

AT THE HEART
OF THE MISSION

NDIA



2019 **ROBOTICS** CAPABILITIES CONFERENCE & EXHIBITION

Multi-Domain Operational Robotics

April 24 – 25 | Columbus, GA | NDIA.org/Robotics

AGENDA

TUESDAY, APRIL 23

- 12:00 – 5:00 pm **REGISTRATION**
SOUTH HALL LOBBY
- 6:00 – 9:00 pm **WELCOME RECEPTION**
Hosted by NAMC
COCA-COLA SPACE SCIENCE CENTER

WEDNESDAY, APRIL 24

- 7:00 am – 6:30 pm **REGISTRATION**
SOUTH HALL LOBBY
- 7:00 – 8:00 am **NETWORKING BREAKFAST**
SOUTH HALL LOBBY
- 8:00 – 8:15 am **OPENING REMARKS**
CENTER HALL
- LTC Matt Dooley, USA (Ret)**
Chair, NDIA Robotics Division
- MG James Boozer, USA (Ret)**
Chief of Staff, National Defense Industrial Association
- MG Gary Brito, USA**
Commanding General, Maneuver Capabilities Development and Integration Directorate, U.S. Army Futures Command, Ft. Benning
- 8:15 – 9:10 am **KEYNOTE: PREPARING FOR MULTI-DOMAIN OPERATIONS**
CENTER HALL
- LTG Eric Wesley, USA**
Deputy Commanding General, Futures and Concepts Center, U.S. Army Futures Command
- 9:00 am – 7:00 pm **EXHIBIT HALL OPEN**
SOUTH HALL
- 9:10 – 10:05 am **KEYNOTE: HELPING INDUSTRY UNDERSTAND THE ARMY'S EFFORT TO TRANSFORM ACQUISITIONS**
CENTER HALL
- Helen Greiner, SES**
Army HQE Robotics, Autonomous Systems and Artificial Intelligence, Assistant Secretary of the Army (Acquisition, Logistics and Technology)

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

10:35 – 11:20 am **PURSUING ROBOTIC AUTONOMY THROUGH TRANSFORMATION**
CENTER HALL

Paul Decker

Deputy Chief Roboticist
U.S. Army Combat Capabilities Development Command, Ground Vehicle Systems Center

LTC Stu Hatfield, USA (Ret)

Robotics Branch Chief, Force Development Directorate, Army G-8

11:20 am – 12:20 pm **ADVANCING AUTONOMY: INDUSTRY PERSPECTIVE**
CENTER HALL

Ted Maciuba

Deputy Director, Robotics Requirements, Maneuver Capabilities Development and Integration Directorate, U.S. Army Futures Command
Moderator

Carl Conti

Spatial Integrated Systems (SIS)

Jeff Schneider

Carnegie Mellon University

Buck Tanner

Combat Vehicle Chief Engineer, BAE Systems

Mack Traynor

Chief Executive Officer, Recon Robotics

12:20 – 12:30 pm **AWARDS CEREMONY**
CENTER HALL

12:30 – 1:30 pm **NETWORKING LUNCH IN THE EXHIBIT HALL**
SOUTH HALL

1:30 – 2:30 pm **NEXT GENERATION COMBAT VEHICLE & ROBOTIC COMBAT VEHICLE UPDATES**
CENTER HALL

LTC Stu Hatfield, USA (Ret)

Robotics Branch Chief, Force Development Directorate, Army G-8
Moderator

COL Warren Sponsler, USA

Next Generation Combat Vehicle Cross-Functional Team

LTC Jon St. John, USA

Product Lead Robotic Combat Vehicle, PM NGCV, PEO GCS

COL Kevin Vanyo, USA

CCDC Ground Vehicle Systems Center

- 2:30 – 3:15 pm **A CONSTELLATION OF MULTI-DOMAIN ROBOTIC CAPABILITIES**
CENTER HALL
- COL Thomas Nelson, USA**
Director, Robotics Requirements, Maneuver Capabilities Development and Integration Directorate, U.S. Army Futures Command
- LTC Jonathan Bodenhamer, USA**
Product Manager, Applique and Large Unmanned Ground Systems, PM-FP
- 3:15 – 3:45 pm **NETWORKING BREAK IN EXHIBIT HALL**
SOUTH HALL
- 3:45 – 4:45 pm **ROBOTICS UPDATES BY SERVICE**
CENTER HALL
- COL Johnny Cochran, USA**
Deputy Director, Close Combat Lethality Task Force, Office of the Secretary of Defense
- LTC Matt Dooley, USA (Ret)**
Chair, NDIA Robotics Division
Moderator
- CAPT Christian Dunbar, USN**
Naval Surface Warfare Center N9, Future Concepts and Innovation
- Col Kevin Murray, USMC**
Director, S&T and RCO, Marine Corps Warfighting Lab
- Dr. Steven Turek**
Head of Robotics, Manufacturing and Industrial Technologies, Air Force Research Lab
- 4:45 – 5:15 pm **ROBOTICS AND AUTONOMOUS SYSTEMS IN ARMY SUSTAINMENT**
CENTER HALL
- Fred Wehrli**
Chief of Requirements Integration for U.S. Army Futures Command, Sustainment Capabilities Development and Integration Directorate
- 5:15 – 5:30 pm **WRAP-UP**
CENTER HALL
- LTC Matt Dooley, USA (Ret)**
Chair, NDIA Robotics Division
- 5:30 – 7:00 pm **NETWORKING RECEPTION IN THE EXHIBIT HALL**
SOUTH HALL

THURSDAY, APRIL 25

- 7:00 am – 12:00 pm **REGISTRATION**
SOUTH HALL LOBBY

7:00 – 8:00 am **NETWORKING BREAKFAST**
SOUTH HALL LOBBY

9:00 am – 12:00 pm **EXHIBIT HALL OPEN**
SOUTH HALL

TECHNICAL SESSIONS

8:00 am – 12:00 pm **TRACK I: ADVANCED AUTONOMY:
OPERATIONAL AUTONOMOUS
BEHAVIORS IN APPLICATION**
CENTER HALL

**TRACK II: ROBOTICS IN APPLICATION
AT THE TACTICAL LEVEL-
PLATOON AND SQUAD**
ROOM 211

8:00 – 8:25 am **Advanced GNSS Positioning for Cooperative
Adaptive Cruise Control (CACC) Truck
Platooning**
Patrick Smith
Graduate Research Assistant, Auburn University

**GEDI Crazy Turtle- Stealth Performance
Communication**
Daniel Reyes
Chief Executive Officer, Crazy Turtle Robotics

8:25 – 8:50 am **Towards a Multi-Agent/Multi-Domain World
Model**
Mark Hinton
Senior Systems Engineer, Johns Hopkins APL

**Organic Precision Strike Using Robustly
Networked Loitering Munitions and Robotic
ISR**
Dr. Adam MacDonald
Director Business Development, AeroVironment

8:50 – 9:15 am **Unmanned System (UxS) and Engineering
Precepts for Safe Autonomy**
Michael Demmick
OSD UxS Safety IPT, NAVSEA

**AI for Maneuver: Artificially Intelligent
Robots in the Last Mile of Combat**
Brandon Tseng
Chief Operating Officer & Co-founder, Shield AI

9:15 – 9:40 am **Autonomy**
Alberto Lacaze
President, Lead Engineer, Robotic Research

**Modular Mission Payloads for Small
Unmanned Ground Vehicles (SUGV)**
Dr. Richard Pettegrew
General Manager, IEC Infrared Systems

9:40 – 10:20 am **NETWORKING BREAK IN THE EXHIBIT HALL**
SOUTH HALL

10:20 – 10:45 am **Adapting NASA Mars Rover Autonomy to
Army Vehicles for Intelligent Autonomous
Control**
Carl Conti
Technical Director, Spatial Integrated Systems

Towards Autonomous Robotic Manipulation
Amanda Sgroi
Principal Research Scientist, RE2 Robotics

10:45 – 11:10 am

**An Approach to the Development of Greater
Autonomy for Combat Vehicles**

Buck Tanner and Thomas McLoud
BAE Systems Land and Armaments L.P.

**UAS Deployment of Micro UGV with Tactical
Payloads**

Mack Traynor
Chief Executive Officer, Recon Robotics

11:10 – 11:35 am

**Autonomous Topography Localization
and Analysis System (ATLAS)**

Javier Rodriguez
Aerospace Engineer, Air Force Research Lab (AFRL)

**Autonomous Precision Landing of sUAS onto
Moving Vehicles at Night**

David Twining
Chief Operating Officer, Planck Aerosystems, Inc.

11:35 am – 12:00 pm

**Modular Multi-Purpose
Autonomy-Enabled Platforms**

Kevin Mulrenin
Director, Pratt & Miller Engineering

12:00 pm

PROGRAM CONCLUDES

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.