

# THE 'INDEPENDENT' FOAM SEMINAR FOR STORAGE TANKS INCLUDING PRACTICAL FIRE-FIGHTING AND FOAM APPLICATION

#### **WORKSHOP AND HANDS-ON TRAINING**

Delivered by Dr Niall Ramsden in association with ISTC Malta

VENUE International Safety Training College, Hal-Far, Malta





All lectures will be supported by video and slide presentations

Delegates will learn about the usage, testing, maintenance and design of firefighting foam

Delegates will learn how to assess and control fire related risks in flammable liquid storage tanks

## WORKSHOP HOURS DAY 1 DAY 2 8:30 - 16:00

DAY 3

8:30 - 15:30

#### DAY 1 - CLASSROOM

- Storage Tank Types and Fire Scenarios
- Atmospheric Storage Tanks
- Pressurised Storage Tanks
- Tank Fire Incident Histories / Review
- Full Surface Tank Fire Response Options and Major Incident Response Units
- Foam Application Techniques
- Foam System Assurance
- Rimseal Fire Fighting Tactics
- SCBA Testing and Wearing Refresher

#### **DAY2 - FIRE GROUND**

- Fire Gear Issue and Safety Brief
- Foam Equipment Demonstrations
- Flange Fire (Simulating tank valve/flange)
- Ground level rim sealfire (Simulating length of rim seal)
- **Ethanol Fire Demonstration**
- Tank rim seal fires (Simulating actual 6m dia. tank rim seal fire conditions)
- Tank Full Surface Fire (Simulating scaled version of full surface fire on tank top)
- Tank Bund Fire (Simulating tank bund fire area for sectional foam control tactics)

#### DAY 3 - CLASSROOM

- **Emergency Response Planning**
- LASTFIRE Project
- Buncefield Terminal Fire Review (RPI attended the incident as advisors)
- Feedback / debrief

A unique opportunity to experience hands on tank fire fighting in one of Europe's leading fire schools, devised and implemented by Dr. Niall Ramsden and his team of experienced Fire Hazard Management Consultants.





#### **FLANGE FIRE**

This is a typical fire training ground simulator for a leaking valve/flange incident used to represent the situation that can occur from a leaking tank flange at lower level, leading to a pressurised jet fire. This challenges the delegates to execute the correct tactics using foam and dry chemical.



#### TANK RIM SEAL FIRE

The 6m diameter and 6m high storage tank has a rim seal area which is divided into a small strip and large strip, for use with extinguishers. The delegates are well challenged by the single access and limited movement that storage tank rim seal fires present.



#### **TANK BUND FIRE**

This is a bund which has a horizontal vessel within but is used in the same manner that a storage tank would be for foam application assistance, before foaming operations to secure each section of the bund fire. This is a particularly challenging fire event as only one foam handline of limited flowrate is used.



This was developed as part of the LASTFIRE Project recommended for tank fire training aids. It allows delegates to practice the use of dry chemical extinguishers on a limited length simulated rimseal fire.



#### TANK FULL SURFACE FIRE

The same tank is used to provide a full surface fire for delegates to extinguish using either a low throughout monitor or foam handline.



#### **BLEVE DEMONSTRATION**

We have worked with the facility to create a safe LPG BLEVE demonstrator to enable delegates to gain an appreciation of the explosive hazard and high radiant heat effect. The scale of this is obviously limited to ensure safety whilst allowing maximum awareness for delegates.



The International Safety Training College was founded in 2000 and registered as a college in 2012. The International Safety Training College currently operates two leading centres in Malta and Libya which provide consultancy and training to the highest professional standards in firefighting, emergency response, disaster management, offshore and marine survival, fire safety. health & safety and first aid. ISTC is Malta's preeminent training centre focusing upon emergency response, disaster management, health, safety and the environment. The unique training facilities offered by the company have been specifically designed to satisfy the learning outcomes required for the aviation, oil and gas, and marine industries, amongst others. These facilities are contained within a large incident ground where risk critical training is undertaken on a daily basis.

### PRACTICALTANKFIREFIGHTING AND FOAM APPLICATION WORKSHOP - OBJECTIVE

The objective of this Workshop is to provide an opportunity for fire responders to receive specialist training in fire response to tank incidents and to carry out

fire ground exercises to back up theoretical knowledge. The programme has been developed from the worldwide experience of RPI and will ensure that delegates are updated in the latest techniques in this important field. The Workshop will describe tank types and potential fire scenarios, drawing heavily from incident experience. The fire ground sessions will include demonstrations and hands-onexercises. With the major tank related incidents in Puerto Rico and India and the current industry debate regarding environmental aspects of foam usage and potential new foams for the future, there has never been a better time to review foam usage policy!

#### WHO SHOULD ATTEND THE WORKSHOP?

- Fire Responders from industrial and municipal brigades
- Fire Engineers with responsibility for developing fire response strategies
- Safety Professionals
- Health, Safety and Environmental Protection regulators

#### WORKSHOP DIRECTOR

Our expert fire and safety instructors deliver specialist academic knowledge uniquely combined with practical incident experience gained from working in the field in the Oil, Gas and Petrochemical industry worldwide, with emphasis on refineries and storage terminals.

#### **DR NIALL RAMSDEN**

Dr. Niall Ramsden joined the loss prevention industry in 1976 having graduated in physics and mechanical engineering. He has been involved in all aspects of fire hazard management for the oil and petrochemical industries and has worldwide experience in active and passive fire protection and detection systems to international standards - including conceptual studies. detailed design and system commissioning. He has carried out training and consultancy projects for major oil/petrochemical companies around the world including fire/safety audits, process safety studies, scenario based emergency resource evaluations and in-house seminars. He is a Chartered Engineer, a Chartered Physicist and a member of the National Fire Protection Association (USA) and CEN (European)\* Foam Systems Committees. He acted as Project Coordinator for the LASTFIRE Project and is currently fulfilling the same role for the LASTFIRE Update Project.

#### **WORKSHOP INFORMATION**

The workshop will be held in Malta at the 'International Safety Training College'. For further details about ISTC, please refer to www.istcollege.com.mt

#### TRANSPORT / ACCOMMODATION

Delegates are responsible for booking and paying their own hotel and travel costs.

ISTC will cover the costs of the transport from the hotel to our college for the training and back for the 3 days of the seminar.

The hotels that we recommend you to stay are the following:

- Marina Hotel at the Corinthia Beach Resort \*\*\*\* located in St Julians.
- Corinthia Hotel St Georges Bay\*\*\*\*\* located in in St Julians.
- Radisson Blu Baypoint Hotel\*\*\*\*\* located in St Julians.
- ♣ Fortina Spa Resort\*\*\*\*\* located in Sliema Tigné.

#### **FEES**

The workshop fee is €1,700.00 + Local VAT (18%) per delegate.

The workshop fees include instruction, lecture notes and light refreshments each day at a lunch break. All classroom exercises and discussions will be supported and complemented by case histories and video and slide presentations. Course notes will be provided in the form of a hard copy of the presentations.

As a courtesy of attending this seminar, ISTC will be covering the following:

Transport from the hotel to ISTC and back on training days.

#### PRACTICAL EXERCISE PARTICIPATION

Delegates will have an opportunity to take part in each exercise if they wish to do so. ISTC has a high standard of firefighting PPE but delegates can bring their own personal equipment if preferred. Changing facilities and showers are provided.

Delegates should note that competence in the use of dry powder extinguishers is desirable for this workshop.

For the tank rim seal fire exercises, it will be necessary to wear self-contained breathing apparatus (SCBA) and therefore it is mandatory for any delegate wishing to take part in these particular exercises to be competent in the testing and wearing of SCBA as this course does not deliver competence for this apparatus.

An SCBA refresher session will however be provided before the day of the exercise to ensure delegate familiarity with the sets in use at the facility (Sabre and Draeger). Taking part in the exercises is not mandatory and is a decision each delegate may make.

All delegates taking part in exercises must obviously be physically and medically capable of doing so and the facility will require delegates to sign documentation that declares the to be capable of participation in the exercises and that they accept full responsibility for taking part in the hands-onexercises.



# BOOKING FORM

### PRACTICAL TANK FIRE FIGHTING WORKSHOP 2020

THE INTERNATIONAL SAFETY TRAINING COLLEGE, MALTA 8th till 10th June 2020

Please regard this Booking Form as an Invoice. A receipt will be issued only on request.

Please book early to avoid disappointment as spaces are limited. This form can be copied for additional delegates. ISTC reserve the right to cancel the event in which case a full refund of any fees received will be given.

#### Return forms, along with appropriate fees, to:

International Safety Training College Hal Far Road, Hal Far, Malta

#### If you have problems printing this form, or need further details please contact us on:

- + 356 2165 8281/2
- + 356 9998 5211

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International Safety Training College Hal Far Road, Hal Far, Malta

#### **IMPORTANT**



