



Advanced Principles of Electronic Defense

Instructor: Dave Adamy

This four day course is designed for individuals who have completed a fundamental electronic defense (ED) course or have significant experience in the field. Legacy and next generation threats and ED techniques are covered at an unclassified level. The course avoids deep mathematical coverage, explaining all concepts in practical, physical terms. Breakfast, lunch, coffee and parking pass will be provided. Course related books published by Dave Adamy will be included (ED 103 and 104). The AOC Maple Leaf Chapter will also host an informal social evening after either the 3rd or 4th day for the attendees, sponsors and invited guests.

Course Outline:

The course starts with a review of the main points in the fundamentals course. Then it moves on to advanced concepts delving more deeply into each ED area. It covers the following specifics that are beyond the scope of the fundamental course:

- More complex propagation calculations including: cylindrical diffraction, Propagation through forests, propagation over salt water, over the horizon long range propagation, and radio horizon determination
- Details on digital receivers, including fast Fourier transforms and their application to intercept and jamming of frequency-hopping signals
- Dynamic Range calculations
- Additional Emitter location techniques
- Electronic protection and pulse Doppler radars
- Current and next generation threat capabilities and countermeasures
- Digital communication Theory
- Advanced communication systems and countermeasures
- Propagation to and from satellites
- Generation and application of pseudo-random codes
- Cell phone systems and jamming
- Advanced jamming techniques and waveforms
- Jamming modern radar and communications threats
- Digital RF Memories
- Intercept of spread spectrum communications
- New developments in Flares and IR jammers
- New challenges and techniques for decoys
- Imagery missile seekers
- Directed energy defense

Instructor Bio:



Dave Adamy is an internationally recognized expert in electronic defense who writes the popular monthly EW-101 column in the Journal of Electronic Defense. He has over 40 years experience as a systems engineer and program technical director. He has published many professional articles on ED, receiver system design and related subjects. He holds a MSEE (Communications Theory) and has ten books in print.

CERTIFICATION: Carleton University, Department of Electronics, Faculty of Engineering and Design will issue Certificates of Attendance to those who attend the Course.

Tuesday, May 17, 2016 to Friday, May 20, 2016
Register now, spaces are limited. See reverse for details

For additional information please contact: Sales@CanadianCrows.org



Registration Form

Fundamental Principles of Electronic Defense

May 17-20, 2016

2014 Minto Centre, Carleton University, Faculty of Engineering and Design
1125 Colonel By Drive, Ottawa, Ontario Canada K1S 5B6

Registration Instructions

Please complete all boxes on form and forward with payment by credit card or cheque payable to The Maple Leaf Chapter A.O.C., 2500 Lancaster Rd, Ottawa, ON K1B 4S5, Canada or fax to 613-745-1429.

Name _____ Title _____

Firm/Company _____ Street _____

Suite _____ City _____ Prov _____ Postal Code _____

Telephone _____ E-mail _____

FEES

Registration includes parking and refreshments

AOC Member \$3495 (plus \$454.45 tax) **\$3949.45**

Non-AOC Member \$3545 (plus \$460.85 tax) **\$4005.85**

PAYMENT

HST registration #: 80650 3520 RC0001

For credit card payment, please fill in the information below and fax to **613-745-1429**, or alternatively you can fill in the information below and pay by mail. Cheques are payable to The Maple Leaf Chapter A.O.C.

Cheque or

Please charge my Visa MasterCard Card Number _____ CSV _____

Expiry Date _____ Signature _____

Name of credit card holder (if different from registrant) _____

Address of credit card holder: Street _____ City _____ Postal Code _____

REFUND POLICY

Registrations can be cancelled and course fees refunded if the AOC Maple Leaf Chapter receives notice in writing by Tuesday, **March 30, 2016**. An administrative fee of \$50 plus \$6.50 HST will be charged. No refunds will be made if notification is received after the cancellation date. If you are unable to attend on the day of the program, you may send a delegate in your place.

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