

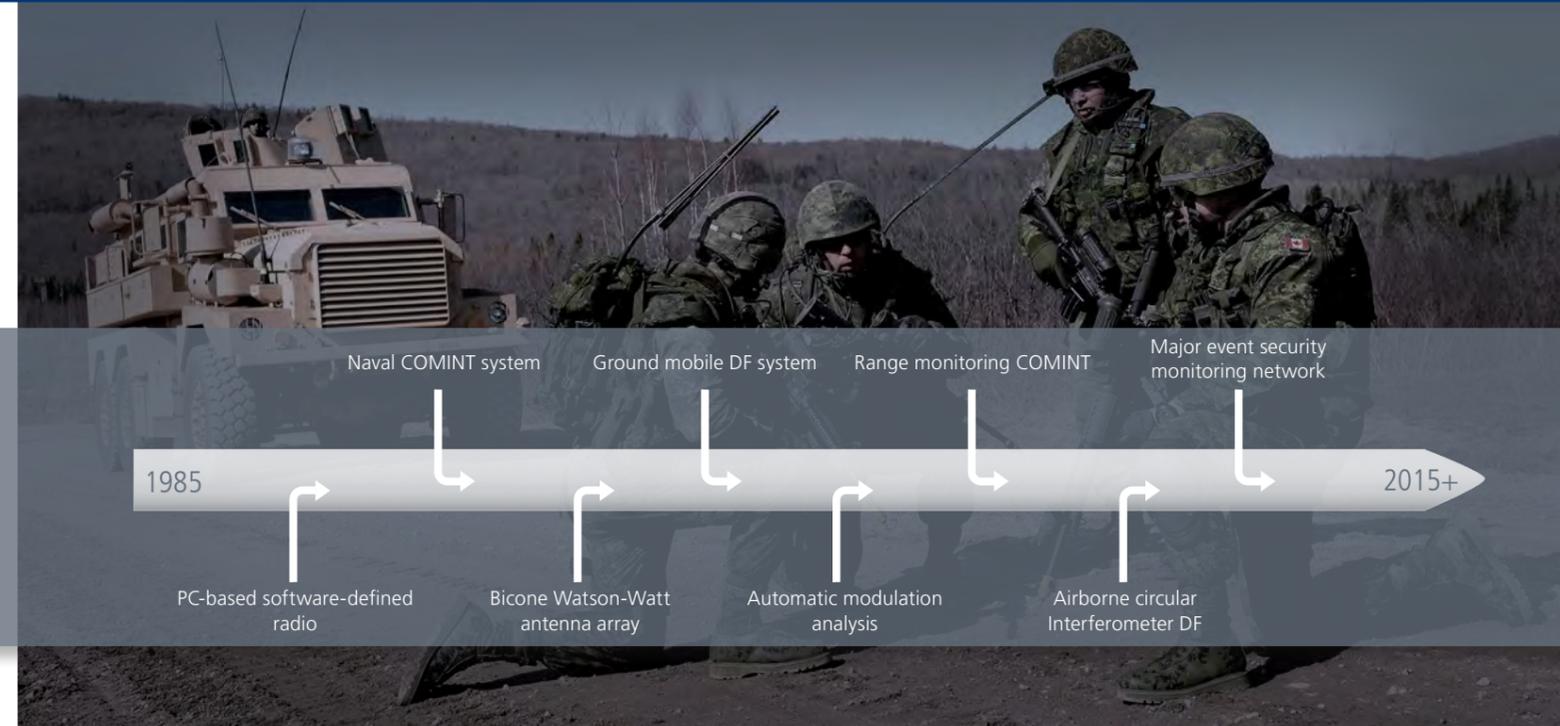


UltraFALCON
COMINT SYSTEMS



Delivering operationally-focussed SIGINT and EW systems

Ultra Electronics, TCS is a world-class provider of ground, sea and airborne Signals Intelligence (SIGINT) and Electronic Warfare (EW) systems. Ultra's technical capabilities are underpinned by real and current expert domain-knowledge of the implementation of SIGINT and EW in tactical and strategic operational scenarios.



Ultra Electronics, TCS Capabilities

Integrated SIGINT Systems

UltraEAGLE ELINT SOLUTIONS
 ELINT systems
 R-ESM systems
 Hardware and software pulse analyzers

UltraFALCON COMINT SOLUTIONS
 COMINT systems
 C-ESM systems
 Specialist signal intercept

ACTIVE Systems

UltraHAWK ACTIVE SOLUTIONS
 Range simulators
 EW training systems
 Test and evaluation systems

The UltraFALCON COMINT System

The UltraFALCON is a family of high performance Communications Intelligence systems designed for use in airborne, ground-based and shipboard ISR applications.

At the core of the UltraFALCON family of solutions is a high performance, wide-band and highly sensitive digital and open systems architecture. Ultra's solutions offer the user a fully integrated COMINT system, providing signal search and intercept, 2D and 3D DF, GIS mapping, emitter location, signal recognition and collection, detailed signal analysis suite, together with multichannel narrowband and wideband signal recording/playback. The operator is presented with these capabilities under the control of a single intuitive graphical user interface and extensive database management subsystem.

Comprehensive Signal Processing

UltraFALCON systems are capable of prosecuting a wide variety of signal types, from conventional fixed frequency and push-to-talk signals, to more complex emissions such as frequency hopping systems and TDMA/CDMA cellular (GSM and iDEN). UltraFALCON also offers a full exploitation capability against SATCOM systems such as INMARSAT, Thuraya, ACeS and Isatphone.

Suitable for all Applications

UltraFALCON solutions are scalable and modular, comprising of open and standard interfaces. As such, they can be installed in a wide range of platforms from large airframes, vessels or ground vehicles to UAV's. Data can be analyzed in real-time on the platform, or passed to fixed analysis stations via encrypted data links for real-time or post-facto analysis.

Integrated Search, Intercept and DF Measurement

- ▶ High-speed wideband search and intercept
- ▶ Rapid signal detection over single or multiple independent frequency bands
- ▶ Simultaneous precision DF measurement
- ▶ 2 and 3 dimensional Correlative Vector Interferometry DF (CVIDF) algorithms
- ▶ Emitter location and GIS mapping capability, including the capability to steer other sensors, such as FLIR, to a specified target



Dense and Complex Environmental Capability

- ▶ Multiple operator work stations capability
- ▶ Multiple COMINT operators can independently perform different signal surveillance and collection tasks
- ▶ Client-server software architecture for local and remote operation
- ▶ Interface to a higher level mission management system



Comprehensive Signal Analysis

- ▶ An extensive signal analysis capability including automatic signal modulation and format recognition
- ▶ Wideband system design for prosecuting frequency hopping, burst and digital cellular signals
- ▶ Cellular and SATCOM signals intercept, location and traffic analysis
- ▶ An extended signal monitoring and recording subsystem available to permit independent monitoring, signal analysis and audio recording of multiple signals
- ▶ All mission and related data collected and stored in a comprehensive database management system (DBMS)



About Ultra Electronics, TCS

Ultra Electronics TCS, a division of Ultra Electronics, is a global leader in tactical communication systems, including high-capacity radio communication and Electronics Warfare (EW) systems. Ultra Electronics, TCS is proud to work with leading system integrators to provide the best communication systems and services to be integrated with any military architecture and fielded as part of any deployment scenario in the world.

Ultra Electronics, TCS ISR Solutions

Focusing on EW and SIGINT, the ISR solutions group is based in Ottawa. Ultra's pedigree is underlined by constant collaboration with government customers, government laboratories, scientific establishments and prime integrators. The UltraEAGLE, UltraHAWK and UltraFALCON product lines have detailed technical specifications and system architecture information that is available to government and prime integrators upon request.



Ultra Electronics

TCS
88 Hines Road
Ottawa, ON
K2K 2T8
Canada
Tel: +1 613 592 2288
Fax: +1 613 592 8855
Email: ISRinfo@ultra-tcs.com
www.ultra-tcs.com
www.ultra-electronics.com

5990 chemin Côte-de-Liesse
Montréal, Québec
H4T 1V7
Canada
Tel: +1 514 855-6397
Fax: +1 514 855-6357

Unless otherwise noted, all images are property of Ultra Electronics, TCS or courtesy of the Canadian Department of National Defense.
© Ultra Electronics TCS Ltd 2011
Printed in Canada
0200/AP/1111