Officer, HawkEye360

Lars Hoffman

Senior Vice President, Global Launch Services, Rocket Lab

12:15 - 1:15 pm

FIRESIDE CHAT: COLLABORATION IN SPACE WARFIGHTING

SCIF AUDITORIUM

Gen Hawk Carlisle, USAF (Ret)

President and Chief Executive Officer, NDIA Moderator

Lt Gen Stephen Whiting, USSF

Commander, Space Operations Command, Peterson Air Force Base, Colorado

LTG Daniel Karbler, USA

Commander, U.S. Army Space and Missile Defense Command, Redstone Arsenal, Alabama

1:15 - 1:20 pm

CLOSING REMARKS

SCIF AUDITORIUM

Gen Hawk Carlisle, USAF (Ret)

President and Chief Executive Officer, NDIA

12:30 - 1:30 pm

TRANSPORTATION TO MARRIOTT COLORADO SPRINGS

CATALYST CAMPUS

Last bus leaves Catalyst Campus at 1:30 pm.

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



General James V. Hartinger Award & Patriot Awards

Friday, August 20 | 6:00 pm | Cheyenne Mountain Resort | Mess Dress/Black tie

Hosted By The NDIA Rocky Mountain Chapter

KEYNOTE BIOGRAPHIES



GEN JAMES DICKINSON, USA

Commander U.S. Space Command

U.S. Army General James H. Dickinson assumed duties as the Commander, U.S.

Space Command, on August 20, 2020, after most recently serving as the first Deputy Commander of U.S. Space Command, the 11th and most recently established unified combatant command.

He is a native of Estes Park, Colorado, and a graduate of Colorado State University. He holds a Bachelor of Science in Mechanical Engineering and a Master of Science in Operations Research and Systems Analysis from the Colorado School of Mines. He later earned a master's degree in Strategic Studies from the United States Army War College.

Gen. Dickinson's command assignments include Commanding General of the Space and Missile Defense Command/Army Forces Strategic Command and Joint Functional Component Command for Integrated Missile Defense; Commanding General of the 32nd Army Air and Missile Defense Command; Commanding General of the 94th Army Air and Missile Defense Command; Brigade Commander of the 35th Air Defense Artillery Brigade, Eighth U.S. Army, Republic of Korea; and Battalion Commander of 1st Battalion, 7th Air Defense Artillery, which deployed in support of Operations Enduring Freedom and Iraqi Freedom.

His key staff assignments include Chief of Staff, U.S. Strategic Command; Director for Test at the Missile Defense Agency; Deputy to The Inspector General, Office of the Secretary of the Army; Deputy Director for Operations, National Military Command Center, J-3, Joint Staff; Chief, Commander's Initiatives Group, United Nations Command/ Combined Forces Command, Republic of Korea; Assistant Chief of Staff, G-3, 32nd

Army Air and Missile Defense Command; Senior Emergency Actions Officer and Senior Operations Officer, National Military Command Center, J-3, Joint Staff; Operations Officer, 11th Air Defense Artillery Brigade; and Operations Officer, 5th Battalion, 52nd Air Defense Artillery, 11th Air Defense Artillery Brigade supporting Operation Southern Watch.

Gen. Dickinson is the senior Air Defense Artillery Officer in the U.S. Army. His awards and decorations include the Defense Distinguished Service Medal, two Distinguished Service Medals, three Defense Superior Service Medals, three Legion of Merits, Bronze Star Medal, Defense Meritorious Service Medal, three Meritorious Service Medals, three Army Commendation Medals, Joint Service Achievement Medal. four Army Achievement Medals, Parachutist Badge, Master Space Badge, and Joint and Army Staff Identification Badges.



GWYNNE SHOTWELL

President and Chief Operating Officer SpaceX

As President and COO of SpaceX, Gwynne Shotwell is responsible for

day-to-day operations and managing all customer and strategic relations to support company growth. She joined SpaceX in 2002 as Vice President of Business Development and built the Falcon vehicle family manifest to approximately 170 launches, representing more than \$20 billion in business. Shotwell is a member of the SpaceX Board of Directors.

Prior to joining SpaceX, Shotwell spent more than 10 years at the Aerospace Corporation, holding positions in Space Systems Engineering, Technology, and Project Management. She was promoted to the role of Chief Engineer of an MLV-class satellite program, managed a landmark study for the Federal Aviation Administration on commercial space transportation, and

completed an extensive analysis of space policy for NASA's future investment in space transportation.

In addition to being included on Time's 100 Most Influential People of 2020, Shotwell was awarded the 2020 Von Karmen Wings award. In 2018, Shotwell was named the Satellite Executive of the Year and was awarded the AIAA Goddard Astronautics Awards as well as the American Society of Mechanical Engineers Ralph Coats Roe Medal. Fortune Magazine placed Shotwell at #42 on their list of the World's 50 Greatest Leaders in 2018 and Forbes named her #55 on their list of Power Women in 2019. Gwynne was inducted into the National Academy of Engineering in 2020 and, in 2019, was appointed to the National Space Council Users' Advisory Group. In 2014, Shotwell was appointed to the United States Export Import Bank's Advisory Committee

and the Federal Aviation Administration's Management Advisory Council. Shotwell was elected to the honorable grade of Fellow with the American Institute of Aeronautics and Astronautics.

Through leadership in both corporate and external science, technology, engineering and math (STEM) programs, Shotwell has helped raise over \$1.8 million for STEM programs reaching thousands of students nationwide.

Shotwell received, with honors, her bachelor's and master's degrees from Northwestern University in Mechanical Engineering and Applied Mathematics, and serves on their Board. She has authored dozens of papers on a variety of spacerelated subjects.



GEN DAVID "DT" THOMPSON, USSF

Vice Chief, Space Operations U.S. Space Force

Gen. David D.
Thompson is the
Vice Chief of Space
Operations, United

States Space Force. As Vice Chief, he is responsible for assisting the Chief of Space Operations in organizing, training, and equipping space forces in the United States and overseas, integrating space policy and guidance, and coordinating space-related activities for the U.S. Space Force and Department of the Air Force.

The U.S. Space Force organizes, trains, equips, and maintains mission-ready space forces that provide missile warning, space domain awareness, positioning, navigation and timing, communications, and space electronic warfare for North American Aerospace Defense Command, U.S. Strategic Command, U.S. Space Command, and other combatant commands.

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

SPONSOR DESCRIPTIONS

NORTHROP GRUMMAN

Northrop Grumman solves the toughest problems in space, aeronautics, defense and cyberspace to meet the ever evolving needs of our customers worldwide. Our 90,000 employees define possible every day using science, technology and engineering to create and deliver advanced systems, products and services.

Avantus

Avantus Federal, a New Spring Holdings Company, is a mission-focused services and solutions company. Avantus' services and solutions are designed and tailored for our Homeland Security, Defense, Intelligence and Federal Civilian customers.

We are focused on improving our client's space warfighting capabilities. Our digital innovation capability helps enable ecosystems to go fast. We provide data readiness by integrating multiple data sources, managing and securing that information, and developing analytical tools to keep you ahead of your adversary. We develop customized applications and software for intelligence, space and cyber operations to enhance your decision making and mission execution.

MAXAR

Maxar is a trusted partner and innovator in Earth Intelligence and Space Infrastructure, enabling the U.S. Government and its allies to better monitor, understand, and respond to global changes, deter threats, and ensure global security. As the industry leader in high-resolution satellite imagery and geospatial information, Maxar designs, owns and operates best-in-class satellites plus associated ground systems, infrastructure and imagery production to provide comprehensive end-to-end solutions.

Maxar's unique approach combines decades of deep mission understanding and a proven foundation of commercial technology to deliver solutions with unrivaled speed, scale and cost effectiveness

BAE SYSTEMS

BAE Systems, Inc. and its 35,200 people are part of a global defense, aerospace and security company with 89,600 employees worldwide. We deliver products and services for air, land, sea and space, as well as advanced electronics, security, information technology solutions, and customer support and services. Our dedication shows in everything we create and deliver—from advanced electronic systems to cyber operations and intelligence analysis, from combat vehicles to naval weapons, and from ship maintenance and modernization to vehicle upgrades and services. We push the limits of possibility to provide a critical advantage to our customers where it counts.



Oceaneering Space Systems develops, integrates, and applies new and innovative technologies to meet the challenges of working in space and other harsh environments. Our capabilities cover a broad range of products and services including space-based robotics and automation, satellite servicing, human space flight systems, and thermal protection systems. We are ideally positioned to meet the growing needs of NASA and the expanding commercial and Department of Defense (DOD) markets.



AN ONLINE COMMUNITY FOR **DEFENSE PROFESSIONALS**

Various specialized communities are available for you to join and use, all while enhancing your Division and Chapter participation and growing your network.

As the National Defense Industrial Association's members-only online community, NDIA Connect offers 24/7 exclusive access to content, contacts, and collaboration capabilities. Each day, defense professionals from around the world post their thoughts, questions, and answers related to topics ranging from cybersecurity and the space domain to international trade regulations and human systems. Log in today to join these conversations and take advantage of all that NDIA Connect enables:

- Connect with like-minded individuals from industry, government, and academia
- Stay up to date on NDIA upcoming events, whitepapers, policies, and much more
- Network with colleagues in your field and any other
- Collaborate on projects and documents of all kinds
- Plan meetings, seminars, webinars, conferences, or any NDIA-related event
- Foster discussion, promote innovation, and grow your network



ANNIVERSAR