

RESILIENCE

The magazine of the Emergency Planning Society

November 2013



The Emergency Planning Society
The Organisation for Resilience Professionals
www.the-eps.org



Helen Hinds
Chair



Sam Mendez
Head of Content

THE Emergency Planning Society recently held its AGM, annual Resilience Awards dinner and Conference in Birmingham. The discussion at the AGM was of a high quality and all the proposals put to the membership by the Board were passed. Minutes are available to download from the Resources section of the website.

The fifth annual Resilience Awards dinner was also a great success!

The standard of entries was very high again this year and the judges had a difficult time choosing the winners. Congratulations must go to all!

Details of all the nominations can be found on the EPS website and on pages 20 to 24 in this issue of *Resilience*.

The dinner was followed by a successful conference at the NEC Birmingham, in partnership with the Emergency Services Show. The presentations were thought-provoking with a special mention going to James J Manahan Jr from the New York City Fire Department who talked about his experience of Super Storm Sandy.

Thanks to everyone who made the Emergency Planning Society's AGM, Resilience Awards dinner and Conference such a success.

The Board met last month at the Emergency Planning College in Easingwold, and I am pleased to say we are already coming up with ideas for next year's event.

Simon Creed is currently working on a survey which will be sent to attendees of this year's two-day event so we can gauge feedback and improve even further on previous years - please spare a couple of minutes to share your experience with us when you receive the survey.

Watch this space for announcements about next year's Resilience Awards and Conference. I hope we'll see you there in 2014!

HOW time flies...this is the last issue of *Resilience* magazine for 2013 - and what a year it's been! We've seen a lot of changes at the EPS Head Office and there are still more to come, but I hope you all agree that the Board is moving the Society in the right direction. As Helen has said in her column, the EPS conference and Resilience Awards were well received and there were some excellent examples of multi-agency working, resilience and innovation in the winning nominations. Congratulations to the winners and to everyone who was shortlisted. I hope everyone, including those that didn't quite make the shortlist, will enter again next year and be part of the sixth national Resilience Awards. You should all have received the recent Board update e-mail which contained details of the proposal to get *Resilience* magazine back to hard copy. The Board has listened to member feedback and is progressing with a proposal to have the magazine printed again. We are hoping to have *Resilience* on your desks by summer 2014. For now, it's business as usual - the deadline for February's issue is January 17. Please send your articles and photos to me on the usual e-mail address (below). Hoping you all have a great Christmas and New Year break!

Sam

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The Emergency Planning Society

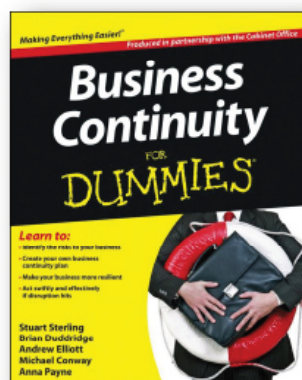
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Profile Photography*

The easy way to ensure your business is prepared for anything...

If disaster struck, could your business continue to operate? It might be a fire, flood, storm, technical failure, or a quality control failure - whichever way, how can you minimise the risk of disruption to your business?



ISBN 978-1-118-32683-1
£16.99 • Aug 2012

FOR
DUMMIES

Business Continuity For Dummies clearly sets out how to identify the risks to your organisation, how to create your own business continuity plan, how to apply it in practice and what to do if the worst does happen.

- ✓ Assess and minimise the risk of disruption to your business
- ✓ Create your own business continuity plan
- ✓ Apply business continuity in practice

What are you waiting for? Take action now to ensure the survival of your business with *Business Continuity For Dummies*.

To order your copy with a special discount please contact Laura on 0845 600 9587

THE Emergency Planning Society, in partnership with the Cabinet Office and the Business Continuity Institute, has worked to produce *Business Continuity for Dummies*, an essential survival guide for small and medium sized enterprises (SMEs). The guide acknowledges that smaller businesses just do not have the money, time and resources to prepare for disruptions, yet the cost of dealing with them when they do arise can be significant. It provides simple, and for the most part inexpensive, how-to measures to deal with difficulties ranging from being let down by one of your key suppliers all the way through to major disruptions caused by challenges such as flooding, severe weather and a pandemic influenza outbreak. The guide came out of the Emergency Planning Society's Business Continuity Professional Working Group (PWG) as part of the EPS' contribution to the profession. All their hard work was done voluntarily and the book – which is available to buy through the EPS Head Office – is the result of their efforts. The guide outlines simple, practical, and low cost steps that companies can take to make sure they stand up to disruptions.

YOUR PWGS AND THEIR CHAIRS

THE EPS has eight Professional Working Groups - CBRN, COMAH & Pipelines, Crowd & Event Safety, Environmental Risk, Health, Human Aspects, Oil Pollution and Business Continuity. The purpose of the PWGs is to harness the Society's expertise and explore current and emerging resilience planning issues in specific areas of interest. Want to apply to join a group? Please contact the relevant Chair:



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Jacqui 'Masters' Health, Safety & Risk

JACQUI Semple, a Resilience Manager at Angus Council, graduated in July 2013 from Robert Gordon University, Aberdeen with a Masters' Degree (with Merit) in Health, Safety & Risk.

Three years of hard work, 'tantrums and no tiaras', reading, writing and researching, finally paid off - despite the statement "never again" (which incidentally she said after her last period of study in 2003 after graduating from Coventry University).

Jacqui was nominated by the university to submit an academic poster to the Institution of Occupational Safety & Health (IOSH) and encouraged to consider undertaking a doctorate. The university has also requested Jacqui to work with students who are undertaking a research project specific to the resilience agenda from both a practical and theoretical perspective.

Jacqui said: "The various subjects studied reflected areas of professional practice and specifically, strategic management, leadership, culture, people management, human and psychological factors and the organisational context.

"In addition, corporate social responsibility, ethics and the operating environment were also integral components of the learning and importantly the legal framework."

Jacqui explained that when considering the learning outcomes in parallel with the resilience agenda, there is significant parity, specifically in relation to leadership, management and culture. The research undertaken for



Jacqui Semple, Scottish branch

the final academic year, in relation to the dissertation, identified a number of themes which are broadly similar to the core principles of integrated emergency management:

- Compliance with legislation
- Leadership and management
- Standards and integration of management practices at all levels within the organisation
- **Culture:** the creation of a safety culture and how it is embedded within the organisation
- **Competences:** people, job and organisational factors
- **Risk:** the integration with other functions, and the risk approach to safety

and the wider organisational aspects

- Learning lessons.

Sound familiar?

Jacqui said: "Never underestimate the importance of leadership, management, competence and culture. Whether the agenda is about risk, resilience or safety, the key message is about the importance of culture; shared values, beliefs and behaviours which should be integrated into the strategy and business functions of the organisation, reflecting a culture which is valued and embedded."

Jacqui is now having some well-earned free time, what is next on the learning agenda? 'Never again' has now become 'maybe'.

Flagstaff, Arizona – Planetary Defence Conference and Meteor Crater



PART II

By Debbie Lewis
London branch

THE International Academy of Astronautics 2013 Planetary Defence Conference took place in Flagstaff, Arizona, in April. The purpose of this conference, the fifth in the series, was to bring together experts in many fields to discuss the latest information on asteroids and comets that might threaten Earth, along with the various options for deflecting an approaching object, consideration given to the political and policy issues affecting the decision to act and what might happen should there be an impact. This year, for the first time, the conference programme reflected an awareness of the civil protection arrangements to be considered alongside the mitigation techniques required for planetary defence. This was achieved in three ways. Firstly, by the inclusion of an address given by Robert J. Fenton, the Assistant Administrator, Response Directorate, U.S.

Department of Homeland Security, FEMA, who asserted that current contingency plans for responding to natural hazards and terrorism could be reviewed against the hazard posed by Near-Earth Objects. Secondly, with the addition of a conference session entirely devoted to Consequence Management and Education with the focus on risk management and risk communication. Thirdly, the conference also included a half-day, discursive table top exercise in which participants had the opportunity to simulate the decision-making process for developing both deflection and civil protection responses to a hypothetical asteroid threat.

Flagstaff was chosen as the conference location as it is 35 miles away from the Barringer Meteorite Crater which is the first proven, best preserved meteorite crater on Earth. The crater is 550ft deep, 4,100 ft across

and 2.5 miles around. It was formed 50,000 years ago when a meteorite 150ft in diameter, weighing 300,000 tons, and travelling at a speed of 28,600 miles per hour (12 kilometers per second) impacted the high desert in Northern Arizona. The resulting explosion equalled 2.5 megatons of TNT, or about 150 times the atomic bomb that destroyed Hiroshima. As a result, one of the many highlights of the conference was an opportunity to not only visit the Meteor Crater Visitor's Centre, but also a rare chance, for those deemed physically fit, to walk to the bottom of the crater and back, an activity that is sadly no longer available to the public given the nature of the terrain and the number of injuries that have been sustained by previous visitors. Consequently the delegates were provided with an amazing experience to trek down to the bottom of



The Barringer Meteor Crater

this crater and experience first-hand the extent of the effects of this impact event. The conference programme also included an emergency response exercise which was conducted during the conference. Those participating in the exercise comprised professors, PhD students, planetary scientists, senior scientists, space journalists and researchers from research, astronomy and astrophysics institutes, observatories, space agencies, laboratories, scientific research centres, space news, planetary societies and aerospace organisations. The participants were, by the process of self-selection, assigned to a specific group, each one representing a particular perspective and expertise in relation to the associated activities of a hypothetical hazardous object, from detection and warning through to the disaster response and planning for, and executing, a mitigation mission. The exercise groups were, namely: NEO discovery and follow-up, NEO characterisation, mitigation techniques and missions, impact effects, consequence management and education, media and risk communication, single nation concerned, UN, inter-

national organisations and NGOs, space agencies (with a launch capability) and the general public. Some 140 conference delegates from the United States, Mexico, Russia, China, France, Germany, Norway, the UK, Australia and New Zealand participated to determine the international decision making requirements in order to mitigate possible NEO impact events, and for consideration to be given to the determination of deflection strategies for mitigation, the development of civil protection policies, such as evacuation and/or shelter, the co-ordinated arrangements for the international response, the mechanisms for enhancing the governmental/political capability to respond to the hazard posed, the development of the educative and risk communication strategy to assist the public in understanding the hazard and to explain the probabilities in relation to its likelihood and consequences. Participants were given a period of 12 years prior to impact, and five years from the possible key hole passage, to plan not only for mitigation missions for deflection but also for the contingency arrangements for civil protection. The rationale for this was

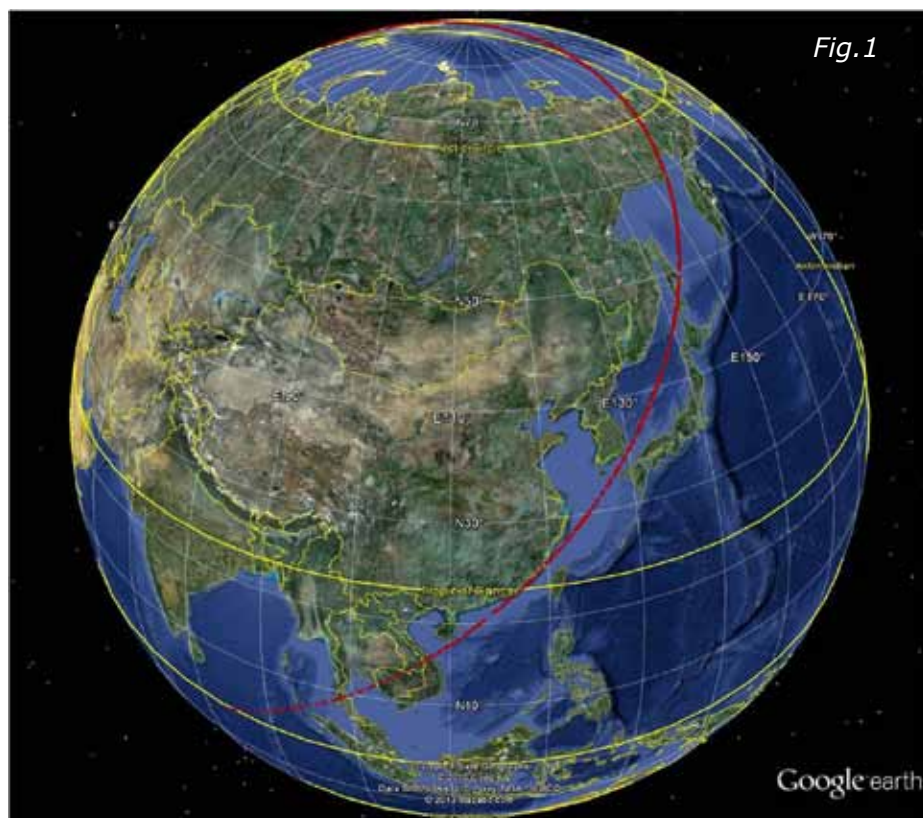
to enable sufficient time to design and launch mitigation missions, which can take up to five years, as well as fully consider the arrangements for civil protection.

The exercise itself was intended to elicit the recommendations from the scientific and technical, consequence management, international, media and public perspectives.

The scenario was devised in order to optimise the diverse nature of the hazard posed, with regard to the possibilities of both land and water impact sites along with the requirements for an international response should several nations be affected, or a single nation be overwhelmed economically, environmentally and humanitarially. The discovery of Asteroid 2013 PDC-E was announced during the afternoon of the second day of the conference, with a further update announced two days later. The hazardous object was a 200-300meter stony asteroid with an initial impact probability of 0.8% in 2028 and not a certainty at this time. Additionally, there was a 1.2km keyhole during a close approach with Earth in 2023, which, if it passed through the keyhole, it would impact in 2028. The

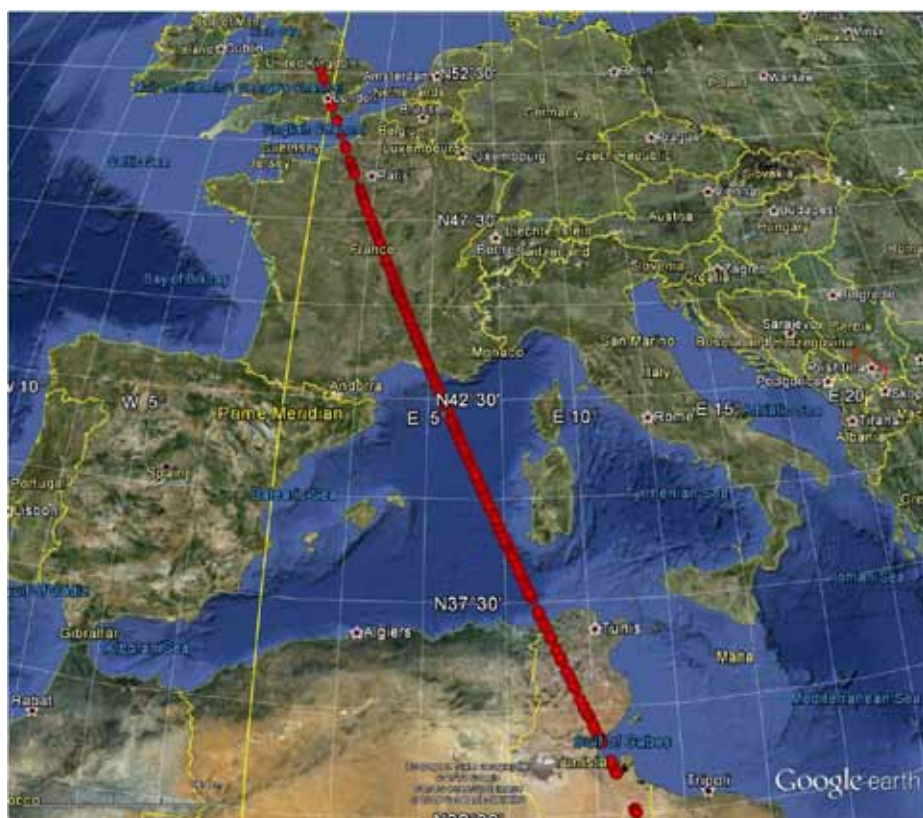
conference delegates and exercise participants were then provided with a briefing during the last session on that Thursday and presented with the scenario narrative that described the situation as it currently existed on the day. Exercise play on the Thursday addressed the notification and response activities. The second part of the exercise was set in 2019, (Friday, April 19) and was initiated with a presentation which provided an update on further observations of the asteroid. The impact probability had risen to 28% and the object's size was known to be 300metres. The risk corridor at that update is shown in Fig.1. (Note that any point in the band defined by the red points shown in Fig.1, a region that extends from Indonesia to Africa, represents a possible point of impact). Exercise play on the Friday addressed the recommendations that would be made to the political leaders in response to the discovery of asteroid 2013 PDC-E and the probability of impact.

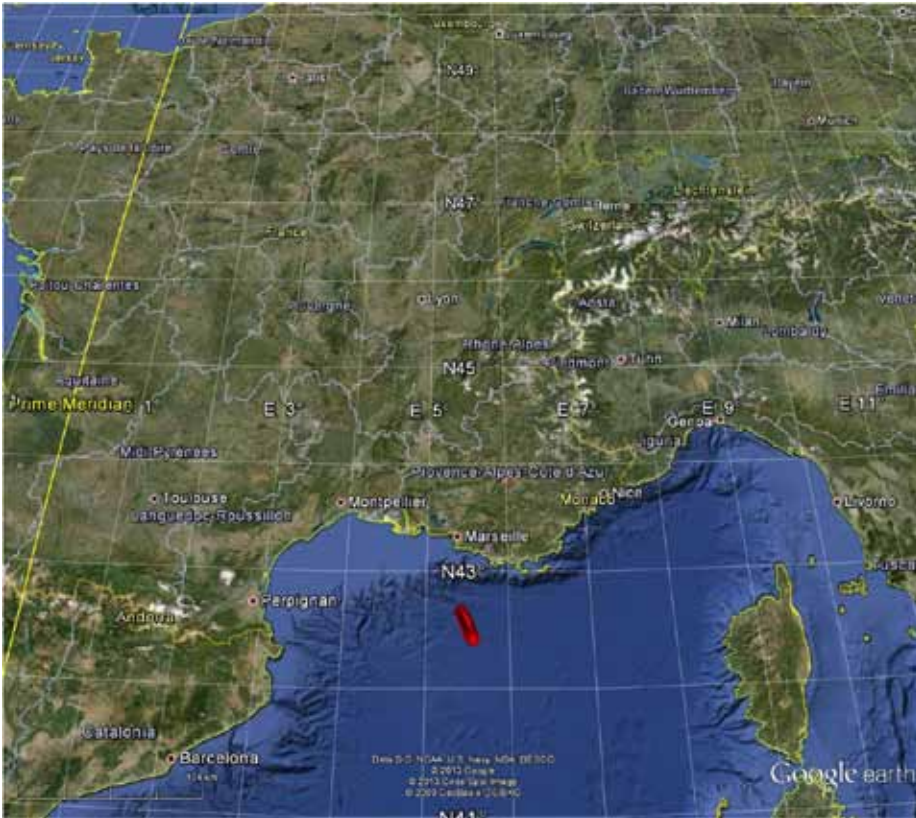
The third part of the exercise was set for 2022, and the presentation took the format of a briefing to the UN which provided an update based on the most recent observations, the probability of impact had risen to 100% - the certainty that the asteroid would pass through the key hole in 2023 unless it was deflected, and details of the shortened risk corridor. Shown in Fig.2 (Possible impact locations in 2028 based on the best information available in 2022). The final update, which was presented at the conclusion of the exercise, represented information known in 2023, when radar tracking became available. The participants were advised that the impact


Fig.1

would occur in the Mediterranean Sea at 07:40:48 on November 21, 2028. The final impact location is shown in Fig.3. During the exercise the impact effects from the asteroid were determined which were heavily reliant and dependent upon the information provided from NEO discovery and follow-up

observations, as well as the data received from characterisation observations and mitigation missions. The astronomical data is required in order to reduce the uncertainties surrounding asteroid impact events. During the exercise a series of extensive and time consuming calculations of the impact effects





Left Page: Fig.2 Possible impact locations in 2028 based on the best information available in 2022. Above: Fig 3 Final impact location

were made along the entire length of the risk corridor to include impact sites on land and in the sea, as well as seas of different water depth and distances from the land. The participants were advised that the effects from an asteroid, with an impact energy of 524MT, at sea a short distance from the coast of France will produce a small crater at the bottom of the Mediterranean of about 40 metres in depth. The principal environmental consequences will be tsunamis that will radiate from the point of impact onto the coastlines. The Tsunamis will be hitting the coastline between the first 10 and 20 minutes from the time of impact, and the wave heights will vary between 0.4 metres and 200 metres. It was recognised that this information clearly has consequences for civil protection preparedness. Overall, the response to the exercise was extremely

favourable, as, on average, 73% of those who completed the evaluation forms were very positive. However, 67% considered that more time could have been allowed for the exercise and more than half of the participants deemed the pace of the exercise was too fast. Repeating this exercise again at future conferences is highly recommended, as the participating communities were forced to think about issues that are not normally discussed and considered; similar exercises can be used to assist those involved to be more prepared when a real impact hazard occurs. The exercise evaluation indicated the exercise provided a rich learning experience and a valuable insight into the variety of the associated perspectives, the multiplicity of the different roles required in the response, and those who would be directly affected by

this impact event.

Additionally, there was an appreciation of the many inter-relationships which are required that had previously not been considered. As a result, the participants not only gained a better understanding of these different perspectives, an appreciation of the complexity of the problem and a greater knowledge of the technical mitigation required, but they were also in a position to realise and understand how the consequences of their own decisions are viewed, interpreted and acted upon by other people. Therefore the value obtained from the exercise was not so much about the decisions made, but in raising the awareness and understanding of the issues and consequences of the choices made and the potential barriers to the decisions being implemented. The exercise also exemplified how important it would be to achieve consensus and how difficult it would be to achieve if the asteroid did actually strike Earth. From this it would appear the scope and breadth of the implications from an incoming asteroid were far greater than originally envisaged. It was also realised that this type of exercise not only has relevance to the scientific community, but also the emergency management and other communities. It is clear that more preparations are required to be in place in order to more effectively respond to not only this type of event but also for those events that provide little or no warning. A degree of chaos and confusion are likely to be present, particularly for the first actual event of this nature.



The Planetary Society conducted a number of interviews throughout the day which were then aired on the Society's radio programme.

Responders and decision makers have not previously had to plan and prepare for such a hazardous event or for one that may have such a long interval between the initial identification and the eventual occurrence. As a result of this conference and exercise a number of questions arose, such as: where do you evacuate people to? What do you do about the medical personnel you evacuate? What is the decision making process? How can scientific information be provided to politicians, the public, decision makers, and

those with the responsibility to develop civil protection policies and plans?

The multi-faceted nature of this issue exemplifies the need for scientific, political and emergency management communities to be further integrated in order to determine effective solutions. There is a further risk posed to humanity by the absence of a decision making process, where valuable time for improving resilience and response preparedness is lost and the only options available are evacuation and crisis management.

Debbie Lewis is the Director for Resilience Preparedness at Axiom (Alderney) Ltd. She spent 12 months as one of the consultant tutors responsible for developing the course materials and delivering the Diploma in Health Emergency Planning Programme for Loughborough University. Prior to establishing Axiom (Alderney) Ltd, Debbie also formed part of the team of associate lecturers delivering the Diploma in Health Emergency Planning on behalf of the UK Government's EPC and the Health Protection Agency. Debbie gained an MSc in Risk, Crisis and Disaster Management at the University of Leicester, where her specialist area of study was the impact, in risk management terms, of Near-Earth Objects. She is a Fellow of the Emergency Planning Society. Debbie has worked in a number of EP roles for British Airways (at Heathrow Airport) and for various elements of the National Health Service (NHS) namely the Royal Berkshire NHS Foundation Trust in Reading, the Berkshire Primary Care Trusts and South Central Strategic Health Authority based in Newbury.



Membership & Development Committee Appeal

THE M&D Committee is made up of a Director from the Board and other members of the Emergency Planning Society from different branches spread across the country. They play a vital role within the Society with responsibility for administering the membership appraisal system, assessing and marking applications for new members and members who wish to upgrade, as well as giving support and advice to members. The M&D Committee has recently lost a couple of members of the group due to personal work commitments and we would like to ask other members of the Society to come forward and volunteer to assist the committee. We have two spaces open on the assessment team; if anyone would be willing to join the Committee or would like to obtain further information please contact the Chair of the Committee, Sandra Walker, on: sandra.walker@the-eps.org

DIARY DATE

The next EPS webinar is taking place on November 26 at 4pm.

Stephen Berry, GAIST Solutions, will be presenting.

More info coming soon!

www.the-eps.org/events



So long, farewell...

THE Emergency Planning Society has bid a fond farewell to June Thompson, who has been a member of the EPS for more than a decade. June, who helped out the Board in a voluntary capacity before taking on the role of General Manager, is a well-known face at the EPS and she will be missed by all. June, who used to work in emergency planning for Essex Council, took voluntary redundancy in the recent restructuring of the Society. She has been a great help to the Board of Directors over the years, as well as to the Membership and Development Committee, where she played an active role with membership upgrades and CPD. Samantha Mendez, Media and Communications Officer, has now taken on the role of Communications and General Manager, and you can contact her on media@the-eps.org / generalmanager@the-eps.org or call the office on 0845 600 9587.



AVIATION SUPPORT AFTER TERRORIST ATTACKS

Dr Dave Sloggett explores how aviation support can help the emergency services maintain a resilient response to a major terrorist incident.

THE ANNUAL pictures of mourning in New York and in Washington at the Pentagon serve to provide a much needed reminder of what happened on September 11, 2001. In less than one hour the world changed. The images of the falling towers of the World Trade Centre haunt every political leader's worst nightmares. Landmark events in history, such as the shooting of President Kennedy, the first man on the moon and the fall of the Berlin Wall are events etched into people's psyche. September 11 was one such event. Everyone who saw it remembers where they were and how they reacted that day vividly. The problem is that it could so easily happen again. And this time it could be even worse if terrorists managed to unleash the potential of Chemical, Biological, Radiological or Nuclear (CBRN) weapons. Recent events in Syria provided a reminder, if it were really needed, of the horror of the aftermath of an attack using chemical weapons. Few dispute the American claims that more than 1,400 people died, including more than 400 children. The images that are available are truly horrific. Seeing children gasping for their last breaths in agony and their bodies cease to function is something that some political leaders were always going to find difficult. The sudden progress that has been made politically over the annexation and destruction of Syria's arsenal of chemical weapons is

obviously a welcome event, but that event of itself does not remove the threat of terrorists using chemical weapons against targets in the west. With all the media attention focused on the attack in Damascus on August 21 the significance of the 13 other events the UK's Prime Minister, David Cameron, referred to in his speech to the House of Commons has been lost. While the Prime Minister said these attacks had also been perpetrated by the Assad regime in Damascus, it is possible that assessment may be flawed. Russia's President, Vladimir Putin, has insisted the attacks were the work of so-called rebel groups. Aside from the attack on August 21, which the Americans have clearly accused the Assad regime of conducting, there is a possibility that President Putin's assertion is partly correct. Other evidence, notably from two journalists who were being held captive by the rebels, suggests they overheard commanders giving orders to use chemical weapons to try and create a situation where President Obama's so-called red-line was breached. The rebels had been on the defensive and this tactic may well have been seen as a way of drawing in the United States on their side against President Assad. In such a confusing and febrile atmosphere, rational analysis seems to take a back seat. Facts seem to be forgotten. That the rebels,

and their Al Qaeda affiliates opposing the Assad regime, have the capability to manufacture simple and very toxic chemical compounds cannot be in doubt. As the low-level chemical attacks occurred on the route to August 21, Iraqi counter-terrorism teams discovered two factories in Baghdad manufacturing sarin gas. Days later, Turkish security forces found 2kg of sarin at a location they raided which was known to be used by members of Al Qaeda. Any quick analysis of the geography shows that if sarin has been discovered in Iraq and Turkey the chances that Al Qaeda-linked groups in Syria have access to these agents is high. This would simply add to a growing body of evidence that Al Qaeda has already experimented with CBRN weapons in the past. Indeed, one attack on the New York subway system using cyanide was in the advanced stage of planning when Al Qaeda's leadership called it off. The reason given for this at the time was the likely death toll may have been quite small. Despite this aborted attack, Al Qaeda's leadership remains focused on acquiring and using CBRN weapons. What then does this mean for the west? Al Qaeda's leadership is desperate to regain the initiative by conducting another large-scale attack. Its original ambition to conduct three major attacks similar to September 11 each year has abjectly failed. A chemical weapon attack or the emplacement of a dirty

bomb in a western capital would, however, count as a new spectacular. Perceptibly the world would have changed again. The question for emergency planners and their colleagues in the wider emergency services is how to be ready to deal with an attack that may, on the surface, appear to be highly unlikely. The problem is if it were to occur its consequences and impact would be hugely significant.

Creating the basis of a resilient response is crucial if the impact on society at large is to be contained. In these situations public perception really matters.

In the immediate aftermath of the last significant terrorist attack in the UK on July 7, 2005 aviation support played a crucial role in helping mobilise resources to the scenes of the attacks. Specialised response trauma teams were flown into the immediate vicinity of the attacks to provide care to those most grievously injured by the explosions. Their calmness at the time was notable. The images broadcast were very reassuring. Those involved in helping to save lives did so in an orderly way. The smoothness of the mobilisation of additional resources was carried out with little apparent fuss. As with more recent events in Boston, that calmness ensured all of those that were critically injured survived. The response to a CBRN attack however would seriously test everyone's resilience both as teams and as individuals. Everyone knows there is a huge difference between a conventional terrorist attack and one that involves a CBRN element; the critical difference is time.

With a conventional attack the terrorists explode one or more devices over a relatively short period of time to create an impact.

However, once a CBRN attack has been released some of its effects last for very long periods of time. They are the silent killers that can catch unprepared teams unawares. The ways the effects spread geographically is also important; conventional attacks are geographically constrained.

The effects of CBRN attacks can extend over greater areas as elements of the agents involved are moved by wind and water; this could quickly test the resilience of the response by the emergency services.

If a dirty bomb was to be detonated in the heart of London, a similar response bringing in people and equipment from geographically co-located members of the emergency services would help provide a timely response. With other forms of transport likely to be unavailable using helicopters to fly first responders, specialised support teams and their equipment into the immediate environs of the incident would provide reassuring pictures to an anxious general public. Critically injured patients could also be evacuated to specialist treatment facilities around the country. These kinds of measures would help increase the resilience of the response. In any subsequent public enquiry into the way the event was handled few complaints could be raised if such facilities existed.

This kind of resilient response would require some of the current fleet of police helicopters to be augmented by new aircraft that are

capable of carrying both underslung loads and small teams of people to the scene of the attack. While some military heavy lifting capability can be requested under existing emergency powers it is possible even their resources might become quickly overwhelmed. Being able to fly heavy pumping equipment into areas where aquifers are threatened by chemical spillage would be an important component of a resilient response. Aircraft that could also be remotely flown into hazardous areas to provide pictures of the scene to commanders would also be important. While concerns over unmanned aircraft operating over a city may be valid, this would be a time of national crisis.

The same capability would also prove critical if the UK was to suffer a nuclear accident, such as that which occurred at Three Mile Island or, more dramatically, at Chernobyl and Fukushima. Experiments conducted by companies such as EUROCOPTER in validating their potential to remotely control helicopters in such situations point to what can be delivered in the short term. Where residual levels of CBRN materials provide a hazard for human operations the ability to fly a mix of sensor systems (visual, infra-red and covering CBRN detection capabilities) or underslung loads into an area would help create a resilient response. In Chernobyl, many Russian helicopter pilots experienced high levels of radiation and some died as a result of the exposure to the radiation emitting from the exposed core. By any objective form of analysis the Russian response to the dreadful events at

Chernobyl was ad-hoc and very poorly co-ordinated; it could hardly be described as being resilient. Official threat assessments published by intelligence agencies in the UK still point to a low likelihood of a CBRN attack being conducted by a terrorist group. Even after the ghastly scenes emerging from Damascus that assessment is unlikely to change. However, that does not remove the obligation for all of those in the emergency planning arena and their colleagues to contemplate how they might respond should the nightmare ever cross the bridge between fiction and fact. If it were to, aviation support would provide a key component of the response. While some elements of that are already in place it would be prudent to reflect on the recent history of terrorist events and look to see if a slightly different configuration of the current aviation fleet of aircraft operated by the National Police Aviation Service would provide a more resilient response.

Author Profile:

Dr Dave Sloggett has 40 years of experience in the military and law enforcement sectors working in a variety of roles, specialising in the field of intelligence analysis, human behaviour and irregular warfare.

Dr Sloggett is an authority on terrorism and counter-terrorism in its chemical, biological, radiological, nuclear and conventional forms lecturing both in the UK and overseas.

Nottingham Trent University - RESEARCH DIGEST

Social stress is not all bad?

Akinola, M. & W. B. Mendes (2012) 'Stress-Induced Cortisol Facilitates Threat-Related Decision Making Among Police Officers.' *Behavioral Neuroscience*. Vol. 126, No. 1, 167-174

Previous research has shown stress can affect human decision making, but this was the first research to investigate the link between cortisol and threat-related decision making. Cortisol affects memory, decision making and attentiveness to threat. These links have implications for multiple emergency services, where people often have to respond to threat potential rapidly. Akinola and Mendes examined whether an increase in cortisol, brought on by an acute social stressor, can influence threat-related decision making. In experimental conditions 81 American police officers processed a complaint made by a black confederate against an officer while being observed. Cortisol levels were measured before and after the task. They then went straight onto a computer simulation which tested decisions to shoot or not shoot armed black or white targets. With higher levels of cortisol fewer errors were made when deciding to shoot armed black targets. This suggests cortisol may enhance attention for threat cues. Akinola and Mendes also found elevated testosterone resulted in fewer errors.

Warner and Ryndycz

Mental health implications of volunteer fire service membership

Wagner, S. L., & O'Neill, M. (2012). 'Mental health implications of volunteer fire service membership' *Disaster Prevention and Management*, 21(3), pp. 310-319.

Wagner & O'Neill (2012) researched the mental health implications of volunteer fire service membership, comparing to full-time fire fighters, and a control group who lived and worked in the same community. The study used 168 participants (64 volunteer fire fighters, 104 similar group comparison) who were, for the majority, married, parenting men. The participants were recruited from four volunteer departments in Northern British Columbia, Canada. They completed three scales to measure any levels of PTSD, a broad range of other potential mental health problems and personality factors. The findings showed there was a significant difference in PTS symptoms between volunteer fire fighters and the control sample, but no differences in other types of mental health symptoms. Regardless of group, however, the personality factor of 'neuroticism' was often a predictor of mental health concerns. A comparison of reported means showed paid, professional fire fighters may be at greater risk of PTS than volunteer fire fighters. These results show volunteer fire fighters are more at risk than the general population and should be treated for mental health implications in the same way as paid, professional fire fighters, to ensure mental wellbeing is maintained. **Tite**



CHEMICAL SPILLAGE: IS YOUR RESPONSE REACTIVE OR PROACTIVE?

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WHEN a chemical substance is spilled, someone has to clear up; this might be the person who spilt it or possibly a trained response team. Whoever it is, are they prepared for the job or do they merely react to the situation when it occurs? Spillages are, at best, an inconvenience – for example, knocking over a cup of coffee on the desk. When the quantity is small or the substance is not very hazardous, people rarely think about the consequences of dealing with the problem. But what happens if a few litres or more of a very volatile solvent are slowly spreading across a laboratory floor? What about a 1,000-litre container of a highly toxic or corrosive waste that has just been punctured during loading? How do you deal with a road tanker that has rolled over and leaked several thousand litres of a pesticide into a stream? These incidents are likely to be much more hazardous

and potentially present more risky situations. The final effects of a spillage will ultimately depend a great deal on who deals with it and how competent they are at their job. If the response is quick and effective, the size of the spill can be reduced and the time taken to clear it up minimised. But how would the incident be handled if it happened in an area where many people are working? How would a response change if there was a spillage on an open road? To ensure an effective and efficient response, it is no use purely reacting to the incident as it unfolds – preparation, planning and training are the key to reaching a proper outcome. That preparation should start long before any incident happens; it must begin with creating response plans based on known and potential types of incident. Plans need to consider the types of incident that could occur, where they might happen, the nature of the hazards and the likely risks

presented. Planners should consider the make-up of the response team – but not in terms of who does which job, but in what roles are required – because you can guarantee that on the day of the ‘biggie’, the person nominated as the incident commander is on holiday and someone else will have to fulfil that role. Planning should also consider the availability and location of the correct personal protective equipment and respiratory protective equipment (PPE and RPE). It will need to take into account how to get to the incident – is it just local on the working site or remote from it? Does the approach made by the responders put them at risk? Some of the other questions to ask might include:

- How quickly can we obtain information on the substance and can we interpret it?
- Do we have a system for assessing the risks of the situation before implementing a response?

- How do we communicate with each other/other people while working on the spill? How do we handle the waste material generated? These four are just the start, there are many more.

Lack of information and equipment may mean a large quantity of a substance is released before an effective response can be made.

Training staff to know when and how to provide a quick and safe method of reducing the quantity or rate of release may make all the difference. Also, being able to interpret the data about the physical properties of a chemical as detailed on a safety data sheet (SDS) gives responders an understanding of how the chemical may behave once released. Armed with this knowledge, they can make an informed assessment of the risks they are likely to be facing. However, improper planning may lead to responders being exposed to substances that can have potentially severe effects on their health. Other implications worth considering are workplaces becoming idle for extended periods with loss of production, thousands of pounds worth of damage, environmental pollution, large clean-up costs and legal action. The legislation that deals with the storage, transportation and handling of chemicals and other substances all contain sections on training staff to know what they are working with and how to respond to any incident. The Control of Substances Hazardous to Health (COSHH) Regulations and The Control of Major Accident Hazards (COMAH) Regulations are just two of many that cite a requirement for having plans in place.

But plans are no use without testing. For example, the COSHH Regulations state 'the employer shall ensure that – procedures, including the provision of appropriate first-aid facilities and relevant safety drills (which shall be tested at regular intervals), have been prepared which can be put into effect when such an event occurs' (Regulation 13 paragraph one a). In effect, this is saying you should have a spill response procedure and it should be tested. Therefore, it is not much good trying to implement the procedures in your well-written 'guidance in the event of a spillage' if you don't actually know what they are and the first time you see them is when an incident occurs. Regulation five of the COMAH Regulations requires lower-tier operators to prepare a document setting out their policy for preventing major accidents – one of the key areas included is planning for emergencies. Top-tier operators need to prepare safety reports and these have to include the same information as the lower-tier sites. In addition, there is a requirement to 'prepare and test an on-site emergency plan'. The time spent in preparing, planning and training to address the requirements for a rapid, well-informed and effective response to a spillage is time well spent – and so is actually exercising your response plans. Wouldn't you prefer to find out during an exercise that it takes just five minutes for the team to arrive and another hour for everyone to sort themselves out with PPE, rather than discovering the same when you are dealing with the 'real thing' and ankle-deep in hydrochloric acid? The aim

of writing and testing a plan is to enable an organisation to have a sound framework on which to implement an effective spill response. It creates a mechanism for closing an incident in a safe, quick and environmentally sound way. No two spillages are exactly the same. However, the methods used to approach, assess and handle the incident fundamentally are; without them, those called to deal with an incident are going to be disorganised and merely react to the situation as it happens. Take time now to review your current spill response plans to determine whether you have rapid access to the right information, equipment and personnel to handle your next chemical spillage.

Author profile:

Previously one of the UK's National Chemical Emergency Centre (NCEC) emergency response team that provides a 24/7 telephone advice service for the UK emergency services under Chemsafe, Paul is now a Technical Consultant providing advice, information and instruction on chemical hazards, risks and handling to industry and the UK Fire & Rescue Services. He presents the NCEC's CIA-sponsored 'Hazmat 1st Response' training course and other one-day courses such as 'Chemical Spill Response'. He has designed and facilitated emergency response exercises and is also the company's COSHH Assessor. Paul studied chemistry at school and college and has a BSc from the Open University which includes chemistry modules.

Community resilience: it's no accident!

By Louise Elstow
London Branch

EARLIER this year Louise Elstow (pictured right at the painted ladies in San Francisco) was lucky enough to be awarded with a Travelling Fellowship from the Winston Churchill Memorial Trust to undertake a two-month research trip to the United States and Canada to look into community resilience with the focus on urban communities. Here she discusses her findings...

"The UK's Strategic National Framework on Community Resilience¹, while a useful starting point for information on the concept of community resilience, is of limited use when trying to apply it to a densely populated urban environment. The main tool offered by the framework, is a community emergency plan template. The template could easily be adopted to fit a rural geographic community, such as a small village, where the border is a relatively easily defined, simple transport systems and emergency services are at a distance from them. The template is less suited to the complex network of communities that make up an urban centre. A resident in a city may be a part of multiple communities simultaneously; at work, at home, as a parent, when commuting or during recreation for example, often in different geographic areas. One emergency plan per community is just not feasible because each person would have to have multiple plans. There must be examples of activities that



build community resilience in urban environments outside the UK that circumnavigate this problem of complex communities. In July, I packed my bags and headed across the proverbial pond to see if I could find any to bring back to the UK. The cities I focused on were New York, Boston, San Francisco and the Bay Area, Vancouver, Victoria on Vancouver Island, Toronto and the Region of Peel, another heavily populated area close to Toronto. Along the way I met many people in the world of emergency management and beyond with interesting stories from hurricanes to earthquakes which I could tell you about, but in this article I want to concentrate on three things I found out that are of direct interest to the community resilience discussion in the UK.

Whole Community

One of the themes underpinning a lot of work in the US - FEMA's Whole Community Approach. For the same

period the UK Government has been extolling the virtues of community resilience, the States have been pursuing a philosophical approach to emergency management. The idea is the whole community is involved in the emergency management process and accounted for in the plans that evolve. Whole Community Strategic Themes include:

- Understanding community complexity
- Recognising community capabilities and needs
- Fostering relationships with community leaders
- Building and maintaining partnerships
- Empowering local action
- Leveraging and strengthening social infrastructure, networks and assets

For anyone who has been looking into community resilience, this sounds awfully similar. Interestingly, the Civil Contingencies Secretariat is likely to move away from the words 'community resilience' towards 'commu-

nities prepared', so this may reflect a similar philosophical approach. There are similarities and differences between the two approaches, but both aim to make communities resilient; that all parts of all communities (in particular individuals with physical or mental difficulties, new immigrants or the poor) are actively involved in planning for emergencies and are able to help themselves and their communities in emergencies. The main difference in the two lies in the responsibility for doing the work. While the Cabinet Office's National Strategy Framework states clearly that responsibility for making communities more resilient lies with those communities themselves and not the Government, FEMA is equally clear that the Whole Community approach is the responsibility of everyone, especially emergency management professionals. Perhaps there is a need to approach resilience in our communities from both angles; there should be onus on the general public to take more collective responsibility for themselves- like the American CERT (Community Emergency Response Teams) program which teaches people emergency response skills that augment the formal responders or the Neighborhood Empowerment Network (NEN)² example coming up. In addition, emergency management practitioners should also ensure their plans are inclusive and they need to recognise the capabilities and skills of the communities as well. While some areas of emergency management are increasingly open about what plans are in place, much of the work of emergency managers in the UK goes on behind closed doors.

There is often an assumption the work is too specialised and the public would not understand the issues. In other places there seems to be a more adult approach to this which fosters a more collective sense of responsibility. In Germany, where the voluntary sector is very much involved in every

closure or a lack of cohesion between two groups of people (such as residents and the university) and it is the neighbourhood group themselves who decides who should be encouraged to attend. Once the group has honed in on a local issue they want to address they come up with their own plan to do



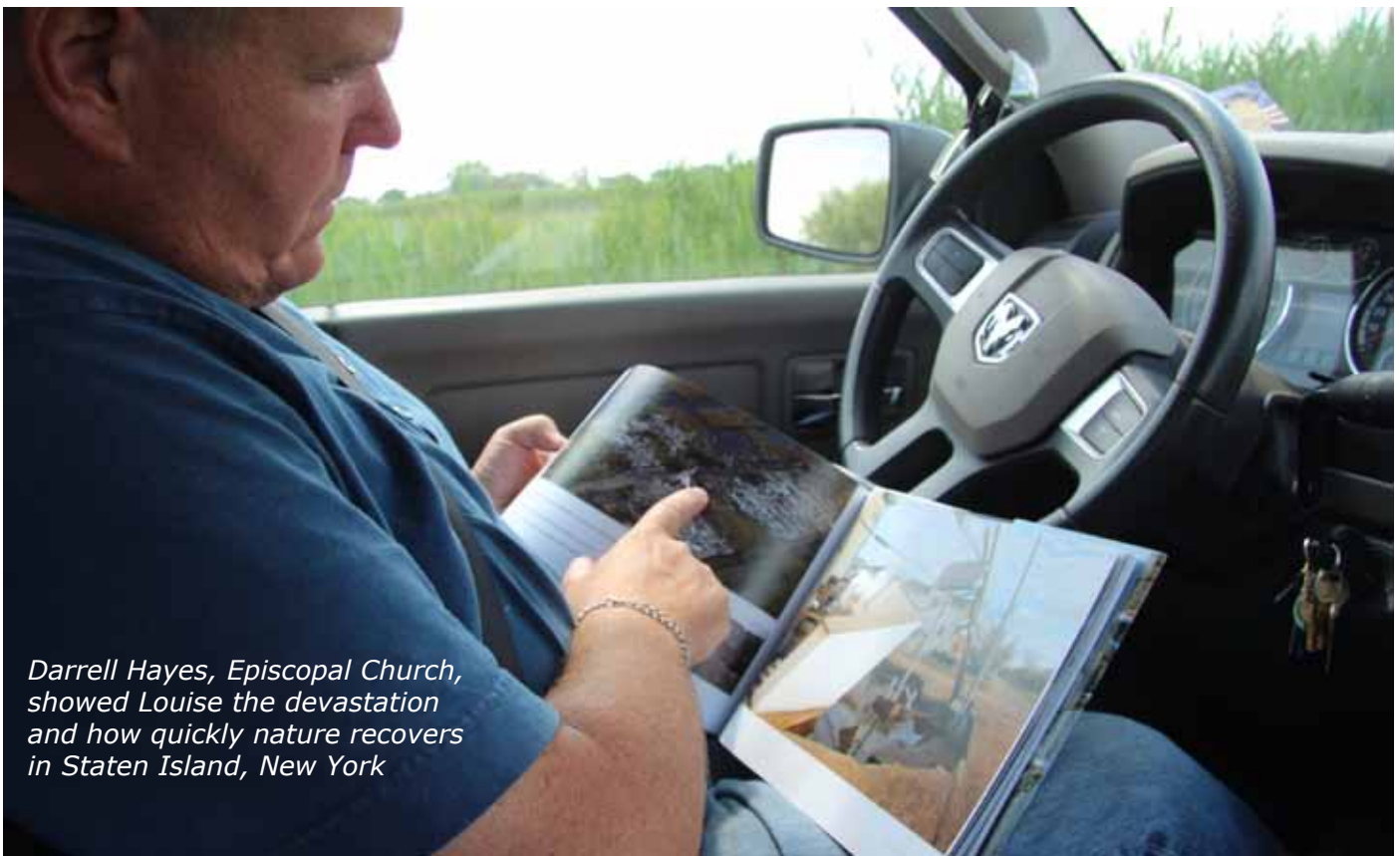
*Exercise in Lüdinghausen, Germany
October 2013*

day emergency response (volunteers make up a huge part of the fire and ambulance services), the public are a trusted partner, for example in the participation and the observation of exercises. The photo below shows an exercise in October, which took place on a main road on the outskirts of a small town, with the public watching from behind a strip of hazard tape; a very unlikely sight in the UK.

Empowering Neighbourhoods

An excellent concept being developed in San Francisco is the NEN, which brings people together from a given neighbourhood to empower them to find solutions to address a local issue. The group identifies what the issue is - it could be a lack of employment in the area, saving a local school from

something about it. If an emergency occurs, the group already has a trusted presence in an organised capacity with an understanding of their own strengths and weaknesses and is used to solving their own problems; the epitome of community resilience. The NEN is a collaborative comprised of community organisations, city agencies, non-profit organisations, and academic institutions, sponsored by the San Francisco General Services Agency and the Department of Emergency Management. The job of the NEN is to facilitate the work of the group and to make sure the right people are at the table. For example, if the problem is to do with utilities failures in the area they will make sure the local utilities provider is part of the discussion. This ensures the community



Darrell Hayes, Episcopal Church, showed Louise the devastation and how quickly nature recovers in Staten Island, New York

group has access to the right actors who have the power to change something – without this targeted approach the group would have a cause but no actual recourse to the power to change.

Resilience is no accident

A practical example of resilient communities comes from Joplin, Missouri, where a deadly tornado struck in May 2011. Within 84 days of the tornado hitting on Graduation Day in 2011, all children were able to go back to school, despite 10 of the 19 school buildings having been destroyed and 161 people killed. CJ Huff, Joplin Schools' Superintendent, claims resilience carried the community through the recovery period, but that it 'does not happen by accident; it starts first and foremost by this - developing relationships'³. Joplin, it seems, was very good at doing just that - not because they had concentrated on

being emergency responders, but rather they had begun to help each other in everyday life. The town developed the Bright Futures Connections for Success programme to address high levels of school drop-outs. They found practical solutions to the varied problems that lead students to not being able to participate in school, and quickly - within 48 hours. Solutions were found using traditional support networks but also via a dedicated Facebook page. What was designed to reduce school drop-out rates, and did so successfully by 50%, gave the town had a natural way to support each other and a readymade system for finding local solutions when the tornado struck. Again, they were used to working together, had a structure for doing so and knew where their resources were.

The secret, therefore, to building resilient communities may not necessarily be by trying to train everyone

emergency skills such as how to do urban search and rescue, use radios or purify water. What we may need is some good old fashioned community building - harnessing some of that feeling we all had last year during the Olympics and the Diamond Jubilee; to say hello, smile and get to know one another. Broom Army in Clapham Junction, after the 2011 riots, would never have been in any community plan! Before we can include everyone in our plans and make sure that their needs are addressed we need to get to know them. So perhaps we can do what one of my interviewees suggested – get together with our community development teams and declare a summer of street parties and BBQs. The Big Lunch are onto something!"

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1. www.gov.uk
2. Website empowers.org
3. See CJ Huff: *Resilience in the aftermath of the unthinkable. POP!TECH*

RESILIENCE AWARDS 2013

MORE than 130 resilience and emergency planning professionals gathered at the Courtyard Suite of the Ramada Hotel Solihull, to find out the winners of this year's Resilience Awards. The EPS received a record number of nominations this year - all of a very high standard - and the judges had quite the challenge on their hands when choosing the winners. Congratulations to all the winners, and short listed nominees, of the 2013 national Resilience Awards. For those of you unable to attend the Awards Dinner on September 25th, please read on to find out who took home the awards this year...



Emergency Planning Initiative of the Year Buckinghamshire Resilience Team

A fantastic entry for Buckinghamshire Resilience Team's 'The House' project was the winner of this year's Emergency Planning Initiative of the Year Award.

Bob Murdoch is pictured collecting the award from our awards night host Neil O'Connor, and EPS Chair, Helen Hinds.

Andy Fyfe, Resilience Manager at Buckinghamshire County Council, said: "We were delighted, proud and honestly surprised that we won the award as it was the group with the highest number of nominations - though that is not to say that we weren't confident that the initiative had the potential to win.

"It is interesting to see the benefits of winning such an award and the raised profile of the team in our organisation particularly when we, as presumably others, are entering the next round of budget planning for the coming years.

"Thanks should go to Sam Justice from our Resilience Team as this was primarily her project, but also to Cliff Productions and the actors from the film and finally the EPS for giving us the opportunity to show off our product and ultimately win this award." The judges thought this nomination was seen to be innovative in its approach to delivering key messages around emergency planning

and supporting the concept of individuals being self resilient in a way that is easy to purvey to the general public. The good use of physical, interactive and printed resources meant they were inclusive and the way in which it was delivered seemed to really grasp those that attended the sessions. The nomination also scored highly on the educational aspects of the criteria with the development of films, awareness training and a supportive booklet all aimed at increasing community and personal resilience.

The judges also liked the fact the project linked many services within the Council together into the resilience theme which included themes such as demand management, localism and family resilience. The judges were impressed with the number of quality entries into this category and had a difficult time selecting the eventual winner.

Highly commended:

Land and Property Services (Eastern Group NI Geo spatial mapping)

Gerard Wilson is pictured (top right) collecting the highly commended certificate for EP Initiative of the Year.



Most Innovative Product of the Year

Business Continuity for Dummies

The *Business Continuity for Dummies* Guide came out of the Emergency Planning Society's Business Continuity Professional Working Group as part of the EPS' contribution to the profession. In collaboration with the Cabinet Office and Business Continuity Institute (BCI), tens of other organisations representing or supporting SMEs have come together for the first time in this way, to support and help protect the health of our SMEs. *Business Continuity for Dummies* is an essential 'survival' guide for small and medium sized enterprises (SMEs). Reducing the risk from emergencies allows SMEs to go about their business more freely and with confidence that they can manage challenges they may face. The judges thought this project was seen as an example of what can be achieved when the right people are involved and the power and benefits of working in collaboration with resilience partners. The book was seen as covering all sectors which is akin to the Society's aims, used non-technical language and is a resource



that could be just as useful to a sole trader, such as a green grocer, as well as to a medium sized business employing 100 people. The product was successfully launched and published by Wiley's and is now available through many bookstores and online sellers, making it a widely available resource, not just within the UK but internationally. Nestor Alfonzo Santamaria, pictured with Tom Croall after collecting the award, said: "As the new interim chair of the Business Continuity PWG, I was greatly honoured to receive the award on behalf of the Group along with Tom Croall (former Chair of the PWG) and Norman Powell (another member of the group). "The *Business Continuity for Dummies* Guide was the largest project the Group has been involved with and it was great to know the judges felt the initiative was of sufficient quality to be this year's winner. "Being recognised in this way has also given the Group a great boost in confidence, helping us regroup and look at the road ahead. We have come up with a number of

projects that we want to get our teeth into, so watch this space," he added.

"From my organisation's perspective, our Chief Executive was one of the first persons to congratulate us - he sent us a message as soon as he read our team's post on Twitter that same night. "Our elected members and senior management have also been very proud of our contribution to the project and winning the award has been a great way to ensure we carry on supporting this type of initiatives."

If you would like a copy of the Business Continuity for Dummies guide at a discounted rate, please contact Laura at Head Office on 0845 600 9587 or e-mail: info@the-eps.org

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**EMERGENCY
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**National Capability of the Year
Dyfed Powys LRF Co-ordination and Training Group**

This award went to the Dyfed Powys LRF Co-ordination and Training group. The group's members are from Category 1 and 2 responders, the military, voluntary sector, infrastructure partners and Welsh Government; all of the LRF group Chairs are members of the Co-ordination and training. This award was kindly sponsored by the Emergency

Planning College in Easingwold. When choosing the overall winner, Angela Kokes, Learning Development Manager at the College, said: "We felt Dyfed Powys demonstrated the greatest contribution to resilience at national and local level over a substantial area – an excellent example of good practice." On receiving the National

Capability Award from the Chair of the Dyfed Powys Local Resilience Forum, Temporary Deputy Chief Constable Carl Langley, Stuart Moncur, Chair of the Dyfed Powys LRF Co-ordination and Training group, *(both pictured)* said: "It represents a combination of the efforts of members of the Dyfed Powys Co-ordination and Training group and LRF Partnership Team in creating a responsive approach in developing plans and procedures for dealing with a wide range of potential emergency situations. "It is also a testament to the agencies who have actively supported the LRF training and exercising programme over the last few years."

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Resilience Planner of the Year

**Rachel Boynes,
Northumbria Police**

Rachel Boynes joined Northumbria Police in December 2007 as a Planning Officer

within the Contingency Planning and Capability section. She has responsibility for contingency planning, testing and exercising, production of force and multi-agency plans and representing the force at multi-agency meetings; part of her role is to develop response plans for St James' Park, the Stadium of Light, airports and flood and severe weather plans. The judges were impressed with Rachel's nomination and her level of commitment to the resilience profession that was evident throughout. Judge Mark Taylor said: "The nomination showed good examples of multi-agency working and the gathering and sharing of information across responders. "The nomination showed that

Rachel consistently shows a professional and innovative approach to resilience work and that she had become an integral member of a number of high-profile groups working on projects ranging from CBRN, the Olympic Games and multi-agency training and exercises." Speaking of her win, Rachel said: "I feel very honoured to have been named Resilience Planner of the Year, especially considering the strong competition in the category. "I would like to pass on my thanks to the Emergency Planning Society and also to my colleagues across Northumbria, as we all know the key to resilience is multi-agency team work and I could not have won this award without their support."



Resilience Team of the Year - Arran Resilience

Arran Resilience was formed in October 2010 by one of Arran island's GPs. The aim and function of the group was to bring together the emergency teams based on the island to establish better working relationships, enhance training and planning to nurture a joined up approach when responding to incidents on the island. Judging the award was Mike Granatt, Community Resilience's Chairman, who said: "This has been very difficult to judge because every entry is a testament to determination, commitment and sheer hard work on behalf of the community.

"[The winning team has] made a real difference to the people they serve, demonstrated by real protection and support in the face of severe weather events.

"The Isle of Arran in the Firth of Clyde is a beautiful place in fair or foul weather. But foul weather doesn't just mean hardship or danger – it means isolation. No ferries, no helicopters, no mutual

aid or help from elsewhere. There are many elderly people among its dispersed population, and in peak season, islanders are vastly outnumbered by tourists "Arran Resilience brings the island's own responders – statutory and voluntary – to meet the challenge. Exercises have honed their teamwork, and on March this year Arran Resilience declared a major emergency in the wake of an unprecedented snowstorm that caused damage not seen in 40 years. People, including a large party of visitors, were cut off and trapped all over the island. Members of Arran Resilience worked selflessly through the emergency, some working 18 hours a day, many becoming cut off from their own homes and families. The several days of the emergency demonstrated the very best of teamwork, resourcefulness and resilience, and makes Arran Resilience a very deserving winner, and a model for how to do it."

Dr David Hogg, GP & Co-ordinator at Arran Resilience, said of the win: "We are absolutely delighted with the result as even being shortlisted for the award was a major achievement for us.

"Winning the award has given our emergency responders a welcome morale boost, especially as we head into winter.

"We made it to the front page of our local paper and have already been asked to make a number of presentations and feature in some other news articles as a result of this," he added, "for an island community like Arran, awards like this can have a very positive impact on forward projects like ours."

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*Neil O'Connor, Laurence McCammick,
Kris Manning and David Cloake*

Voluntary Sector Award Berkshire Lowland Search and Rescue

The Voluntary Sector Award was introduced for the first time this year, and the EPS was delighted with the number of nominations received.

Kindly sponsored by Community Resilience UK, Mike Granatt, Chairman, had the difficult task of picking an overall winner.

"It wasn't easy to make the choice - all the nominations provide evidence of excellent and selfless community service. But the one that stands out is Berkshire Lowland Search and Rescue (SEBEV)," he said, "their long record of service, their many, flexible capabilities and the sheer volume of callouts and responses point to the value placed on SEBEV by Berkshire's statutory responders and the community. They are fitting winners of this award." Laurence McCammick, EPO, said: "We were up against some very good competition for this award and were incredibly pleased to win. It was great to be recognised by the EPS for our commitment over the

years in supporting Civil Contingencies in Berkshire, but also in recognition for the wider association of Lowland Search and Rescue teams who all voluntarily give their time and energy to support emergency services throughout the UK."



During the judging process, Community Resilience felt there was another nomination that had to have a special mention, and so, EPS member Moya Wood-Heath, former Chair of the Humanitarian Assistance Professional Working Group, was given a

Highly Commended certificate in the same category. Mr Granatt said: "Moya Wood-Heath's personal contribution to the development and co-ordination of the nation's voluntary agencies over many years is nothing short of outstanding."

"Those of us who have worked with Moya over many years can testify to all the qualities described in her nomination. It is my view - and I'm sure it will be others' - that the Society should consider a special individual award that recognises her unique contribution to emergency planning and humanitarian aid from her time in the police service until today."

Mick Free, who took over the role of Chair of the EPS' Humanitarian Assistance PWG, said: "Moya's contribution to the voluntary sector aspect of civil resilience and protection, both in the UK and overseas (particularly in the EU), is almost certainly without parallel. Her involvement in civil protection goes back over 30 years; during this time she has displayed a level of commitment, integrity and compassion that is truly outstanding. "Her impact within the British and European Red Cross, the wider voluntary sector and other organisations is quite staggering. The thread that can be clearly seen to run through all her work is her desire to put people firmly at the heart of response arrangements and to improve the service to people affected by major incidents and events."

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Resilience Awards 2013



EPS CONFERENCE 2013



MORE than 100 emergency planning and resilience professionals attended the EPS' Resilience Conference on September 26 at the NEC Birmingham. We would like to thank all of our speakers for their insightful presentations - we have received nothing but positive feedback about the learning opportunities presented. And thank you to everyone who made the effort to attend the Conference and support the Society. Here is a selection of images from the day, and more can be found at: www.profilephotography.co.uk





What you said...

@PaulDutchburn: "Really enjoyed @TheEPS1 conference today. Learnt a lot about resilience and wider emergency planning. SuperStorm Sandy talk fantastic. Thanks"

@mtaylor001: "Finally home after a great 2 days with the @TheEPS1 conference. Good to see so many members coming together and some great speakers."

@NWR2012: "@TheEPS1 great talk from Prof Denis Fischbacher-Smith. Thought provoking and entertaining!!"



PREPARING FOR A NUCLEAR RENAISSANCE

By Becky Martin

Becky.Martin@soton.ac.uk

THE 2008 Climate Change Act has changed our approach towards energy generation as we now have a legislative requirement to reduce UK greenhouse gas emissions by at least 80% by 2050¹.

Increased nuclear energy production has been proposed as an effective way to meet emissions requirements and to provide a cleaner and safer form of energy to the UK.

However it has been more than 18 years since our last new nuclear power station, the Sizewell B pressurised water reactor in Suffolk, was commissioned and we now live in a post-Fukushima world. So have our views on radiation preparedness changed and what implications could a new phase of nuclear energy production have for you as resilience professionals?

Our political landscape has changed dramatically since the initial identification of 10 potential future nuclear power sites across the UK in 2009. While lessons learned in the UK from Fukushima suggest we are unlikely to experience a similar incident due to our relative distance from active tectonic plate boundaries and comparatively low flood risk, the Fukushima catastrophe of 2011 is still very much present within our collective consciousness. So has this affected the public perception of risk associated with nuclear energy? The Ipsos Global Advisor Survey of December 2009 showed 53% of people were concerned about the

risks of radiation related to nuclear energy globally, pre-Fukushima². However, while nuclear power saw a dip in support in the UK in June 2011, Fukushima actually appears to have had little long-term impact on the UK and a recent study conducted by the UK Energy Research Centre (UKERC) this year has revealed support for nuclear energy is now greater than in 2005³. It was confirmed on October 21 this year that the Hinkley Point C two-reactor station will be the first new nuclear power plant for the UK in 20 years following an agreement between the Government and EDF Energy, who currently operate eight of our nine existing nuclear power plants. Hinkley Point C is anticipated to provide 3.2GW energy, which is equivalent to 7% of UK energy consumption, and forms part of a larger Government plan to deliver around 16GW of new nuclear energy by 2030 with Sizewell, Wylfa, Oldbury and Moorside also marked for future development⁴. While this nuclear energy revival could solve our immediate energy and emissions challenges, it is essential that any risk to occupational workers and the general public is minimised across the lifespan of these new facilities, from the first phase of construction to the final stages of decommissioning. Perhaps it should therefore be anticipated there will be a greater need for REPIR and COMAH trained emergency planners and radiation health professionals

in the UK, to prepare for, and manage, the risks associated with our burgeoning nuclear sector.

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THE CHANGING FACE OF STUDENT PROTESTS

By Chris Hoad

West Midlands Branch

THERE'S nothing particularly new about student protests and for those of us that work within the security function of a university they are a sporadic part of the risk landscape. Dealing effectively with them is a continual learning process which requires open mindedness, cool and collected thinking and a high patience threshold. The roots of student activism go back to the early 1960s and were at that time endemic across Western Europe and North America. America's intervention in Indochina caused vehement opposition to the Vietnam War and also the '60s heralded an era of unprecedented economic prosperity in the West which created a bigger disparity between the rich and the poor. This disparity was also reflected in the wealth of the developed world compared to the poverty of the third world. These factors and other global developments, such as Israel's occupation of the Palestinian Territories in 1967, gave huge impetus to a Far Left movement which was bitterly opposed to capitalism, wealthy industrialists, imperialism and the snuggling up of Western Europe to the US. It was global factors such as these that gave rise to extremist European groups like the Red Army Faction, which were borne out of the student protest movement. Thus we saw many violent protests where students traded rocks for tear gas with riot police. Things have now changed. The fall of the Berlin Wall



in 1998, the collapse of Communism and national reunification in Germany took a lot of the wind out of Left Wing sails and even the Red Army Faction collapsed from exhaustion and indifference in 1992. Also, over the last 50 years the political compass has moved over to the Left throughout most of Europe whereby ideology that would once have been considered very Socialist or Left Wing is now pretty mainstream stuff. But none of this means that students have nothing left to protest about.

"There is no shortage of Cause Celebre which can unite students in a rousing chorus of 'we shall not be moved'."

The recent increase by threefold in tuition fees has caused significant protest across the university community, as has what is perceived to be an increasing privatisation of universities with facilities functions such as catering or cleaning being outsourced to private contract. Industrial relations disputes with academic staff

over pay, working conditions or redundancies, though not involving students directly, are very likely to attract student protest in 'solidarity' with their lecturers. Visiting speakers can attract protests particularly if they are controversial politicians, industrialists or senior military figures.

Also, careers fairs which feature exhibitors from the defence industry or equally unpopular businesses for whatever reason are prone to attracting protest action, as are perceived unfairness to minority groups and contentious disciplinary action against students. Thankfully, rock throwing, tear gas-breathing protests have now all but died out in UK universities and many academics will lament that "protests aren't what they used to be". This is partly due to the advent of the Public Order Act 1986 which created new offences relating to public order and gave the police some new powers. Student protestors now, rather than aiming for carnage and running battles, will aim to cause maximum inconvenience.

nience and gain publicity for their cause. This usually comes in the form of an occupation (or 'sit-in') of an administrative, conference or teaching area of significant importance to the institution. Students, unlike staff, cannot withdraw labour so they withdraw space. As benign as this might appear, it will cause very significant problems for the university and can get badly out of hand. The right approach from the outset is crucial in securing an early and amicable solution with the least disruption and cost.

The earlier mistakes are made, the bigger they will get. We must first remember that we are dealing with young students, not hardened criminals. The vast majority of students I come across are perfectly charming individuals who are at university for all the right reasons. They may be involved in a protest for no other reason than it is fun and all part of the student experience; a bit like stealing a traffic cone. Hardcore activists may be at the centre of it but are likely to be relatively few in number. There is a danger the group might be infiltrated by 'professional rabble-rousers' who are not students, depending on the cause. These characters present a real risk; they mean business and will try to provoke the university authorities or the police into ill-advised over-reaction. They will also seek to keep the protest going as long as possible and have no allegiance to the university or even to the students. This makes cool thinking and measured responses even more of an imperative. The law on evicting protestors is far from clear cut and the

protestors themselves will be very well legally briefed. Unless a criminal act has been committed by an identifiable individual the police will not intervene. They may like to keep an eye on the situation and will offer advice but it is best to keep them at a low profile, at least to begin with. Their presence might inflame the situation or even give the protestors the warm feeling that the protest really is a big deal warranting a blue light response, thus overstating its impact. Technically, the law does allow the owner of the property to remove trespassers or those whose right to enter has subsequently been withdrawn, by force if necessary. My experience is that only the fool should rush into this. The protestors will outnumber university staff and they will resist. Not only will they resist but they will film everything and later in the day you can have the pleasure of watching yourself on YouTube in an unedifying spectacle of grappling with students which has now been 'Tweeted' to half the planet.

Students are highly skilled in the use of social media and will use this very effectively. Accordingly, management should be sensible about the role of security staff. Security staff are not riot police; they are not trained, equipped and empowered as such and it is very short-sighted to create long term enmity between security staff and students by using them in this way. Security staff don't usually want to be in this position either. Over time they build up affection for the student community and see their role as that of care-giving and safeguarding. They don't like manhandling students and

this should be done only as a last resort. We must also bear in mind that security staff are our employees to whom we owe a duty of care.

If one of them were to get hurt in a scuffle it would not be unusual for them to then sue the employer in a personal injury claim. Security staff are best deployed to provide a reassuring presence and to help prevent things getting out of hand, not as hired muscle. In the face of an occupation a low key reaction and the establishing of amicable relationships very early on is crucial in dictating the tone of things from there on. Some universities have even passed in pizzas and drinks to the protestors as an act of conciliation and this is laudable as a progressive attitude. On many occasions, when the university has kept a watchful eye but largely left the protestors to it, they have tended to drift off of their own accord after less than a day from sheer boredom, feeling they have made their point and now have something to tell the grandchildren. There should, however, be no tolerance of damage to property, assaults on staff, the causing of harassment or distress or anything that constitutes a health and safety hazard. Robust intervention in these cases is required but the advice of the police and/or the legal department must be sought and heeded. I do not recommend any attempts to make the protestors uncomfortable in an attempt to hasten the end of the occupation. Strategies such as turning off heating, lighting, water etc could be deemed as harassment and will make the protestors more determined to dig in for the

long haul. There is also the risk they will create their own heating and lighting in the shape of naked flames.

Equally, setting off the fire alarm in an attempt to force them out is unwise, very naive and won't work. Management should be inclined to accede to reasonable requests during the protest, such as allowing people to leave to use the toilet and then allowing them back in to rejoin the protest on a one-by-one basis. Refusal to allow this means they will find a makeshift toilet in the area of occupation and again such a denial could be deemed a breach of human rights. I would, however, strongly advise against allowing anyone else to join the occupation if they weren't there at the outset, if this can be prevented. A swelling of the ranks will prolong the occupation, might create safety hazards or increase the risk of criminal offences being committed. Sympathetic students might want to pass food parcels in and a view will have to be taken as to whether this is reasonable. It would be a good idea to stipulate that this can only be done via a nominated officer of the Student Union and after the parcel has been checked for illicit items, but otherwise permissible. After a prolonged period of time and without an end in sight, there remains the option of getting a Possession Claim from the County Court under the Civil Procedure Rules Part 55 (a Possession Claim against trespassers means a claim for the recovery of land, including buildings or parts of buildings, which the claimant alleges is occupied only by a person or persons who entered or remained

on the land without the consent of a person entitled to possession of that land). Where the claimant does not know the name of those in occupation the claim must be brought against 'persons unknown'. This is a viable option and has the advantage that the police or court bailiffs will execute the claim, but it has drawbacks which must be carefully considered. It can be an expensive process and a court will want compelling reasons why a claim is required to terminate a peaceful protest and deny students their lawful right to freedoms of protest, gathering and expression, given that students have every right to be on university property. Citing significant safety concerns such as overcrowding in a small area with resultant fire safety or other health risks will stand the greatest chance of success. Another drawback is that a Court Order to evict could well become a Cause Celebre in itself for future protests. The order will be very precisely crafted in that it is unlikely to prevent different protestors occupying a different building at a different time, and they will do so just to prove the point.

All in all, student protests do have the potential to get very troublesome, but more so if handled poorly by managers who allow themselves to get flustered. I have always found that approaching protestors on a human though business like level and with good humour goes a long way to establishing some mutual respect. Official and authoritarian approaches that involve reading scripts from university ordinances outlining weighty consequences of non-compliance

will probably just create merriment amongst the protestors. It helps to remember that the building isn't on fire and nobody is being held at gunpoint. Time is on our side for once. Certainly, I would encourage all universities to have a contingency plan in place to resort to in the event of an occupation. Such a plan should focus on matters relating to alternative use of space for working or teaching, internal and external communication procedures, an outline of the legal framework surrounding occupations and protests, health and safety and the responsibilities of key senior staff. Liaise with the local police, never compromise on safety and keep the daily order of business running with as much normality as possible. Any plan that purports to offer a solution in terms of interventionist tactics to bring the protest to a close had better be very loosely and flexibly drafted.

Author profile:

Chris Hoad is Head of Security and Emergency Planning at the University of Birmingham. Chris has 35 years' experience in security starting with the Royal Air Force and after 17 years in the private sector has spent the past 10 years working in Higher Education. Chris is a Fellow of the Security Institute and a Chartered Security Professional. He is a member of the EPS West Midlands branch.

SPOTLIGHT ON: THE BRITISH TRANSPORT POLICE

BRITISH Transport Police (BTP) is the national police service for the railways. It covers the whole of the rail system throughout England, Scotland and Wales, they also police the High Speed One international rail link from St Pancras, London Underground, Docklands Light Railway, the Midland Metro tram system, Croydon Tramlink, Sunderland Metro, Glasgow Subway and Emirates AirLine.

BTP is a specialist police force operating within a safety critical environment, so although often dealing with the same crimes and criminals as the local police, the nature of the railway environment demands that its staff has certain specialist skills so they can operate safely and effectively. Its task is to deliver a service that both deals with crime, disorder and other incidents, and to keep the transport system running. BTP officers provide a specialist service to the railway industry and its users. The force has developed particular expertise in:

- Major incident handling
- Anti-terrorist strategy
- Tackling of metal theft
- Prevention of pick-pocketing
- Graffiti
- Policing of travelling sports fans.

As a truly National Category One Responder, BTP has a challenging role in responding to major incidents that occur on or near the rail infrastructure. Britain's railways run over 10,000 miles of track through more than 3,000

stations and depots. Every day 2.5million people travel on the national rail system and another three million plus on London's Underground system and Docklands Light Railway. Around half of all rail journeys in the UK are made within the London area, which provides some of the densest and most heavily utilised rail infrastructure in the world. Virtually any major incident in London, or other major city in the UK, from a power outage to a chemical release, impacts on the rail or Underground systems, so BTP will have a role working with other agencies to see through the rescue and recovery operation.

As a member of the London Emergency Services Liaison Panel (LESLP) BTP has developed clear protocols with other agencies that have proved themselves in practice – following the rail crashes at Grayrigg and Ladbroke Grove and the terrorist attacks in London in 2005, for instance. LESLP provides a forum in which experience and expertise can be shared, where procedures are agreed in advance and effective communication links put in place. Similar arrangements are also in place in other areas of the UK and the imminent arrival of the National JESIP (Joint Emergency Services Interoperability Programme) training will promote even closer liaison between Category One responders. BTP brings a wealth of experience in dealing with many aspects of major incidents to regional/ national and Local Resilience Fora and derives considerable benefit

by learning from others and ensuring its operations are properly co-ordinated with the other emergency services and wider responder community. Because BTP is a specialist organisation, it works closely with local police to complement their activity and with its partners in the rail industry. Partnership working is at the centre of how BTP operates. Within the arena of emergency planning, BTP provides links with the rail infrastructure operators that are effective because they are forged out of constant contact at ground level, dealing with daily, often hourly, problems and crises and finding solutions to them. The nature of BTP's operating environment confers both advantages and disadvantages compared to local police. In many cases, when dealing with crime, disorder or other incidents, BTP has the advantage of an easily contained scene, working alongside partners from the industry who have staff on the ground to provide immediate and expert assistance. In others, criminals use the flexibility and speed of the system to their advantage – crime scenes and witnesses can be miles away within seconds. Similarly, relatively minor incidents – reports of children trespassing on the line, minor criminal damage to equipment – may have knock-on effects that reverberate down the network causing disruption to tens of thousands of people. BTP has the flexibility to respond quickly to a major incident when it occurs and, through partnership



working at resilience fora, the experience to make the maximum contribution it can to its resolution.

BTP is unique as the only national police force that has a daily, direct interface with the public. That means it is a key partner in dealing with national priorities such as terrorism and antisocial behaviour. The force provides a specialist service that complements local policing services and, above all, meets the needs of the railway community it serves. The force deals with crimes from homicide, crimes of violence, sexual offences, robberies, thefts, fraud (including major commercial fraud) downwards.

There are also particular railway offences – endangering safety, obstructing trains etc – which have serious safety implications.

In particular, we have had great success in reducing cable theft which was down 46% last year (2012-13). Over the nine-year period to the end of 2012/13,

BTP has reduced notifiable offences by 35%, and in doing so, made significant reductions in priority crimes such as robbery (down 80%), violence against the person (down 7%), and notifiable route crime (down 71%).

The notifiable detection rate for BTP during 2012/13 was 31%, which is well above the average when compared with other police forces.

The rate has increased significantly since 2004 when it was 17%.

BTP has particularly high detection rates for priority crime such as robbery (45%), staff assaults (58%) and violent crime (50%).

Every fatality, including approximately 210 suicides every year on Britain's railways, has to be assessed to ensure there are no suspicious circumstances and then dealt with taking into account the needs of the deceased's relatives, and the needs of the Coroner's inquiry, while trying to minimise disruption to the rail system.

BTP at a glance:

- *2,878 police officers (including 305 CID)
- *370 PCSOs
- *1,435 police staff
- *164 police stations spread throughout England, Wales and Scotland
- *53,885 crimes dealt with in 2012/2013
- *38,300 minor (non-notifiable) offences – travel fraud, drunkenness etc – dealt with in 2012/2013

This 'patch' comprises:

- *20,000 miles of track
- *3,000 stations and depots
- *Passenger numbers have grown 50% from 976m to 1.46bn in 10 years; four million passengers every day.
- *In 2011/12 rail freight transported 101.7 million tonnes of goods worth over £30 billion.
- *Visit the British Transport Police at www.btp.police.uk, Twitter: @btp_uk, call us on Freephone 0800 405040 or text 61016.

GATWICK AIRPORT PLAYS HOSTS TO THE EPS' SOUTH EAST BRANCH



By Joanna Cupial-Jones

STANDING at the windows of the Penthouse boardroom at Gatwick Airport is an opportunity rarely afforded. From this lofty vantage point, all airside activity can be surveyed – once the maze of hallways and staircases has been successfully navigated. It was here that the South East branch of the EPS met for their autumn event. On September 17, 22 members of the EPS' South East branch visited Gatwick Airport in West Sussex, ready for the regional AGM and airside tour of the London Gatwick Fire Station and training ground.

The event was an excellent chance for members to network with fellow emergency planning professionals, and to be directly involved with the Society. Chaired by PC Paul Collard, Deputy Force Emergency Planning Officer for Sussex Police, the AGM brought to light the issues that are

impacting both the South East regional branch and the Society as a whole. Membership and methods of attracting new members were key areas of discussion. Christine Morgan, a new EPS member, said: "Community Resilience UK sponsored me to join, and it has been a good opportunity for me to manage both my career and professional development. The whole day ran very smoothly and was a great chance to be involved with a society that is striving for continual development." Once settled into the boardroom, the day began with an insightful presentation into Gatwick Airport's emergency operations by PC John Ashbey, of Sussex Police, and Matthew Greener, of Gatwick Airports Ltd. PC Caroline Lowe and PS Trevor Speed were also in attendance. Ms Morgan said: "Hearing about the emergency operations

planning Gatwick Airport has in place was really interesting, it has shone a whole new light on emergency planning for me." Following the presentation, passes were issued and all EPS members were ushered out of the boardroom. PC Lowe led the group through airside security in order to be driven across the runway to the London Gatwick Fire Station. Once the two minibuses were full, they sped off across the airport – avoiding any unfortunate collisions with manoeuvring planes. The station itself appeared to be nothing more than a simple fire station garage. However, parked inside were some of London Gatwick Fire and Rescue Service's brand new Panther trucks: £750,000 of high tech, fire-busting power designed to deal with Kerosene fires quickly and efficiently. Those wanting a closer look at the huge trucks were able

London Gatwick Fire and Rescue Service's brand new Panther truck

to climb aboard to explore the cockpit of one of the Panther vehicles. After this the minibuses whisked the group off to the FRS' training ground to the west of the main airport. The visit coincided with a "hot box" training session that was well underway. Sheltering from the driving rain under

the wing of a towering fire training plane, members were offered a unique view of FRS training in an active and unpredictable environment. The South East autumn event was a fantastic opportunity for old and new members to get to know each other, and take part in an experience that would not ordinarily

be possible. All of the members agreed the day was thoroughly interesting, enjoyable and informative.

*The Branch is looking at venues and topics for its Spring Study day and all members are invited to send suggestions to: stephen.scully@kent.gov.uk

*The group take shelter under the wing of a fire training plane*

THE EMERGENCY PLANNING SOCIETY

