



IABTI

In-Service Training



EXPOSITION 2017

June 12-16, 2017 – KI Convention Center, Green Bay, Wisconsin



TRAIN

Stay on top of your game.

- More than thirty explosive related presentations
- Professional Experts who are known in the industry
- Easily score new knowledge

CONNECT

Whether you're a rookie or a veteran, there's room in the IABTI huddle for you.

- Meet new colleagues
- Build relationships and share winning strategies
- Reconnect with old friends

EXPLORE

Even the hardest working players ensure that their equipment stays in peak condition.

- Get your eyes and hands on current technology
- Learn from those who design, develop, and maintain such equipment



The best defense is a good offense.

You know that staying engaged empowers you.

Join us in Green Bay!

The International Association of Bomb Technicians and Investigators
www.iabti.org

IABTI's 2017 International In-Service Training Schedule

Monday June 12, 2017

- 08:30 – 09:45 **Opening Ceremonies & IABTI Business Meeting**
ID Yarbrough, IABTI Executive Board
IABTI requests the honor of your presence at Opening Ceremonies to help us officially open IABTI's 2017 In-Service Training. All Delegates and Exhibitors are invited to attend.
- 09:45 – 10:15 **Green Bay Convention and Visitors Bureau**
Welcome to Green Bay
- 10:15 – 10:30 **Break**
- 10:30 – 11:15 **I need to talk to a Bomb Tech – The Response to Kurt Saxon's Residence**
Michael Meadors – Bentonville Police Department – USA
May 2015, the Bentonville Bomb Squad responded to the home of Kurt Saxon, Author of Poor Man's James Bond, due to numerous items of concern that were discovered during a renovation.
- 11:15 – 12:00 **Dallas shooting incident and use of the robot**
Johnnie Green
- 12:00 – 1:00 **Lunch (is included with your registration)**
- 1:00 – 2:30 **Inspire Magazine Devices and Tactics**
Bobb Epps – Riverside County Sheriff – USA
This presentation will explore and show all of the devices published in the Inspire magazines. Nine of the fifteen issues have IED's in them. My presentation will show each of the devices and cover how they are built, and how they intend to deploy them.
- 2:30 – 3:00 **Determining the Origin or Source of an Explosive Origin Using Field-Portable Instrumentation**
Pauline Leary Ph.D. – Smiths Detection - USA
& John Reffner Ph.D. – John Jay College of Criminal Justice - USA
This presentation will describe methods used to classify different explosives using field-portable instrumentation to aid in the determination of explosive origin or source. The advantages and disadvantages for each method used will be described in detail.
- 3:00 – 3:15 **Break**

3:15 – 4:15 **DHS Science and Technology Support to Public Safety bomb Squads (REDOPS)**
Jeff David & Byung Hee Frantz – DAGER Technology – USA
This briefing will discuss accomplishments of the DHS S&T REDOPS program in 2016 and plans for 2017 including operational assessments and exercise participation.

4:15 – 5:00 **Technological advances in Tinkering**
Russell Szczepaniec – USA
This presentation brings awareness of technological advances in hobby engineering and its devastating potential to IED detection and defeat efforts. Tinkering used to define tuning up motorcycles, fixing an old appliance, etc. Today it also defines playing with advanced sensors, programming embedded logic devices, and 3D printing a place to hide it all.

7:00 – 9:00 **Welcome Reception in Exhibit Hall**
Join us at the Exposition. Check out the latest in explosive related equipment and tools; detection; training services; it's all here!

Tuesday June 13, 2017

8:00 – 8:45 **IED Attack on the Public Transportation in Taiwan**
Chen Kai Hua & HSU Chia Min – Criminal Investigation Bureau – Taiwan
July 7th, 2016 an explosion occurred in the local train in Taiwan, causing 25 injuries. The investigation was solved in 24 hours.

8:45 – 9:45 **IED Trends in the Middle East, 2017**
Michael Cardash – Senior CIED Analyst Terrogence – Israel
The presentation focuses on the newer mutual IED trends and IED tactics employed in the different Middle Eastern conflicts.

9:45 – 10:00 **Coffee Break in Exhibit Hall**

10:00 – 10:45 **Raven's Challenge Interoperability Exercise**
John V. Simpson – Bureau of Alcohol, Tobacco and Firearms – USA
This presentation will provide an overview of the only international level, nationwide exercise program that is designed to integrate Public Safety Bomb Technicians and Military EOD Technicians in downrange operations.

- 10:45 – 12:15 **Explosive Misconceptions and Reality**
Christopher R. Cherry – Cherry Engineering – USA
In this session, common misconceptions regarding the use of explosives for EOD and explosive entry operations will be addressed and reconciled with scientific fact. With the goal of improving performance, response time, and personnel safety, a variety of topics including sensitivity of explosives and detonators, priming procedures, relative effectiveness factors, and methods to determine safe stacking distances will be examined.
- 12:15 – 1:15 **Lunch (is included with your registration)**
- 1:15 – 1:45 **Accessorizing EOD Robot with Low Cost Chemical and Explosive Detection Capabilities**
Kimberly Pricenski – Morphix Technologies – USA
Robots have become an indispensable tool for EOD teams and bomb squads. Adding low cost chemical and explosive detection capability allows users to get even greater benefits from the robot with little added cost.
- 1:45 – 2:30 **Creating Deadly IED's and Incendiary Devices Using Low Tech Materials**
Ron Craig – Ryerson University – Canada
The use of low explosives to create IEDs is an international trend. Using Pressure cookers as a containment device is not the only way to create an IED using low explosives. In fact, effective IEDs and incendiary devices can be created using low-tech materials: sandwich baggies, electrical tape and fireworks initiators and simple accelerant. This presentation shows how reliable devices can be constructed using these low-tech materials, and examines a way to reliably initiate high explosives without using a military or civilian detonator or improvised detonator.
- 2:30 -3:15 **Recovery of Unknown, Historically Significant Ordnance®**
Tom Gersbeck – Oklahoma State University – USA
Introduction to the application of a 7-step deductive Process used to identify unknown military ordnance from all ages and how to recognize historically significant munitions.
- 3:15 -3:45 **Break/Dessert in Exhibit Hall**
- 3:45 – 4:30 **NCETR Update**
Special Agent in Charge Donald Robinson – ATF – USA
Update on ATF's National Center for Explosives Training and Research (NCETR) training, R&D and enforcement programs, to include many partnerships that are benefiting IABTI members in public safety and military bomb technician and criminal investigator fields.

4:30 – 5:30 **Sparks and Radios – ESD and RF susceptibility of modern IED's**
Rick Haworth – PAE – USA
The susceptibility of IEDs to Electro-Static Discharge (ESD) and Radio Frequency (RF) signals is still talked about in terms of detonator vulnerability. Even this aspect is not well understood by many Bomb Techs. This presentation will address the susceptibility of detonators, improvised initiators and modern electronic firing systems to these in straightforward, non-mathematical, manner.

5:45 - **Regions I – VII Regional Meetings**
IABTI Regional Directors
Regional meeting locations will be posted at registration. Please support your region

Wednesday June 14, 2017

8:00 – 9:00 **The Development of a United States Marine Corps EOD Technician: Past, Present, and Future**
Shane A. Langerud – United States Marine Corps EOD – USA
The development of a highly effective training and education program is the cornerstone to the proficiency and survivability of bomb disposal technicians. After reviewing the history of the USMC EOD training and education program, new concepts will be introduced to exploit growth edges within the program. These concepts have applicability to both civilian and military bomb disposal programs.

9:00 – 10:00 **How the NIJ Bomb Suit Standard addresses Blast Effects and Operator Needs**
Dr. Aris Makris – Med-Eng – Canada
An updated presentation on the blast effect and protection required by bomb suites is provided in the context of the newly released NIJ Bomb Suit standard. Some functionality expected of bomb suits are covered within the standards while some important ones are not. The presentation aims to educate the end user community on what is important in a bomb suit and highlight where the new standard may address needs and expectations by the operator.

10:00 – 10:15 **Coffee Break in Exhibit Hall**

10:15 – 12:15 **Identifying ammunition from former Warsaw Pact Countries**
Eng. Vladimir Kavicky, Ph.D. – Slovakia
Warsaw Pact Countries had a different identification system of ammunition. EOD operators need to know it for their safety. Same color means different types of ammunition between Warsaw Pact and NATO.

12:15 – 1:15 **Lunch (included with your registration)**

- 1:15 – 3:00 **The Hazard Puzzle Risk Assessment Method**
Chuck O'Connor – US Navy Retired – USA
This risk assessment process provides the tactical explosive user a proven method to rapidly assess all risks and identify appropriate safety protocols during explosive operations in urban environment. The protocol does not require using calculators or computer programs.
- 3:00 – 3:15 **Break**
- 3:15 – 4:15 **Dallas Police Department Headquarters Zombie Van Attack**
Blair Ward – ATF – USA
This comprehensive case study involves the strategic use of an armored vehicle to attack the Dallas PD HQ with heavy rifle gunfire and to deploy a command initiated IED. It provides a detailed study of a uniquely designed and crafted electronic switch and IED, as well as the tactical utilization of a command initiated IED in an attempt to mass murder Police Officers. The study explores a wide variety of challenges Bomb Technicians creatively overcame while conducting an RSP of IED's inside an armored vehicle and the challenges Investigators overcame in conducting a large post blast scene investigation and a fire scene that contained IED's.
- 4:15 – 5:15 **Methods and Techniques of terrorist groups n the use of explosives in booby-trapping operations in Iraq in the current period**
B. General Jabbar Ali Shlayyish al Kashanee & Eng. Haider Fouad – Iraq
An explanation for planting IED operations, armoring cars to attack targets vitality and the type of explosives used and the places of booby-trapping and **show all the methods that are not seen by other countries.**
- 6:00 – 7:00 **Reception**
- 7:00 - **Annual Banquet (banquet meal is included with your registration)**

Wednesday June 14, 2017

- CIPBI Training / Refresher and Testing**
EEO Danny Waltenbaugh
- 8:00 – 12:00 Training
1:15 – 4:00 Testing

Thursday June 15, 2017

- 8:00 – 8:45 **IED Mitigation in Hong Kong**
Alick McWhirter – Hong Kong Police – Hong Kong
Hong Kong, as a city state and as part of China, is faced with both advantages and disadvantages when planning and dealing with IED mitigation. The presentation examines how our systems have evolved as a result of our experiences, resources and people.
- 8:45 – 10:00 **Bomb Arson Tracking System (BATS) & Mobile BATS (mBATS) Training**
Matt Nollau & Chris Lawler – United States Bomb Data Center – USA
The United States Bomb Data Center (USBDC) has developed a new version of the Bomb Arson Tracking System (BATS) and Mobile Bomb Arson Tracking System (mBATS). The new version provides a modernized interface and additional capabilities.
- 10:00 – 11:15 Dedicated **Exhibitor Time for Research and Development in Exhibit Hall**
- 11:15 – 12:00 **Unmanned Aircraft Systems (UAS) as Improvised Explosive Devices: Response and Defeat**
Dr. Edwin Bundy – Combating Terrorism Technical Support Office – USA
Unmanned aircraft systems (UASs) are increasingly being used during military conflicts as a delivery platform for Improvised Explosive Devices (IED's). The purpose of this presentation is to address how this threat differs from other IED threats, and discuss potential response and defeat considerations.
- 12:00 – 1:00 **Lunch**
- 1:00 – 1:45 **FBI Hazardous Devices School**
John P. Stewart – Federal Bureau of Investigation – USA
An overview of the FBI Hazardous Devices School located in Huntsville, Alabama.
- 1:45 – 2:15 **Novel Method for Fingerprint Visualization on Post-Blast IED Fragments and Debris**
Alexander Smyth – University of Leicester – United Kingdom
Traditional fingerprint enhancement techniques prove difficult in post-blast scenes due to the loss of fingerprint constituents, which physically or chemically react with traditional methods. A novel technique has been developed to visualize fingerprints on post-blast debris as well as directly from fragments of an IED. A number of different scenarios have been tested with positive results being achieved.
- 2:15 – 2:30 **Refreshment Break in Exhibit Hall**

- 2:30 – 3:30 **The Phenomenon of Suicide Bombings**
Mordecai Dzikansky – NYPD (Ret) – Israel
During the second intifada urban terrorism by means of suicide bombings was the preferred method of attack by terror groups in Israel. We are now seeing the resurgence of this method of attack by ISIS and other radical groups in Europe and Africa. Israel's reaction to suicide bombings, the resilience of its citizens and the country's ensuing security developments show the phenomenal capability of an urban environment succeeding against this type of terror. Israel's pro-active approach to combating suicide bombings and Best Practices will be conveyed in this course and be made relevant and operational for the USA environment.
- 3:30 – 4:15 **Use of Explosives for Criminal Purposes in Peru**
Gustavo Medina Gironzini – Coronel Retirado, Policia Nacional Del Peru
After terrorism in Peru (80's), ordinary criminals are using grenades, IED's and explosives to extort and blackmail. Illegal explosives are also being used in informal mining.
- 4:15 – 5:00 **IS use of IED's in the battle for Mosul**
Professor Clive Williams MG – Australian Defense Force Academy – Australia
IS uses a range of defensive measures to make it difficult to recover IS occupied areas. One of its most successful tactics is the use of IED's in Innovative ways.
- Friday June 16, 2017
- 8:00 – 9:30 **John Holmes Case Brief, Aurora Theatre Response**
Brian Knudsen – Arapahoe County – USA
Initial response, Interoperability of local, state and federal resources, Interoperability of SWAT and Bomb Squads, Multiple scenes, bomb disposal and outcome.
- 9:30 -10:15 **Curtailling the HME Pattern and Trends of IED's**
Shafqat Malik – Pakistan
- 10:15 – 12:00 **Can you recognize a homemade explosive (HME) lab?**
Elie Zussman – Signature Science, LLC – USA
This class will provide the necessary information about HME labs in an effort to keep K-9 handlers safe when investigating a clandestine lab. The presentation will include current and emerging HME threats and go beyond the traditional discussion of peroxide-based explosives.

This is the preliminary Training Schedule and is subject to change based on schedules. Please note, although all presentations/training presenters have submitted the approved topics, most typically have official duties which may require them to respond to unforeseen incidents. Therefore, the program is subject to change without notice. In the event that a speaker is required to cancel, IABTI will make every effort to substitute another qualified speaker on the same or related subject.