# NDIA

# 2017

Ground Robotics
Capabilities
Conference
& Exhibition

Preparing for the Third Offset







## **TUESDAY, MARCH 21, 2017**

12:ООРМ – 5:ООРМ REGISTRATION OPEN 12:ООРМ – 5:ООРМ EXHIBITOR MOVE-IN

# **WEDNESDAY, MARCH 22, 2017**

7:00AM - 6:00PM REGISTRATION OPEN

7:00am - 8:00am NETWORKING CONTINENTAL BREAKFAST

8:00am - 8:15am OPENING REMARKS

Mr. Jorgen Pedersen, Chairman, NDIA Robotics Division; President & CEO, RE2, Inc.

8:15<sub>AM</sub> - 8:45<sub>AM</sub> OUSD ROBOTICS

Mr. Robert Gold, Director, Engineering Enterprise, Office of the Under Secretary of

Defence (ATL)

8:45AM - 9:15AM ROBOTICS ADDRESS

Mr. Paul Scharre, Senior Fellow and Director of the Future of Warfare Initiative, The

Center for a New American Security

9:00AM - 6:00PM EXHIBIT AREA OPEN

9:15<sub>AM</sub> - 9:45<sub>AM</sub> ARMY ROBOTICS

BG John George, USA, Director, Capabilities Developments Directorate, Army

Capabilities Integration Center

9:45<sub>AM</sub> - 10:15<sub>AM</sub> DARPA ROBOTICS

Mr. Brad Tousley, Office Director, Tactical Technology Office, Defense Advanced

Research Projects Agency

10:15<sub>AM</sub> - 10:45<sub>AM</sub> NETWORKING BREAK IN THE EXHIBIT AREA

10:45AM - 12:00PM WHERE IOP, VICTORY AND ROS-M CONVERGE PANEL

Moderator: Mr. Will Thomasmeyer, Consultant, National Advanced Mobility Consortium

Panelists:

Mr. Orin Hoffman, Autonomy and Robotics, HQE, DIUx

Mr. Mark Mazzara, Robotics Interoperability Lead, PM Force Projection

Mr. Michael Moore, President, Senior SME, Moore Integrity Engineering

Mr. David Stone, GCE Project Officer Robotics, Marine Corps Warfighting Lab,

Science and Technology Division

12:00pm - 12:30pm AWARDS CEREMONY

12:30<sub>PM</sub> - 1:45<sub>PM</sub> NETWORKING LUNCHEON

1:45PM - 2:15PM AIR FORCE ROBOTICS

Dr. Robert Diltz, Robotics Program Manager, Air Force Civil Engineer

Center/AFCEC/CXAE

2:15<sub>PM</sub> - 2:45<sub>PM</sub> COUNTERING UNMANNED SYSTEMS

Mr. Chris O'Donnell, Director, Joint Rapid Acquisition Cell Executive Secretary,

Warfighter Senior Integration Group

2:45pm - 3:15pm DIUX AUTONOMY PRESENTATION

Mr. Orin Hoffman, Autonomy and Robotics, HQE, DIUx

3:15рм - 3:45рм

NETWORKING BREAK IN THE EXHIBIT AREA

3:45рм - 5:00рм

COMMON CONTROL ARCHITECTURE PANEL

Moderator: Dr. Parag Batavia, President, Neya Systems, LLC

#### Panelists:

- Mr. Jeff Hyams, Senior Software Engineer, Neya Systems, LLC
- Mr. Tom Phelps, Director of New Products, Endeavor Robotics
- Mr. Dave Rusbarsky, Senior Software Engineer, RE<sup>2</sup> Robotics
- Mr. Matt Waters, Senior Project Manager, Dynetics (Invited)
- Mr. Jun Yu, Technical Program Manager, Unmanned Systems, QinetiQ North America (Invited)

5:00pm - 6:00pm

NETWORKING RECEPTION IN THE EXHIBIT AREA

## THURSDAY, MARCH 23, 2017

7:00<sub>AM</sub> - 2:45<sub>PM</sub> REGISTRATION OPEN

7:00am - 8:00am NETWORKING CONTINENTAL BREAKFAST

8:00am - 8:30am OPENING KEYNOTE ADDRESS

LTG Joseph Anderson, USA, HQDA Deputy Chief of Staff, G-3/5/7

8:30AM - 9:00AM TARDEC ROBOTICS

Dr. Paul Rogers, Director, U.S. Army Tank Automotive Research Development

& Engineering Center

9:00am - 1:00pm EXHIBIT AREA OPEN

9:00am - 9:30am ARL ROBOTICS

Mr. Dan Baechle, Mechanical Engineer, U.S. Army Research Laboratory (Invited)

Mr. Harris Edge, *Army Research Lab* 

9:30AM - 10:00AM NETWORKING BREAK IN THE EXHIBIT AREA

10:00am - 11:15am UNMANNED SYSTEMS TESTING PANEL

Moderator: Mr. Bob Mawson, QinetiQ-North America

#### Panelists:

- Mr. Adam Bennett, Test and Training Lead, Robotic Logistics Support Center (RLSC)
- Ms. Jean Imboden, Test Lead, PM UGV
- Mr. Brian Wise, Senior Test Officer, Army Test and Evaluation Command (ATEC)
- Mr. Dave Stone, Marine Corp Warfighting Lab (MCWL)
- Mr. Michael Kastanas, QinetiQ-North America (QNA)

11:15AM - 11:45AM NAVY EOD ROBOTICS

Mr. Jim Ryan, PMS-408, U.S. Navy

11:45AM - 1:00PM NETWORKING LUNCHEON

1:00pm - 1:30pm Center 1:30pm - 2:00pm 2:00pm - 2:30pm 2:30pm - 2:45pm	ROBOTIC WINGMAN ADDRESS MAJ Mike Dvorak, USA, Army Capabilities Integration  PM FORCE PROJECTION ROBOTICS Mr. Bryan McVeigh, Project Manager, Force Projection  CLOSING KEYNOTE ADDRESS The Honorable Frank Kendall  CLOSING REMARKS Mr. Jorgen Pedersen, Chairman, NDIA Robotics Division; President & CEO, RE <sup>2</sup> , Inc.  CONFERENCE ADJOURNS	THANK YOU TO OUR PROGRAM COMMITTEE  CONFERENCE CHAIR Mr. Jorgen Pedersen Chairman, NDIA Robotics Division; President & CEO, RE <sup>2</sup> , Inc.
NOTES		Dr. Parag Batavia Neya Systems, LLC
		Mr. Dan Deguire QinetiQ, North America
		Mr. Mathew Dooley John H. Northrop & Associates
		Ms. Angela Duff Booz Allen Hamilton
		Mr. Thomas Gonzalez Stratom, Inc.
		Mr. Jesse Hurdus TORC Robotics
		Mr. Kevin Ryan Endeavor Robotics
		Mr. William Thomasmeyer National Advanced Mobility Consortium
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# **EXHIBITOR INFORMATION**

By Company	Booth #
Alion Science & Technology	307
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QinetiQ North America	301
QSA Global, Inc.	105
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Telefactor Robotics	208

#### **EXHIBIT SCHEDULE**

#### **EXHIBITOR MOVE IN:**

Tuesday, March 21, 2017 12:00pm - 5:00pm

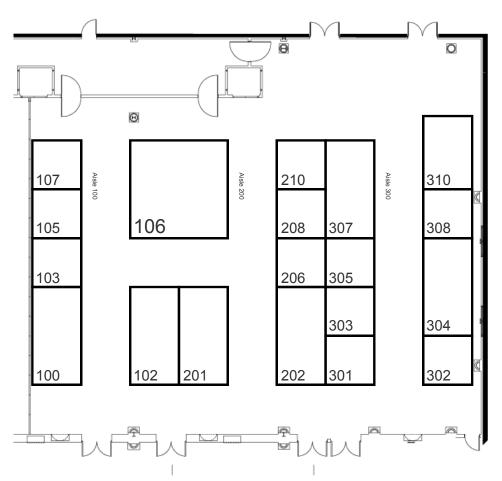
#### **EXHIBIT HALL HOURS:**

Wednesday, March 22, 2017 9:00<sub>AM</sub> - 6:00<sub>PM</sub> Thursday, March 23, 2017

9:00ам - 1:00рм

#### **EXHIBITOR MOVE OUT:**

Thursday, March 23, 2017 1:00<sub>PM</sub> - 5:00<sub>PM</sub>



#### **ALION SCIENCE & TECHNOLOGY**

**307** 

Realion Robotics joins the extensive capabilities of two companies at the vanguard of defense engineering: Alion Science & Technology and Reamda Limited. We are reimagining the future of robots, with technology that's more reliable, more affordable, and more capable than ever. Realion Robotics delivers the solutions and services you need to achieve your mission: engineering, integration, communications platform development, program management, operations and logistics, rapid prototyping & more.

#### AM GENERAL 106

The MV-1A offers a driver-less solution in a commercially available, streetready, spacious and great driving vehicle offering easy entry and exit convenience while meeting or exceeding Americans with Disabilities Act (ADA) guidelines right off the assembly line. Designed for wheelchair accessibility from the ground up, AM General's automatic driving option adds another valuable degree of freedom for those who need it.

AMBOT 107

AMBOT provides solutions for EOD, Leader/Follower, Autonomous Vehicle, Autonomous Convoy, Autonomous Transport, ISR and Subterranean Investigations. Our focus on Interoperability allows our UGV's to be seamlessly integrated with a wide range of DoD mission profiles.

#### CARNEGIE ROBOTICS 103

Carnegie Robotics, LLC (CRL) is a leading provider of advanced robotics sensors and platforms for defense, agriculture, & mining. CRL designs and builds reliable & robust 3D sensors, GPS-denied pose systems, and advanced field robots. In 2014, the US Army awarded CRL a \$23M contract to develop the Autonomous Mine Detection System (AMDS), a platform to detect, mark and neutralize explosive hazards at standoff in complex and urban terrain.

#### ENDEAVOR ROBOTICS 201

With nearly 30 years developing practical robots for defense and industrial applications, iRobot has delivered more than 6,000 mobile robots worldwide. We have partnered with customers and end-users to maximize capabilities and to integrate mobile robots with standard operations in numerous industries. Our robots provide a safer, stand-off distance from danger and gather actionable intelligence to protect military personnel, first responders, workers, the public and the environment.

#### HARRIS CORP.

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 in more than 100 countries and has approximately \$6 billion in annual revenue. The company is organized into three business segments: Communication Systems, Space and Intelligence Systems and Electronic Systems.

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#### NDIA 308

NDIA's vast network of members embodies the full spectrum of corporate, government, academic, and individual stakeholders who advocate for a strong, vigilant, and innovative national defense. As part of this diverse network, over 1,600 corporate and 85,000 individual members are actively developing best practices, initiatives, technology, and products in defense with continued guidance and feedback from key stakeholders. NDIA Affiliates are subsidiary organizations that focus on specific areas and missions related to it's community of interest. Each affiliate has its own membership, structure, and dues.

#### 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.

#### NEYA SYSTEMS, LLC 305

Neya Systems LLC is a leading developer of advanced unmanned systems technologies. We work with defense, homeland security, and commercial customers to deliver novel solutions to some of the hardest problems related to autonomy, computer vision, and general unmanned systems development and deployment.

#### MILREM ROBOTICS, INC. 202

Milrem Robotics is the designer and manufacturer of THeMIS: Tracked Hybrid Modular Infantry System, a modular diesel-electric hybrid unmanned ground vehicle for SMET and other purposes such as a Mobile Remote Weapons Station with integrated Target Acquisition and Fire Control. Milrem is a Northern European Transportation and Automotive Company of 1000 employees with a presence in the United States in Arlington, Virginia as a Delaware corporation.

#### **QINETIQ NORTH AMERICA**

301

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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.

#### QSA GLOBAL, INC. 105

QSA Global Inc., manufacturer of OpenVision™ livevideo x-ray systems, has a worldwide reputation for quality, reliability and safety. OpenVision™ achieves realtime inspection and investigation of unattended items and suspicious situations. OpenVision™ is lightweight and flexible, enabling mission specific configurations; reducing risk while investigating potential threats and is deployable in hand-held or robot equipped mode in under two minutes.

#### RE2 ROBOTICS 102

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.

#### REMOTEC/NORTHROP GRUMMAN 100

Military, EOD, first responders and law enforcement agencies worldwide rely on Remotec to help assure a safe, successful outcome for their most challenging missions. Remotec is the global leader in mobile robot systems for hazardous-duty operations.

#### RESEARCH ROBOTICS, LLC

Robotic Research is a small disadvantaged engineering firm committed to finding innovative, cost-effective solutions in unmanned systems development with a focus on autonomous mobility.

#### ROBOTEAM, INC. 304

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).

#### **TELEFACTOR ROBOTICS**

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At Telefactor Robotics, we design and build advanced vision and dexterity solutions for robots, with special focus on the realistic projection of human-like capabilities for remote operations. Products include HARV head-aimed vision systems and gimbals, VISPRO H.264 cameras and encoders, and Contineo grippers and dexterity systems.





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