

2018 GROUND ROBOTICS CAPABILITIES CONFERENCE & EXHIBITION

ADAPTING AT THE SPEED OF A CHANGING WORLD



April 10 – 11, 2018

The Waterford Reception Center

Springfield, VA

NDIA.org/Robotics

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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 information, visit **NDIA.org**



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DIVISION LEADERSHIP

Jorgen Pedersen

Division Chair

Matt Dooley

Vice Chair

ROBOTICS DIVISION

WHO WE ARE

NOTES

The Robotics Division focuses on security-related robotics technology. The group covers development, acquisition, application, integration and sustainment of unmanned ground systems to improve war fighters' capabilities and survivability — with an emphasis on underlying technologies that will yield integrated, interoperable unmanned systems to meet present and future operational requirements.



SCHEDULE AT A GLANCE

MONDAY, APRIL 9

Registration

Grand Foyer 12:00 – 5:00 pm

TUESDAY, APRIL 10

Registration

Grand Foyer 7:00 am - 6:00 pm

Networking Breakfast

Miller Ballroom 7:00 am - 8:00 am

General Session

Singleton Ballroom 8:00 am - 5:00 pm **Exhibit Hall Open**

Sternberg/Hazel Ballroom 9:30 am – 6:00 pm

Lunch

Sternberg/Hazel and Miller Ballrooms 12:35 – 1:35 pm

Networking Reception in the Exhibit Hall

Sternberg/Hazel Ballroom 5:00 – 6:00 pm

WEDNESDAY, APRIL 11

Registration

Grand Foyer
7:00 am - 2:45 pm

Networking Breakfast

Miller Ballroom 7:00 am – 8:00 am

General Session

Singleton Ballroom 8:00 am - 2:45 pm

Exhibit Hall Open

Sternberg/Hazel Ballroom 9:00 am - 1:00 pm

Lunch

Sternberg/Hazel and Miller Ballrooms 11:25 am – 12:10 pm

EVENT INFORMATION

LOCATION

The Waterford Reception Center 6715 Commerce Street Springfield, VA 22150

EVENT WEBSITE

NDIA.org/Robotics

EVENT CONTACT

Trish Wildt, CMP

Associate Director of Meetings twildt@ndia.org

PLANNING COMMITTEE Dan Deguire Matt Dooley Thomas Gonzalez Jesse Hurdus

Robert Mawson

Jorgen Pedersen Kevin Ryan Bill Thomasmeyer Patrick Weldon **EVENT THEME**

Adapting at the Speed of a Changing World

ATTIRE

Appropriate Dress for the conference is business for civilians and Class A uniform or uniform of the day for military personal.

SURVEY AND PARTICIPANT LIST

A survey and participant list will be sent to attendees at the conclusion of the conference.

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.

AGENDA

MONDAY, APRIL 9

12:00 - 5:00 pm

REGISTRATION

GRAND FOYER

TUESDAY, APRIL 10

7:00 am - 6:00 pm **REGISTRATION**

GRAND FOYER

7:00 – 8:00 am **NETWORKING BREAKFAST**

MILLER BALLROOM

8:00 – 8:15 am WELCOME AND INTRODUCTIONS

SINGLETON BALLROOM

Jorgen Pedersen Chair, Robotics Division



8:15 – 8:55 am **KEYNOTE ADDRESS**

SINGLETON BALLROOM

Jose Gonzalez

Deputy Assistant Secretary of Defense, Office of the Under Secretary

of Defense for Acquisition, Technology and Logistics

8:55 – 9:35 am **TPO MRAS**

SINGLETON BALLROOM

Don Sando

Deputy to the Commanding General, Maneuver Center of Excellence, Fort Benning

9:35 – 10:05 am NETWORKING BREAK IN THE EXHIBIT HALL

STERNBERG/HAZEL BALLROOM

10:05 – 10:45 am OPERATIONAL LEVELS OF AUTONOMOUS SYSTEMS

SINGLETON BALLROOM

Matt Dooley

Principal Consultant, Robotics and Autonomous Systems, JHNA, Inc.

10:45 am - 12:05 pm PANEL—UGV-UAV TEAMING

SINGLETON BALLROOM

MAJ Mike Dvorak, USA

Army Capabilities Integration Center

Moderator

Errol Farr

Director, Business Development,

AeroVironment, Inc.

Robert Mawson

Senior Business Development Manager,

QinetiQ North America

Al Rebara

Director, Ground Robotics, Roboteam Inc.

LtCol Kevin Reilly, USMC

Marine Corps Warfighting Laboratory

Mack Traynor

President and CEO, ReconRobotics, Inc.

David Viens

Senior Business Development Executive,

Endeavor Robotics

12:05 – 12:35 pm **AWARDS CEREMONY**

SINGLETON BALLROOM

Tom Gonzalez

Senior Vice President of Corporate Development, Stratom, Inc.

Presentation of Robotics Innovator Award and 2018 Robotics Champion

12:35 – 1:35 pm **NETWORKING LUNCH**

STERNBERG/HAZEL AND MILLER BALLROOMS

1:35 – 2:15 pm **DEFENSE MOBILITY ENTERPRISE**

SINGLETON BALLROOM

Tony Melita

Executive Director, National Advanced Mobility Consortium

2:15 – 2:55 pm ACCELERATING ACQUISITION (SECTION 809)

SINGLETON BALLROOM

Darryl Scott

Corporate Vice President, Contracts and Pricing, The Boeing Company

2:55 – 3:25 pm NETWORKING BREAK IN THE EXHIBIT HALL

STERNBERG/HAZEL BALLROOM

3:25 – 4:05 pm TARDEC ROBOTICS

SINGLETON BALLROOM

Kevin Mills

Associate Director, U.S. Army Tank Automotive Research, Development, and Engineering Center

4:05 – 4:45 pm PM FP ROBOTICS PORTFOLIO

SINGLETON BALLROOM

Bryan McVeigh

Project Manager, PM Force Protection

4:45 – 5:00 pm CLOSING REMARKS

SINGLETON BALLROOM

Jorgen Pedersen

Chair, Robotics Division

5:00 – 6:00 pm NETWORKING RECEPTION IN THE EXHIBIT HALL

STERNBERG/HAZEL BALLROOM

Light hors d'oeuvres will be served with a cash bar.



REGISTER NOW

33RD ANNUAL NATIONAL TEST & EVALUATION CONFERENCE

May 15 – 17, 2018 Holiday Inn Solomons Solomons, MD NDIA.org/TANDE18



WEDNESDAY, APRIL 11

7:00 am – 2:45 pm **REGISTRATION**

GRAND FOYER

7:00 – 8:00 am **NETWORKING BREAKFAST**

MILLER BALLROOM

8:00 – 8:05 am INTRODUCTIONS

SINGLETON BALLROOM

Jorgen Pedersen Chair, Robotics Division

8:05 – 8:45 am **ARMY RAS**

SINGLETON BALLROOM

MG John George, USA

Director, Force Development, U.S. Army

8:45 – 9:25 am DIUX STRATEGY AND UPDATE

SINGLETON BALLROOM

Orin Hoffman

Autonomy and Robotics, DIUx

9:25 – 9:55 am NETWORKING BREAK IN THE EXHIBIT HALL

STERNBERG/HAZEL BALLROOM

9:55 – 10:40 am UNMANNED SYSTEMS SAFETY PRECEPTS

SINGLETON BALLROOM

Jeffrey Fornoff

Electronics Engineer, U.S. Army ARDEC

Michael Demmick

Executive Secretary, Joint Weapon Safety Working Group (JWSWG), & Weapon System Explosives Safety

Review Board (WSESRB) SME for Large Caliber Ammunition & Large Caliber Guns

10:40 – 11:25 am USAF GROUND ROBOTICS

SINGLETON BALLROOM

Dr. Bobby Diltz

U.S. Air Force Civil Engineer Center

11:25 am – 12:10 pm **NETWORKING LUNCH**

STERNBERG/HAZEL AND MILLER BALLROOMS

12:10 – 1:50 pm PANEL—PROTOTYPING

SINGLETON BALLROOM

Bill Thomasmeyer

Consultant, National Advanced Mobility Consortium (NAMC)

Moderator

LTC Cory Berg, USA

Project Manager, Force Projection

LTC Stuarty Hatfield, USA

Branch Chief, Soldier Systems and Unmanned Ground U.S. Army Systems FDD, Army G-8

Jered Leo

Attorney, Business Law, Picatinny Legal Office

Patrick McGrath

Chief, Material System Division, U.S. Army Training and Doctrine Command (TRADOC), Capability Manager, EOD

Patrick McKinney

Department of the Army Systems Coordinator (DASC), U.S. Army

1:50 – 2:35 pm RUSSIAN MILITARY UNMANNED GROUND VEHICLES

DEVELOPMENT

SINGLETON BALLROOM

Sam Bendett

Research Analyst, CNA Corporation, Russia Studies Program

2:35 – 2:45 pm CLOSING REMARKS

SINGLETON BALLROOM

Jorgen Pedersen Chair, Robotics Division

2:45 pm CONFERENCE AJOURNS

SINGLETON BALLROOM

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.



EXHIBIT DISPLAY HOURS

TUESDAY, APRIL 10 STERNBERG/HAZEL BALLROOM

9:30 am - 6:00 pm

EXHIBIT HALL OPEN

WEDNESDAY, APRIL 11 STERNBERG/HAZEL BALLROOM)

9:00 am - 1:00 pm

EXHIBIT HALL OPEN

EXHIBITORS

ENDEAVOR ROBOTICS

Based in Chelmsford, Mass., Endeavor Robotics is the world's largest supplier of tactical unmanned ground vehicles, delivering more than 6,500 robots to customers in over 40 countries. Every day Endeavor products operate in areas of conflict, assist law enforcement agencies, and respond to natural disasters to protect lives. Endeavor Robotics is 100% based in the United States, including R&D, manufacturing, staffing and ownership.

GHOST ROBOTICS

Robots That Feel the World® Ghost Robotics™ is revolutionizing legged robotics and the market for autonomous unmanned ground vehicles (Q-UGVs) used in unstructured terrain and harsh environments. Our Q-UGVs are unstoppable. Beyond all terrain operation, a core design principle for our legged robots is size-scalability, and reduced mechanical complexity with total software (SDK) control when compared to other legged and traditional wheeled and tracked UGVs on the market.

HARRIS CORPORATION

308

Harris Corporation is a leading technology innovator, solving customers' toughest mission-critical challenges by providing solutions that connect, inform and protect. Harris supports government and commercial customers around the world. Learn more at harris.com.

JHU APPLIED PHYSICS LABORATORY

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MED-ENG

301

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100

Med-Eng provides Explosive Ordnance Disposal (EOD) suits, tools and robots, as well as Blast Attenuation Seats, and Thermal Management systems for Crew Survivability. All branches of the U.S. military trust Med-Eng Bomb Suits for protection against explosives, including Improvised Explosive Devices (IEDs). Med-Eng is a brand of The Safariland Group.

NATIONAL ROBOTICS ENGINEERING CENTER 302

NREC is home to the world's leading robotics experts. Our programs place NREC at the forefront in unmanned ground vehicle design, autonomy, sensing and perception, machine learning, machine vision, autonomous navigation, humanoid, manipulation, operator assistance, robotic safety as well as testing and validation. Stop by our booth to know more.

OPENJAUS, LLC

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OpenJAUS is a leading JAUS interoperability and integration company that provides beautiful, easy to implement JAUS Products and consulting packages. Established in 2010, OpenJAUS has been a leader in the adoption of the JAUS and IOP standards in the industry. OpenJAUS is dedicated to providing the most complete and robust middleware solutions for RAS-G Interoperability Profiles (IOP), JAUS and AEODRS programs of record.

QINETIQ NORTH AMERICA

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QinetiQ North America delivers world-class technology and revolutionary products to defense, security, and commercial markets worldwide. Our offerings range from survivability and unmanned systems to power, controls, sensors and transportation solutions. Customers rely on our products to increase readiness, improve mission effectiveness, streamline operations, increase situational awareness and enhance security. QinetiQ North America is part of QinetiQ Group PLC (QQ: LSE), one of the world's leading defense and security technology companies.

RE2 ROBOTICS

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RE2 Robotics develops mobile robotic technologies that enable robot users to remotely interact with their world from a safe distance -- whether on the ground, in the air, or underwater. RE2 creates interoperable robotic manipulator arms with human-like performance, intuitive human robot interfaces, and advanced autonomy software for mobile robotics.

RECONROBOTICS, INC.

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ReconRobotics is the world leader in tactical micro-robot and personal sensor systems. Worldwide, over 5,000 of the company's robots have been deployed to the U.S. military and international friendly forces, federal, state and local law enforcement agencies, bomb squads and fire/rescue teams. The Recon Scout® and Throwbot® devices are used daily to protect their personnel, minimize collateral damage, and gain immediate reconnaissance within dangerous and hostile environments.

ROBOTEAM, INC.

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Roboteam designs, develops and manufactures cutting edge, user-oriented, multi-purpose, unmanned platforms and controllers for Defense, Law Enforcement and Public Safety missions. Roboteam provides solutions for: Tactical Intelligence Missions, Surveillance and Reconnaissance (ISR), Explosive Ordnance Disposal (EOD), Subterranean/Tunnel Investigations, Search & Rescue, and Chemical, Biological, Radiological, Nuclear and hazardous material removal (CBRNE/HAZMAT).

SOAR TECHNOLOGY, INC.

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The same technologies that have enabled SoarTech to bring human level intelligence and natural, multi-modal interfaces to simulation systems are now being used to build intelligent, autonomous, and collaborative robotic systems. Robotic intelligence frees humans from being tethered to a robot and makes the robot a true teammate instead of a piece of equipment.

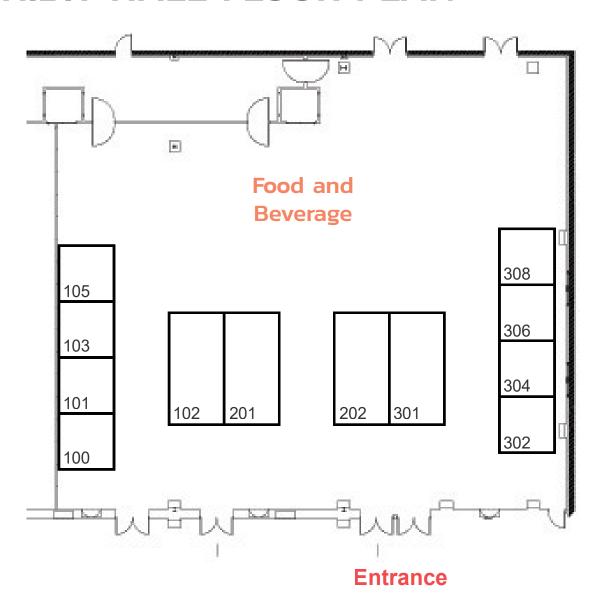
EXHIBITORS BY BOOTH NUMBER

As of 4/518

Med-Eng100	Roboteam Inc
JHU Applied Physics Laboratory	Endeavor Robotics
QinetiQ Ltd102	National Robotics Engineering Center 302
OpenJAUS LLC	Soar Technology, Inc
Ghost Robotics	ReconRobotics, Inc
RE2 Robotics	Harris Corp



EXHIBIT HALL FLOOR PLAN



THANK YOU TO OUR SPONSORS





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