

January 2017

JOIFF Shared Learning

Shared learning is one of the 3 key pillars of JOIFF. Details of the industrial incidents listed on this page which are only a small number of actual incidents reported during the past 3 months have been circulated through the JOIFF Shared Learning network to the nominees of all JOIFF member organisations.

Message from the JOIFF Chairman



JOIFF members and Guests,

Here are my thoughts on the first JOIFF International Fire and Explosion Hazard Management Planning (FEHMP) conference held in Malta during the first week of November 2016.

JOIFFs first conference on FEHMP attempted to gather a range of experts to provide information and perspective on a range of disciplines as continued overleaf....





USA – Ethanol plant fire: Tanker driver in critical condition ~ Germany - One Dead, Six Missing in BASF Explosion ~ USA - 102 injured, 1 serious due to chemical plume, hydrochloride & sulfuric & acid accidentally mixed. ~ China – Naphtha loading

explosions at Port of

Dongfang, 1 dead 16 to hospital. \sim Pakistan – At least 12 dead, 58 injured in explosions at Gadani shipbreaking yard. \sim US - Effects of pipeline blast

dies in Ballash oil refinery blast. ~



USA – Fire erupts at PBF Energy Refinery in Torrance. ~ Mozambique - 73 killed in tanker explosion. ~ South Africa – Clean-up under way after big Durban oil spill. ~ USA – Fire at Exxonmobil Refinery leaves 4 workers critically injured in Baton Rouge. ~ Pakistan - Two hurt as fire erupts in Keamari oil storage tank ~ Italy – Fire Hits ENI Refinery near Milan - no reported Injuries ~

Congo Republic -One dead in ENI

Congo oil platform fire ~ Bulgaria - Seven Killed, 29 Injured in LPG Train Derailment ~ Azerbaijan – Caspian Sea platform collapses in high winds; 1 dead, 9 missing ~ Pakistan - 2 killed as blaze erupts in Kemari area methanol tank ~ Israel – Haifa Refinery Naphtha Tank Ignites, fire-fighters at

just beginning to reach NC. ~ Albania – Worker

Scene ~ Azerbaijan – Garadagh District Houses damaged in gas pipeline explosion

JOIFF



described below. The quality and depth of information presented by our speakers, and the incredible depth and quality of the delegates in the room was astounding. I have been to many conferences, seminars and training sessions over the years. I cannot recall any event that was represented by such an excellent range of professionals dedicated to their craft. There are always things to learn and excellent people to meet at any event I have been to, but few offered such a consistent powerful experience as I was able to enjoy in the conference hall on those two days. For me, it was a constant flow of value.

This is a direct reflection on the delegates and the speakers, who maintained a sharp edge of quality. We as JOIFF leadership are delighted and deeply appreciative of how you as the delegates and speakers insured that the conference was very successful on all accounts.

As professionals, we rely on expertise in the range of disciplines that allow us to be effective in our mission. For the industrial response profession this includes an understanding of fire behavior, fuels, propagation, construction, physical configuration, metallurgy and failure rates, deflagration, conflagration, environmental impacts, hydraulics, foam, heat flux modeling, toxicology, human physiology, physical and medical attributes, high angle rescue, mechanical and electrical and chemical risk mitigation, organizational management and construct, training and learning development, Response equipment design, specifications, applications and limitations, small team dynamics, fire ground control and coordination, public speaking, agency interaction, laws and regulations, comprehensive resource management, budgeting, leadership, and the list goes on......

I would expect that every reader of this message can add to this list and understands how each competency applies. I would also expect that whether you are in a position of leadership, responsible for the effectiveness of your response organization, a support or technical expert, or an individual contributor, that you strive to embed these disciplines into your organization and apply them through your Fire Explosion and Management Plans. No one can be a master of all of the disciplines mentioned above, so it is a good thing that we have such a range of professionals that dedicate themselves to specific elements and then provide that expertise to those that need it. We don't have to know everything, we just have to know those that do and apply their hard work into our FEHMP.

The conference provided such an opportunity to learn and JOIFF is dedicated to continue that effort through all that we do on your behalf.

Highest Regards,

RANDAL S. FLETCHER (RANDY)

JOIFF Chairman

About JOIFF

Membership of JOIFF, the International Organisation for Industrial Emergency Response and Fire Hazard Management is open to any organisation which is a high hazard industry and/or has nominated personnel as emergency responders/hazard management team members who provide cover to industrial/commercial organisations. Organisations which do not fully comply with these requirements and wish to support JOIFF are welcome to apply for Corporate Membership of JOIFF.

JOIFF's purpose is to prevent and/or mitigate hazardous incidents in Industry through its 3 pillars:

- Shared Learning improving risk awareness amongst our members
- Accredited Training enhancing operational preparedness in emergency response and crisis management.
- Technical Advisory Group raising the quality of safety standards in the working environment of High Hazard Industry

JOIFF welcomes enquiries for Membership - please contact the JOIFF Secretariat for more information.

JOIFF CLG is registered in Ireland. Registration number 362542. Address as secretariat. JOIFF is the registered Business Name of JOIFF CLG

About The Catalyst

The Catalyst is the official newsletter of JOIFF, the International Organisation for Industrial Emergency Response and Fire Hazard Management. Our policy is to bring you articles on relevant technical issues, current and new developments and other happenings in the area of Fire and Explosion Hazard Management Planning (FEHMP). The Catalyst is published quarterly - in January, April, July and October each year.

Readers are encouraged to circulate The Catalyst amongst their colleagues and interested parties. The Editors welcome any comments – please send to fulcrum.consult@iol.ie

In addition to The Catalyst, information relevant to FEHMP is posted on the JOIFF website.

Disclaimer: The views and opinions expressed in The Catalyst are not necessarily the views of JOIFF or of its Secretariat, Fulcrum Consultants, neither of which are in any way responsible or legally liable for any statements, reports or technical anomalies made by authors in The Catalyst.



The Catalyst

New Members

During October, November and December 2016, the JOIFF Board of Directors were pleased to welcome the following new Members.

Full Member:

Safety-Innovations Training Centre, Dammam, Saudi Arabia represented by Saeed Jaber Al Ghamdi, Principle Instructor & training Consultant. The Safety-Innovations Training Center (SITC) provides various kinds of training programs for Emergency Response Leaders and Fire Safety Professional in both the public and private sectors.

Courses are tailored to their client's needs using training programs in compliance with recognized International industry standards. Various types of training programs are provided for both commercials and industrial facilities in both Arabic and English languages.

Safety-Innovations Training Centre believe that safety should be the cornerstone of any business, and makes it their top priority to help their clients to achieve it.

Corporate Members:

Kenbri Fire Fighting B.V., Numansdorp, The Netherlands represented by Ed Mathon, Fire Fighting engineer (dept. Industry). Kenbri Fire Fighting supplies, services and rents out professional firefighting materials to locations in the Netherlands, Belgium, Indonesia and Dubai. The company focuses on municipal, industrial onshore & offshore and airport fire services with a wide diversity of mobile and (semi)stationary equipment.

During Q 4 2016, the Directors were also happy to welcome Hassan Kazlak, Abu Dhabi, who is currently a Firefighter in a major Oil refinery and wishes to upgrade his competence by being a member of and learning from the major International Industrial Emergency Response organisation.

We look forward to the involvement of our new and existing Members in the continuing development of JOIFF.



Notes from the JOIFF Conference

Malta, November 2016



The first JOIFF International Fire & Explosion Hazard Management Conference took place on the 3rd & 4th of November 2016 at the Corinthia Hotel, St Georges Bay, Malta in association with JOIFF member organisation International Safety Training College (ISTC) Malta.

The Annual General Meeting (AGM) of JOIFF took place on the evening of 2nd November attended by 50 representatives of JOIFF member organisation. The Conference was officially opened after the JOIFF AGM at an evening reception hosted by Alberta Group, Malta, which is a Global Provider of Total Fire, Safety and Security and of which Organisation ISTC Malta is a subsidiary. The Malta Minister for Home Affairs and National Security welcomed the more than 120 delegates who attended and the Minister's address was responded to by JOIFF Chairman Randal Fletcher.

The Conference opening Key Note address was given by Vanessa Allen Sutherland Chairperson of the U.S. Chemical Safety Board. Ms Sutherland discussed the tragic incident that took place on 17th April 2013 in the Fertilizer Plant in the City of West, Texas, USA. A fire involved the seed and fertilizer building which contained pallets of bags of seed and fertiliser bulk materials including a large amount of ammonium nitrate. Other chemicals stored in the building included potash, ammonium sulphate, diammonium sulphate and tanks of liquid chemicals including liquefied anhydrous ammonia.

As the building became more involved in the fire, the roof collapsed and a huge explosion which registered 2.1 on the Richter scale took place. The blast killed 10 firefighters, 2 civilians who had responded to the incident to assist and 3 civilians in the residential area close to the plant. Several responding firefighters suffered debilitating or near fatal injuries and civilian injuries totalled more than 200. The blast created a 90 foot wide, 10 foot deep crater and damaged or destroyed 500 structures in a 37 block area including 3 schools, a nursing home, an apartment complex and a number of family homes.

Following the presentation about the incident, Ms Sutherland answered a number of questions from delegates on a wide range of subjects.

The first Keynote address of Day 2 was given by Dave Price, UK President and Principal Engineer at Gexcon, a leading company in the field of safety and risk management and advanced dispersion, explosion and fire modelling. Dave is an internationally recognised explosion protection specialist and he discussed recent incidents involving explosions, in particular the incident that took place on 12th August 2015 when a series of explosions killed more than 170 people and injured hundreds of others at a container storage station at the Port of Tianjin, China. The incident was initiated by two explosions which occurred within 30 seconds of each other at the facility. The second explosion was far larger than the first

JOIFF





JOIFF Chairman Randal Fletcher, George Barbaro Sant, Chairman Alberta Group, Hon. Carmelo Abela, Minister for Home Affairs and National Security Malta.



Brad Byczynski, Global Response Manager, BP International and Vanessa Allen Sutherland, Chairperson U.S. Chemical Safety and Hazard Investigation Board

tonation of about 800 tonnes of ammonium nitrate. Fires caused by the initial explosions continued to burn uncontrolled throughout the weekend, repeatedly causing secondary explosions, eight of which occurred on 15th August. Dave compared the impact of other serious incidents where explosions took place which, whilst serious and caused major damage and injuries and deaths, were small compared to the enormity of the Tianjin incident.

The third and final Keynote address was presented on Day 2 by J. Gordon Routley, Division Chief of Montreal Fire Department, Canada who discussed the rail disaster in the town of Lac Mégantic in the province of Quebec Canada on 6th July 2013. This incident involved an unattended 74-car freight train carrying 7.7 million litres of petroleum crude from North Dakota USA bound for Saint John, New Brunswick, Canada. Having travelled from North Dakota during the day, the train arrived in Nantes, Quebec, late on the night of 5th July 2013. The locomotive engineer parked the train on a descending grade on the main track, applied hand brakes on all five locomotives and two other cars and shut down all but the lead

locomotive. Railway rules require that hand brakes alone must be capable of holding a train and this must be verified by a test. That night however, the locomotive air brakes were left on during the test, meaning the train was being held by a combination of hand brakes and air brakes which gave the false impression that the hand brakes alone would hold the train.

The lead locomotive had experienced mechanical difficulties throughout the trip from North Dakota and when it was parked, it had excessive black and white smoke coming from its smoke stack. The engineer agreed with his supervisor that the train should be left as it was to be dealt with the following morning.

Shortly after the engineer left for his boarding place for the night, the local Fire Department responded to an emergency call reporting a fire on the train. After shutting off the locomotive's fuel supply, the firefighters moved the electrical breakers inside the cab to the off position, in keeping with railway instructions. At that point, with all the locomotives shut down, the air compressor no longer supplied air to the air brake system. As air leaked from the brake system, the main air reservoirs were slowly depleted, gradually reducing the effectiveness of the locomotive air brakes. Just before 1 a.m., the air pressure had dropped to a point at which the combination of locomotive air brakes and hand brakes could no longer hold the train, and it began to roll downhill toward Lac Mégantic, a small town just over seven miles away. As it moved down the grade, the train picked up speed, reaching a top speed of 65 mph. The rail line in Lac Mégantic is on a curve with a speed limit for trains of 10 mph and as the train reached the curve in the centre of the town, the train derailed.

Almost all of the 63 derailed tank cars were damaged, and many had large breaches. About six million litres of petroleum crude oil was quickly released. The fire began almost immediately and the ensuing blaze and explosions left 47 people dead. Another 2000 people were forced from their homes, and much of the downtown core was destroyed. The pileup of tank cars, combined with the large volume of burning petroleum crude oil, made the firefighters' job extremely difficult. Fire crews responded from Canada and the USA and even after 20 hours, the centre of the fire was still inaccessible to firefighters. Local firefighters who initially responded had no easy access to their fire station as the burning fuel surrounded it and when they eventually got to the station, they had to break in to get access to the pumps and other equipment. Gordon reported that when the emergency crews arrived on the scene, despite the challenges, the response was well coordinated and the fire departments effectively protected the site and ensured public safety after the derailment.

JOIFF Chairman Randal Fletcher Chairman said that the main priority of JOIFF must continue to be to work to prevent such tragic incidents and associated losses of life, property and impact on the environment through its 3 pillars, Shared Learning, Technical Advisory Group and Accredited Training. The 3 pillars are to ensure



The Catalyst

development and continual improvement in preparation for and in response to industrial hazardous incidents. Fire and Explosion Hazard Management Planning (FEHMP) is the foundation of all these emergency response and training efforts and JOIFF organised this first International Fire & Explosion Hazard Management Conference to provide a global platform for discussion and dissemination of the latest FEHMP thinking.

Other papers presented during the Conference included discussion on various aspects of Fire and Explosion Management Planning, - Holistic Overview of FEHMP, Consequence Modelling, E-TankFire project update, Insurance, Passive Protection, Ageing Installations, Foam, Operational Readiness and Mutual Aid.

As well as the Keynote speakers other speakers at the conference included Chris Addiers, President of Federation of EU Fire Officers Association, Brad Byczynski. BP Global Response Manager, Iain Clough, Risk Engineering Consultant, Edward Hawthorne, Regional Response. Manager Shell Oil Company, Kees Kappetijn, Kappetijn Safety, John Olsen, Strategic Consultants Germany, Henry Persson, SP Technical Research Institute of Sweden, Andre Rabie, Fire Service Manager, ORPIC Oman, Mark Samuels, Divisional Officer Essex County Fire and Rescue Service, Professor Vincent Tam, Spadeadam Testing and Research Centre, Simon Thurlbeck, MMI Engineering Ltd. Jeanne van Buren, Marsh Risk Consulting and Kevin Westwood, BP Group Fire Advisor

During the afternoon of Day 1, delegates visited the training grounds of International Safety Training College and were treated to a demonstration of extinguishing various aviation and industrial fires by the trainers of ISTC working with fire crews from Malta Municipal Brigade and Malta Airport's Aviation Responders. Delegates were also shown the facilities and procedures in ISTC used for training in evacuation from helicopters landing in water and the new suite of equipment, for training in Incident Command.

The JOIFF/ISTC International FEHM Conference would not have been possible without the support of the conference sponsors Alberta, Fomtec, Solberg, Tyco , MSA, Scott Safety, Auxquimia, Dr. Sthamer and ISTC Malta.

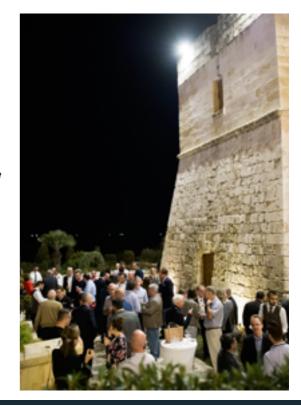
Plans are in hand to hold a JOIFF FEHM Regional Summit in Africa 2017 and the 2nd Fire and Explosion Hazard Management Planning Conference in 2018. For more information on Sponsorship and Delegate places at the Africa FEHM Summit in 2017 please contact JOIFF Business Agent Paul Budgen at + 44 (0) 203 287 2289 or direct email pbudgen@edicogroup.net. Further information on the 2016 Conference will be published in the April edition of The Catalyst.



Delegates at the ISTC Training Ground



Andy Gilravey, College Director, International Safety Training College, Malta welcoming the delegates at the evening reception.



Delegates enjoying the evening reception



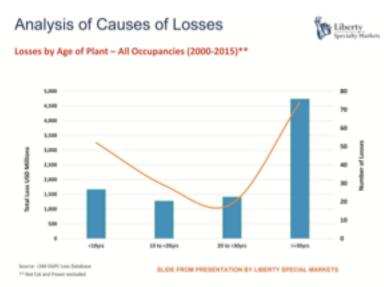


Management of Ageing Assets

By Jeanne van Buren

I was pleased to deliver my presentation on Management of Ageing Assets during the JOIFF International Fire & Explosion Hazard Management Conference in Malta early November this year.

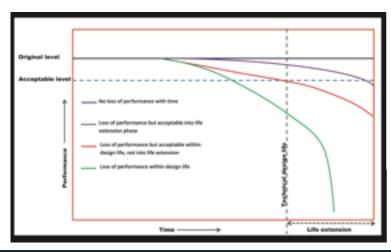
Is there an Age Related Asset Problem?



The trend analysis, by Liberty Special Markets, in this slide shows that there is a distinct relation between the age of installations and the number of losses for assets older than 30 years. Indirectly the same slide provides an indication that the average workforce is confronted only once with ageing assets during the time they are employed in industry.

Unfortunately management of ageing assets is not yet part of many curriculums of training programs and academic programs in industry. Hopefully managing ageing assets becomes an integral part of the overall asset management program and will no longer be particularised as a separate topic

Asset Management Diagram



addition to the asset management program.

The Asset Management Diagram shows an image which already has the interest of many company managers. It shows the performance of an installation. The same image presents relevant information for identifying ageing of the installation.

For instance the green line is typical for installations that were designed to operate at 80% of their max capacity during the majority of their technical life, but are now operated intermittently at various capacities. This mode of operation will reduce the technical life of the installation unless the inspection, testing and maintenance (ITM) program targets the wear and tear the installations suffers due to the different operational conditions.

Collected ITM data for this installation has to be analysed and subjected to trend analysis to optimise ITM frequencies. Not only for controlling the costs but also to assure that the installation is fit for purpose and therefore safe to operate.

There is a distinct difference between active (operated continuously or frequently) and passive components when managing ageing assets. Active systems and their components tend to "communicate" age related aches and pains, while identifying ageing related problems in passive systems, like fire proofing, fire protection systems and their components, requires a sophisticated proactive approach and profound record keeping from the very first moment the installations was constructed and commissioned. This is vital as these passive systems are often the last barrier to control an incident when all other barriers have failed. Data from carefully planned ITM activities is "the tool" for identifying age related problems in passive systems.

ASSET MANAGEMENT - FIRE PROTECTION

- Manage ageing of fire protection through Inspection, Testing and Maintenance process
- Performance Based setup of ITM for 99% reliability of systems using:
 - FMEA
- PFOD

PF00 →	NFPA Recommended Test & Inspection Interval				
	weekly	monthly	quarterly	semi-annually	annually
Ranking					
High	<1sweek	Twock	1 month	1 month	1 month
Modium	1 month	1 month	6 months	6 months	6 months
Low	6 months	6 months	1-2 years	1-2 years	1-2 years
Very low	1-2 years	1-2 years	Testing and Inspection not required	Testing and Inspection not required	Testing and Inspection not required

Section 4.7 of NFPA 25: Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems is the reference to setup dedicated Performance Based ITM



The Catalyst

program for keeping industrial fire protection systems fit for purpose throughout their technical life. This setup, which can also be used for other lines of defence, requires a custom made approach for each system and includes a failure mode effect analysis and probability of failure on demand of components in the overall fire protection system. An example is provided in the slide at the end of page 6 for a fire protection system with a 99% reliability and availability.

The process should be used individually for setting the inspection and testing requirements for each system component. ITM findings are used to substantiate adjustment of maintenance frequencies or to identify that a component needs to be replaced.

Please contact me if you have any questions on ageing assets and/or fire protection systems in particular.

Editor's note: Dr Jeanne van Buren is a senior consultant with Marsh Risk Consulting and also participates in the advisory board of the Ageing Centre of the University of Delft.

She is based in Rotterdam and consults on specific risks related to the power, energy and (petro-)chemical industry sectors. This includes identifying potential hazards, evaluating these hazards and quantifying the associated risks and counselling on risk mitigation and control measures. She also provides training courses in Dutch and English. For more information contact Jeanne van Buren at Jeanne.vanburen@marsh.com tel. +31 10 4060 404



Press Release: H2K adds an Additional JOIFF Accredited Course to its Portfolio

JOIFF accredited Training Provider H2K, The Netherlands, recognises that knowledge of risk is essential for effective emergency response and each business and each risk profile is different. H2K is developing a range of new courses and programmes tailored to the specific needs of High Hazard Industry aimed at increasing the competence of persons engaged in Fire and Explosion Hazard Management Planning and have broadened their own resources in this development by entering into partnerships with a number of renowned organisations in other sectors of the Industry. With their partnerships, H2K aims to provide the most modern and professional concepts.



Composite and plastic Intermediate bulk containers (IBCs) used outside and warehouse storage of flammable and combustible liquids

In 2015, H2K partnered with Marsh Risk Consulting to develop a 3-day Industrial Safety and Emergency Response training course for tank and bund fires. This JOIFF accredited training course covers the relationships between the design of storage tanks, development of credible incidents, fixed and mobile fire protection systems, incident response and inspection, testing and maintenance. An extensive range of



Intermodals (ISO tanks) used for storage and transport of various hazardous products

stakeholders have successfully completed this course, the next of which takes place on 14th to 16th November 2017.

In partnership with Marsh Risk Consulting, H2K has recently added to their JOIFF accredited course programme of specialised courses a new course entitled Integrated Fire and Safety of IBCs & Intermodals. This 3 day course deals with the fire protection of the various types of storage containers used for transport of hazardous products.

These storage and transport modes are widely used and unfortunately incidents involving these types of packaging happen. Knowledge gained during this training can significantly contribute not only to the prevention of such incidents, but also to controlling these incidents and prevent unwanted escalation.

Box Containers for storage and transport of various hazardous products



JOIFF



The Instructors on this course are Peter de Roos of H2K and Jeanne van Buren of MARSH Risk Consulting. Peter de Roos has a long time experience as an instructor for industrial incident response. Jeanne van Buren is a senior consultant who has worked in the high-risk industry as a specialist in industrial (fire) safety for more than three decades.

The first of these courses will take place on April 11th to 13th 2017 at Spinel Safety Centre in Dordrecht, near Rotterdam, The Netherlands. The training is internationally oriented and will be conducted in the English language.

To register for this course please go to the H2K website www.h2k.nl

Editor's notes: An "Intermodal" involves two or more different modes of transport in conveying goods. IBCs stand for Intermediate Bulk Containers



A fire involving IBCs



JOIFF Qualifications

The JOIFF Diploma is a competency programme for personnel who respond to emergencies. It covers necessary key skills, learnt and demonstrated by the student in practical training and exercises that allows them to deal competently with site emergencies.

The JOIFF Technician programme is to allow the emergency responder to enhance their knowledge and skills having already demonstrated their competence in Key Skills.

The JOIFF Leadership programmes, comprising Leadership 1 and Leadership 2, are JOIFF accredited and have been developed as a path to the skills and knowledge of team leader and officer to personnel who are technically competent to a recognised standard and have core educational skills to a level compatible to the position.

These programmes which are drawn from National and International Standards are computer based. Each student is issued with an individual electronic portfolio which sets out a structured training path and in which each student's training and progress is tracked. An important aspect of the programmes is that they are primarily carried out on the site within the area where the student is based using the facilities and equipment that is available to them.

For details of the JOIFF Graduate and JOIFF Member award, contact the JOIFF Secretariat fulcrum.consult@iol.ie

The supreme quality for leadership is unquestionably integrity. Without it, no real success is possible, no matter whether it is on a section gang, a football field, in an army, or in an office.

~~~ Dwight D. Eisenhower







Images from Shared Learning, Final Quarter 2016



### Dip. JOIFF

#### BP Exploration Operating Company Ltd. Sullom Voe, Shetland, Scotland

Simon Barrett Dip.JOIFF; Magnus Bradley Dip.JOIFF; Richard Horton Dip.JOIFF; Marianne Hughson Dip.JOIFF; Craiq Porter Dip.JOIFF; Duncan Stove Dip.JOIFF;

#### Essex County Fire and Rescue Service, England.



(L-R) ADO David Barnard Dip.JOIFF. T/DO Tony Clark Dip.JOIFF. Station Officer Geoff Wheal Dip.JOIFF receiving their certificates from A/CFO Adam Eckley

Assistant Divisional Officer (ADO) Dave Barnard Dip.JOIFF, formerly an ADO Emergency planning (SHQ) is currently a Station Manager in Essex County Fire and Rescue Service (ECFRS) responsible for three stations. Dave has 28 years' service during which he has attended with ECFRS some very serious incidents including the explosion at the Buncefield fuel depot in Hemel Hempstead in December 2005 and the huge blaze in Tilbury Power Station in February 2012.

T/Divisional Officer Tony Clark Dip.JOIFF has 23 years' service. Formerly he was ADO Operational Policy in ECFRS and he is currently responsible for a Command group of stations.

Geoff Wheal Dip.JOIFF is currently Station Officer in Charge of Corringham fire station. Geoff has 29 years' service during which he has attended with ECFRS some very serious incidents including the explosion at the Buncefield fuel depot in Hemel Hempstead in December 2005, the naphtha storage tank fire in Mobil Coryton, the Korean Air Cargo 747 aircraft accident in Stansted airport in 1999 and the crash of an Avro 748 in Stansted in 1998.

#### Martin Pullen, Dip. JOIFF

ECFRS, as an operational officer and Station Commander, Martin Pullen Dip.JOIFF retired in July 2016 and is now a part-time Emergency Planning Officer. During his career in the fire service he specialised as a Petrochemical Officer, Hazmat Officer and Fire Investigation Officer and had an extensive background from operational incidents including attending the Buncefield incident, numerous hazardous material incidents and many other incidents involving

Having completed 30 years' service in fires and rescues. This experience led Martin to emergency management, particularly at COMAH (Seveso) sites organising multiagency off-site exercises. He previously held the position of Chair of a Strategic Development Group which brought COMAH terminals together across Essex County and Martin now works closely with fuel terminals and delivers training across the multiagencies roles, including incident command and leadership to continually raise standards.





#### Guilio Phillip Grad.JOIFF

Sasol Secunda Emergency Management, South Africa



Guilio Phillip has served 21 years in the Fire Services and is currently Specialist – Emergency Management Engineering in Secunda Chemicals Operations. In this role his responsibilities and duties include updating procedures, specifications, and works instructions, performing audits, inspections, investigations, consultations and making recommendations on emergency management risks to improve onsite emergency preparedness and ensure effective application of emergency management resources during mitigation of incidents.

Guilio has extensive experience in designing fire safety aspects in the petrochemical industry due to his involvement in a number of large scale developments where he has addressed all 5 phases of emergency management - Prevention, Protection, Preparedness, Response and Recover - to ensure effective fire safety on the Sasol Secunda site.

As part of his role, Guilio liaises with governing bodies such as South African Bureau of Standards and forms part of technical work groups in the establishment of national standards. He also conducts specialist research and development regarding fire risk reduction and mitigation techniques and technology and has been engaged in investigation of all types of emergency incidents where he has played a leading role as a subject matter expert.

#### BC (Clement) Motlogelwa Grad.JOIFF

Emergency Management Training Academy, Sasol Secunda, South Africa



BC (Clement) Motlogelwa started his career in Emergency Response in 2003 as Fire & Emergency Service Instructor in South African National Defence Forces (SANDF) Fire Training School where he remained for 2 years. During that time he was responsible for preparing programmes and carrying out teaching and training duties including Fire & Hazmat courses as well as being responsible for organising instructors, assessors and moderators for South African Emergency Services Institute (SAESI) accredited courses.

In August 2005, he moved over to take on the role of Training Officer in the Emergency Management Training Academy which role he held for 10 years.

Clement was appointed Manager of the Emergency Management Training Academy Secunda Chemicals Operations in April 2015 and is now responsible for creating and implementing training programs and overseeing the development of careers, setting performance metrics, evaluating productivity and helping workers create long-term career plans within an organisation.



#### Andreas Theodorus (Theo) Spies MJOIFF

South Africa



Andreas Theodorus (Theo) Spies progressed through all the ranks in the fire services starting as a Junior fire fighter in Kimberley Fire Department, South Africa until 1979 when he started at Sasol Emergency Services as Operation Group Leader,

moving over to the Sasol Fire Engineering team in 2005.

He has 19 years' experience in the petro-chemical fire services, started when he was appointed Operational Group Leader and currently he holds the position of Specialist - Emergency Management Engineering, Secunda Chemicals Operations

Theo has extensive experience in the designing of fire safety aspects in the petrochemical industry due to his involvement in a number of large scale developments. During the execution of these large scale projects all 5 phases of Emergency management - Prevention, Protection, Preparedness, Response and Recovery - are addressed to ensure effective fire safety on the Sasol Secunda site.

Theo's current daily responsibilities and duties include hazard identification, risk evaluation, audits, compliance to recommendations, compilation, approval and auditing of emergency procedures, conducting emergency management related awareness, compilation of standards, codes and procedures, planning the scheduling and execution of major and community emergency exercises, investigation and office administration.

#### Shane Erasmus M. JOIFF

Sasol Secunda, South Africa

Shane Erasmus started his career in emergency response as a fire fighter in 1996 at Evander municipality Mpumalanga, South Africa. He progressed through the ranks and in 2003 joined Sasol Emergency Management Engineering where he currently holds the rank of Fire Safety Specialist, Group Technology - a division of Sasol South Africa (Pty) Ltd

As part of Shane's roles and responsibilities in Sasol Emergency Management he assists project managers, leads the team of Emergency Management Engineering Technicians, conducts Incident Commander standby, carries out risk

assessments for a number of departments and assists during the design and implementation of fire protection systems in buildings including suppression system, fire equipment including fire extinguishers, hose reels fire protection including active and passive fire protection in industrial processing plants and he also deals with fire protection on flammable loading bays for road tankers and rail loading.

Shane acts as management representative during third party audits for compliance to ISO 4001, 9001 and 18000 and he ensures compliance to fire and safety related legislation.

#### Ephraim Thabo (ET) Mokgele, M.JOIFF

South Africa

Ephraim Thabo ET Mokgele started his career in emergency response as a trainee fire fighter in 1985 and was promoted though ranks and was appointed Senior Divisional Commander in 2012. ET is now Specialist Emergency Management, Engineering, Sasol Secunda.

His responsibilities and duties include audits, hazard identification, risk evaluations, compilation of standards, codes and procedures, ensure compliance to recommendations, compilation, approval and auditing of Emergency Procedures, conducting emergency management related awareness, planning the scheduling and execution of major and community emergency exercises and investigation and office administration.

ET has numerous qualifications including South African Emergency Services Institute Advanced Diploma, Fire Service Instructor, Hazmat Awareness, Advance Fire Prevention, Advance Fire Investigation, Advance flammable liquid firefighting foam technology, Project management Advance risk assessment, Implementation of ISO 9001 quality system



Ambulance course, Wildland Fire Fighting course and Advance Incident Command System.





#### **Eric Dempsey MJOIFF**

Arc Fire Training Services Ltd, England

Eric Dempsey started his career in HM Forces UK as an Army communications engineer following which he spent some time working as a radio and telex operator in the North Sea oil fields. In 1979 he joined Merseyside Fire & Rescue Service. During his service with Merseyside, Fire & Rescue he received an extensive operational background in emergency response management, fire fighting, Team Leader and rescue procedures including full Airport Fire Training at Liverpool Airport. He ran the driving & transport department at the Fire Service Training Academy and achieved the rank of Station Commander with command of several fire stations covering large city centres, marine and petrochemical risks. He left the Service in 2006 with the rank of Station Commander.

On his retirement from Merseyside Fire & Rescue in 2006, he took up a position in the UK Fire Service College in Moreton in Marsh as a Training Consultant and during the next 4 years he trained personnel from the UK, The Netherlands, Spain, Africa, China, Bermuda and a number of Countries in the Middle East, across a wide range of courses including recruits, leadership and specialist officer training in emergency response management,

hazmat specialists in chemical and hydro-carbon incidents, Airport Fire-Fighting, shipping fire fighting and rescue well-head and flange hydro carbon fire-fighting techniques, H2S Inspection and gas testing/hot work permits and First Aid courses. In 2010, Eric established his own Company, Arc Fire Training Services Ltd. and currently delivers amongst other subjects, the required training to comply with the UK Regulatory Reform Acts, Confined Space & Evacuation Training, Evac Chair training. In the past 12 months Eric has trained more than 1,000 people on safety courses and in excess of 300 people on Evac-Chairs.

Arc Fire Training Ltd. is a JOIFF accredited Training Establishment and Eric has delivered bespoke JOIFF accredited training all over the UK and worldwide to companies large and small.



#### Benneth (Benzo) Mathebula MJOIFF

Sasol Secunda Emergency Management South Africa

Benneth (Benzo) Mathebula has 15 years of service in the Fire Service, starting in 2001 as a Fire fighter and emergency medical technician with the Service in the city of Johannesburg, South Africa.

After a short term International assignment as Loss Control Supervisor with Sasol Gas to Liquid (international), Sasol Joint Venture in Qatar (Middle-East) Benzo joined Sasol - Secunda Chemicals Operations (SCO) in August 2006 and progressed through the ranks as Fire Fighter, Senior Fire Fighter, Fire Prevention Officer, Senior Station Officer, Divisional Officer, Acting Manager Planning Maintenance & Logistics, Acting

Manager Maintenance & Workshops, Acting Statutory Compliance & Maintenance Manager, to the role that he currently holds, Divisional Commander/Project Manager: Statutory Compliance — Emergency Management Secunda Chemicals Operations.

During his career to date in Sasol he has qualified at the Sasol Emergency Fire Training Academy in numerous courses including Fire Instructor, HazMat Technician, Advanced Petrochemical Snr Instructor Course, High Angle Rescue, Confined Space Rescue and Grass/ Veld (Wildland) firefighting.



# **The Catalyst**

# Office of The Lord Howie of Troon House of Lords Westminster London SW1A 0PW

#### INTEGRATED SERVICE CAPABILITY AND SAFETY FOR OIL AND GAS.



JOIFF is a member of UK Fire Sector Federation and Executive Director of Engineering & Technology Kevin Westwood attended the Houses of Lords representing JOIFF. Hosted by Lord Howie of Troon and facilitated by Ronnie King OBE, secretary of the All-Party Parliamentary Fire Safety & Rescue Group a small number of senior Fire Safety Experts gathered to discuss the issue of deluge performance. Specifically the issue of aging assets where these life safety systems are susceptible to corrosion, tuberculation and marine growth. This has an adverse consequence on performance with small bore deluge nozzle orifice blockage. A number of performance enhancing options were discussed for current systems as well as potentially new design cases for future assets. Whilst this is specifically addressing the UK Continental Shelf Assets, the problem exists globally with offshore and land based deluge systems. HSE and Oil and Gas UK agreed that a paper be presented to the Offshore Major Accident Hazards Advisory Committee (OMAHAC) outlining their issues of concern. If the view is further work is to be done to develop recommendations/ solutions being proposed, then it will refer the matter to the Oil and Gas UK Major Hazards Group. The full minutes of the meeting are provided below for more context.

### Meeting Notes – Informal lunch meeting – UK House of Lords

The meeting was held on 10<sup>th</sup> October 2016 to discuss integrated service capability and safety for oil and gas. The meeting was attended by:

The Lord Howie of Troon; Peter Aldous MP; Mary Glindon MP; Dr. Richard Judge, Chief Executive U K Health and Safety Executive (HSE); Chris Flint, Director of Energy HSE; Mick Borwell, Policy Director Oil & Gas UK; Brian Robinson CBE, Chair, Fire Sector Federation, Paul Fuller CBE, Chief Fire Officers Association, Evert Jonker, Principal Tech. Expert, Shell Global Solutions; Henry Green, Director Oil, Gas & Marine, Tyco Fire & Int. Slns.; Kevin Westwood, JOIFF/BP Fire Advisor; Paul Clarke, Head of Engineering, JLT Group Plc, Lloyds; Paul Tanner, Business Development Director, Tyco Fire & Int. Slns.; Martin Harvey, Chairman Fire Industry Association; Simon Rooks, Operations Director, Oil & Gas, Tyco Fire & Int. Slns.; Ronnie King OBE, Hon. Admin. Sec., All Party Parliamentary Group.

#### Apologies:

Peter Holland CBE, Chief Fire \$ Rescue Advisor; Kevin MacGillivray, Chief Executive, British Automatic Fire Sprinkler Association Lord Howie welcomed everyone to the meeting which the All-Party Parliamentary Fire Safety & Rescue Group had been pleased to facilitate on the basis that there was no commercial interest in its involvement, but it had an interest in ensuring that any potential safety issues brought to its attention relating to the oil and gas industry offshore, were properly considered and discussed by all interested parties.

Ronnie King Hon. Admin. Sec. All-Party Parliamentary Fire Safety & Rescue Group introduced the perceived problem of potential equipment failure or reduced effectiveness of firefighting fixed systems due to corrosion in valves nozzles and pipework from saltwater, marine growth, salt crystallization and microbiologically marine growth. Something he had experience of in his former role as Chief Fire Officer of the Mid & West Wales Fire & Rescue Service for twenty years, covering oil refining and shipping areas in Milford Haven, Pembroke, Llandarcy and Baglan Bay. There was a suggestion that the recent uncertainty in the oil and gas market, could lead to a reduction in maintaining safety levels, and replacing outdated systems.

Simon Rooks Operations Director Oil and Gas (Tyco) set the scene on the issues in the North Sea, as aged assets, (Asset life extension beyond intended life), referring to corrosion and Marine environment and the major impact it has on the Fire systems' ability to perform.

In the UK safety legislation is goalsetting rather than "prescriptive". The legislation sets out the objectives that must be achieved, but allows flexibility in the choice of methods or equipment that may be used by companies to meet the statutory requirements. All 106 recommendations in Lord Cullen's report on Piper Alpha were adopted by Government and the offshore industry which is thought to have spent more than £ 2 billion on safety improvements in the 10 years following Piper Alpha.

However much of the same fire suppression technology is still in use not taking into account the salt water compliance issues. Regulations call for increased testing of deluge systems. However tis serves to compound the problem with wet testing increasing the corrosion in the pipes due to the effects of salt water.

Changing out the delivery pipes is not a solution. Even a titanium lines and elastometric pipe will still suffer from salt crystallization and marine growth and systems then fail through blockages, as seen in Norway and the UK continental shelf (Pictures shown).

In response to the scene setting, <u>Mick Borwell</u> Policy Director at Oil and Gas UK, refuted any allegations as 'Old news', as the oil and gas industry takes safety as its highest priority, and a safety culture is embedded in everyone involved in this

**JOIFF** 



industry. He said that a good way for anyone who wished to be heard would be to take membership of Oil and Gas UK.

Peter Aldous MP, who sits on both the All Party Group (Fire) and All Party Group (Oil and Gas) also felt that any claims of safety possibly being compromised in the oil and gas industry from recent uncertainty in the oil and gas market, didn't seem justified in this highly safety conscious industry, He asked if this was an old issue "does it exist?", "what facts do you have?", "are they new?"

Mary Glindon MP also needed to be assured that there was evidence of a current problem, and if there was, then it needed to be resolved.



Offshore Platform

Simon Rooks explained that the issue is current and whilst there have been Guidance documents written by HSE (a report on corrosion highlighting the issues operators face was produced in 2015), and that there is guidance on Testing by HSE; but the problem is still widespread. He went on to show a montage of photos explaining each picture; pointing out that all the photos were from different UK Offshore North sea platforms, showing blocked nozzles, corrosion and sludge in pipes, and marine life (even in Exotic material Titanium)! The message was: "This is a current fact - it does exist across many platforms and the industry is not tackling the issue"

He went on to say that the Fire Protection industry wants to work with operators and regulators, to look at Service guidance and material standards, to ensure the operators have a chance of providing reliable and resilient Fire protection systems offshore.

Brian Robinson and Paul Fuller wanted to understand who is the regulator and who is responsible for enforcement? <u>HSE</u> confirmed that they were both the regulator and enforcer.

Evert Jonker (Shell) said that Goal 'Zero' is the top priority of the Oil Industry (certainly Shell) in all of its activities and operations during the entire life cycle of an asset. Integrity and reliability issues regarding water based systems in offshore operations and onshore operations is a well-known

issue, and as such was under continuous attention. Where these systems are safety critical these are directly linked to permitted operations scope of the asset.

Risk Management developed over the recent decennia: it must be said that where historically water based protection systems were seen as safety critical for an installation, then added safety features such as improved technical safety measures (Detection, Automated source control, etc.), Changing operating models, could have led to a situation where some of these water based protection systems did lose the safety critical tag. This has been highlighted by Industry as well as the UK HSE and Insurance companies.

Over the last years initiatives like "dry Testing" regimes emerged and have been accepted by authorities to demonstrate performance requirements following strict protocols. Also better designs came to the market. This work needs further development into approved protocols or Best Practices.

He said that there isn't really a need for new or changing legislation/standards but the Industry would be helped if concise Best Practices, Guidance information is developed regarding integrity and reliability assurance for water based protection systems. Partnering between the Oil and Gas Industry, UK-HSE, Energy Institute, Insurance, Manufacturers is strongly recommended.

To ensure applicability on a global scale (as desired by the Operators) proper chairing, steering and coordination of the activities is needed so that the tools, deliverables will be widely accepted.

<u>Kevin Westwood</u>, JOIFF/BP Fire Adviser summarised the issues as:

Today's issue;

- There are observations by the regulator and operator of 'failure on demand' for deluge life safety systems offshore.
- Corrosion observed in deluge systems is due to long term exposure to seawater following wet testing Saltwater
- The problem of blocked nozzles from the resultant corrosion products is not new and the industry has long been aware of the problem
- Where practical, flushing deluge piping with potable water after wet testing helps to remove pooled sea water and salt deposits
- Novel materials such as Cunifer (copper/nickel/iron) , GRP, Stainless Steel, Tungsten do reduce the potential of corrosion but don't stop marine growth
- Marine growth inhibiters and chemical cleaning and flushing with potable water also play some part in prevention and remediation of pipework

Tomorrow's potential solution;

- (Tyco) Omnipass Adaptor with anti-nozzle fouling if retrofitted, will prevent many of the blockages seen today
  - Dry testing of systems, however, raises concerns that



# The Catalyst

designed for live events

- System design approach and change from a small bore pipework and small bore nozzle discharge arrangement to one of large waterways and monitor application where possible
- Deluge adds to congested volumes and adds to overpressure potential not so with large volume circumferential monitor based systems
- Use of elastomeric materials fire, blast and impact resistant and hydraulically more efficient than the metal alternatives. Do not require hot work or scaffold to install, although will still capture Marine environment and growth which leads to blocked nozzles too



Marine Growth

- Better system design based on risk based fire hazard analysis and modelling and less prescriptive application of code.
- More use of passive systems to negate the need for active systems

Paul Clarke – JLT Group (Lloyds) said that the insurance community is directly affected by any incidents that happen in the North Sea and want to support both the regulators the operators and other stakeholders.

He said JLT Group has a wealth of experience to draw on both in the history and accumulated losses, but also from the people recruited into the insurance industry to support insurers brokers and loss adjuster.

Protection and detection systems are expected to work, and any challenges should be addressed.

What the insurance industry can contribute is its experience and technical capability in an area where it has both a moral and a vested interest in safe operations continuing in the North Sea.

Simon Rooks explained that the industry can and is looking at alternative ways of delivering annual testing and inspection which remove the need to wet test, and to deliver testing that

this does not fully ensure the systems will operate as ensures compliance and systems' ability to perform without the salt water issues and that this will save operators money in the current climate. However the operators need the regulator to develop guidance on this, so they are clear on what is not acceptable. Examples discussed were that some people are using smoke to test, which only proves smoke can get through pipes, it does not enable the system to be verified that it will work and deliver the correct water and flow to meet the systems' hydraulic demand, this point was acknowledged by the Operators and by the insurers in attendance.

> Also discussed was suitable product and suitable approvals for the Marine environment. The discussions explained that the product and nozzles were the same as those installed onshore. Whilst the current approvals are based on Fire testing and environmental tests which include salt water, the external impact is not the issue. It is the problem caused internally to the Fire pipework network caused from salt water, marine life, some induced and some evolving whilst sitting stagnant in the system.

> The operators' perspective was that product suitability and approvals should be tackled globally rather than locally given the Oil and gas market is global and generally NFPA/UL and Marine class approvals are recognised globally.

> Oil and Gas UK were concerned that any of the proposed measures would increase costs to operators, Rooks confirmed that there are suitable alternative solutions to testing which will save operators 20% on annual costs; and additionally for life extension, there is not the need to replace pipework with very expensive Rubberised or Exotic Titanium or conifer pipe systems for the Deluge Fire fighting systems.

> HSE (Dr Richard Judge and Chris Flint) listened with interest to the information presented by Tyco on their view of the state of active fire protection systems in the UK Continental Shelf. In order that the matter be formally considered by the industry, HSE and Oil and Gas UK agreed that Tyco should be invited to present a paper to the Offshore Major Accident Hazards Advisory Committee (OMAHAC) outlining their issues of concern. The paper will be presented at the next OMAHAC meeting of 1 December 2016.

> Should OMAHAC form the view that the issues raised need consideration by industry experts with a view to recommendations/solutions being proposed, then it will refer the matter to the Oil and Gas UK Major Hazards Group.

> Note: OMAHAC is a tripartite body and draws its membership from the offshore oil and gas industry and includes industry organisations, trade unions and the regulator.

> The meeting closed promptly at 2pm with Lord Howie thanking everyone for the excellent contributions to the discussions, and for the agreed next steps.

> Ronnie King OBE, O.StJ, QFSM, F.I.Fire E, Honorary Administrative Secretary, All-Party Parliamentary Fire Safety & Rescue Group.

### **JOIFF**





### Press Release: Fire Service College adds additional JOIFF accredited courses to its portfolio

Following a recent JOIFF accreditation audit, having demonstrated compliance with the three pillars which form the basis of JOIFF accreditation - Establishment, Instruction and Course - JOIFF accredited Training Provider The Fire Service College increased the number of JOIFF accredited courses that they can now provide. The courses that have recently been JOIFF accredited are:

- Breathing Apparatus Wearer initial and refresher
- Breathing Apparatus Instructor initial and refresher
- **PERO**

These courses are in addition to the existing portfolio of JOIFF accredited courses provided by the Fire Service College:

- Fire Team Member initial and refresher
- Fire Team Leader initial and refresher
- JOIFF accredited practical firefighting courses
- Site specific courses (subject to proposed timetable submission for JOIFF accreditation)

Kevin Keeler, Head of Specialist Operational Training, Fire Service College said "JOIFF accredited training is regarded as Good Industry Practice and is based on the highest International current levels of knowledge and competence in the sectors dealing with the high hazardous materials and processes in which JOIFF Members operate.

"At the College, we pride ourselves on the level of excellence we can provide; the extensive incident ground facilities at the disposal of learners, combined with the expert knowledge of our instructors and tutors."

To qualify for JOIFF accreditation courses and programmes have to be robust, challenging and relevant to the potential accidents/incidents on and off the site to which the emergency responder may be required to respond within their Site Emergency Response Plan. Content should be accurate within itself and accurate to the context of the emergency responder.

JOIFF Accredited Training includes training courses and programmes specifically developed for the sectors in which JOIFF members operate, the location and facilities where the training will take place and the instructors who will present and assess the training. JOIFF training is competency based and is therefore increasingly site specific, building on core emergency response team competencies. Key to all JOIFF accredited training and personal development of emergency responders is an accredited system of assessment and verification to ensure competence which should be demonstrated on an on-going basis. All successful participants in JOIFF accredited training courses / programmes receive JOIFF accredited certificates of competence.

Courses can be site specific and specially developed between the College and our clients and can also be generic, for instance BA Wearer and BA instructor. Before any course can be promoted as JOIFF accredited the programme must be agreed between the College and JOIFF.

For more information visit http://www.fireservicecollege.ac.uk/

### A Thought for the Coming Year - Bank Account of Life

with \$ 86,400. It carries no balance forward from day-to-day. Every evening it deletes whatever part of the balance you failed to use during the day.

What would you do ?? Draw out every cent of course !!

Each of us has such a bank !! It's name is time. Every morning it credits you with 86,400 seconds. Every night it writes off as lost whatever of this you have failed to invest to good purpose. It carries over no balance. It allows no overdraft. Each day it opens a new account for you. Each night it burns the remains of the dav.

If you fail to use the day's deposit the loss is yours. There is no going back, there is no drawing down against tomorrow. You must live in the present on today's deposits. Invest it so as to get Remember time waits for no-one. Yesterday is history. Tomorrow from it the utmost in health, happiness and success.

Imagine there is a Bank that credits your account each morning To realise the value of one year - ask a student who failed a grade. To realise the value of one month - ask a mother who gave birth to a premature baby. To realise the values of one week - ask the editor of a weekly newspaper. To realise the values of one hour - ask a child who is waiting to be taken for a treat. To realise the values of one hour - ask a child who is waiting to be taken for a treat. To realise the values of one minute - ask a person who has missed a train. To realise the values of one second - ask a person who has just avoided an accident. To realise the values of one millisecond - ask an athlete who won a silver medal at the Olympics.

> Treasure every moment that you have. And treasure it more because you shared it with someone special, special enough to spend your time.

is mystery. Today is a gift – that is why it called the Present.

The clock is running. Make the most of today.



# The Catalyst

## **JOIFF Training Notes**

#### "TRAIN AS IF YOUR LIFE DEPENDS ON IT - BECAUSE SOMEDAY, IT MIGHT!"

JOIFF accredited training is within a Competency Based Training framework and involves course content, instruction and the facilities of the training provider/training establishment. All students who successfully complete a JOIFF accredited course/programme are issued with a JOIFF Certificate of Competence which has its own unique number.

"Often the desire to appear confident impedes our ability to become competent because we are more anxious to display our knowledge than learn what we do not know."

~~Madeleine de Souvré, marquise de Sablé (1599-1678)

"When you ignite your self-confidence you can be aware that you are not competent in a particular area...and you are completely ok with that, freeing up head space to ask yourself the question 'what can I do right now to start getting better?'

Someone with low self-confidence will be aware they are not competent in a particular area...and see it as more evidence of their lack of worth." ~~ Aaron Morton

The following dates have been provided by JOIFF accredited training providers. If you wish to find out any information or make a booking, please contact the training provider direct, contact email addresses provided.

| JOIFF Accredited Course                                                                                                                                                                                   | 2017 Dates                                                                            | Venue/Organiser                                                                                                          |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|--|
| Site Specific Courses Fire & Safety Foundation 4 x 1 Day Modules Incident Controller 2 or 4 Days SCBA Initial & Refresher Confined Space Entry Confined Space Train the Trainer (with SCBA for High Risk) | As Required                                                                           | On your own site. Subject to Risk Assessment & Facilities.  For further information contact arcfiretraining@ntlworld.com |  |
| Site Incident Controller Training 2 Days                                                                                                                                                                  | 14th – 15th February<br>16th – 17th May                                               | Eddistone Consulting Email: opportunities@eddistone.com Tel: +44 1433 659 800                                            |  |
| Site Main Controller 3 Days                                                                                                                                                                               | 7th - 9th February<br>9th – 11th May                                                  |                                                                                                                          |  |
| Industrial Fire Brigade Incident<br>Commander Course (IFBIC)<br>5 Days                                                                                                                                    | 10th – 14th April<br>3rd to 7th July<br>4th to 8th September<br>13th to 17th November | Falck Fire Academy, Rotterdam, Netherlands Email: fireacademy@falck.com Tel: +31 181 376 666                             |  |
| Integrated Fire Safety of Intermediate<br>Bulk Containers (IBC's) and<br>Intermodals                                                                                                                      | 11th – 13th April                                                                     | H2K Netherlands Email: p.deroos@h2k.nl Tel: + 31 174 414 872 +31 651 588 089                                             |  |
| Industrial Safety and Emergency<br>Response Course<br>3 days                                                                                                                                              | 14th - 16th November                                                                  |                                                                                                                          |  |



### **JOIFF** Diary of Events

January

22<sup>nd</sup> – 24<sup>th</sup> Intersec, Dubai, UAE

March

21<sup>st</sup> – 23<sup>rd</sup> SECUREX West Africa, Lagos, Nigeria

April

12<sup>th</sup> – 14<sup>th</sup> SECUTECH 2017I, Taiwan

24<sup>th</sup> – 29<sup>th</sup> FDIC International, Indianapolis, U.S.A.

26<sup>th</sup> - 27<sup>th</sup> StocExpo Middle East, Dubai, UAE

May

2<sup>nd</sup> - 4<sup>th</sup> Intersec Saudi Arabia , Jeddah, Saudi Arabia

22<sup>nd</sup> – 23<sup>rd</sup> Disaster and Emergency Management Conference, Queensland, Australia

June

4<sup>th</sup> - 7<sup>th</sup> NFPA Conference and Expo, Boston, U.S.A.

8<sup>th</sup> – 10<sup>th</sup> JOIFF Fire and Explosion Hazard Management Regional Summit, Secunda,

South Africa

Please contact the JOIFF Secretariat with details of any event that you think that JOIFF Members might be interested in attending.

Note: The Catalyst is not responsible for the accuracy of dates and / or venues announced.

This is based on information given to the Editors and is published in good faith.

#### JOIFF Secretariat:

Fulcrum Consultants ∼ in Partnership with JOIFF

P.O. Box 10346, Dublin 14, Ireland

Email: fulcrum.consult@iol.ie

Website: www.fulcrum-consultants.com



**Published by ABCom**