

2022 PACIFIC OPERATIONAL SCIENCE & TECHNOLOGY (POST) CONFERENCE

Faster Together – Accelerating the S&T Community to the Speed of Innovation

March 7 - 10, 2022 | NDIA.org/POST | Honolulu, HI

Persistent Autonomous Sensing For Over Thirty Years

Slocum Gliders and APEX Profilers

- Sound Speed
- Ambient Noise
- Real Time Reports

Deploy from Aircraft and Ships

- -C-130
- V-22
- Warships
- Auxiliaries
- Commercial

Slocum Glider

Learn more: www.teledynemarine.com/defense Contact us: TMDefense@Teledyne.com



APEX

A-P-E-X-

🔰 Windy

NDIR

TABLE OF CONTENTS

WELCOME TO POST 2022 3
EVENT INFORMATION
AGENDA6
BIOGRAPHIES
THANK YOU TO OUR SPONSORS. 17
EXHIBITORS INFORMATION 18
EXHIBIT HALL MAP
VENUE MAP 23



NDIR

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**

WELCOME TO POST 2022

Aloha E Komo Mai (Hello and welcome)!

The U.S. Indo-Pacific Command's Science and Technology Office and the National Defense Industrial Association proudly welcome you to the 23rd annual Pacific Operational Science and Technology (POST) Conference. We are privileged to be your hosts for this distinguished event and excited to be meeting with all of you in person again. We are once again bringing the Indo-Pacific area's foremost experts in science, technology, and security together to better understand and successfully address operational issues and challenges in the region. Moreover, this conference enables technology providers to recommend near term solutions to such challenges. This year's event will also place a special focus on prototyping and experimentation to support JADC2 joint fires, information advantage, contested logistics and other joint warfighting concepts.

The POST 2022 conference theme is "Faster Together – Accelerating the S&T Community to the Speed of Innovation." With science and technology, we hope to contribute toward a free and open Indo-Pacific. As the U.S. military works together with its regional partners, the joint community needs to innovate with a sense of urgency to develop, experiment, and apply new technologies and capabilities to maintain peace and prosperity in the Indo-Pacific. We must work together with industry, government, academia, national labs, start-up innovators, allies, and partners to retain our military's competitive edge.

The security challenges in the region require all of us to move forward together at a faster and smarter pace. Developing solutions from different perspectives and rapidly transitioning scientific ideas to technology demonstrations to experiment in an iterative manner will enable us to advance greater capabilities to the joint warfighting force. We are excited you are joining us at POST 2022 for a wonderful chance to reconnect in-person with colleagues. We look forward to continuing our work together and collaborating, innovating, and strengthening efforts to maintain peace and prosperity in the Info-Pacific.

Mahalo (Thank you)!

Martin F. Lindse Dr. Martin Lindsey

S&T Advisor U.S. Indo-Pacific Command

Gen Hawk Carlisle, USAF (Ret) President and CEO National Defense Industrial Association

EVENT INFORMATION

LOCATION	Hilton Hawaiian Village Waikiki B 2005 Kalia Road Honolulu, HI 96815	each Resort	
ATTIRE	Civilian: Polo or Aloha Shirt in muted colors/subtle patterns with Khakis or Slacks Military Speaker: Class A Uniform Military: Utility Uniform		
SURVEY AND PARTICIPANT LIST	You will receive via email a survey and list of participants (name and organization) after the conference. Please complete the survey to make our event even more successful in the future.		
NDIA CONTACTS	Kimberly Hurley Director, Meetings (703) 247-9494 khurley@NDIA.org Andrew Peters Manager, Meetings (703) 247-2572 apeters@NDIA.org	Allison Hitchner Carpenter, CEM, CMP Director, Exhibits & Sponsorships (703) 247-2573 ahcarpenter@NDIA.org Carizza Gutierrez Program Manager, Divisions (703) 247-2599 cgutierrez@NDIA.org	
SPEAKER GIFTS	In lieu of speaker gifts, a donatic	n is being made to the Fisher House Foundation.	
DISCLAIMER	USINDOPACOM does not support	nt to POST 2022 and is hosted exclusively by NDIA. ort or endorse the exhibit hall event. USINDOPACOM does not a and/or services of exhibitors, sponsors, or advertisers.	
HARASSMENT STATEMENT	and verbal harassment. NDIA wi limited to harassment based on sexual orientation. This policy ap meetings and events. Harassme intimidation, stalking, following, i of talks or other events, inappro	a professional environment free from physical, psychological I not tolerate harassment of any kind, including but not ethnicity, religion, disability, physical appearance, gender, or plies to all participants and attendees at NDIA conferences, int includes offensive gestures and verbal comments, deliberate nappropriate photography and recording, sustained disruption priate physical contact, and unwelcome attention. Participants whavior are expected to comply immediately, and failure will excess to the NDIA event.	
ANTITRUST STATEMENT	laws prohibit competitors from e of trade. Consequently, NDIA me together at formal association m informal contacts with other indu terms or conditions of sale (inclu markets or customers or division	ompliance with federal and state antitrust laws. The antitrust ngaging in actions that could result in an unreasonable restraint embers must avoid discussing certain topics when they are embership, board, committee, and other meetings and in ustry members: prices, fees, rates, profit margins, or other ding allowances, credit terms, and warranties); allocation of of territories; or refusals to deal with or boycotts of suppliers, or topics that may lead participants not to deal with a hird party.	



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) meetingrelated 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 <u>NDIA.org/CodeOfConduct</u> to review the full policy.

REAL-TIME CROWD-SOURCED 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. Ask your question in the mobile app by selecting Sli.do or visit www.Slido.com and enter the event code!

Event code: POST2022

MOBILE APP



Make the most of your time at the 2022 Pacific Operational Science and Technology (POST) Conference with the "POST 2022" app available on the App Store for Apple devices and Google Play for Android devices. by searching "NDIA Pacific."

Download this FREE app for complete access to: Agenda | Clickable Floorplan | Exhibitor Listing | Slido | Social Media | Speakers | Timely "Buzz" Event Updates Build your personal itinerary, contact exhibitors by directly accessing their websites, and more! Whether logged into the POST 2022 mobile app on your computer or mobile device, your Expo Plan and Itinerary will always be in sync!

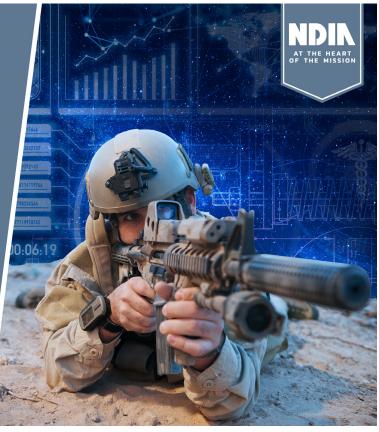
22ND ANNUAL SCIENCE AND ENGINEERING TECHNOLOGY CONFERENCE

Register Today

The future of warfare is here. Experience the energy at NDIA's exciting event in Miami. Get ready for this year's theme: "Technology for the Future Fight - Focusing S&T on Operational Needs."

Meet leaders from the S&ET community and the Department of Defense. Hear about cutting-edge research and help build innovative technology solutions for our warfighters.

April 26 – 28, 2022 | Miami, FL | NDIA.org/SET22



AGENDA

SUNDAY, MARCH 6

12:00 - 5:00 PM

REGISTRATION CORAL LOUNGE

BAE SYSTEMS

BAE SYSTEMS

MONDAY, MARCH 7

7:00 am – 6:00 pm	REGISTRATION
(All times are in HST)	CORAL LOUNGE

7:00 - 8:00 am **NETWORKING BREAKFAST** CORAL LOUNGE

7:00 am - 6:00 pm **EXHIBIT HALL OPEN**

CORAL LOUNGE

The exhibit hall is a separate event to POST 2022 and is hosted exclusively by NDIA. USINDOPACOM does not support or endorse the exhibit hall event.

WELCOME REMARKS 8:00 - 8:15 am

CORAL 3 – 5 | VIRTUAL LIVESTREAM

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

Dr. Martin Lindsey S&T Advisor, USINDOPACOM

8:15 - 8:45 am **KEYNOTE**

CORAL 3 – 5 | VIRTUAL LIVESTREAM

MajGen James Jarrard, USA Chief of Staff, U.S. Indo-Pacific Command

8:50 - 9:20 am **KEYNOTE** CORAL 3 – 5 | VIRTUAL LIVESTREAM

The Honorable Heidi Shyu Under Secretary of Defense for Research and Engineering (OUSD(R&E))

NETWORKING BREAK 9:20 - 9:50 am CORAL LOUNGE



9:50 - 11:20 am

FASTER TECHNOLOGY TOGETHER FROM CONCEPT TO COMPETITION, CRISIS AND CONFLICT PANEL

CORAL 3 – 5 | VIRTUAL LIVESTREAM

Dr. George Ka'iliwai III, SES Director, Requirements & Resources (J8), USINDOPACOM Moderator

Dr. Timothy Bunning

Chief Technology Officer, Air Force Research Laboratory, U.S. Air Force

Chris Manning

Director, Science and Technology Integration, U.S. Army Combat Capabilities Development Command

CAPT James Colston

Assistant Chief of Naval Research

11:20 am – 1:05 pm NETWORKING LUNCHEON CORAL 3 - 5

12:00 – 12:40 pm **LUNCHEON KEYNOTE**

CORAL 3 – 5 | VIRTUAL LIVESTREAM

Dr. Tai Ming Cheung Director, UC Institute on Global Conflict & Cooperation *Virtual*

1:05 – 2:20 pm THE NEXT S&T GAME CHANGERS PANEL

CORAL 3 – 5 | VIRTUAL LIVESTREAM

Maynard Holliday

Director for Modernization, Office of the Under Secretary of Defense for Research and Engineering *Moderator*

Michael White

Principal Director for Hypersonic, Office of the Under Secretary of Defense for Research and Engineering

Dr. Lindsay Millard

Principal Director for Space, Office of the Under Secretary of Defense for Research and Engineering

Dr. James Trebes

Principal Director for Directed Energy, Office of the Under Secretary of Defense for Research and Engineering

Ian Crone

Principal Director for Cyber, Office of the Under Secretary of Defense for Research and Engineering

NDIN CAREER CENTER

Connecting Talent with Great Opportunities

This latest member benefit of the National Defense Industrial Association offers qualified defense and national security professionals and employers an intuitive platform to identify the next best opportunity or candidate. With single-signon, quick and advanced searches, job alerts, career resources, pre-screen questionnaires, success tracking, and more, the NDIA Career Center is the defense industry's premier resource for career growth and advancement.

Log in and complete your profile today at Jobs.NDIA.org

1:05 - 4:05 pm

TECH BRIDGE WORKSHOP

CORAL 1

Bob Smith

Director, DoN Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Program

Moderator

Carmelo Fontan Chief Technology Officer, Naval Surface Warfare Center

Gloria Choo

University Program Director, UH Manoa, National Security Innovation Network (NSIN)

Curry Wright Special Advisor to the Director, AFWERX, Department of the Air Force

CAPT John Zerr Navy Service Lead, Defense Innovation Unit

Chris Murphy ONR Global Science Advisor, U.S. Pacific Fleet

LtCol Thomas Kline USMC, U.S. Marine Corps Forces, Pacific

Marissa Brand Project Manager, Naval Information Warfare Center (NIWC) Pacific

2:20 - 2:50 pmNETWORKING BREAK

CORAL LOUNGE

2:50 - 4:05 pm

INTERNATIONAL PANEL 1: MULTI-NATIONAL RESEARCH AND DEVELOPMENT EXPERIMENTATION AND TECHNOLOGY INSERTION INTO EXERCISES

CORAL 3 – 5 | VIRTUAL LIVESTREAM

Dr. Dana Johnson

Director, International Outreach & Policy, Office of the Under Secretary of Defense Research and Engineering *Moderator*

Col Hojoo Lee Attaché, Defense Science Research and Development, Embassy of the Republic of Korea

Col Ong Jack Sen

Deputy Future Systems and Technology Architect / Director Systems and Concepts Group 1, Future Systems and Technology Directorate, Ministry of Defence, Singapore

Lois Nicholson

Counsellor Defence Acquisition and Technology, British Defense Staff U.S., U.K. Ministry of Defence

2:50 - 4:05 pm

TECHNICAL INTERCHANGE MEETING 1 (INVITATION ONLY)

SOUTH PACIFIC 3 - 4

Dr. Greg Power

Liaison, Prototypes & Experiments, USINDOPACOM J85

This meeting will inform the audience about select Department of Defense project funding programs that support joint capability development.

To attend, you must have submitted your clearance by visiting the <u>Security Information</u> webpage. You also must provide Dr. Greg Power (<u>gregory.power@pacom.mil</u>) your name, title, rank, organization, position, email address, and phone number to be added to the attendee list. There are limited spaces available.



CLOSING REMARKS CORAL 3 – 5 | VIRTUAL LIVESTREAM

Dr. Martin Lindsey S&T Advisor, USINDOPACOM

4:10 – 6:00 pm NETWORKING RECEPTION & POSTER REVIEW SESSION CORAL LOUNGE

TUESDAY, MARCH 8

4:05 – 4:10 pm

7:00 am – 6:00 pm REGISTRATION CORAL LOUNGE **BAE SYSTEMS**

7:00 – 8:00 am NETWORKING BREAKFAST CORAL LOUNGE

7:00 am – 6:00 pm **EXHIBIT HALL OPEN** CORAL LOUNGE

The exhibit hall is a separate event to POST 2022 and is hosted exclusively by NDIA. USINDOPACOM does not support or endorse the exhibit hall event.



8:00 – 8:10 am	S&T ADVISOR WELCOME REMARKS CORAL 3 – 5 VIRTUAL LIVESTREAM
	Col Tammy Low, USAF Deputy S&T Advisor, USINDOPACOM
8:15 – 8:45 am	FEATURED SPEAKER CORAL 3 – 5 VIRTUAL LIVESTREAM
	Alexander Lovett Deputy Director, Prototypes and Experiments, Office of the Under Secretary of Defense Research & Engineering
8:50 – 9:35 am	INNOVATIVE APPROACHES TO INTELLIGENCE, OPERATIONS, AND PLANNING PANEL CORAL 3 – 5 VIRTUAL LIVESTREAM
	BGen Alex Day, RCAF Deputy Director for Operations (DJ3), U.S. Indo-Pacific Command Moderator
	CDRE Dean Commons, RAN Vice Director for Intelligence (VJ2), U.S. Indo-Pacific Command
	AIRCDRE Chris Robson, RAAF Regional and Multinational Engagement Advisor for Strategic Planning and Policy (J5RA), U.S. Indo-Pacific Command
9:05 – 11:35 am	TECHNICAL INTERCHANGE MEETING 2 (INVITATION ONLY) SOUTH PACIFIC 3-4
	Dr. Greg Power Liaison, Prototypes & Experiments, USINDOPACOM J85
	This meeting will inform on processes and capability requirements for the Military Services, Combatant Commands, and Agencies.

To attend you must have submitted your clearance by visiting the <u>Security Information</u> webpage. You also must provide Dr. Greg Power (<u>gregory.power@pacom.mil</u>) your name, title, rank, organization, position, email address, and phone number to be added to the attendee list. There are limited spaces available.

EMERGING TECH HORIZONS

An ETI Podcast

Listen in as our nation's security experts share their personal takes on the latest defense technology.

Hosted by our resident expert Dr. Mark Lewis, Executive Director of NDIA's new Emerging Technologies Institute, our podcast takes a deep dive into how technology will shape the future of warfare.

EmergingTechnologiesInstitute.org/Podcast





10:20 – 11:35 am

INTERNATIONAL PANEL 2: INTERNATIONAL APPROACHES TO FASTER INNOVATION AND TECHNOLOGY TRANSFER

CORAL 3 – 5

Dr. Dana Johnson Director, International Outreach & Policy, Office of the Under Secretary of Defense Research and Engineering *Moderator*

First Admiral Dr. Arif Harnanto

Head of Center for Research and Development of Defense Equipment, Ministry of Defense of the Republic of Indonesia

Dr. Mohd Yazid Ahmad

Director General, Science & Technology Research Institute for Defense, Malaysia

LtGen Somkiat Sampan

Director General, Defense Science & Technology Department, Thailand

11:35 am - 1:20 pmNETWORKING LUNCHEON

CORAL 3 – 5

1:20 – 2:35 pm BETTER APPROACHES TO INNOVATION PANEL

CORAL 3 – 5 | VIRTUAL LIVESTREAM

Dr. Mark Lewis

Executive Director, Emerging Technologies Institute, NDIA *Moderator*

Michael Brown Director, Defense Innovation Unit

Prof Tanya Monro

Chief Defence Scientist and Technology Group (DSTG) and Capability Manager for Innovation, Science and Technology within the Australian Department of Defence

Dr. John Turner

Technical Director, Space Development Agency (SDA)

1:20 - 2:35 pmINTERNATIONAL S&T WORKSHOP

CORAL 1

Welcome Remarks and USINDOPACOM Joint International Brief

Col Tammy Low, USAF

Deputy S&T Advisor and International S&T Lead, USINDOPACOM

Joel Lane

Senior Program Analyst, OUSD(A&S) Coalition Warfare Program Workshop Moderator

USINDOPACOM Pacific Multi-Domain Training and Experimentation Capability (PMTEC)

Brent Parker J325 PMTEC Lead Coordinator/Joint Training Analyst, USINDOPACOM/SAIC

USINDOPACOM Mission Partner Environment (MPE)

CAPT Brett O'Donovan, USN

J67 Innovation and Experimentation Division Chief, INDOPACOM

Joint Combined Demonstration & Experimentation (JDEC) and International Experimentation Under Rapid Defense Experimentation Reserve (RDER)

Willie McCallister

Director of RdER Experiment and Assessment Campaign, Office of the Under Secretary of Defense Research and Engineering

1:20 - 4:20 pm

WORKSHOP: ENCHANCING READINESS THROUGH WEARABLES

CORAL 2

Dr. Mike von Fahnestock J85, USINDOPACOM Workshop Moderator

Senior Leader Performance Optimization through Wearables

Dr. George Ka'iliwai III, SES Director, Requirements & Resources (J8), USINDOPACOM,

Introductory Remarks on DTRA Wearables Program Vision

Dr. Ron Hann Director, DTRA

Strategic Perspective on Physiological Wearable Devices for DOD Applications

Dr. John Hannan Wearables Program Manager, DTRA

Dave Restione

Chief Technology Officer, The Joint Program Executive office for Chemical Biological, Radiological and Nuclear Defense

RATE and PREP Wearables Projects for Pre-Symptomatic Disease Indications and Alerts

Dr. Chris Kiley Wearables Program Manager, DTRA/JSTO-CBD

Software Platform Program for Physiological Monitoring through Wearables for Early Bio-threat Indications

Dave Restione

Chief Technology Officer, The Joint Program Executive office for Chemical Biological, Radiological and Nuclear Defense

1:20 – 4:20 pm STRATOSPHERE WORKSHOP (INVITATION ONLY)

SOUTH PACIFIC 3-4

Thomas Smith

Chief, Science & Advanced Concepts, United States Central Command

Alexander Lovett

Director, Prototypes & Experiments, Office of the Under Secretary of Defense Research and Engineering

2:35 – 3:05 pm NETWORKING BREAK

CORAL LOUNGE

3:05 – 4:15 pm INTERNATIONAL S&T WORKSHOP

CORAL 1

Other OSD Research & Engineering (R&E) and OSD Acquisition & Sustainment (A&S) Programs Dr. Dana Johnson

Director, International Outreach & Policy, Office of the Under Secretary of Defense Research and Engineering

Col Corey Beaverson, USAF Director, Global Capabilities Programs, Office of the Under Secretary of Defense Research and Engineering

Col Marcia Quigley, USA Director Global Capabilities Projects, Office of the Under Secretary of Defense Research and Engineering

Closing Remarks for Workshop

Col Tammy Low, USAF Deputy S&T Advisor and International S&T Lead, USINDOPACOM 3:05 - 4:20 pm

4:20 - 4:25 pm

MOVING FASTER TO INNOVATE FOR THE USINDOPACOM WARFIGHTERS PANEL

CORAL 3 – 5 | VIRTUAL LIVESTREAM

Dr. Martin Lindsey S&T Advisor, U.S. Indo-Pacific Command *Moderator*

Dr. Robert Smith Science Advisor, U.S. Army Pacific (USARPAC)

Christopher Murphy Science Advisor, U.S. Pacific Fleet (PACFLT)

Dr. Jeffrey Sanders Chief Scientist, U.S. Pacific Air Forces (PACAF)

Daniel Hanna Science Advisor, Marine Forces Pacific (MARFORPAC)

Kevin Ruddell Requirements Specialist/Science and Technology Representative, Special Operations Command Pacific (SOCPAC)

CLOSING REMARKS CORAL 3 – 5 | VIRTUAL LIVESTREAM

Gen Hawk Carlisle, USAF (Ret)

President & CEO, NDIA

Dr. Martin Lindsey S&T Advisor, USINDOPACOM

4:30 – 6:00 pm NETWORKING RECEPTION & POSTER REVIEW SESSION CORAL LOUNGE

WEDNESDAY, MARCH 9

CLOSED SESSIONS

6:30 am BUSES DEPART FROM THE HILTON (PRE-REGISTRATION REQUIRED)

7:00 – 8:00 am **REGISTRATION**

- 8:00 11:15 am CLOSED SESSION PRESENTATIONS
- 11:15 am 12:45 pm **LUNCH PROVIDED**

12:45 – 4:20 pm CLOSED SESSION PRESENTATIONS

4:30 pm BUSES RETURN TO THE HILTON (PRE-REGISTRATION REQUIRED)

IDIR

THURSDAY, MARCH 10

CLOSED SESSIONS

6:30 am BUSES DEPART FROM THE HILTON (PRE-REGISTRATION REQUIRED)

- 7:00 8:00 am **REGISTRATION**
- 8:00 11:00 am CLOSED SESSION PRESENTATIONS
- 11:00 am 12:30 pm **LUNCH PROVIDED**
- 12:30 2:15 pm CLOSED SESSION PRESENTATIONS

2:30 pm BUSES RETURN TO THE HILTON (PRE-REGISTRATION REQUIRED)

OPEN SESSION – POST FIELD EXPERIMENTATION (POST FX) ADVANCED REGISTRATION REQUIRED – LIMITED SPOTS AVAILABLE

7:45 am BUSES DEPART FROM THE HILTON (PRE-REGISTRATION REQUIRED) (PRE-REGISTRATION REQUIRED)

8:30 – 9:30 am PARTICIPANT CHECK-IN BELLOWS AIR FORCE STATION

- 9:00 9:30 am WELCOME & OPENING REMARKS BELLOWS AIR FORCE STATION
- 9:00 am 1:00 pm VENDOR TECHNOLOGY BRIEFINGS BELLOWS AIR FORCE STATION
- 1:00 2:00 pm
 NETWORKING LUNCH PROVIDED

 BELLOWS AIR FORCE STATION
- 2:00 4:00 pm VENDOR TECHNOLOGY BRIEFINGS & NETWORKING SOCIAL BELLOWS AIR FORCE STATION

4:00 pm BUSES RETURN TO HILTON (PRE-REGISTRATION REQUIRED)

BIOGRAPHIES





MG JAMES JARRARD, USA

Chief of Staff U.S. Indo-Pacific Command

Major General James (Jamie) B. Jarrard was born in Germany where his

father served as an Armor Lieutenant. Upon graduation from North Hall High School, he attended Basic Training at Fort Benning, Georgia and served in the Georgia National Guard while attending college. He was commissioned and entered on to active duty on 25 May, 1988 at North Georgia College, Dahlonega, GA.

After graduation from the Infantry Officers Basic Course at Fort Benning, Georgia, MG Jarrard's first assignment was with B Company, 7th Battalion, 6th Infantry Regiment, 1st Armored Division in Germany. He subsequently served at the 5th Ranger Training Battalion in Dahlonega, GA before assignment to the 25th Infantry Division at Schofield Barracks, Hawaii where he served as the Assistant S3 for 3d Brigade and Commander, Bravo Company, 2-27 Infantry.

He has served in numerous command and staff assignments in the U.S. Special Operations Command along with assignments to 7th Infantry Division and the Joint Staff. His eight operational assignments include leadership and command positions from Operation Desert Storm in 1991 in Kuwait to his most recent assignment as Commander, Special Operation Joint Task Force – Operation Inherent Resolve from 2017 – 2018. Major General Jarrard served as the Director of Operations, J3, U.S. Special Operations Command, MacDill AFB, Tampa, Florida. Most recently, he served as the Commanding General of the 25th Infantry Division at Schofield Barracks, Hawaii.

MG Jarrard holds a Bachelor of Business Administration from North Georgia College and a Master of Science in Military Operational Art and Science from the Air University. Additionally, he is a graduate of the Air Command and Staff College and served as a Senior Service College Fellow at the George C. Marshall European Center for Security Studies.



THE HON. HEIDI SHYU

Under Secretary of Defense for Research and Engineering (OUSD(R&E)) Department of Defense

The Honorable Heidi Shyu is the Under Secretary of Defense for Research and

Engineering (OUSD(R&E)). In this role, she serves as the Chief Technology Officer for the Department of Defense (DoD), mandated with ensuring the technological superiority of the U.S. military, and is responsible for the research, development, and prototyping activities across the DoD enterprise. She also oversees the activities of the Defense Advanced Research Projects Agency (DARPA), the Missile Defense Agency (MDA), the Defense Innovation Unit (DIU), the Space Development Agency (SDA), the DoD Laboratory and Engineering Center enterprise, and the Under Secretariat staff focused on developing advanced technology and capability for the U.S. military.

Previously, she served as the Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASA(ALT)), from September 2012 to January 2016. Prior to this, she was Acting ASA(ALT) beginning in June 2011 and appointed the Principal Deputy in November 2010. As the ASA(ALT). she served as the Army Acquisition Executive, the Senior Procurement Executive, the Science Advisor to the Secretary of the Army, and the Army's Senior Research and Development official. She had principal responsibility for all Department of the Army matters related to logistics. Ms. Shyu also led the execution of the Army's acquisition function and the acquisition management system. Her responsibilities included providing oversight for the life cycle management and sustainment of Army weapons systems and equipment from research and development through test and evaluation, acquisition, logistics, fielding, and disposition.

Prior to her government service, Ms. Shyu was the Vice President of Technology Strategy for Raytheon Company's Space and Airborne Systems. Ms. Shyu holds a Bachelor of Science Degree in Mathematics from the University of New Brunswick (UNB) in Canada, a Master of Science Degree in Mathematics from the University of Toronto, Master of Science Degree in System Science (Electrical Engineering) from UCLA, and the Engineer Degree from UCLA. She received an Honorary Doctorate of Science from the UNB. She is also a graduate of the UCLA Executive Management Course Program.

A member of the Air Force Scientific Advisory Board from 2000 to 2010, she served as the Vice Chairman from 2003 to 2005 and Chairman from 2005 to 2008. Ms. Shyu is a member of the National Academy of Engineering and AIAA Honorary Fellow.



DR. TAI MING CHEUNG

Director

UC Institute on Global Conflict & Cooperation

Tai Ming Cheung is director of the Institute on Global Conflict and Cooperation at

the University of California, San Diego in La Jolla. Among his research areas, his focus includes China's efforts to become a worldclass science and technology power, and the relationship between geo-economics, innovation, and national security. Dr. Cheung is also a professor at the School of Global Policy and Strategy at UC San Diego, where he teaches courses on the international relations and national security of China and Chinese security and technology policy. Dr. Cheung is a long-time analyst of Chinese and East Asian defense and national security affairs, especially defense economic, industrial and science and technological issues. He is the author of Fortifying China: The Struggle to Build a Modern Defense Economy (Cornell University Press, 2009), editor of Forging China's Military Might: A New Framework for Assessing Innovation (Johns Hopkins University Press, 2014), co-editor of *The Gathering Pacific Storm: Emerging US-China Strategic Competition in Defense Technological and Industrial Development* (Cambria Press, 2018), and author of *Innovate to Dominate: The Rise of* the Chinese Techno-Security State (Cornell University Press, 2022). He was based Hong Kong, China, and Japan from the mid-1980s to 2002 covering political, economic, and strategic developments in Greater China and East Asia, first as a journalist for the Far Eastern Economic Review from 1988-1993 and subsequently as a political and business risk consultant for a number of companies, including PricewaterhouseCoopers. Dr. Cheung has a PhD in War Studies from King's College, London.



ALEXANDER LOVETT

Deputy Director, Prototypes & Experiments Office of the Under Secretary of Defense Research and Engineering

Mr. Alex Lovett is the Director of Defense Research and Engineering

for Advanced Capabilities, reporting to the Under Secretary of Defense Research and Engineering within the Office of the Secretary of Defense. He directs an organization whose mission is to recognize, explore, and accelerate the development and integration of new technology to maintain U.S. technological superiority. He is responsible for establishing a Department of Defense joint mission engineering capability, oversight of developmental testing and test facilities, provides independent technical risk assessments of major acquisition programs, as well as demonstration and validation of technology prototype and rapid fielding activities.



THANK YOU TO OUR SPONSORS

BAE SYSTEMS

BAE Systems, Inc. and its 35,000 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, intelligence, security, and IT solutions and support services. Our dedication shows in everything we design, produce and deliver- to protect those who protect us in a high-performance, innovative culture. We push the limits of possibility to provide a critical advantage to our customers where it counts.

LOCKHEED MARTIN

Headquartered in Bethesda, Maryland, Lockheed Martin Corporation is a global security and aerospace company that employs approximately 114,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services.

Hypersonic capabilities are a national security imperative and vital to ensure America maintains our technological edge over near-peer threats. Lockheed Martin is the leader in both offensive and defensive hypersonic strike programs, leveraging more than 60 years of experience in the field to deliver gamechanging hypersonic capabilities to our customers. We are committed to innovating with urgency, making the investment and taking necessary risks to enable the development of this important deterrent for the United Sates. In partnership with our customers, our robust experience in high-speed flight will help enhance strategic deterrence and offer precision strike capabilities to address increasing adversarial threats

Raytheon Technologies

Raytheon Technologies Corporation is an aerospace and defense company that provides advanced systems and services for commercial, military and government customers worldwide. With four industry-leading businesses - Collins Aerospace Systems, Pratt & Whitney, Raytheon Intelligence & Space and Raytheon Missiles & Defense - the company delivers solutions that push the boundaries in avionics, cybersecurity, directed energy, electric propulsion, hypersonics, and quantum physics. The company, formed in 2020 through the combination of Raytheon Company and the United Technologies Corporation aerospace businesses, is headquartered in Waltham, Massachusetts,

NDIR

JOIN THE CONVERSATION

NDIA.org/LinkedIn



@NDIAMembership

@NDIAToday











@NDIAToday

EXHIBIT HALL HOURS

Monday, March 7

7:00 am – 6:00 pm

Tuesday March 8 7:00 am – 6:00 pm

EXHIBITORS BY COMPANY

Los Alamos National Laboratory 1014
MBDA Inc 1024
Missile Defense Agency 908
Nokomis
Office of Naval Research 1008
Orion Technologies
Pacific Science & Engineering (PSE) 1038
Premise
Stratolaunch
T2S Solutions LLC
Terradepth
Tribalco LLC 1026
WEETECH Inc 1018
Western Global 1016
Woolpert, Inc

EXHIBITOR DESCRIPTIONS

ALTAEROS

919

Altaeros' autonomous ST-Flex aerostats outperform tethered drones and traditional aerostats without requiring a ground crew for day-to-day operations. Our tactical aerostats are designed to lift heavy payloads (ISR, Radar, Communications & more) for long durations while providing significant OPEX savings.

APPLIED RESEARCH LABORATORYATTHE UNIVERSITY OF HAWAI'I916

The Applied Research Laboratory at the University of Hawai'i undertakes research and development focused on remote sensing of the environment specific to the Pacific region in support of the United States Navy, the Department of Defense, the State of Hawai'i, and the nation.

911

DEFENSE SYSTEMS INFORMATION ANALYSIS CENTER (DSIAC)

The Defense Systems Information Analysis Center (DSIAC) is a component of the DoD - USD (R&E) comprised of scientists, engineers, researchers, analysts, and information specialists. We offer free research services to DoD and federal government users - including subject matter expert connections, trainings, database management, and more - intended to eliminate interdepartmental redundancy, foster collaboration, and stimulate innovation. Visit our website at www.dsiac.org/.

DEFENSE TECHNICAL INFORMATION **CENTER (DTIC)**

The Defense Technical Information Center (DTIC) has served the information needs of the Defense community for more than 75 years. Reporting to the Under Secretary of Defense for Research and Engineering (USD(R&E)), DTIC aims to be the premier knowledge source for Department of Defense (DoD) research, providing a robust science and technology (S&T) knowledge base to enable research and engineering and connect scientific communities.

DELL TECHNOLOGIES

Transform with Dell Technologies. Whether you're optimizing an existing infrastructure or exploring emerging technologies -5G, Al, data management - in the cloud or at the edge, we have the technology expertise, solutions, and services. Create a secure IT foundation that allows you to adapt to change, deliver consistent experiences and confidently lead you well into the future. For more information, contact DellFederalSales@federal.dell.com or call us at 855-860-9606.

FLEX LOGIX TECHNOLOGIES, INC. 924

Flex Logix is the leading supplier in eFPGAs, EFLX, with more designs, metal stacks and configurations supported. We have been doing eFPGAs for 7 years and can port our technology to any process in just a few months. EFLX eFPGA uses standard cells to build the logic and by leveraging our patented XFLX ® Boundary-less Reduce power, add reconfigurability and accelerate your chips with EFLX eFPGAs.

GIGAMON

927

925

920

Gigamon is the recognized leader in next generation packet brokers and the only company with a singular focus on this technology. Gigamon provides not only simple taps, but a platform of integrated tap, aggregation & analysis capabilities that are used throughout the U.S. Department of Defense. For more information visit www.gigamon.com

HAWKEYE 360

HawkEye 360 is a Radio Frequency (RF) data analytics company. We operate a first-of-its-kind commercial satellite constellation to identify, process, and geolocate a broad set of RF signals. We extract value from this unique data through proprietary algorithms, fusing it with other sources to create powerful analytical products that solve hard challenges for our global customers. Our products include maritime domain awareness and spectrum mapping and monitoring; our customers include a wide range of commercial, government and international entities

HUNTINGTON INGALLS INDUSTRIES 1028

HII is a global engineering and defense technologies provider. With a 135-year history of trusted partnerships in advancing U.S. national security, HII delivers critical capabilities ranging from the most powerful and resilient maritime platforms ever built, to unmanned systems and AI/ML analytics. HII leads the industry in mission-driven solutions that support and enable a connected, integrated full spectrum force. Headquartered in Newport News, Virginia, HII's skilled workforce is 44,000.

IMSAR

IMSAR is democratizing radar by making it more affordable, available, and usable. Our radars are capable of all-weather imaging, change detection (CCD), Ground MovingTarget Indicator (GMTI) and Maritime MTI (MMTI). IMSAR has a family of radars that addresses group 1 through group 5 UAS and manned aircraft.

INDIGO INDUSTRIES

922

Indigo Industries specializes in forming and leading teams of innovative companies to rapidly produce new, disruptive capabilities. In addition, Indigo Industries assists US Government customers with a wide range of professional services that organize, guantify, and streamline elements of the acquisition process.

1012

KRATOS DEFENSE & SECURITY SOLUTIONS

Kratos Unmanned Aerial Systems (KUAS) has been at the forefront of the development of reusable/attritable Unmanned Aerial Systems (UAS) for use in Manned-Unmanned Teaming (MUM-T) operations in a contested environment. KUAS leveraged its domain knowledge of high-performance subscale aerial targets to design, develop and demonstrate the first purposebuilt attritable UAS. Kratos is at the forefront of delivering a family of innovative, affordable, expeditionary, and high performance tactical UAS.

LOCKHEED MARTIN

Headquartered in Bethesda, Maryland, Lockheed Martin Corporation is a global security and aerospace company that employs approximately 114,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services.

LOS ALAMOS NATIONAL LABORATORY 1014

Los Alamos National Laboratory has a rich history of technical excellence assuring a viable integrated deterrence exists for the US. Los Alamos' National Security and Defense office leverages that technical excellence to provide our partner agencies advanced operational capabilities. Visit our booth to discuss advanced unmanned systems, predictive analytics, clean energy, space systems.

MBDA INC.

1024

908

MBDA is a world-leading, global missile systems company, delivering cutting-edge technologies to our multinational customer base. Our expertise in guided weapons design, systems engineering, integration and flight testing provides our defense customers solutions to their critical needs. MBDA operates in the United States through MBDA Incorporated, under a Special Security Agreement with the U.S. Department of Defense.

MISSILE DEFENSE AGENCY

The Missile Defense Agency (MDA) is a research, development, and acquisition agency within the Department of Defense whose mission is to develop and deploy a layered Missile Defense System to defend the United States, its deployed forces, allies, and friends from missile attacks in all phases of flight.

NOKOMIS

931

1034

Nokomis is a high growth technology company dedicated to providing advanced technical capability for our customers. Our team has developed and delivered state-of-the-art uniquely capable sensors and technology solutions. Our corporate office is located in Charleroi, Pennsylvania. The 50,000 sq. ft Charleroi facility is endowed with state-of-the-art scientific, engineering and manufacturing capabilities.

OFFICE OF NAVAL RESEARCH

The Department of the Navy's Office of Naval Research provides the science and technology necessary to maintain the Navy and Marine Corps' technological advantage. ONR is a leader in science and technology with engagement in 50 states, 55 countries, 634 institutions of higher learning and nonprofit institutions, and over 960 industry partners. ONR, through its commands, including headquarters, ONR Global and the Naval Research Laboratory in Washington, D.C., employs over 3,800 people.

ORION TECHNOLOGIES

914

Orion Technologies is an Embedded Solutions Provider located in Orlando, FL. Specializing in the design and production of embedded electronics for over 20 years, our capabilities range from full rugged systems to COTS board-level products and everything in between. Whether it's a small quantity, onetime requirement or a high-volume delivery for years to come, our remarkable quality and easy-to-work with partnerships continually exceed customer expectations to deliver at the speed of need.

PACIFIC SCIENCE & ENGINEERING (PSE) 1038

PSE's products improve system effectiveness, reduce error, and enhance user performance and decision-making. We support all aspects of system engineering, design, development, training, and evaluation. PSE specializes in human factors engineering, human-system integration, cognitive science, and organizational processes; and we develop user-centered designs and prototypes, conduct applied research, develop models and simulations, assess usability, and conduct operationallyrelevant evaluations.

1008

PREMISE

Premise is a crowdsourced insights company. Our technology mobilizes communities of global smartphone users to source actionable data in real-time, cost-effectively and with the visibility you need. In more than 128 countries and 37 languages, we find Data for Every Decision[™]. To know more, visit www.premise.com

STRATOLAUNCH

Stratolaunch is a technology accelerator that engineers operationally realistic testing at Mach 5+. Our air-launched, Talon testbeds are reusable, cost-effective platforms that enable routine access to the hypersonic environment. We deliver flight data critical to validating system performance and achieving rapid technology deployment. Together with our customers, we drive innovations that are imperative to advancing national security.

T2S SOLUTIONS LLC

T2S is a Veteran Owned Small Business specializing in Electronic Warfare (EW), Intelligence, Surveillance and Reconnaissance (ISR), and Positioning-Navigation-Timing (PNT) systems. T2S provides Engineering, Design, Development, Prototyping, Test and Logistics Support to various customers. This includes Quick Reaction Capability solutions to develop advanced prototype EW (EA, EP, ES, NAVWAR), PNT, Cyber, SIGINT, and Geospatial Intel hardware, techniques, and modifying fielded production systems.

TERRADEPTH

Terradepth is committed to driving innovation in the areas of deep ocean mapping and exploration. Through specific advancements in AUV technology, and through the deployment of this technology at unprecedented scale, the company will transform the economics of ocean data collection. Coupled with cloud-based data aggregation and analytics, this data will yield an immersive model of the undersea environment capable of driving a step-change in humanity's understanding of our planet's oceans.

TRIBALCO LLC

915

935

912

Tribalco is a global systems integrator, original equipment manufacturer, and software developer providing C5ISR and survival, rescue, and safety systems to military, intelligence, civilian agency, and commercial customers around the world. Since 2004, Tribalco has developed and deployed operational capabilities leveraging innovative technologies that protect our nation's critical infrastructure.

WEETECH INC.

For more than 45 years, WEETECH has developed and produced test systems for wire harnesses, backplanes, electronic parts, components, fiber optics, and now intermittent fault detection. Closely cooperating with our customers during planning, programming, and installation, our customized solutions have let us grow to be a competent partner in the fields of complex wire harness, fiber optic, intermittent, and functional testing. We are a small business located just north of Chicago in Illinois.

WESTERN GLOBAL

For the safe storage and handling of fuels, lubricants and other fluids Western Global is the leading provider. Our transportable, double-walled, self-contained tanks deliver increasing run times and efficient fuel management. Western Global supplies cost effective, complete site refueling solutions globally to keep your operation fueled and productive.

WOOLPERT, INC

Woolpert is the premier architecture, engineering, geospatial (AEG) and strategic consulting firm, with a vision to become one of the best companies in the world. With more than 1,600 employees and 60 offices on four continents, we innovate within and across markets to serve public, private and government clients worldwide.



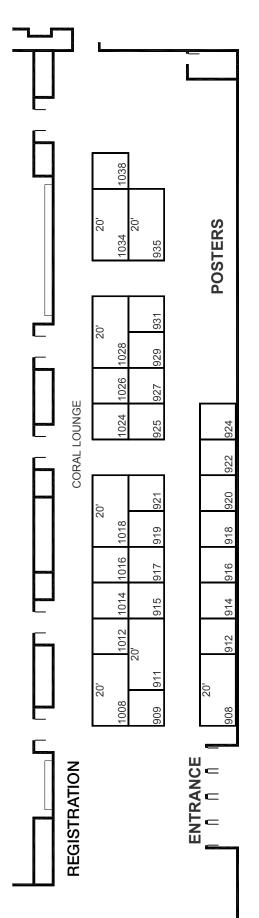
1018

1016

909

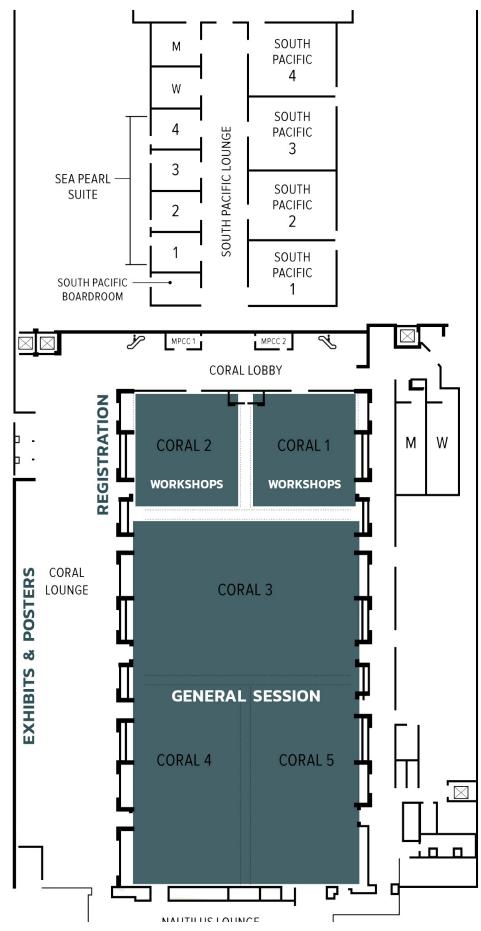
929

EXHIBIT HALL MAP





VENUE MAP



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

PLAN AHEAD FOR SUCCESS | 2022 FEATURED MEETINGS, CONFERENCES, AND EVENTS



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

March 7 - 8 (Open), 9 - 10 (Closed), 2022 | Honolulu, HI

Regional Security | Science & Engineering Technology | Technology Engagement



BREAKTHROUGH ENERGETICS 2022 May 4 - 5, 2022 | West Lafayette, IN

Science & Engineering Technology | Propellants | Explosives | Modeling & Simulation



36TH ANNUAL NATIONAL LOGISTICS FORUM March 15, 2022 | Salt Lake City, UT

Defense Logistics | Logistics Management



65TH ANNUAL FUZE CONFERENCE May 10 – 12, 2022 | Renton, WA

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



DLA LAND & MARITIME SUPPLIER CONFERENCE & EXHIBITION April 6 – 7, 2022 | Columbus, OH

Logistics | Supply Chain | Support Equipment | Small Business



MUNITIONS EXECUTIVE SUMMIT April 6 – 7, 2022 | Parsippany, NJ

Munitions Technology | Energetic Materials | Fuze | Technology



2022 JOINT NDIA/AIA SPRING INDUSTRIAL SECURITY CONFERENCE April 25 – 27, 2022 | Clearwater Beach, FL

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



22ND ANNUAL SCIENCE & ENGINEERING TECHNOLOGY CONFERENCE April 26 – 28, 2022 | Miami, FL

Defense Research & Development | Science & Technology



INTEGRATED PRECISION WARFARE REVIEW (IPWR-22) May 4 – 5, 2022 | Arlington, VA

Acquisition and Policy | Precision Capability | Air & Missile Defense

NTSA TSIS

Communications | Light Vehicles | Small Arms | Special Operations
TRAINING & SIMULATION

INDUSTRY SYMPOSIUM (TSIS) June 15 – 16, 2022 | Orlando, FL

2022 SPECIAL OPERATIONS

& EXHIBITION (SOFIC) May 16 – 19, 2022 | Tampa, FL

FORCES INDUSTRY CONFERENCE

Training | Simulation | Modeling | Acquisition/Funding



2022 CBRN DEFENSE CONFERENCE AND EXHIBITION July 26 – 28, 2022 | Baltimore, MD

Combat Architecture | Defensive Measures | Demilitarization | Preparedness | Industrial Base



2022 SPACE WARFIGHTING INDUSTRY FORUM (SWIF)

August 17 – 18, 2022 | Colorado Springs, CO

Defense Research & Development | Science & Technology



I/ITSEC 2022 November 28 – December 2, 2022 | Orlando, FL

Simulation | Training | Virtual Reality

*All Classified | **Partially Classified

VISIT NDIA.ORG FOR MORE INFORMATION ON ALL OF OUR MEETINGS, CONFERENCES, AND EVENTS