

Warfighting Integration

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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



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WELCOME TO THE SPACE WARFIGHTING INDUSTRY FORUM

On behalf of NDIA and the Space Warfighting Industry Forum (SWIF) committee, we would like to welcome you to our inaugural 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 inaugural event builds on the legacy of the NDIA Space Industry Forum that has linked our industry partners with the DoD space leaders to discuss the problems our government leaders are facing today and in the foreseeable future. Those early exchanges have set the stage for our SWIF discussions, panels, and presentations. Additionally, while we had initially envisioned this forum taking place in person, at multiple classification levels, and with engagement by U.S. Air Force Academy cadets, our precautions in response to the COVID-19 virus have driven us to reconfigure the format of SWIF to ensure the safety of our

community while still having a rich exchange of ideas. This twoday forum will be held at an unclassified level to expand its reach to our government and industry partners who are working from their offices, their homes, or their favorite quarantine location during this fight against the spread of COVID-19.

At this year's virtual event, we will hear from several exciting keynote speakers and have lively exchanges through moderated panels that feature leaders from industry, government, and the international defense industry. The NDIA Rocky Mountain Chapter will help kick off the forum by presenting the annual Hartinger Award to the 2020 recipient, Lt Gen John Thompson, the Commander of the Space and Missile Systems Center, in recognition of his outstanding achievement in the military space mission of the United States.

We are glad you have joined us for this ground-breaking event. 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

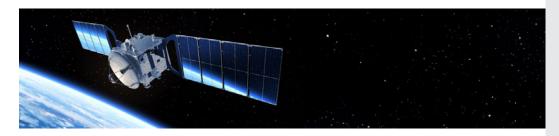
Vice Chair, Space Division, NDIA Senior Vice President, Aerospace Corporation

Kevin "Morty" Mortensen

President, Rocky Mountain Chapter, NDIA Vice President, Business Development, BAE Systems

Philip Kwong

Executive Vice President, Rocky Mountain Chapter, NDIA Manager, Satellite Networks Development, Intelsat General



SPACE DIVISION

WHO WE ARE

NDIA's Space Division offers a continuing forum for communications, discussions, and exchanges of view 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 as well as U.S. defense and government agencies in activities relating to space matters. It maintains close liaison with other industry associations, professional societies, universities, and other groups with similar interests in meeting its mission objectives. The Division addresses numerous key areas, including the cost

DIVISION LEADERSHIP

Gary Testut

Division Chair

Marty Whelan

Division Vice Chair

Brig Gen Russ Anarde, USAF (Ret)

Subcommittee Chair

John Manney

Subcommittee Chair

Mike Pierson

Subcommittee Chair

Scott Stover

Subcommittee Chair

Dr. Tom Walker

Subcommittee Chair

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.



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 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 AFB, Schriever AFB, Buckley AFB, and Cheyenne Mountain Air Force

CHAPTER LEADERSHIP

Kevin "Morty" Mortensen

Chapter President

Philip Kwong

Chapter Executive Vice President

Karri Palmetier

Chapter Treasurer

Michael Pennica

Chapter Secretary

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Henry Baird

Jeff Benesh

Kristen Christy

Joe Kahoe

Richard "Doc" Klodnicki

Rayetta Lantzy

Tony Muro

Rusty Powell

Kelly Shelton

Tom Taylor

Laura Turner

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.

AGENDA

THURSDAY, AUGUST 20

9:30 - 9:40 am MDT 11:30 - 11: 40 am EDT

OPENING REMARKS

Gen Hawk Carlisle, USAF (Ret)

President and CEO, National Defense Industrial Association (NDIA)

9:40 - 10:00 am MDT 11:40 am - 12:00 pm EDT

PRESENTATION OF THE GENERAL JAMES V. HARTINGER AWARD

Philip Kwong

Executive Vice President, Rocky Mountain Chapter, NDIA Manager, Satellite Networks Development, Intelsat General

Loula Moschonas

President, Greater Los Angeles Chapter, NDIA

Lt Gen John Thompson, USAF

Commander, Space and Missile Systems Center

10:00 - 10:15 am MDT 12:00 - 12:15 pm EDT **BREAK**



10:15 - 11:15 am MDT 12:15 - 1:15 pm EDT

OPENING KEYNOTE: U.S. SPACE COMMAND AND U.S. SPACE FORCE: STRUCTURE AND INTEGRATION

Lt Gen David Thompson, USAF Vice Commander, U.S. Space Force

11:15 – 11:30 am MDT 1:15 – 1:30 pm EDT

NETWORKING CHAT LOBBY BREAK

11:30 am - 12:30 pm MDT 1:30 - 2:30 pm EDT

PANEL: INTEGRATING SPACE CAPABILITIES

Dr. Bill LaPlante

Senior Vice President and General Manager, National Security Sector, MITRE *Moderator*

BG Kevin Whale, RCAF

Special Advisor to the Deputy Commander, Headquarters, U.S. Space Force

Tim Deaver

Director, U.S. Space Systems, Airbus U.S. Space & Defense, Inc.

Kay Sears

Vice President and General Manager, Military Space, Lockheed Martin

Brig Gen Jody Merritt, USAF

Mobilization Assistant to the Combined Force Space Component Commander, U.S. Space Command Commander, Space Operations, U.S. Space Force

12:30 – 12:45 pm MDT 2:30 – 2:45 pm EDT

BREAK

12:45 – 1:45 pm MDT 2:45 – 3:45 pm EDT

PANEL: REQUIREMENT DEVELOPMENT AND DISSEMINATION

Lt Gen Mark Shackelford, USAF (Ret)

Moderator

Shawn Barnes

Deputy Assistant Secretary of the Air Force for Space Acquisition and Integration

Lt Gen John Thompson, USAF

Commander, Space and Missile Systems Center

Michael Dickey

Director, Enterprise Strategy and Architectures Office Chief Architect, Headquarters, U.S. Space Force

Wallis Laughrey

Vice President, Space & C2 Systems, Raytheon Intelligence and Space

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NETWORKING CHAT LOBBY BREAK

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2:00 - 3:00 pm MDT 4:00 - 5:00 pm EDT

PANEL: CONGRESSIONAL PRIORITIES

Gen Hawk Carlisle, USAF (Ret)

President and CEO, NDIA Moderator

Sen Cory Gardner (CO)

Subcommittee on Aviation and Space, Committee on Commerce, Science, and Transportation, U.S. Senate

Rep Denny Heck (WA)

Permanent Select Committee on Intelligence, Subcommittee on Strategic Technologies and Advanced Research, U.S. House of Representatives

Rep Mike Turner (OH)

Ranking Member, Subcommittee on Strategic Forces, Armed Services Committee, U.S. House of Representatives

FRIDAY, AUGUST 21

9:00 - 9:15 am MDT 11:00 - 11:15 am EDT

OPENING REMARKS

Gen Hawk Carlisle, USAF (Ret) President and CEO, NDIA

Moment of silence in honor of Col Tom Falzarano of the U.S. Space Force and others who have lost their lives on Active Duty.



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9:15 - 9:30 am MDT 11:15 - 11:30 am EDT

NETWORKING CHAT LOBBY BREAK

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9:30 - 10:30 am MDT 11:30 am - 12:30 pm EDT

PANEL: DIGITAL ENGINEERING IN SPACE CAPABILITY ACQUISITION AND MANAGEMENT

Maj Gen Kim Crider, USAF

Mobilization Assistant to the Chief of Space Operations, U.S. Space Force *Moderator*

Dr. Scott Nowlin

Chief Engineer, Air Force Solutions - Strategic Systems, Intelligence & Security Sector, BAE Systems, Inc.

Dr. Jamie M. Morir

Vice President, Defense Systems Operations, Aerospace Corporation

Bryan Eberhardt

Director, Global Sales and Marketing, Boeing Space and Missile Systems

Jeff Sneller

Chief Engineer - Next Generation Polar OPIR System, Northrop Grumman Space Systems

10:30 – 10:45 am MDT 12:30 – 12:45 pm EDT **BREAK**

10:45 - 11:45 am MDT 12:45 - 1:45 pm EDT

PANEL: INNOVATION IN SPACE WARFIGHTING

Jason Knudson

Founder and CEO, Vyzva Lab Board of Directors, Catalyst Campus Moderator

Dr. Joel Mozer

Chief Scientist, U.S. Space Force

Josh Marcuse

Head of Strategy and Innovation, Global Public Sector, Google Cloud

Rachel Cheetham

Space Senior Staffer, Defense Innovation Board

Lars Hoffman

Senior Vice President, Global Launch Services, Rocket Lab

11:45 am - 12:00 pm MDT 1:45 - 2:00 pm EDT **BREAK**

12:00 – 1:00 pm MDT 2:00 – 3:00 pm FDT

CLOSING KEYNOTE: WARFIGHTING IN SPACE: READY TO FIGHT TONIGHT

2:00 – 3:00 pm EDT MG Tim Lawson, USANG

Mobilization Assistant to the Commander, U.S. Space Command

Currently performing the duties of the Deputy Commander, U.S. Space Command

1:00- 1:15 pm MDT 3:00 - 3:15 pm EDT

CLOSING REMARKS Gen Hawk Carlisle, USAF (Ret)

President and CEO, NDIA

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.



2020 HARTINGER AWARD RECIPIENT

Lt. Gen. John F. Thompson is the Commander, Space and Missile Systems Center, Los Angeles Air Force Base, California. He is responsible for approximately 6,000 employees nationwide and an annual budget of \$9 billion. As the Air Force Program Executive Officer for Space, General Thompson manages the research, design, development, acquisition and sustainment of satellites and the associated command and control systems. His extensive portfolio includes military satellite communication, missile warning, navigation and timing, space-based weather, space launch and test ranges, certification for launch, space superiority, responsive space, and other emerging evolutionary space programs.

General Thompson is leading historic changes in National Security Space as one of the most vocal advocates for military space. He is managing the Secretary of the Air Force-directed Space Acquisition Transformation to re-architect the Space and Missile Systems Center and implement innovative approaches that rapidly address emerging threats. General Thompson expertly drove the SMC 2.0 reorganization

to initial operational capability and stood up three new PEOs. He cut three layers bureaucracy and 25 years from the acquisition cycle, which reduced decision timelines by 50%.

General Thompson pioneered the use of Fiscal Year 2016 National Defense Authorization Act Section 804 Middle Tier Acquisition authorities on eight space programs, enabling the delivery of space capabilities a combined 19 years ahead of schedule. He implemented Section 804 prototyping authorities on 12 programs, shaving years off acquisition timelines and exceeding objectives. Through tri-annual reports and strategic communications with Congressional staffs, he maintained full transparency on Section 804 programs, as demonstrated by successful engagements to remove budget marks and/or gain Above Threshold Reprogramming approvals.

General Thompson has successfully supported our international space partnerships. He worked closely with Japan to issue a Request for Proposal to support their satellite and agreement on U.S. payload interface standards. General Thompson negotiated a Memo of Understanding with

Norway regarding satellite bus selection and maintained multiple allied partnerships established with Italy, the United Kingdom, Australia, and Canada.

Under his leadership, the Air Force successfully launched 12 National Security Space payloads with 100% mission success, bolstering the Global Positioning System, Advanced Extremely High Frequency, Wideband Global Satellite Communications, Space Based Infrared System, and National Reconnaissance Office satellite constellations. General Thompson awarded \$312M in contracts on the Space Enterprise Consortium (SpEC), with many targeted to convert to operational capability. He negotiated reduction of the decades old Launch Claim payout by 50%, saving America \$260 million.

General Thompson's inspirational and innovative leadership has delivered superior space capabilities to the warfighter. He has served as a masterful steward of our Nation's resources, established effective partnerships in the development of space systems and technologies, and provided successful access to space in support of Air Force and National objectives.



LT GEN JOHN THOMPSON, USAF

Commander
Space and Missile Systems Center

Lt. Gen. John F. Thompson is the Commander, Space and Missile

Systems Center, Los Angeles Air Force Base, California. He is responsible for approximately 6,000 employees nationwide and an annual budget of \$9 billion. As the Air Force Program Executive Officer for Space, General Thompson manages the research, design, development, acquisition and sustainment of satellites and the associated command and control systems. His extensive portfolio includes military satellite communication, missile warning, navigation and timing, space-based weather, space launch and test ranges, certification

for launch, space superiority, responsive space, and other emerging evolutionary space programs.

Lt. Gen.Thompson entered the Air Force in 1984 as a graduate of the U.S. Air Force Academy. He has served in a variety of scientific, acquisition and logistics-oriented capacities, including staff assignments at Air Force Systems Command, Air Force Materiel Command and in the office of the Assistant Secretary of the Air Force for Acquisition.

The general has been Chief of the Commodities Division, Ogden Air Logistics Center, Utah, and Chief of the Air Vehicle Division, C-17 System Program Office, Wright-Patterson AFB, Ohio. He also served as Director of Propulsion, Oklahoma City ALC, Okla.; and Chief of Staff, Air Force Materiel Command, Wright-Patterson AFB. He has commanded the 327th Aircraft Sustainment Wing, Tinker AFB, Okla., and the 303rd Aeronautical Systems Wing, Wright-Patterson AFB, Ohio, where he served as Air Force Program Executive Officer for Intelligence, Surveillance and Reconnaissance. General Thompson has also served as Air Force Program Executive Officer for Strategic Systems, Deputy Program Executive Officer for the F-35 Joint Strike Fighter Program, and KC-46 Program Director.

Prior to assuming his current position, Lt. Gen. Thompson was Commander, Air Force Life Cycle Management Center, Wright-Patterson AFB, Ohio.

BIOGRAPHIES



MG TIM LAWSON, USANG

Mobilization Assistant to the Commander, U.S. Space Command Currently performing the duties of the Deputy Commander, U.S. Space Command

Major General Tim Lawson serves as the Acting Deputy Commander and

National Guard Mobilization Assistant to the Commander, U.S. Space Command. Prior to his current role, Major General Lawson served as the Deputy Commanding General for Operations and the Deputy Commander for Support at the U.S. Army Space and Missile Defense Command/Army Forces
Strategic Command. Major General Lawson
commanded the 100th Missile Defense
Brigade (Colorado Springs), and the 32d
Infantry Brigade Combat Team, an Infantry
Battalion, and a Recruiting and Retention
Battalion in the Wisconsin Army National
Guard. Major General Lawson deployed as
a Platoon Leader during Operation DESERT
SHIELD/STORM, as a Company Commander

to Kuwait and Bahrain, and as the Regional Police Advisory Commander to Regional Command West, Herat, Afghanistan.

Major General Lawson holds a B.S. in Law Enforcement Administration from Western Illinois University and a Master of Strategic Studies from the U.S. Army War College. His decorations include the Legion of Merit with two bronze oak leaf clusters and the Bronze Star Medal with one bronze oak leaf cluster.



LT GEN DAVID THOMPSON, USAF

Vice Commander
U.S. 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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