

Advanced Defeating IEDs Case Studies & Training Workshops 2008

"Counter IEDs through effective detection, technology and training capabilities"

Brussels - Belgium

November 26 - 27 2008

November 28 Live Demo (invitation only)

Venue: Hotel Bedford & Congress
www.hotelbedford.be

The workshop will focus on:

- Home based IEDs threat
- Terrorist surveillance detection (TSD)
- Examining threat assessment and
- IED identification techniques
- Disarming and defeating IEDs
- The integral role of technology in countering IEDs
- Analyzing the need for standardization of tactics, techniques, and procedures (TTPs) across MODs and security forces
- Assault IEDD operations and planning (HOSTAGE RESCUE AND RAPID INTERDICTION OPERATIONS)
- Individual protective measures (IPM)
- Best training practices in the fight against IEDs

Benefits of attending:

- Limited delegation, allowing highly interactive training
- Pre-course questionnaires giving you the opportunity to further tailor the course to your personal organizations priorities
- Practical workshops and case-study examples
- Comprehensive course documentation

Who should attend:

Government attendee profile is:

Directors / Analysts / Experts / Commanders / Operators & Trainers involved in the following disciplines:

- Procurement / Acquisitions
- EOD / IEDD
- Law enforcement
- Aviation and maritime security
- Anti-terrorism
- Close protection / PSD
- Force protection
- Research and technology
- Homeland security
- Explosives research
- EOD / IEDD science and technology
- Search operations

Industry attendees profile is:

Directors / Business development / Corporate Managers / Operators / Trainers...

- Counter-IEDs
- Aviation and maritime security
- Close protection / PSD
- RF Systems
- Neutralization, protection and threat mitigation
- Explosives detection
- Transport security
- IEDD/ EOD security training centers
- Force protection
- First responders
- Airport security
- Maritime security

To train selected personnel in IEDD Operations and Planning in the essential skills needed to operate as Commanders of specialist IEDD & C-IED units

Putting First Responders First

Event Chair:

Major (Ret) Chris Hunter QGM
(Author and former British armed forces – Ammunition Technical Officer)

Keynote Speakers:

CDR Dirk Vanhoutteghem
Ops & Training Dept
Doctrine and requirements division
Belgian Defence Staff

CDR (Sel) Bobby Baker, USA-N
Military cooperation
Director: ISAF Individual Augmentee Pre-Deployment Course (IAPDC)
NATO school

Dr Kurt Osterloh
Digital Radiology and Image Analysis

BAM, Fed. Inst. for Materials Research and Testing, VIII.3

Michael Raschella
Introduction to the Lance® Disrupter System
CTS

Dr. Regina E. Dugan
New Methods for Defeating IEDs:
Why we will always lose if we fight the IED at the side of the road.
CEO, RedXDefense, LLC

Live Demonstrations
RedXDefense
ION Applications

Industry Panel
TBC

Dr. Arnold Schoolderman
Detection and Neutralization
TNO defence, Security and Safety

Jim Blackburn
Capability Manager Engagement
European Defence Agency (EDA)

Ludwig Decamps
Head, Armaments Programme Support Section
NATO HQ

Alain Vallée
NIAG Airborne C-IED study
Chairman of **NIAG SG 128**
Sagem Défense et Sécurité

TBD
Initiative for a **NATO C-IED CoE**
Spanish Joint Staff
SP MoD (confirmed)

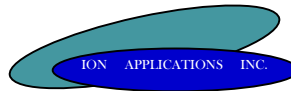
Panel Discussion
Countering IEDs at the strategic, operational and tactical levels
EDA
NATO School
BAM, Germany

November 28
Live Demonstration of the **Lance** Disrupter System, in Collaboration with the Belgian Defence staff
(only by invitation)

Training workshops Led by Your expert trainer, Major (Ret.) Chris Hunter QGM (author and former British Armed Forces – Ammunition Technical Officer)

Chris Hunter is a recently retired Major from the British Army and a former counter-terrorist bomb disposal operator and weapons intelligence specialist. During his 17 years in the military he served in a variety of operational counter-IED appointments and saw active service in a number of high threat theatres including Iraq, Afghanistan, Colombia and Northern Ireland. During much of his career he specialized in overt and covert assault IEDD in support of police tactical Firearms Units, close protection teams and specialist CT units. He also deployed on a number of anti-terrorist arrest operations in the UK and was the architect of the UK's EOD response to a suicide bomb attack on the UK mainland. Later, he played an instrumental role during the July 2005 London bombings when he was seconded to the British Government's COBR-A as a suicide terrorism subject matter expert. He retired from the MOD in 2007 as the MOD's senior IED intelligence analyst. Chris was awarded the Queen's Gallantry Medal in 2005. He has written and presented numerous papers on counter-terrorism, and is a Fellow of the Institute of Explosives Engineers.

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“Soldiers and Internal Security forces must learn how to react to an IED attack. Constant repetition of battle drills is Key”

Day 1: Wednesday November 26

8:15 Registration
Networking and morning coffee

8:45 Introduction to MK Defence Ltd.

9:00 Chair's opening remarks
Major (Ret) Chris Hunter QGM
(Author & former British armed forces – Ammunition Technical Officer)

Home based IED threat

9:15 **Building capacity in European Militaries focusing on CIED, EOD and CBRN**

- European Defence Agency a historic perspective
- Reasons for an agency
- Role, missions and tasks
- The Capability Development Plan
- CIED in the EDA
- CBRN in the EDA
- CIED/CBRN and EOD other European institution actors

Jim Blackburn

Capability Manager Engagement
European Defence Agency (EDA)

9:50 **Countering asymmetric threats through technological collaboration: NATO's approach**

- NATO's Defence Against Terrorism Programme of Work
- Practical experience
- Challenges
- Future orientations

Ludwig Decamps

Head, Armaments Programme Support Section
Defence Investment Division
NATO Headquarters

10:30 **Coffee & Networking break**

Airport and aviation security – Lessons learned from the UK

10:45 **Round table discussion**

- The impact of aviation security legislation
- Conducting a comprehensive IED threat assessment
- The likely scenarios/ tactics for attacking an aircraft or terminal building, the consequences of taking action
- Minimizing the explosion's impact (physical security and blast mitigation techniques)
- Mitigation through addressing vulnerabilities
- Managing the post-attack response
- Challenges of the recruitment and training of staff / security contractors

Led by **Major (Ret) Chris Hunter QGM**

(Author and former British armed forces – Ammunition Technical Officer)

11:30 **The dual use of detection and inspection technologies**

- Detection methods with Ionising and non-Ionising radiation
- Detection of IEDs through radiographic imaging
- Looking ahead at the new radiographic methods with novel portable devices.
- A look at airport and aviation security

Dr

Kurt Osterloh

Digital Radiology and Image Analysis
BAM, Fed. Inst. for Materials Research and Testing, VIII.3

Complementary accommodation booking services: Should you require accommodation whilst attending an MK Defence event, please do not hesitate to contact our customer service agent at info@mkdefence.com

12:15 Luncheon
Sponsored by CTS

13:15 **Attaining an unprecedented international capability towards nullifying the IED threat: The CoE C-IED**

- C-IED in NATO
- NATO Centres of Excellence
- Spain and the C-IED CoE
- C-IED CoE concept
- Scope of activities
- C-IED CoE contribution to NATO C-IED effort

TBD

Initiative for a NATO C-IED CoE

Spanish Joint Staff (**Confirmed**)

Half day training workshop

14:00 **Introduction to explosives and improvised explosive devices (IED)**

This workshop will introduce attendees to the full range of explosives and components used by terrorist and criminals globally

- Basic explosive theory: introduction to high and low explosives
- Initiation systems for explosive materials
- Improvised explosives (including fertilizer-based and organic-peroxide based improvised explosives)
- Common IED components and triggers
- Introduction to suicide IEDs
- Introduction to improvised mortars, grenades and rockets

Maj. Chris Hunter

15:45 **Coffee and Networking break**

Workshop continues

16:00 **Introduction to the global IED threat and terrorist tactics, techniques and procedures (TTPs)**

This workshop will introduce attendees to the full spectrum of IED related TTPs used by terrorists and criminals around the world. Subject covered include:

- The global IED threat
- Terrorist Ideologies, Aims, Beliefs & Motivation
- The terrorist network: components of a terrorist cell, its supporting elements and their functions
- Introduction to terrorist tactics and techniques
- Recruitment and training of terrorist
- Introduction to terrorist funding and support
- Terrorist methods of intelligence gathering
- The operational phases of a terrorist IED attack
- Terrorist target selection considerations
- Characteristics of terrorist bomb making factories and facilities
- Introduction to the improvised chemical, Biological, radiological and nuclear (CBRNE) threat

Major (Ret) Chris Hunter QGM

(Author and former British armed forces – Ammunition Technical Officer)

18:00 **Chair's closing remarks**

For further information on this workshop and to learn more about future training schedules and locations please contact info@mkdefence.com

Business Development opportunities
Find out more about exhibiting, networking and branding opportunities available by contacting marketing@mkdefence.com or call 001.514.963.7577

Advanced Defeating IEDs Case Studies & Training Workshops 2008

“Counter IEDs through effective detection, technology and training capabilities”

Day 2: Thursday November 27

8:00 Registration
Networking and morning coffee

8:30 Chair's opening remarks
Major (Ret) Chris Hunter QGM
(Author and former British armed forces – Ammunition
Technical Officer)

Assessing the needs for better capabilities and training

8:40 **Reviewing the C-IED academic training conducted at NATO School**

- Flying FA-18's in Iraq and Afghanistan in search of IED's
- ACT direction letter detailing teaching modules
- ISAF C-IED academic training efforts
- Reviewing results of the NATO C-IED conference that will be held at O'gau early July

CDR (Sel) Bobby Baker, USA-N
Deputy Director Military Cooperation
Director: ISAF Individual Augmentee Pre-Deployment Course (IAPDC)
NATO school

9:20 **NIAG Airborne C-IED study**
SG 84 on Countering IED

- Objectives & Activities
- Main results

SG 128 on Airborne C-IED

- Companies & Experts
- Objectives & Scope of Activities
- Stakeholders & Links
- Organisation & Planning
- First Outputs

Alain Vallée (Sagem Défense et Sécurité)
Chairman of NIAG SG 128 - NATO

10:00 Coffee and Networking break

10:15 **The Belgian approach to C-IED**

- Belgium's Armed Forces and C-IED
- From concept to capability
- Development of C-IED capabilities
- C-IED Training

CDR Dirk Vanhoutteghem
OF-3, BEL Army
Ops & Training Dept
Doctrine and Requirements division
Belgian Defence Staff

Crisis management & Defence against terrorism

10:55 **Defence against terrorism**

- NATO C-IED Concept

Topics in military C-IED R&D:

- Standoff IED detection
- Identification and/or neutralization
- Fighting the network

Dr. Arnold Schoolderman
Detection and Neutralization
TNO defence, security and safety

11:35 **Introduction to the Lance® Disrupter System, a new era of EOD / IEDs disrupter systems**

Successful demonstrations and deploying latest technology to the front lines of the GWOT with NATO Special Forces, The Lance Disrupter System is on its way to revolutionizing the EOD Industry.

- Lightest of its kind by 30% or more
- Most deployable
- Self calibrating laser

Michael Raschella / VP R&D / Engineering
CTS

12:15 Luncheon

The perspective on countering home grown IEDs threats

13:15 **Panel discussion**

- Countering IEDs at the strategic, operational and tactical levels
- Looking ahead on what needs to be done
- Suicide terrorism, protection vs. prevention
- Reviewing the latest technology in detecting and defeating IEDs

Jim Blackburn
European Defence Agency

CDR (Sel) Bobby Baker, USA-N
NATO School

Dr. Kurt Osterloh
BAM, Fed. Inst. for Materials
Research and Testing, VIII.3

Alain Vallée (Sagem Défense et Sécurité)
Chairman of NIAG SG 128 - NATO

Half day training workshop

14:00 **Introduction to IED defeat operations**

This workshop will introduce attendees to the full range of IEDD and C-IED operations

- Responding to bomb threats
- Actions by first responders following a successful IED attack
- Evacuation and post explosion IED search
- Organizing a bomb search team Introduction to the counter-terrorism plan. The principles and philosophy of Improvised Explosives Device Disposal Operations
- The conduct of an IEDD task
- Arrival drills and security considerations for IEDD team Commanders
- C3 during an IEDD operations
- Importance of effective x-ray interpretation
- Introduction to forensics and post incident procedures
- Handing over the scene to other agencies

Major (Ret) Chris Hunter QGM - (Author and former British armed forces – Ammunition Technical Officer)

13:00 Coffee and Networking break

15:15 **Introduction to counter-IED: Interdicting and Defeating the Bomber Network**

This workshop will introduce CT operators, planners and support personnel to the entire spectrum of skills and considerations needed to conduct successful arrest and interdiction operations against bomber networks.

Subject covered include:

- The global terrorist network attacking the web
- Introduction to terrorist interdiction operations in hostile (non permissive) environments
- Principles of assault IEDD Operations
- Considerations for dealing with hostage IEDs
- Introduction to Clandestine IEDD Operations

New Methods for Defeating IEDs:

Why we will always lose if we fight the IED at the side of the road.

This workshop focuses on a new conceptual framework as it relates to the IED threat and, as well, offers a few first examples of solutions that emerge from this new perspective. The conceptual framework consists of an order of magnitude (factor of ten) analysis of the terrorist or insurgency problem. It provides a straightforward organizing principle against which to test possible technological, organizational, or tactical solutions as well as a means for assessing their effectiveness in execution. The “bookends” principle illustrates the difficulty of achieving success using current approaches and challenges existing investment strategies for both the military and homeland security problem.

Major (Ret) Chris Hunter QGM
(Author and former British armed
forces – Ammunition Technical Officer)

Dr. Regina E. Dugan
CEO, RedXDefense, LLC

17:50 Chair's closing remarks

"Soldiers and Internal Security forces must learn how to react to an IED attack. Constant repetition of battle drills is Key"

Day 3: Friday November 28

Live Demonstration

Live Demonstration

MK Defence Ltd. In collaboration with CTS and the Belgian Defence Staff will be conducting a live demonstration to the **CTS Lance** disruptor system at the Queen Elisabeth Barracks (located behind NATO HQ).

This Demo is *by invitation only*. **All invited attendees should confirm their participation no later than October 17.**

8:10 All confirmed attendees for the Live Demonstration, holding Special Badges, should be present next to the hotel reception.

8:15 A shuttle bus will take all attendees to the Queen Elisabeth Barracks (located behind NATO HQ), to attend the Live demonstration. Please note that **No other vehicles** than those arranged by MK Defence will be accepted in the barracks.

9:00 Live Demonstration for the CTS Lance Disrupter System

The Lance disrupter system (Patent Pending)

- Lightest and most compact on the market
- Rapid deployment time
- Hands free/no calibration setup
- Unique recoil absorbing cartridge
- Extremely versatile for a variety of applications
- Most deployable - lightest of its kind by 30% or more, designed for Airborne special forces operations
- Minimal recoil for never before possible applications; small robots, dismantled troops
- Simple spare parts package included, supports field maintenance
- No laser calibration using the only self calibrating laser in the market (Patent Pending)
- Unique power adaptability through existing power source from robot, vehicle, etc.
- No risk of EMF/RFI

Michael Raschella
VP R&D / Engineering
CTS

For more information on the **Lance** Disrupter or to schedule a Demo please contact Lance@mkdefence.com

Event Partners:



CTS (Canadian Technology Systems)

At CTS the technological component of the company's business concept is seen as one of the main factors to answer the market's needs for reliable EOD equipment. CTS's mission: "CTS strives to be the foremost innovator in the disruption technology for improvised explosive devices and unexploded ordnance using a scientific approach to create and produce the most advanced, safer, reliable and affordable equipment worldwide."

Through real research and development activities CTS is able to propose to the EOD world, a state-of-the-art disrupter capable of meeting the highest expectations. By incorporating a scientific approach rather than trial-and-error, CTS has improved the existing disruption technology by focusing on optimized designs, analysis, as well as live testing and virtual simulations. CTS develops its products in direct response to the market requests by working closely with end-users. This is CTS's "modus operandi".

CTS promotes its products to the domestic and international markets, which are composed of public organizations mandated with public security for EOD and related equipment including Counter-IED (Improvised Explosive Device), Unexploded Ordnance (UXO) and de-mining applications. CTS's core competencies offer the highest degree of innovation in the industry and its human capital make up the gainful strengths required to compete in a niche market with very high expectations.



"SEMA WORLD designs and manufactures flexible innovative solutions against different IEDs with high speed fragmentation and also against various terrorist threats, chemical and biological, suicide bomber, liquid explosive car bomb... All the range is coming from our factory under ISO 9001 and is internationally patented."



MREL Group of Companies Limited is the world's leading manufacturer of binary-explosive-loaded tactical disrupters. AquaRam™ Tactical Disrupters are used by Police, Military and Government Agencies to defeat IEDs and Vehicle Borne IEDs during domestic and international operations. MREL and its Associates provide advanced bomb technician training at MREL's private Explosives Training Facility near Ottawa, Canada."



(A live demo will be conducted at RedXDefense Booth during the event)
RedXDefense is a complete solution provider for defense against explosive threats. Privately-held and located in Rockville, MD, our mission is the detection of not only bombs but also bomb-making facilities, bomb makers, and terrorist networks. We believe that detection of explosive materials and those who have had contact with explosive materials is key to achieving this goal. Rugged, easy to use, and affordable, RedX's XPAK Portable Trace Explosives Detection System is ideal for wide scale deployment in applications from intelligence gathering to vehicle checkpoint screening.

"Theirs is the most advanced yet user-friendly detector I have ever seen. I wouldn't deploy on operations without it."

Major Chris Hunter

Author, *Eight Lives Down*, former British Armed Forces senior IED intelligence analyst



Manufacturers of Ion Mobility Spectroscopy Instruments, using newly developed patent pending, miniaturized ion mobility spectrometers, with sensitivity in low parts per trillion. Hand Held NON-CONTACT Explosive Detectors - Desk Top NON-CONTACT Explosive Detectors



ICx Radiation is a German manufacturer of radiation measurement equipment. Over the years ICx Radiation's expertise became advanced miniaturized electronics for gamma radiation spectrometry. Many new, revolutionary instruments have been successfully introduced since 1992. ICx Radiation's various multi-channel analyzers are the core of many applied systems that have been developed for many special applications in the medical industrial, nuclear, scientific and security field. ICx Radiation's portable and installed instruments are used in numerous standard applications in universities, research centres and laboratories around the world. Today ICx Radiation is a main supplier of handheld spectrometers to security and customs authorities worldwide.