

The background of the entire page is a digital illustration of two mechs. On the left is a blue mech with a jet-like structure on its back. On the right is a red mech, also with a jet-like structure. They are positioned as if in a combat or standoff. The background is a dark blue space filled with white stars and a network of glowing blue lines, suggesting a high-tech or futuristic environment. The NDIA logo is in the top right corner.

NDIA

2024 AIRCRAFT SURVIVABILITY SYMPOSIUM

The Future is Now: Ready, Set, Fight!

November 5 – 7, 2024 | Monterey, CA | [NDIA.org /AircraftSurvivability](https://ndia.org/AircraftSurvivability)

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Get Involved

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



Leadership and Committees

Lt Gen Chris Bogdan, USAF (Ret)

Division Chair

Barry Vincent

Symposium Chair

Amy Howell

Symposium Vice-Chair

Air Combat Survivability

Who We Are

NDIA’s Air Combat Survivability Division addresses all aspects of susceptibility reduction (probability of hit), vulnerability reduction (consequences of hit), and the overall survivability discipline, including countermeasures, signature reduction, tactics and training, camouflage, concealment and deception, as well as damage resistance, damage tolerance, and combat damage repair. The division also focuses on the transfer of information and technology between the military survivability and civil aviation communities to improve flight safety and to mitigate the effects of terrorist acts.

Join the Conversation



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Schedule at a Glance

Tuesday, November 5

Optional Tutorial Day

Naval Postgraduate School | King Hall
8:00 am – 4:35 pm

Networking Reception

Hyatt Regency Monterey | Monterey Terrace
6:00 – 7:30 pm

Wednesday, November 6

Symposium Day 1

Naval Postgraduate School | King Hall
8:00 am – 3:35 pm

Networking Reception and Awardee Celebration

A Taste of Monterey
5:00 – 7:00 pm

Thursday, November 7

Symposium Day 2

Naval Postgraduate School | King Hall
8:00 am – 4:05 pm

Awards Luncheon

Naval Postgraduate School | Herrmann Hall
11:35am – 1:15 pm

Event Information

Location

Symposium Venue

Naval Postgraduate School
1 University Circle
Monterey, CA 93943

Host Hotel

Hyatt Regency Monterey Hotel & Spa
1 Old Golf Course Road
Monterey, CA 93940

Speaker Biography



For a full list of speaker biographies please visit the event page at [NDIA.org/AircraftSurvivability](https://www.ndia.org/AircraftSurvivability)

Survey and Participant List

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

Event Contact

Jenica Seguine

Meeting Planner
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Agenda

THIS EVENT IS CLASSIFIED AS SECRET//NOFORN

Tuesday, November 5

7:00 am – 4:35 pm

Registration Open

KING HALL FOYER

7:00 – 8:00 am

Continental Breakfast

KING HALL FOYER

8:00 – 8:15 am

Welcome Remarks

KING HALL

Brig Gen Guy Walsh, USAF (Ret)

Executive Vice President & Chief Operating Officer, NDIA

8:15 – 9:45 am

Artificial Intelligence (AI) and Machine Learning (ML) Tutorial: Unlocking the Potential of AI: Fundamentals and Applications in Air Survivability

KING HALL

Joe Rohner

Vice President, Chief Technology Office, Booz Allen Hamilton

Dan Wald

Principal/Director, Booz Allen Hamilton

9:45 – 10:15 am

Networking Break

KING HALL FOYER

10:15 – 11:30 am

Artificial Intelligence (AI) and Machine Learning (ML) Tutorial – Continued

KING HALL

11:30 am – 1:00 pm

Lunch On Own

1:00 – 2:30 pm

Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) Tutorial: Introduction of CBRN Operational Environment and Impact on Aircraft Survivability

KING HALL

COL Ron Fizer, USA (Ret)

Counter Threat Fellow, ARServices

2:30 – 3:00 pm

Networking Break

KING HALL FOYER

3:00 – 4:30 pm

Survivability Tutorial

KING HALL

4:30 – 4:35 pm

Closing Remarks

KING HALL

Lt Gen Chris Bogdan, USAF (Ret)

Executive Vice President, Booz Allen Hamilton
Chair, Air Combat Survivability Division, NDIA

6:00 – 7:30 pm

Networking Reception

HYATT REGENCY MONTEREY – MONTEREY TERRACE

Wednesday, November 6

7:00 am – 3:35 pm

Registration Open

KING HALL FOYER

7:00 – 8:00 am

Continental Breakfast

KING HALL FOYER

8:00 – 8:15 am

Welcome and Introductory Remarks

KING HALL

Barry Vincent

Chief Engineer, Booz Allen Hamilton
Symposium Chair, Air Combat Survivability Division, NDIA

Lt Gen Chris Bogdan, USAF (Ret)

Executive Vice President, Booz Allen Hamilton
Chair, Air Combat Survivability Division, NDIA

8:15 – 8:30 am

NPS Welcome

KING HALL

VADM Ann Rondeau, USN (Ret)

President, Naval Postgraduate School

8:30 – 8:35 am

Introduction to Keynote Speaker

KING HALL

Lt Gen Chris Bogdan, USAF (Ret)

Executive Vice President, Booz Allen Hamilton
Chair, Air Combat Survivability Division, NDIA

8:35 – 9:15 am

Keynote Address

KING HALL

Dr. Eric Ruggiero

Engineering Lead, Advanced Military Engineering, GE Edison Works

9:15 – 9:45 am

Poster and Display Hall Open

KING HALL AUDITORIUM UPPER LEVEL

9:15 – 9:45 am

Networking Break

KING HALL FOYER

SESSION 1 – THREAT • Session Chair: Ken McKenzie

9:45 – 9:55 am

Introduction to Session

KING HALL

Ken McKenzie

Senior Engineer, Modern Technology Solutions, Inc.

9:55 – 10:20 am

Impact of Chinese Carrier Task Group on U.S. Air Operations

KING HALL

Joseph Na

DAF Red Team, MIT Lincoln Laboratory

10:20 – 10:45 am

OTHR Detection and Tracking Analyses

KING HALL

Peter Reheis

DAF Red Team, MIT Lincoln Laboratory

Poster Presenters

Survivability of Solar Powered Aircraft

Dr. Robert Miller

CEO, Skydweller US, Inc.

Luna Labs' Dissipative Coating(s) for Counter Directed Energy Weapons (CDEWs) Threats

Nikita Kevlich

Principal Scientist, Materials, Luna Labs USA, LLC

An Expeditionary Hangar (X-HANGAR) Shelter System for Forward Deployed Aircraft in Austere Environments

Scott Ramsey

Senior Research Scientist, U.S. Naval Research Laboratory

Architecture of the Aircraft Survivability Enterprise

Tara Trumbull

Senior Principal Systems Architect, System of Systems Architecture Section Lead, Raytheon-RTX

Aircraft Control Strategies for Mitigating Midair Debris Lethality in Counter-Air Operations

Maj John Hansen, USAF

Assistant Professor, Air Force Institute of Technology

10:45 – 11:15 am **Networking Break**
KING HALL FOYER

11:15 – 11:55 am **Surface-to-Air Missile Technology Trends**
KING HALL
Riley Freelove
Senior Analyst, MSIC

11:55 am – 12:55 pm **Networking Lunch**
HERRMANN HALL

12:55 – 1:05 pm **Reconvene**
KING HALL

SESSION 2 – MOD/SIM • Session Chair: Rebecca Hooper & Amy Howell

1:05 – 1:15 pm **Introduction to Session**
KING HALL
Rebecca Hooper
Senior Staff Engineer Systems Architect, B-2 Survivability IPT Lead, Northrop Grumman Corporation
Amy Howell
Director, Operations Analysis, Lockheed Martin Rotary & Mission Systems (RMS)

1:15 – 1:40 pm **Accelerating the Delivery of Threat Missile Models for Survivability Modeling and Simulation**
KING HALL
Eric Joyce
Senior Lead Engineer, Booz Allen Hamilton

1:40 – 2:05 pm **Using Modeling and Simulation to Determine Cyber Survivability**
KING HALL
Dr. William Bryant
Technical Fellow, Modern Technology Solutions, Inc.

2:05 – 2:35 pm **Networking Break**
KING HALL FOYER

2:05 – 2:35 pm **Poster and Display Hall Open**
KING HALL AUDITORIUM UPPER LEVEL

2:35 – 3:00 pm **Aircraft CBRN and Live Fire Testing, Digital Technologies for Survivability Testing, and Future Threats Considerations**
KING HALL
Bill Greer
Senior CBRN Research Analyst, U.S. Air Force Research Laboratory

3:00 – 3:25 pm **LO's Not Dead: A Discussion on Modeling, Assumptions, and LO Survivability**
KING HALL
Maj Derek Ecklebe, USAF
B-2 Chief of Survivability & Special Programs & Assistant Director of Operations,
509th Operations Support Squadron, Whiteman Air Force Base

3:25 – 3:35 pm **Closing Remarks**
KING HALL

5:00 – 7:00 pm **Networking Reception and Awardee Celebration**
OFFSITE LOCATION : *A TASTE OF MONTEREY*
700 Cannery Row Suite KK, Monterey, CA 93940

*Ticket required for all attendees and guests. Additional tickets can be purchased at the registration desk.

Thursday, November 7

7:00 am – 4:05 pm **Registration Open**
KING HALL FOYER

7:00 – 8:00 am **Continental Breakfast**
KING HALL FOYER

8:00 – 8:15 am **Welcome and Administrative Remarks**
KING HALL

Barry Vincent
Chief Engineer, Booz Allen Hamilton
Symposium Chair, Air Combat Survivability Division, NDIA

Lt Gen Chris Bogdan, USAF (Ret)
Executive Vice President, Booz Allen Hamilton
Chair, Air Combat Survivability Division, NDIA

8:15 – 8:20 am **Introduction to Fireside Chat**
KING HALL

Dr. Mark Couch
Research Staff Member, Institute for Defense Analyses

8:20 – 9:00 am

Fireside Chat: Air Combat Survivability Past, Present, Future

KING HALL

Dr. Mark Couch

Research Staff Member, Institute for Defense Analyses
Moderator

Brig Gen Guy Walsh, USAF (Ret)

Executive Vice President & Chief Operating Officer, NDIA

Lt Gen Chris Bogdan, USAF (Ret)

Former KC-46 and F-35 PEO and Commander, AF Big Safari

SESSION 3 – VULNERABILITY • Session Chair: Thao Nguyen & Tara Trumbull

9:00 – 9:10 am

Introduction to Session

KING HALL

Thao Nguyen

Senior Technical Fellow, Systems Survivability-Vulnerability Engineering, Pratt & Whitney-RTX

Tara Trumbull

Senior Principal Systems Architect, System of Systems Architecture Section Lead, Raytheon-RTX

9:10 – 9:35 am

A New Look at Ullage Vulnerability

KING HALL

Colton Lapworth

Test Manager, WPAFB, 704 TG/OL-AC

Timothy Staley

Vulnerability Analysis Technical Expert, AFLCMC/EZJA

9:35 – 10:05 am

Networking Break

KING HALL FOYER

10:05 – 10:30 am

Fuel Tank Shallow Jet Spurt Characterization and Modeling Using Natural Frequency

KING HALL

Maj John Hansen, USAF

Assistant Professor of Aerospace Engineering, U.S. Air Force Institute of Technology

10:30 – 10:55 am

Leveraging Cyber Operations Lethality & Effectiveness (COLE) Tool for Aircraft Survivability/Vulnerability Analysis

KING HALL

Kira Lindke

COLE Test & Evaluation Lead, Applied Research Associates

10:55 – 11:20 am

Advancing Military Aircraft Biological Threat Survivability and Recovery

KING HALL

Michael Horenziak

Research Chemical Engineer, U.S. Air Force Research Laboratory

11:20 – 11:35 am

Transition to Awards Luncheon

11:35 am – 1:15 pm

Awards Luncheon

HERRMANN HALL

Robert Gierard

Defense Mission Professional, Booz Allen Hamilton

Dale B. Atkinson Air Combat Survivability Award for Lifetime Achievement

Charles Frankenberger, III

Systems Vulnerability Branch Head, Naval Air Warfare Center Weapons Division, China Lake

RADM Robert H. Gormley Air Combat Survivability Award for Leadership

Barry Strattan

Chief Engineer, Advanced Technology Development Center, Northrop Grumman Aeronautics Systems

Patrick S. Sharp Air Combat Survivability Award for Technical Achievement

Timothy Conn

Chief Scientist, National Radar Cross Section Test Facility, Reliance Test and Technology

Professor Robert E. Ball Young Professional Award for Air Combat Survivability

Hannah McWilliams

Senior Staff, Strategic Operations Researcher, Lockheed Martin Aeronautics

1:15 – 1:30 pm

Reconvene

KING HALL

Air Combat Survivability Awards



Dale B. Atkinson Air Combat Survivability Award for Lifetime Achievement

This award is presented to an individual who has made significant technical and leadership contributions throughout their professional career, spanning many or most of the numerous facets of aircraft combat survivability.



RADM Robert H. Gormley Air Combat Survivability Award for Leadership

This award is presented to a person who has made major leadership contributions to combat survivability.



Patrick S. Sharp Air Combat Survivability Award for Technical Achievement

This award is presented to an individual who has made a significant technical contribution to any aspect of survivability.



Professor Robert E. Ball Young Professional Award for Air Combat Survivability

This award is presented to an early-to-mid career person who has made a significant technical, analytic, or tactical contribution to any aspect of survivability.

1:30 – 1:40 pm

Session Introduction

KING HALL

Greg Ruderman

Senior Military Systems Evaluator, Land and Expeditionary Warfare,
Office of the Director, Operational Test and Evaluation

1:40 – 2:05 pm

Cognitive EW Intel and T&E Roadmap, Investments, and Path Forward

KING HALL

Brandon Stringfield

Senior Research Scientist, Georgia Tech Research Institute

2:05 – 2:30 pm

Cognitive EW Challenges

KING HALL

Brandon Stringfield

Senior Research Scientist, Georgia Tech Research Institute

2:30 – 3:00 pm

Networking Break

KING HALL FOYER

3:00 – 3:25 pm

Radio Frequency (RF) Electromagnetic Warfare (EW) Demonstrator (REWD) for Rapid Reprogramming of Mission Data Files to Combat Future Electronic Warfare Threats

KING HALL

Jason Marcum

Lead Engineer, Booz Allen Hamilton

3:25 – 3:50 pm

Assessing Potential Clutter from Beyond Radar Line-of-Sight Wind Turbines

KING HALL

Roger Davis

Subject Matter Expert, Reliance Test & Technology, LLC

3:50 – 4:05 pm

Closing Remarks

KING HALL

4:05 pm

Symposium Adjourns

The 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.



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Plan Ahead for Success | 2024 – 2025 Featured Meetings, Conferences, and Events



I/ITSEC 2024

The World's Largest Modeling, Simulation & Training Event

December 2 – 6, 2024 | Orlando, FL



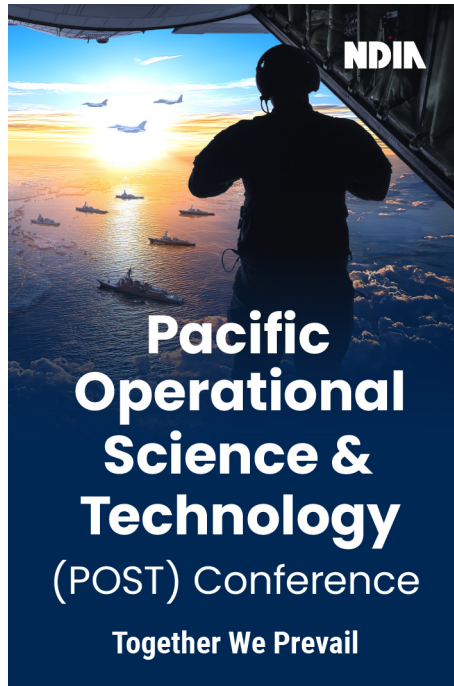
2025 Tactical Wheeled Vehicles Conference

February 24 – 26, 2025 | Reston, VA



2025 Undersea Warfare Spring Conference

March 17 – 19, 2025* | San Diego, CA



Pacific Operational Science & Technology (POST) Conference

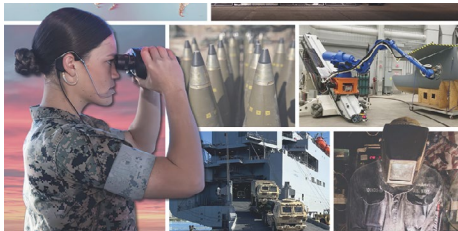
Together We Prevail

March 3 – 7, 2025** | Honolulu, HI



2025 Munitions Executive Summit

March 18 – 19, 2025 | Parsippany, NJ



39th Annual National Logistics Forum

February 11 – 13, 2025 | Orlando, FL



DLA Supply Chain Alliance Conference & Exhibition

June 11 – 12, 2025 | Richmond, VA



35th Annual Special Operations Symposium

February 19 – 20, 2025 | Washington, D.C.



2025 Human Systems Conference

March 11 – 12, 2025 | Arlington, VA



MODSIM World 2025

August 18 – 20, 2025 | Norfolk, VA

**All Classified | **Partially Classified*

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