Carleton University / NAV CANADA 5-Day Professional Short Course UAV / DRONE Types, Opportunities and Challenges

May 8-12, 2017

Carleton University's Faculty of Engineering and Design and NAV CANADA are pleased to jointly offer a special professional short course on UAV / Drone Types, Opportunities and Challenges. The 5-day course will be delivered at the NAV CENTRE Facility in Cornwall, Ontario from May 8-12, 2017. Course content will be focused towards:

- UAV application designers
- Operation planners
- Project/program managers
- Scientists, specialists, engineers and technical based subject matter experts involved in the application of UAVs
- Law enforcement and first responders
- UAV entrepreneurs
- Technical managers

A broad assortment of topics pertaining to both fixed-wing and rotary UAVs / Drones will be covered, including in-depth analysis on;

- Special Flight Operations Certificate (requirements, application, applied use and exceptions)
- Flight principles, functionality and controllability
- Applications
- Detection, tracking and countermeasures
- Sensors and communication
- NAV CANADA Air Navigation System overview including:
 - Weather products and access
 - Contact references
- Potential opportunities and risks related to UAV / Drone use will also be discussed, along with current and pending Transport Canada policy and regulations. A Group UAV workshop focusing on threat scenario, along with discussion on strategies for mitigation and response will support this topic.

Course participants will be presented with a Carleton University and NAV CANADA joint attendance certificate upon completion.

Course Overview:

- Day 1: SFOC, requirements, application process. Drone / UAV Types (Range, Endurance, Payload).
- **Day 2:** Flight Principles of Drones / UAVs and Propulsion Systems.
- **Day 3:** Controllability, Sensors and Communication, UAV Safety, Detection, Tracking and Interception and practical demonstrations.

Day 4: NAV CANADA Air Navigation System (Airspace definitions, Weather products and access, facility contact information and opportunities and challenges).

Day 5: Policy and Regulations, Industry Support / Involvement and Workshops focusing on threat scenario, discussion on strategies for mitigation and response.

Program Enrollment Fee:

Enrollment fee is collected to cover the academic and ancillary costs of the course including instructors, classroom space, use of simulators, simulator support resources and supplies.

Package A:

Enrollment Fee (one time) = \$1,500 +tx

Guest Room, Propeller Breakfast, Propeller Lunch, Propeller Dinner (per night) = \$154.65 +tx

Package B:

Enrollment Fee (one time) = \$1,500 +tx Propeller Lunch (per day) = \$19.55 +tx



www.navcentre.ca

1950 Montreal Road, Cornwall ON K6H 6L2

NAV CENTRE is designed to put the focus on learning. Our idyllic natural setting eliminates distractions, while our impressive amenities and food and beverage services ensure everything learners need to stay energized is available on-site.

Traditional Queen Rooms feature: One queen bed, high-speed internet access, work area, private full bathroom, telephone with voice mail, cable television, individual climate control, iron and ironing board, fridge and coffee maker

Propeller Restaurant: With a menu that changes daily, the Propeller Restaurant serves a healthy variety of whole foods and freshly cooked meals. Please note that all dietary restrictions are handled on a case-by-case basis, please inform your registrar of any restrictions.

NAV FIT: Indoor: 25-metre indoor pool, saunas, treadmills, stationary bikes, elliptical trainers, rowing machines, universal machines, exercise balls and free weights. Outdoor: Two tennis courts, volleyball court, baseball diamond, soccer field and recreational paths

Additional amenities at the NAV CENTRE: Jet Set Pub, Le Café Tuck Shop and Snack Bar, NAV SPA

Registrar – Katherine MacLean – 613-936-5006 – katherine.maclean@navcentre.ca

To register please email Katherine the following information:

- Full Name
- Title/Major
- Company/Educational Institution
- Address
- Telephone
- Email Address
- Indicate your choice of Package A or Package B
 - If Package A please indicate arrival & departure date

Seating is limited and available on a first-come-first-serve basis.

Once received Katherine will call you for a full non-refundable pre-payment via credit card.