



UNMANNED CANADA  
**2019**

NATIONAL CONFERENCE + TRADE SHOW  
OCT30 - NOV1 2019 // OTTAWA, ON

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**#UC19**Ottawa

CONFERENCE PROGRAM



## TUESDAY OCT29

1700// ANNUAL GENERAL MEETING

## WEDNESDAY OCT30

### BREAKFAST

Keynote Presentation: Vic Fedeli, Ontario Minister of Economic Development, Job Creation and Trade

### 2019 RPAS OPERATIONS – PANEL

**MODERATOR// LOOKNORTH**

- 100 Pilots and Counting: Dan Juhlin, RPAS Operations Manager, Government of Alberta
- BVLOS Operations in the Niger Delta: Mike Meakin, Technical Solutions Engineer, Kongsberg Geospatial
- UAVs in Public Safety – Where We Are Today and What's the Future? Romeo Durscher, Director of Public Safety Integration, DJI
- TC's Operational BVLOS Program – 2019 Flight Ops and Future Plans: Marty Rogers, Chief RPAS Operations Transport Canada
- Fostering Growth of an Industry: LOOKNorth's Experience

### NEW MOBILITY – PANEL

**MODERATOR// TBD**

- L5 CAV Test Track: Invest Ottawa
- PodZero: Aurrigo Canada
- Planning for AV Deployment: Transport Canada
- Electric Ground Vehicles: IVEO
- Next Generation Fighting Vehicles: CANSOFCOM

// LUNCH

### OPERATOR FORUM

**MODERATOR// MIKE CAMPBELL, CKMM PHOTOGRAPHIC**

- Six Months of Regulations – Howgozit: Mike Campbell, Principal, CKMM Photographic (open mike)
- Building a Fit-For-Purpose SMS for UAV Operations: Ron Campbell, Aviation Advisor, SGS Aviation Compliance
- Key Legal Issues Facing the RPAS Industry – Kathryn McCulloch, Partner, Dentons Canada LLP
- Flight Reviews and Standardization: Grant Caswell, Owner, Caswell Aviation Ltd.
- USC Flight Safety Program: Anne-Sophie Riopel-Bouvier, USC Flight Safety Officer, Co-Founder Exotactik
- Lessons Learned from an RPAS Accident Investigation: Niall McCallum, Systems Specialist, SkyX
- Challenges and Lessons Learned – First Year of RPAS Operations: Dorothy Voyageur, CEO Voyageur Technologies

### TRAINING FORUM

**MODERATOR// KERRY MOHER, FRESHAIR EDUCATORS**

- Transport Canada Update: Mr. Frank Brzobohaty, RPAS Task Force
- UAV Competency-Based Learning Practices for First Responders: Paul St. Onge, Collège La Cité
- Drones in Education – Introducing High-Tech to Schools: Matt Johnson, President and CEO, M3 Drone Training Zone Inc.
- Building Your Future Workforce: Scott Lawson, Air Cadet League of Canada
- AUVSI Trusted Operator Program – A Case Study: Ron Campbell, Aviation Advisor, SGS Aviation Compliance
- UAS for Training Test and Evaluation: Frank Decker, RCAF School of Aerospace Studies

### COUNTERMEASURES TRACK

**MODERATOR// DAVE DOMONEY, BLUEFORCE UAV CONSULTING**

- Drone Detection and Mitigation – There Isn't and Won't Be A Perfect Solution: Dr. Peter Jones, Version 2.0
- Drone Detection and Classification with an AI Learning Scheme: Dr. Iraj Mantegh, National Research Council
- Drone Countermeasures – Evolving with the Threat: Rick Whittaker, CEO Airshare
- Drones – Threat from Above: Kieran Gubbins, CTO IDS North America

// EXHIBITS OPEN// NETWORKING RECEPTION

## THURSDAY OCT31

### BREAKFAST + WOMEN IN DRONES BREAKFAST

Keynote Presentation: Michael Keenan,  
Deputy Minister, Transport Canada

### TRANSPORT CANADA RPAS TASK FORCE

**CHAIR// FELIX MEUNIER, HEAD RPAS TASK FORCE**

- Global Regulatory Update
- VLOS sUAS Regulations Update: Statistics and Observations
- BVLOS Way-Ahead
- RPAS Traffic Management Action Team
- RPAS Traffic Management: Introducing the National RTM Roadmap; TC and NAVCanada.
- International Regulations and Standards: Mr. John Walker, Vice-Chair JARUS Industry Stakeholder Consultation Body; Chairperson ISO TC20 SC6 UAS Committee
- ASSURE, the FAA's Center of Excellence for Research – How to Get Involved: Col (ret'd) Stephen Luxion, ASSURE Associate Director

### // LUNCH

### RTM/UTM ENABLING BLVOS

**MODERATOR// EUGENE HOEVEN, PRESIDENT,  
EHA MANAGEMENT CONSULTING**

- Realizing Fully Interoperable Nationwide UTM Systems: Steve Willer, Bus. Dev. Mgr, Airmap
- Method of Tracking Mode A/C Transponders with Passive Receivers: Dr. Yake Li, Seamatica Aerospace
- Provision of UTM Services – Lessons learned from an International Perspective: Laurent Huenaerts, VP and General Manager Unifly
- Data and Software – The Fuel for Urban Skyways: Ayaan Haider, Lead Engineer, Air Matrix
- Beyond BVLOS – The Age of the Autonomous Drone: Tzuki Friedman, CTO SkyX

Come Learn How Canadians Do  
**#GoodDroneWork**

### BVLOS USE CASES: FIRST RESPONDERS

**MODERATOR// PHILIP REECE, CEO INDR0 ROBOTICS  
INDUSTRIAL INSPECTIONS: MICHAEL COHEN,  
CEO INDUSTRIAL SKYWORKS**

- RPAS For the Fire Services: Michael Hoffman, Studio Eh Productions
- How Thermal Imaging is Helping Public Safety Agencies Save Lives: Brett Kanda, UAS BD Manager, FLIR Inc.
- Operational Concept for sUAS in Nuclear Emergency Response: Richard Fortin, Geological Survey of Canada, Natural Resources Canada
- BVLOS Operations for Forest Survey Data Capture and Analytics: David Loydon, Terra Sense Analytics Ltd.
- Urban BVLOS for Municipalities to Reduce Costs and Taxes: Chris Healy, IN-Flight Data
- Using UAS to Track Endangered Bison in Northern Alberta: Jeff Voyageur, UAS Division Manager, Voyageur Technologies
- Pushing the Boundaries of RPAS and Digital Decision-Making in Offshore Oil and Gas: Trevor Bergman, CEO AeroVision Canada
- Drones for Non-Destructive Testing: Courtland Penk, Osprey Integrity
- Canopy Nitrogen Weight Retrieval Using UAV-Based Images in Wheat and Corn Fields: Hwang Lee, University of Western Ontario (student paper)
- Development of a Cross-Border Bridge Inspection Utilizing a Remotely Piloted Aircraft System at the Ogdensburg-Prescott International Bridge: Brendan Ooi, Carleton University (student paper)
- Spectral Analysis of the Magnetic Field Generated by a Brushless Direct Current Electromagnetic Motor and the Implications for UAV-Borne Aeromagnetic Surveying: Callum Walter, Queens University (student paper)
- Fire Service Applications: Scott Wilkinson, Winnipeg Fire Academy
- BVLOS and First Responder Operations: Mike Nolan, Chief Renfrew County Paramedics
- Policing Applications: Colin Giles, Ontario Provincial Police

### DATA ANALYTICS AND IMAGE PROCESSING

**MODERATOR// GERVAIS THERRIEN, THERRIEN CORPORATION**

- Automated Spotting and Monitoring of Right Whales with Real-time Unsupervised Learning: Alan Parslow, President DeepVision
- Application of RPAS for Automation of Migratory Bird Counting: Brendan Ooi, Carleton University
- Powerful Drone Imagery Processing and Analytics with ARCGIS: Pierre Bilodeau
- Ground Control Points for RPAS Mapping: a Review and Assessment of Best Practices: Dr. Frederique Pivot, Athabasca University
- Real World Challenges of AI in Vision Applications: Dany Longval, Vice President Sales, Teledyne Lumenera

## BVLOS AND BEYOND

### MODERATOR// TBD

- From SFOCs to Routine Operations – Lessons Learned from VLOS Operations: Tzuki Friedman, CTO SkyX
- Obtaining BVLOS Approvals Using a DAA System in Five Countries: Alex Harmsen, CEO Iris Automation
- SATCOM Integration – Lessons Learned: Mariah Murray, VP Operations AVSS
- BVLOS – Get'er Done – Perspectives from 35,000 Flight Hours: Ian Glenn, COO/CTO ING Robotic Aviation
- Drone Flight Management Systems Enabling One to Many: Steve Eisenhower, Chief Scientist, Periculum Labs
- Resolving the Conflict Between Ship Design and UAV Launch and Recovery Deck Limits: Dr. Bernard Ferrier, Head Dynamic Interface Lab, NAVAIR
- Our Journey to Safe and Legal Drone Operations Over People: Avi Lozowick, Vice President, ParaZero Drone Safety Systems
- Contact-Based Task and Process Deployment for UAS: Charles, Research Engineer, National Research Council

## // RECEPTION

# FRIDAY NOV1

## BREAKFAST

## SATCOM: WHAT YOU NEED TO KNOW – PANEL

### MODERATOR// COL (RET'D) ANDRE DUPUIS, PRESIDENT, SSCL SOLUTIONS

- Roland Renner, VP Business Development, Hunter Communications
- Sunil Chavda, Director New Satellite Systems Development Telesat
- University of Waterloo
- TBD

## FEDERAL PROCUREMENT

### MODERATOR// MARC MOFFATT, CED ALMA

- RCAF RPAS Procurement Update: Major Jason Furlong, Directorate of Air Requirements
- PSPC National Master Standing Offer for sUAS Services: Mr. Vincent Landreville, Manager Charter and Transportation Services Division PSPC
- Transport Canada UAS Procurement Update: TBD
- RCMP Procurement Strategy: Mr. Paul Bruce, RCMP RPAS Program Manager
- Industrial and Technological Benefits Program Update: Mr. Rick Santos, Deputy Director, Air and Space Team, ISED ITB Branch

## // LUNCH

## ELECTRIFICATION – PANEL

### MODERATOR// TBD

- The Challenges of Electrification: Nicholas Brodeur and Adrian Sfetcu, Bell Helicopter
- Improving your Battery Performance: Kostya Khomutov, CEO GBatteries
- Battery Technology Update: Dr. Dean MacNeil, Senior Research Officer, Energy, Mining and Environment, National Research Council (TBC)
- TBD

## ENABLING BVLOS

### MODERATOR// TBD

- Development of a Robust Pilot Control Handover System: Salman Shafi, Carleton University
- Quantitative Air-to-Air Collision Risk Assessment: Dr. Siu O'Young, Seamatica Aerospace
- Evaluating Parachute Recovery Systems: Josh Ogden, CEO Aerial Vehicle Safety Solutions
- RPAS Software Certification: John Mannarino, President Mannarino Systems and Software Inc.

## RESEARCH INITIATIVES

### MODERATOR// TBD

- Activities to Support TC Regulatory Framework: Charles Vidal, National Research Council
- UAS Training and Research: Dr. Jeremy Laliberte, Carleton University
- Aerial Robotics Research and Education at the University of Toronto: Dr. Hugh Liu, U of T
- CARIC RPAS Program: TBD
- Transport Canada RPAS R&D Program

## INQUIRIES? PLEASE CONTACT US!

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