



July, 2011

The Catalyst

JOIFF



About JOIFF

Membership of JOIFF, the Organisation for Emergency Services 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 are welcome to apply for Corporate Membership of JOIFF.

JOIFF provides a forum for discussion amongst peers, accredited training specifically developed for the sectors in which JOIFF members operate and technical advice through the JOIFF Standard and the JOIFF Shared Learning network. JOIFF welcomes enquiries for Membership - contact the JOIFF Secretariat

JOIFF Ltd. Registered in Ireland.
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Address as secretariat.

The Catalyst is the official newsletter of JOIFF, The Organisation for Emergency Services Management and is published quarterly - in January, April, July and October each year. Our policy is to bring you high quality articles on relevant technical issues and current and new developments and other happenings in the area of Emergency Services Management. In addition to The Catalyst, information relevant to Emergency Services Management is posted on the JOIFF website.

Readers are encouraged to circulate The Catalyst amongst their colleagues and interested parties and the Editors welcome any comments.

New Members

During April, May and June 2011 the Executive of JOIFF were pleased to welcome the following new Members.

Full Members

INEOS Nitriles UK Ltd., Seal Sands, Teesside, England, represented by Phil Almond, Emergency Services and Security Manager. INEOS Nitriles UK Ltd. acquired their Seal Sands operation from BASF in 2008, is one of the largest manufacturers of acrylonitrile in Europe and is the largest producer of purified acetonitrile in Europe.

TOTAL Petrochemicals France - Usine de Gonfreville, represented by Gilles Hellschger, Safety and Security Manager and Joris Plasmans Corporate Process Safety Department, Brussels. Total Petrochemicals is one of the world's leading petrochemicals companies with its head office in Brussels (Belgium) and employs nearly 6,000 people worldwide. Total Petrochemicals brings

together all of the TOTAL Group's petrochemicals activities. Total Petrochemicals has two main product groups: base chemicals and the consumer polymers (polyethylene, polypropylene and polystyrene) that are derived from them.

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



SEMBCORP FIREFIGHTERS EXCEL AS MAJOR INDUSTRIAL BLAZE IS BROUGHT UNDER CONTROL

Sembcorp UK's Asset Protection team has been praised for its skill in handling a major industrial fire at a customer's premises in June 2011. An oil fire on a gas compressor unit in an elevated section of the GrowHow Ammonia 4 plant at Billingham on Teesside was well ablaze by the time the Sembcorp on-site fire units were alerted. The Sembcorp team showed their integral value to GrowHow and other international companies across the area and rose to the challenge.

Utilizing all their training and expertise in managing industrial emergencies, Sembcorp took the initial lead to bring the difficult situation to a safe conclusion within two hours. In planning and executing an initial foam attack followed by the use of dry powder on the fire and strategically protecting hazardous units adjacent to the compressor house, Sembcorp ensured that damage to the plant was minimised and no one on or off site was hurt.

The efforts of the men later drew praise from GrowHow and firemen from the local authority brigade. Keith Brudenell, GrowHow's Site Operations Manager congratulated the Sembcorp crews involved, saying: "As always it was handled professionally and with good support and communication to the GrowHow team." His colleague Jacqui Reed, GrowHow's Utilities Account Manager, added: "To have the fire station team so close to hand was invaluable."

Paul Frankland, Sembcorp UK's Assistant Vice President for Industrial Park Services, said: "The team excelled themselves and displayed supreme professionalism in what was an extremely challenging situation. "Thankfully incidents like this are extremely rare, but when they do happen – whether it's a normal working day or Christmas Day – we need to be in a position to offer the same level of professional service and expertise to all our customers and we did exactly that."

In an interview with a local newspaper, Eddie Thompson, of Cleveland Fire Brigade, said: "We were there as support if they (GrowHow) needed us but their own works personnel (Sembcorp) carried everything out."

The expertise of Sembcorp's Asset Protection team was recognised at both regional and national level last year with honours in the prestigious UK National Training Awards, run by the Government's Department of Business, Innovation and Skills.

Sembcorp was the first industrial fire fighting force in the UK to put its entire workforce of almost 100 site protection officers through the new Level 3 National Vocational Qualification (NVQ) designed specifically for people in the fire and rescue sector. The business is responsible for guarding literally billions of pounds worth of industrial assets on behalf of customers in the chemical, petrochemical, biofuels, power and oil and gas industries on Teesside.



Some of the Team that extinguished the fire at GrowHow, Billingham: L – R: Stuart Young, Mick Breckon, Craige Smith Dip.JOIFF, Bill Clarke, Graham Turner Dip.JOIFF.



MAKING THE RIGHT CHOICE OF FABRICS IF ANTI-STATIC PROPERTIES ARE NEEDED

Mechanics, utility company staff, workers in the chemical industry... there are numerous occupations across the globe that require people to endure risks to their safety. They are confronted more or less daily with extreme dangers in the workplace.

One of the risks can be caused by static-electricity. A worker's movements can generate a static electric load in the clothing, sometimes to extremely high voltages. This static load must be

discharged from the clothing in a controlled manner. Failure to do this creates a major risk in an explosive environment. Imagine the consequences. Static electricity is created when two objects or materials that have been in contact with each other are separated. When in contact, the surface electrical charges of the objects try to balance each other. This happens by the free flow of electrons (negatively charged particles) from one object to the other. When the

objects separate, they are left with either an excess or a shortage of electrons. This causes both objects to become electrically charged.

The rubbing of a fabric, even in the course of normal everyday wear, can build up static electrical charges of over 5000 volts. Should the wearer then touch a grounded object the discharge promotes a small electric shock, accompanied by an electric spark. In the presence of flammable vapours or dust, the discharge of the static



Standardisation

EN 1149-5: 2008 – This European Standard specifies material and design requirements for electrostatic dissipative clothing, used as part of a total earthed system, to avoid incendiary discharges. The requirements may not be sufficient in oxygen enriched flammable atmospheres. This European Standard is not applicable for protection against mains voltages.

Test methods of EN 1149-5:

There are 2 different test methods in EN 1149-5. These are EN 1149-1 and EN 1149-3.

EN 1149-1, test method for measurement of surface resistivity.

The specimen is placed on an insulating base plate and an electrode assembly is rested on the specimen. A Direct Current (DC) potential is applied to the electrode assembly and the resistance of the fabric is measured. This test determines the resistance over a short distance and is most appropriate for materials for which the electrostatic behaviour is based on surface conductivity.

EN 1149-3, test method for measurement of charge decay,

The dissipation of electrostatic charge from the surface of materials for garments. A specimen is charged by an induction effect. The induced charge on the test material influence the net field that is observed by a field-measuring probe, positioned above the test surface. The decrease in field is used to determine the half decay time and the shielding factor. This test method is applicable for homogeneous and non homogeneous materials.

electricity may be great enough to cause an explosion.

Risks

The risks of static electricity to humans are explosion or fire. Static electricity creates sparks in an explosive or flammable atmosphere and can cause 1st, 2nd or 3rd degree skin burns.



Anti-static fibres

Protective clothing with anti-static properties is manufactured from fabrics with anti-static fibres. Different types of anti-static fibres are available in the market and have their own performance characteristics. It is important to know what type of anti-static fibre is applied into the fabric. In principal there are two different types of anti-static fibre: *Surface resistivity fibres (tested according EN 1149-1)* Metal (Bekinox) and carbon fibres (Negastat P210) are good examples of surface resistivity solutions. To protect the wearer it is very important that the protective clothing is grounded to earth. This can be achieved by a direct line with

a ground (wrist bands) or via anti-static shoes and special conductive floors. In some working environments this could be very difficult to achieve.

Conductive fibres (tested according EN 1149-3) Carbon is the product that is mainly used as the anti-static component in core conductive fibres (Static-Control™, Negastat P190 and P140 used in Nomex® Comfort). These fibres are able to discharge via corona effect – which means that the static charge is discharged to air and secures more protection in environments where grounding to the earth is impractical.

Protective solutions

TenCate Protective Fabrics offers anti-static fabrics based on core-conductive fibres, like Static-Control™ and P140. TenCate's Static-Control™ fibre is a trilobal core conductive filament fibre and is 'gridlocked' into the fabric. Static electricity is dissipated even when the

person wearing the garment is electrically isolated. It discharges through corona at low energy levels that will not cause explosions. This type of fibre is a filament fibre which means that it is included in the manufacturing stage of the fibre and therefore it cannot be removed by washing and offers permanent Anti-Static properties.

P140 is a staple fibre blended into Nomex® Comfort fabrics. Nomex® Comfort fabrics are part of the TenCate Tecashield® collection (BV 170, BV 180, BV 185 and BV 190).

Many fabrics of TenCate contain anti-static properties. In many working environments, anti-static is one of the requirements for protective clothing. The selection of the optimum solution depends on the rest of the risk assessment. It is strongly recommend that clothing to protect against static charges should also be fire resisting.



TenCate Protective Fabrics manufacture and supply high-tech fabrics. For more information contact Mrs Karin Klein Hesselink, End Use Market Manager on +31 (0)548 633 667, email k.kleinhesselink@tencate.com.

TENCATE
Tecashield®

Inherently heat- and flame resistant fabrics

This group of fabrics has been developed on the basis of meta-aramid and para-aramid fibres (including Nomex®).

TENCATE
Tecasafe®

Inherently flame resistant fabrics

*The basis here is a mixture of natural fibres (including cotton or cellulose) with flame resistant PPA-*fr*.*

TENCATE
Tecapro®

Flame-retardant finished fabrics

These fabrics have been developed mainly on the basis of cotton. They are made flame retardant using a special finish process.

WORKING IN DANGER ZONES IS YOUR JOB. MAKING SURE YOU'RE PROTECTED IS OURS.

TenCate Protective Fabrics develops and produces fabrics for work- and safetywear. Our fabrics form the basis of protective clothing worn by firefighters, industrial workers, the military, and other professionals who work in hazardous conditions in danger zones around the world.

We work closely with our customers, end-users, fibre and chemical manufacturers and independent test institutes. As a result, TenCate Protective Fabrics is the one source the world looks to for leadership in knowledge of materials, consistent product quality, and a proven commitment to service excellence.



fabrics for safetywear

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Tecashield

TENCATE
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fabrics for work- and profilewear

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For more information:
www.tencate.com/protective



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MEMBERS SECTION

JOIFF Post Nominals:

At a recent meeting of the JOIFF Directors/Executive it was agreed that in order to recognise those persons who demonstrate excellence in their involvement in High Hazard Industry, 3 JOIFF awards to Individuals will be established – JOIFF Fellowship, JOIFF Member and JOIFF Diploma holder. Those who are awarded such a recognition will be able to use the relevant post nominal after their name.

An Awarding Committee called the JOIFF Post Nominal Adjudication Panel has been established and will review quarterly, applications for the JOIFF awards FJOIFF and MJOIFF.

JOIFF Fellowship:

FJOIFF can be awarded to an individual who in the opinion of the JOIFF Board of Directors has made an outstanding contribution to Industrial Hazard Management activities. The JOIFF Board of Directors may nominate persons for a JOIFF Fellowship to the JOIFF Post Nominal Adjudication Panel. The individual nominated need not necessarily be from a JOIFF Member Organisation.

JOIFF Member

MJOIFF can be awarded to an individual from any JOIFF Member Organisation who has shown significant professional attainment in Industrial Hazard Management activities. Nominations for the award of a JOIFF Member can be made by the JOIFF Board of Directors and also by a representative from a JOIFF Member Organisation. Any such nomination must be supported by an official application form to be filled in by the nominee which is submitted with the nomination, to the JOIFF Post Nominal Adjudication Panel.

JOIFF Diploma holder Dip.JOIFF

The award of Dip.JOIFF will automatically be given to all persons who are assessed as competent in the JOIFF Diploma Programme and are awarded JOIFF Diploma Certification.

More information is available to members from the JOIFF Secretariat: fulcrum.consult@iol.ie

JOIFF Annual General Meeting:

At the kind invitation of FER Tűzoltóság és Szolgáltató Kft. FER

Fire Department, MOL, Százhalombatta, Hungary the 2011 Annual General Meeting of JOIFF will take place on Monday afternoon 24th October 2011 at Danubius Hotel Flamenco, Budapest, Hungary, website address www.danubiushotels.com/flamenco

The AGM will coincide with the 6th International Conference for Fire Brigades in the Oil and Chemical Industry, which will take place in the same venue following the JOIFF AGM, on 25th and 26th October 2011. This major Conference is organised every 2 years by the FER Fire Department. Some of the lecturers and presentations this year include:

- Large LPG tank fire after the earthquake in Japan, 2011; Safety issues of internal floating roof tanks by Dr. Hiroshi Koseki, Japan
- Post Buncefield recovery issues by Gary Douthwaite, Hawkesfire.
- Incident response enhanced via real-time intelligence by Eric Quatreuille, SAFER Systems
- Lastfire update by Dr. Niall Ramsden, RPI.
- ETANKFIRE project - Facing challenges to broad ethanol introduction by Henry Persson, Sweden.
- Ethanol content in fuel - influence in extinguishing processes by Dr. Rosvita Milo-Rieks, Dr. Sthamer.
- A high efficient turbine-based system for plant and tank fire extinction and cooling by Francesco Fritz, AlpinTech, Italy.
- Demonstrations at MOL Plc. Danube Refinery

More detail will be sent to Members when it becomes available.

Annual General Meeting (AGM) Elections:

At the recent meeting of the JOIFF Directors/Executive it was also agreed that the controlling body of JOIFF will be re-organised to meet the ever-increasing demands placed upon the Organisation due to its growth and current positioning in the World of Emergency Response as a major influential International Organisation with more than 190 Organisations as Members in 37 Countries. All members of the Executive have agreed to resign just prior to the AGM, the Executive Board will be disbanded and a new Board of Directors will be elected at the AGM.

Full detail will be circulated to the Membership in due course. More information is available to members from the JOIFF Secretariat: fulcrum.consult@iol.ie

JOIFF POLO SHIRTS AVAILABLE

JOIFF now has JOIFF polo shirts available to Members.

Sizes: Medium, Large, X Large and XX large.

Cost: Sterling £ 12.50p each plus postage.

For delivery in the UK: Sterling £ 15.00p each including postage.

Contact the JOIFF Secretariat to place your order





FUNDING OPPORTUNITIES FOR INDUSTRIAL FIRE SAFETY RESEARCH PROJECT

By Jeanne van Buren

Thanks to my extensive work experience in the public, commercial and industrial sectors, I have encountered a wide range of funding options for research projects. Recently I could share the fact that NATO is much more than a military organisation and offers funding with their Science for Peace and Security (SPS) program (http://www.nato.int/science/nato_funded_activities/nato_funded_activities.htm) with a funding expert consultant while we were working on another project. In the past NATO offered more possibilities for funding and conditions were more favourable than now.



An array of different topics can meet the conditions set for funding applications from various organisations. An enumeration of all the topics suitable for funding from organisations all over the world would fill many pages of the Catalyst and bore its readers. A search for funding options to carry out research into “fire safety” related topics will however only take up a small paragraph of the Catalyst as listed below. But I do not have to waste my time presenting the results from a further refined search on “industrial fire safety” funding prospects as I could not find one.

Results of search for options to fund fire safety related topics:

- OECD funding (<http://cfa.au.dk/en/research/research-projects/oecd-funding-systems/>) does not cover funding into industrial fire safety.
- FM Global offers funding options (<http://www.fmglobal.com/grants/grantsFAQ.pdf>) but only for projects relevant for public purposes.
- NFPA has the Fire Protection Research Foundation <http://www.nfpa.org/itemDetail.asp?categoryID=646&itemID=18907>. The aim of this foundation is to ensure that research carried out was independent, the Foundation was formed as a separate organization. It has given the following mission: To plan, manage and communicate research in support of the NFPA mission.
- NIST has potentially the most extensive program for funding research (http://www.nist.gov/el/fire_grants.cfm). Their program is open to foreign governments; organizations under the jurisdiction of foreign governments; and international organizations, but only through NIST.
- And last but not least JOIFF also offers funding for specific projects concerning industrial (fire) safety.

I could not find any possibilities for international funding from Australia and Canada.

If readers of the Catalyst are aware of more and other options which I have missed please feel free to enlighten me.

This is amazing as all developed countries have extensive legislation addressing the high risk industries. In Europe the legislation for this line of industry is covered by the SEVESO Directive. Any research related to this Directive is referred to the Seventh Framework Programme (FP7 - http://cordis.europa.eu/fp7/whattypeuser_en.html and <http://www.eurunion.org/eu/Science-and-Technology/Research/Science-Technology/Research.html>).

Research projects dealing with industrial fire safety do not meet the conditions set to apply for funding by this program. Earlier this year the aerosol (spray cans) industry tried to get funding for research and large scale tests for the use of hi-expansion foam with outside air, as an alternative to the method used in NFPA 30 B, to extinguish fires in warehouses where these products are stored. Small scale tests showed promising effects for specific aerosol cans as the high expansion foam prevented the feared rocketing of the aerosol cans. Further large scale testing within this project had to be abandoned due to lack of funding. This is a pity as there is wide spread storage of aerosol cans which range from dedicated aerosol warehouses to mixed good storage. The ESFR sprinkler described by NFPA 30B is not always suitable for a multi purpose storage of aerosol cans and flammable liquids. These tests could have provided useful knowledge about hi-ex foam systems for these mixed storage configurations, even if the tests proved that hi-ex foam is not suitable.

This project is just one of the many topics eligible for further joint research. The outcomes of these research projects are globally applicable. Industrial and public safety can benefit tremendously from the improvements made possible through these research projects.

Could JOIFF play a role in a joint effort with organisations like ECPS, FABIG and OILPERA to get funding of industrial fires safety projects on the agenda of European Union and other relevant organisations? Let us know your thoughts and views on this article.

Editor's Note: Jeanne van Buren is a Safety specialist working with the Rotterdam-Rijnmond regional emergency response organisation in The Netherlands. She has BSc degrees in the Dutch equivalent of Process Engineering, Chemical Engineering, Applied Chemistry and Environmental Engineering and an MSc in Environmental Quality Management as well as Risk Crisis and Disaster Management. She is currently carrying out a PhD research into integrated fire safety during the whole life cycle at SEVESO sites.



THE COALITION FOR RESPONSIBLE FIRE PROTECTION

The Coalition for Responsible Fire Protection is well into its first official year of existence and the formation of Coalition has been a long process of open forum and debate. The underlying goal of the Coalition is to apply models of environmental responsibility to the field of fire protection. While this is a noble cause, it is also a business decision for the members as we consider the vast emerging “Green Construction” markets and how we can best meet the needs of green companies.

The Coalition for Responsible Fire Protection has been established to concentrate on the growing demands for a more sustainable fire protection industry. Of particular interest to JOIFF members is the work the Coalition is doing, to understand the challenges facing the choice and use of fire fighting foam.

The biggest hurdle The Coalition has faced, and will continue to face, is the tendency of individuals to assume The Coalition leans toward any particular product or solution, such as fluorine free foams. Whilst the impact of foams will be an issue within any discussion of the environmental aspects of fire protection, they are not the sum total and the focus will be on finding solutions which will deliver performance at minimal environmental impact. If one considers the full impact of life cycle assessment outlined in ISO-14044 they will conclude what The Coalition also has, that there is a significant amount of work to be done in looking at the sustainability process rather than on one product or compound as a panacea.

There are several real challenges for industry, including consideration of the need to accept responsibility for capturing foam products sold into the market at the end of their service life, where there presently appear to be inconsistencies in approach. Some companies have made plans but generally there are no formal programs and the participation varies greatly from product-to-product and market-to-market. Many times these products simply end up in the back of a warehouse or in land-fills rather than being reprocessed appropriately. One of the goals of The Coalition is to encourage manufacturers and suppliers to become more aggressive across the range of fire fighting products in capturing, reclaiming and destroying agents and hardware at the end of their service life.

To address the end-of-life challenge The Coalition will be working with organizations like the World Resources Institute to develop standardized guides for companies to deploy for “life-cycle” management. This will require manufacturers, suppliers and end-users to work together to manage the product from cradle to grave. The end result will be products manufactured with less negative

impact on the environment and better serviced during their service life.

The Coalition encourages suppliers and users to adopt greener practices, by providing information, education and training in regard to sustainability and competitiveness. To realise the full potential of these aims these goals will address the whole business cycle rather than focusing solely on the choice of foam for instance. At the same time The Coalition seeks to help end users and suppliers obtain the certifications and labels that allow them to demonstrate their commitment and credibility to sustainability. The sustainability approach to business and social responsibility is fast becoming a part of everyday vocabulary with companies like Walmart® having incorporated sustainability into their purchasing requirements. The Coalition foresees this type of pre-qualification becoming a standard feature within all industries, especially including the high-hazard refining industries from which JOIFF draws many of its members.



The Coalition membership is sought from all parts of the fire industry supply/user chain. The intention is to recruit end users, members of government agencies and the green consulting community as key members contributing with their individual expertise. The long-term expectation is that the “fire industry” will become just one section of a membership made up of all parts of industry, and by recruiting a diverse group of members The Coalition will develop sustainability, life cycle and product stewardship policies and processes which are representative of the wider consensus.

We invite any company interested in taking a more responsible stand on environmentally responsible products and business practices to seriously consider joining The Coalition for Responsible Fire Protection. You can obtain more information at <http://www.responsiblefireprotection.org/>



"SUSTAINABILITY in FIRE PROTECTION CONFERENCE"

*"Understanding 'Sustainability in Fire Protection'
... And how it may enhance your bottom line."*

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– Conference Speakers –

Tuesday, September 13th

- 8:30 AM – Scott McDougal, Terrachoice (UL Green),
"Emergence of the Green Market and Greenwashing"
- 10:30 AM – Tom Cortina, Cortina Environmental Consulting,
"Update on Clean Agents & Environmental Legislation &
Sustainability"
- 1:00 PM – Dr. L. Draucker, World Resources Institute,
"The World Resources Institute Update on the GHG Protocol Product
Life Cycle Accounting and Reporting Standard"
- 3:00 PM – Mark Wagner, ICF International,
"GWP As a Dynamic Value in Understanding Sustainability"

Wednesday, September 14th

- 8:30 AM – Jennifer Woofer, Strategic Sustainability Consulting,
"Promoting Your Business to, and Advertising in, The Green Market"
- 10:30 AM – Tom Cortina, Cortina Environmental Consulting Incorporated,
"Sustainability Challenges Facing the Fire Fighting Foam Industry"
- 1:00 PM – Sapna Walter Palla, Kay Scholer LLP,
"The Carbon Market & The Impact on Environmental Decisions"
- 3:00 PM – Randal Shaheen, Arnold & Porter LLP,
"Green Advertising Law and New FTC Guidelines"

Thursday, September 15th

- 8:30 AM – Dr. Rudolf Overbeek, Intertek
"Certification and Labeling of Sustainable Fire Products"
- 10:15 AM – Richard Marcus, Remtec International
"Halocarbon Management – Best Practices"
- 12:15 PM – Michael Arny, Leonardo Academy,
"Connecting LEED® & Sustainability for Fire Protection in Buildings"
- 1:30 PM – Tom Gillmore, Tyco Fire Protection Products,
"Vision & Future of the Coalition for Responsible Fire Protection"



THE JOIFF DIPLOMA ROLL OF HONOUR

The JOIFF Diploma is a competency based programme for emergency responders including the necessary key skills that will allow them to deal competently with any site emergency that involves the risks within their area of responsibility. The Diploma is electronically based and key skills are learnt and demonstrated by the student in practical training and exercises. One of the main advantages of the programme is that it is primarily carried out on site using the site facilities and equipment and is assessed and verified by competent site personnel.

The Diploma programme is comprised of 24 Units covering in excess of 100 elements and 700 competences which is locally assessed and externally verified. The JOIFF Diploma is based on National and International Standards and therefore can be used and recognised throughout the World. Approved prior learning is acceptable for up to two years prior to the commencement of the programme.

Below is the list of persons - and their Employer at the time - to whom the JOIFF diploma has been awarded since it was established.

Petroplus Coryton Refinery

Arnie Arnold	Scott Chinery	Dennis Dudley
Geoff Howes	David Nunnery	

Sembcorp Utilities UK Ltd.

Iqbal Ali	Allan Bunn	Robert Caster
Howard Carr	Andrew Causten	Mark Clayton
Stuart Clethro	Craig Dunnett	Glen Doyle
Martin Evans	Daniel Ferguson	Martin Graham
Craig Holmes	Peter Holmes	John Jeavons
Ian Kirkup	Chris Leaditter	Wayne Leonard
Daniel Mee	Trevor Moody	Simon McIntyre
Michael Paisley	Andy Passmore	Gavin Pidgeon
Stephen Pritchard	Adam Robson	Ian Scott
Anthony Sivills	Brian Smith	Craige Smith
Chirstine Stangoe	David Taylor	Matthew Thomas
Graham Turner		

Williams Fire and Hazard Control

Ewen Duncan

The persons listed above can now use the Post Nominals Dip. JOIFF after their names.



PPE CORNER

In the April 2011 edition of The Catalyst we announced a survey to gauge the attitudes of Users of PPE Worldwide to the PPE that they use, particularly PPE to protect against possible exposure to heat and/or flame. We promised to publish a summary of the responses in this edition.

All of the responses that we received were from persons in the Emergency Response Sector. The answers to the 3 questions in the survey are summarised as follows:

What do you like about your current PPE?

Comfortable to wear. Good visibility through improved use of reflective tape. Good thermal protection. Longer flash hood is also useful, however since being issued we have now got a small collar on the tunic, I would prefer both.

What don't you like about your current PPE?

Too heavy. Too hot. Not suitable for all jobs. Would prefer one set of PPE which suits all incident types. Severely restricts movement. Excessive metabolic heat build-up. Lacks functionality and durability. Too bulky, especially the gloves and helmet. Would prefer boots that zip.

What would you change about your PPE?

Improved protection for extreme conditions. Integrated mask/helmet. Identify different grades by wearing different colour. Need lighter PPE more suitable for all incident types

Thanks to those who responded.

We invite comment as to what you think that we should do following receipt of these replies. Please send suggestions to the JOIFF Secretariat:

fulcrum.consult@iol.ie



Chairman of the JOIFF Training Standards Committee Gerry Johnson presenting the JOIFF Diploma to Dennis Dudley Dip.JOIFF, a member of the Emergency Response Team in Petroplus Refinery, Coryton, UK. Also in the picture is Arnie Arnold Dip.JOIFF, Emergency Response Specialist, Petroplus Refinery.

DON'T GIVE CANCER A CHANCE

By Chief Charles Brush MS EFO

In the United States, June was National Safety Month; October is National Health Awareness Month. While it's quite fashionable to focus on safety and health during these months, given our vocation shouldn't there be a daily focus and a daily consideration?

Let's blend safety and health together and call it quality of life. Everyday should be a quality of life awareness day! Each day, we need to be aware of the preciousness and fragility of our life and act accordingly to protect it. Perhaps in this manner we could defeat the moments of "driving like I have no deductible", "hey guys, watch this", "living on the edge" and "pushing the envelope".

Every day, we should strive to reduce the dangers we face; cancer for example: *Don't Give Cancer a Chance!*

Cancer is being acquired by firefighters at an alarming rate, well beyond the level experienced in the civilian population. This is not because of what we do, but because of what we do not do! An effective offense combined with a strong

defence is not only the winning combination of football teams and armies but also holds true in the avoidance of cancer.

Don't Give Cancer a Chance - Remove the Carcinogens - Clean your gear!

The crud, dirt, soot and products of combustion on your PPE are the not-so-secret agents of cancer. Left alone, they will enter your body covertly and contaminate it. The best defense is to attack these agents before they can infiltrate! Clean your gear and kill the agents of cancer before they can kill you!

Don't Give Cancer a Chance - Keep the carcinogens out - Respiratory protection

The products of combustion are a veritable cornucopia of bad things to breathe. Some of them are identifiable and get a lot of attention such as carbon monoxide, phosgene and hydrogen cyanide. The ones I am more concerned with are the ones that are new and unique to each fire. These mutants,



spawned by the burning interaction of the chemicals and petroleum based contents of a fire are unknown and inherently bad news. They invade our body via the respiratory system, an entrance that many times, is left unguarded. The best defense is to protect your respiratory system by wearing your SCBA during suppression and overhaul operations (See Note below) while attacking and dispersing the invaders with aggressive ventilation. Remember, our four gas monitors tell you what we already know is there, they will not detect the mutants.

Don't Give Cancer a Chance – Fit, Rested and in Good Health – Strengthen body defenses!

We are at our peak when we are well rested, mentally and physically fit and in good health. Just as a roof or floor truss, this defensive triangle is only as strong as its weakest link. While it is never you, you know or have heard stories of other firefighters that come to work to “rest up” after a rough couple days off. Then there is the firefighter that shows up for work but in less than stellar health who would rather work than take sick time. A weakness in any of the three directly affects the ability of your immune system to resist attack. With your immune system compromised. You are at the mercy of whatever you might come upon.

Don't Give Cancer a Chance – Early Detection – Regular check-ups

The danger to the security of your body or a house is the lack of threat assessment or awareness of danger. Cancer in the body is very similar to termites in a house. They enter unseen, establish themselves secretly and do extensive damage before their presence is realized. In many instances, when they finally do make themselves known, the structure they now live in (house or body) is not salvageable. Our best defense is to be aware and have regular check-ups in accordance with the recommendations of your doctor. If an invasion or infiltration is detected early, it can be stopped without long term damage to you...or your house.

Don't Give Cancer a Chance – What if – Resources for those combating cancer

If you are diagnosed with cancer, it is not the end and you are not alone! Each of us has been faced with adversity to one

degree or another and while cancer is one of the more egregious adversities, it is just that. There are weapons at your disposal to fight and overcome cancer. They are as powerful as you make them and when used together in a combined arms assault are invincible!

- **Attitude** – Eradicate despair, hunt down and kill melancholy, live each day with vitality, a positive attitude and positive energy.
- **Your support group** – Friends, family, the Firefighter Cancer Support Network www.firefightercancersupport.org nationally and/or local support groups.
- **Traditional and non- traditional Medicine** – Seek out sound medical counsel/advice. Question everything and do not hesitate to get a second opinion. Once a course of treatment(s) is decided, embrace it and surround it with an attitude and aura of success.
- **Faith** – The old adage is that there are no atheists in fox holes, nor are there many undergoing cancer treatment. Regardless of your belief system, whatever gives you comfort and solace, embrace it and use it.

It is my fervent wish that cancer will never be at your doorstep, but it something that you must take an active part in preventing. Live long and prosper, experience all that a full life as to offer.

Don't Give Cancer a Chance!

Note: Overhaul means restoring the scene as closely as possible to the condition that it was before the incident. This includes finding and extinguishing all hidden fires after the main fires have been extinguished.

Editor's Note: Chief Charles (Charlie) Brush MS EFO is Safety Programs Manager, Bureau Fire Standards and Training, Florida State Fire Marshal. He has held the rank of chief in both career and volunteer fire departments, working his way through the ranks of firefighter to chief.

Charlie holds a Master of Science degree, is a Florida Certified Instructor III and a bunch of others “suitable for framing”. When not involved in emergency services, Charlie can be found on the water aboard his sailboat. Contact Charlie at charlie.brush@myflorida.cfo.com



The Fireman's "Ring of the Bell" Tradition in the USA.

The ceremonial ringing of the bell in memory of those who died in the line of duty is an age old tradition of the US Fire Services that dates back over 150 years. The tradition reflects respect and honour to those who gave their lives to their duty. A distinctive bell ringing marks the end of an emergency and a return to quarters. In memory of all who died during the attacks on the World Trade Centre in New York on September 11, 2001 the bell is rung five times in series of fives (5 x 5 x 5 x 5 x 5). Multiplied out this equals 3,125, a number very close to the number of people who died as result of the attacks.

From <http://www.qbfire.com/traditions.asp>



PRESS RELEASE:

IMPROVING EMERGENCY PREPAREDNESS: THE EMERGENCY SERVICES SHOW AND CONFERENCE



Unfortunately accidents at oil refineries do occur; most recently four people were killed in an explosion and fire at Chevron oil refinery in west Wales. Consequently an important element of workplace safety in the industry is therefore emergency preparedness. As a JOIFF member you will adapt at ensuring the prevention, protection and preparation of risk based scenarios, as well as being fully versed in command operations involving fire and other emergency scenarios.

Networking and collaboration with suppliers, colleagues and contemporaries is and will continue to be, an essential part of ensuring an emergency is dealt with as efficiently and effective as possible; The Emergency Services Show and Conference 2011, facilitates the necessary communication by bringing together everyone involved in emergency situations.

With over 380 exhibitors and 4,000 visitors attending the successful show last year, the Emergency Services Show and Conference 2011 is one of the key events for anyone involved in emergency planning, response or recovery, in the UK and abroad. This year's show and conference will be taking place on Wednesday 23rd and Thursday 24th November at Stoneleigh Park, Coventry.

Visitors to the exhibition can discover the latest equipments and services from a range of leading companies. Among those organisations already confirmed to attend this year's exhibition are: Angus Fire, Draeger, Bristol Uniforms, North Fire, MSA, Argus Thermal Imaging, DuPont, Angloco and Godiva. The products and services on display include: personal protective equipment, communications and IT, first response equipment, station equipment, training and education, vehicles and vehicle equipment, business continuity and outsourcing. Many exhibitors will also be carrying out a number of live demonstrations throughout the two days.

At a time when budgets are being squeezed, this FREE to attend exhibition provides the perfect opportunity for visitors

to research methods of 'doing more with less' funds. Visitors will be able to speak to exhibitors about how they may operate more effectively and efficiently, thereby resulting in the highly desirable outcome of "more for less".



David Brown, Show Organiser, Emergency Services (MMC) Ltd, comments: "In these uncertain times it is more important than ever for all emergency professionals and associated agencies to communicate with one another, this may allow resources to be shared and budgets to be maximised.

The Emergency Services Show offers the unique opportunity to meet with specialist equipment and service suppliers from the UK and abroad to facilitate mutually beneficial buying arrangements and discuss new important innovations and products."

David continues: "As well as allowing exhibitors to showcase their latest products and services, the exhibition provides an ideal way for professionals to discuss co-operation, ideas and initiatives and learn from each other in preparation for major events taking place over the coming years or prepare for the unexpected."

There will also be approximately 100 end users exhibiting within the Emergency Response Zone. This zone (essential for operational staff and emergency planning officers) is made up of Category 1 and 2 Responders, Professional, Government and Voluntary organisations, and hence offers perfect networking opportunities to affiliated organisations. The British Compressed Gases Association, CFOA National Resilience, Met Office, Flood Forecasting Centre, Fire Protection Association, Health Protection Agency, are just a few of the organisations exhibiting in this specialist area. There is also a dedicated UK Search and Rescue (SAR) Zone including exhibitors: Mountain Rescue England & Wales, Maritime Volunteer Service, Association of Lowland Search & Rescue and the National Search and Rescue Dog Association.

Conference

The show's high profile conference is delivered in tandem with the exhibition and this year will facilitate professionals to discuss the latest industry news, developments and strategic advances, as well as hearing about lessons learnt and new initiatives affecting them. The programme is set to offer delegates an informative couple of days both for personnel development and their organisations. For further information on the conference programme please visit the website, www.emergencyuk.com, regularly.

Register now for your free visitor pass

To register for your FREE visitor pass or to learn more about attending or exhibiting at The Emergency Services Show and Conference 2011, please visit the event's new website www.emergencyuk.com Remember; be sure to put Wednesday 23rd and Thursday 24th November in your diary, this is an event for all emergency and resilience professionals not to miss! Spread the word amongst your colleagues!



PFOS REGULATIONS - REDUCTION IN LOWER LIMITS

JOIFF has received the following information from the Chemical Compliance Team of The Environment Agency for England and Wales.

Please see below the timeline for the transfer of PFOS foam legislation from REACH Annex 17 into the EU POPs Regulation.

PFOS became regulated under the EU Persistent Organic Pollutants Regulation by amendments made in August 2010. The original regulation (EC No 850/2004) and amendments (EU No 756 and 757/2010 for PFOS) can be accessed via the EU's EUR-lex database: <http://eur-lex.europa.eu>

During this transfer from REACH to POPs, the unintentional trace contamination level for PFOS was **reduced from 50mg/kg to 10mg/kg**; the reason being that evidence has shown that some PFOS derivatives

may be deliberately used in preparations at concentrations below 50mg/kg.

A document explaining this reduction is available online at the following location: http://ec.europa.eu/environment/pops/pdf/questions_answers.pdf

The 10mg/kg revised concentration limit is applicable to foam concentrates.

PFOS was officially removed from Annex 17 of REACH in February 2011. Again, the relevant amending legislation (EU No 207/2011) can be accessed via the EUR-lex database.

Some users of fire fighting foams may be in a situation whereby they have previously taken steps to comply with the PFOS phase-out under REACH, but now find themselves non-compliant with the POPs Regulation (due to cross-contamination from residual PFOS foam in

their fire system causing PFOS levels in their replacement foams in excess of 10mg/kg). In this situation, The Environment Agency would expect detailed records of what actions were taken and when, to be available for inspection if required.

Anyone who has not yet carried out actions to comply with the PFOS foam phase-out should do so immediately. They should make sure their systems are properly decontaminated so that their new foam stock complies with the revised 10mg/kg limit for continued use.

The European Commission is currently considering a lower waste management limit for PFOS. Until that limit has been decided, any waste that contains any concentration of PFOS should be stored and disposed of in line with the prescribed methods in the EU POPs Regulation.



Innovative high visibility, heat and flame resistant fabric launched by renowned textile manufacturer

Toray Textiles Europe Ltd, a world leader in textile manufacturing has launched an innovative high visibility heat and flame resistant fabric. ThermGuard™ High Visibility has been designed to ensure workers are highly conspicuous as well as protected against thermal hazards. This revolutionary fabric, with international patent pending, has been developed in collaboration with customers, laundries and end users and specifically those working in chemical and petrochemical industries to ensure outstanding quality and comfort is coupled with enhanced performance.

ThermGuard™ High Visibility is a heat and flame resistant material and can be supplied in any high visibility colour including GO/RT 3279. The fabric conforms to industry standards and in particular ISO 11612: 2008 for clothing that protects against heat and flame, ISO 11611:2007 clothing for

use in welding and allied processes, EN 471 including GO/RT 3279 high visibility work wear and EN 61482-1-1: 2009 protection against the thermal hazards of an electric arc with an open arc rating of >8cal/cm². The fabric is breathable, comfortable to wear and stable to industrial washing whilst retaining excellent light, colour and wash fastness. ThermGuard™ High Visibility is ideal to offer protection for those working in the chemical and petrochemical industries.

Wearer trials in a major UK refinery have been completed to the satisfaction of the Health Safety and Operations departments and confirm the outstanding features and benefits of ThermGuard™ High Visibility, in addition to high visibility the fabric can be dyed in any colour meaning garments can be supplied in corporate colours along with high visibility fluorescent shades.

Mike Fisher, Associate Director Technical Textiles at Toray Textiles Europe Ltd explains "we are renowned world wide for our technical expertise and we have dedicated time and listened to our customers to produce this new innovative fabric that offers quality and performance far exceeding other fabrics currently available. From our fully integrated weaving & dyeing manufacturing plant in the UK we offer our customers quick response and the benefits of a bespoke sampling service to facilitate targeted developments".

For more information on Toray Textiles Europe Limited or ThermGuard™ High Visibility fabric please contact sales@ttel.co.uk or visit <http://www.ttel.co.uk>



Diary of Events 2011

July

- 5th - 6th *Emergency Scotland* , SECC, Glasgow, Scotland
- 6th - 7th *Ambulex*, Fire Service College, England
- 26th - 29th *Fire Systems Integrity Assurance and Maintenance Workshop*, Brazil

September

- 13th – 16th *Fire Systems Integrity Assurance and Maintenance Workshop*, Australia
- 20th – 22nd *Practical: Storage Tank Fire Fighting Workshop*, Brazil
- 27th – 29th *Fire & Gas Detection Workshop*, Singapore
- 28th – 30th *LNG workshop*, Netherlands

October

- 4th – 5th *Practical with Fireground Training: LNG*, Spain
- 10th – 13th *Storage Tank Fire Hazard Management Workshop*, Malaysia
- 24th – 27th *Fire Systems Integrity Assurance and Maintenance Workshop*, Abu Dhabi
- 24th *JOIFF Annual General Meeting* , Budapest, Hungary
- 25th – 26th *European Oil Refinery Fire Chiefs Conference*, Budapest, Hungary

November

- 14th – 16th *Civil Defence Exhibition and Conference* Doha, Qatar
- 23rd – 24th *Emergency Services Show* Stoneleigh Park, England
- 28th – 30th *Practical: Storage Tank Fire Fighting Workshop* , Malaysia

December

- 10th – 13th *MEFSEC Conference and Expo*, Cairo, Egypt

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.*

TORAY

ThermGuard™

HIGH-VISIBILITY
COLOUR SOLUTION

Toray Textiles Europe Ltd

A revolution in protection and visibility

- ISO 11612: 2008. Clothing to protect against heat and flame
- ISO 11611: 2007. Protective clothing for use in welding and allied processes
- EN 471 High Visibility. GO/RT 3279: 2008
- EN 61482-1-1: 2009. ATPV Electric Arc Protection >8/Cal/cm²
- EN 61482-1-2: 2007. Electric Arc Protection. Class 1 ('Box' Method)



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

JOIFF accredited training is within a Competency Based Training framework and involves not only course content, as also critical to the effective provision of training are the facilities of the training provider/training establishment and the capabilities of the instructing staff. JOIFF has developed systems of accreditation for training providers and minimum instructional requirements for Instructors.

All students who successfully complete a JOIFF accredited course/programme are issued with a JOIFF Certificate of Competence which has its own unique number. Records of all successful

students and the courses in which they qualify are retained. There is growing recognition worldwide of the JOIFF Certificate of Competence which is coming to be regarded as a passport to the level of employment and rank which an emergency responder's qualifications enables and entitles them to deserve.

"If you think that you can do it, that is confidence. If you can do it well on an on-going basis, that is competence!"

JOIFF Accredited Training for 2011:

For further information about JOIFF accredited on-Site Competency Based Training Programmes, the range of Fire Service NVQs and any other aspect of JOIFF Training, please contact the JOIFF Secretariat.

The dates below have been provided by UK based JOIFF accredited training providers. If the dates are not suitable for you or your own specific training requirements are not listed below, contact the JOIFF Secretariat.

PROGRAMME FOR 2011/2012 JOIFF ACCREDITED TRAINING ESTABLISHMENTS:

JOIFF Accredited Course	Dates	Venue / Organiser
Basic Industrial Firefighter Course	3rd - 7th October 2011	
	16th – 20th January 2012	
Team Leader Course	19th – 23rd September 2011	
	5th – 9th March 2012	
Fire Incident Command Course (5 Days)	4th – 8th July	Netherlands / Falck Risc
	12th – 16th September	
	21st – 25th November	
LNG Hazard Awareness and Fire Hazard Management Workshop (classroom based)	28th – 29th September	Netherlands / Falck Risc
Fire Systems Integrity Assurance (FSIA) Workshop	24th – 27th October	Falck Abu Dhabi
PERO Pipeline Emergency Response Officer (UKOPA)	10th October	Wilton/ Sembcorp UK Protection Group
Site Incident Controller Training (1 Day)	21st September 2011	Wilton/ Sembcorp UK Protection Group
	17th November 2011	
Site Main Controller Training (1 Day)	23rd September 2011	Wilton/ Sembcorp UK Protection Group

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