



*Hazardous Materials*  
***SYMPOSIUM***

October 24 & 25, 2013



Fire Service Training Bureau



## *Michael Callan*

*Mr. Callan is a 41 year veteran of the Fire Service. He served as a Captain with the Wallingford, Connecticut Fire Department for 20 years. In May of 2013 he received the John M. Eversole Lifetime Achievement Award given annually by the International Association of Fire Chiefs (IAFC) to recognize a living individual who has had an exceptionally distinguished career in the field of*

*hazardous materials emergency response. In 2010 he was the recipient of the prestigious Norman Y. Mineta Excellence in Transportation Award by the National Association of State Fire Marshals (NASFM) for his contribution to the safety of people, products and materials in transit. In 2001 he was selected as the California Hazardous Materials Instructor of the Year.*

*Michael Callan has authored a number of books on Emergency Response, including the popular Street Smart HazMat Response. His company, Callan and Company, conducts energy, pipeline, safety, chemical and emergency response training around the country for Industrial and Municipal HazMat Teams. He lists as clients, corporations such as Pipeline Association for Public Awareness, ComEd, Excel Energy, Puget Sound Energy, Bristol Meyers Squibb, SCANA, Northeast Utilities, Louisiana Pacific, Sprint, Pacific Gas and Electric, US DOJ - ATF, NASA & Kennedy Space Center, Duke Energy, General Motors, Ensign-Bickford Industries, Merck, Dupont, IBM, National Association of State Fire Marshals. In addition, he has been training emergency responders for 38 years throughout the United States and Canada.*

## *Keynote Presentation: "It Didn't Start Out as a Disaster"*

Most emergencies start out small and grow into major events. The escalation of the incident can result naturally from the sheer magnitude of the release or hazards of the product. However, it can also be other factors, denial, failure to notify supervisors, poor planning and of course poor, incorrect or downright "bad" decisions by the organization's leadership. This presentation uses simple street smart tips and approaches to keep an organization's efforts within an emergency focused on a successful conclusion of the emergency well before it has the opportunity to become a disaster. Join Mike Callan, Consultant and Owner of Callan and Company, as he presents this keynote address in his usual humorous way.



# HAZARDOUS MATERIALS SYMPOSIUM

*October 24 & 25, 2013*

The Fire Service Training Bureau is pleased to present the 2013 Iowa Hazardous Materials Symposium. The Symposium is designed to provide training for individuals who plan for, or may have to respond to hazardous materials incidents, including: Hazardous Materials Teams; Firefighters; EMS Providers; Emergency Management Personnel; Law Enforcement; Local Government; and Business & Industrial Personnel.

The Fire Service Training Bureau is sure that you will find this year's selection of classes a valuable addition to your professional development opportunities.

## *SCHEDULE*

### *Thursday, October 24, 2013*

7:15 am	Registration
8:00 - 10:00 am	Concurrent Sessions
10:00 - 10:15 am	Break
10:15 am - 12:15 pm	Concurrent Sessions
12:15 - 1:00 pm	Lunch
1:00 - 3:00 pm	Concurrent Sessions
3:00 - 3:15 pm	Break
3:15 - 5:15 pm	Concurrent Sessions

### *Friday, October 25, 2013*

7:15 am	Registration
8:00 - 9:30 am	General Session Presentation
9:30 - 9:45 am	Hazardous Materials "Technician of the Year" Presentation
9:45 - 10:00 am	Break
10:00 am - 12:00 pm	Keynote Presentation
12:00 pm	Symposium ends



## *Hazardous Materials:* **GENERAL INFORMATION**

### *Registration*

If you would like to attend the Iowa Hazardous Materials Symposium, complete the registration form in this brochure, and mail the form with payment to:

Haz Mat Symposium  
Fire Service Training Bureau  
3100 Fire Service Rd (Haber Rd)  
Ames, IA 50011

You may also FAX your registration and billing information to the Fire Service Training Bureau at 800.722.7350. For more information call 515.294.6817 or 888.469.2374.

Cost for the two-day Hazardous Materials Symposium is \$130.00 per person for registrations received on or before October 2, 2013. The cost for registrations received after October 2, 2013 will be \$160.00.

Lunch on Thursday is included in your registration fee.

### *Location*

The Symposium will be held at the Scheman Building at the Iowa State Center (on the ISU Campus next to Hilton Coliseum).

### *Lodging*

A block of rooms have been reserved at the following hotel (when making reservations, ask for the Fire Service Training Bureau rate. Reservations must be made by October 2, 2013 for this published rate):

- Gateway Hotel & Conference Center - \$72.00/night plus tax  
2100 Green Hills Drive, Ames 515-292-8600

## *Iowa Fire Service Bookstore*

Educational materials from Fire Protection Publications/IFSTA, NFPA, Fire Engineering, Delmar, Jones & Bartlett and the Fire Service Training Bureau are always available by direct mail order services at the Fire Service Training Bureau. Stop by the booth and pick up FREE catalogs. Take the opportunity to look at the merchandise and take it home with you that day, or call us with your order at our toll-free number 888-469-2374.

We are offering a 10% discount on the purchase of any books during the Symposium. Purchases may be made with credit cards, checks, cash, or charged to fire departments.

Remember, all proceeds from the purchase of educational materials at the IFSB stay in the Iowa fire service so that the benefit of guidance and information about firefighter safety, effective fire prevention and protection, and many other services may continue to be provided to individuals and fire departments.

## *Hazardous Materials Symposium "Sponsors"*

- 71st Civil Support Team
- EHS Resource Group, LLC
- Iowa Department of Natural Resources
- Iowa Department of Transportation
- Iowa Emergency Response Commission
- Iowa Hazardous Materials Task Force and the member Haz Mat Teams
- Iowa Homeland Security and Emergency Management
- Iowa Pipeline Association
- Iowa State University Environmental Health & Safety
- US Department of Transportation





## *Hazardous Materials: BACK TO BASICS*

*Thursday 8:00 - 10:00 am*

### *Hazardous Materials Training Program Management*

Managing hazardous materials training at the local level can be a complex task. Given the limited resources and time we have to spend on hazmat training, coupled with the numerous agencies we try to maintain compliance with, a training officer can find the job overwhelming. This workshop will present guidelines for how to prepare an ongoing training program for Awareness, Operations, and Technician level personnel. Topics include: developing an annual training schedule required training objectives, and refresher training.

*Presenter: Rich Rodewald, Drill Master, Council Bluffs Fire Department*

*Thursday 10:15 am - 12:15 pm*

### *Street Smart HazMat, Revisited*

This program is about real life hazardous materials emergency response. In this session are lessons that have been learned by emergency responders over the last twenty years. Mike Callan brings years of experience in teaching responders around the country and shares their experiences with the class as well as his own personnel skills and training to the program.

*Presenter: Mike Callan,  
Consultant and Owner,  
Callan and Company*



*Thursday 1:00 - 3:00 pm*

## *Response to Cryogenic Liquids*

This workshop will provide an understanding of the use, properties, hazards, and emergency response to cryogenic gases and liquids. Topics include: use, properties, and hazards of cryogenics; and proper emergency response guidelines.



*Presenter: Matt Woody,  
EHS Resource Group, LLC*

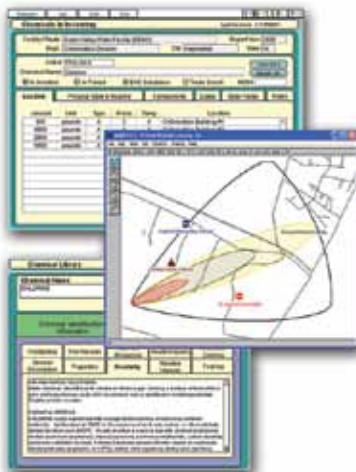
*Thursday 3:15 - 5:15 pm*

## *Basic Software Operations*

This workshop will explore the operations of CAMEO, ALOHA, Marplot and other free hazardous materials related software. These software applications relate to emergency response, planning, and documentation.

This is a great workshop to explore these software applications.

*Presenter: Rich Andersen,  
Lieutenant, Sioux City Fire Rescue  
and Regional Hazardous Materials  
Response Team*





## *Hazardous Materials:* **TRANSPORTATION & FIXED FACILITIES**

*Thursday 8:00 - 10:00 am*

### *Pipeline Emergency Response*

This workshop is a part of an on-going national effort to increase the knowledge and understanding of pipeline emergencies, and is developed in conjunction with the US Department of Transportation's (DOT) Public Awareness final rule regarding API RP 1162. This workshop will stress the coordination effort needed by emergency responders and pipeline operators in the event of an incident, reminding emergency services to review the National Incident Management System (NIMS) and Incident Command System (ICS). This program will include information related to the following: 811 system, hazards and characteristics of products, line pressures, high consequence area regulations, and responding techniques needed for properly handling a pipeline emergency.

*Presenter: Robbie DeLong, Instructor, Paradigm Liaison Services – Representing the Iowa Pipeline Association*



*Thursday 10:15 am - 12:15 pm*

### *Transportation of Explosives*

This session is designed to heighten awareness of the various types of explosives that are transported daily in Iowa, and their characteristics. This session will include information on bulk emulsions, detonators, and other high explosives used in Iowa for blasting. Discussion will also include information on pyrotechnics.

*Presenters: Art Fleener, State Program Manager, US Department of Transportation; and Ryan Able, General Manager, Quick Supply Company*





*Thursday 1:00 - 3:00 pm*

## *HazMat Science Officer*

There has been a lot of discussion lately about how responders assess things and make decisions. Part of that process should include classifying the material and making decisions based on what classification. The key decision points for chemicals are: "Is it moving?" and "What does it do?" (energy release, corrosive, and/or toxic). From there, a person should be able to safely get their protection and detection figured out and actually start doing something. The "Is it moving?" part addresses some key items such as population and environmental protection. Both concerns are very important in the hazard and risk assessment process. NOTE: the key decision points don't involve the use of fancy toys or short cuts. It finds its basis in a few fundamental observations coupled with effective monitoring. This workshop breaks the incident assessment down into the environment, the container, and the material. Understanding hazmat containers is like learning building construction for firefighters. Anticipating the results of stress on the container can be compared to learning about the collapse of a burning building during a fire situation.

*Presenter: Bill Hand, Houston (TX) Fire Department Hazardous Materials Response Team (retired)*

*Thursday 3:15 - 5:15 pm*

## *Responding to Fixed Facilities*

This workshop will provide participants with an understanding of the coordination, operations, identifying tactical operations, and understanding processes of fixed facilities. Topics include: an understanding of the differences and similarities of public and private emergency response; features of fixed facilities that can be useful in handling chemical emergencies; and tips for understanding chemical processes for the purpose of working with a process to resolve a chemical emergency.

*Presenter: Matt Woody, EHS Resource Group, LLC*



# *Hazardous Materials:* **TRANSPORTATION EMERGENCIES**

*Thursday 8:00 am - 12:15 pm*

## *Highway Cargo Tank Emergency Response*

Highway cargo tank incidents are one of the most frequently encountered types of hazardous materials emergencies. Bill Hand will draw on his long career as a member of the Houston (TX) Fire Department Hazardous Materials Response Team to provide actual case histories of highway cargo tank incidents for the students to assess and make tactical decisions. This will be an interactive workshop and students will have ample opportunity to make emergency response decisions.

*Presenter: Bill Hand, Houston (TX) Fire Department Hazardous Materials Response Team (retired)*



*Thursday 1:00 - 5:15 pm*

## *Rail Emergency Response*

This course will focus on safe response to emergencies involving rail from locomotive fires to haz mat releases. Tank car design and features, damage assessment along with mitigation techniques will be covered. The dome trailer that includes all valves and fittings from both pressure and non-pressure tanks cars will be included in the class allowing for a hands on section for participants.

*Presenters: Anthony Ipolitto, Canadian National Railroad; and Matt Thompson, Union Pacific Railroad*





## *Hazardous Materials: CASE STUDIES*

*Thursday 8:00 - 10:00 am*

### *Chlorine Leak & Hydrochloric Acid Spill*

The Cedar Rapids Fire Department and Regional Hazardous Materials Team responded to two separate incidents involving chemicals. The first incident was a semi-tanker that starts to leak during off-loading of hydrochloric acid. The second incident was a one-ton chlorine cylinder leaking at the municipal water plant. Greg will provide an overview of both incidents, sharing lessons learned.

*Presenter: Greg Smith, Assistant Fire Chief, Cedar Rapids Fire Department*



*Thursday 10:15 am - 12:15 pm*

### *We Don't Have It So Bad*

After a recent trip to Kosovo to assess their disaster preparedness, it became clear that while the hazards are similar in every country, we are far better prepared to deal with hazardous materials, weapons of mass destruction and disaster response than other countries. Come join this discussion to see for yourself.

*Presenter: Jim Clark, Assistant Fire Chief, Sioux City Fire Rescue*



*Thursday 1:00 - 3:00 pm*

## *White Powder Incident at ISU*

In June of 2013, a white powder substance was found at Hamilton Hall on the Iowa State University campus in Ames. Responders included ISU Police, Ames FD Hazardous Materials Team, Des Moines FD Hazardous Materials Team, the US Postal Inspection Service, and the FBI. ISU Environmental Health and Safety responded for consultation. This incident quickly evolved into a multi-agency response. Learn how this incident was handled, and lessons learned.

*Presenters: Representatives from ISU Police, ISU Environmental Health and Safety, Ames FD Hazardous Materials Team, and Des Moines FD Hazardous Materials Team*

*Thursday 3:15 - 5:15 pm*

## *History of Illicit Drug Labs, Current Manufacturing Trends, and Lessons Learned from Responses*

This workshop will provide an understanding of the methamphetamine abuser and the processes used to manufacture methamphetamine. Those who manufacture this in Iowa utilize three main cooking methods: the Lithium/Ammonia method, the One Pot method, and the Red Phosphorous method. All three methods use highly volatile chemicals with varying properties, and the cooks are by no means scientists or chemists. This workshop will cover topics including the history of clandestine labs, various chemicals used in the manufacturing process, their effects on the human body, as well as procedures to be followed when a clandestine lab is discovered.

*Presenter: J. Douglas Hurley, Special Agent, Iowa Division of Narcotics Enforcement*







## *Hazardous Materials: INTERMEDIATE*

*Thursday 8:00 am - 12:15 pm*

### *Handling Chemical/Medical Emergencies*

This workshop will provide an understanding of how to properly handle chemical accident victims in the pre-hospital and hospital setting. Topics include: hazards of handling chemically contaminated victims, clarifying the types of support hazmat responders should provide to EMS providers, and sources of chemical/medical guidance.

*Presenter: Matt Woody, EHS Resource Group LLC*

*Thursday 1:00 - 5:15 pm*

### *HazMat IQ Refresher: "Above the Line/Below the Line"*

This four-hour refresher is for personnel who have completed the full HazMat IQ training. This training is based on a patented HazMat/WMD response system called HazMat IQ that coaches responders through a streamlined chemical research method. HazMat IQ incorporates a series of easy-to-understand job aids called Smart Charts that help you quickly assess risks and respond safely and efficiently. All participants will receive a personal copy of the Smart Charts. Topics covered include: 30-second Above the Line and Below the Line size-up; quick assessment for GO/NO GO rescue decision making; chemical research under two-minutes; selecting the correct meters (TopH, CGI, TempGun, PID, FID, DM, KI, etc.); and choosing the correct mission-driven PPE (PPE turnout gear, level A, B, or C). This workshop is limited to 30 participants (who have completed the full HazMat IQ training).

*Presenter: Steve Hergenreter, Captain, Fort Dodge Fire Rescue Hazardous Materials Response Team*

# Hazardous Materials: *ADVANCED*



*Thursday*  
*8:00 am - 12:15 pm or 1:00 - 5:15 pm*

## *Monitoring Strategies for First Responders*

In recent years, new technologies have been given to first responders. This workshop will show the first responders how to combine the results, or lack of results, to help determine the classification/identification of the material involved. Chemical identifiers have their limitations also. Going beyond the library to classify materials will also be discussed. This hands-on workshop will be limited to 20 participants.

*Presenter: Richard Dufek, Battalion Chief (retired), Carmel (IN)  
Fire Department*





## *Hazardous Materials: GENERAL SESSION*

*Friday 8:00 - 9:30 am*

### *Updated Iowa CBRNE HazMat Protocols*

The Chemical-Biological-Radiological-Nuclear-Explosives (CBRNE) Protocols that all responders in the State should be using for suspected Weapons of Mass Destruction (WMD) events has been updated. The new Protocol is now in an interactive format (.pdf), with an updated “quick action guide”, designed to get all responders working effectively to manage a suspected WMD event. Join Frank Klier, Iowa Homeland Security and Emergency Management, along with representatives from WMD HazMat Teams, the 71st Civil Support Team, WMD Bomb Teams, WMD Tactical Teams, and the State Hygienic Lab, as they provide this updated Protocol.

*Friday 9:30 - 9:45 am*

### *HazMat “Technician of the Year” Presentation*

Each year, a Hazardous Materials Technician is recognized by the Iowa Hazardous Materials Task Force for their efforts in the field of Hazardous Materials Response. Mike Cheney, President of the Iowa Hazardous Materials Task Force, will formally recognize this year’s recipient.

*Friday 10:00 am - 12:00 pm*

### *Keynote Presentation: “It Didn’t Start Out as a Disaster”*

*Presented by Michael Callan  
(See inside cover for Bio and Description.)*

**Registration Information:** Only 1 registration per form (Please duplicate for additional registrations)

First Name	Last Name	
Home Address		
City	State	Zip
Fire Department/Company Name		Last 4 Digits of SSN
Date of Birth (Mo/Dav/Yr)	Phone Number	E-mail Address

- |  |                     |
|--|---------------------|
| ___ (11) HazMat Training Program Management                                      | 8:00 am – 10:00 am  |
| ___ (12) Pipeline Emergency Response   | 8:00 am – 10:00 am  |
| ___ (13) Chlorine Leak & Hydrochloric Acid Spill                                 | 8:00 am – 10:00 am  |
| ___ (14) Highway Cargo Tank Emergency Response                                   | 8:00 am – 12:15 pm  |
| ___ (15) Handling Chemical/Medical Emergencies                                   | 8:00 am – 12:15 pm  |
| ___ (16) Monitoring Strategies for First Responders ( <i>Morning Session</i> )   | 8:00 am – 12:15 pm  |
| ___ (17) Street Smart HazMat, Revisited  | 10:15 am – 12:15 pm |
| ___ (18) Transportation of Explosives  | 10:15 am – 12:15 pm |
| ___ (19) We Don't Have It So Bad   | 10:15 am – 12:15 pm |
| ___ (20) Response to Cryogenic Liquids   | 1:00 pm - 3:00 pm   |
| ___ (21) HazMat Science Officer  | 1:00 pm – 3:00 pm   |
| ___ (22) White Powder Incident at ISU  | 1:00 pm – 3:00 pm   |
| ___ (23) Rail Emergency Response   | 1:00 pm – 5:15 pm   |
| ___ (24) HazMat IQ Refresher   | 1:00 pm – 5:15 pm   |
| ___ (25) Monitoring Strategies for First Responders ( <i>Afternoon Session</i> ) | 1:00 pm – 5:15 pm   |
| ___ (26) Basic Software Operations   | 3:15 pm – 5:15 pm   |
| ___ (27) Responding to Fixed Facilities  | 3:15 pm – 5:15 pm   |
| ___ (28) History of Illicit Drug Labs  | 3:15 pm – 5:15 pm   |

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|--|---------------------|
| _____ (29) Updated Iowa CBRNE HazMat Protocols                               | 8:00 am - 9:30 am   |
| _____ (30) Keynote Presentation " <i>It Didn't Start Out as a Disaster</i> " | 10:00 am - 12:00 pm |

**Registration deadline is October 2, 2013.**

**Fees:** (Check all appropriate lines)Registrations received on or before October 2, 2013 - **\$130.00**

\_\_\_\_\_ Registrations received after October 2, 2013 - **\$160.00**

TOTAL....\$

**Method of Payment:**

- ☐ Check (Payable to Fire Service Training Bureau)
- ☐ Bill my Fire Department/Company

Purchase Order #: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Billing Address:

☐ Credit Card Payment

Due to ISU Credit Card Policies, we are unable to accept credit card information online.

Please call the FSTB at 888-469-2374 with payment information after submitting your registration online.

**FAX or Mail BOTH pages  
of the Registration Form**

FAX form and billing or credit card information to:  
800-722-7350

Mail completed forms with fee to:

HazMat Symposium  
Fire Service Training Bureau  
3100 Fire Service Rd  
Ames, IA 50011-3100

Registrations will NOT be taken over the phone.

*Registrations will be processed in the order they are received. Please pay attention to day and times for each class.*





**THURSDAY** October 24, 2013

**FRIDAY** October 25, 2013

<i>TRACK</i>	8:00 - 10:00am	10:15am - 12:15pm	1:00 - 3:00pm	3:15 - 5:15pm
<i>Back to Basics</i>	HazMat Training Program Management	Street Smart HazMat, Revisited	Response to Cryogenic Liquids	Basic Software Operations
<i>Transportation &amp; Fixed Facilities</i>	Pipeline Emergency Response	Transportation of Explosives	HazMat Science Officer	Responding to Fixed Facilities
<i>Transportation Emergencies</i>	Highway Cargo Tank Emergency Response		Rail Emergency Response	
<i>Case Studies</i>	Chlorine Leak & Hydrochloric Acid Spill	We Don't Have It So Bad	White Powder Incident at ISU	History of Illicit Drug Labs
<i>Hazardous Materials; Intermediate</i>	Handling Chemical/Medical Emergencies		HazMat IQ Refresher	
<i>Hazardous Materials; Advanced</i>	Monitoring Strategies for First Responders		Monitoring Strategies for First Responders	

<i>General Session Presentation</i> 8:00 - 9:30 am	Updated Iowa CBRNE HazMat Protocols
<i>General Session Presentation</i> 9:30 - 9:45 am	Hazardous Materials "Technician of the Year" Presentation
<i>Keynote Presentation</i> 10:00 am - 12:00 pm	It Didn't Start Out as a Disaster



# Hazardous Materials SYMPOSIUM

October 24 & 25, 2013

Fire Service Training Bureau  
3100 Fire Service Road  
Ames, IA 50011-3100

Address Service Requested